



42A14SE2001 OM91-082 TULLY

010

1991 SUMMARY REPORT
THE RESULTS OF A DIAMOND DRILLING PROGRAM
ON THE TULLY TOWNSHIP PROPERTY,
PORCUPINE MINING DIVISION,
ONTARIO

NTS: 42A\14
LATITUDE: 48 46'N
LONGITUDE: 81 08'W
OWNER: HOMESTAKE CANADA LTD.
BY: DUNCAN MCIVOR
DATE: MAY, 1991



TABLE OF CONTENTS

	<u>PAGE</u>
1. Summary and Recommendations	5
2. Introduction	6
2.1 Location. Area, and Access	6
2.2 Property Definition	6
2.3 Regional Geologic Setting	9
2.4 Previous Exploration	9
2.5 1991 Program Outline	14
3. Detailed Technical Data	15
3.1 Diamond Drilling Results	15
3.2 Discussion: An Overview of Work Completed to Date, and Economic Re-evaluation of the Property	37
4. 1991\92 Exploration Proposal and Budget	38
5. Selected References	43
6. Statement of Qualifications	44

LIST OF FIGURES

	<u>FOLLOWS PAGE</u>
1. General Location Map, Tully Property Area	6
2. Location Map, Tully Property	6
3. Claim Sketch, Tully Property	6
4. General Geology of the Tully Property Area	13
5. Geology and Previous Drilling, Tully Property Area	13

LIST OF TABLES

	<u>PAGE</u>
1. Claim Status Summary, Tully Property	7
2. Anomalous Drill Intersections (Pre-1991), Tully Property	13
3. 1991 Drill Hole Summary	35
4. Summary of Anomalous Intersections (>1.0 gpt Au), 1991 Diamond Drilling Program	36
5. Proposed Drill Hole Summary	42

LIST OF APPENDICES

1. Detailed Diamond Drill Logs, DDH T-91-01 to T-91-09
2. Diamond Drill Sections, DDH T-91-01 to 09, TU1-3-70, TU87-01
3. Raw Geochemical Data
4. 1:1000 Projected Geology, Main Zone Area
5. 1:5000 Geology - Geophysics Compilation, and Proposed Drill Hole Locations
6. Vertical Longitudinal Section, Main Mineralized Zone

1. SUMMARY AND RECOMMENDATIONS

The Tully Property of Homestake Canada Ltd. is located 35 kilometres north-northeast of the city of Timmins, in northeastern Ontario. The property is comprised of 47 contiguous unpatented mining claims, 23 of which are at point of lease.

Previous exploration activity on the property, primarily by Hollinger Mines Ltd., and Esso Minerals Canada, had defined a northwest-southeast trending major fault zone, marking the contact between massive mafic metavolcanics to the northeast, and a complex intercalated sequence of epiclastic and volcanoclastic sediments, and komatiitic\calc-alkalic flows to the southwest. Along the deformation zone associated with the major fault are localized zones of intense hydrothermal alteration, and in some cases significant secondary quartz-carbonate veining, sulphide mineralization, and highly anomalous gold values.

During the period February 08 through April 03, 1991, Homestake Canada Ltd. completed a ten hole, 1944.4 metre (6,379 feet) drilling program on the property.

Two holes targeted a potential eastern extension of the previously defined structure, 1900 metres to the southeast of all previous drilling on the zone. Hole T-91-01 intersected a footwall assemblage of interbedded altered epiclastic and volcanoclastic sediments, and the targeted deformation zone appears to have been overshot.

Eight holes targeted the immediate strike extensions of the mineralized zone, over a strike length of 610 metres. All holes successfully intersected the targeted horizon, though gold values were generally poor within the altered, veined, and mineralized deformation zone. The best individual assay was only 7.01 gpt\0.5 metres, and the best section returned only 2.8 gpt\5.3 metres. These low, sporadic grades, within an intensely fractured horizon exhibiting an RQD in excess of 50 fractures per metre, indicate that there is little potential in the zone drilled to date. The horizon does appear, however, to extend at least another 800 metres to the southeast, where no previous drilling has tested the favourable lithostructural zone. A seven hole, 1500 metre diamond drilling program is proposed to evaluate this portion of the fault, at a cost of \$125,650.

2. INTRODUCTION

2.1 LOCATION, AREA, AND ACCESS

The Tully property of Homestake Canada Ltd. is located 35 kilometres NNE of Timmins, Ontario, within the NTS 42A\14 (Buskegau River) 1:50,000 topographic map sheet.

The property is covered by a large, poorly drained spruce and alder swamp, which was partially harvested in the late 1960's. Outcrop constitutes <1% of the ground, the remainder being covered by glacial sediments to depths often in excess of 100 metres.

Access to the property is variable, depending on the season. The property can be reached via Highway 101 east from Timmins to Hoyle (25 kilometres), then north on Highway 610 to Ice Chest Lake Road (28 kilometres). That road, and several secondary gravel roads, extend north into Little Township, from which a gravel road branches west onto the property. Several bridges crossing the Buskegau River have been washed out approximately three kilometres east of the property, restricting summer vehicle access to that point. Winter roads from several locations cross the property, both from the east and west, and drill access during freeze conditions is relatively good.

Figures 1 and 2 illustrate the location of the property.

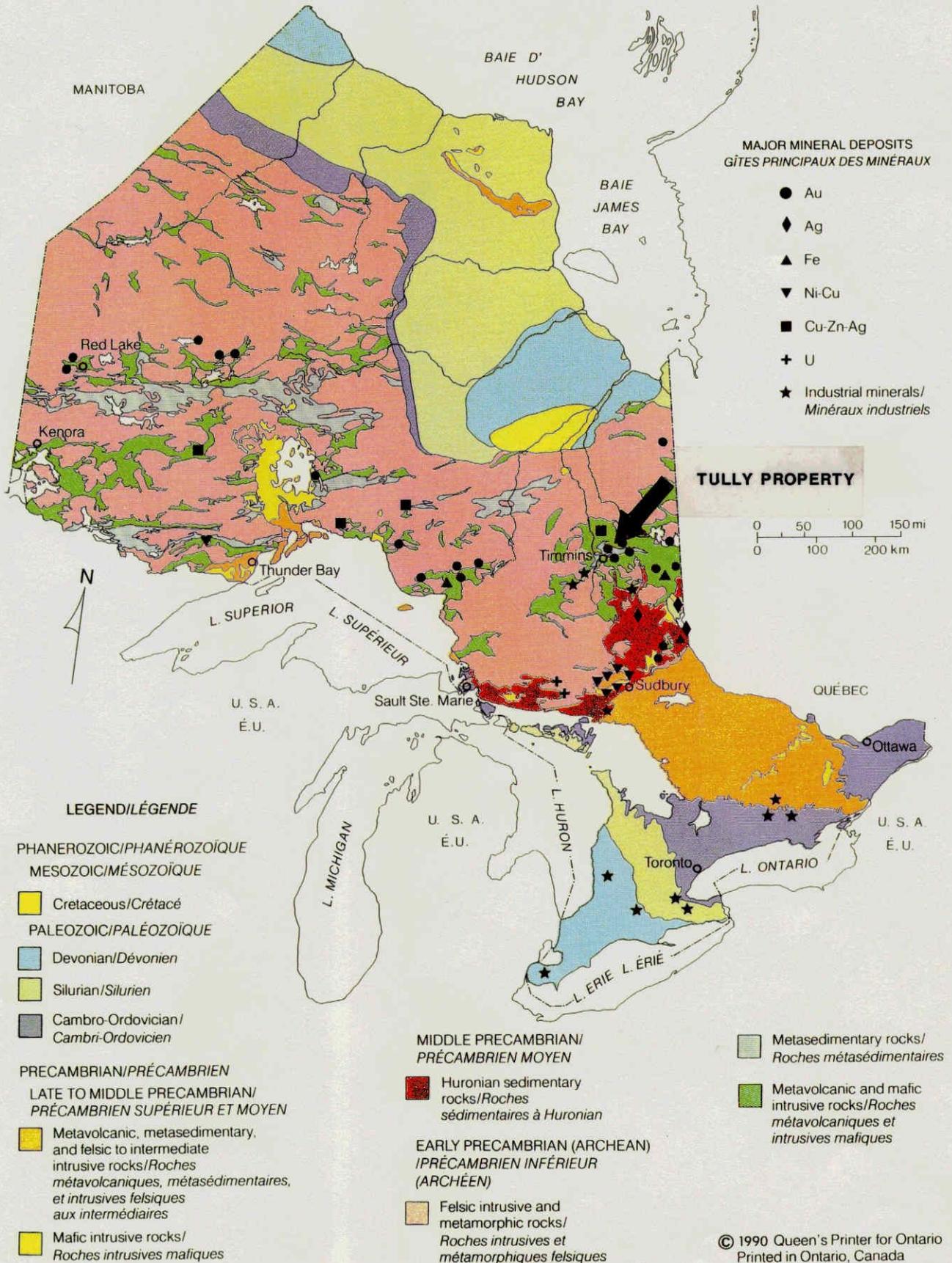
2.2 PROPERTY DEFINITION

The property is comprised of 47 contiguous claims, all located in Tully Township of the Porcupine Mining Division. Twenty three of the claims are held under Lease 103940 from the Ministry of Natural Resources. Table 1 summarizes the status of all claims that comprise the property, and Figure 3 illustrates their respective locations.



GEOLOGY AND PRINCIPAL MINERALS OF ONTARIO

GÉOLOGIE ET MINÉRAUX PRINCIPAUX DE L'ONTARIO



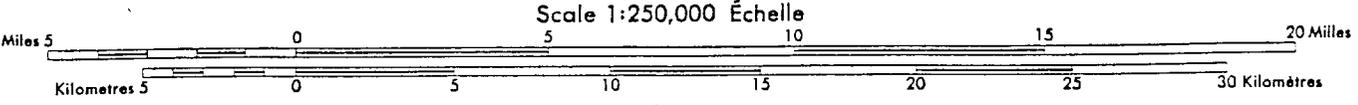
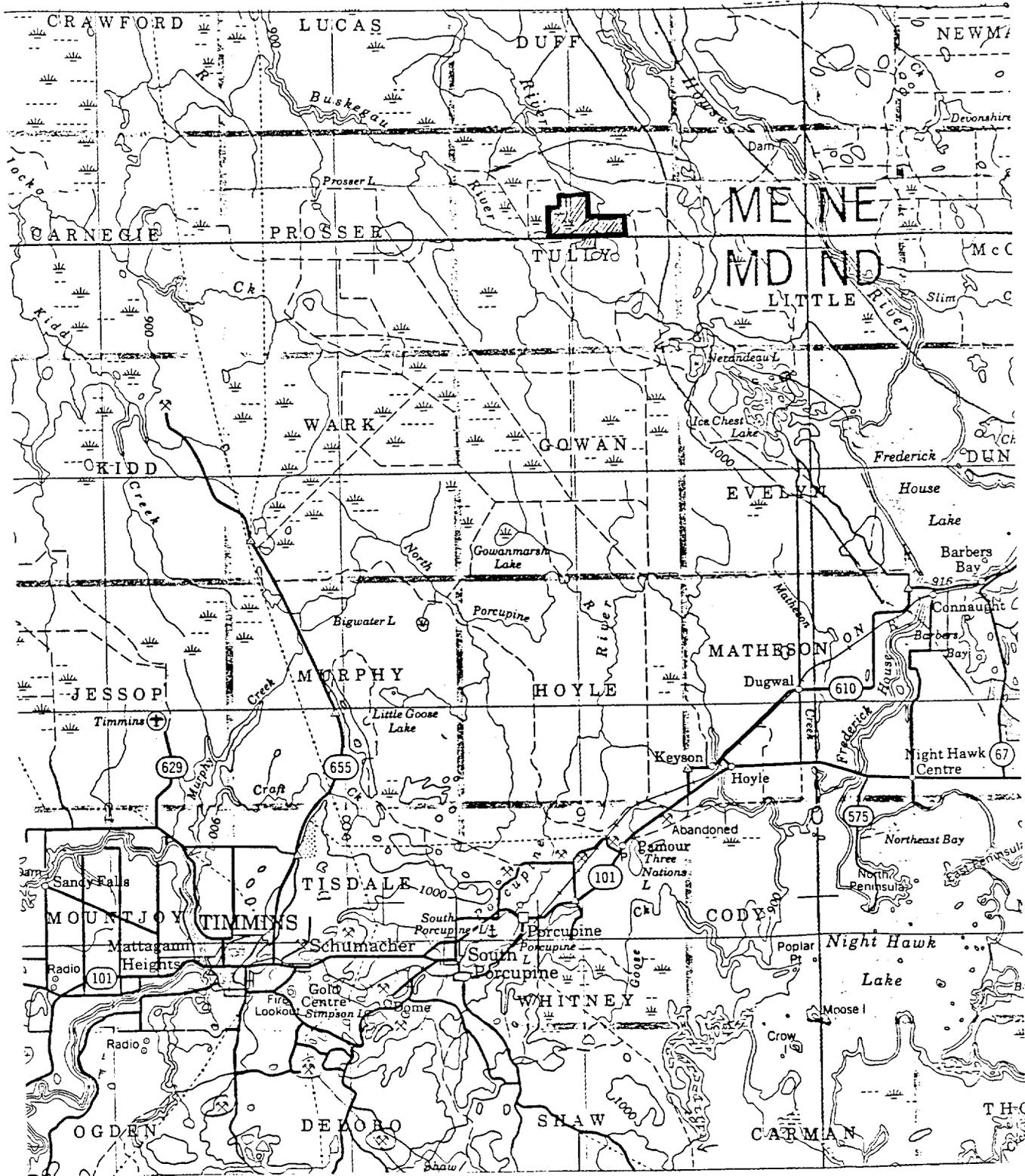
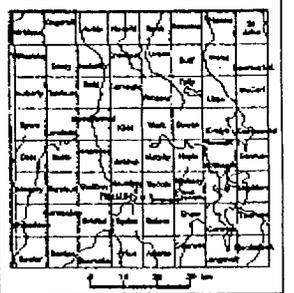
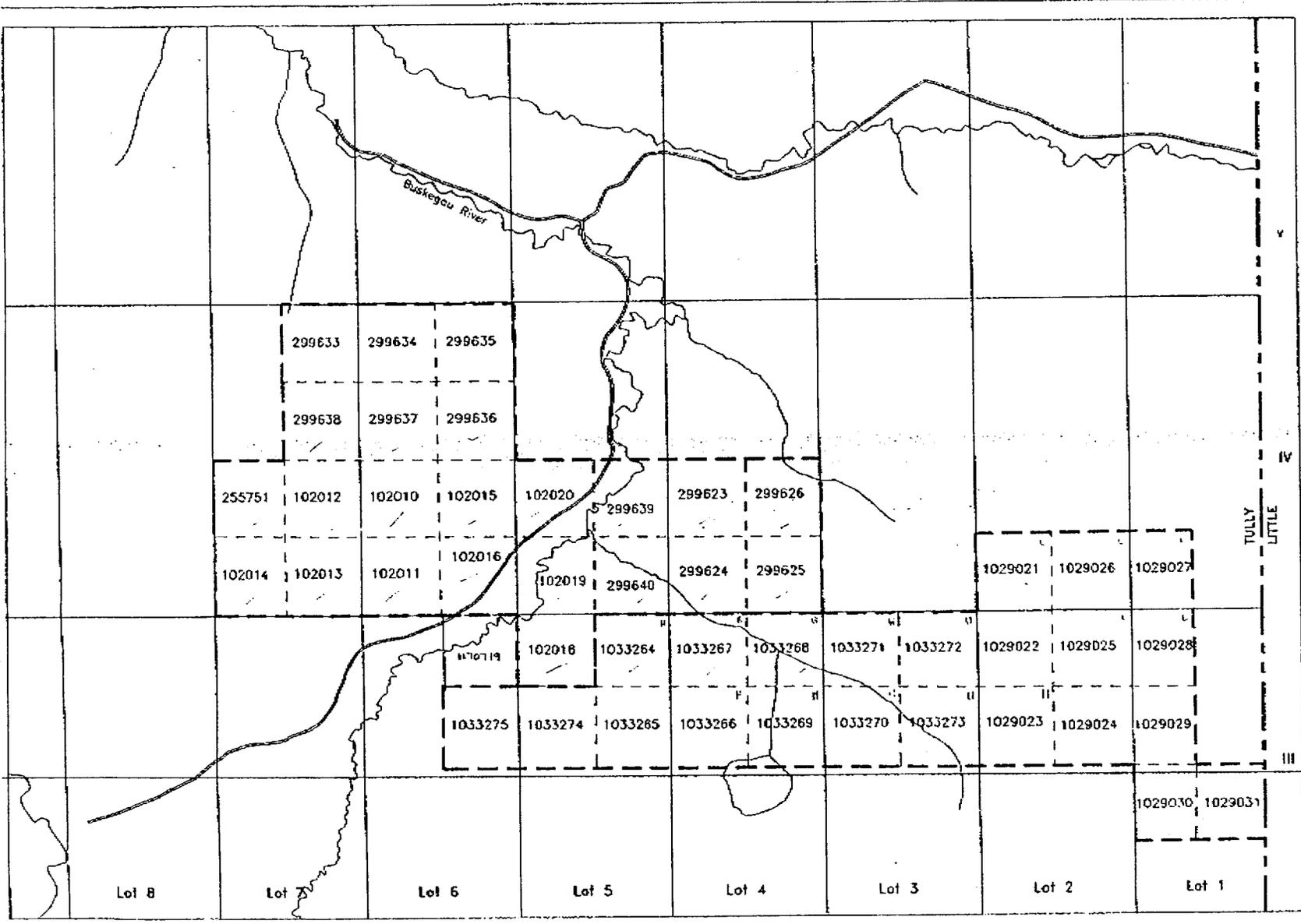


FIGURE 1 Tully 1 Location Map



LEGEND

--- HOMESTEAK PROPERTY



HOMESTEAK MINERAL
 DEVELOPMENT COMPANY
 TULLY TOWNSHIP PROPERTY

Property Claim Map
FIGURE 3

DATE	FILE	BY	REVISION
			M.V. WHITE & ASSOCIATES, INC. ENGINEERS, SURVEYORS

TABLE 1
SUMMARY OF CLAIMS STATUS
TULLY TOWNSHIP PROPERTY

<u>CLAIM NO.</u>	<u>RECORDING DATE</u>	<u>ASSESSMENT CREDITS</u>	<u>EXPIRY DATE</u>
102010	Feb.12, 69	At Lease	Dec. 01, 2004
102011	Feb.12, 69	At Lease	Dec. 01, 2004
102012	Feb.12, 69	At Lease	Dec. 01, 2004
102013	Feb.12, 69	At Lease	Dec. 01, 2004
102014	Feb.12, 69	At Lease	Dec. 01, 2004
102015	Feb.12, 69	At Lease	Dec. 01, 2004
102016	Feb.12, 69	At Lease	Dec. 01, 2004
102018	Feb.12, 69	At Lease	Dec. 01, 2004
102019	Feb.12, 69	At Lease	Dec. 01, 2004
102020	Feb.12, 69	At Lease	Dec. 01, 2004
255751	May 20, 70	At Lease	Dec. 01, 2004
299623	Dec.14, 70	At Lease	Dec. 01, 2004
299624	Dec.14, 70	At Lease	Dec. 01, 2004
299625	Dec.14, 70	At Lease	Dec. 01, 2004
299626	Dec.14, 70	At Lease	Dec. 01, 2004
299633	Oct.26, 70	At Lease	Dec. 01, 2004
299634	Oct.26, 70	At Lease	Dec. 01, 2004
299635	Oct.26, 70	At Lease	Dec. 01, 2004
299636	Oct.26, 70	At Lease	Dec. 01, 2004
299637	Oct.26, 70	At Lease	Dec. 01, 2004
299638	Oct.26, 70	At Lease	Dec. 01, 2004
299639	Dec.14, 70	At Lease	Dec. 01, 2004
299640	Dec.14, 70	At Lease	Dec. 01, 2004
1029021	Mar.24, 88	100	Mar. 24, 92
1029022	Mar.24, 88	100	Mar. 24, 92
1029023	Mar.24, 88	100	Mar. 24, 92
1029024	Mar.24, 88	100	Mar. 24, 92
1029025	Mar.24, 88	100	Mar. 24, 92
1029026	Mar.24, 88	100	Mar. 24, 92
1029027	Mar.24, 88	100	Mar. 24, 92
1029028	Mar.24, 88	100	Mar. 24, 92
1029029	Mar.24, 88	100	Mar. 24, 92
1029030	Mar.24, 88	100	Mar. 24, 92
1029031	Mar.24, 88	100	Mar. 24, 92
1033264	Mar.24, 88	100	Mar. 24, 92
1033265	Mar.24, 88	100	Mar. 24, 92

<u>CLAIM NO.</u>	<u>RECORDING DATE</u>	<u>ASSESSMENT CREDITS</u>	<u>EXPIRY DATE</u>
1033266	Mar.24, 88	140	Mar. 24, 93
1033267	Mar.24, 88	140	Mar. 24, 93
1033268	Mar.24, 88	140	Mar. 24, 93
1033269	Mar.24, 88	140	Mar. 24, 93
1033270	Mar.24, 88	140	Mar. 24, 93
1033271	Mar.24, 88	140	Mar. 24, 93
1033272	Mar.24, 88	141.5	Mar. 24, 93
1033273	Mar.24, 88	100	Mar. 24, 92
1033274	Mar.24, 88	100	Mar. 24, 92
1033275	Mar.24, 88	100	Mar. 24, 92
1170719	Jan.11, 91	0	Jan. 11, 92

Note that Labrador Mining and Exploration Ltd. retain a 12.5% net profits interest in the 23 leased claims of the property.

2.3 REGIONAL GEOLOGIC SETTING

The Tully property lies within the Archean Abitibi greenstone belt. Little outcrop is exposed in the region, and as such no detailed geological maps are available, and the regional geological interpretation is based predominantly on geophysical data and limited diamond drilling. OGS Map 2205 shows the northern half of Tully township underlain by felsic volcanic rocks, and the southern half by tholeiitic and komatiitic mafic to ultramafic volcanics, with minor intercalated epiclastic sediments. A regional lineament known as the Buskegau Fault trends NNW-SSE across the region, crossing the western portion of the Tully property. Several north-south trending faults locally offset stratigraphy.

Previous geological compilations by Shegelski (1985) and Bending (1990) indicate a convergence of NW and EW trending structural trends in the central portion of Tully Township, within the confines of the property. This feature is thought to be the result of open flexural folding, though it may be caused by fault transposition on a regional scale.

The property itself is underlain predominantly by a sequence of ENE trending tholeiitic mafic flows, with minor intercalated intermediate to felsic metavolcanics and volcanoclastic fragmental rocks. Within the sequence are several komatiitic flows, as well as discrete, ovoid ultramafic bodies that are probably intrusive. The stratigraphy is cut by a distinct 120 degree trending fault that crosses the southwestern portion of the claim block. This fault marks the sharp contact between mafic volcanics to the north, and a sequence of graphitic metasediments and coarse volcanoclastic rocks to the south, that appear to be a thin structurally introduced wedge. The fault/shear system has been the historical focus of gold exploration in the region, and continued to be the target of Homestake's 1991 exploration program. Figures 4 and 5 illustrate the regional geological setting of the Tully property, as well as the location of some of the previous exploration activity in the area, as discussed in the following section of this report.

2.4 PREVIOUS EXPLORATION ACTIVITY

Bending (1991) has summarized previous exploration activity in the area as follows;

" Early exploration work concentrated on airborne and ground geophysics to evaluate base metal potential. Poor exposure and skeletal assessment reporting has led to an incomplete geological database for the area. Most of the surrounding townships are patented land.

Diamond drilling to test conductive responses led to the fortuitous discovery of the Nickel Offsets, Abitibi-Price (Lucas), Texmont, and Frankfield gold deposits during 1969-1970. The area has subsequently been covered by several generations of geophysics and reverse circulation drilling by Saimin, Cominco, Western Mines, Abitibi-Price, and Kidd Creek Mines. The record of the overburden drilling is incomplete.

Newmont Mines and Dupont Exploration Ltd. evaluated numerous properties in central and northern Tully Township as part of the Buskegau Project between 1981 and 1983. The work identified anomalous gold concentrations along two northwest trending lithostructural arrays called the Northern and Southern Trends.

The Newmont-Dupont Southern Gold Trend includes intersections west of the HCL Tully claims and coincides with strike extensions of the HCL "Discovery Zone". It is presently interpreted to be a northeast dipping reverse or thrust fault which disrupts one limb of a southeast trending anticline. Gold values were reported within the northeast, or upper structural block. The best intersection reported from the Newmont drilling along the Southern Trend was 7.2 gpt Au\1.5 metres.

The Newmont-Dupont Northern Gold Trend consists of a series of conformable cherty and pyritic zones in variably graphitic felsic volcanic rocks. This includes the Abitibi-Price Lucas Discovery (5.14 gpt Au\8.23 metres) 20 kilometres northeast of the HCL Tully claims. The most significant indication of the north trend in the immediate vicinity of the HCL claims was Newmont-Dupont drill hole 255B-01-01, with an intersection of 5.46 gpt Au\4 metres. Subsequent drilling showed uneconomic gold concentrations 50 metres down dip and 200 metres along strike, but the anomalous horizon remains incompletely tested. Some short untested sections of the north trend traverse the north and east portions of the HCL Tully property.

The Nickel Offsets prospect has been subjected to extensive ground geophysics and diamond drilling through a joint venture with Noranda. The work has defined an uneconomic resource in a structurally complex setting. Further exploration work is warranted but will involve significant expenditures.

The Texmont and Frankfield Zones have been advanced through several phases of diamond drilling to suggest good exploration potential but significant metallurgical problems. Encouraging deep drilling results from the Frankfield Zone have stimulated renewed interest in the district.

Local Activity

1964: Texasgulf Exploration; airborne geophysics, VEM and magnetic surveys, three diamond drill holes totalling 387 metres to test conductors associated with magnetic responses. All three holes within upper plate sequence, conductors explained as graphitic argillite. No gold assays reported, no permissive alteration.

1969: United Comstock Lode Mines completed three diamond drill totalling 1300 feet (locations uncertain). Gold assays reported for short intervals showed nil values.

Cincinnati Porcupine Gold Mines Ltd. intersected anomalous gold values (3.43 gpt\0.31 metres) drilling west of the present HCL Tully Property. The gold was localized between graphitic breccia and quartz-carbonate altered mafic rocks.

Labrador Mining and Exploration (Hollinger Mines) staked 23 claims in February 1969. The property was covered by line cutting, magnetic and HLEM surveys.

1970: Labrador Mining completed three diamond drill holes totalling 337.4 metres. DDH TU1-3-70 intersected 2.5 gpt\6.6 metres, including 13.7 gpt\3.1 metres.

1972: Labrador Mining completed two diamond drillholes totalling 237.4 metres. DDH TU1-4-72 intersected the western extension of the carbonatized shear zone in Hole 3, but the highest gold value documented was 0.34

gpt\0.91 metres. The assay record for these holes is incomplete, with some sections logged as graphitic tuff with arsenopyrite needles and altered dacite showing no analyses.

1973: Labrador Mining completed two holes totalling 362.4 metres. TU1-6-73 tested the shear zone along an ultramafic contact west of hole 4, and was lost in broken ground within the target structure. Although the logs indicate extensive sampling, the only assay reported was 1.72 gpt in a selected sample taken for thin section analysis. TU1-7-73 tested the shear zone at the western property boundary. The log and sample record shows extensive favourably altered and pyritic intervals sampled with no assays reported.

1987: Esso Minerals completed programs of line-cutting and Genie EM surveying on a small portion of the claims, and completed a six hole diamond drilling program totalling 756.7 metres to examine the immediate vicinity of the intersection in Hollinger Hole TU1-3-70. This program confirmed the presence of a wide zone of carbonate-silica +/- sulphide alteration and a quartz vein with locally visible gold.

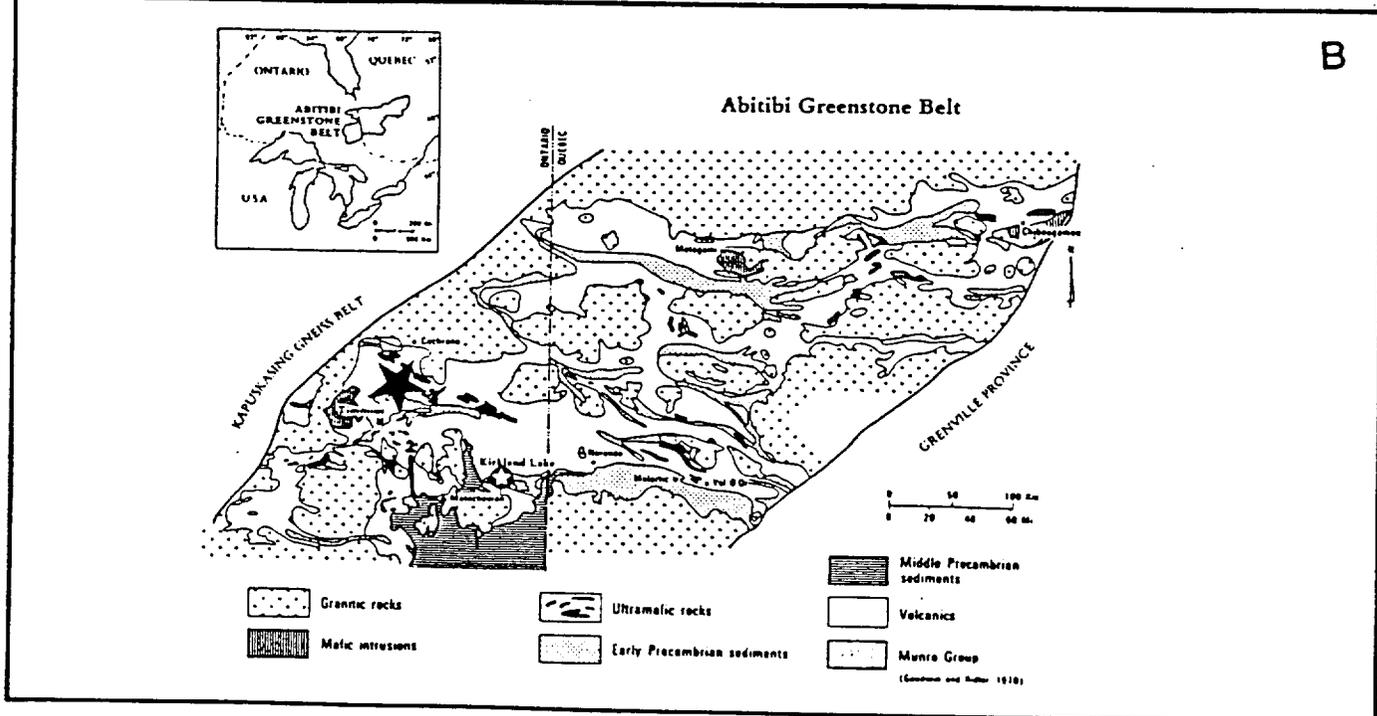
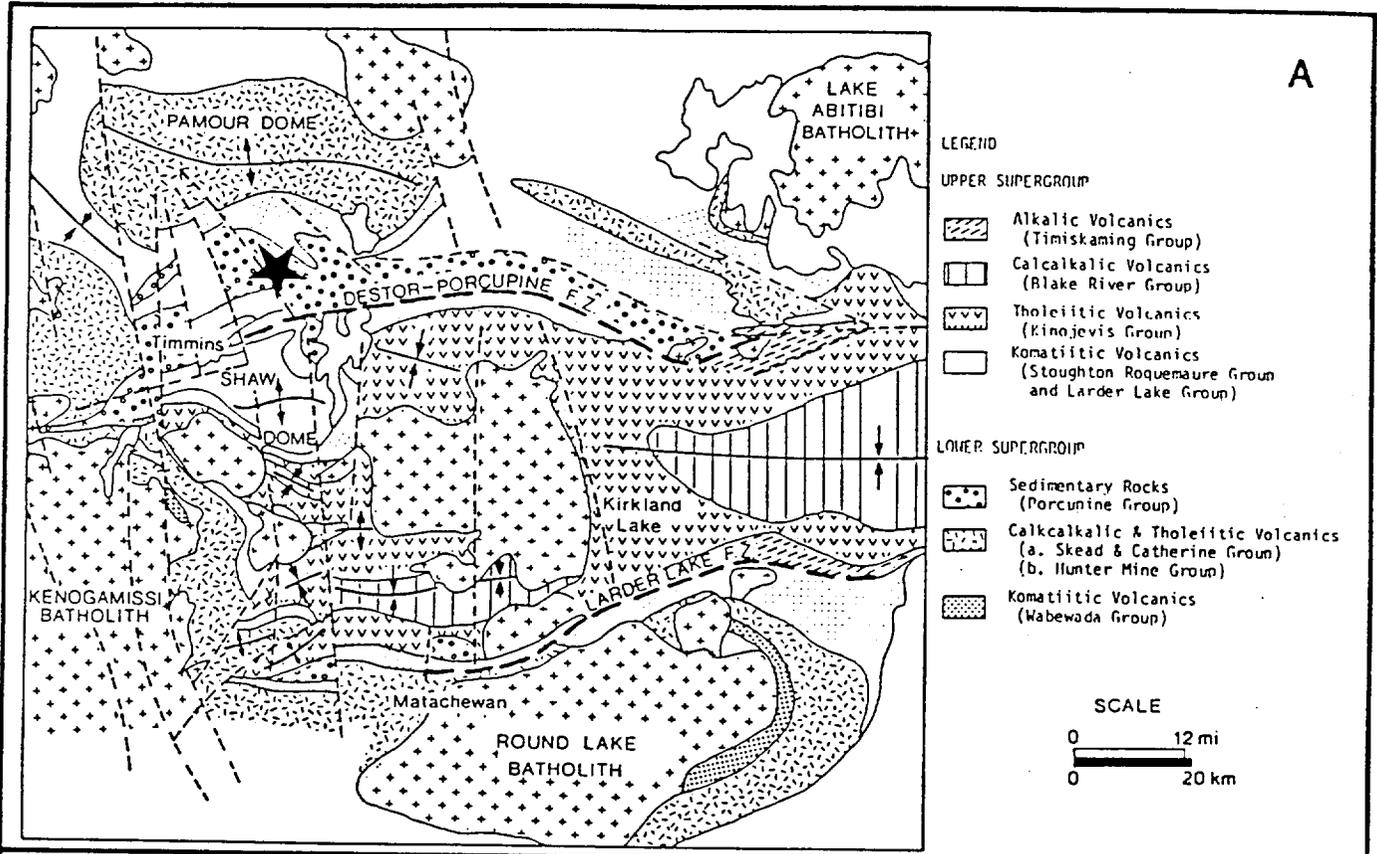
1988: Esso Minerals staked 23 claims to the SE of the leased claims to protect the extension of the EM anomalous trend, as defined by newly released airborne geophysical surveys.

1989: Homestake completed a program of line-cutting, magnetic and HLEM surveys to cover the new 23 claims."

Table 2 summarizes anomalous drill intersections on the property, prior to the 1991 drilling program by Homestake Canada Ltd.

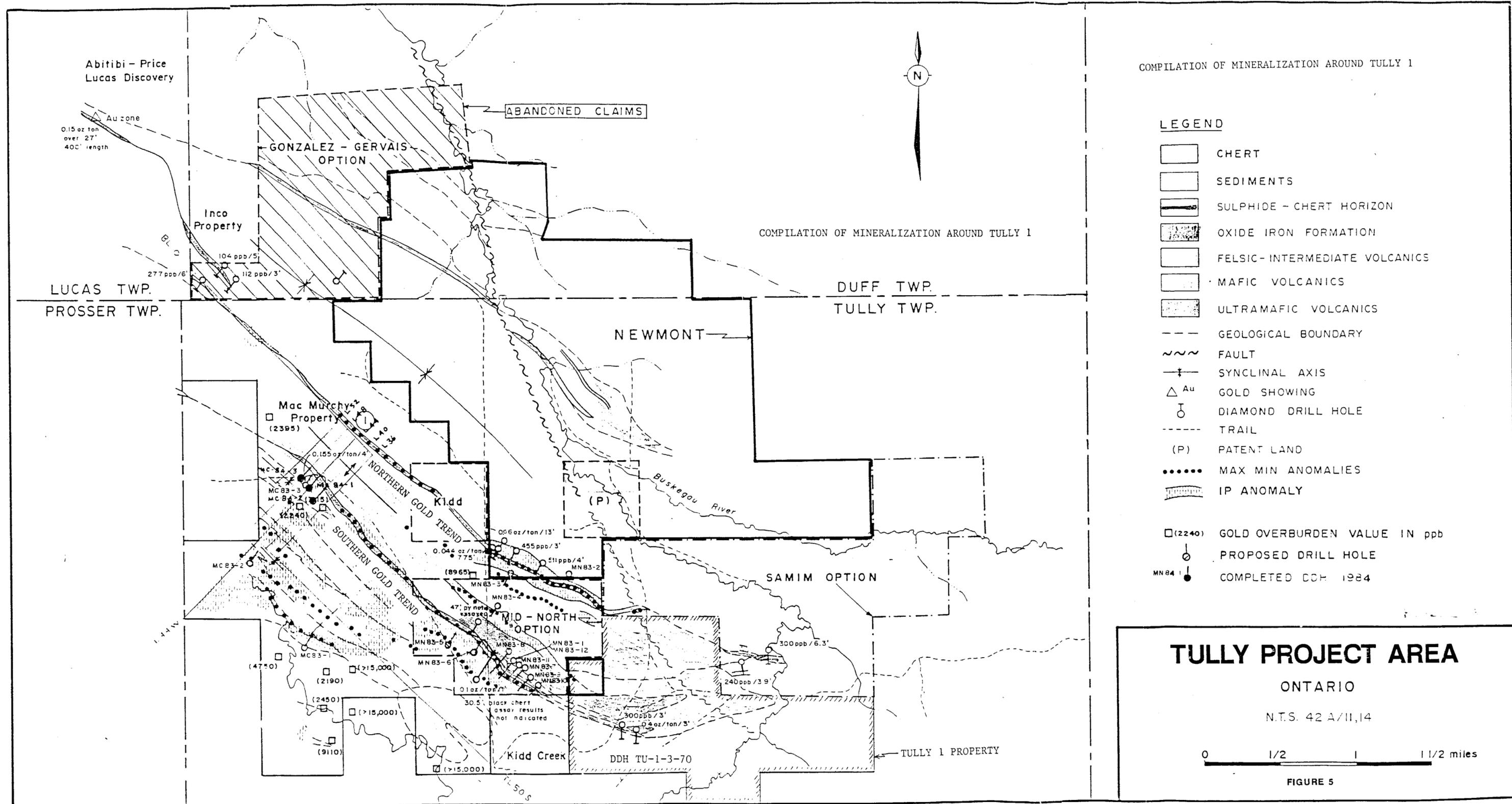
TABLE 2
SUMMARY OF ANOMALOUS INTERSECTIONS (>1.0 GPT Au)
PRE-1991 DIAMOND DRILLING
(Note all Linear Units are Imperial)

<u>HOLE NO.</u>	<u>FROM</u>	<u>TO</u>	<u>WIDTH</u>	<u>ASSAY</u>	<u>CATEGORY</u>	<u>COMMENTS</u>
TU1-3-70	220.0	223.0	3.0	13.72	MIN.	Au in Qtz.Vn.
TU87-01	219.0	228.0	9.0	3.07	MIN.	Qtz. Veins in Carb.Maf.Volc.
	243.7	248.3	4.6	2.75	ANOM.	"
TU87-02	214.0	220.7	6.7	26.76	ORE	Au in Qtz. Vn.
TU87-03	265.5	268.0	2.5	2.22	ANOM.	Carb.Maf.Volc.
TU87-04	197.2	200.2	3.0	4.46	MIN.	Au in Qtz.Vn.



Tully Property Location Map

FIGURE 4



Abitibi - Price
Lucas Discovery

Au zone
0.15 oz ton
over 27'
400' length

GONZALEZ - GERVAIS
OPTION

ABANDONED CLAIMS

Inco
Property

COMPILATION OF MINERALIZATION AROUND TULLY 1

LUCAS TWP.
PROSSER TWP.

DUFF TWP.
TULLY TWP.

NEWMONT

Mac Murtry
Property
(2395)

Kidd

(8965)

SAMIM OPTION

MID-NORTH
OPTION

(4750)

(2190)

(2450)

(9110)

(>15,000)

(>15,000)

(>15,000)

Kidd Creek

DDH TU-1-3-70

TULLY 1 PROPERTY

(2240) GOLD OREBURDEN VALUE IN ppb

PROPOSED DRILL HOLE

COMPLETED DDH 1984

TULLY PROJECT AREA

ONTARIO

N.T.S. 42 A/II,14

0 1/2 1 1 1/2 miles

FIGURE 5

2.5 1991 PROGRAM OUTLINE

During the period February 8 through to April 03, 1991, a ten hole, 1944.4 metre (6,379 feet) diamond drilling program was completed on the property, in two stages. From February 04 to February 28, an eight hole, 1326.4 metre program was completed (DDH T-91-01L, T-91-01 through 07) on the property. A second follow up program, which consisted of two additional holes and the deepening of two holes, was completed during the period March 13 to April 03.

In addition to the diamond drilling program, approximately 15 line kilometres of grid were re-established on the property, to provide control during drilling.

The results of this work are summarized in the following section of this report.

3.0 DETAILED TECHNICAL DATA

3.1 DIAMOND DRILLING RESULTS

As mentioned, a ten hole, 1944.4 metre diamond drilling program was completed on the property during the period February to April, 1991.

All detailed diamond drill logs appear in Appendix 1. Sections appear in Appendix 2. The raw geochemical data appears in Appendix 3, as well as on all drill logs, and, where appropriate, on drill sections. A detailed 1:1000 plan projection of the majority of the drilling appears in Appendix 4. Appendix 5 contains a 1:5,000 compilation of the property, including the location of all drill holes, and all proposed drill holes.

Table 3 summarizes all collar locations and depths. Table 4 summarizes all anomalous intersections (> 1.0 gpt Au) encountered during the program.

Outlined below is a hole by hole description of the 1991 diamond drilling program.

DDH T-91-01(L)

COLLAR: L7+20W, 3+75N (METRIC GRID)
AZIMUTH: 210 DEGREES
DIP: - 50 DEGREES
LENGTH: 52.4 METRES
TARGET: This hole was designed to test an interpreted southeastern extension of the fault\shear zone identified by Hollinger\Esso drilling, 1900 metres to the northwest. The inferred structure was identified based on detailed ground magnetics data, where a 140 degree trending sharp linear transition from a zone of flat magnetic relief, to one of abruptly higher relief, occurs. The hole was also designed to test a short strike length, weak HLEM anomaly, located parallel to and immediately northeast of the interpreted magnetic lineament.

LITHOLOGIES SUMMARY (All intervals in metres)

0.00 - 52.4 Overburden
EOH

This hole was lost in overburden, when the B casing snapped at 52.4 metres.

T-91-01

COLLAR: L7+20W, 3+75 NORTH (METRIC GRID)
AZIMUTH: 210 DEGREES
DIP: -50 DEGREES
LENGTH: 320.0 METRES
TARGET: The target of this hole is identical to that outlined for hole T-91-01(L). The head was simply steepened on the same set up when the first hole was lost.

LITHOLOGIES SUMMARY (All intervals in metres)

0.00 - 70.3	Overburden
70.3 - 71.0	Qtz.-Carb. Vned, Graphitic Argillite
71.0 - 78.3	Amygdaloidal Basalt
78.3 - 80.9	Mod. Sericitized, Carbonatized Basalt
80.9 - 84.0	Qtz.-Carb. Vned, Strongly Sericitized, Carbonatized Volcanic Fragmental\Breccia
84.0 - 87.5	Intensely Sheared, Sericitized Volcanic Fragmental
87.5 - 96.0	Strongly Chloritized Coarse Volcanoclastic\Epiclastic Rock (Agglomerate\Conglomerate)
96.0 -104.4	Graphitic Breccia\Fault Gouge
104.4-106.7	Intensely Sericitized, Fe Carbonatized Rock
106.6-111.0	Strongly Sericitized Mafic Volcanic
111.0-112.9	Brecciated Sericitized, Carbonatized Mafic Volcanic
112.9-113.1	Graphitic Argillite
113.1-115.5	Brecciated, Sericitized mafic Volcanic
115.5-199.5	Pillowed, Amygdaloidal Basalt
199.5-210.5	F.G. Crystalline Basalt
210.5-293.0	Weakly Altered, Variably Brecciated Basalt
293.0-295.7	Sheared, Chloritized Basalt
295.7-320.0	F.G. Crystalline Basalt

EOH

This hole intersected, between 70.3 and 115.5 metres, a sequence of intercalated strongly sheared and altered mafic volcanics and volcanoclastic\epiclastic sediments that characterize the targeted fault zone some 2 kilometres to the northwest. One distinct zone of

fault gouge was noted between 96.0 and 104.4 metres, and the interpreted extension of the zone was successfully identified. Of notable variance in this hole was the presence of a relatively undeformed and unaltered mafic volcanic "footwall", whereas to the northwest the footwall is usually volcanoclastic fragmental rocks. It is probably that this hole has penetrated much deeper (south) into the footwall stratigraphy, and has come out of the broad zone of deformation and alteration associated with what appears to be an anastomosing shear system.

While several zones of intense alteration, typically sericite and Fe carbonate, with lesser silica and sulphide mineralization, were noted around the major fault, no significantly elevated gold values were returned from the 110 samples split for analysis in this hole. The best analysis, of 346 ppb Au, came from the uppermost 0.7 metres of core drilled in the hole, a quartz-carbonate veined graphitic metasediment. This tenure of gold is common through the main mineralized zone to the northwest, in graphitic metasediments and shears, and only where significant silicification accompanies the sericite-carbonate alteration, particularly if sulphide mineralization in the form of pyrite and arsenopyrite are present in excess of 5%, do gold values approach economic grade. This typically occurs almost immediately at the first mafic volcanic-sediment\volcanoclastic contact, a stratigraphic horizon not seen in this hole, and it may be that the most prospective stratigraphy was overshot. Any additional drilling on the property should include a hole designed to step back from this one, and in section drill through the inferred contact immediately north of the stratigraphy intersected in T-91-01.

DDH T-91-02

COLLAR: L0+00E, 14+00N (IMPERIAL GRID)
AZIMUTH: 180 DEGREES
DIP: -50 DEGREES
LENGTH: 146.0 METRES
TARGET: This hole was designed to step 122 metres east and along strike from intersections in Holes TU1-3-70 and T-87-01, and 91.44 metres east and along strike from intersections in Hole T-87-03. These three holes delineated a complex interdigitated structural sequence of intensely altered (carbonate-sericite-silica-sulphides) mafic metavolcanics and epiclastic metasediments,

at the stratigraphic contact between massive leucoxene bearing tholeiitic mafic metavolcanics to the north, and coarse volcanoclastic fragmental rocks to the south. Previous drilling indicated the contact is a structural transposition of two dramatically different stratigraphic assemblages, that in holes TU1-3-70 and T-91-01 appears to dip at a very shallow angle from 45 to 25 degrees to the north. Gold mineralization occurs as both free gold in thin quartz veins within the intensely altered sequence, and associated with disseminated pyrite and arsenopyrite within the altered sequence. Assays to as high as 2.5 gpt Au\6.6 metres, including 13.7 gpt Au\0.91 metres in hole TU1-3-70, 2.7 gpt Au\2.75 metres in hole T-87-01, and 1.6 gpt Au\1.0 metres in hole T-91-03 were returned from the altered horizon. The hole was targeted using an HLEM conductor associated with graphitic shears and graphitic argillaceous metasediments within and immediately below the structural zone of interest, as well as a truncated strong ovoid magnetic signature reflecting the termination of a local ultramafic body (emplacement genesis uncertain) against the structural zone.

LITHOLOGIES SUMMARY (All intervals in metres)

0.00 - 26.2	Overburden
26.2 - 30.0	Massive F.G. Crystalline Basalt
30.0 - 59.0	Amygdaloidal and Variolitic Basalt
59.0 - 65.6	Weakly Bleached, Altered Amygdaloidal Basalt
65.6 - 66.0	Graphite
66.0 - 73.5	Talc Altered Ultramafic
73.5 - 76.5	Intensely Talc Altered Ultramafic
76.5 - 82.0	Talc Altered Ultramafic
82.0 - 88.4	Moderately Bleached, Altered Mafic Volcanic
88.4 - 91.4	Intensely Bleached, Silica-Fe Carbonate Altered Mafic Volcanic
91.4 - 91.8	Fuchsite Quartz-Carbonate Veined Intensely Silica-Carbonate Altered Mafic Volcanic
91.8 - 92.6	Intensely Silica-Fe Carbonate Altered Mafic Volcanic
92.6 - 93.1	Graphitic, Siliceous Argillite
93.1 - 97.6	Variably Silicified, Brecciated Intermediate to Mafic Volcanic
97.6 - 99.3	Graphitic Mud\Gouge
99.3 - 101.3	Intensely Brecciated, Fe Carbonate Altered Mafic Volcanic
101.3-103.6	Graphitic Mud\Gouge\Argillite
103.6-105.0	Mineralized, Strongly Silicified, Carbonatized Intermediate to Mafic Volcanic

105.0-121.6	Massive, F.G. Crystalline Andesite to Basalt
121.6-122.3	Interbedded Argillite-Siltstone-Greywacke
122.3-124.2	Graphitic Argillite-Siltstone
124.2-127.0	Interbedded Graphitic and Siliceous Metasediments
127.0-129.5	Sericite-Carbonate Schist (Sheared Greywacke)
129.5-134.3	Sericitized, Carbonatized Mafic Volcanic
134.3-136.2	Graphitic Argillite
136.2-140.6	Coarse Volcanoclastic Fragmental
140.6-143.0	Graphitic Argillite
143.0-146.0	Coarse Volcanoclastic Fragmental

EOH

The hole intersected a similar stratigraphic and lithostructural sequence to that encountered to the west, namely;

- a hanging wall suite of massive mafic metavolcanics from 26.2 to 65.6 metres, followed by ultramafics (probably intrusive) from 66.0 to 82.0 metres.

- the structural zone of strongly altered mafic volcanics around several thin graphitic fault zones between 82.0 and 105.0 metres.

- a thin unaltered mafic flow between 105.0 and 121.6 metres.

- a thick epiclastic sedimentary sequence between 121.6 and 136.2 metres.

- into the coarse volcanic fragmental unit to the end of the hole, at 146.0 metres.

Eighty six samples were split for analysis, none of which returned significantly anomalous gold values in excess of 1.0 gpt Au. Several weakly anomalous values, in the hundreds of ppb range were encountered, primarily from graphitic shears and adjacent altered mafic metavolcanics, indicating that the targeted lithostructural zone continues to carry Au of uneconomic tenure.

DDH T-91-03

COLLAR: L4+00E, 12+00N (IMPERIAL GRID)
 AZIMUTH: 180 DEGREES
 DIP: -50 DEGREES
 LENGTH: 170.0 METRES

TARGET: This hole stepped 122 metres east-southeast along strike from hole T-91-02, and was again designed to test the lithostructural zone encountered in drilling to the west. The hole again targeted a strong, distinct magnetic break, between the ovoid high reflecting ultramafics terminating against the inferred fault zone, and a strong east-southeast trending HLEM anomaly associated with graphitic shears and epiclastic metasediments within and immediately below the targeted fault.

LITHOLOGIES SUMMARY (ALL INTERVALS IN METRES)

0.00 - 24.0	Overburden
24.0 - 29.0	Peridotite
29.0 - 30.9	Intermediate Lapilli Tuff\Agglomerate
30.9 - 32.9	Mafic to Ultramafic Intrusive (Gabbro-Pyroxenite)
32.9 - 40.0	Porphyritic, Silicified Int. - Mafic Volcanic
40.0 - 52.2	FG Crystalline Basalt
52.2 - 52.5	Brecciated Mafic Volcanic
52.5 - 53.1	Graphitic Argillite
53.1 - 53.3	Brecciated Mafic Volcanic
53.3 - 62.2	Leucoxene Basalt
62.2 - 64.0	Intensely Chloritized Lcx. Basalt (Fault)
64.0 - 68.0	Leucoxene Basalt
68.0 - 72.5	Wkly to Mod. Sericite-Fe Carbonate Altered Lcx. Basalt
72.5 - 79.4	Coarse Volcanoclastic\Fragmental
79.4 - 80.6	Graphitic Argillite\Breccia
80.6 - 86.8	Coarse Volcanoclastic\Fragmental
86.8 - 89.5	Mineralized, Qtz-Carb Veined Volcanoclastic\Fragmental
89.5 - 92.6	Strongly Sericite-Fe Carbonate Altered Volcanoclastic\Fragmental
92.6 - 98.3	Graphitic Argillite
98.3 - 106.3	Qtz-Carb. Veined, Brecciated, Strongly Silica-Sericite-Fe Carbonate Altered Mafic Volcanic
106.3-110.0	Sericite-Carbonate Altered Mafic to Ultramafic Volcanic
110.0-117.2	Talc-Chlorite-Carbonate ALtered Ultramafic (Komatiitic Flow)
117.2-123.0	Talc-Serpentine Altered Ultramafic (Kom. Flow)
123.0-126.7	Talc-Serp. Clay\Mud (Fault Gouge)
126.7-151.8	Interbedded Graphitic Argillite and Siltstone-Greywacke

151.8-153.4	Siltstone
153.4-154.8	Graphitic Argillite
154.8-155.9	Brecciated Siltstone
155.9-158.4	Graphitic Argillite
158.4-167.8	Coarse Volcanoclastic\Fragmental
167.8-170.0	Sericite-Fe Carbonate Altered Volcanoclastic\ Fragmental

EOH

This hole collared into the ultramafic intrusive, as reflected geophysically by the strong, ovoid, northeast trending magnetic high. Below the ultramafic was a stratigraphic and structural sequence similar to that intersected in drilling to the west, again namely;

- a sequence of relatively unaltered or deformed mafic metavolcanics, to 72.5 metres.

- the complex "structural zone", between 72.5 and 126.7 metres, that locally included tightly interdigitated, altered mafic volcanics, coarse volcanoclastics, and thin komatiitic flows.

- a distinct footwall of epiclastic metasediments between 126.7 and 158.4 metres.

- into the coarse volcanoclastics to the end of the hole at 170.0 metres.

One hundred and sixteen samples were split for analysis, none of which returned significantly elevated gold values in excess of 1.0 gpt. Again, as in hole T-91-02, there was a broad zone of weak gold enrichment on the 100's of ppb level, throughout the altered structural zone between 72.5 and 106.3 metres. The zone, moving east, then, continues to carry weakly anomalous values but no economic grade intersections.

DDH T-91-04

COLLAR: L8+00E, 11+00N
 AZIMUTH: 180 DEGREES
 DIP: - 50 DEGREES

LENGTH: 227.0 METRES (Note that this hole was initially drilled to a depth of 158.0 metres, and subsequently deepened to 227.0 metres)

TARGET: This hole was designed to continue testing the "structural" zone southeast and along strike from hole T-91-03, 122 metres to the west. The hole targeted a strong HLEM anomaly associated with the graphitic shears and epiclastic metasediments within and immediately below the zone of interest, and the distinct magnetic break reflecting the targeted structure.

LITHOLOGIES SUMMARY (ALL INTERVALS IN METRES)

0.00 - 27.3	Overburden
27.3 - 53.7	Massive FG Crystalline Mafic Volcanic
53.7 - 57.1	FG Crystalline Leucoxene Basalt
57.1 - 66.0	Massive FG-MG Basalt
66.0 - 69.5	Partially Altered (Sericite, Fe Carbonate) Mafic Volcanic
69.5 - 89.2	Strongly Carbonatized, Moderately Sericitized Mafic Volcanic
89.2 - 91.0	Mineralized, Intensely Fe Carbonate Altered, Brecciated Mafic Volcanic
91.0 - 94.0	Variably Brecciated, Strongly Carbonatized Mafic Volcanic
94.0 - 95.2	Quartz Veined Fault Gouge
95.2 - 96.7	Quartz Vein
96.7 - 97.2	Mineralized Graphitic Schist
97.2 - 97.8	Mineralized, Sericitized, Carbonatized Mafic Volcanic
97.8 - 99.0	Altered FG Crystalline Mafic Volcanic
99.0 -106.0	Mineralized, Intensely Carbonatized, Sericitized Mafic Volcanic
106.0-106.3	Graphitic Schist
106.3-108.4	Quartz-Graphite Breccia
108.4-109.8	Graphitic Argillite
109.8-112.0	Fuchsitic, Intensely Sericitized, Carbonatized Volcanic Fragmental\Breccia
112.0-141.7	Intensely Sericitized, Carbonatized Coarse Volcanoclastic\Breccia
141.7-144.1	Interbedded Graphitic Argillite and Graphitic Volcanoclastic
144.1-158.0	Strongly Sericitized, Carbonatized Mafic Volcanic

158.0-159.5	Mineralized, Intensely Sericitized, Carbonatized Brecciated Mafic Volcanic
159.5-159.8	Graphitic Argillite
159.8-161.0	Mineralized, Quartz Carbonate Veined, Intensely Sericitized, Carbonatized Mafic Volcanic
161.0-161.7	Qtz Veined, Silicified, Graphitic Breccia
161.7-166.1	Intensely Sericitized, Carbonatized Fragmental\ Breccia
166.1-168.0	Intensely Talc-Sericite-Carbonate Altered Fragmental\Breccia (UM Protolith)
168.0-185.2	Intensely Talc Altered, Variably Brecciated Ultramafic (Komatiitic Flow)
185.2-187.0	Serpentinized Ultramafic (Kom. Flow)
187.0-207.2	Talc Altered, Variably Brecciated Ultramafic (Kom. Flow)
207.2-208.4	Variably Altered (Silica-Sericite-Carbonate) Bleached Mafic to Ultramafic Volcanic
208.4-208.9	Felsic Dyke
208.9-212.6	Variably Altered (Silica-Sericite-Carbonate) Brecciated Mafic to Ultramafic Volcanic
212.6-214.0	Talc Altered Ultramafic (Komatiitic Flow)
214.0-216.0	Brecciated, Silicified Mafic to Ultramafic Volcanic
216.0-224.7	Variably Bleached, Silicified Mafic Volcanic
224.7-227.0	FG Crystalline Leucoxene Basalt

EOH

This hole intersected a similar stratigraphy and structural zone as that seen in the drilling completed to the west, and for the first time penetrated completely through the volcanoclastic footwall zone into relatively undeformed, massive mafic volcanics.

The hole collared into massive basalts, from 27.7 to 66.0 metres, and continued through into the "structural zone", with increasing intensity of carbonate-sericite and silica alteration within the mafic metavolcanics from 66.0 to 94.0 metres. Several weakly anomalous gold values were returned from the altered mafics, two in excess of 1.0 gpt Au. From 83.7 to 84.2 metres, a 50 cm sample encompassing a 10 cm. quartz - arsenopyrite vein returned 7.5 gpt Au. Note that this is the first significant occurrence of AsPy in

the 1991 drilling program. From 89.2 to 89.7 metres, a 50 cm. sample encompassing a 10 cm. quartz-pyrite vein carried 1.159 gpt Au.

From 94.0 to 95.2 metres, the hole encountered quartz veined graphitic fault gouge, below which from 95.2 to 96.7, a massive bull quartz vein was intersected. Only weakly anomalous gold values to 136 ppb were returned from this horizon.

Below the vein, the hole continued through intensely altered mafic volcanics, to 109.8 metres, though again only weakly anomalous gold values to 641 ppb were encountered.

From 109.8 to 144.1 metres, the hole intersected altered coarse volcanoclastics, returning no significant gold values. From 144.1 to 158.0 metres, the hole re-entered a sequence of intensely altered mafic volcanics, with trace amounts of very fine grained disseminated arsenopyrite. This mineralization was not seen while shutting down the hole, and only noted later during detailed logging. As the targeted zone had already been penetrated, the hole was terminated within this weakly mineralized zone, which returned gold values to 455 ppb\1.0 metres. A decision to deepen the hole was made based on the anomalous values, as it was not known to what extent this new, lower zone might continue.

From 158.0 to 161.0, the deepened hole intersected similarly strongly altered, weakly mineralized mafic volcanics, which carried weakly anomalous gold values to 689 ppb\0.3 metres.

Below the altered mafics, from 161.7 to 207.2 metres, a thick sequence of variably altered (talc, carbonate, sericite, serpentine) ultramafics were encountered, thought to be komatiites. This intersection represented a significant thickening of the komatiites, and serves to illustrate the very rapid local changes in the complex stratigraphy.

Below the altered ultramafics, a series of variably altered mafic flows was encountered, from which no significantly elevated gold values were returned. The hole stopped in relatively undeformed, massive fg crystalline basalt, very similar in appearance to the massive basalts of the hanging wall. With this section through the stratigraphy\structure, it becomes clear that much of what is being termed volcanoclastics are very locally derived, possibly fault

scarp related fragmental rocks, or in fact intensely tectonized flows. While clearly there is an epiclastic\volcanoclastic component to the lower portion of the "zone", it appears that in the broadest sense both the footwall and hanging walls of the "structure" are massive mafic flows.

DDH T-91-05

COLLAR: L12+00E, 10+00N (IMPERIAL GRID)
AZIMUTH: 180 DEGREES
DIP: - 50 DEGREES
LENGTH: 235.0 METRES (This hole was originally drilled to a depth of 143.0 metres, and subsequently deepened to 235.0 metres).
TARGET: This hole was drilled 122 metres east-southeast and along strike from DDH T-91-04. The hole was designed to continue testing along strike the "structural zone", and again targeted the inferred magnetic break along that zone, as well as the HLEM anomaly associated with the graphitic shearing associated with the mineralized zone. Note that at this location the strong HLEM anomaly has turned from a 120 degree orientation, to almost east-west. The conductor then continues to the northeast at approximately 070 degrees. The changing orientation may either reflect a gentle open fold in the stratigraphy, or a second 070 degree trending graphitic interflow horizon that terminates against the 120 degree trending fault proximal to Line 12+00E.

LITHOLOGIES SUMMARY (ALL INTERVALS IN METRES)

0.00 - 29.3	Overburden
29.3 - 47.2	FG, Crystalline Basalt
47.2 - 51.5	Siliceous Graywacke
51.5 - 56.6	Graphitic Argillite\Breccia
56.6 - 60.6	Siliceous Graywacke
60.6 - 72.4	Andesite to Basalt
72.4 - 73.2	Interbedded Siliceous and Graphitic Argillite
73.2 - 75.6	Brecciated, ALTERed Mafic Volcanic
75.6 - 84.5	Leucoxene Basalt
84.5 - 89.6	Strongly Sheared, Silicified, Carbonatized Basalt
89.6 - 94.7	Graphitic Argillite
94.7 - 97.5	Mineralized, Intensely Sericitized, Carbonatized Mafic Volcanic

97.5 - 98.6	Graphitic, Siliceous Argillite
98.6 - 99.4	Pyritic, Sericitic Argillite
99.4 -102.1	Graphitic Argillite
102.1-108.5	Carbonatized, FG Crystalline Basalt
108.5-112.4	Mineralized, Strongly Sericitized, Carbonatized Mafic Volcanic
112.4-116.0	Strongly Carbonatized, Sericitized Basalt
116.0-127.8	FG Crystalline Leucoxene Basalt
127.8-129.5	Brecciated, Intensely Sericitized, Carbonatized Mafic Volcanic
129.5-156.0	Massive, FG Crystalline Lcx Basalt
156.0-162.5	Porphyritic, Carbonatized Leucoxene Basalt
162.5-167.4	Strongly Carbonatized, Sericitized Lcx. Basalt
167.4-168.2	Qtz-Carb Veined, Brecciated, Silicified Graphitic Argillite
168.2-171.8	Variably Brecciated, Strongly Carbonatized Leucoxene Basalt
171.8-172.7	Qtz-Carb Veined, Brecciated, Silicified Graphitic Argillite
172.7-177.8	Intensely Sericitized, Carbonatized Fragmental Rock (Breccia?)
177.8-194.5	Variably Altered (Silica-Sericite-Carbonate) Brecciated Intermediate to Mafic Volcanic\Volcanoclastic
194.5-203.6	Intensely Talc Altered Ultramafic (Komatiitic Flow)
203.6-209.5	Sericitized, Carbonatized, Brecciated Siltstone- Graywacke
209.5-223.5	Graywacke to Conglomerate
223.5-225.8	Strongly Sheared, Sericitized, Carbonatized, Siltstone-Graywacke
225.8-226.8	Qtz-Carb Veined, Variably Altered Siltstone
226.8-228.4	Qtz-Carb Veined Graphitic Breccia
228.4-235.0	Basalt

EOH

This hole intersected a locally more complex stratigraphy, with multiple zones of structural deformation and related alteration and mineralization.

The hole collared into the hanging wall massive basalts, between 29.3 and 72.4 metres, with locally between 47.2 and 60.6 metres,

a wedge of relatively undeformed epiclastic metasediments. This new interflow horizon is interpreted as trending northeast - southwest, as reflected by the abrupt change in the associated HLEM conductor, and probably terminates against the main structural deformation zone to the southwest.

Below these unaltered mafics, the hole intersected a zone of structural deformation and associated alteration\mineralization, in both mafic metavolcanics and thin associated graphitic shear zones, between 73.2 and 116.0 metres. Included in this section were zones of disseminated AsPy mineralization to 2%, notably between 108.5 and 112.4 metres. Several broad zones of anomalous gold values were returned from the zone, including 759 ppb Au\12.5 metres between 89.6 and 102.1 metres, and 801 ppb Au\3.9 metres between 108.5 and 112.4 metres (including 1.9 gpt\1.0 metres).

The hole then re-entered relatively massive, undeformed mafic volcanics to 143.0 metres, with the exception of one thin altered mineralized zone between 127.8 and 129.5 metres, which returned gold values averaging 252 ppb\1.7 metres. The hole was originally terminated at 143.0 metres, having intersected what was believed at the time to be the main mineralized deformation zone. Subsequent re-interpretation indicated that the main contact related horizon had not been intersected, and the hole was deepened to 227.0 metres.

The deeper drilling encountered the contact related structural deformation zone between 167.4 and 174.5 metres, with intensely altered mafic volcanics and intercalated graphitic metasediments immediately above the footwall coarse volcanoclastics. The zone carried anomalous gold values averaging 296 ppb\8.7 metres, with values as high as 1.12 gpt Au\0.3 metres.

The hole continued through the marker komatiitic flow, epiclastic metasediments, and terminated in relatively unaltered, undeformed basalts at 227.0 metres.

The results of this hole were encouraging, with the discovery of multiple mineralized zones over significant widths, and the original drilling program was expanded to continue probing the targeted deformation zone to the east.

DDH T-91-06

COLLAR: L16+00E, 8+00N (IMPERIAL GRID)
AZIMUTH: 180 DEGREES
DIP: -50 DEGREES
LENGTH: 137.0 METRES
TARGET: This hole was designed to continue testing east-southeast along strike the structural deformation zone outlined by previous drilling to the west. The hole was collared 122 metres east of DDH T-91-05, and targeted the extrapolated magnetic break thought to reflect the main deformation zone.

LITHOLOGIES SUMMARY (ALL INTERVALS IN METRES)

0.00 - 33.6	Overburden
33.6 - 48.0	Massive, F.G. Crystalline Basalt
48.0 - 50.8	Carbonatized, Porphyritic Lcx. Basalt
50.8 - 53.3	Intensely Sericitized, Carbonatized Mafic Volcanic
53.3 - 53.7	Pyrite
53.7 - 56.4	Mineralized, Siliceous Graywacke
56.4 - 56.8	Mineralized, Siliceous Graywacke
56.8 - 58.0	Mineralized, Sericitized, Carbonatized Basalt
58.0 - 59.2	Siliceous Graywacke
59.2 - 61.0	Mineralized, Strongly Carbonatized Mafic Volcanic
61.0 - 62.5	Siltstone-Graywacke
62.5 - 63.7	Brecciated Siltstone-Graywacke
63.7 - 71.3	Interbedded Graywacke-Siltstone-Argillite
71.3 - 74.7	Sheared, Sericitized, Carbonatized Siltstone
74.7 - 74.9	Graphitic Mud\Fault Gouge
74.9 - 75.3	Quartz-Graphite Breccia
75.3 - 97.0	Sericitized, Carbonatized Coarse Fragmental Rock
97.0 - 98.0	Graphitic Breccia
98.0 -102.8	Quartz-Carbonate Breccia
102.8-106.4	Interbedded Sericitic and Graphitic Argillite
106.4-108.3	Conglomerate
108.3-109.0	Interbedded Sericitic and Graphitic Argillite
109.0-130.3	Conglomerate
130.3-137.0	Coarse Volcanoclastic\Fragmental Rock

EOH

This hole collared into the massive basalts of the hanging wall, and continued through the deformation zone proximal to the contact

with a thick sequence of epiclastic metasediments. Below the epiclastic metasediments were the footwall volcanoclastics, with several thin interbedded epiclastic horizons. Within the altered zone, several areas of disseminated arsenopyrite, to 3% locally, returned anomalous gold values. From 52.0 - 53.3 metres, within altered, mineralized mafic volcanics, gold values averaged 623 ppb Au\1.3 metres, including 1.35 gpt\0.5 metres. From 59.2 to 61.0 metres, gold values averaged 1.44 gpt\1.8 metres, including 3.51 gpt\0.5 metres.

DDH T-91-07

COLLAR: L16+00E, 10+00N (IMPERIAL GRID)
 AZIMUTH: 180 DEGREES
 DIP: - 50 DEGREES
 LENGTH: 200.0 METRES
 TARGET: This hole was collared 61 metres behind hole T-91-06, and drilled beneath hole 06 to test the down dip extension of the mineralized deformation zone, and provide some sense of the orientation of the zone some 600 metres east of any previous sectional drilling.

LITHOLOGIES SUMMARY (ALL INTERVALS IN METRES)

0.00 - 39.2	Overburden
39.2 - 48.5	Mineralized, Strongly Carbonatized, Sericitized, Mafic Volcanic
48.5 - 76.5	Massive, FG Crystalline Lcx. Basalt
76.5 - 84.8	Sheared, Carbonatized Lcx. Basalt
84.8 -150.6	Massive, FG Crystalline Lcx. Basalt
150.6-154.6	Mineralized, Sericitized, Carbonatized, Brecciated Mafic Volcanic
154.6-156.5	Graphitic Argillite
156.5-175.0	Strongly Sericitized, Carbonatized Graywacke?\Volcanic?
175.0-176.5	Coarse Volcanic Fragmental
176.5-181.8	Mineralized, Qtz-Carb Veined, Brecciated Sericitized, Carbonatized Mafic Volcanic
181.8-182.2	Graphitic Gouge
182.2-188.2	Sheared, Sericitized, Carbonatized Fragmental Rock
188.2-192.0	Fuchsitic, Sericitized, Carbonatized Fragmental Rock
192.0-198.3	Sheared, Sericitized, Carbonatized, Fragmental Rock
198.3-200.0	Interbedded Argillite-Siltstone-Graywacke

EOH

This hole collared into a previously unidentified major alteration zone within the mafic metavolcanics, from 39.2 to 48.5 metres. The zone, characterized by intense sericite and Fe carbonate alteration, and up to 3% fine disseminated arsenopyrite, returned an average gold grade of 471 ppb over 9.3 metres, with half metre intervals in excess of 1.0 gpt Au.

Beneath this alteration zone, the hole intersected massive mafic metavolcanics to 150.6 metres. From 150.6 to 154.6, a second zone of altered mafic volcanics, proximal to the contact with underlying epiclastic metasediments, carried 3% disseminated arsenopyrite and returned gold grades averaging 707 ppb\4.0 metres, including a one metre section at 1.22 gpt Au.

The hole intersected a third strongly mineralized (up to 7% disseminated AsPy) intensely altered mafic volcanic package between 176.5 and 181.8 metres, immediately above a major graphitic fault zone. This zone returned an average gold grade of 2.08 gpt\5.3 metres, including 5.27 gpt\1.0 metres, and represents the best intersection from the 1991 drilling program. Below this zone, the hole encountered the footwall coarse volcanoclastics, with minor interbedded epiclastic metasediments. Note in section the vertical to sub-vertical orientation of the faulting and related alteration\ mineralization. The fault has thus "rolled" from its shallowly northward dip seen in section on L4+00W, 600 metres to the west.

DDH T-91-08

COLLAR: L16+00E, 11+00N (IMPERIAL GRID)
AZIMUTH: 180 DEGREES
DIP: -55 DEGREES
LENGTH: 281.0 METRES
TARGET: This hole stepped 33 metres north and behind hole T-91-07, to test the downdip extensions of the three mineralized zones encountered in that hole.

LITHOLOGIES SUMMARY (ALL INTERVALS IN METRES)

0.00 - 26.8	Overburden
26.8 - 35.0	Graphitic ARgillite
35.0 - 35.9	Brecciated, Carbonatized Basalt
35.9 - 39.0	Moderately Carbonatized Andesite to Basalt

39.0 - 60.2	FG, Crystalline Lcx. Basalt
60.2 - 61.4	Strongly Carbonatized, Sericitized, Mafic Volcanic
61.4 - 62.0	Sheared, Strongly Carbonatized, Sericitized Mafic Volcanic
62.0 - 63.5	Mineralized Sheared Sericitized, Carbonatized Wacke\ Tuff
63.5 - 63.7	Graphitic Fault Gouge\Mud
63.7 - 78.5	Porphyritic Weakly Carbonatized Basalt
78.5 - 89.0	Strongly Carbonatized, Sericitized Mafic Volcanic
89.0 -111.1	FG Crystalline Lcx. Basalt
111.1-120.9	Massive FG Crystalline Basalt
120.9-162.4	FG Massive Lcx. Basalt
162.4-187.5	Porphyritic, Carbonatized Lcx. Basalt
187.5-202.6	Strongly Carbonatized, Sericitized Lcx. Basalt
202.6-211.2	Intensely Carbonatized, Sericitized, Silicified Mafic Volcanic
211.2-213.4	Graphitic Argillite
213.4-217.4	Brecciated, Intensely Carbonatized, Variably Sericitized, Silicified Mafic Volcanic
217.4-218.2	Graphitic Argillite\Breccia
218.2-224.6	Strongly Carbonatized, Sericitized, Silicified Int. to Mafic Volcanic
224.6-225.1	Qtz-Carb. Veined Graphitic Schist (Fault)
225.1-226.8	Mineralized, Intensely Carbonatized, Sericitized, Silicified Mafic Volcanic
226.8-227.6	Qtz Veined Graphitic Fault Gouge
227.6-230.0	Intensely Sericitized, Carbonatized Fragmental Rock
230.0-239.5	Sheared, Variably ALtered Basalt
239.5-245.8	Intensely Talc Altered, Variably Brecciated Ultramafic (Komatiitic Flow)
245.8-258.0	Strongly Sheared, Coarse Fragmental Rock
258.0-281.0	Siltstone-Graywacke

EOH (Hole lost due to caving at 281.0 metres)

This hole collared into graphitic argillite, from 26.8 to 35.0 metres, immediately below which was a weakly carbonatized zone within mafic metavolcanics, from 35.0 to 39.0 metres. Note that a strong northeast trending HLEM conductor is associated with the graphitic horizon, trending northeast -southwest and terminating to the southwest of the intersection against the 120 degree trending targeted fault.

The hole then penetrated a thick sequence of massive mafic volcanics to 187.5 metres, within which were two weakly mineralized, altered zones. From 61.4 to 63.5, a thin zone of carbonatized basalts, with 3% pyrite and 0.5% arsenopyrite, returned gold values averaging 467 ppb\2.1 metres. From 78.5 to 89.0 metres, a zone of strong carbonate-sericite alteration within the mafics correlates with the zone intersected in the uppermost section of hole T-91-07. The zone was only weakly mineralized, however, and only one sample where locally arsenopyrite was present to 1% returned a significantly anomalous gold value of 2.10 gpt\1.0 metres. Correlating the two zones indicates a dip of approximately 75 degrees north to the altered horizon. As is readily obvious, the continuity of mineralization and related gold tenure in the zone is extremely poor.

From 187.5 to 202.6 metres, the mafic volcanics exhibited increasing carbonatization and sericitization. From 202.6 to 227.6, the major zone of deformation and alteration was encountered, within an intercalated sequence of mafic volcanics, and graphitic shears. Locally within the altered mafics arsenopyrite was present to 2%, though gold values through the horizon were only weakly anomalous. From 212.8 - 213.4 metres, a sample carried 1.24 gpt Au, and from 225.1 to 226.8, a section averaged 997 ppb\1.7 metres.

Below this intensely altered zone, the hole encountered the footwall coarse volcanoclastic fragmentals, and from 239.5 to 245.8, a marker komatiitic horizon. Note that the ultramafic was not intersected in the up-dip holes 07 or 06, indicating dramatic very local complexity in the stratigraphy below and within the fault zone. The hole terminated in a thick, altered siltstone, at 281.0 metres. The graphitic fault zones were badly caving down hole, and despite two major cementings of the rubble zones, the hole was not able to continue. It is unclear, due to the complexity of the stratigraphy, whether or not the strongly mineralized horizon encountered in hole T-91-07 was penetrated. I suspect it was, between 202.6 and 226.8 metres, and that the broad fault\alteration system is strongly anastomosing, accounting for the local apparent changes in dip and position of the mineralized zones.

Within this three hole section through the main fault\deformation zone, the position, continuity, and grade of mineralization is extremely erratic, and does not bode well for defining within the zone an economic ore body.

DDH T-91-09

COLLAR: L4+00W, 17+00N (IMPERIAL GRID)
AZIMUTH: 180 DEGREES
DIP: -50 DEGREES
LENGTH: 176.0 METRES
TARGET: This hole was designed to test the down dip extension of mineralization encountered in holes TU-81-01 and TU1-03-70, collared 75 metres to the south. Both of those holes had intersected strongly anomalous gold values to as high as 13.7 gpt\0.9 metres, within quartz veined, brecciated, intensely sericite-silica-carbonate altered mafic volcanics proximal to the contact with epiclastic metasediments.

LITHOLOGIES SUMMARY (ALL INTERVALS IN METRES)

0.00 - 9.2	Overburden
9.2 -124.4	Massive, FG Crystalline Basalt
124.4-125.9	Mineralized Graphitic Breccia
125.9-127.6	Qtz Veined Graphitic Rubble\Fault
127.6-138.0	Variably Altered (Carbonate, Sericite, Silica) Leucoxene Basalt
138.0-141.0	Brecciated, Interbedded Graphitic Argillite and Siltstone-Graywacke
141.0-143.9	Qtz-Carb Veined, Brecciated Siltstone-Graywacke
143.9-146.7	Intensely Sericitized, Carbonatized Fragmental Rock
146.7-159.5	Interbedded Graphitic Argillite-Siltstone
159.5-169.9	Interbedded Graphitic Argillite-Siltstone-Graywacke
169.9-176.0	Sericitized Coarse Volcanic Fragmental Rock

EOH

This hole encountered a thick sequence of unaltered hanging wall basalts, from 9.2 to 124.4 metres. From 124.4 to 143.9 metres, the hole intersected variably altered mafic volcanics, with several graphitic fault zones, and intercalated, altered and brecciated epiclastic horizons. From within this targeted deformation zone, only sporadic weakly anomalous gold values to 653 ppb were returned.

From 143.9 to 169.9, the hole intersected primarily epiclastic metasediments, below which, to the end of the hole at 176.0 metres, were the footwall volcanoclastics. Note in section the correlations

of the marker epiclastic and fault zones indicate a 55 to 65 degree dip to the north. The very poor gold values encountered in this hole again illustrate the very sporadic nature of gold mineralization within the fault zone, and the potential for discovery of an economic ore body is limited within the strike length drill tested to date.

TABLE 3
1991 DIAMOND DRILL HOLE SUMMARY
TULLY PROPERTY

<u>HOLE NUMBER</u>	<u>COLLAR</u>	<u>AZIMUTH\DIP</u>	<u>LENGTH</u>
T-91-01L	L7+20W, 3+75N	210\ -50	52.4 M.
T-91-01	L7+20W, 3+75N	210\ -55	320.0 M.
T-91-02	L0+00E, 14+00N	180\ -50	146.0 M.
T-91-03	L4+00E, 12+00N	180\ -50	170.0 M.
T-91-04	L8+00E, 11+00N	180\ -50	227.0 M.
T-91-05	L12+00E, 10+00N	180\ -50	235.0 M.
T-91-06	L16+00E, 8+00N	180\ -50	137.0 M.
T-91-07	L16+00E, 10+00N	180\ -50	200.0 M.
T-91-08	L16+00N, 11+00N	180\ -55	281.0 M.
T-91-09	L4+00W, 17+00N	180\ -50	176.0 M.
TOTAL:			1944.4 M.

TABLE 4
SUMMARY OF ANOMALOUS INTERSECTIONS (>1.0 GPT Au)
1991 DIAMOND DRILLING PROGRAM

<u>HOLE NO.</u>	<u>INTERSECTION(M)</u>		<u>WIDTH</u> (M)	<u>Au (GPT)</u>	<u>CAT.</u>	<u>COMMENTS</u>
	<u>FROM</u>	<u>TO</u>				
T-91-01L	NONE		-	-	BAR.	HOLE LOST
T-91-01	NONE		-	-	BAR.	-
T-91-02	NONE		-	-	BAR.	-
T-91-03	NONE		-	-	BAR.	-
T-91-04	83.7	84.2	0.5	7.09	MIN.	ALT. VOLC.
	89.2	89.7	0.5	1.95	ANOM.	ALT. VOLC.
T-91-05	93.5	94.7	1.2	3.03	SIG.	FRAGMENTAL GRAPH. ARG.
	110.5	111.0	0.5	2.73	ANOM.	ALT. VOLC.
	111.0	111.5	0.5	1.06	ANOM.	ALT. VOLC.
	128.8	129.0	0.2	1.42	ANOM.	ALT. VOLC.
	168.2	168.5	0.3	1.12	ANOM.	ALT. VOLC.
T-91-06	52.5	53.0	0.5	1.35	ANOM.	ALT. VOLC.
	60.5	61.0	0.5	3.42	SIG.	ALT. VOLC.
T-91-07	42.0	42.5	0.5	1.13	ANOM.	ALT. VOLC.
	45.0	45.5	0.5	1.13	ANOM.	ALT. VOLC.
	47.5	48.0	0.5	1.44	ANOM.	ALT. VOLC.
	152.5	153.0	0.5	1.10	ANOM.	ALT. VOLC.
	153.0	153.5	0.5	1.34	ANOM.	ALT. VOLC.
	176.0	176.5	0.5	1.20	ANOM.	ALT. VOLC.
	176.5	177.0	0.5	4.33	SIG.	ALT. VOLC.
	177.0	177.5	0.5	6.22	MIN.	ALT. VOLC.
	179.5	180.0	0.5	1.95	ANOM.	ALT. VOLC.
	180.0	180.5	0.5	3.50	SIG.	ALT. VOLC.
	180.5	181.0	0.5	3.13	SIG.	ALT. VOLC.
T-91-08	84.0	85.0	1.0	2.10	ANOM.	ALT. VOLC.
	212.8	213.4	0.6	1.29	ANOM.	GR. ARG.
	225.1	226.0	0.9	1.12	ANOM.	ALT. VOLC.
T-91-09	NONE		-	-	BAR.	-

CATEGORIES

< 1.0 gpt	BAR. \BARREN
1.0 - 3.0 gpt	ANOM. \ANOMALOUS
3.0 - 5.0 gpt	SIG. \SIGNIFICANT
5.0 - 10.0 GPT	MIN. \MINERALIZED
> 10.0 gpt	ORE

3.2 DISCUSSION: AN OVERVIEW OF WORK COMPLETED TO DATE, AND ECONOMIC RE-EVALUATION OF THE PROPERTY

To date on the property, drilling by Hollinger Argus Mines Ltd, Esso Minerals Canada, and Homestake Canada Ltd., has delineated in 16 drill holes a zone of intense deformation and associated alteration over a strike length of 1400 metres (4250 feet). The zone occurs at or proximal to a tectonic contact between relatively massive, unaltered leucoxene basalts to the north, and a complex lithostratigraphic assemblage of epiclastic sediments, volcanoclastic sediments, and thin komatiitic flows to the south.

The zone is characterized by intense carbonatization, sericitization, and localized silicification, with or without significant secondary quartz-carbonate veining and sulphide (pyrite, arsenopyrite) mineralization. Gold occurs both as free blebs within quartz veins developed within dilatant zones in the broad deformation zone, and intimately associated with disseminated arsenopyrite and pyrite within the altered mafic metavolcanics.

Gold grades along the horizon drill tested to date are extremely sporadic, and for the most part uneconomic. Best values have occurred to date within quartz veins (TU87-02, TU87-04), and with broad zones of disseminated arsenopyrite (T-91-07). Follow up drilling around and down dip from sub-economic intersections have failed to define any continuity of either grade or width in the mineralized zones.

The host deformation zone is also extremely fractured, and between Lines 8+00W and 8+00E, RQD's through the zone are usually in excess of 50 fractures per metre, and the core basically rubble. Mining costs within the zone, even if grades were significantly better, would be prohibitive.

The zone defined to date is uneconomic, and no additional work is recommended west of L16+00E. Work to date has defined, however, a major lithostructural zone, carrying widespread anomalous gold values, that represents a valid target along its untested strike length. The best non-vein intersection to date on the property is from the easternmost hole T-91-07, and while drilling down and up dip from this intersection failed to reproduce grades and widths seen in Hole 07, there is considerable room to test the structure to the southeast. A drilling program designed to evaluate the eastern strike extension of the horizon is proposed in the following section of this report.

4. 1991\92 EXPLORATION PROPOSAL AND BUDGET

A seven hole, 1500 metres diamond drilling program is proposed for either the late summer\early fall 1991, or winter 1992. The timing of the program is dependant on available 1991 budget dollars.

Table 5 summarizes the 7 hole program, and outlined below are hole by hole descriptions. For the sake of clarity, I have labelled all proposed holes with the prefix T-92. Their locations appear plotted on the 1:5000 Geology-Geophysics Compilation in Appendix 5.

DDH T-92-01

COLLAR: L18+00E, 12+00N (IMPERIAL GRID)
AZIMUTH: 180 DEGREES
DIP: -50 DEGREES
ESTIMATED LENGTH: 220 METRES
TARGET: This hole steps 61 metres east and along strike from the three hole fence completed on L16+00E, and is designed to test a strong HLEM conductor (graphitic argillite, as encountered in Hole T-91-08) and the stratigraphy immediately below that conductor. Within that stratigraphy, holes T-91-07 and 08 encountered broad zones of intense carbonatization within mafic metavolcanics, which in places were strongly mineralized (Py, Aspy), and carried gold values to 471 ppb\9.3 metres. The hole, the first of a two hole fence, will continue to a depth of approximately 220 metres, to provide a complete section through the upper altered zones.

DDH T-92-02

COLLAR: L18+00N, 8+00N (IMPERIAL GRID)
AZIMUTH: 180 DEGREES
DIP: -50 DEGREES
ESTIMATED LENGTH: 200 METRES
TARGET: This hole will continue testing a section along L18+00e, 61 metres east and along strike from Holes T-91-06,07, and 08. The hole is designed to penetrate the projected strike extension of the "main mineralized zone", targeting a weak HLEM conductor and a distinct linear magnetic break thought to reflect the underlying deformation zone.

DDH T-92-03

COLLAR: L20+00E, 9+00N (IMPERIAL GRID)
AZIMUTH: 180 DEGREES
DIP: -50 DEGREES
ESTIMATED LENGTH: 240 METRES
TARGET: This hole is designed to step 61 metres east and along strike from the two hole fence completed on L18+00E. The hole will penetrate a previously untested, strong HLEM conductor, immediately north of the envisioned strike projection of the "main mineralized zone", and continue through that zone.

Pending the results of these three holes, the following drilling is proposed.

DDH T-92-04

COLLAR: L24+00E, 6+00N (IMPERIAL GRID)
AZIMUTH: 180 DEGREES
DIP: -50 DEGREES
ESTIMATED LENGTH: 200 METRES
TARGET: This hole is designed to continue testing east and along strike the projected "main mineralized zone", stepping 122 metres east of DDH T-92-03. The hole targets a weak HLEM conductor in the vicinity of the linear magnetic break thought to reflect the underlying structural deformation zone.

DDH T-92-05

COLLAR: L28+00E, 6+00N (IMPERIAL GRID)
AZIMUTH: 180 DEGREES
DIP: -50 DEGREES
ESTIMATED LENGTH: 240 METRES
TARGET: This hole will continue testing the targeted mineralized zone, stepping 122 metres east and along strike from DDH T-92-04.

DDH T-92-06

COLLAR: L34+00E, 0+00 (IMPERIAL GRID)
AZIMUTH: 180 DEGREES
DIP: -50 DEGREES
ESTIMATED LENGTH: 200 METRES
TARGET: This hole is designed to test a previously undrilled weak HLEM conductor, in the vicinity of the possible strike extension of the "mineralized zone".

DDH T-92-07

COLLAR: L7+00W, 4+25N (METRIC GRID)
AZIMUTH: 210 DEGREES
DIP: -50 DEGREES
ESTIMATED LENGTH: 200 METRES
TARGET: This hole is designed to test the stratigraphy immediately northeast of DDH T-91-01, which collared into weakly anomalous graphitic sediments and altered fragmental volcanics very similar in appearance to the footwall sequence of the "mineralized zone", 1200 metres to the northwest. The hole targets a weak HLEM conductor, which may represent the graphitic shear\fault controlling mineralization within the main zone.

Obviously, this proposed program is flexible, and will be very much dependant on the results as they progress.

Estimated total costs for the program are outlined below.

ESTIMATED 1991\92 DRILLING PROGRAM COSTS
TULLY PROJECT

1. DRILLING COSTS

Direct Drilling Costs: 1500M at \$55\M	\$82,500.
Casing, and Miscellaneous Consumables:	\$7,500.

2. SUPERVISION AND GEOLOGICAL

Geologist: 40 days at \$270\day	\$10,800.
Core Splitter: 30 days, at\$125\day	\$3,750.

3. ANALYTICAL

800 samples, at \$12\per sample	\$9,600.
---------------------------------------	----------

<u>4. ROADS AND TRAILS</u>	\$5,000.
----------------------------------	----------

<u>5. MACHINERY AND EQUIPMENT</u>	\$2,500.
---	----------

<u>6. MISCELLANEOUS GEOLOGICAL</u>	\$2,500.
--	----------

<u>7. OTHER</u>	\$1,500.
-----------------------	----------

TOTAL PROGRAM COSTS:	\$125,650.
----------------------	------------

(APPROXIMATELY \$83.73 PER METRE, ALL INCLUSIVE)

TABLE 5
PROPOSED 1991\1992 DIAMOND DRILL HOLES

<u>HOLE NUMBER</u>	<u>COLLAR</u>	<u>GRID</u>	<u>AZIMUTH\DIP</u>	<u>LENGTH</u>
T-92-01	L18+00E, 12+00N	IMPERIAL	180\ -50	220 M
T-92-02	L18+00E, 8+00N	IMPERIAL	180\ -50	200 M
T-92-03	L20+00E, 9+00N	IMPERIAL	180\ -50	240 M
T-92-04	L24+00E, 6+00N	IMPERIAL	180\ -50	200 M
T-92-05	L28+00E, 6+00N	IMPERIAL	180\ -50	240 M
T-92-06	L34+00E, 0+00	IMPERIAL	180\ -50	200 M
T-92-07	L7+00W, 4+25N	METRIC	210\ -50	200M
TOTAL:				1500 M

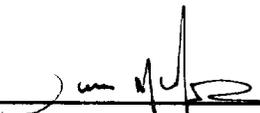
5. SELECTED REFERENCES

- Bending, D.A., 1991
Executive Summary, and Diamond Drilling Proposal, Tully Township Property; Homestake Canada Ltd. Internal Memo
- Bridge, D.A., 1986
Summary Report-Tully 1 Project; Esso Minerals Canada Internal Report
- Hunt, D.S., Richard, J.A., and Carey, E.R., 1980
Tully Township; O.G.S. Preliminary Geology Map P699, 1:15,840
- Lenters, M.H., 1987
Report on Diamond Drilling During September-October, 1987, Tully Project, Tully Township; Esso Minerals Canada Internal Report
- Pyke, D.R., Ayres, L.D., and Innes, D.G., 1973
Timmins-Kirkland Lake Geological Compilation Series, O.G.S. Map 2205 1:253,440
- Shegelski, R.J., 1985
Geological Compilation of Tully Township; Esso Minerals Canada Internal Map
- Wilson, L., 1987
Interpretation of Geophysical Surveys on the Tully Property; Esso Minerals Canada Internal Reports

6. STATEMENT OF QUALIFICATIONS

I, Duncan Forbes McIvor, hereby state that;

- I am a graduate of the University of Waterloo, holding an Honours B.ASc. in Earth Sciences.
- I have been actively employed in the mineral exploration business since 1974, holding various positions with Esso Minerals Canada, Utah Mines Ltd., Utah International Ltd., and Homestake Canada Ltd.
- I am currently employed by Homestake Canada Ltd. as a Regional Exploration Geologist.
- I have personal knowledge that the information presented in this report is accurate.



Duncan McIvor

MAY 1991, TIMMINS, ONT.

Date and Place

DRILL INTERVAL		RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	ROD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION and VEINING	MINERAL PERCENTAGES					DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY					LAB	
FROM	TO									P _q	P	C _{py}					OTA						
35.0	83.0	86.0	3.0	100%	60°	8		<p>84.0-87.5M INTENSELY SHEARED, SERICITIZED (& TALC, CHL, CALC) VOLCANIC FRAGMENTAL (OR EPICLASTIC EQUIVALENT).</p> <ul style="list-style-type: none"> v. strongly to intensely sh. sch. @ ax. or. 60° to ax., ranges from 40° to 70° to ax. light green, to white in places, v. soft, intensely sericitized (with some minor talc), some remnant chl. & calc as thin seams & schistosity - pred (> 80%) det. well developed coarse fragmental/breccia mt, 2 zones of < 5mm to 3cm angular to round frags of similar comp (autobrecc.) stretched elongate if fol, show more heterolithic zones, & frags of light beige, ser. Fe carb all rk. & clear green chloritic rock - appears to be a coarse volcanoclastic, possibly epiclastic - may be a bx. contains 15% < 5mm to 3cm calc. cherty gray to white qtz veins & subv fol, often contorted to strongly brecc. av. sulphide content: 1% Py, tr. sph, pred. ass. & qtz veins. @ 85.5, 3cm hard white Fe/Mg carb - qtz v. u. fol & tr. Py, sph. from 86.1-86.2, soft 1-2 cm contorted qtz - hard white magnesite(?) v. u. fol & locally 2% Py has v. g. min @ v. margin. @ 86.5, 1 cm qtz-mag/dol v. @ 55° ax & 2% spinelite at honey brown blobs to 5mm. @ 86.6, 3 cm cherty white qtz v. @ 60° ax & 1% Py, 1% tr. @ 86.9, clear kg. cherty white qtz v. u. fol & tr Py. @ 87.1, 2cm cherty qtz-mag/dol v. @ 65° ax & 1% Py. from 87.4-87.5, 60 to 5mm - 1cm qtz-mag/dol v. u. fol locally @ 70° ax, & 2% Py. cont. @ 87.5 based on colour, & chl > ser. <p>87.5-96.0M STRONGLY CHLORITIZED (TO SERICITIZED) COARSE VOLCANICLASTIC/EPICLASTIC ROCK</p> <ul style="list-style-type: none"> strongly sch. @ ax. or. 75° to ax, ranges 65°-80° to ax. v. soft, pred. dk green, intensely chloritized, & several lighter green, strongly ser (& talc) altered zones. v. well developed coarse volcanoclastic or epiclastic mt, & frags to 40% of rock, from < 5mm to 5cm, pred. of similar comp (chl-ser all rk), clear (10%) beige strongly Fe carb all frags show more siliceous, harder frags, also pseudospinel mt (?) frags - may be amphibole. strongly fractured, @ all or, & calc, qtz, chl, ser. & TALC trace all. 5% thin (to 1cm) hard white Fe/Mg carb - qtz veins pred. u. fol. average sulphide content: 0.5% Py, pred. ass. & thin qtz-carb v. u. fol. texture & comp suggest probable UM (chemically). @ 88.7, 1cm qtz-mag v. u. fol & tr Py. @ 88.8, 3cm black graph/silic frag & 2% Py. from 90.7-90.9, 10% 1-3cm qtz-mag v. u. fol, & 1% Py. from 92.0-96.0, becomes less mag rich (to 10%), finer, more sericitic, locally abundant talc trace all - almost mylonitic app. @ 92.9, 2 cm qtz-mag/dol v. @ 70° ax & 3% Py @ margin. from 93.9-94.0, 30% 1 cm qtz-mag v. u. fol & tr Py. 	1%						TR. sph.	85.0	15						
86.0														86.0	2115	<5							
87.0														87.0	2116	<5							
88.0	86.0	89.0	3.0	100%	75°	7								87.5	2117	5							
89.0														88.5	2118	<5							
90.0															2119	<5							
91.0	89.0	92.0	3.0	100%		8									89.5	2120	<5						
92.0															2121	<5							
93.0															2122	<5							
94.0	92.0	95.0	3.0	100%		15									90.5	2123	<5						
95.0															91.5	2124	5						
96.0															92.5	2125	<5						
97.0	95.0	98.0	3.0	100%	70-80°	>50									93.0	2126	<5						
98.0															94.0	2127	7						
99.0															95.0	2128	9/12						
100.0	98.0	101.0	1.5	50%	FAULT	>50								96.0	2129	<5							

DRILL INTERVAL		RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	ROD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION and VEINING	MINERAL PERCENTAGES					DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY					LAB			
FROM	TO									P ₄	P ₀	Q ₄													
113.0	116.0	3.0	100%	60°		5		113-1-115.5M BRECCIATED, & STRONGLY SERICITIZED MAFIC (TO UM-LOW Mg KOM?) VOLC. - rock is v. soft, intensely sh. schistose, orientations highly variable, tightly folded in places, ax 60-70° to cax. - light grey, comp. pred. of ser (if talc?), some wk prv. calc (mag) alb in places. - strongly auto-brecciated appearing, & angular to sub-rounded frags to 1-2 cm, in similar compositional matrix. - strongly fractured, @ all orientations, & calc. magnesite, ser, chl trac hill. - 5% thin conchoidal to brecciated mag-minor calc qtz vns. - from 113.1-114.0m, contains 2% v. hy diss Py & Py frac hill (& locally abundant ans hematite) - from 114.0-115.5, only tr. Py pred as frac hill. - from 113-113.4, sch is intensely contorted, tightly folded. - from 114.3-114.9, open fold nose, cax is 60°-0°-60°. - @ 115.0, 5 cm qtz-mag vns @ 80° to cax. - gradational contact & underlying massive unit.	SPRNG SER ALT.	TR	-	-	-	-	45.5	2142	<5								
116.0	119.0	3.0	100%		8x	5		strongly auto-brecciated appearing, & angular to sub-rounded frags to 1-2 cm, in similar compositional matrix. - strongly fractured, @ all orientations, & calc. magnesite, ser, chl trac hill. - 5% thin conchoidal to brecciated mag-minor calc qtz vns. - from 113.1-114.0m, contains 2% v. hy diss Py & Py frac hill (& locally abundant ans hematite) - from 114.0-115.5, only tr. Py pred as frac hill. - from 113-113.4, sch is intensely contorted, tightly folded. - from 114.3-114.9, open fold nose, cax is 60°-0°-60°. - @ 115.0, 5 cm qtz-mag vns @ 80° to cax. - gradational contact & underlying massive unit.	WK CHL, & WK BLEACHING (SIL-SER-CARB) IN PLACES	1%	TR	-	-	-	119.7										
119.0	122.0	3.0	100%			3		from 114.0-115.5, only tr. Py pred as frac hill. - from 113-113.4, sch is intensely contorted, tightly folded. - from 114.3-114.9, open fold nose, cax is 60°-0°-60°. - @ 115.0, 5 cm qtz-mag vns @ 80° to cax. - gradational contact & underlying massive unit.	5-15% QTZ-CALC-CHL VNS					120.2	2143	6									
122.0	125.0	3.0	100%		8x	3		115.5-199.5 AMUGDALOIDAL BASALT. (PILLOWED) - massive, to v. wily, crudely foliated @ 60° to cax, light to med green, wily chl to wily bleached appearing. - v. well dev amugdaloidal texture, 10% 3-5 mm spherical pred calc, some talc amp. - mod to strongly "microfractured" @ all orientations, pred. calcite, some chl, talc frac. hill. - 5% 1-3 cm qtz-calc-magnesite veins pred v. sub. wk fol, but other or. present. - average sulphide content: 1% Py, tr. Po, associated pred. & qtz-carb vns & as fracture filling. (to 1% Po in places) - wily auto-brecciated in places. - from 115.7-115.9, avm. 1 cm conchoidal carb vns & 2% Py @ vn margins - @ 116.5, also 1 cm calc minor qtz vns 11 fol & 2% Py. - from 116.9-117.2, 2 cm calc-chl-minor qtz vns @ 30° cax & 2% Py @ vn margins. - from 117.2-117.6, locally strongly auto-brecc (flow top). - from 119.7-120.2, locally 3% Py, 1% Po, as frac hill & min. ass & 3 cm calc minor qtz vns 11 fol @ 119.8, 120.1 - unit looks "dacitic to andesitic" in places, due to wk "bleaching", relatively hard. - from 120.8-121.0, 20% 1-2 cm pred calc minor qtz vns @ 30-60° to cax, & 1% Py-Po @ vn margins. - from 121.9-122.8, several 5mm-1cm chl-calc minor qtz shrapers @ 0° to cax, & 1% ass Py-Po. - @ 123.2, 10 cm calc-qtz vns @ 30° to cax. - from 124.3-124.4, 10 cm auto-brecc/pillow breccia zone. - @ 124.4, 1 cm qtz vns @ 40° to cax.						122.0		44				123.0	2144	6			
125.0	128.0	3.0	100%			6		unit looks "dacitic to andesitic" in places, due to wk "bleaching", relatively hard. - from 120.8-121.0, 20% 1-2 cm pred calc minor qtz vns @ 30-60° to cax, & 1% Py-Po @ vn margins. - from 121.9-122.8, several 5mm-1cm chl-calc minor qtz shrapers @ 0° to cax, & 1% ass Py-Po. - @ 123.2, 10 cm calc-qtz vns @ 30° to cax. - from 124.3-124.4, 10 cm auto-brecc/pillow breccia zone. - @ 124.4, 1 cm qtz vns @ 40° to cax.	WILLY CHL ² , WILLY "BLEACHED"					125.0		45					126.0	2145	<5		
128.0	131.0	3.0	100%			5		unit looks "dacitic to andesitic" in places, due to wk "bleaching", relatively hard. - from 120.8-121.0, 20% 1-2 cm pred calc minor qtz vns @ 30-60° to cax, & 1% Py-Po @ vn margins. - from 121.9-122.8, several 5mm-1cm chl-calc minor qtz shrapers @ 0° to cax, & 1% ass Py-Po. - @ 123.2, 10 cm calc-qtz vns @ 30° to cax. - from 124.3-124.4, 10 cm auto-brecc/pillow breccia zone. - @ 124.4, 1 cm qtz vns @ 40° to cax.	5-15% QTZ-CALC-CHL VNS					127.0		46					127.0	2146	<5		
													128.0		47				128.0	2147	9				

DRILL INTERVAL	RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	ROD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION and VEINING	MINERAL PERCENTAGES					DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY					LAB	
									P ₄	P ₀	Q ₄					OH						
145.0	143.0	146.0	3.0	100%	6		<p><u>115.5-199.5M CONTINUED.</u></p> <ul style="list-style-type: none"> from 174.7 - 177.8, numerous strongly brecciated zones, ± locally 2% Pb, 1% Py, ass. ± 20% qb-calc-chl vas to 2 cm il fol. from 177.8, becomes slightly coarser, less veined (only 5%) only a few widely spaced pillow selvages/breccia zones. from 188.0 - 188.3, 50% 1-3 cm calc-qb-chl vas @ 50% to calc. ± 2% ass Pb. from 191.0 - 192.0, 20% 1-3 cm qb-calc-chl veins + fol ± 1% Pb, 1% P. from 195.5 - 196.5, 20% 1-3 cm qb-calc-chl vas brecciate rock ± 1% Pb, 1% Py. arbitrary contact @ 199.5 based on grain size. 	<p>WK CHL ACT, WKLY BLEACHED, 5-15% CRZ-CALC-CHL VEINS.</p>	12	12	-				146.0							
146.0															147.0	2154	<5					
147.0	146.0	149.0	3.0	100%	5										148.0	2155	<5					
148.0															149.0	2156	<5					
149.0															150.5							
150.0	149.0	152.0	3.0	100%	4										151.5	2157	7/5					
151.0															152.0							
152.0															153.0							
153.0	152.0	155.0	3.0	100%	6										154.0							
154.0															155.0							
155.0													156.0									
156.0	156.0	158.0	3.0	100%	4								157.5									
157.0													158.5	2158	6							
158.0													159.0									
159.0	158.0	161.0	3.0	100%	4								160.0									

DRILL INTERVAL		RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	RQD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION AND VEINING	MINERAL PERCENTAGES					DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY					LAB		
FROM	TO									P ₄	P ₀	C _{py}	-	-			OTH.	As (ppb)						
220.0	218.0	3.0	100%	58°		3		210.5-243.0M CONTINUED - from 221.0-222.3M, strongly ch. sch. @ 50° to Cox, strongly brecc. by thin chlorite seams u fol, locally associated 2% P ₄ , 0.5% P ₀ . - from 225.5-226.0, fol 1-3 cm calc. chl-minor qtz vs u fol. - @ 233.0, 5 mm calc in scute fol @ 60° to Cox ± 5% sphalerite blebs - from 234.5-238.5, locally more strongly sheared. sch. @ 50° to Cox, more strongly brecciated, ± 25-30% 3-5mm chl: calc seams u fol (pillow breccia) - from 238.7-238.8, 10 cm calcite minor qtz vein u fol. - from 244.5-244.7, numerous (20%) 1-3 cm qtz-calcite minor hard Fe/Mg carb vs u sub u fol. - from 245.0, basin peeing prominent loc selv @ 10° to Cox ± P ₄ minor P ₀ trace fill, ± numerous (to 10%) 1-3 cm gray, more strongly bleached, silicified zones, usually proximal pillow selvages & breccia zones. - from 249.0-256.0, ± 20% of rock is gray, harder, strongly bleached-silicified zones. - @ 254.1, 254.3, 2 cm qtz-calc. Fe/Mg carb vs u fol. - @ 255.3, 2 cm dark qtz-Fe/Mg carb u @ 70° to Cox. - @ 258.1, 3 cm bright yellow dark dot u. @ 60° to Cox. - from 259.8-260.2, 40 cm bright green, strongly & pervasively silicified zone (selvage). - from 264.7-264.9, 20 cm bright green intensely silicified selvage zone, ± 20% Fe/Mg carb-qtz vs @ all or. - from 266.0-4, all selvage/breccia zones are wky to med. silicified, as are 10% of basy ± other gray brown patches sil alt (± bio?). - tr. hochwhite ass ± silc selvages - @ 268.6, 2 cm dark white qtz u u fol. - from 274.0-271.2, 20 cm dk gray strongly silicified zone as halo on 1cm qtz-Fe/Mg carb u @ 0° Cox - from 271.7-271.9, 20 cm dk gray silc zone. - from 272.1-272.4, dk brownish gray silicified zone - from 272.7-272.9, strongly silicified pillow selvage. - from 272.9-273.2, light brown silicified zone. - @ 273.5, 20 cm dk brown silic (bio) alt zone. - @ 274.2, 5 cm strongly silicified pillow selvage. - from 276.1-276.3, dk gray strongly silicified zone. - from 277.4-277.5, 10 cm intensely silicified, qtz-carb veined selvage zone.	WKLK BLEACHED (SIL ± SER-CARB ALT) 5-10% QTZ-CARB VNS.	0.5%	1%						221.0							
221.0													72											
222.0	221.0	3.0	100%			4								2172	<5									
223.0																								
224.0	224.0	3.0	100%			6																		
225.0																								
226.0	224.0	3.0	100%			7																		
227.0																								
228.0	227.0	3.0	100%			7																		
229.0																								
230.0																								
231.0	230.0	3.0	100%			6		WKLK BLEACHED (SIL ± SER-CARB ALT) 5-10% QTZ-CARB VNS.	0.5%	1%														
232.0																								
233.0	232.0	3.0	100%			10								74										
234.0																								
235.0	233.0	3.0	100%	55°		10								75	<5									

DRILL INTERVAL		RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	ROD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION and VEINING	MINERAL PERCENTAGES					DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY					LAB			
FROM	TO									P ₄	P ₆	Ca	-	-			OH	250.0	80	As					
250.0	248.0	251.0	3.0	100%	30°-55°	3		20.6-253.0M CONTINUED	30% BLEACHED, SILICIFIED ZONES	0.5%	19%					250.0	80								
251.0																			251.0	2180	<5				
252.0																			252.0	2181	<5				
253.0	252.0	254.0	3.0	100%						3									253.0	2182	<5				
254.0																			254.0	2183	<5				
255.0	254.0	257.0	3.0	100%						3									255.0	2184	<5				
256.0																			256.0	2185	<5				
257.0																									
258.0	257.0	260.0	3.0	100%						3									259.5	86					
259.0																			260.5	2186	<5				
260.0			3.0																						
261.0	260.0	263.0		100%		3																			
262.0																									
263.0																									
264.0	263.0	266.0	3.0	100%		3									264.0	87									
265.0															265.0	2187	<5								

PROJECT Tully

HOLE DESIGNATION T-91-01

LOGGED BY J. Duncan McIVOR

SCALE 1:100

PAGE 15 OF 18

DRILL INTERVAL		RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	RQD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION and VENING	MINERAL PERCENTAGES						DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY					LAB
FROM	TO									P ₄	P ₆	Qp ₄	-	-	OTH.			Au (ppb)					
265.0	263.0	266.0	3.0	100%	SE-SS	3		20.5-293.0M CONTINUED	W/ly-MOD BLEACHED, SIL-C (to 10% ROCK, PRED ALL SELTAGES)	0.56	1%	-	-	-	TR. Fuch.	266.0	88						
266.0							267.0									2188	<5						
267.0																89							
268.0	266.0	269.0	3.0	100%		3										268.0	2189	<5					
269.0																90							
270.0																269.0	2190	<5					
271.0																91							
272.0	269.0	272.0	3.0	100%		5										270.0	2191	<5					
273.0																92							
274.0																271.0	2192	6					
275.0																93							
276.0																272.0	2193	<5					
277.0								94															
278.0	272.0	275.0	3.0	100%		5		273.0	2194	5													
279.0								95															
280.0								274.0	2195	<5													
								96															
								275.0	2196	<5													
								97															
								276.0	2197	<5													
								98															
								277.0	2198	<5													
								99															
								278.0	2199	<5													
								100															
								279.0	2200	5													
								101															
								280.0	2201	<5													

PROJECT Tony

HOLE DESIGNATION T-91-01

LOGGED BY DONALD McIVOR

SCALE 1:100

PAGE 18 OF 18

DRILL INTERVAL		RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	ROD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION and VEINING	MINERAL PERCENTAGES					DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY					LAB					
FROM	TO									P ₄	P ₆	Q ₄	-	-			OH	As	Fe	Ca	Mg		Si	Al	Na	K	
308.0	311.0	3.0	100%			2		255.7-320.0M CONTINUED	WK CHL-EPIDOTE ALT.	1%	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
312.0	314.0	3.0	100%		6																						
315.0	317.0	3.0	100%		4																						
318.0	320.0	3.0	100%		3.																						
HOLE ENDS @ 320.0 METRES								<p style="text-align: center;">  FEBRUARY 14, 1991. </p>																			

DRILL INTERVAL		RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	RQD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION and VEINING	MINERAL PERCENTAGES					DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY					LAB
FROM	TO									P _y	P _o	C _{py}					OTHER	A _n (ppb)				
115.0								105.0-121.6 M CONTINUED														
113.0	116.0	3.0	100%	MASSIVE		5																
116.0								121.6-122.3 M INTERBEDDED METAEDMENTS (ARGILLITE - SILTSTONE - GRAYWACKE)	WK SER. EP ALT.	0.5%												
117.0						6		thinly bedded (bedding @ 20° to 40°) interbedded arg. silt-grmk. from 121.6-121.7, dk gray, v. calcareous argillite & a few 5mm yellow sericitic argillite inebeds.														
118.0	119.0	3.0	100%					from 121.7-122.0, graywacke, thinly bedded gray siliceous matrix & 30% 1mm-1cm rock frags along bed, frags pred. graphitic arg.					118.5									
119.0								from 122.0-122.3, coarser, g. granular light green sericitic siliceous "siltstone + graywacke" & a few small graph arg rock frags.					119.5	59 2269	<5							
120.0	122.0	3.0	100%			10		all units are mod to strongly frac @ 70-90° to con, & qtz. calc frac fill	MOD BLEACHED, SIL-CB ALT. 15% QC W/S	0.5%				120.6	60 2270	<5						
121.0								19% Py as large (to 1cm) fragments in both graywacke, siltstone.						121.6	61 2271	12						
122.0				30° CNTC 40°				122.3-124.2 GRAPHITIC ARGILLITE - SILTSTONE	WK SER ALT.	1%				122.3	62 2272	10						
123.0				60° CNTC 80°				only v. crudely pl. @ 60° to con, relatively hard, siliceous, v. jet black, strongly graphitic (40%) argillite to siltstone.						123.3	63 2273	26						
122.0	125.0	3.0	100%			7-50		contains 25% v. conchoidal to brecciated 5mm-2cm hard white Fe-rich carb minor qtz vs 11 pl.	25% QC VEINS.	2%		40% GRAP.	123.3	64 2274	26							
124.0					RUBBLE			strongly fractured, pred. 4 sub 11 fol, though other or. present & Fe carb. qtz. chl. Py, hem frachill.					124.2	65 2275	44							
125.0				70°				contains 2% Py as v. fine diss min, frachill. & calc nodular beds to 5mm.					125.0	66 2276	121							
126.0	128.0	3.0	100%			10		from 122.3-123.3, thinly bedded, argillaceous					125.5	67 2277	20							
127.0								from 123.3-124.2, slightly coarser, siltstone.					126.0	68 2278	25							
128.0				55°				@ 123.4, 3 cm qtz. Fe carb vs 11 fol.					127.0	69 2279	7							
129.0	131.0	3.0	100%			9		from 123.7-124.2, rubble.	STRONG SER. FE CARB ALT.	1%			128.0	70 2280	7							
130.0				65-70°				124.2-127.0 M INTERBEDDED SILICEOUS & GRAPHITIC METAEDS					129.5	71 2281	<5							
								thinly bedded, @ an. 75-85° though locally varies 55°-90°, interbedded siliceous & graphitic metaeds.	STRONG SER. FE CARB ALT.	TR.				129.5	72 2282	5						

DRILL INTERVAL	RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	ROD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION	VEINING	MINERAL PERCENTAGES					DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY					LAB						
										P ₁	P ₀	Cp ₁					Oil	A ₁ (ppb)										
128.0 - 131.0	3.0	100%	65-70°		9		127.0-129.5 M SERICITE-CARBONATE SCHIST (SH. METASED) - rock is soft, intensely sh. sch. @ 65° to cax, & appears bed || fol, comprised of alternating bands of Fe carb-sericite (45% / 45%) & a few harder, more siliceous & clear green chl-graph bands. - probably a sh. silicified type metabas. though appears vol. in places. - strongly fractured, pred. || fol & @ 0° to cax, & Fe carb, qtz, some hematite, graphite, Py frac fill. - contains 1% Py as v. diss min & frac fill. - from 127.7-127.8, locally 5% hematite bands to 5mm || fol. - @ 128.6, 10 cm Fe carb v. @ 46° to cax. - from 128.7; 128.8, a few thin 1-2 cm graph arg intbeds @ 65° cax. - sharp contact @ 129.5 @ 65° to cax.	STRONG SER-CARB ALT.						TR.				130.5	2282 ⁷²	5								
131.0 - 132.0																	131.5	2283 ⁷³	8									
132.0 - 133.0																	132.5	2284 ⁷⁴	9									
133.0 - 134.0																	133.5	2285 ⁷⁵	6									
134.0 - 135.0																	134.3	2286 ⁷⁶	8									
134.0 - 137.0	3.0	100%	68-73°	CATE 70°	15		129.5-134.3 M SERICITIZED, CARR. MAFIC VOLCANIC. - v. v. sh. sch @ 65-70° to cax, rel. soft, strongly Fe carb-ser alt, v. homogeneous, rock frac pred || sch. fol, & Fe carb, qtz, some calc. ser. fuchsite frac fill. - 5% thin (to 2 cm) carbonated brecc. qtz-Fe carb vns || fol. - only trace Py along clew frac. - from 130.2, 130.5, a few 1cm qtz-Fe cb vns @ 70° to cax. - @ 131.2, a few 1cm Fe cb vns @ all or., 2 tr. fuchsite @ margins. - from 132.0-133.3, more strongly alt, yellow, locally calc. fuch. frac fill. - @ 132.4, 10 cm zone & numerous 1-2 cm carbonated Fe carb minor qtz vns @ all or., & 5% ass. fuchsite. - @ 133.1, a few 2cm qtz-Fe carb vns @ 65° to cax. - from 134.0-134.3, 4% 5mm-1cm Fe carb vns @ all or., host is gray, strongly carb, sharp contact @ 134.3 @ 70° cax.														135.2	2287 ⁷⁷	17					
136.0 - 137.0																	136.2	2288 ⁷⁸	9									
137.0 - 138.0																	137.0	2289 ⁷⁹	5									
138.0 - 139.0																	138.0	2290 ⁸⁰	7									
137.0 - 140.0	3.0	100%	75-80°		5		134.3-136.2 GRAPHITIC ARGILLITE/BRECCIA. - thin bed & strongly sch @ 65-70° to cax, jet black, soft, graphitic (50%) argillite. & 35% 1mm-1cm gray qtz-Fe carb bands - veins || fol, & 10% 1-2 cm light green v. 30% carb. mafic volc. frags. may be volcanoclast. / slump brecc. & strongly frag, pred || fol, & carb, qtz, chl, Py frac fill. - 2% Py as thin seams || fol, frac fill, occ. nodular blob to 5mm. - from 134.6-134.8, locally 50% qtz-Fe carb vns to 3cm || fol.	STRONG SER-CARB ALT. OF FRAGS.												139.0	2291 ⁸¹	6						
139.0 - 140.0																	140.0	2292 ⁸²	8									
140.0 - 141.0																	140.6	2293 ⁸³	10									
140.0 - 143.0	3.0	100%	75°		> 50		136.2-140.6 COARSE VOLCANOCLASTIC FRAGMENTAL. - strongly fol. @ 75-90° to cax, highly var comp & app, but pred; v. dk gray to black graphitic to chloritic matrix, & an. 70% (ranges 50-90%) < 1 to 10 cm fragments of v. frag, being to light green, often mod. strongly ser. carb alt mat volc. blow 1-2 cm silicified matrix v. frags. - strongly frag, pred || sch || fol, & calc, qtz, chl, graph frac fill, at. sulfide content: 1% Py as diss min in both matrix & frags. - 5% thin qtz calc vns || fol. - @ 136.3, 15 cm brecc. qtz-calc vns || fol.													141.8	2294 ⁸⁴	18						
142.0 - 143.0																	143.0	2295 ⁸⁵	12									
143.0 - 144.0																	144.0	2296 ⁸⁶	< 5									
143.0 - 146.0	3.0	100%	70°		10		140.6-143.0 M GRAPHITIC ARGILLITE. - thin bedded, @ 75° to cax, rel soft, jet black, v. graphitic (70%) argillite, 15% thin sil-carb seams || fol, 5% qtz-calc vns to 1cm || fol, 5% Py as thin semi-mass bands || fol, occ nodular blobs to 5mm, & v. diss min. - @ 142.6, 2p cm brecciated qtz-Fe carb vein. - @ 142.8, fold nose.	STRONG SER-CARB ALT. OF FRAGS.											145.0	2297 ⁸⁷	< 5							



PROJECT Tully ELEVATION 0
 HOLE DESIGNATION T-91-03 AZIMUTH 180°
 NTS 42A/14 DIP -50°
 CLAIM _____ LENGTH OF HOLE 170.0M
 EASTING 14700E (IMPERIAL GRID) CORE DIAMETER NQ
 NORTHING 12700N

CONTRACTOR NOREX
 DATE STARTED FEBRUARY 17, 1991
 DATE FINISHED FEBRUARY 19, 1991
 LOGGED BY DUNCAN McEVOR
 DATE FEBRUARY, 1991
 SCALE 1:100

BASELINE IMPERIAL GRID

TEST DEPTH	0	24.0M	15.0M	137.0M
AZIMUTH	180°	180°	180°	180°
DIP	-50°	-47°	-47°	-46°

DBL INTERVAL	RECOVERED CORE LENGTH	CORE RECOVERY	RQD	STRUCTURE	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION AND VEINING	MINERAL PERCENTAGES					DEPTH	WIDTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY				
<u>HOLE SUMMARY</u>																				
						0-24.0M	OVERBORDEN													
						24.0-29.0	PERIDOTITE													
						29.0-30.9	INTERMEDIATE LAPILLI TOFF/AGGLOMERATE													
						30.9-32.9	MAFIC TO UM INTRUSIVE (GABBRO-PHDX)													
						32.9-40.0	PHENYRITIC, SILICIFIED INT.-MAFIC VOLCANIC													
						40.0-52.2	FG KILLINE BASALT (TO GABBRO)													
						52.2-52.5	BRECCIATED/FRAGMENTAL MAFIC VOLCANIC													
						52.5-53.1	GRAPHITIC ARGILLITE													
						53.1-53.3	BRECCIATED/FRAGMENTAL MAFIC VOLCANIC													
						53.3-62.2	LX RICH, VARIOLITIC BASALT													
						62.2-64.0	INTENSELY CHL ² LX BASALT (FAULT)													
						64.0-68.0	LX BASALT													
						68.0-72.5	WLY TO MOD. SER. Fz CARB ALT LX BASALT.													
						72.5-79.4	COARSE VOLCANOCLASTIC/FRAGMENTAL													
						79.4-80.6	GRAPHITIC ARGILLITE/BRECCIA (FAULT)													
						80.6-86.8	COARSE VOLCANOCLASTIC/FRAGMENTAL.													
						86.8-89.5	MINERALIZED, QTZ-CARB VEINED VOLCANOCLASTIC/FRAGMENTAL.													
						89.5-92.6	STRONGLY CARB ⁴ , SER ⁶ VOLCANOCLASTIC/FRAGMENTAL													
						92.6-98.3	GRAPHITIC ARGILLITE													
						98.3-101.0	QUARTZ VEINED, BRECCIATED, STRONGLY SILICA-SER-Fe CARB ALT MAFIC VOLC.													
						101.0-106.3	QUARTZ-CARB VEINED, BRECCIATED, STRONGLY SIL-SER-Fe CARB ALT. MAFIC VOLC.													

CONT. ON 14.

DRILL INTERVAL	FROM	TO	RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	ROD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION and VEINING	MINERAL PERCENTAGES					DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY					LAB			
											P	Po	Cpy		OTd.			Au (ppb)								
20.0									0.0-24.0M OVERBURDEN.																	
21.0																										
22.0																										
23.0																										
24.0					45°				24.0-29.0M PERIDOTITE	WK SERP. ALT.					162 MTE											
25.0	24.0	26.0	2.0	100%	///		> 50		- black, fg, v. wily fol @ 40-50° to ax. v. wily serp ⁿ peridotite - strongly magnetic, ± 10% interstitial magnetite - mod fractured, @ all orientations, ± pred. serpentine, minor magnetite, calc. fill, fractures often have mm scale mte. halos. - no visible sulphides - few (< 5%) thin (to 5mm) magnetite veins @ all orientations - sharp contact @ 29.0M @ 50° to ax.																	
26.0					///																					
27.0	26.0	29.0	3.0	100%	///		> 50			WK SERP. ALT.					162 MTE.											
28.0					///				29.0-30.9M INTERMEDIATE LAPILLI TUFF / AGGLOMERATE (?)						29.0											
29.0					50°	CNTC			- v. to sph. bright light green (black colour) crudely foliated @ 50° to ax. granular, relatively hard, siliceous, ± 5-10% < 1mm - 2cm elongate fl. frag. of Qtz, calc, talc, & gabbroic/diabase appearing lith. appears agglomeratic, but may be altered, brecciated contact. - v. strongly fractured, @ all or., ± pred. talc, magnetite, calc. breccia. - trace v. grey chert & py. along fractures - @ 29.7, 10 cm of gabbroic frag. xenolith. - from 30.3-30.4, 10 cm gabbroic dyke @ 50° to ax. - v. sharp contact @ 30.9 @ 50° to ax.																	
30.0					50°		25			SILIC ?	TR.				30.0	2299 ⁰¹	12									
31.0	29.0	32.0	3.0	100%	///	CNTC									30.9	2300 ⁰²	10									
32.0					50°					WK EP ALT. OF PLAG.	TR.				32.2											
33.0					MASSIVE				30.9-32.2M MAFIC TO ULTRAMAFIC INTRUSIVE (GABBRO - PYROXENITE)	WK-MOD PREV-SILICA ALT.	TR.	TR.	TR.		28 Foch.	33.0	2301 ⁰³	5								
34.0	32.0	35.0	3.0	100%			4		- fg, white, dk green, massive to v. crudely fol. @ 50° to ax. comp 3-7% frags (pyrox), 30% wily ep. alt. plag. v. homogeneous, non-magnetic - only wily frag @ all orientations, ± calc. chl. breccia. - trace chert - distinct contact @ 32.2M underlying silicified unit.							34.0	2302 ⁰⁴	6								
35.0															35.0	2303 ⁰⁵	5									

DRILL INTERVAL	FROM	TO	RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	ROD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION and VEINING	MINERAL PERCENTAGES					DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY					LAB		
											Py	B	Cpy					OTH.	S.°	Au (ppb)					
50.0					MASSIVE				40.0-52.2M CONTINUED	WK CALC ALT.						31.0	2314	5							
51.0	50.0	53.0	3.0	100%			15		<ul style="list-style-type: none"> @ 45.2, a few 5mm conchoidal qtz-mag vns @ all or., host is strongly silicified / b.c. @ 46.0, 1cm qtz-mag vns @ 50° to ax. from 46.0-47.0, cgl. locally several chl-carb-ep filled holes @ 0-25° to ax. from 47.0-47.2, v. mottled appearing, around 3cm calc-chl. mag vns @ 80° to ax. from 47.3-47.5, 2cm sil-carb alt halo on top @ 20° to ax. from 47.0-52.2, granular, med pervasively calcite alt, becomes gradually finer grained to top by 52.2M. @ 49.5, 1cm qtz-dol vns @ 45° to ax. @ 50.9, 4cm gray qtz-Fe carb vns @ 50° to ax, 2 tr. Py-Cpy-sphalerite. @ 51.2, 3cm chunky gray qtz vns @ 40° to ax 2 tr. Py, 1% sphalerite @ vns margins. from 51.1-52.2, Py increases to 2% 	WK CALC ALT.	0.5%					37%		52.2	2315	8					
52.0					65° to 85°					WK CALC ALT.	3%						2316	76							
53.0					65°					WK CALC ALT.	3%					53.3									
54.0	53.0	56.0	3.0	100%	MASSIVE		7		<ul style="list-style-type: none"> @ 50.9, 4cm gray qtz-Fe carb vns @ 50° to ax, 2 tr. Py-Cpy-sphalerite. @ 51.2, 3cm chunky gray qtz vns @ 40° to ax 2 tr. Py, 1% sphalerite @ vns margins. from 51.1-52.2, Py increases to 2% 	WK CALC ALT.	1%						54.0	2317	<5						
55.0																55.0									
56.0									52.2-52.5M BRECCIATED/FRAGMENTAL MAFIC VOLC.																
57.0	56.0	59.0	3.0	100%			4		<ul style="list-style-type: none"> strongly foliated. @ 65° to ax, comprised of 70% < 1cm to 3cm elong & fol frags of wky chl-calc alt mafic volc, in wky, dk green chloritic groundmass, 2-3% Py as wky disc min, & occasional fragmental app blebs to 5mm. sharp contact @ 52.5 @ 70° to ax. 									58.0	2318	<5					
58.0									52.5-53.1M GRAPHITIC ARGILLITE																
59.0									<ul style="list-style-type: none"> thinly bed, @ 70°-85° to ax, soft, v-graphitic (60%) argillite, 2-20% 5mm-1cm sericitic argillite interbeds, 10% 1-2cm conchoidal to brecciated hard white Fe carb-minor qtz vns 4 tr. 3% Py, as nodular blebs to 2cm, thin semi-massive bands w/ol. & vly disc min & 1% sph as thin seams || fol. 	WK CALC ALT. WK SER ALT.	1%						59.0								
60.0	59.0	62.0	3.0	100%			5		53.1-53.3M BRECCIATED/FRAGMENTAL MAFIC VOLC																
61.0									<ul style="list-style-type: none"> as in 52.2-52.5M. 																
62.0									53.3-62.2M LEUCOXENE RICH, VARICLITIC BASALT																
63.0	62.0	65.0	3.0	100%		FAULT GOUGE, RUBBLE	> 50		<ul style="list-style-type: none"> massive, vly, dk grayish green, to light green, wky chl² basalt, 2-3% 1-3mm pink to white leucopene blebs, & av. 15% 1-5mm gray to beige Fe carb alt/replaced irreg blebs that resemble varicols. - lcx & varicols can last increase down hole. med. to strongly frag. @ all or., 2 pred. chl, some Fe carb, calc, Py, qtz nac fill. autobrecciated in places. av. sulphide content: 1% disc Py as occ. cubic blebs, & minor frag fill, minor vly disc min. non-mag. < 5% thin qtz-carb vns to 5mm @ all or. from 54.2-54.4, wky autobrecciated. @ 54.9, 2cm qtz-calc vns @ 90° to ax. 	INTENSE CHLORITE ALT.	1%						61.2	2319	<5						
64.0																									
65.0					60°					WK CALC ALT.	1%					64.0	2320	12							

DRILL INTERVAL		RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	ROD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION AND VEINING	MINERAL PERCENTAGES					DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY				LAB	
FROM	TO									Py	Pb	Cpy	Asfy	OH			Ag (ppb)					
80.0				70°	FACET			80.6-86.8 M COARSE VOLCANOCLASTIC / FRAGMENTAL (SER. CARB. MAFIC VOLC FRAGS. GRAPHITIC-CHLORITIC MATRIX)	3% QC VEINS	5%	-	-	-	-	80.6	2333 ³⁶	102					
81.0	80.0	83.0	3.0	88°-86°		750		strongly fol. @ 55-60° to Cox. - rock comprised of 4-75% < 5mm to 20-30 cm, avg. 1-2 cm. vlg. brnq. soft, strongly Fe carb-ser alt mat volc frags elipsite // fol. set in lg. dk gray to black, wky. moderately carbonaceous, chloritic to siliceous wacke type matrix - matrix seams // fol are 1-2 mm to 10 cm - looks like a volcanoclastic or slump breccia, but may be tectonic breccia. entire unit is intensely fractured, pred. // fol. & chl. graphite, calcite, minor qtz, Fe/Mg carb, Py, tuchshite frac fill. - average sulphide content: 1% Py, tr. Cpy, tr. Pb, all pred. as frac fill & ass. & matrix seams. - @ 80.8, 3 cm brecciated qtz in // fol. - < 5% thin (to 1 cm) strongly brecc. qtz-carb vns @ all or. - from 85.8-86.8, harder, gray, graywacke interbed, more siliceous, & 2% vlg diss Py, locally also 1 cm tuchshite rich fragments // fol. locally 2% 5mm-1cm qtz-Fe/Mg carb vns @ 0-10° to Cox. - contact @ 86.8 M based on sulphide content & 7% veining.	STRONG SER-Fe CARB ALT (OF FRAGS)	1%	TR.	TR.	-	-	TR. FUCH.	81.7	2334 ³⁷	56				
82.0															82.8	2335 ³⁸	45					
83.0															83.8	2336 ³⁹	37					
84.0	83.0	86.0	3.0			10									84.8	2337 ⁴⁰	208					
85.0															85.8	2338 ⁴¹	581					
86.0															86.8	2339 ⁴²	37					
87.0				55°		9		86.8-89.5 M MINERALIZED, QZ-CARB. VEINED, VOLCANOCLASTIC / FRAGMENTAL	INTENSE SER-Fe CARB ALT. (OF FRAGS)	5%	-	-	-	-	87.3	2340 ⁴³	287					
88.0	86.0	89.0	3.0					strongly foliated @ 55° to Cox, as in preceding unit, comprised of 70% smaller, < 5mm to 3-5 cm, yellow to beige, intensely sericitic to carbonaceous alt. matrix volc frags elipsite // fol. set in / brecciated by dk green to black, often carbonaceous chl-graph + silica matrix seams from 1-2 mm to 1-2 cm // fol. - entire unit intensely fractured, @ all orientations, & calc. qtz, Py, Fe carb, graph, chl frac fill. - contains avg. 5% Py, as 1-2 mm diss blebs throughout unit, & as frac fill, & 0.25% ASPy, as noted below. - trace tuchshite along fracs & as thin seams // fol. - to 88.0, 5% 1-2 cm qtz-minor Fe/Mg carb vns // fol. - from 88.0-89.5, 30% 1-3 cm qtz-minor Fe/Mg carb vns, @ 30-50° to Cox. - @ 86.9, 1 cm qtz in xvts fol @ 30° to Cox. - @ 87.3, also 1-2 mm diss Asfy blebs (same @ 89.5) - from 87.3-87.6, 1% diss 1-2 mm Asfy blebs. - @ 87.5, also 1 cm qtz-carb vns xvts fol @ 40° to Cox, locally & 5% Py, 2% Asfy @ vn margins.	3% QC VEINS.				0.2%	TR. FUCH.	88.0	2341 ⁴⁴	516					
89.0															88.5	2342 ⁴⁵	227					
90.0				70°											89.0	2343 ⁴⁶	861					
91.0	89.0	92.0	3.0			7									89.5	2344 ⁴⁷	435					
92.0															90.0	2345 ⁴⁸	148					
93.0															90.7	2346 ⁴⁹	119					
94.0	92.0	95.0	3.0			25		89.5-92.6 M STRONGLY CARB. SER. VOLCANOCLASTIC / FRAGMENTAL.	STRONG SER-Fe CARB ALT.	2%	TR.	-	-	-	91.6	2347 ⁵⁰	64					
95.0								strongly fol. @ 70° to Cox, pred. relatively soft, light green, strongly Fe carb-pentite altered, vlg. matrix volc appearing lth, but v. banded // fol - may be sulf/epitaxial - brecciated by or, as frags in other gray chloritic - often carbonaceous matrix seams to 1 cm & 2% of rock cont. chl. 6A.	5% QC VEINS.	4%	-	-	-	-	92.6	2348 ⁵¹	67					
															93.5	2349 ⁵²	28					
															94.5	2350 ⁵³	58					
																2351 ⁵⁴	22					

DRILL INTERVAL		RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	ROD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION and VEINING	MINERAL PERCENTAGES					DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY				LAB		
FROM	TO									Py	Po	Cpy	AsPy	OTH			Au (ppb)						
95.0				70°				98.3-101.0 M QUARTZ VEINED, BRECCIATED, STRONGLY SILICA-SER-Fe CARB ALT RK (MAF VOLC). v. crudely foliated. @ 60-70° to con, rock is gray, lg, v. hard, strongly silicified & Fe carb-ser alt mafic volc. - intensely fractured, @ all orientations, & pred silica, Fe carb, locally some graph. chl, calc here fill. - 35% qtz vns to 3cm @ all orientations, vns often v. contorted to brecciated, minor ass Fe/Mg carb. - in places, intensely brecciated by thin graphitic seams to 10% of rock. - from 99.7-101.0 M, predominantly rubble, locally v. graphitic - only trace Py ass & a few thin graphitic seams.	5% QTZ-CARB VEINS							95.5	2351 ⁵³	22					
96.0	95.0	3.0	100%		ROBBLE (FAULT?)	>50								96.5	2352 ⁵⁴	19							
97.0														97.5	2353 ⁵⁵	95							
98.0														98.3	2354 ⁵⁶	45							
99.0	98.0	2.0	67%	6-70°		750		101.0-106.3 M QUARTZ-CARBONATE VEINED, BRECCIATED STRONGLY SIL-SER-Fe CARB ALT RK (M.V.). v. similar to overlying unit, less qtz veining, more ser-carb alt than silicified. - mod. to strongly fol. @ 30-40° to con, ranges 30-70° to con, contorted, highly folded in places. - vlg. gray, hard, mod to strongly silicified, strongly Fe carb-sericite alt, silica alt increases in intensity towards 106.3 - intensely brecciated in places, by thin 1-2mm to 1-2 cm. black chl-graph seams - may be, v. coarse volcanoclastic - intensely fractured, @ all orientations, & pred qtz, Fe carb, lesser chl, graph. hem, sericite here fill. - con. 20% 5mm-3cm, usually intensely contorted to brecc. - pred. qtz - minor Fe/Mg carb vns @ all orientations. - average sulphide content: only tr. Py, sph, ass & occasional qtz vns & breccia seam. - from 101.8-102.3, intensely brecciated, 30% 2mm-1cm graph. chl seams brecc rk into < 1cm to 2-3cm frags. - from 104.0-104.5, locally 50% qtz-carb vns @ 0-20° to con. - from 104.5-104.8, intensely brecc. by graphitic seams to 1cm & 30% of rock, frags pred qtz-carb vns. - from 104.5-106.1, con angles pred 0-20° to con. - @ 106.1, fold nose.	STRONG SILICA-SER-Fe CARB ALT, 35% QTZ VEINS.	TR.						102	99.7	2355 ⁵⁷	25				
100.0														101.0	2356 ⁵⁸	15							
101.0				30-40°										102.0	2357 ⁵⁹	47							
102.0	101.0	3.0	100%			25								103.0	2358 ⁶⁰	44							
103.0														104.0	2359 ⁶¹	28							
104.0														105.0	2360 ⁶²	22							
105.0	104.0	3.0	100%			15								106.0	2361 ⁶³	17							
106.0														107.0	2362 ⁶⁴	13							
107.0				50°										108.0	2363 ⁶⁵	45							
108.0	107.0	3.0	100%			5								109.0	2364 ⁶⁶	45							
109.0														110.0	2365 ⁶⁷	45							
110.0								106.3-110.0 M SERICITE-CARBONATE (TALC) ALTERED MAFIC-UM VOLCANIC (VOLC-FRAGMENTAL). v. strongly fol. @ 50° to con, though locally varies from 15°-50° (from 106.3-107.0 @ 15° to con). - pred. soft, intensely sericitized rk. & 30-40% 5mm to 1/2 cm Fe carb bands, l. fol. - wk vlg. lg rmt silica txt & crude fragmental appearing txt, & 1-2cm lighter green but similarly alt frags elongate 1/2 to 25% of rock. - also thin black chl-graph seams brecc. rock in places - strongly fractured, pred. 4 sp v fol. though all or. present, & pred Fe/Mg carb, ser, qtz here fill. - 5% secondary 1-2 cm contorted to brecciated qtz-Fe/Mg carb vns @ all or. - average sulphide content: only 0-5% Py as occ. disc blobs to 5mm & min ass & qc vns, filled tracs.	INTENSE SERICITE-Fe CARB ALT, MINOR TALC ALT.	0-5%													

DRILL INTERVAL		RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	RQD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION and VEINING	MINERAL PERCENTAGES					DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY					LAB			
FROM	TO									Py	P	Cpy	Aspy	·			STH	A ₁ (ppb)							
55.0	53.0	3.0	100%	MASSIVE		7		53.7-57.1 M CONTINUED. - 27% Py as disc blebs to 5mm & as frac fill. - appears w/ky amphibole/brecciated in places, by thin chl seams. - @ 53.8, 1cm qtz-Fe/Mg carb in @ 70° to Cox. - @ 55.8-55.9, 1.6cm qtz-Fe/Mg carb in @ 40° to Cox. ± 1% Py. - from 56.3-56.5, 20cm vulg zone (How top?). - from 56.5-57.1, becomes finer grained, to vfg. contact @ 57.1 marked by thin breccia/hyaloclastite zone @ 45° to Cox.	WK CHL ALT.							55.0	2419 ⁰⁵	<5							
56.0	56.0														56.0										
57.0	56.0	3.0	100%	MASSIVE		9		57.1-66.0 M MASSIVE FG-MG BASALT TO GABBRO (PyBx). - similar to 27.7-53.7, - massive, dk green, pred fg, to mg in places, illine basalt, - v. homogeneous, may be intrusive. - w/ky chl, w/ky sauss (of plag), non-magnetic. - strongly fractured, @ all orientations, ± pred. chl, Fe/Mg carb, minor calc, Py frac fill. mass w/ky brecciate rock in places. - contains 3-5% 1-3mm disc blebs in places. - few (<5%) thin (to 1cm) qtz-Fe/Mg carb-calc vns @ all or average sulphide content: 1% Py, pred-as frac fill, tr. Pb, Cpy. - @ 58.7, 1cm calc vns @ 65° to Cox. - @ 60.2, 3cm hard, pinkish gray Fe/Mg carb vns @ 70° to Cox. - @ 63.9, 1cm qtz-Fe/Mg carb-chl vns @ 65° to Cox. - @ 65.3, 1cm qtz-carb vns @ 30° to Cox. - @ 65.6, 1cm qtz-Fe/Mg carb vns @ 70° to Cox. - contact @ 66.0 m based on first appearance of irreg patches Fe carb alt.	WK CHL-SAUSS ALT.	P%	TR.	TR.													
58.0	59.0																								
59.0	59.0																								
60.0	59.0	3.0	100%			20																			
61.0	62.0																								
62.0	62.0																								
63.0	62.0	3.0	100%			4																			
64.0	65.0																								
65.0	65.0																								
66.0	65.0	3.0	100%	MASSIVE		3		66.0-69.3 M PARTIALLY ALTERED (SER, Fe CARB) MAFIC Volcanic: - transitional zone between overlying unaltered and underlying intensely alt units. - pred. lg basalt, ± irreg 5mm-1cm patches of Fe carb alt from 10% @ 66.0, to 100% by 69.3 m. - v. strongly fractured, prealtered or, @ 45° to Cox || v. crude fol, ± pred. chl, some Fe/Mg carb frac fill. - 5% (increases downhole) disc 1-3mm pink to white to yellow lcr. blebs. - 5% thin (to 2cm) qtz-Fe/Mg carb vns @ all orientations. - only trace disc Py. - @ 66.7, 1cm qtz-carb vns @ 40° Cox ± tr Py. - @ 67.8, 1cm magnetite vns @ 80° Cox. - @ 68.3, 2cm mag/dol vns @ 80° to Cox.	WK Fe CARB ALT									66.0	2420 ⁰⁶	<5					
67.0	68.0														67.0	07	<5								
68.0	68.0														68.0	2421 ⁰⁸	<5								
69.0	68.0	3.0	100%			15										2422 ⁰⁸	<5								
70.0	71.0			MASSIVE					STRONG Fe CARB ALT						69.5	09	<5								
									STRONG Fe CARB, MOD SER ALT.	TR.						2423 ⁰⁹	<5								

DRILL INTERVAL		RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	ROD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION AND VEINING	MINERAL PERCENTAGES						DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY				LAB				
FROM	TO									Py	Po	Cpy	AsPy	-	Other			Ag (ppb)	As (ppm)							
70.0	68.0	71.0	3.0	100%	MASSIVE	15		<p>69.5-89.2 m STRONGLY CARBONATIZED, MOD. SERICITIZED MAFIC VOLCANIC.</p> <ul style="list-style-type: none"> v. strongly glassed equivalent of overlying units, v. homogeneous, lg, well dec. remnant by x-line ppt. massive, beige to gray, strongly & pervasively Fe carb altered mafic volc. ± 5% (to 10% in places) 1-3mm dices lvs blabs. v. strongly fractured, prominent set @ 50-70° to Cox, though all orientations present, 2 pred. chl. some Fe/Mg carb. qtz, graphite fracture filling. strongly brecciated in some places, by thin 3-5mm chl-graph seams @ all orientations - only clear 10-20cm brecciated zones in unit. ~ 5% secondary qtz-Fe/Mg carb veins, pred. @ 70-90° to Cox. though chl or, present. average sulphide content: from 69.5-73.0m, only trace Py as ± traces, qtz veins; from 73.0m, 17% Py as vlg dices min. & brachill, min. as ± qtz veins. @ 69.5, 3cm qtz-Fe/Mg carb vein @ 85° to Cox. from 70.0-71.0, strongly brecciated, by 1-3mm to 2cm qtz-chl seams locally @ 20° to Cox, only 0.3% as Py. from 72.2-72.7, strongly brecciated by thin chl-graph seams @ 40-60° to Cox. @ 72.7, 1cm qtz-Fe/Mg carb vein @ 80° Cox, 2 ln Py. from 78.0-79.4, locally 5% Py as dices blabs to 5mm & halos on traces, thin qtz-carb vns @ 45°-60° to Cox. @ 78.6, 2cm qtz-carb v @ 60° Cox ± 5% Py @ margins. @ 78.9, 1cm qtz v @ 30° Cox ± 5% Py @ margins. @ 79.3, 3cm qtz v @ 50° to Cox ± 5% Py @ margins. @ 80.9, 1cm qtz-Fe/Mg carb vein @ 70° to Cox. @ 81.4, 1cm qtz-Fe/Mg carb vein @ 85° to Cox. from 82.8-83.9, 10cm banded crack/seal qtz v @ 45° Cox ± 10% Py, 10% dk gray AsPy as vlg massive bands in v & v margins. 3% blood red hem along v margins. from 84.0-84.1, 10cm carb-minor qtz v @ 45° Cox ± 5% Py. @ 84.3, 2cm brecciated qtz v @ 45° Cox ± 3% Py. @ 84.6, 1cm qtz v @ 70° to Cox ± 3% Py @ margins. @ 85.8, 2cm qtz-carb v @ 45° Cox ± 3% Py @ margins. @ 86.6, clear 5mm qtz vns @ 70° to Cox ± 1% Cpy. from 88.0-89.2, becomes moderately brecciated, arbitrary contact c underlying brecc/fragmental unit @ 89.2m. 	STRONG Fe CARB ALT. MOD. SER ALT.																	
71.0																9	2423	<5								
72.0																	10	2424	<5							
73.0	71.0	74.0	3.0	100%			3											11	2425	<5						
74.0																		12	2426	<5						
75.0																		13	2427	<5						
76.0	74.0	77.0	3.0	100%			4					12						14	2428	10						
77.0																		15	2429	23						
78.0																		16	2430	5						
79.0	77.0	80.0	3.0	100%			8					57						17	2431	34						
80.0																		18	2432	11						
81.0																		19	2433	7						
82.0	80.0	83.0	3.0	100%			5											20	2434	14						
83.0																		21	2435	24						
84.0	83.0	86.0	3.0	100%			8					12						22	2436	7086	7.501					
85.0															23	2437	21									

DRILL INTERVAL		RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	ROD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION AND VEINING	MINERAL PERCENTAGES					DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY				LAB
FROM	TO									P _y	P _o	Cp _y	AsP _y	OTH.			A _u (ppb)	A _u SFA (ppt)			
85.0	83.0	86.0	3.0	100%	MASSIVE	8		STRONG Fe CARB. MOD SER ALT.	1%		TR.			85.0	2438	48					
86.0															86.0	2439	25				
87.0	86.0	89.0	3.0	100%		10		STRONG Fe CARB ALT.						87.0	2440	7					
88.0															88.0	2441	8				
89.0	89.0	92.0	3.0	100%	50°	30		STRONG Fe CARB ALT.	5%				3% GRAPH.	89.2	2442	1954	1.159				
90.0															89.7	2443	78				
91.0	89.0	92.0	3.0	100%	50-90° FAULT G.			STRONG Fe CARB, MOD SER ALT.						91.0	2444	134					
92.0															92.0	2445	67				
93.0	92.0	95.0	3.0	100%	10 cm FAULT G.	>50		60% QTZ VEIN FRACS.	3%		TR.	TR.		93.0	2446	12					
94.0						ROBBLE									94.0	2447	20				
95.0					FAULT-ROBBLE CONC. 65°			QUARTZ VEIN.					30% GRAPH.	95.2	2448	136					
96.0	95.0	98.0	3.0	100%		15				1%				TR. Sph.	95.7	2449	92				
97.0								STRONG SER Fe CARB ALT.	TR.					96.2	2450	45					
98.0										1%					96.7	2451	8				
99.0	98.0	101.0	3.0	100%	50°	15		PATCHY Fe CARB ALT.	5%		TR.	TR.		97.2	2452	494					
100.0															97.8	2453	84				
					MASSIVE			INTENSE SEA-Fe CARB ALT, PATCHY SIL.	3%		TR.	0.5%		99.0	2454	25					
															100.0	2455	373				

89.2-91.0M MINERALIZED, INTENSELY Fe CARB ALT, BRECCIATED / FRAGMENTAL MAFIC VOLC.

- strongly fol. @ 30° to Cox, pred. beige to gray. v. lg. intensely Fe carb alt mafic volc(?), brecciated into 1-3cm fragments elongate. v. fol. by jet black, v. hard siliceous-graphitic seams/bands to 3-5cm, av. < 1cm, & 70% frags, 30% "matrix" - may be coarse volcaniclastic.
- strongly fractured, 2 prominent sets @ 0-20° to Cox, 50-70° to Cox, 2 qtz. fr. carb. chl. graph. frac. fill.
- average sulphide content: 5% Py as cubic blebs in "matrix" & along fractures.
- from 89.2-89.6, 5% blood red hem. as frac. fill.
- @ 89.6, 10 cm semi-mass (50%) Py-silica band/vn @ 50° Cox.
- contact @ 91.0 m marked by 10 cm mud/clay-fault gouge seam.

91.0-94.0M STRONGLY CARBONATIZED, VARIABLY BRECCIATED MAFIC VOLCANIC.

- core is rubble, crudely fol. @ highly variable orientations ranging 50-90° to Cox. pred. lg. light gray to beige, v. strongly Fe carb alt, mod. sericitized & variably silicified mafic volc. 5% dms 1-2mm, lcs blebs.
- intensely fractured, to strongly brecciated by fractures @ all orientations, 2 pred chl. hard Fe/Mg carb, qtz. Py frac. fill (minor graph. in places).
- where strongly blebs, fragments are strongly silicified.
- contains 5% qtz. Fe/Mg carb veins @ all orientations.
- average sulphide content: 3% Py (tr. AsPy, tr. CpY, pred. as disc blebs throughout rock, CpY as c. qt. vns.
- @ 92.2, 3cm qtz vn @ 20° to Cox & 1% CpY as frac. fill in veins.
- @ 92.4, 3cm qtz vn @ 80° to Cox.
- @ 92.5, 1cm qtz vn @ 60° to Cox.
- @ 93.1, 10 cm clay fault gouge seam.

94.0-95.2M QUARTZ VEINED FAULT GOUGE.

- rubble, pred. (60%) quartz vein material = 3% Py, tr. CpY. some ser-carb alt maf. volc. frags, some graphitic mud rubble.

95.2-96.7M QUARTZ VEIN.

- upper & lower contacts @ 65° to Cox. white, v. lg qtz vn, mod. to strongly fractured @ 65° to Cox, 2 graphite, sericite, & late qtz-Fe carb frac. fill - proximal to contacts, from 95.2-95.8. & 96.5-96.9. 15% graph. inclusions & 1% Py.
- from 96.8-96.1, 1cm Fe carb-qtz vn cuts vn @ 20° - tr. sph.

DRILL INTERVAL		RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	ROD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION AND VEINING	MINERAL PERCENTAGES					DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY					LAB				
FROM	TO																									
								ADDITIONAL DESCRIPTIVE NOTES																		
								<p><u>96.7-97.2M MINERALIZED GRAPHITIC SCHIST</u></p> <ul style="list-style-type: none"> - strongly sheared, schistose, & thinly laminated appearing @ 50° to core. - soft, dk gray, graphitic (30%) - sericite schist - looks like a shear zone as opposed to interflow sed, - locally 30% 1/2 cm white to gray qtz vns to 1cm, 11 sub 11 fol, though often contorted to brecciated. - contains 5% Py, as thin bands of diss cubic min u fol & as trac fill, tr. AsPy as occasional diss blebs, tr. Cpy ass. & qc veins. 																		
								<p><u>97.2-97.8M MINERALIZED, SERICITIC MAFIC VOLCANIC</u></p> <ul style="list-style-type: none"> - dk gray, w/ky ochraceous, crudely fol @ 50° to core, soft, strongly serc. Fe carb alt rk, & 5% 1-2mm diss lcx blebs (probable mafic volc) - 10% 1cm qtz vns pred @ 60-70° to core - 5% diss cubic Py, tr. AsPy, & tr. Cpy ass & qc vns. 																		
								<p><u>97.8-99.0M ALTERED FG XLWD MAFIC VOLC.</u></p> <ul style="list-style-type: none"> - massive, light green, lg vline, appearing basalt, & 25-40% (variable) 3-7mm irregular blebs (porphyroblasts?) of Fe carbonate throughout rock. 5% 1-3mm diss lcx blebs. - strongly fractured @ all orientations. & qtz, Fe carb, minor calc, Py trac fill. - w/ky brecciated in places by thin dk gray to black dk-graph seams, in places define v. crudely fol @ 50° to core. - 10% qtz, minor Fe carb vns @ all orientations, usually & strong sulphide alt halos. - average sulphide content: 3% Py as diss cubic min throughout rk, as trac fill, & as alt halos on vns, tr. AsPy, tr. Cpy ass & qc veins. - relatively sharp contact @ 99.0M & underlying intensely alt. unit. 																		

DRILL INTERVAL	FROM	TO	RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	ROD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION and VEINING	MINERAL PERCENTAGES					DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY				LAB				
											P _y	P _o	C _{py}	As _{py}	OT _H			Ac	Cpb							
100.0	98.0	101.0	3.0	100%	6°		7		99.0-106.0M MINERALIZED, INTENSELY CARB. SERC MAFIC VOLCANIC - lg. massive to crudely fol @ 50° to ax, beige to light grayish green, intensely bleached, sericite-Fe carbonate (± local patchy silicification), altered mafic volc. - 10% disc 1-3 mm pink to white ka blebs. - intensely fractured, to brecciated by fractures, @ all orientations, ± pred- qtz, Fe/Mg carb, ser, Py frac fill (± graph locally from 103.0-105.8) - fractures have thin more intensely altered halos, ± are usually sulphide rich halos. - < 5% thin (to 1cm) qz-Fe/Mg carb vns @ all or, also ± stronger alt ± sulphide rich halos. - average sulphide content: 3% P _y , 0.5% As _{py} , both as lg diss min throughout rock, ± higher concentrations proximal to fracs & veins; k. C _{py} ass ± qz veins. - from 100.7-101.1, 40 cm zone ± 30% qz vns to 2cm @ 45° to ax, ± 5% P _y , 5% As _{py} alt halos on veins. - from 102.0-102.1, 2 cm qz vns @ 35° ax ± 4% P _y , 1% As _{py} /10 cm as halo on vein. - from 103.0, becomes darker gray, more strongly fractured to brecciated by thin chit minor graphite seams, P _y to 5%, ± only trace As _{py} , C _{py} . - @ 103.5, 1cm qz vns @ 40° to ax. - from 105.1-105.3, 3cm qz vns @ 20° to ax. - from 105.7-106.0, 50% qz vns ± brecc vns frags @ 0-20°, ± locally 5% P _y , 1% As _{py} . - rubble contact ± underlying graphitic schist.	INTENSE SER-Fe CARB ALT, PATCHY SILIC.	3%		TR.	0.5%		100.0	42									
101.0											5%				100.7	2456	199									
															101.1	2457 ⁴³	437									
102.0															102.0	2458	61									
103.0	101.0	104.0	3.0	100%			5				3%		TR.	0.5%		103.0	2459	293								
104.0															104.0	2460	57									
105.0											5%		TR.	TR.		105.0	2461	125								
106.0	104.0	107.0	3.0	100%			20								105.7	2462	90									
					75°	FAULT									106.0	2463 ⁴⁴	51									
107.0															106.3	2464 ⁴⁵	641									
108.0										QUARTZ VEIN.	1%				106.4	2465	10									
109.0	107.0	110.0	3.0	100%	6-7°	FAULT	750			SER ALT OF SULF INTBEDS.	5%		TRACE		108.4	2466	64									
110.0															109.1	2467	261									
111.0															109.3	2468 ⁴⁶	75									
112.0															109.8	2469 ⁴⁷	98									
113.0															111.0	2470	21									
114.0	113.0	116.0	3.0	100%	30°		15				5%		TR.	TR.		112.0	2471	40								
															113.0	2472	5									
115.0											0.5%				114.0	2473	8									
															115.0	2474	12									
											0.5%															

106.0-106.3M GRAPHIC SCHIST
- predominantly rubble, mtd - where observable, thinly bd @ 75° ax, soft graphite, ± 20% 5mm-1cm qz vns || foli, 5% P_y as vlg diss min ± occ nodules to 3mm.

106.3-108.4M QUARTZ-GRAPHITE "BRECCIA"
- appears to be a major qz vns intensely brecciated by graphitic seams, massive, comp x 70% qz vns material, 30% graphite, as irreg seams & blobs to 1-2cm, no apparent foliation
- from 106.3-107.5, locally 15% graphite blebs & seams, ± ass. 1% P_y
- from 107.5-108.4, locally 40% graph blebs & seams, ± 2% ass P_y.

108.4-109.8M GRAPHIC ARGILLITE
- thinly bd, @ pred. 60-70° to ax (ranges 60-80°), jet black, v-graphitic (70%) argillite, ± 5% thin 1-2mm silic- carb bands || fol, 5% carbonated, to brecciated qz, carb vns || fol, 5% P_y as occ. nodules to 5mm, thin semi-massive bands || foli, ± vlg diss min.

DRILL INTERVAL		RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	ROD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION and VEINING	MINERAL PERCENTAGES					DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY					LAB		
FROM	TO									Py	Po	Cpy	Aspy	Gr			Ag (ppb)							
45.0	143.0	146.0	3.0	100%	60°			144.1-158.0M STRONGLY SER. Fe-CARB ALT ROCK (MAF VOLC? TUFF? SED?)	STRONG SER. MOD Fe-CARB ALT.	2%	-	-	TR.	-	145.5	2500 ⁸⁶ 87	63							
46.0								v. v. granular appearing, beige to light green, strongly sericitized, mod to strongly Fe carb alt rk, (sed? volc?), v. crudely fol @ 60° to Cox.							147.0	3714	24							
47.0	146.0	149.0	3.0	100%				v. strongly fractured @ all orientations, i. pred. qtz, some Fe/Mg carb, Py, chl, graph frac fill. frags brecciate rock in places.								88	3715	39						
48.0								- 5% thin (to 1cm) qtz-minor Fe/Mg carb veins @ all or., i. abs 1-2% Py.							148.5	89	3716	221						
49.0								- average sulphide content: 2% Py, as min. associated i. qc veins, qtz-carb filled fractures, & as v. diss min, & tr. AsPy, pred. as diss min. proximal qc veins.							150.0	90	3717	131						
50.0	149.0	152.0	3.0	100%				- from 149.1-149.4, v. dk gray, v. likely carbonaceous zone/incl. bed.							151.0	91	3718	393						
51.0								- @ 150.6, 2 cm Fe/Mg carb minor qtz vn @ 0° to Cox i. 5mm semi-mass Py bands @ margins.					TR.		152.0	92	3719	184						
52.0								- from 152.0-152.9, strongly brecciated by thin graph seams, locally 20% thin qc veins @ 0° to Cox.							153.0	93	3720	145						
53.0								- from 154.0-155.0, 20% qtz-carb vs to 1 cm @ all orientations, locally i. 2% Py, 1% AsPy as v. diss min. in adjacent wall rock.							154.0	94	3721	455						
54.0	152.0	155.0	3.0	100%				- @ 155.6, 3 cm qtz minor Fe/Mg carb vn @ 40° to Cox i. minor Py, AsPy @ margins.		5%		1%			155.0	95	3722	124						
55.0								- @ 156.7, 156.9, 2 cm qtz vs u fol i. 1% AsPy in vns i. along vn margins.							156.0	96	3723	142						
56.0								- from 154.0-157.0, locally 2% Py, & as 0.5% AsPy	STRONG SER. MOD Fe-CARB ALT.	2%			0.5%		157.0	97	3724	107						
57.0	155.0	158.0	3.0	100%				NB - AsPy u fine, did not note when stopping hole - option to deepen i. casing in rt assays warrant.																
58.0								HOLE ENDS @ 158.0M.																

Duncan McIvor
FEBRUARY 24, 1991.

DRILL INTERVAL		RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	ROD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION and VEINING	MINERAL PERCENTAGES						DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY					LAB		
FROM	TO									Py	Po	Cpy	Asly	-	OH			As	Fe	Ca	Mg	Al		Si	Ti	Other
200.0				35-8°																					
200.0	203.0	3.0	100%			20		187.0-207.2 M CONTINUED	STRONGLY TALC ALT, W/LLY SERP, 15% TALC-MAGNESITE VEINS.	TR.	-	-	-	-	-	-									
203.0	206.0	2.5	83%			> 50 RUBBLE		207.2-208.4 M VARIABLY ALTERED (SER-SIL-CARB), BLEACHED		TR.	-	-	-	-	-	-									
206.0								MAFIC TO ULTRAMAFIC VOLCANIC																	
206.0	209.0	3.0	100%	45-60°		5		- crudely fol. @ highly variable orientations ranging 45°-60° to cax. - bright light green to grey, pred. strongly ser. carb alt, 2 irregular patches of strong silicification as halos on VAS, fracs, & spherical patches to 5mm affecting 30% of rock. - remnant vlg xlline alt, looks like an intensely alt. pt. - v. strongly fractured, @ all orientations, 2 magnesite, qtz, some talc-chl frac fill. - 5% qtz-magnesite/calcite veins to 1cm @ all orientations - only trace Py along a few fractures. - @ 207.8, 10 cm qtz-mag vi. @ 45° to cax. - sharp contact @ 208.4 @ 80° to cax.	STRONG SER-CARB ALT. PATCHY SIL-	TR.	-	-	-	-	-	744	744	<5							
208.0					MASSIVE. CARC. 80°						3%	-	-	-	-	208.9	745	13							
209.0				60°	CARC. 80°			208.4-208.9 FELSIC-INT. DYKE	MOD SER, W/LLY CARB, PATCHY, STRONG SILICIFIC.	0.5%	-	-	-	-	210.0	746	<5								
209.0	212.0	3.0	100%			4		- jet black, fq, xlline, v. hard, siliceous dyke, contacts @ 80°. - 3% vlg diss Py & Py frac fill. - numerous partially digested xenoliths of alt maf-um rock. - porphyritic in places, 2 15% 1-3 mm bpix phenox.						211.0	747	<5									
212.0								208.9-212.6 M VARIABLY ALTERED (SER-SIL-CARB) BRECCIATED		0.5%	-	-	-	-	212.6	748	<5								
212.0								MAFIC TO ULTRAMAFIC VOLCANIC																	
212.0	215.0	3.0	100%	65°		25		- crudely fol @ 60° to cax, bright light green, vly, mod, bleached, sericitized, w/llly carb, & mod strongly silicified in places, as irreg patches to 2cm of grey strong sil alt, to 35% rock. - strongly fractured, @ all orientations, 2 carb. qtz, some ser-talc, chl frac fill. fracs strongly brecciate rock in places. - 5% thin magnesite-talc VAS to 1cm @ all orientations. - only 0.5% Py pred, as frac fill. - from 211.8-212.6, becomes softer, more sh @ 60° to cax, increasingly talc alt. - arbitrary contact & underlying unit.	INTENSE TALC ALT.	1%	-	-	-	-	214.0	749	<5								
214.0				65°					STRONG SILICIFIC.	TR.	-	-	-	-	215.0	750	<5								



PROJECT Tully ELEVATION ⊖
 HOLE DESIGNATION T-91-05 AZIMUTH 180°
 NTS 42A/14 DIP -50°
 CLAIM _____ LENGTH OF HOLE 143.0M.
 EASTING 112+00 E (IMPERIAL GRID) CORE DIAMETER NQ
 NORTHING 10+00 N

CONTRACTOR NOREX
 DATE STARTED FEBRUARY 21, 91
 DATE FINISHED FEBRUARY 24, 91
 LOGGED BY DONALD McIVOR
 DATE FEBRUARY 1991
 SCALE 1:100

BASELINE _____

TEST DEPTH

0	30M	75M	143M
180°	180°	180°	180°
-50°	-48°	-48°	-49°

AZIMUTH

DIP

DRILL INTERVAL		RECOVERED CORE LENGTH	CORE RECOVERY	RQD	STRUCTURE	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION AND VEINING	MINERAL PERCENTAGES					DEPTH	WIDTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY				
meter	length																				
<u>HOLE SUMMARY</u>																					
	0-29.3M						OVERBURDEN														
	29.3-38.1						FG XLINE BASALT														
	38.1-47.2						PORPHYRIC, FG XLINE BASALT														
	47.2-47.7						GRAPHITIC, SILICEOUS METASEDIMENT														
	47.7-51.5						SILICEOUS GRAYWACKE														
	51.5-56.6						GRAPHITIC ARGILLITE/BRECCIA														
	56.6-60.6						SILICEOUS GRAYWACKE														
	60.6-72.4						ANDESITE TO BASALT														
	72.4-73.2						INTERBEDDED GRAPHITIC & SILICEOUS ARGILLITE														
	73.2-75.6						BRECCIATED, ALTERED MAFIC VOLC/VOLCANIC FRAGMENTAL.														
	75.6-84.5						LCX RICH, VARIOLITIC (CARB ^N) BASALT														
	84.5-89.6						STRONGLY SHEARED, SILICIFIED, CARB ^N LCX BASALT.														
	89.6-94.7						GRAPHITIC ARGILLITE														
	94.7-97.5						MINERALIZED, INTENSELY SER ^C CARB ^N MAFIC VOLCANIC.														
	97.5-98.6						GRAPHITIC, SILICEOUS ARGILLITE.														
	98.6-99.4						PYRITIC, SERICITIC ARGILLITE														
	99.4-102.1						GRAPHITIC ARGILLITE														
	102.1-108.5						CARBONATIZED, FG XLINE AND.-BASALT.														
	108.5-112.4						MINERALIZED, STRONGLY CARB ^N , SER ^C MAFIC VOLCANIC.														
CONTINUED																					

DRILL INTERVAL		RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	ROD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION and VEINING	MINERAL PERCENTAGES						DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY				LAB
FROM	TO									P _y	P _o	C _{py}	As _{py}	OH ₁	OH ₂			Ac (ppb)				
40.0	38.0	41.0	3.0	100%	30-40°	6		38.1-47.2 M CONTINUED <5% secondary qtz-calc vns @ all or. - clear finer grained, v. qtz, sheared appearing zones where porphyritic v. line txt is overprinted. - average sulphide content: only trace Py, associated & occasional qtz-calc vns, in filled frac. - contains 3-5% < 1mm diss lex frags. - @ 38.7, 2 cm qtz-calc. ep vein @ 85° to ax. - @ 38.4, 1 cm pink-dol vn @ 45° to ax. - from 40.8-42.4, finer grained zone, crudely fol @ 30-40° to ax. - from 43.4-43.7, wkly auto-brecciated, & brecc by thin chl seams locally 20% 1-3 cm contorted qtz-dol vns @ 45° to ax. - from 44.0-44.4, rubble zone. - contact @ 47.2 marked by 2 cm pink dol. vn @ 90° ax.	WEAK CHL-Fe CARB ALT.													
41.0																						
42.0	41.0	44.0	3.0	100%		10																
43.0																						
44.0					RUDDLE																	
45.0	44.0	47.0	3.0	100%	MASSIVE	6		47.2-47.7 M GRAPHITIC SILICEOUS METASEDIMENT - predominantly rubble, where observable. - jet black, wkly graphitic (20%), mod. foliated, bd appearing @ 65° to ax, hard, siliceous v. argillaceous rock. - v. strongly fractured, @ all orientations, & qtz, carb. Py trace fill. - 3% Py as v. qtz vns, pred. 11 subfol. - 20% 2-5cm qtz-calc vns, pred. 11 subfol. - @ 47.2, 2 cm pink dol vn @ 80° to ax. - from 47.4-47.5, 10 cm. qtz-pink dol vn u fol & 2% Py.	WK CHL-Fe CARB ALT.													
46.0																						
47.0					65°			20% QZC VEINS.	3%					2% GRAPH	47.7	3726 ⁰¹	9					
48.0	47.0	50.0	2.4	80%	30°	20		SIL ALT HALOS ON FRACS.	3%		TR.				48.2	3727 ⁰³	6					
49.0															48.7	3728 ⁰⁴	<5					
50.0																3729 ⁰⁵	<5					
51.0															50.5	3730 ⁰⁶	<5					
52.0	50.0	53.0	3.0	100%	0°	750		30% (DOL VNS)	2%		TR.		TR. Sph	6%	51.5	3731 ⁰⁷	6					
53.0					SHEAR										52.5	3732 ⁰⁸	6					
54.0	53.0	56.0	3.0	100%		750									53.5	3733 ⁰⁹	11					
55.0															54.5	3734 ¹⁰	8					

DRILL INTERVAL	RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	ROD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION and VEINING	MINERAL PERCENTAGES					DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY			LAB				
									Py	Po	Cpy	AsPy	OTH			Au (ppb)	Ag (ppb)						
85.0	83.0 - 86.0	3.0	100%	35°	7		84.5 - 89.6 M STRONGLY SHEARED, SILICIFIED, CARB ⁿ LEX BASALT. - as in preceding unit, but intensely altered, more strongly sheared, sch @ 35° to ax., light grayish green, vfg, ± 60-100% patches from 5mm to 2cm of intense Fe carb, mod. sil alt. - 5:10% diss 1-3 mm pink lex blbs. - strongly fractured 11 fol, ± @ 0°, 90° to ax, ± chl. carb, ± minor graphite, frac. fill. - 1% Py as occ. diss blbs to 3mm ± as frac fill. - from 87.5, becomes darker gray, harder, more sil, Py increases to 2%. - from 88.4-88.8, intensely silicified zone around 10 cm graphic shear @ 65° to ax, ± 5% Py as vfg diss min. halting shear, ± occ nodular blb in graph. - @ contact @ 89.6, 10 cm silicified zone, ± 10% diss Py, contact @ 60° to ax.	STRONG Fe CARB ALT.						85.5	3743 ¹⁹	8							
86.0									1%					86.5	3744 ²⁰	<5							
87.0														87.5	3745 ²¹	<5							
88.0	86.0 - 89.0	3.0	100%		10			STRONG Fe CARB. MOD. SIL. ALT.	2%					88.4	3746 ²²	<5							
89.0														88.8	3747 ²³	164							
90.0														89.6	3748 ²⁴	51							
91.0				40°	750		89.6 - 94.7 M GRAPHIC ARGILLITE. - thinly bedded @ ax. or, 40° to ax, though locally contorted - jet black, soft, v. graphitic (80%) argillite. - 5% thin (to 5 cm, ax. 1 cm) light greenish gray, vfg, granular "siltstone" type interbeds, often slumped app. - 5% thin 1-2 mm silica seams 11 fol (as always ± graph). - 7% Py, almost entirely as 5mm - 2cm nodular blbs. - occ. thin semi. mass band 11 fol, minor vfg diss min. - mod. fractured, pred. 11 fol, ± calc, abundant hem frac fill. - from 91.0-94.7, core pred rubble (fault) - from 92.0-92.5, in rubble zone, 50% of fragments are qtz va material, locally abundant hem. frac fill. - @ 92.6, 10 cm siltstone intbed ± 10% vfg diss Py. - @ 93.0, alev 1-2 cm qtz va frags in rubble.							7%			89.5	3749 ²⁵	829				
92.0	89.0 - 92.0	3.0	100%		750									90.5	3750 ²⁶	704							
93.0														92.0	3751 ²⁷	418							
94.0	92.0 - 95.0	3.0	100%		750									92.5	3752 ²⁸	587							
95.0														93.5	3753 ²⁹	3033	3.056						
96.0	95.0 - 98.0	3.0	100%	30°	750		94.7 - 97.5 M MINERALIZED, INTENSELY SER ^c , CARB ⁿ MAFIC VOLC. (?) - rock is gray, vfg, granular appearing, v. strongly Fe carb alt, mod. sericitized. only wkly, crudely foliated @ 50° to ax. though locally variable; looks in places like alt volc elsewhere like a siltstone - protolith unknown - intensely fractured @ all or, ± qtz, chl. carb frac fill (& graph proximal contacts). - 20% < 5mm - 2 cm qtz-Fe carb vns @ all orientations, ± ax. 2% Py, 1% AsPy as vfg diss min throughout rk ± halting qc vns, tilted frags, ± tr-sph-cpy ass ± qc vns. - contact ± underlying graphitic unit @ 20° to ax.	STRONG INTENSE Fe CARB-SER ALT. 2% QC VEINS.	3%		TR.	1%		95.5	3754 ³⁰	409							
97.0														96.0	3755 ³¹	156							
98.0														96.5	3756 ³²	280							
99.0	98.0 - 101.0	3.0	100%		750									97.0	3757 ³³	264							
100.0														97.5	3758 ³⁴	608							
														98.6	3759 ³⁵	960							
														99.4	3760 ³⁶	235							
														100.0	3761 ³⁷	847							

DRILL INTERVAL		RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	ROD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION AND VEINING	MINERAL PERCENTAGES					DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY		LAB				
FROM	TO									Py	Po	Cpy	Aspy	OTH.			Au (ppb)	Ag (ppb)					
98.0	101.0	3.0	100%	8°		>50		97.5-98.6M GRAPHITIC, SILICEOUS ARGILLITE. - pred. rubble, - jet black, v. hard, siliceous, almost cherty graphitic (30%) argillite, fol. highly variable, ranges 20-70° to ax, pred @ 35° to ax. - strongly fractured @ all orientations, ± qtz, Py frac fill. - contains 10% Py as nodules to 2cm, ± semi-massive bands || fol to 1-2 cm, ± as frac fill. - from 97.3-97.6, 70% Py as 1-2 cm semi-mass bands. - @ 97.8, 2 cm semi-mass Py band @ 40° ax.	SER ALT OF SUB INTERBS	5%	-	-	-	-	80% GRAPH.	102.0	3762	752					
101.0															102.1	3763	811						
101.0	104.0	3.0	100%	MASSIVE		10		98.6-99.4 PYRITIC, SERICITIC ARGILLITE. - waxy fol @ 50° to ax, dk greenish gray, v. soft, intensely sericitized, waxy carbonaceous argillaceous rk, ± 25% Py as waxy pervasive diss min. 99.4-102.1M GRAPHITIC ARGILLITE. - thinly bedded, @ ax or 35° to ax, though contorted, varies 35°-70° to ax in places. - jet black, soft, graphitic (30%) argillite, ± 15% 1-5 cm light green sericitic "siltstone" interbeds || fol, 570 thin 1-3 mm silica seams || fol. - 5% Py, pred. as nodular blebs to 1cm, occasional semi- massive band || fol, ± as frac fill, ± diss min. - appears slumped, auto-brecciated in places.	STRONG Fe CARB ALT.	0.5%	-	-	-	-	103.0	3764	10						
103.0															103.0	3765	6						
104.0															104.0	3766	16						
104.0	107.0	3.0	100%			5		102.1-108.5M CARBONATIZED, FC XLINE ANDESITE TO BASALT. - by well dev. xline fol, predominantly massive appearing, though in places is crudely foliated @ 0-20° to ax, light gray to brownish gray "andesite to basalt". - strongly Fe carb alt, as disseminated aggregates of 1-2mm blebs to 40% of rock, appears to be alt/replacement of plag. - mpt to strongly fractured, @ all orientations, ± chl, some qtz, hematite, Fe/Mg carb frac fill. - average sulphide contents 0-5% Py, pred as frac fill, to minor diss min. - from 102.1-102.6, proximal to graphitic arg, 2% Py as coarse blebs to 5mm along fracs, locally abundant here, frac fill. - from 103.0-103.2, locally 20% thin 5mm Fe carb vns @ 30-50° to ax, locally abundant hem @ margins, ± 1% Py. - @ 107.5, 1cm qtz vns @ 70° to ax ± Py fol to 270/5cm. - from 107.5-108.5, sulphides increase to 1% Py, pred. as halos on fractures & thin qc stringers. - @ 108.3, 10 cm qtz vns ± 5 cm halo of 5% Py - contact @ 108.5 based on intensity of alt & sulphide content.	STRONG Fe CARB ALT.	1%	-	-	-	-	105.0	3767	7						
106.0															106.0	3768	<5						
107.0															107.0	3769	64						
107.0	110.0	3.0	100%	60°		10		STRONG Fe SER. Fe CARB ALT, PATCHY SILIC.							108.0	3770	60						
109.0															108.5	3771	372						
110.0															109.0	3772	171						
111.0															109.5	3773	397						
111.0	113.0	3.0	100%	MASSIVE		>50		STRONG Fe SER ALT	5%	-	TR.	2%	TR. sph.	110.0	3774	315							
112.0															110.5	3775	2728	2.08					
112.0	113.0	3.0	100%			>50									111.0	3776	1083	0.857					
113.0															111.5	3777	806						
113.0	116.0	3.0	100%			10		STRONG Fe SER ALT	10%	-	-	1%		112.0	3778	503							
114.0															112.4	3779	6						
115.0								CHL. ALT.	0.5%	-	-	-		113.0	3780	<5							
															114.0	3781	<5						

DRILL INTERVAL		RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	RQD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION and VEINING	MINERAL PERCENTAGES					DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY					LAB
FROM	TO									P _y	P _o	C _{py}	A _s P _y	OTH			A _u (ppb)					
130.0	128.0	3.0	100%	MASSIVE		5		127.8-129.5M CONTINUED. - average sulphide content: 3% Py, 2% AsPy, both as pervasive disse min throughout unit, & min ass c/along qc veins. - k-Cpy-sphalerite, associated & qc veins. - from 128.8-129.0, 20cm silicified zone, 11 fol @ 70° to core, & 50% 1-2 cm crack-seal qtz vns 11 fol. & associated 10% AsPy, 3% Py, as thin semi-massive seams in vns & @ vns margins, & disse. throughout zone. - gradually becomes less altered from 129.3-129.5.	WIKELY CHL ² , WIKELY CARB ⁴							66						
131.0	128.0	3.0	100%	MASSIVE		5									67							
132.0	131.0	3.0	100%	MASSIVE		8									68							
133.0	131.0	3.0	100%	MASSIVE		8									68							
134.0	133.0	3.0	100%	MASSIVE		5		129.5-143.0 M MASSIVE FG LEUCITIC BASALT. - dk green, fq, w/ky chloritized massive basalt, & 10% 1-3 mm disse blabs of pink to white kx. - non-mag, v. homogeneous. - mod. fractured, pred. @ 70-90° to core, & pred. chl. calc, minor Py fract. fill. - average sulphide content: 1% Py, ass pred. c chl. calc filled frac, minor disse min. - from 129.5-135.0, 10-15% (decreases downhole) 1-3 mm irreg patches/blabs of Fe carb - @ 132.5, 1 cm qtz Fe carb vns @ 70° to core. - @ 133.7, 1 cm Fe carb qtz vns @ 70° to core. - @ 138.9, 3 cm Fe carb vns @ 70° to core.	WEAKLY CHL ² .													
135.0	134.0	3.0	100%	MASSIVE		5																
136.0	134.0	3.0	100%	MASSIVE		5																
137.0	134.0	3.0	100%	MASSIVE		5																
138.0	137.0	3.0	100%	MASSIVE		4																
139.0	137.0	3.0	100%	MASSIVE		4																
140.0	137.0	3.0	100%	MASSIVE		4																
141.0	140.0	3.0	100%	MASSIVE		3																
142.0	140.0	3.0	100%	MASSIVE		3																
143.0	140.0	3.0	100%	MASSIVE		3																
								HOLE ENDS @ 143.0M. <i>Duncan McIvor</i> FEBRUARY 26, 1991.														



PROJECT Tully ELEVATION 0
 HOLE DESIGNATION I-91-05 (EXT) AZIMUTH 180°
 NTS 42 A/14 DIP -55°
 CLAIM _____ LENGTH OF HOLE 143.0-236.0
 EASTING L12+00E, (IMPERIAL GRID) CORE DIAMETER NQ
 NORTHING 10+00N

CONTRACTOR NOREX
 DATE STARTED MARCH 19, 1991
 DATE FINISHED MARCH 21, 1991
 LOGGED BY DUNCAN McIVOR
 DATE MARCH, 1991
 SCALE 1:100

BASELINE IMPERIAL GRID.

TEST DEPTH	235m.		
AZIMUTH	180°		
DIP	50°		

DRILL INTERVAL	RECOVERED CORE LENGTH	CORE RECOVERY	ROD	STRUCTURE	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION AND VEINING	MINERAL PERCENTAGES				DEPTH	WIDTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY				
<u>HOLE SUMMARY.</u>																			
						143.0 - 156.0 M	MASSIVE, FG. XLINE LK BASALT												
						156.0 - 162.5	POPHYRITIC, CARB ^N LK BASALT												
						162.5 - 167.4	STRONGLY CARB ^N , SER ^C LK BASALT												
						167.4 - 168.2	QTZ-CARB VNED, BRECCIATED, SILICIFIED GRAPHITIC ARGILLITE												
						168.2 - 171.8	VARIABLY BRECCIATED, STRONGLY CARB ^N POPHYRITIC LK BASALT.												
						171.8 - 172.7	QTZ-CARB VNED, BRECCIATED SILICIFIED GRAPHITIC ARGILLITE.												
						172.7 - 173.0	QTZ-CARB VNED, CARB ^N , SER ^C BASALT.												
						173.0 - 173.2	QTZ VNED GRAPHITIC RUBBLE												
						173.2 - 174.5	QTZ VNED, CARB ^N , SER ^C BASALT.												
						174.5 - 175.6	INTENSELY SER ^C , CARB ^N FRAGMENTAL (BRECCIA?) ROCK.												
						175.6 - 177.2	GRAPHITIC ARGILLITE.												
						177.2 - 177.8	INTENSELY SER ^C , CARB ^N FRAGMENTAL (BRECCIA?) ROCK.												
						177.8 - 194.5	VARIABLY ALTERED (SIL-SER-CARB) BRECCIATED INT-MAP VOLC/VOLC. FRAGMENTAL.												
						194.5 - 203.6	INTENSELY TALC ALTERED UM (KFM).												
						203.6 - 209.5	SER ^C , CARB ^N , BRECCIATED SILTSTONE GRAYWACKE.												
						209.5 - 223.5	GRAYWACKE TO CONGLOMERATE.												
CONT. ON 1A.																			

PROJECT Tully

HOLE DESIGNATION T-91-05E

LOGGED BY DUNCAN McIVOR

SCALE 1:100

PAGE 2 OF 8

DRILL INTERVAL		RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	ROD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION and VEINING	MINERAL PERCENTAGES					DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY					LAB
FROM	TO									P _y	P _o	Cp _y	As _y	OTH			A ₁ (ppb)					
40.0								0.0 - 143.0M - SEE LOG T-91-05														
143.0	146.0	3.0	100%		MASSIVE	1	*	<p><u>143.0-156.0M MASSIVE, FG XLLINE LCX BASALT</u></p> <ul style="list-style-type: none"> - dk green, wkly chl⁺, massive, lg (by mg in places) lcx basalt, ± 5-7% 1-3mm diss pink to white lcx blebs, ± av. 10% (varies 0-20%) 1-3mm irreg spherulitic app blebs Fe carb. in typical "snowflake hxt". - mod. fractured, strong pre-orientation @ 50° to cap, ± pred. calcite, chlorite, some qtz, Py trac hill. - average sulphide content: 1% Py, pred as trac hill & min. associated ± thin qz-carb vns. & minor vlg diss min. - 5% thin (to 1cm) pred. calcite minor qtz vns @ all orientations. - @ 153.5, 1cm calc minor qtz vns @ 40° cont ± 2% Py @ magis. - from 153.6-154.1, 1cm Fe carb minor qtz vns @ 10° to cap. - from 154.0-156.0, gradually becomes finer grained, lighter green, wkly bleached app, Py increases to 2% as trac hill & min. ass ± thin qz vns locally pred @ 0-20' to cap, vns often have 1-2 cm more strongly bleached alk halos. - @ 155.8, 1cm qtz Fe carb vns @ 50° to cap. - arbitrary contact @ 156.0M ± underlying por, carb⁺ basalt. 	WKLY CHL [±] WKLY CARB ⁺	1%												
146.0	149.0	3.0	100%			5	*															
149.0	152.0	3.0	100%			5	*															
152.0	155.0	3.0	100%			1	*			WKLY CHL [±] WKLY CARB ⁺					153.0							
153.0															154.0	643 ⁰¹	5					
154.0															644 ⁰²	15						
155.0														155.0								

DRILL INTERVAL	FROM	TO	RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	ROD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION AND VEINING	MINERAL PERCENTAGES					DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY				LAB	
											Py	Pb	Cpy	Aspy	OT4			1550	A ₁ (ppb)	A ₂ SFA (ppm)			
156.0					MASSIVE				156.0-162.5 M POPHYRITIC/BLASTIC CARB ⁿ LEX BASALT. - rock comprised of a massive, dk green, wdky-mod ch ^l v. basaltic groundmass, ± 5-7% 1-3mm diss pink lxx blebs ± ax. 35% 5mm-1cm (coarser downhole) irregular, spherulitic type blebs/aggregates of smaller sub-euhedral gray to pinkish gray Fe carbonate (alt. plg?) in well dev "snowflake hb" - mod. fractured, ± prominent ser ^s @ 0°, 45°, 90° to ax, ± pred. Fe carb, some calc, chl, qtz, Py frac fill. - 5% secondary pred. Fe carb minor qtz vns @ all or. - both frac & veins have 5mm-2cm more strongly carb ⁿ ser ^s , bleached alt. halos. - average sulphide content: 1% Py, pred. as frac fill, minor diss min. - from 156.8-157.0, 1cm Fe carb vns @ 0° to ax. - @ 157.5, 1cm qtz-Fe carb vns @ 55° to ax. - @ 158.4, also 1cm Fe carb minor qtz vns @ 30°, 30° to ax. - @ 158.9, 10cm bleached carb ⁿ zone. - @ 159.2, 1cm qtz-Fe carb vns @ 50° to ax, ± 2cm carbonized alt. halo. - from 159.5, becomes gradationally lighter green, wdky pervasively bleached, ser ^s , carb ⁿ . - @ 160.5, 1cm qtz-Fe carb vns @ 65° to ax. - arbitrary contact @ 162.5 ± underlying more strongly alt. unit.	Wdky carb ⁿ	2%	-	-	-	-	156.0	645	<5					
156.0	155.0	158.0	3.0	100%	MASSIVE		4			Wdky-mod carb ⁿ , MOD. CARB ⁿ .	1%	-	-	-	-	157.0	646	<5					
157.0																158.0	647	<5					
158.0																159.0	648	<5					
159.0	158.0	161.0	3.0	100%			8									160.0	649	<5					
160.0										Wdky SERC, MOD. CARB ⁿ .	1%	-	-	-	-	161.0	650	29					
161.0																162.0	651	13					
162.0	161.0	164.0	3.0	100%	55°		10									162.5	652	<5					
163.0										STRONGLY CARB ⁿ , MOD. SERC.	1%	-	-	-	-	163.5	653	6					
164.0																164.5	654	6					
165.0																165.5	655	443					
166.0	164.0	167.0	3.0	100%			8			LEX BASALT. - more strongly altered equivalent of overlying unit. - massive, to v. wdky, crudely foliated @ 55° to ax. - rock is comprised of light greenish gray, vly. strongly Fe carb alt, mod. sericitized basaltic groundmass, ± 3-5% 1-2mm diss pink to yellow lxx blebs, ± 20% least 2mm-5mm "snowflake hb" Fe carb blebs - v. strongly fractured, to precipitated by frac ^s , @ all or, ± pred. Fe carb, some qtz, chl, ser, Py frac fill. - 5% thin (<1cm) qtz-Fe carb vns @ all or, (from ser ^s @ 0-20° to ax), often ± more strongly bleached thin halos. - average sulphide content: 1% Py, as occ. diss bleb ± frac fill, ± min. ass ± thin qtz veins. - v. Aspy as noted below. - @ 162.7, also 1cm qtz vns @ 45° to ax ± 1% ass Py @ margins. - from 164.0-164.5, locally 10% thin (5mm) qtz-carb vns @ 0-20° to ax. - from 165.4-165.7, 30cm intensely alt zone, ± 5% diss Py, tr. Aspy, as halos on 20% thin 5mm qtz-Fe carb vns @ 70° to	STRONGLY CARB ⁿ , MOD. SERC.	1%	-	-	-	-	166.6	656	109				
167.0																167.4	657	166					
168.0					20° 30° 55°					SIL ^c , 50% AX VNS	3%	-	TR.	TR.	-	168.2	658	239					
169.0	167.0	170.0	3.0	100%	60°		8			STRONGLY CARB ⁿ , MOD SERC.	2%	-	TR.	0.5%	-	168.5	659	1124	0.979				
170.0																169.5	660	291					
											1%	-	TR.	-	-	170.0	661	25					

DRILL INTERVAL	FROM	TO	RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	ROD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION	BMS	VEINING	MINERAL PERCENTAGES					DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY				LAB					
													P _y	P _o	C _{py}	Ash _y	OTH			A _y	(ppb)								
170.0					8°				171.8-172.7 M. QTZ-CARB VINED, BRECCIATED, SILICIFIED	STRONGLY CARB ⁿ			1%		TR.	TR.		170.0	20										
171.0	170.0	173.0	3.0	100%	50°		15		GRAPHITIC ARGILLITE-SILTSTONE. - mod. foliated @ 45° or 50° to cax. though locally in locally contorted - pred. & v.ig. dk gray to black, mod. graphitic (20-35%) siltstone- argillite, z 2% to 5 mm to 3 cm gray qtz vs @ all orientations - strongly brecciating rk (minor carb ass z qtz) - intensely fractured, @ all orientations, z pred. silica, P _y fractill - contains 7% Py as occasional nodular blob to 1cm, occasional semi-massive band n fol. by diss min. & frac fill. - contact @ 172.7 @ 60° to cax.	MOD SER ^c .			0.25%						171.0	662	76								
172.0					65°				172.7-173.2 M. QTZ VINED, MOD CARB ⁿ , SER ^c BASALT. - mod. sch. @ 65° to cax, v.ig. light green, mod. sericitized, Fe carb fill sh. basalt, z 25% v. contorted to brecciated, < 5mm to 3 cm qtz. Fe carb vs 11 sub n fol. - 1% Py as fractill, & clear thin seams n fol @ upper contact.	20% QZ VEINS.					30% GRAN.			171.8	663	248									
173.0					65°				173.2-174.5 M. QTZ VINED, MOD CARB ⁿ , SER ^c BASALT. - mod. sch. @ 65° to cax, v.ig. light green, mod. sericitized, Fe carb fill sh. basalt, z 25% v. contorted to brecciated, < 5mm to 3 cm qtz. Fe carb vs 11 sub n fol. - 1% Py as fractill, & clear thin seams n fol @ upper contact.	35% QZ VAS						172.7	664	623											
174.0	173.0	176.0	3.0	100%	75°		>50		173.0-173.2 M. QTZ VINED GRAPHITIC RUBBLE (probably fall back rubble from above).	STRONGLY SER ^c , MOD. CARB ⁿ							173.0	665	530										
175.0					8°				173.2-174.5 M. QTZ VINED, MOD. CARB ⁿ , SER ^c BASALT. - v. crudely, v.ig. fol @ 60-75° to cax, light green, mod. to strongly sericitized, mod. carb, sheared v.ig. mafic volc, z 40% qtz vs & brecciated qtz in fragments from 1cm - 15 cm, foliated n fol. - contains 2% Py as blebs & seams to 5mm along v. margins, & as frac fill.	INTENSE SER-CARB ALT.							173.2	666	288										
176.0					8°				174.5-175.6 M. INTENSELY SER ^c , CARB ⁿ , FRAGMENTAL (BRECCIA?) - intensely sh. sch. @ 45° or 75° to cax, rock pred. a ser-carb sch. z well developed remnant fragmental/breccia fill, comprised of at. 40% stretched elongate n fol z 5mm to 1 cm by xline/gren app. bright yellow v. strongly carb ⁿ , serc frags (alt v.ig?) in a matrix (60%) of gray v.ig Fe carb (z minor serc) - strongly fractured, pred. n fol z @ 0° to cax, z pred. Fe carb, minor qtz frac fill. - 10% 5mm - 5 cm qtz. Fe carb veins, n fol. - contains 2% Py as v.ig. diss min. throughout rk. - @ 175.4, 15 cm qtz. Fe carb v. - good MARKER HORIZONTAL	10% QZ VAS.	3%			40% GRAN.		174.5	667	70											
177.0	176.0	179.0	3.0	100%	75°		>50		175.6-177.2 M. GRAPHITIC RUBBLE	INTENSE SER-CARB ALT.							175.6	668	33										
178.0					8°				177.2-178.8 M. INTENSELY SER ^c , CARB ⁿ , FRAGMENTAL (BRECCIA?) - intensely sh. sch. @ 45° or 75° to cax, rock pred. a ser-carb sch. z well developed remnant fragmental/breccia fill, comprised of at. 40% stretched elongate n fol z 5mm to 1 cm by xline/gren app. bright yellow v. strongly carb ⁿ , serc frags (alt v.ig?) in a matrix (60%) of gray v.ig Fe carb (z minor serc) - strongly fractured, pred. n fol z @ 0° to cax, z pred. Fe carb, minor qtz frac fill. - 10% 5mm - 5 cm qtz. Fe carb veins, n fol. - contains 2% Py as v.ig. diss min. throughout rk. - @ 175.4, 15 cm qtz. Fe carb v. - good MARKER HORIZONTAL	10% QZ VAS.	3%			40% GRAN.		176.6	669	56											
179.0	177.0	179.0	3.0	100%	75°		>50		178.8-179.0 M. INTENSELY SER ^c , CARB ⁿ , FRAGMENTAL (BRECCIA?) - intensely sh. sch. @ 45° or 75° to cax, rock pred. a ser-carb sch. z well developed remnant fragmental/breccia fill, comprised of at. 40% stretched elongate n fol z 5mm to 1 cm by xline/gren app. bright yellow v. strongly carb ⁿ , serc frags (alt v.ig?) in a matrix (60%) of gray v.ig Fe carb (z minor serc) - strongly fractured, pred. n fol z @ 0° to cax, z pred. Fe carb, minor qtz frac fill. - 10% 5mm - 5 cm qtz. Fe carb veins, n fol. - contains 2% Py as v.ig. diss min. throughout rk. - @ 175.4, 15 cm qtz. Fe carb v. - good MARKER HORIZONTAL	INTENSE SER-CARB ALT.						177.2	670	14											
180.0	179.0	182.0	3.0	100%	70°				179.0-180.5 M. MOD SER ALT, MOD CALC ALT, PATCHY SIL ^c .	MOD SER ALT, MOD CALC ALT, PATCHY SIL ^c .							177.8	671	7										
181.0	179.0	182.0	3.0	100%	70°				180.5-182.0 M. MOD SER ALT, MOD CALC ALT, PATCHY SIL ^c .	MOD SER ALT, MOD CALC ALT, PATCHY SIL ^c .							179.0	672	<5										
182.0					70°				182.0-183.5 M. MOD SER ALT, MOD CALC ALT, PATCHY SIL ^c .	MOD SER ALT, MOD CALC ALT, PATCHY SIL ^c .							180.5	673	<5										
183.0	182.0	185.0	3.0	100%	70°		3		183.5-185.0 M. MOD SER ALT, MOD CALC ALT, PATCHY SIL ^c .	MOD SER ALT, MOD CALC ALT, PATCHY SIL ^c .							182.0	674	5										
184.0	183.0	185.0	3.0	100%	70°				185.0-186.5 M. MOD SER ALT, MOD CALC ALT, PATCHY SIL ^c .	MOD SER ALT, MOD CALC ALT, PATCHY SIL ^c .							183.5	675	8										
185.0	184.0	185.0	3.0	100%	70°		6		186.5-188.0 M. MOD SER ALT, MOD CALC ALT, PATCHY SIL ^c .	MOD SER ALT, MOD CALC ALT, PATCHY SIL ^c .							185.0	676	22										

DRILL INTERVAL	RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	ROD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION and VEINING	MINERAL PERCENTAGES						DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY					LAB		
									Py	Po	Cpy	Asly		OTH			As	Co	Fe	Mo				
185.0							<u>177.2-177.8 M INTENSELY SER^c CARBⁿ FRAGMENTAL (BREGNA) Rock.</u>	MOD SER-CALC ALT, PATCHY SILC.							185.0	35								
186.0	186.0	188.0	3.0	100%	6		<ul style="list-style-type: none"> strongly fol. sch., @ ax. or. 70° to coax. rock comprised of 60% to 1-3 cm elong 11 fol frags, of lg intensely Fe carb-ser alt bright yellowish-green rk. alt un frags: in gray carbonate-minor ser matrix. 1% diss Py @ 177.2, 10 cm qtz vn @ 60° to coax. 		0.5%						TR FZCH	186.5	677	<5						
187.0							<u>177.8-194.5 M VARIABLY ALTERED (SER-SIL-CARB) BRECCIATED INT. MAFIC VOLC. / VOLC FRAGMENTAL.</u>	STRONGLY CARB ⁿ !							188.0	36								
188.0							<ul style="list-style-type: none"> highly variable appearance & composition. mod. fol. sch. @ ax. or. 70° to coax. pred. a vlg. granular appearing, light green, relatively hard, mod. seritic calc, calcitic, dacite to andesite (with?) & a coarse crude fragmental rth as exhibited by numerous (to 30%) 1-3 cm bands / fragments of clear quartz, more siliceous, silicified rk. & occasional beige Fe carb alt rock. entire unit is strongly brecciated by 5mm-3cm pred. calc minor qtz, Fe carb veins/bands 11 fol. to 15% of unit. intensely fractured, pred. 11 fol. & pred. calcite, some qtz, Fe carb, chl. ser, hematite, frac fill contains 0.5% Py as vlg diss min, frac hills & min. ass & qc veins @ 178.4, 1cm Fe carb vn 11 fol. @ 17° sph (clabs to 3mm. from 182.0-183.0, 30% to 1-3 cm cherty qtz-Fe carb vns 11 fol. locally & 2% ass. hematite along vn margins @ 188.2, alaw rocksite alt frags, & thin rocksite seams 11 fol. from 192.5-194.5, numerous intensely carb spin. htd un frags sharp contact @ 194.5 marked by 5 cm magnesite vn & 2cm spinifer htd zone @ 45° to coax. 								189.0	37								
189.0																190.0	38							
190.0	188.0	191.0	3.0	100%	6											191.0	39							
191.0																192.0	40							
192.0	191.0	194.0	3.0	100%	6										193.0	41								
193.0															194.0	42								
194.0							<u>194.5-203.6 M INTENSELY TALC ALTERED UM. (USM. FLOW)</u>	INTENSE TALC ALT. 15% TALC-MAGNESITE VEINS.							194.5	43								
195.0	194.0	197.0	3.0	100%	7		<ul style="list-style-type: none"> to top qtz, dk green, massive to crudely fol. @ ax. or. 50° to coax, vlg soft, intensely talc alt um. komatiite. intensely fractured, to v. strongly brecciated by fractures @ all or. (prominent set 11 fol.) & pred. talc, magnesite, fract. 15% talc-magnesite veins to 2cm, ax. 5mm, @ all or. non-magnetic. contains 1% Py as vlg diss min. throughout unit. & as frac fill. from 194.5-195.2, v. strongly brecciated. & strongly fol @ 50° to coax, locally alaw spinifer htd frags (flow top). from 196.3-197.0, locally 2% Py from 203.4-203.6, intensely sheared lower contact @ 40° to coax. 		1%						195.5	44								
196.0																196.5	45							
197.0																197.5	46							
198.0																198.5	47							
199.0	197.0	200.0	3.0	100%	10										199.5	48								
200.0																49								
																691	<5							

DRILL INTERVAL	RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	ROD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION and VEINING	MINERAL PERCENTAGES					DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY					LAB		
									P ₁	P ₀	Ca	As ₁	OTU			As ₁ (006)							
200.0													200.5	691 ⁴¹	<5								
201.0	200.0	203.0	3.0	100%	13			INTENSE TALC ALT.	1%					201.5	692 ⁵⁰	<5							
202.0													202.5	693 ⁵¹	<5								
203.0													203.6	694 ⁵²	<5								
204.0	203.0	206.0	3.0	100%	4		203.6-209.5 M STRONGLY CARB ^N SEQ ^C BRECCIATED SILTSTONE - GRAYWACKE - well bedded, & w/dy, med. sh. sp. @ 55° to ax. v. q. v. granular (clearly epiblastic) light gray to beige, v. strongly carbonized, w/dy to mod. sericitized siltstone - graywacke. - a few "fragments" of similar comp to 5mm, a few qtz v. frags. - mod. brecciated in places, by thin qtz-calcite veins/bands || fol. & occasionally by dk green chl bands || fol. appears slumped in places. - strongly fractured, pred. || sub || fol. & pred. calcite, some qtz, Fe carb, chl, talc frac fill - contains 1% Py as occasional frags/clasts to 5mm, & as frac fill ass & qtz-carb. - @ 204.6, 1cm qtz-Fe carb v. @ 45° to ax. - @ 206.9, 5cm qtz-Fe carb v. @ 70° to ax. - from 207.4-208.0, locally 20% qtz-carb vns to 3cm || bed & cutting fol @ 60° to ax, & locally 5% Py as blebs to 1cm throughout rk. - from 208.6-208.9, 1cm graphic seam @ 0° ax & 3% R. - contact @ 209.5 marked by thin graphitic interbed - arbitrary contact & underlying less altered, coarser unit.	STRONGLY CARB ^N , W/DY SEQ ^C .	1%					204.6	695 ⁵³	<5							
205.0													205.6	696 ⁵⁴	5								
206.0													206.6	697 ⁵⁵	<5								
207.0	206.0	209.0	3.0	100%	10				1%				207.6	698 ⁵⁶	<5								
208.0													208.6	699 ⁵⁷	7								
209.0													209.5	700 ⁵⁸	<5								
210.0	209.0	212.0	3.0	100%	10		209.5-223.5 M GRAYWACKE TO CONGLOMERATE - well dev. bd, thinly bedded, @ 65° to ax - variable in appearance & composition, but pred. dk grayish green, w/dy chloritic, relatively hard, siliceous & mod. carbonized/carb bearing, v. granular graywacke, & 5-10% small < 5mm to 2cm similar comp. clasts, usually angular, along || fol. - a few graph arg, qtz clasts/frags. - a few finer grained, w/dy carbonaceous gray "siltstone" in beds. - a few coarser, conglomeratic zones, & clasts/frags as per above to 2-3cm & 60-70% in gray silica-carb. minor chl rich matrix - looks brecciated, as opposed to epiblastic in places. - mod. fractured @ all orientations, & pred. qtz, Fe carb, some calc, chl, Py, frac fill. - 10% thin (to 1cm) often strongly contorted to brecciated qtz-Fe carb minor calcite veins @ all orientations. - unit is vuggy. - av. sulphide content: 2% v. diss Py.	MOD. CARB ^N , 10% CL VEINS.	5%					210.0	701 ⁵⁹	6							
211.0													211.0	702 ⁶⁰	<5								
212.0													212.0	703 ⁶¹	<5								
213.0	212.0	215.0	3.0	100%	10								213.0	704 ⁶²	<5								
214.0													214.0	705 ⁶³	5								
215.0													215.0	706 ⁶⁴	5								

DRILL INTERVAL	RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	ROD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION AND VEINING	MINERAL PERCENTAGES					DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY					LAB
									Py	Pb	Cpy	Aspy	OTH			Ag (ppb)					
215.0 - 218.0	3.0	100%	65°		10		209.5 - 223.5 M CONTINUED. - from 209.5 - 209.9, locally 5% diss Py, 15% thin conchoidal qtz-Fe carb vns 11 fol. - from 211.3 - 211.5, num. 1-2 cm spinifer htd alt vns clasts. - from 213.0 - 214.5, w/ky carbonaceous-graphitic matrix, locally 3% Py as stretched nodular app blebs to 1cm. - @ 214.2, a few 1cm fuchsite alt frags/clasts. - @ 214.7, 214.8, a few 1cm calcite-qtz-fuchsite (5%) vns @ all orientations. - from 216.3 - 216.6, locally 30% thin (to 2cm) qtz-carb vns 11 fol, ± 1% Py, tr. fuchsite - locally host is carb. bleached. - @ 218.6, several 1cm spinifer htd alt vns frags. - @ 219.3, a few 1cm Fe carb-fuchsite vns 11 sub 11 fol. - @ 223.0, a few thin fuchsite filled frags. - arbitrary contact @ 223.5 ± underlying more intensely altered unit.	MOD. CARB + 10% QZ VEINS.						215.0	65						
218.0 - 221.0	3.0	100%	65°		10		223.5 - 225.8 M STRONGLY SH. SER. CARB SLTS-GRAUK. - thinly banded, bedded appearing, ± strongly sch. @ an. or. 60° to cax, though ranges 45° to 60° to cax. - pred. bright yellowish green, v. y-granular, v. strongly sericitized, mod. carb, graywacke. - crudely banded, ± alternating thin yellow seriphic vs gray carbonate rich band ±, may be remnant frag htd. - mod. fractured, @ all orientations, ± pred. Fe carb, some qtz ser frac fill. - contains 0.25% Py as minor frac fill. - @ 225.7, 5 cm breccia qtz-Fe carb vns 11 fol.	MOD. CARB + 10% QZ VEINS.	2%					TR. FUCH.	216.0	707	5				
221.0 - 224.0	3.0	100%	65°		11		225.8 - 226.8 M QZ-CARB VINED, VARIABLY ALT. SILTSTONE. - v. granular, mod. foliated @ 60° to cax, dk gray siltstone. - mod. Fe carb alt, w/ky ser, ± in places mod. silicified as halos on frags, qz veins. - intensely fractured, ± brecciated by frags, pred. 11 fol ± cutting fol @ 45° to cax, ± Fe carb, qtz frac fill. - 30% ± 5mm to 1cm conchoidal qtz-Fe carb vns pred 11 sub 11 fol. - vns ± frags have w/ky silicified alt halos to 2cm. - average sulphide content: 1% v/vq diss Py, usually proximal qz veins.	STRONGLY SER. MOD. CARB + 0.25% Py	2%					TR. FUCH.	217.0	708	<5				
224.0 - 227.0	3.0	100%	65°		15		226.8 - 228.4 M QZ-CARB VINED GRAPHIC BRECCIA (FAULT). - core is rubble - crudely fol. @ an. or. 60° to cax - pred. qtz-Fe carb vns, ± brecciated vein fragments to 2cm ± 60% rock in a soft, graphitic (30%) matrix - a few intensely sil. r. frags - 1% Py as occ nodular blob in graph, as frac fill, ± minor diss min.	MOD. CARB SER ALT - 30% QZ VNS.						TR. FUCH.	218.0	709	<5				
227.0 - 230.0	3.0	100%	60°	RUBBLE FAULT.	> 50		228.4 - 229.0 M QZ-CARB VINED GRAPHIC BRECCIA (FAULT). - core is rubble - crudely fol. @ an. or. 60° to cax - pred. qtz-Fe carb vns, ± brecciated vein fragments to 2cm ± 60% rock in a soft, graphitic (30%) matrix - a few intensely sil. r. frags - 1% Py as occ nodular blob in graph, as frac fill, ± minor diss min.	60% QZ-CARB VNS ± BRECC V. FRAGS	1%				30% GRAPH.	219.0	710	<5					
229.0 - 230.0	3.0	100%	60°	RUBBLE	> 50		229.0 - 230.0 M QZ-CARB VINED GRAPHIC BRECCIA (FAULT). - core is rubble - crudely fol. @ an. or. 60° to cax - pred. qtz-Fe carb vns, ± brecciated vein fragments to 2cm ± 60% rock in a soft, graphitic (30%) matrix - a few intensely sil. r. frags - 1% Py as occ nodular blob in graph, as frac fill, ± minor diss min.	W/ky CHLZ 15% CALC VEINS.						220.0	711	<5					
														221.0	712	<5					
														222.0	713	<5					
														223.0	714	<5					
														223.5	715	23					
														224.5	716	<5					
														225.8	717	<5					
														226.8	718	<5					
														227.6	719	29					
														228.4	720	<5					
														229.0	721	<5					
														230.0	722	<5					



PROJECT Tolly ELEVATION ⊖
 HOLE DESIGNATION T-91-06 AZIMUTH 180°
 NTS 42A/14 DIP -50°
 CLAIM _____ LENGTH OF HOLE 137.0M
 EASTING L16+00E (IMPERIAL GRID) CORE DIAMETER NG
 NORTHING 8+00N

CONTRACTOR NOREX
 DATE STARTED FEBRUARY 24, 1991
 DATE FINISHED FEBRUARY 26, 1991
 LOGGED BY DUNCAN McIVOR
 DATE FEBRUARY, 1991
 SCALE 1:100

BASELINE IMPERIAL GRID

TEST DEPTH	0	354	75M	137M
AZIMUTH	180°	180°	180°	180°
DIP	-50°	-49°	-48°	-48°

DRILL INTERVAL metres length	RECOVERED CORE LENGTH	CORE RECOVERY	ROD	STRUCTURE	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION AND VEINING	MINERAL PERCENTAGES					DEPTH	WIDTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY				
<u>HOLE SUMMARY</u>																				
						0 - 33.6 M	OVERBURDEN													
						33.6 - 48.0	MASSIVE, FG KILNE BASALT													
						48.0 - 50.8	ALTERED (CARBONATIZED) PORPHYRITIC LKX BASALT													
						50.8 - 53.3	INTENSELY CARB ^N SER ^C MAFIC VOLCANIC													
						53.3 - 53.7	SEMI-MASSIVE PYRITE													
						53.7 - 56.4	INTERBEDDED SILTSTONE - GRAYWACKE													
						56.4 - 56.8	MINERALIZED, SILICEOUS GRAYWACKE													
						56.8 - 58.0	MINERALIZED, SER ^C CARB ^N AMYGD. BASALT													
						58.0 - 59.2	SILICEOUS GRAYWACKE													
						59.2 - 61.0	MINERALIZED, STRONGLY CARB ^N MAFIC VOLC													
						61.0 - 62.5	SILTSTONE - GRAYWACKE													
						62.5 - 63.7	BRECCIATED (SLUMPED) SILTSTONE GRAYWACKE													
						63.7 - 71.3	INTERBEDDED GRAYWACKE - SILTSTONE - ARGILLITE													
						71.3 - 74.7	SHEARED, SER ^C CARB ^N "SILTSTONE"													
						74.7 - 74.9	GRAPHITIC MUD/FAULT GOUGE													
						74.9 - 75.3	QUARTZ - GRAPHITE BRECCIA													
						75.3 - 82.0	SER ^C CARB ^N FRAGMENTAL ROCK.													
						82.0 - 97.0	SER ^C CARB ^N COARSE FRAGMENTAL ROCK.													
						97.0 - 98.0	GRAPHITIC BRECCIA													
						98.0 - 102.8	QTZ-CARBONATE BRECCIA													
						102.8 - 106.4	INTERBEDDED GRAPHITIC & SERICITIC ARGILLITE													
CONTINUED																				

DRILL INTERVAL		RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	ROD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION AND VEINING	MINERAL PERCENTAGES					DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY				LAB	
FROM	TO									P _y	P _o	C _{py}	A _{py}	OTH			A _u (ppb)					
105.0																						
106.0	104.0	3.0	100%	85°	CATC	9		106.4-108.3 M CONGLOMERATE (AGGLOMERATE?) - strongly foliated, schistose, ranging from 50° @ 106.4, to 15° @ 108.3; - rock comprised pred. of a vfg. bright light green, soft, v. strongly sericitized "wacke" type matrix, & variable clast content. averages ~ 40% - poorly sorted, clasts range in size from 1-2cm to < 1cm, pred. angular to sub-rounded. - majority of clasts (>90%) are similar appearing, vfg. v. strongly sericitized rk (wacke? volc?) also appearing harder carb-ser alt frags, also qtz in frags; unit appears to be crudely graded, fining downhole. - matrix from 106.4-107.2 is clear gray, more chloritic & w/ky carbonaceous - almost a "sericite sch" in places, & ser alt & shearing overprinting congl. ht. - w/ky fractured, @ all or, & pred. calc, some Fe carb frac fill - 1% py diss py both in frags & matrix, & trace 0.25% vfg diss black min - sphalerite?	W/ky CARB ALT. SOME INTBEDS.	1%					105.5	4056 ⁶³	9					
107.0				65°					STRONGLY SER.	1%				106.4	4056	40						
108.0				15°	10B	9			MID SER ALT.	0.5%				108.3								
109.0	107.0	3.0	100%	15-20°		9								109.0	4057 ⁶⁵	6						
110.0					10B				V-STRONG SER. ALT.	1%				110.0	4058	45						
111.0						8		108.3-109.0 M INTERBEDDED GRAPHITIC & SERICITIC ARGILLITE - thinly interbedded @ 20° to ax, of interbedded graphitic & sericitic argillite, locally ~ 20% 1-2 cm, v. carbonized to brecciated pink to white Fe carb vis @ all or, only 0.5% py as frac fill, minor vfg diss min.						111.0	4059	45						
112.0	110.0	3.0	100%											112.0	4060	45						
113.0														113.0	4061	45						
114.0				35°																		
115.0	113.0	3.0	100%			5		109.0-130.3 M CONGLOMERATE (AGGLOMERATE?) - poorly defined fol (sch), ranging from 0° to ax to ax, or 50°-60° to ax. - comprised of a vfg. bright light green, v. soft, strongly sericitized matrix, almost a sericite schist in places, & average 30% poorly sorted < 1cm to 2cm sub-rounded to angular clasts, frags, pred. of vfg strongly sericitized rock v. similar to matrix (to 70% of clasts/frags), 20% finer ash beige strongly ser-carb alt rk, 5% spinel her ht'd carb dm frags, 5% qtz v. frags - entire unit is w/ky to mod. frac pred. il fol. & Fe carb, minor chl, ser. qtz frac fill. - contains 5% secondary pred. Fe carb minor qtz vis @ all or. - average sulphide content: 1% py as diss min. in both frags & matrix - may be explain - strong similarity between clasts & matrix - from 109.0-109.8, locally 25% 1-2 cm Fe carb vis @ 0-10" to ax. - from 110.7-112.5, 20% Fe carb minor qtz vis to 1cm @ 0-10" to ax. - @ 113.5, 5 cm banded Fe carb - v. @ 85° to ax, & h. fracture. - @ 114.3, 3 cm Fe carb v. @ 50° to ax. - @ 116.1, 2 cm qtz-Fe carb v. @ 70° to ax, & trace krichite							116.0							
116.0														116.0	70							
117.0						6			V-STRONG SER. ALT.	1%				117.0	4062	7						
118.0	116.0	3.0	100%																			
119.0														119.0								
119.0	119.0	3.0	100%			5								119.0	71							
120.0	119.0	3.0	100%			5								120.0	4063	45						

DRILL INTERVAL		RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	RQD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION and VEINING	MINERAL PERCENTAGES					DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY					LAB	
FROM	TO									P _q	P _o	C _{py}	A _{cl}	OH			Au (ppb)						
135.0																							
136.0	134.0	137.0	3.0	100%	///	6			MOD. SER. WE. CALC. ALT.	1%	32 GRAMS								
137.0								HOLE ENDS @ 137.0 m. <i>Duncan McEvor</i> FEBRUARY 28, 91															

DRILL INTERVAL	FROM	TO	RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	ROD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION and VEINING	MINERAL PERCENTAGES					DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY				LAB
											Py	Po	Cpy	Asly	qtz.			As (ppb)	As ₂ S ₃ (ppb)			
35.0									0-39.2M OVERBURDEN													
36.0								OVERBURDEN.	'CASING LEFT IN HOLE & MAKING WATER.													
37.0																						
38.0																						
39.0																						
40.0	39.2	41.0	1.8	100%	50°		7		39.2-48.5 M MINERALIZED (Py, Asly) STRONGLY CARB ⁿ , SERC BASALT.	STRONGLY CARB ⁿ , MOD. SERC.						40.0	4066 ⁰¹	47				
41.0									Py well dev. x-line hst, mod fol (to strong in places) @ ax. or 50° to ax, ranges 50-70°.							40.5	4067 ⁰²	198				
42.0									light grayish green to beige, v. strongly Fe carb alt mod. serc basalt, Fe carb as matted fibrous aggregates to 1-2mm & 30-50% rock, "mottled" in places.							41.5	4068 ⁰³	234				
43.0	41.0	44.0	3.0	100%			7		v. strongly fractured, to brecciated by fractures in places @ all orientations, & pred. qtz. Fe carb, hematite, sph, sericite, Py-Asly inc. hst. traces often have strongly mineralized halos to 1/2 cm.	MOD. SERC. 10% QTZ-CARB VEINS	2%	-	TR.	0-5%	TR. sph.	42.0	4069 ⁰⁴	663				
44.0									contains, alt. 10% serc qtz-carb vns, pred. 11 sub 11 fol @ 50-70° to ax, to 1-2 cm, usually strongly min. & 2 min. alt halos, as outlined below.							42.5	4070 ⁰⁵	1131	0.859			
45.0									average sulphide content: from 39.2-45.1, ax. 2% Py, 0-5% Asly, tr. Cpy & sph. Py & Asly as vlg disc min. & halos on qz vns, hst, Cpy-sph ass & qz vns.							43.5	4071 ⁰⁶	330				
46.0	44.0	47.0	3.0	100%	SHEAR 70°		10		@ 39.6, 2 cm qtz-carb vein @ 50° to ax & 1% Py, 1% Asly.							44.5	4072 ⁰⁷	9				
47.0									@ 39.7, 1 cm qtz v. @ 70° to ax & 1% Py, 1% Asly @ v. margins.		3%	-	TR.			45.0	4073 ⁰⁸	10				
48.0									from 40.0-40.3, 1 cm conchoid qtz-Fe carb v. @ 0° to ax & 5% Py, 1% Asly in v. & along vein margins.							45.5	4074 ⁰⁹	1133	1.120			
49.0	47.0	50.0	3.0	100%	MASSIVE TO WAXY FOL. 50°		4		@ 40.5, 2 cm qtz-carb v. @ 60° to ax & 1% Py-Asly.							46.0	4075 ¹⁰	934				
50.0									from 41.8-41.9, 10 cm zone & 50% qtz-Fe carb vns @ 50° ax & 3% Py, tr. Asly, Cpy.							47.0	4076 ¹¹	534				
									from 42.0-42.5, locally 25% 1-3 cm qtz-Fe carb vns @ 60° to ax, & locally 5% Py, 1% Asly, tr. Cpy-sph.							47.5	4077 ¹²	826				
									from 45.0-45.1, 19 cm intense shear @ 70° to ax, proximal to 30cm quartz-sil arg infed @ 50° to ax & 5% Py from 45.1-45.4	WAXY CH ² CARB ⁿ .	1%	-	-	-	TR. sph.	48.0	4078 ¹³	1435	1.304			
									Sulphides from 45.4-46.0 become 3% Py, 2% Asly							48.5	4079 ¹⁴	150				
									Sulphides from 46.0-47.5 become 3% Py, 1% Asly							49.0	4080 ¹⁵	6				
									Sulphides from 47.5-48.5 become 3% Asly, 3% Py, qtz. less alt, more chloritic from 48.2-48.5.							50.0	4081 ¹⁶	45				

DRILL INTERVAL		RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	ROD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION and VEINING	MINERAL PERCENTAGES					DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY					LAB	
FROM	TO									P _y	P _o	C _{py}	As _{py}	·			OTH	A _u (ppb)					
				MASSIVE				48.5-76.5 M CONTINUED															
65.0	68.0	3.0	100%			4			Wkly CHL ²	17.													
68.0	71.0	3.0	100%			6																	
71.0	74.0	3.0	100%			4			Wkly CHL ² Wkly-MOD. CARB ¹	17.													
74.0	77.0	3.0	100%			15								74.5	19								
75.0	77.0	3.0	100%			15								75.5	20	4084	<5						
76.0										22			TR.	76.5	21	4085	51						
77.0				30-35°					Wkly-MOD SER. SIL ALT. MOD. CARB ¹	22		TR.		77.5	22	4086	192						
78.0	80.0	3.0	100%			15								78.5	23	4087	11						
79.0														79.5	24	4088	16						
80.0															24	4089	53						

76.5-84.8 M SHEARED, CARBONATIZED LCK BASALT

- arbitrary contacts @ 76.5 & 84.8 M, based on alteration intensity & degree of foliation.
- rock becomes comprised of a mod. to strongly foliated, @ av. or. 30-35° to ax, light green, wkly serc & wkly silicified in places, v. fine gr. mass, ± av. 60% irregular patches & aggregates of 1-2 mm Fe carb sub to external scale to 1-2 cm, "snowflake" type carbonate alteration,
- in places, proximal fracs, alt. blebs become 100% rls/5' cov.
- unit is strongly fractured, pred. 11 sub 11 fol. & Fe carb. qb, ch. py, sericite trac fill.
- contains 7-10% < 5 mm to 10 cm, qtz, Fe carb vns @ all or. usually ± min. halos as outings below.

DRILL INTERVAL	RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	ROD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION and VEINING	MINERAL PERCENTAGES						DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY					LAB
									Py	Fe	Ca	Al	-	OTH.			As	(ppb)				
110.0 - 113.0	3.0	100%	MASSIVE		3		B4.8-150-6M CONTINUED.	WKLY CHLZ	0.5%	.	.	.	.	.			
113.0 - 116.0	3.0	100%			5																	
116.0 - 119.0	3.0	100%			4			WKLY CHLZ	0.5%	.	.	.	.	.			
119.0 - 122.0	3.0	100%			7																	
122.0 - 125.0	3.0	100%		RUBBLE FAULT	>50 RUBBLE			WKLY CHLZ	0.5%	.	.	.	.	.			

Flow top

DRILL INTERVAL		RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	ROD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION and VEINING	MINERAL PERCENTAGES					DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY				LAB
FROM	TO									Py	Ps	Cpy	Aspy	OW			Au (ppb)	Au SFA (ppt)			
140.0				40°										32							
141.0	140.0	3.0	100%	/		4		84-8-150.6M CONTINUED	MOD. CHL ² , WKLY CARB ^N	0.5%					4097	<5					
142.0	143.0	3.0	100%	/																	
143.0	143.0	3.0	100%	/											33						
144.0	143.0	3.0	100%	/		6									4098	<5					
145.0	146.0	3.0	100%	/																	
146.0	146.0	3.0	100%	/											34						
147.0	147.0	3.0	100%	/											4099	<5					
148.0	146.0	3.0	100%	/		6									35						
149.0	149.0	3.0	100%	/											4100	6					
150.0	148.0	3.0	100%	/											36						
151.0	149.0	3.0	100%	/											6901	<5					
152.0	150.0	3.0	100%	/											37						
153.0	151.0	3.0	100%	MASSIVE		6		150.6-154.6M MINERALIZED (Py, Aspy) SER ² , CARB ^N BRECCIATED MAFC VOLCANIC	MOD. CHL ² , MOD. CARB ^N	0.5%					6902	<5					
154.0	151.0	3.0	100%					rock is predominantly f ₀ , ± a wk remnant vlline, pyx, massive, soft, light gray to beige, intensely Fe carb-sericite alt. mafic volcanic	INTENSE Fe CARB. SERICITE ALT. 6% QZ VEINING.	4%		TR.	3%	TR. sph.	38						
155.0	151.0	3.0	100%					intensely fractured, to brecciated by fractures. Fracs exhibit strong preferred orientations of 0-20° to Cox, 45° to Cox, & 80-90° to Cox, ± pred. gray wkly carbonaceous qtz & qtz-Fe carbonate fracture filling, ± sulphide (Py, Aspy), sericite, & blood red hematite breccia. Fracs have strong sulphide halos to semi-mass 3-5mm seams & diss min/5cm as do, all qz veins. (Aspy filled fracs exhibit strong preferred br. @ 20° to Cox)							39						
156.0	152.0	3.0	100%	45°		5		contains 10% secondary qtz-minor Fe carb vng. @ 35-45° & 70-90° to Cox, also E strong sulphide halos.		5%				TR. CMAH	40						
	153.0	3.0	100%												41						
	154.0	3.0	100%												6903	16					
	155.0	3.0	100%												6904	37					
															6905	199					
															6906	986					
															6907	947					
															6908	1096	1.047				
															6909	1336	1.348				
															6910	725					
															6911	283					
															6912	823					

DRILL INTERVAL		RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	ROD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION AND VEINING	MINERAL PERCENTAGES					DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY				LAB	
FROM	TO									P ₄	P ₆	C _{py}	As ₄	OTW			Au (ppb)					
35.0																						
86.0	185.0	188.0	3.0	100%	38°	RUBBLE FAULT RUBBLE	> 50 RUBBLE	182.2-188.2M INTENSELY SH. SER. CARB ⁿ FRAGMENTAL/CONGL. (CORE IS RUBBLE - FAULT ZONE). - intensely sh. sch. @ 30° to cax - rock comprised of a v. fq, dk gray, hard, siliceous & sericitic matrix - to 50% rock, & 40-50% bright yellow, v. granular sericite-carbonate (alt. rk) frags, v. strongly sheared 11 fol. landing banded app to rock. frags range in size from 1/2 cm to 2-3 cm, along other lithic frags - spinel, hst, km frags, qz-carb v. frags; - intensely fractured, @ 0°, 35°, 90° to cax, & qz, Fe carb, hst, hll - 10% thin (to 1cm) qz-Fe carb vns @ all orientations - average sulphide content: 1% diss Py both in frags & matrix, h - 0-25% black chlon? sph? - contact @ 188.2 is rubble, v. approximate.	STRONG SERICITE-Fe CARB ALT. OF FRAGS.	1%					185.2	75						
187.0													186.2	6940	19							
188.0													187.2	6941	24							
189.0													188.2	6942	23							
190.0	188.0	191.0	3.0	100%	50°		20	188.2-192.0M COARSE, ROCKY, SER. CARB ⁿ FRAGMENTAL - rock is strongly foliated, sch & banded/beaded app. @ 50° to cax, comprised of a v. fq, v. granular, often spicose, hard gray siliceous & calcitic, "siltstone" type matrix, & 40% < 1cm to 3cm elongate 11 fol fragments of strongly carb ⁿ -ser ⁿ -fuch-silic rock - or 70% of frags are bright green, v. fuch-silic (to 20%) rich, & 30% frags are yellow, sericitic (& carb). - mod. fractured @ all orientations, & Fe carb, qz, ser, km, hst, hll - 5% thin secondary Fe carb minor qz vns @ all or. - 1% Py as v. diss min in matrix & frags, h. black sph/chr diss throughout carb frags. - @ 189.5, 1cm carb v. @ 50° to cax & 3% Py @ margins. - from 190.3-190.5, locally 5% hem-lim along frags & as thin bands 11 fol. - occ fuch-carb alt frag exhibits "spinel-type" hst.	INTENSE SER-Fe CARB-FUCHSITE ALT. OF FRAGS/CLASTS.	1%					189.0	6943	7					
191.0													190.0	6944	15							
192.0													191.0	6945	38							
193.0	191.0	194.0	3.0	100%	45°		8	192.0-198.3 SHEARED, CARB ⁿ SER ⁿ FRAGMENTAL - strongly sch. fol. @ 45° to cax... rock comprised of a v. fq, v. granular, dk gray, hard, siliceous (& wicky carb ⁿ ser ⁿ) matrix, & ex. 50% < 1cm to 5cm, sub rounded elongate 11 fol, v. v. rounded appearing v. bright yellow to light green v. fq, variably (pred. strongly) ser-carb alt fragments/clasts. - also contains 5% black graph arg frags along 11 fol. - mod. to strongly fractured, @ all or., & pred. Fe carb, minor qz hem-lim, hst, hll. - 1% Py as diss min in both frags & matrix.	STRONG SER-Fe CARB ALT OF FRAGS/CLASTS.	1%					192.0	6946	7					
194.0													193.0	6947	10							
195.0	194.0	197.0	3.0	100%			7	198.3-200.0M INTERBEDDED ARG-SILTST-WK/CONGL. - thick bedded, @ 50° to cax, pred dk gray v. wicky carbonaceous wacke-siltstone, & dev. thin, graph arg siltst. interbeds, along coarse conglomerate interbeds - 2% Py pred. ass & graph arg & siltstone beds as semi-massive bands 11 fol & nodules to 5mm. - 5% qz-Fe carb vns to 2cm @ all or.	5% SER. CRTZ-CARB VNS.	2%					194.0	6948	10					
196.0													195.0	6949	8							
197.0													196.0	6950	9							
198.0													197.0	6951	15							
199.0	197.0	200.0	3.0	100%	50°		10						198.3	6952	5							
200.0													200.0	6953	15							

HOLE ENDS @ 200.0M. *Duncan McIvor*



PROJECT _____	ELEVATION _____
HOLE DESIGNATION _____	AZIMUTH _____
NTS _____	DIP _____
CLAIM _____	LENGTH OF HOLE _____
EASTING _____	CORE DIAMETER _____
NORTHING _____	

CONTRACTOR _____
 DATE STARTED _____
 DATE FINISHED _____
 LOGGED BY _____
 DATE _____
 SCALE _____

BASELINE _____
 TEST DEPTH

--	--	--	--

 AZIMUTH

--	--	--	--

 DIP

--	--	--	--

DRILL INTERVAL	RECOVERED CORE LENGTH	CORE RECOVERY	RQD	STRUCTURE	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION AND VEINING	MINERAL PERCENTAGES					DEPTH	WIDTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY				
<u>HOLE SUMMARY (CONTINUED)</u>																				
						217.4 - 218.2										GRAPHITIC ARGILLITE/BRECCIA.				
						218.2 - 224.6										STRONGLY CARB ^N , SER ^C , MOD. SIL ^C INT. - MAFIC VOLCANIC.				
						224.6 - 225.1										QZ-CARB VINED GRAPHITIC SCHIST (FAULT)				
						225.1 - 226.8										MINERALIZED (Py, Asp) INTENSELY CARB ^N , SER ^C , SIL ^C , BRECCIATED MAFIC VOLCANIC.				
						226.8 - 227.6										QZ VINED GRAPHITIC FAULT GOUGE.				
						227.6 - 230.0										INTENSELY SER ^C , CARB ^N FRAGMENTAL PY.				
						230.0 - 239.5										SHEARED, CALCITIC, CHL ² , VARIABLY BRECCIATED, SIL ^C BASALT.				
						239.5 - 245.8										INTENSELY TALC ALTERED, VARIABLY BRECCIATED ULTRAMAFIC (KOM FLOW)				
						245.8 - 258.0										STRONGLY SH, SER ^C , CHL ² FRAGMENTAL ROCK (EPICLASTIC - SLUMP?)				
						258.0 - 281.0										SILTSTONE - GRAYWACKE.				
						EOH. @ 281.0 M. 142 SAMPLES SPLIT FOR ANALYSIS.														

DRILL INTERVAL		RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	RQD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION and VEINING	MINERAL PERCENTAGES					DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY					LAB		
FROM	TO									P _y	P _o	C _{py}	As _{py}	OTH			A _u							
160.0	158.0	161.0	3.0	100%	MASSIVE	4			Wkly CHL ² , SAUSS ²	0.5%	0.5%													
162.0	161.0	164.0	3.0	100%	MASSIVE	8		162.4-187.5 M PORPHYRITIC/BLASTIC, CARB ^N KCX BASALT (VAROLITIC/SNFLK TXT'D).	MOD. CHL ² , MOD CARB ^N .	0.5%														
163.0	164.0	167.0	3.0	100%	MASSIVE	3		<ul style="list-style-type: none"> massive, to v. wkly, crudely foliated in a few places @ highly variable orientations, pred. 45-55° to Cox. rock comprised of a v. mod chl² basaltic groundmass, c. av. 5%-7% 1-3mm diss pink to white lcx blebs, & average 25% (to 40% in places) irreg blebs to 1cm, av. 5mm, of light gray to pink Fe carb aggregates of smaller 1-2mm sub to euhedral xstals - alt plaq? - varides?; clearly alteration, as size & frequency increase proximal fractures & veins. strongly fractured @ all orientations. c. pred. Fe carb, some calc, qtz, chl, Py fac fill. 5% thin (to 1cm) secondary Fe carb minor qtz veins @ all orientations (one prominent set @ 40-50° to Cox) average sulphide content: 0.5% P_y, pred. as fac fill ass e. qtz, Fe carb, & min ass e. thin qz veins, v. minor lg diss min. @ 166.9, 2cm Fe carb minor qtz v. @ 50° Cox c. 1% P_y. from 167.0-168.5, locally 2% P_y ass e. locally 10% thin (to 5mm) Fe carb minor qtz vns @ 35-50° to Cox, alt blebs gradationally increase in size to av. 1cm & 35% of rock by 168.5 M. from 168.5-173.5, v. coarse carb blebs av. 35% of rk, from 1-2 cm in size. from 169.6-170.0, locally 20% 1-2 cm qtz-Fe carb vns pred. @ 45° to Cox, c. 1% P_y, b. C_{py}; locally host appears wkly bleached, sericitized. @ 172.5, 3cm Fe carb minor qtz v. @ 30° to Cox, c. 3% coarse cubic P_y. from 175.0-178.0, becomes mod. sh. sch. @ 35° to Cox. @ 175.1, 2cm Fe carb minor qtz v. @ 35° to Cox, Mod CARB^N. @ 176.5, 3cm Fe carb v. in 11 fol in local 20 cm strongly sericitized shear zone @ 35° to Cox. from 177.9-178.0, 10 cm Fe carb minor qtz v. @ 35° to Cox. @ 178.8, 179.0, 1cm qtz-Fe carb vns @ 45° to Cox c. 1% P_y. @ 183.0, 2cm Fe carb v. @ 45° to Cox c. 5cm bleached sericitized alt base. 	MOD. CHL ² , MOD CARB ^N .	0.5%														
164.0	164.0	164.0	3.0	100%	MASSIVE	8																		
165.0	164.0	167.0	3.0	100%	MASSIVE	3																		
166.0	164.0	167.0	3.0	100%	MASSIVE	3																		
167.0	167.0	167.0	3.0	100%	MASSIVE	8																		
168.0	167.0	170.0	3.0	100%	MASSIVE	8																		
169.0	167.0	170.0	3.0	100%	MASSIVE	8																		
170.0	167.0	170.0	3.0	100%	MASSIVE	8																		
171.0	170.0	173.0	3.0	100%	MASSIVE	4																		
172.0	170.0	173.0	3.0	100%	MASSIVE	4																		
173.0	173.0	173.0	3.0	100%	MASSIVE	4																		
174.0	173.0	176.0	3.0	100%	MASSIVE	15																		
175.0	173.0	176.0	3.0	100%	MASSIVE	15																		

167.0	46					
168.0	446	<5				
169.0	447	<5				
170.0	448	<5				
171.0	449	<5				
172.0	450	<5				
173.0	451	<5				
174.0	452	<5				
175.0	453	<5				

DRILL INTERVAL	RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	ROD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION AND VEINING	MINERAL PERCENTAGES						DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY					LAB			
									Py	Pb	Cpy	Asfy	.	OTH			190.0	Au (ppb)							
190.0	188.0	191.0	3.0	100%		3	<p><u>187.5 - 202.6 M CONTINUED.</u></p> <ul style="list-style-type: none"> more strongly veined, \pm 5-7% < 5mm to 2cm pred. Fe carb. minor qtz vns @ all orientations. (prom. sat @ 45° to core). both fractures & veins have more strongly bleached Fe carb. ser qtz halos from 1-2mm to 20cm, & occasional patchy silicification. dev. zones of remnant "snowflake ht", \pm cobbles to 1-2cm \pm 60-70% of rock. average sulphide content: 2% Py, pred. as frac fill & min. halos on qtz carb vns & infilled fractures, & minor diss min., & trace Asfy as occ. min. halos on qtz carb veins. - tr. sph. Cpy. associated \pm qtz carb veins. @ 196.0, 1cm qtz vn @ 30° to core \pm diss Asfy as halo to 290/5cm. Asfy is both acicular & cubic. @ 193.5, 5mm qtz vn @ 35° to core \pm 1% Asfy in vns & along vn margins. from 196.0-196.4, intensely altered zone, around 30% 1-2cm qtz Fe carb vns @ 40° to core, \pm locally 3% Py, 1% Asfy as halos around qc veins. arbitrary contact @ 202.6 M \pm underlying more intensely altered unit. 	<p>MOD. FE CARB-SERICITE ALT. 10% QC VEINS</p>							190.0	61									
191.0										2%			TR.	TR.											
192.0						6										191.0	461	<5							
193.0																192.0	462	<5							
194.0	191.0	194.0	3.0	100%												193.0	463	69							
195.0																194.0	464	9							
196.0																195.0	465	<5							
197.0	194.0	197.0	3.0	100%		7										196.0	466	<5							
198.0																196.5	467 ⁶⁴	17							
199.0																197.0	468 ⁶⁸	<5							
200.0														198.0	469	<5									
201.0														199.0	470	<5									
202.0														200.0	471	<5									
203.0														201.0	472	<5									
204.0	200.0	203.0	3.0	100%		4								202.0	473	<5									
205.0														202.6	474 ⁷⁴	<5									
							<u>202.6 - 211.2 M INTENSELY CARB. SER. WKLY SIL. MAFIC VOLC.</u>							203.5	475	<5									
														204.5	476	24									
															477	5									

DRILL INTERVAL	RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	ROD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION AND VEINING	MINERAL PERCENTAGES					DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY		LAB		
									Py	Po	Cpy	Aspy	OTH.			Au (ppb)	Au SFA GPT			
205.0 - 206.0	203.0 - 206.0	3.0	100%	MASSIVE	10		202.6 - 211.2 M CONTINUED. • 5% thin (to 1cm) secondary pred qtz minor Fe carb vns @ all orientations • vns & tracs have wk sulphide rich halos (Py, Aspy), as outlined below. • average sulphide content: variable, from 202.6-207.5, 1% Py, tr. Aspy, as v. v. diss. min. & frac. fill. & wk halos on fractures. Aspy noted only as immediate halos on thin qtz filled tracs. • from 207.5-210.0 2% Py, 0.5% Aspy, both as v. v. diss. min., as fracture filling, & as min. halos on thin qtz veins & infilled tracs. • from 208.6-209.2, locally 3% Py, 2% Aspy, as halos of v. v. diss. min. on 30% thin qtz-Fe carb vns pred. @ 0°-50° to Cox. • from 210.0-211.2, only 1% v. v. diss. Py • relatively sharp contact @ 211.2 & underlying less alt. unit.	INTENSE Fe CARB-SER ALT, WK SILC.	1%			TR.			205.5	477 ⁷⁸	5			
206.0 - 207.0					6								206.5	478 ⁷⁹	5					
207.0 - 208.0	206.0 - 209.0	3.0	100%										207.5	479 ⁸⁰	<5					
208.0 - 209.0													208.6	480 ⁸¹	43					
209.0 - 210.0													209.2	481 ⁸²	143					
210.0 - 211.0	209.0 - 212.0	3.0	100%		10								210.0	482 ⁸³	79					
211.0 - 212.0				MASSIVE			211.2 - 212.8 M PORPHYRITIC/ELASTIC CARB ^N LEX BASALT. • rock composed of a massive, light to med green, v. v. med chl ⁺ basaltic gneiss, & 30% 5mm-1cm iron blebs Fe carb (alt plog - voids?) in well dev. "snowflake lit." & 3% iron diss lex blebs. • only v. v. mod hac @ all or., & pred qtz, calc, chl, & graph frac fill. • 0.5% Py to 212.4 • from 212.4-212.8, becomes strongly brecciated by 30% < 5mm to 1-2 cm, chl-graph seams, diss Py to 3% both in brecc matrix & frags. • sharp contact @ 212.8 M @ 60° to Cox.	INTENSE Fe CARB-SER ALT, WK SILC.	1%						211.2	483 ⁸⁴	25			
212.0 - 213.0													212.4	484 ⁸⁵	36					
213.0 - 214.0	212.0 - 215.0	3.0	100%	50° CUTC. 60° FAULT	25								212.8	485 ⁸⁶	275					
214.0 - 215.0				55°									213.4	486 ⁸⁷	1294	0.796				
215.0 - 216.0													214.4	487 ⁸⁸	8					
216.0 - 217.0	215.0 - 218.0	3.0	100%		20		212.8 - 213.4 M GRAPHITIC ARGILLITE. • thinly bedded, @ 45-55° to Cox, jet black, v. soft, v. graphitic (80%) argillite, 2-30% 5mm-2cm gray, more siliceous, less graphitic (10%) arg interbeds • 10% Py, as diss lg min. & occ. thin semi-massive bands 1/4 to 1/2 • 5% v. v. contorted to brecciated qtz vns || sub || fol to 1cm. • from 213.2-213.4, graphitic mud, fault gouge.	INTENSE Fe CARB ALT, MOD. PATHY SIL-SER ALT.	1%						215.4	488 ⁸⁹	84			
217.0 - 218.0													216.4	489 ⁹⁰	32					
218.0 - 219.0	217.0 - 219.0	3.0	100%	55° CUTC. 40°			213.4 - 217.4 M BRECCIATED, INTENSELY CARB ^N VARIABLY SERC, SILC. ROCK (ALT MAF VOLC.?). • v. v. locally v. granular appearing, dk gray, v. strongly Fe carb alt, variably serc & silc as pathy qtz throughout unit, "dacitic" app lithology - probably alt. mafic volc. • strongly fol. sch. @ variable orientations ranging 45-65° to Cox, pred. 55° to Cox. • intensely fractured, to brecciated by frags, alt strong pred. or 50° to Cox, & qtz, Fe carb, graph-chl fracture filling, contains 10% fol & but often v. contorted to brecciated thin (to 1cm, or 5mm) qtz-Fe carb veins.	10% QC VEINS.	1%						217.4	490 ⁹¹	45			
219.0 - 220.0	218.0 - 221.0	3.0	100%		12								218.2	491 ⁹²	70					
													218.2	491 ⁹²	70					
													219.2	492 ⁹³	<5					
													219.2	493 ⁹³	12					

DRILL INTERVAL		RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	ROD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION AND VEINING	MINERAL PERCENTAGES					DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY				LAB		
FROM	TO									Py	Po	Cpy	Aspy	OTH			Au (ppb)	Au SFA CPT					
220.0	218.0	221.0	3.0	100%	40°	12		213.4 - 217.4 M CONTINUED. - clay thin graphitic breccia bands/intelbeds to 20 cm. - average sulphide content: 1% Py, as vfg diss min. & frach. - @ 215.7, 10 cm graphitic band || fol & 30% brecciated qtz-carb v. frags. & 3% Py. - @ 215.9, 15 cm zone & 50% contorted qtz-Fe carb v. to 2 cm, & 1% ass Py. - @ 216.6, 20 cm graphitic arg intelbed @ 50° to coax. - @ 217.1, 15 cm qtz-Fe carb v. @ 45° to coax & 1% Py. - sharp contact @ 217.4 @ 40° to coax.	STRONG Fe CARB. MOD SER-SIL. ALT.						220.2								
221.0													220.7	494 ⁹⁴	<5								
222.0													221.2	495 ⁹⁵	492								
223.0	221.0	224.0	3.0	100%		15							222.0	496 ⁹⁶	7								
224.0													223.0	497 ⁹⁷	5								
225.0													224.0	498 ⁹⁸	7								
226.0	224.0	227.0	3.0	100%	30° FAULT.	25		217.4 - 218.2 M QTZ-CARB VEINED, GRAPHITIC ARG/BRECCIA. - v. strongly fol. @ ax. or. 35° to coax. though intensely contorted, folded in places. - pred. a soft, jet black, v. graphitic (70%) argillite, & 3% 5mm - 2cm pred. qtz minor Fe carb veins & brecc v. frags 115 suby fol, clear carb-ser alt volc frags to 1cm. - 1% Py as fracture filling, min. ass & qz veins, & minor vfg diss min. - core is v. rubby.	50% QTZ VAS	2%				224.6	499 ⁹⁹	29							
227.0													225.1	500 ¹⁰⁰	262								
228.0	224.0	227.0	3.0	100%	45°	25		218.2 - 224.6 M STRONGLY CARB SER. MOD. SILC. INT. M&F VOLCANIC. (NB. similar unit observed in T-91-07) - rock is vfg, locally v. granular app. but no definitive bd. observed, relatively hard, dk gray, v. strongly Fe carb alt, mod. ser & silicified, looks "dacitic" but probably strongly alt mat volc. contains 1-2% small diss lcx blebs. - mod to strongly foliated, sch. @ ax. or. 40° to coax. - v. strongly fractured, to brecciated by frags, @ all or. (prominent ser || fol), & pred. Fe carb-qtz, some graph. chl, Py frac fill. - 5% thin (to 1cm) qtz-Fe carb v. pred. || fol. - average sulphide content: 1% Py as vfg diss min., frac fill. & min. halos on occasional qtz-carb v. & 0.25% AsPy. as vfg (almost invisible) min. halos on qz veins. - @ 220.9, 1cm qtz-Fe carb v. || fol. & locally 3% AsPy, 2% Py/3cm as vfg min. @ margins of vein. - @ 221.2, 1cm qtz-Fe carb v. || fol & 3% AsPy, 2% Py/3cm @ v. margins. - from 224.0 - 224.2, locally 0.5% AsPy as frac fill & vfg diss min.	INTENSE CARB-SIL SER ALT, 30% QTZ-CARB "VNS"	2%			2%		226.0	601 ¹⁰¹	1172	1.152					
229.0													226.8	602 ¹⁰²	780								
230.0													227.6	603 ¹⁰³	250								
231.0													228.0	604 ¹⁰⁴	8								
232.0	227.0	230.0	3.0	100%	70° FAULT.	25							229.0	605 ¹⁰⁵	8								
233.0													230.0	606 ¹⁰⁶	10								
234.0	233.0	236.0	3.0	100%	75°	6							231.5	607 ¹⁰⁷	<5								
235.0													233.0	608 ¹⁰⁸	6								
													234.5	609 ¹⁰⁹	<5								
													235.0	610 ¹¹⁰	<5								

DRILL INTERVAL		RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	ROD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION AND VEINING	MINERAL PERCENTAGES					DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY					LAB			
FROM	TO									P ₄	P ₀	Cp ₄	As ₄	Other			As	
265.0													265.0												
263.0	266.0	3.0	100%	55-60°		8		258.0-281.04 CONTINUED. - @ 260.4, 2 cm qtz-calc vn @ 65° to ax. - @ 260.7, 5 cm zone of irreg. patchy Fe carb alt. - from 262.7-263.5, locally 10% thin calcite minor qtz vns to 1 cm vns, c 2% Py, 1% P ₀ as diss. beds to 5mm, thin bands 1/4" fol, locally a few thin kurosite seams 1/4" to 1/2". - @ 265.7, 3 cm graphitic inbed @ 45° ax. - @ 266.2, 10 cm qtz-calc vn @ 70° to ax c 1% Py. - @ 268.8, 2 cm qtz-Fe carb-calc vn @ 70° to ax. - from 269.0-281.0, bedding only v. wldly developed, v. faint rock looks v. calcitic, but well dev gran. ht. - @ 271.3, 2 cm calc vn @ 45° to ax. - @ 271.8, 3 cm qtz-calc vn @ 70° to ax. - @ 272.3, 5 cm controlled qtz-dolomite vein @ 50° ax. - @ 272.8, 10 cm banded qtz-calc-Fe carb vn @ 65° to ax, c tr. Py.	MOD. SERICITE ALT.	1%	TR.						266.0	131 631	<5						
267.0						3							267.0	132 632	<5										
268.0	269.0	3.0	100%			3																			
269.0						3																			
270.0	272.0	3.0	100%			3							271.0	133 633	<5										
271.0						3							272.0	134 634	<5										
272.0						3							273.0	135 635	<5										
273.0	275.0	3.0	100%			3		MOD. SERICITE ALT.					274.0	136 636	<5										
274.0						3							275.0	137 637	<5										
275.0						3							276.0	138 638	<5										
276.0	278.0	3.0	100%			3							277.0	139 639	<5										
277.0						3							278.0	140 640	<5										
278.0						4							279.0	141 641	<5										
279.0	281.0	3.0	100%			4		MOD. SERICITE ALT.					280.0		<5										

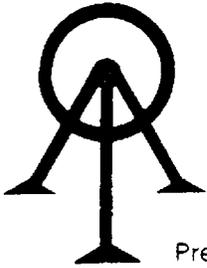
280.0
281.0

DRILL INTERVAL		RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	ROD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION and VEINING	MINERAL PERCENTAGES					DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY					LAB		
FROM	TO									P _y	P _o	Q _y	A _{sl}	-			oxi	Ac						
278.0	281.0	3.0	100%	1-6		4		MOD SERVICITE AT	1%	TR	-	-	-	-	280.0	42	(ppb)							
															281.0	62	45							

HOLE ENDS @ 281.04.
 - HOLE WAS CAVING FROM 212.0M,
 V. DIFFICULT TO PULL RODS - DRILLER'S
 RECOMMENDED NOT PROCEEDING.
 Duncan McEvoy
 MARCH 19, 1991.

DRILL INTERVAL	RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	ROD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION and VEINING	MINERAL PERCENTAGES					DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY					LAB		
									Py	Po	Cpy	Ashy	·			OTH.	As	·	·	·		·	
110.0							<u>32.0 - 124.4 m CONTINUED.</u>																
111.0	110.0	113.0	3.0	100%	3			WKL - MOD CALC., CALCITIC.	0.5%	0.5%	TR.												
112.0																							
113.0																							
114.0																							
115.0	113.0	116.0	3.0	100%	5																		
116.0																							
117.0																							
118.0	116.0	119.0	3.0	100%	3																		
119.0																							
120.0																							
121.0	119.0	122.0	3.0	100%	5																		
122.0																							
123.0																							
124.0	122.0	125.0	3.0	100%	15																		
125.0								STRONG SER- CARB ALT. OF BRECC. FRAGS.	5%					10% HEM.	124.4	763 ⁰³	7						
															124.9	764 ⁰⁴	32						

DRILL INTERVAL		RECOVERED CORE LENGTH	CORE RECOVERY	FOLIATION OR CLEAVAGE	STRUCTURE	RQD	GRAPHIC	ROCK TYPE (DESCRIPTION)	ALTERATION AND VEINING	MINERAL PERCENTAGES					DEPTH	SAMPLE NUMBER	ASSAY GEOCHEMISTRY					LAB
FROM	TO									P ₄	P ₆	C _{py}	As _{ly}	OTH.			As _g					
25.0				38°				124.4-125.9 M. MINERALIZED GRAPHITIC BRECCIA. - cloudy fol. @ an. or. 50° to east, though intensely contorted. & highly variable throughout unit. - rock comprised of a thinly banded, jet black, graphitic (30%) matrix - relatively hard, siliceous in places, & av. 50% < 5mm to 10cm light green to beige, intensely ser ^s , carb ^s angular fragments of altered mafic volc. - strongly fractured, @ all orientations, & pred. Fe carb. some qtz, hep, Py trace fill. - 10% qtz-Fe carb veins to 1cm @ pred. 60-80° to east. - average sulphide content: 5% Py, as vly diss min. throughout unit, & as occasional larger blobs & semi-massive bands // fol. - @ 124.6, 5 cm hematite-Py "fragment", Py is strongly oxidized - from 124.9-125.3, locally 20% hematite, as thin bands in graphitic matrix, & as oxidized Py bands/frags, locally 15% Py as semi-massive bands to 1cm, & as brecciated 1-2 cm fragments. - sharp contact & graphitic fault gouge @ 90° to core @ 125.9.	SPARK SER. CARB ALT. OF BX FRAGS.	5%					10% HEM.	125.4	765	20				
126.0	125.0	1.8	60%		FAULT	> 50			60% QTZ VEIN FRAGS.	2% AV.				ONLY 0.5M OF CORE	766	653						
127.0														127.6								
128.0				MASSIVE						5%			TR.	128.3	767	196						
129.0					FAULT	750			MOD. CARB ^s , WILLY SER ^s , SILIC ^s .					129.0	768	48						
130.0	128.0	3.0	100%											130.0	769	84						
131.0										12		TR.	TR. sph.	131.0	770	12/18						
132.0														132.0	771	9						
133.0	131.0	3.0	100%											132.0	772	10						
134.0														133.0	773	22						
135.0														134.0	774	56						
136.0	134.0	3.0	100%		FAULT	> 50			MOD. CARB ^s , WILLY SER ^s , SILIC ^s .	1%		TR.	TR. sph.	135.0	775	114						
137.0														136.0	776	152						
138.0														137.0	777	110						
139.0	137.0	2.8	93%	45°					SER ALT. OF WACKE INTERBEDS.	5%				138.0	778	199						
140.0														139.0	779	250						
														140.0								



ACCURASSAY LABORATORIES LTD.

P.O. BOX 426
KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

Certificate of Analysis

Page: 1

Mr. Duncan MacIvor
Homestake Mineral Development
P.O. Box 290
Timmins, Ontario
P4N 7N6

Date: February 13 19 91

38264

Work Order # : 910144
Project : Tully

Accurassay	SAMPLE NUMBERS Customer	Gold ppb	
	2101	346	
	2102	10	
	2103	<5	
	2104	<5	
	2105	<5	
	2106	<5	
	2107	7	
	2108	<5	
	2109	<5	
	2110	<5	
	2110	<5	Check
	2111	7	
	2112	<5	
	2113	<5	
	2114	<5	
	2115	<5	
	2116	<5	
	2117	5	
	2118	<5	
	2119	<5	
	2119	<5	Check
	2120	<5	
	2121	<5	
	2122	<5	
	2123	<5	
	2124	5	
	2125	<5	
	2126	<5	
	2127	7	
	2128	9	
	2128	12	Check



Per:



ACCURASSAY LABORATORIES LTD.

P.O. BOX 426
KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

Certificate of Analysis

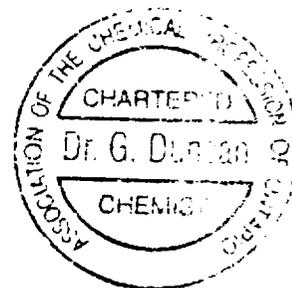
Page: 2

Mr. Duncan MacIvor
Homestake Mineral Development Date: February 13 1991
P.O. Box 290
Timmins, Ontario
P4N 7N6

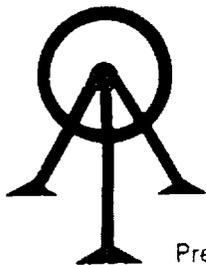
38265

Work Order # : 910144
Project : Tully

Accurassay	SAMPLE NUMBERS	Customer	Gold ppb
	2129		47
	2129		47 Check



Per: G Duncan



ACCURASSAY LABORATORIES LTD.

P.O. BOX 426
KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

Certificate of Analysis

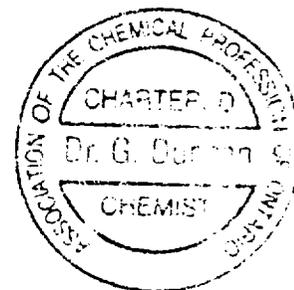
Page: 1

38302 Mr. Duncan McIvor
Homestake Mineral Development
P.O. Box 290
Timmins, Ontario
P4N 7N6

Date: February 15 19 91

Work Order # : 910157A
Project : Tully

Accurassay	SAMPLE NUMBERS Customer	Gold ppb	
	236920	2130	76
	236921	2131	<5
	236922	2132	83
	236923	2133	<5
	236924	2134	<5
	236925	2135	<5
	236926	2136	<5
	236927	2137	<5
	236928	2138	<5
	236929	2139	6
	236929	2139	9 Check
	236930	2140	36
	236931	2141	7
	236932	2142	<5
	236933	2143	6
	236934	2144	6
	236935	2145	<5
	236936	2146	<5
	236937	2147	9
	236938	2148	<5
	236938	2148	<5 Check
	236939	2149	<5
	236940	2150	<5
	236941	2151	<5
	236942	2152	<5
	236943	2153	<5
	236944	2154	<5
	236945	2155	5
	236946	2156	<5
	236947	2157	7
	236947	2157	5 Check



Per: G Duncan



ACCURASSAY LABORATORIES LTD.

P.O. BOX 426
KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

Certificate of Analysis

Page: 2

38303 Mr. Duncan McIvor
Homestake Mineral Development
P.O. Box 290
Timmins, Ontario
P4N 7N6

Date: February 15 19 91

Work Order # : 910157A
Project : Tully

SAMPLE NUMBERS		Gold
Accurassay	Customer	ppb
236948	2158	6
236949	2159	<5
236950	2160	<5
236951	2161	<5
236951	2161	<5 Check



Per: G Duncan



ACCURASSAY LABORATORIES LTD.

P.O. BOX 426
KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

Certificate of Analysis

Page: 1

38338 Mr. Duncan McIvor
Homestake Mineral Development
P.O. Box 290
Timmins, Ontario
P4N 7N6

Date: February 18 19 91

Work Order # : 910168
Project : # 5755

SAMPLE NUMBERS		Gold
Accurassay	Customer	ppb
237204	2162	<5
237205	2163	5
237206	2164	<5
237207	2165	5
237208	2166	<5
237209	2167	5
237210	2168	<5
237211	2169	<5
237212	2170	<5
237213	2171	<5
237213	2171	<5 Check
237214	2172	<5
237215	2173	<5
237216	2174	<5
237217	2175	<5
237218	2176	<5
237219	2177	<5
237220	2178	<5
237221	2179	<5
237222	2180	<5
237222	2180	<5 Check
237223	2181	<5
237224	2182	<5
237225	2183	<5
237226	2184	<5
237227	2185	<5
237228	2186	<5
237229	2187	<5
237230	2188	<5
237231	2189	<5
237231	2189	<5 Check



Per: _____

G. Duncan



ACCURASSAY LABORATORIES LTD.

P.O. BOX 426
 KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
 TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem. (Ont.), C. Chem. (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T

Certificate of Analysis

Page: 2

38339 Mr. Duncan Melvor
 Homestake Mineral Development
 P.O. Box 290
 Timmins, Ontario
 P4N 7N6

Date: February 18 19 91

Work Order # : 910168
 Project : # 5755

SAMPLE NUMBERS		Gold
Accurassay	Customer	ppb
237232	2190	<5
237233	2191	<5
237234	2192	6
237235	2193	<5
237236	2194	5
237237	2195	<5
237238	2196	<5
237239	2197	<5
237240	2198	<5
237240	2198	<5 Check
237241	2199	<5
237242	2200	5
237243	2201	<5
237244	2202	11
237245	2203	5
237246	2204	<5
237247	2205	<5
237248	2206	5
237249	2207	<5
237249	2207	<5 Check
237250	2208	<5
237251	2209	<5
237252	2210	<5
237252	2210	<5 Check



Per: G. Duncan



ACCURASSAY LABORATORIES LTD.

P.O. BOX 426
KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph.D., C. Chem. (Ont.), C. Chem. (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

Certificate of Analysis

Page: 1

38380 Mr. Duncan McIvor
Homestake Mineral Development
P.O. Box 290
Timmins, Ontario
P4N 7N6

Date: February 20 19 91

Work Order # : 910176
Project : # 5755

SAMPLE NUMBERS		Gold
Accurassay	Customer	ppb
237515	2211	<5
237516	2212	<5
237517	2213	<5
237518	2214	<5
237519	2215	6
237520	2216	5
237521	2217	<5
237522	2218	<5
237523	2219	<5
237524	2220	<5
237524	2220	<5
237525	2221	<5
237526	2222	<5
237527	2223	<5
237528	2224	<5
237529	2225	<5
237530	2226	<5
237531	2227	<5
237532	2228	<5
237533	2229	<5
237533	2229	<5
237534	2230	<5
237535	2231	<5
237536	2232	<5
237537	2233	<5
237538	2234	<5
237539	2235	<5
237540	2236	<5
237541	2237	<5
237542	2238	<5
237542	2238	<5

Check

Check

Check



Per: _____

G. Duncan



ACCURASSAY LABORATORIES LTD.

P.O. BOX 426
KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

Certificate of Analysis

Page: 2

38381 Mr. Duncan McIvor
Homestake Mineral Development
P.O. Box 290
Timmins, Ontario
P4N 7N6

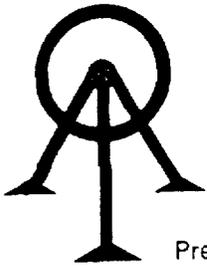
Date: February 20 19 91

Work Order # : 910176
Project : # 5755

SAMPLE NUMBERS	Customer	Gold ppb
Accurassay		
237543	2239	<5
237544	2240	<5
237544	2240	<5 Check



G. Duncan



ACCURASSAY LABORATORIES LTD.

P.O. BOX 426
KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

Certificate of Analysis

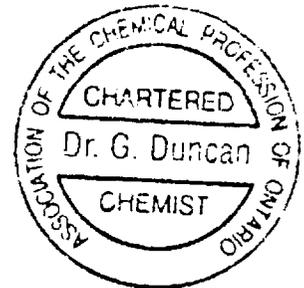
Page: 1

38386 Mr. Duncan McIvor
Homestake Mineral Development
P.O. Box 290
Timmins, Ontario
P4N 7N6

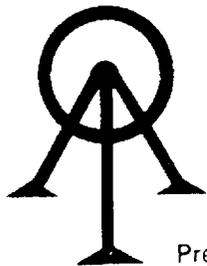
Date: February 21 19 91

Work Order # : 910177
Project : # 5755

Accurassay	SAMPLE NUMBERS Customer	Gold ppb	
	2241	5	
237545	2242	<5	
237546	2243	5	
237547	2244	<5	
237548	2245	<5	
237549	2246	<5	
237550	2247	150	
237551	2248	10	
237552	2249	13	
237553	2250	14	
237554	2250	15	Check
237554	2251	71	
237555	2252	27	
237556	2253	975	
237557	2254	145	
237558	2255	281	
237559	2256	133	
237560	2257	106	
237561	2258	297	
237562	2259	33	
237563	2259	28	Check
237563	2260	325	
237564	2261	33	
237565	2262	110	
237566	2263	352	
237567	2264	7	
237568	2265	<5	
237569	2266	<5	
237570	2267	<5	
237571	2268	<5	
237572	2268	<5	Check
237572	2268	<5	



Per: G Duncan



ACCURASSAY LABORATORIES LTD.

P.O. BOX 426
KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

Certificate of Analysis

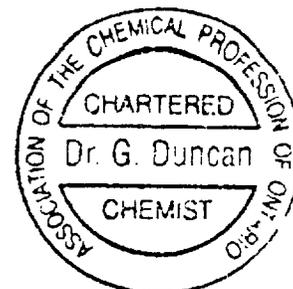
Page: 2

38387 Mr. Duncan McIvor
Homestake Mineral Development
P.O. Box 290
Timmins, Ontario
P4N 7N6

Date: February 21 19 91

Work Order # : 910177
Project : # 5755

SAMPLE NUMBERS		Gold
Accurassay	Customer	ppb
237573	2269	<5
237574	2270	<5
237574	2270	<5 Check



Per: G Duncan



ACCURASSAY LABORATORIES LTD.

P.O. BOX 426
KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

Certificate of Analysis

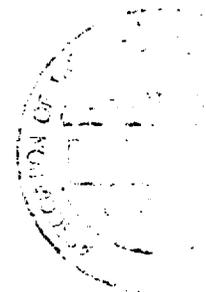
Page: 1

38392 Mr. Duncan McIvor
Homestake Mineral Development
P.O. Box 290
Timmings, Ontario
P4N 7N6

Date: February 21 19 91

Work Order # : 910178
Project : # 5755

Accurassay	SAMPLE NUMBERS Customer	Gold ppb	
	237575	2271	12
	237576	2272	10
	237577	2273	26
	237578	2274	26
	237579	2275	44
	237580	2276	121
	237581	2277	20
	237582	2278	25
	237583	2279	7
	237584	2280	7
	237584	2280	11 Check
	237585	2281	<5
	237586	2282	5
	237587	2283	8
	237588	2284	9
	237589	2285	6
	237590	2286	8
	237591	2287	17
	237592	2288	9
	237593	2289	5
	237593	2289	7 Check
	237594	2290	7
	237595	2291	6
	237596	2292	8
	237597	2293	10
	237598	2294	18
	237599	2295	12
	237600	2296	<5
	237601	2297	<5
	237602	2298	5
	237602	2298	<5 Check



Per: G Duncan



ACCURASSAY LABORATORIES

A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALL, ONTARIO

BOX 426

KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1

TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

39003

Certificate of Analysis

Page: 2

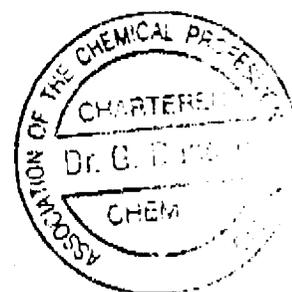
Mr. Duncan McIvor
Homestake Mineral Development
P.O. Box 290
Timmins, Ontario
P4N 7N6

February 22

91

Work Order # : 910188A
Project : #5755

SAMPLE NUMBERS		Gold
Accurassay	Customer	ppb
237782	2327	17
237783	2328	56
237784	2329	19
237785	2330	34
237785	2330	32 Check



Per: _____

G. Duncan



ACCURASSAY LABORATORIES

A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO
BOX 426
KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

39031

Certificate of Analysis

Page: 2

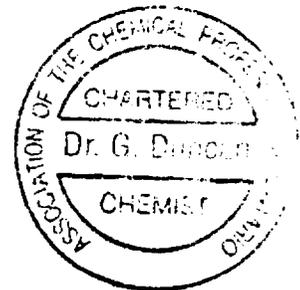
Mr. Duncan McIvor
Homestake Mineral Development
P.O. Box 290
Timmins, Ontario
P4N 7N6

February 25

91

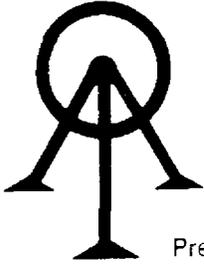
Work Order # : 910191
Project : # 5755

SAMPLE NUMBERS		Gold ppb	T-91-03
Accurassay	Customer		
237918	2359	28	
237919	2360	22	
237919	2360	22	Check



Per: _____

G. Duncan



ACCURASSAY LABORATORIES
 A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO
 BOX 426
 KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
 TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

39032

Certificate of Analysis

Page: 1

Mr. Duncan McIvor
 Homestake Mineral Development
 P.O. Box 290
 Timmins, Ontario
 P4N 7N6

February 25

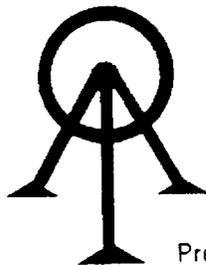
91

Work Order # : 910192
 Project : # 5755

Accurassay	SAMPLE NUMBERS Customer	Gold ppb	
	2361	17	
	2362	13	
	2363	<5	
	2364	<5	
	2365	<5	
	2366	<5	
	2367	<5	
	2368	<5	
	2369	<5	
	2370	<5	
	2370	<5	Check
	2371	<5	
	2372	<5	
	2373	<5	
	2374	<5	
	2375	<5	
	2376	<5	
	2377	<5	
	2378	<5	
	2379	8	
	2379	5	Check
	2380	5	
	2381	<5	
	2382	<5	
	2383	17	
	2384	12	
	2385	13	
	2386	21	
	2387	13	
	2388	16	
	2388	15	Check

T-91-03

Per: G. Duncan



ACCURASSAY LABORATORIES
 A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO
 BOX 426
 KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
 TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

39033

Certificate of Analysis

Page: 1

Mr. Duncan McIvor
 Homestake Mineral Development
 P.O. Box 290
 Timmins, Ontario
 P4N 7N6

February 25

91

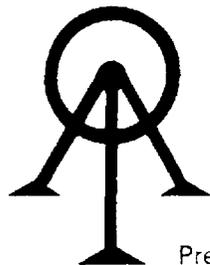
Work Order # : 910192
 Project : # 5755

T-91-03

Accurassay	SAMPLE NUMBERS Customer	Gold ppb	
237948	2389	10	
237949	2390	10	
237949	2390	11	Check



Per: G. Duncan



ACCURASSAY LABORATORIES

A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO

BOX 426

KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1

TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem. (Ont.), C. Chem. (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

39034

Certificate of Analysis

Page: 1

Mr. Duncan McIvor
Homestake Mineral Development
P.O. Box 290
Timmins, Ontario
P4N 7N6

February 25

91

Work Order # : 910193
Project : # 5755

Accurassay	SAMPLE NUMBERS Customer	Gold ppb	
	237950	2391	8
	237951	2392	10
	237952	2393	6
	237953	2394	5
	237954	2395	6
	237955	2396	6
	237956	2397	8
	237957	2398	<5
	237958	2399	17
	237959	2400	<5
	237959	2400	<5 Check
	237960	2401	<5
	237961	2402	<5
	237962	2403	7
	237963	2404	6
	237964	2405	52
	237965	2406	<5
	237966	2407	<5
	237967	2408	<5
	237968	2409	<5
	237968	2409	<5 Check
	237969	2410	<5
	237970	2411	<5
	237971	2412	5
	237972	2413	<5
	237973	2414	<5
	237973	2414	<5 Check

T-91-03.



Per:

G. Duncan



ACCURASSAY LABORATORIES

A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO

BOX 426

KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1

TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.F.C.S.

39067

Certificate of Analysis

Mr. Duncan McIvor
 Homestake Mineral Development
 P.O. Box 290
 Timmins, Ontario
 P4N 7N6

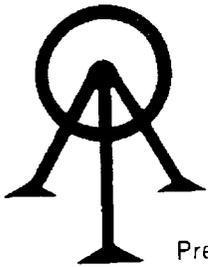
February 27

Work Order # : 91020
 Project : 5755

SAMPLE NUMBERS		Gold
Accurassay	Customer	ppb
238131	2415	<5
238132	2416	<5
238133	2417	<5
238134	2418	<5
238135	2419	<5
238136	2420	<5
238137	2421	<5
238138	2422	<5
238139	2423	<5
238140	2424	<5
238140	2424	<5 Check
238141	2425	<5
238142	2426	<5
238143	2427	<5
238144	2428	10
238145	2429	23
238146	2430	5
238147	2431	34
238148	2432	11
238149	2433	7
238149	2433	7 Check
238150	2434	14
238151	2435	24
238152	2436	7086
238153	2437	21
238154	2438	48
238155	2439	25
238156	2440	7
238156	2440	7 Check

Per: _____

G 11



ACCURASSAY LABORATORIES
 A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO
 BOX 426
 KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
 TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

39065

Certificate of Analysis

Page: 1

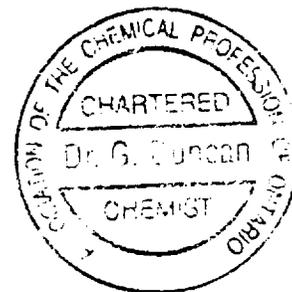
Mr. Duncan McIvor
 Homestake Mineral Development
 P.O. Box 290
 Timmins, Ontario
 P4N 7N6

February 27

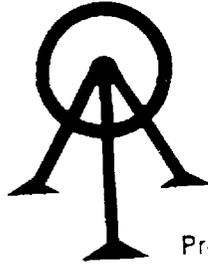
91

Work Order # : 910208
 Project : 5755

Accurassay	SAMPLE NUMBERS	Customer	Gold ppb	
	238157	2441	8	
	238158	2442	1954	
	238159	2443	78	
	238160	2444	134	
	238161	2445	67	
	238162	2446	12	
	238163	2447	20	
	238164	2448	136	
	238165	2449	92	
	238166	2450	<5	
	238166	2450	<5	Check
	238166	2451	8	
	238167	2452	494	
	238168	2453	84	
	238169	2454	25	
	238170	2455	373	
	238171	2456	199	
	238172	2457	437	
	238173	2458	61	
	238174	2459	293	
	238175	2459	231	Check
	238175	2460	57	
	238176	2461	125	
	238177	2462	90	
	238178	2463	51	
	238179	2464	641	
	238180	2465	10	
	238181	2466	64	
	238182	2466	80	Check
	238182			



Per: G. Duncan



ACCURASSAY LABORATORIES
 A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO
 BOX 426
 KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
 TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C.

39087

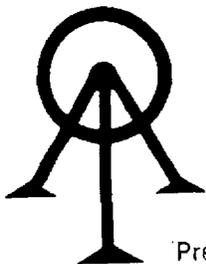
Certificate of Analysis

Mr. Duncan McIvor
 Homestake Mineral Development
 P.O. Box 290
 Timmins, Ontario
 P4N 7N6

February 28

Work Order # : 9102
 Project : 5755

Accurassay	SAMPLE NUMBERS Customer	Gold ppb
	2467	261
238183	2468	75
238184	2469	98
238185	2470	21
238186	2471	40
238187	2472	5
238188	2473	8
238189	2474	12
238190	2475	7
238191	2476	<5
238192	2476	<5 Check
238192	2477	14
238193	2478	17
238194	2479	<5
238195	2480	<5
238196	2481	<5
238197	2482	19
238198	2483	<5
238199	2484	<5
238200	2485	<5
238201	2485	<5 Check
238201	2486	7
238202	2487	7
238203	2488	<5
238204	2489	<5
238205	2490	<5
238206	2491	<5
238207	2492	<5
238208	2493	<5
238209	2494	<5
238210	2494	<5 Check
238210		



ACCURASSAY LABORATORIES
 A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO
 BOX 426
 KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
 TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.P.C.S.

39088

Certificate of Analysis

Page

Mr. Duncan McIvor
 Homestake Mineral Development
 P.O. Box 290
 Timmins, Ontario
 P4N 7N6

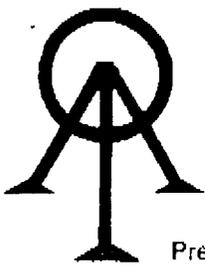
February 28

Work Order # : 910209
 Project : 5755

SAMPLE NUMBERS		Gold
Accurassay	Customer	ppb
238211	2495	<5
238212	2496	6
238213	2497	174
238214	2498	110
238215	2499	309
238216	2500	63
238216	2500	57 Check



Per: G. H.



ACCURASSAY LABORATORIES

A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO

BOX 426

KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1

TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem. (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.I.

39102

Certificate of Analysis

Page: 1

Mr. Duncan McIvor
Homestake Mineral Development
P.O. Box 290
Timmins, Ontario
P4N 7N6

February 28

91

Work Order # : 910211
Project : 5755

SAMPLE NUMBERS		Gold
Accurassay	Customer	ppb
238228	3725	10
238229	3726	9
238230	3727	6
238231	3728	<5
238232	3729	<5
238233	3730	<5
238234	3731	6
238235	3732	6
238236	3733	11
238237	3734	8
238237	3734	7 Check
238238	3735	<5
238239	3736	<5
238240	3737	<5
238241	3738	<5
238242	3739	<5
238243	3740	29
238244	3741	40
238245	3742	<5
238246	3743	8
238246	3743	<5 Check
238247	3744	<5
238248	3745	<5
238249	3746	<5
238250	3747	164
238251	3748	51
238252	3749	829
238253	3750	704
238254	3751	418
238255	3752	587
238255	3752	569 Check



Per: G Duncan

ORIGINAL



ACCURASSAY LABORATORIES
A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO
BOX 426
KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.G.I.C., M.R.S.C., A.R.C.S.

39103

Certificate of Analysis

Page

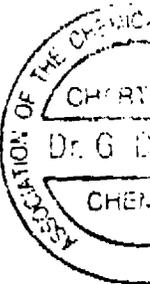
Mr. Duncan McIvor
Homestake Mineral Development
P.O. Box 290
Timmins, Ontario
P4N 7N6

February 28

Work Order # : 910211
Project : 5755

Accurassay	SAMPLE NUMBERS	Customer	Gold ppb
	238256	3753	3033
	238257	3754	409
	238258	3755	156
	238259	3756	280
	238260	3757	264
	238261	3758	608
	238261	3758	588

Check



Handwritten initials or signature.



ACCURASSAY LABORATORIES

A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO
 BOX 426
 KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
 TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph.D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

39104

Certificate of Analysis

Page: 1

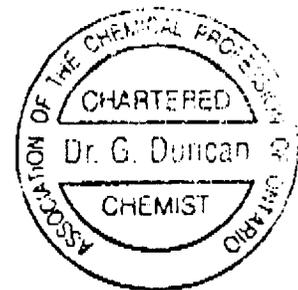
Mr. Duncan McIvor
 Homestake Mineral Development
 P.O. Box 290
 Timmins, Ontario
 P4N 7N6

February 28

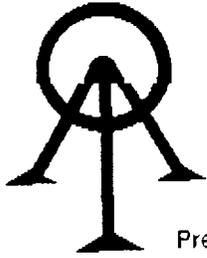
91

Work Order # : 910212
 Project : 5755

SAMPLE NUMBERS	Customer	Gold ppb	
238262	3759	960	
238263	3760	235	
238264	3761	847	
238265	3762	752	
238266	3763	811	
238267	3764	10	
238268	3765	6	
238269	3766	16	
238270	3767	7	
238271	3768	<5	
238271	3768	<5	Check
238272	3769	64	
238273	3770	60	
238274	3771	372	
238275	3772	171	
238276	3773	397	
238277	3774	315	
238278	3775	2728	
238279	3776	1063	
238280	3777	806	
238280	3777	836	Check
238281	3778	503	
238282	3779	6	
238283	3780	<5	
238284	3781	<5	
238285	3782	<5	
238286	3783	10	
238287	3784	<5	
238288	3785	<5	
238289	3786	32	
238289	3786	35	Check



Per: G Duncan



ACCURASSAY LABORATORIES

A DIVISION OF CHARRIDGE LABORATORIES LIMITED, REXDALE, ONTARIO

BOX 426

KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1

TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.I.

39105

Certificate of Analysis

Page: 2

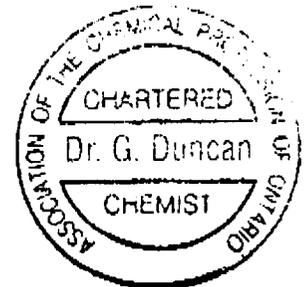
Mr. Duncan McIvor
Homestake Mineral Development
P.O. Box 290
Timmins, Ontario
P4N 7N6

February 28

91

Work Order # : 910212
Project : 5755

SAMPLE NUMBERS		Gold
Accurassay	Customer	ppb
238290	3787	175
238291	3788	1417
238292	3789	142
238293	3790	<5
238294	3791	<5
238295	3792	<5
238295	3792	<5 Check



Per: G. Duncan



ACCURASSAY LABORATORIES

A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALL, ONTARIO

BOX 426

KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1

TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem. (Ont.), C. Chem. (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T

39114

Certificate of Analysis

Page: 2

Mr. Duncan McIvor
Homestake Mineral Development
P.O. Box 290
Timmins, Ontario
P4N 7N6

February 28

91

Work Order # : 910220
Project : # 5755

Accurassay	SAMPLE NUMBERS Customer	Gold ppb
	4021	6
238462	4022	16
238463	4023	732
238464	4024	106
238465	4025	41
238466	4026	162
238467	4027	67
238468	4027	72
238468		Check



G. Duncan



ACCURASSAY LABORATORIES
 A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO
 BOX 426
 KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
 TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.I.

39116

Certificate of Analysis

Page: 1

Mr. Duncan McIvor
 Homestake Mineral Development
 P.O. Box 290
 Timmins, Ontario
 P4N 7N6

February 28

91

Work Order # : 910221
 Project : # 5755

Accurassay	SAMPLE NUMBERS Customer	Gold ppb
	4028	29
	4029	57
	4030	30
	4031	10
	4032	17
	4033	52
	4034	42
	4035	9
	4036	8
	4037	18
	4037	17
	4038	<5
	4039	7
	4040	6
	4041	10
	4042	12
	4043	6
	4044	<5
	4045	26
	4046	9
	4046	8
	4047	22
	4048	41
	4049	6
	4050	<5
	4051	<5
	4052	<5
	4053	<5
	4054	9
	4055	9
	4055	9

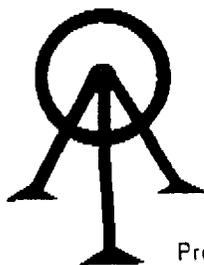
Check

Check

Check



Per: G. Duncan



ACCURASSAY LABORATORIES
 A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO
 BOX 426
 KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
 TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph.D., C. Chem. (Ont.), C. Chem. (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

39117

Certificate of Analysis

Page: 2

Mr. Duncan McIvor
 Homestake Mineral Development
 P.O. Box 290
 Timmins, Ontario
 P4N 7N6

February 28

91

Work Order # : 910221
 Project : # 5755

Accurassay	SAMPLE NUMBERS	Customer	Gold ppb	
				T-91-06.
238497		4056	40	
238498		4057	6	
238499		4058	<5	
238500		4059	<5	
238501		4060	<5	
238502		4061	<5	
238503		4062	7	
238504		4063	<5	
238505		4064	<5	Check
238506		4065	<5	Check
238506		4065	<5	



Per: G. Duncan



ACCURASSAY LABORATORIES

A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO
 BOX 426
 KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
 TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C. A.R.C.S.T.

39128

Certificate of Analysis

Page: 1

Mr. Duncan McIvor
 Homestake Mineral Development
 P.O. Box 290
 Timmins, Ontario
 P4N 7N6

March 5

91

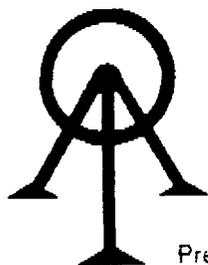
Work Order # : 910228
 Project : # 5755

Accurassay	SAMPLE NUMBERS	Customer	Gold ppb	
		4066	47	
		4067	198	
		4068	234	
		4069	663	
		4070	1	
		4071	330	
		4072	9	
		4073	10	
		4074	1133	
		4075	934	
		4075	924	Check
		4076	534	
		4077	826	
		4078	1435	
		4079	150	
		4080	6	
		4081	<5	
		4082	<5	
		4083	<5	
		4084	<5	
		4084	<5	Check
		4085	51	
		4086	192	
		4087	11	
		4088	16	
		4089	53	
		4090	141	
		4091	64	
		4092	18	
		4093	7	
		4093	7	Check

T-91.07.



Per: G. Duncan



ACCURASSAY LABORATORIES

A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO

BOX 426

KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1

TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

39129

Certificate of Analysis

Page: 2

Mr. Duncan McIvor
 Homestake Mineral Development
 P.O. Box 290
 Timmins, Ontario
 P4N 7N6

March 5

91

Work Order # : 910228
 Project : # 5755

SAMPLE NUMBERS		Gold
Accurassay	Customer	ppb
238588	4094	5
238589	4095	<5
238589	4095	<5 Check



Per:

G. Duncan



ACCURASSAY LABORATORIES
 A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO
 BOX 426
 KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
 TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem. (Ont.), C. Chem. (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

39126

Certificate of Analysis

Page: 1

Mr. Duncan McIvor
 Homestake Mineral Development
 P.O. Box 290
 Timmins, Ontario
 P4N 7N6

March 5

91

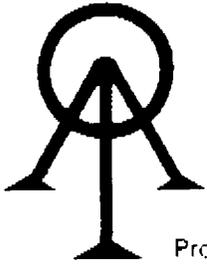
Work Order # : 910229
 Project : # 5755

SAMPLE NUMBERS	Customer	Gold ppb	
238590	4096	9	
238591	4097	<5	
238592	4098	<5	
238593	4099	<5	
238594	4100	6	
238595	6901	<5	
238596	6902	<5	
238597	6903	16	
238598	6904	37	
238599	6905	199	
238599	6905	206	Check
238600	6906	936	
238601	6907	947	
238602	6908	1096	
238603	6909	1336	
238604	6910	725	
238605	6911	283	
238606	6912	823	
238607	6913	157	
238608	6914	7	
238608	6914	6	Check
238609	6915	5	
238610	6916	<5	
238611	6917	14	
238612	6918	10	
238613	6919	5	
238614	6920	9	
238615	6921	7	
238616	6922	5	
238617	6923	<5	
238617	6923	<5	Check



Per: _____

G. Duncan



ACCURASSAY LABORATORIES
 A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO
 BOX 426
 KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
 TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

39130

Certificate of Analysis

Page: 1

Mr. Duncan McIvor
 Homestake Mineral Development
 P.O. Box 290
 Timmins, Ontario
 P4N 7N6

March 5

91

Work Order # : 910230
 Project : # 5755

SAMPLE NUMBERS Accurassay	CUSTOMER	Gold ppb	
238620	6926	4325	
238621	6927	- 6219 -	
238622	6928	574	
238623	6929	135	
238624	6930	939	
238625	6931	789	
238626	6932	1947	
238627	6933	3503	
238628	6934	3126	
238629	6935	863	
238629	6935	832	Check
238630	6936	455	
238631	6937	26	
238632	6938	17	
238633	6939	13	
238634	6940	19	
238635	6941	24	
238636	6942	23	
238637	6943	7	
238638	6944	<5	
238638	6944	<5	Check
238639	6945	38	
238640	6946	7	
238641	6947	10	
238642	6948	10	
238643	6949	8	
238644	6950	9	
238645	6951	<5	
238646	6952	5	
238647	6953	15	
238647	6953	19	Check



Per: _____

G. Duncan



ACCURASSAY LABORATORIES

A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO
BOX 426
KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
TEL.: (705) 567 3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph.D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

39415

Certificate of Analysis

Page: 1

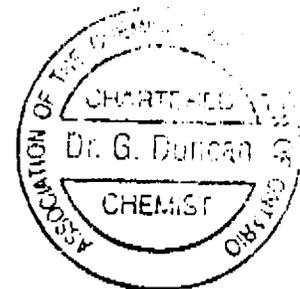
Mr. Duncan McIvor
Homestake Mineral Development
P.O. Box 290
Timmins, Ontario
P4N 7N6

March 21

91

Work Order # : 910315
Project : #5755

SAMPLE NUMBERS	Customer	Gold ppb
240505	401	22
240506	402	28
240507	403	38
240508	404	34
240509	405	9
240510	406	12
240511	407	14
240512	408	10
240513	409	<5
240514	410	<5
240514	410	<5 Check
240515	411	<5
240516	412	<5
240517	413	18
240518	414	<5
240519	415	10
240520	416	<5
240521	417	<5
240522	418	<5
240523	419	6
240523	419	6 Check
240524	420	190
240525	421	844
240526	422	132
240526	422	126 Check



Per:

G. Duncan



ACCURASSAY LABORATORIES

A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO

BOX 426

KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1

TEL.: (705) 567 3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph.D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

39416

Certificate of Analysis

Page: 1

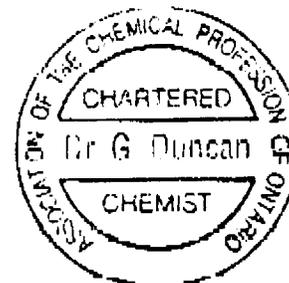
Mr. Duncan McIvor
Homestake Mineral Development.
P.O. Box 290
Timmins, Ontario
P4N 7N6

March 21

91

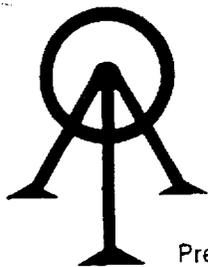
Work Order # : 910316
Project : #5755

Accurassay	SAMPLE NUMBERS Customer	Gold ppb	
	423	686	
240527	424	818	
240528	425	180	
240529	426	9	
240530	427	<5	
240531	428	<5	
240532	429	39	
240533	430	131	
240534	431	0	
240535	432	<5	
240536	432	<5	Check
240536	433	<5	
240537	434	<5	
240538	435	5	
240539	436	5	
240540	437	13	
240541	438	6	
240542	439	21	
240543	440	1831	
240544	441	31	
240545	441	29	Check
240545	442	117	
240546	443	18	
240547	444	<5	
240548	444	<5	Check
240548			



Per: _____

G. Duncan



ACCURASSAY LABORATORIES
 A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO
 BOX 426
 KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
 TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

39474

Certificate of Analysis

Page: 1

Mr. Duncan McIvor
 Homestake Mineral Development
 P.O. Box 290
 Timmins, Ontario
 P4N 7N6

March 27

91

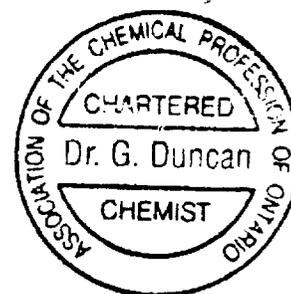
Work Order # : 910348
 Project : 5755

Accurassay	SAMPLE NUMBERS Customer	Gold ppb
	445	<5
	446	<5
	447	<5
	448	<5
	449	<5
	450	<5
	451	<5
	452	<5
	453	<5
	454	<5
	454	<5
	455	<5
	456	<5
	457	<5
	458	<5
	459	<5
	460	9
	461	<5
	462	<5
	463	69
	463	66
	464	9
	465	<5
	466	<5
	467	17
	468	<5
	469	<5
	470	<5
	471	<5
	472	<5
	472	<5

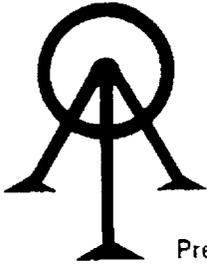
Check

Check

Check



Per: G. Duncan



ACCURASSAY LABORATORIES

A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO

BOX 426

KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1

TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Gr.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

39475

Certificate of Analysis

Page: 2

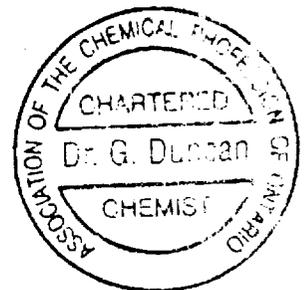
Mr. Duncan McIvor
Homestake Mineral Development
P.O. Box 290
Timmins, Ontario
P4N 7N6

March 27

91

Work Order # : 910348
Project : 5755

SAMPLE NUMBERS		Gold
Accurassay	Customer	ppb
241006	473	<5
241007	474	<5
241007	474	<5 Check



Per: G. Duncan



ACCURASSAY LABORATORIES

A DIVISION OF BARRINGER LABORATORIES LIMITED, RFXDALE, ONTARIO
 BOX 426
 KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
 TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph.D., C. Chem (Int.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

39485

Certificate of Analysis

Page: 1

Mr. Duncan McIvor
 Homestake Mineral Development
 P.O. Box 290
 Timmins, Ontario
 P4N 7N6

March 27

91

Work Order # : 910349
 Project : 5755

SAMPLE NUMBERS Accurassay	Customer	Gold ppb
241008	475	<5
241009	476	24
241010	477	5
241011	478	5
241012	479	<5
241013	480	43
241014	481	143
241015	482	79
241016	483	25
241017	484	36
241017	484	59
241018	485	275
241019	486	1294
241020	487	8
241021	488	84
241022	489	32
241023	490	45
241024	491	70
241025	492	<5
241026	493	12
241026	493	14
241027	494	<5
241028	495	492
241029	496	7
241030	497	5
241031	498	7
241032	499	29
241033	500	252
241034	601	1172
241035	602	780
241035	602	805

1% Asp. < 1mm
1% Asp. < 1mm

Check

2% Asp. < 1mm
100% cell carbon



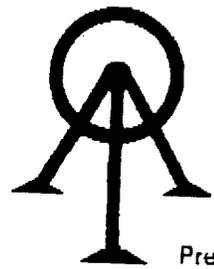
Check

with Fr. asp. as py, fine carbon

*1% asp. w/ fine basalts covered + to py
 pre-fragmented min.*

Check

Per: G Duncan



ACCURASSAY LABORATORIES

A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO

BOX 426

KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1

TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

39486

Certificate of Analysis

Page: 2

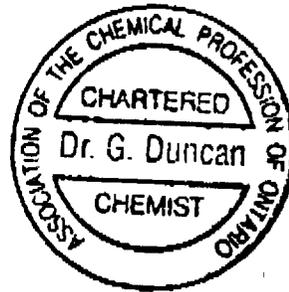
Mr. Duncan McIvor
Homestake Mineral Development
P.O. Box 290
Timmins, Ontario
P4N 7N6

March 27

91

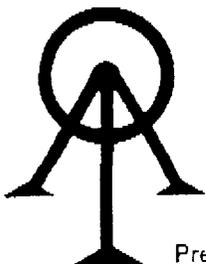
Work Order # : 910349
Project : 5755

SAMPLE NUMBERS Accurassay	Customer	Gold ppb	
036	603	250	60% carbon
037	604	8	ditto note - not tested or limited etc.
037	604	6	Check



Per: _____

G. Duncan



ACCURASSAY LABORATORIES

A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO

BOX 426

KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1

TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T

39488

Certificate of Analysis

Page: 2

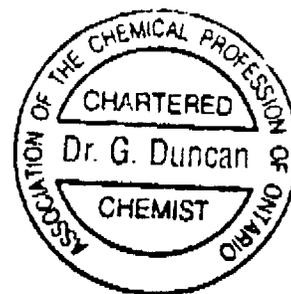
Mr. Duncan McIvor
Homestake Mineral Development
P.O. Box 290
Timmins, Ontario
P4N 7N6

March 27

91

Work Order # : 910350
Project : 5755

SAMPLE NUMBERS		Gold
Accurassay	Customer	ppb
241066	633	<5
241067	634	<5
241068	635	<5
241069	636	<5
241070	637	<5
241071	638	<5
241072	639	<5
241072	639	<5 Check



Per: _____

G. Duncan



ACCURASSAY LABORATORIES

A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO

BOX 426

KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1

TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph.D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

39489

Certificate of Analysis

Page: 1

Mr. Duncan McIvor
Homestake Mineral Development
P.O. Box 290
Timmins, Ontario
P4N 7N6

March 27

91

Work Order # : 910351
Project : 5755

Accurassay	SAMPLE NUMBERS	Customer	Gold ppb
		all hole 8	
241073		640	<5
241074		641	<5
241075		642	<5
241076		643	5
241077		644	<5
241078		645	<5
241079		646	<5
241080		647	<5
241081		648	<5
241082		649	<5
241082		649	<5
241083		650	29
241084		651	13
241085		652	<5
241086		653	6
241087		654	6
241088		655	443
241089		656	109
241090		657	166
241091		658	239
241091		658	305
241092		659	1124
241093		660	291
241094		661	25
241095		662	75
241096		663	248
241097		664	623
241098		665	530
241099		666	288
241100		667	70
241100		667	66

Check

< 1% top < 1mm

< 1% top < 2mm

10% carbon, to top

Check

RV, + py hole, 2m east, 7% py < 2m

1% py + some silver in pit

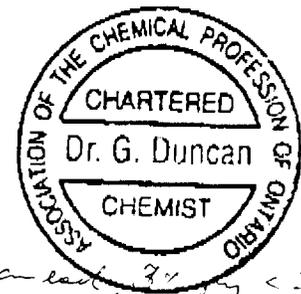
10% py hole + 1m vein, also 12 result analyzed

barren + eqn. flooring

crushed material in bottle

qv. + testing out barren

Check



Per: G. Duncan



ACCURASSAY LABORATORIES

A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO

BOX 426

KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1

TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

39490

Certificate of Analysis

Page: 2

Mr. Duncan McIvor
Homestake Mineral Development
P.O. Box 290
Timmins, Ontario
P4N 7N6

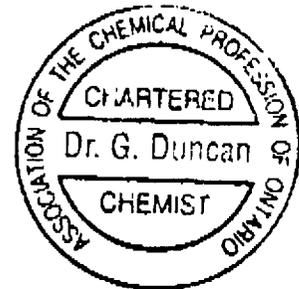
March 27

91

Work Order # : 910351
Project : 5755

SAMPLE NUMBERS		Gold
Accurassay	Customer	ppb
241101	668	33
241102	669	56
241103	670	14
241104	671	7
241105	672	<5
241106	673	<5
241106	673	<5 Check

carbonate shale + pyrophyllite + ...



Per: _____

G. Duncan



ACCURASSAY LABORATORIES

A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO

BOX 426

KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1

TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

39525

Certificate of Analysis

Page: 1

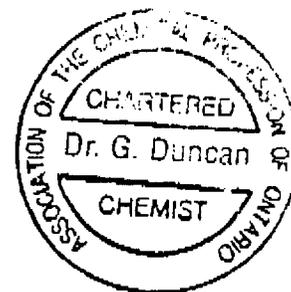
Mr. Duncan McIvor
 Homestake Mineral Development
 P.O. Box 290
 Timmins, Ontario
 P4N 7N6

April 3

91

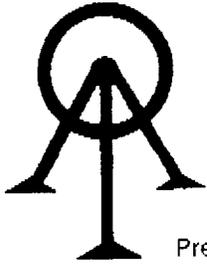
Work Order # : 910366
 Project : 5755

Accurassay	SAMPLE NUMBERS	Customer	Gold ppb	
	241251	674	5	
	241252	675	6	
	241253	676	22	
	241254	677	<5	
	241255	678	<5	
	241256	679	<5	
	241257	680	<5	
	241258	681	<5	
	241259	682	<5	
	241260	683	7	
	241260	683	6	Check
	241261	684	9	
	241262	686	13	
	241263	687	<5	
	241264	688	6	
	241265	690	<5	
	241266	691	<5	
	241267	692	<5	
	241268	693	<5	
	241269	694	<5	
	241269	694	<5	Check
	241270	695	<5	
	241271	696	5	
	241272	697	<5	
	241273	698	<5	
	241274	699	7	
	241275	700	<5	
	241276	701	6	
	241277	702	<5	
	241278	703	<5	
	241278	703	<5	Check



Per: _____

G. Duncan



ACCURASSAY LABORATORIES

A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO
 BOX 426
 KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
 TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

39526

Certificate of Analysis

Page: 2

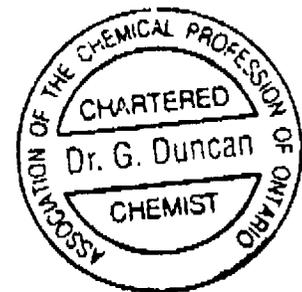
Mr. Duncan McIvor
 Homestake Mineral Development
 P.O. Box 290
 Timmins, Ontario
 P4N 7N6

April 3

91

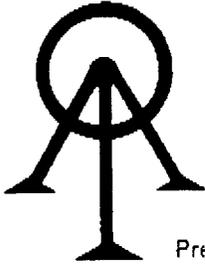
Work Order # : 910366
 Project : 5755

SAMPLE NUMBERS		Gold
Accurassay	Customer	ppb
241279	704	<5
241280	705	5
241280	705	5 Check



Per: _____

G. Duncan



ACCURASSAY LABORATORIES
 A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO
 BOX 426
 KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
 TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

39527

Certificate of Analysis

Page: 1

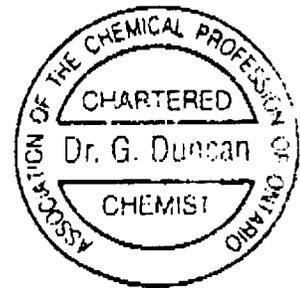
Mr. Duncan Molvor
 Homestake Mineral Development
 P.O. Box 290
 Timmins, Ontario
 P4N 7N5

April 3

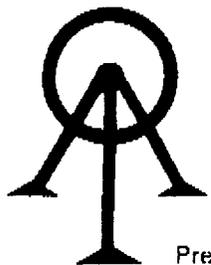
91

Work Order # : 910367
 Project : 5755

SAMPLE NUMBERS	Customer	Gold ppb
241281	706	5
241282	707	5
241283	708	<5
241284	709	<5
241285	710	<5
241286	711	<5
241287	712	<5
241288	713	<5
241289	714	<5
241290	715	28
241290	715	31 Check
241291	716	<5
241292	717	<5
241293	718	<5
241294	719	29
241295	721	<5
241296	722	<5
241297	723	<5
241298	724	<5
241299	725	<5
241299	725	Check
241300	726	<5
241301	727	<5
241301	727	Check



Per: G. Duncan



ACCURASSAY LABORATORIES

A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO
BOX 426
KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

39530

Certificate of Analysis

Page: 1

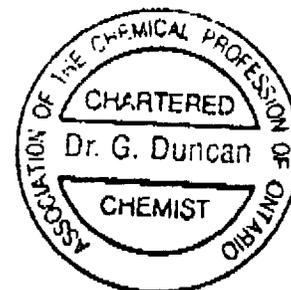
Mr. Duncan Melvor
Homestake Mineral Development
P.O. Box 290
Timmins, Ontario
P4N 7N6

April 5

91

Work Order # : 910375
Project :

SAMPLE NUMBERS	Customer	Gold	
Accurassay		ppb	
241373	728	74	
241374	729	47	
241375	730	689	
241376	731	502	
241377	732	354	
241378	733	196	
241379	734	144	
241380	735	12	
241381	736	60	
241382	737	8	
241382	737	17	Check
241383	738	64	
241384	739	<5	
241385	740	<5	
241386	741	<5	
241387	742	<5	
241388	743	<5	
241389	744	<5	
241390	745	13	
241391	746	<5	
241391	746	<5	Check
241392	747	<5	
241393	748	<5	
241394	749	<5	
241395	750	<5	
241396	751	<5	
241397	752	<5	
241398	753	<5	
241399	754	<5	
241400	755	<5	
241400	755	<5	Check



Per: G Duncan



ACCURASSAY LABORATORIES

A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO

BOX 426

KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1

TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T

39531

Certificate of Analysis

Page: 2

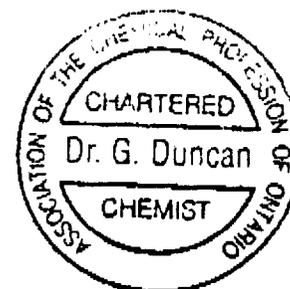
Mr. Duncan McIvor
Homestake Mineral Development
P.O. Box 390
Timmins, Ontario
P4N 7N6

April 5

91

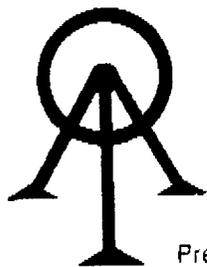
Work Order # : 910375
Project :

SAMPLE NUMBERS		Gold
Accurassay	Customer	ppb
241401	756	<5
241402	757	<5
241403	758	<5
241404	759	5
241405	760	<5
241405	760	7 Check



Per: _____

G. Duncan



ACCURASSAY LABORATORIES

A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO

BOX 426

KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1

TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

39535

Certificate of Analysis

Page: 1

Mr. Duncan Melvor
Homestake Mineral Development
P.O. Box 290
Timmins, Ontario
P4N 7N6

April 5

91

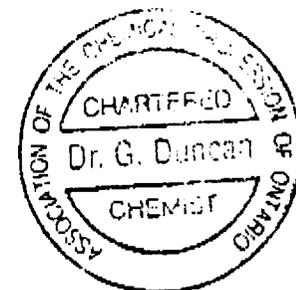
Work Order # : 910380
Project : 5755

SAMPLE NUMBERS	Customer	Gold ppb
241447	761	45
241448	762	5
241449	763	7
241450	764	32
241451	765	20
241452	766	653
241453	767	196
241454	768	48
241455	769	84
241456	770	13
241456	770	18
241457	771	9
241458	772	10
241459	773	22
241460	774	56
241461	775	114
241462	776	152
241463	777	110
241464	778	199
241465	779	231
241465	779	250
241466	780	197
241467	781	160
241468	782	567
241469	783	146
241470	784	76
241471	785	19
241472	786	28
241473	787	18
241474	788	112
241474	788	106

Check

Check

Check



Per: G Duncan



ACCURASSAY LABORATORIES

A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO

BOX 426

KIRKI AND LAKE, ONTARIO, CANADA P2N 3J1

TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D. C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

39536

Certificate of Analysis

Page: 2

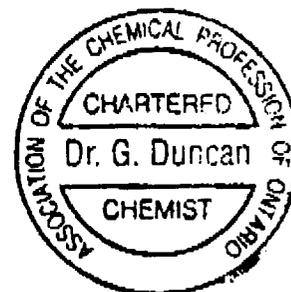
Mr. Duncan McIvor
 Homestake Mineral Development
 P.O. Box 290
 Timmins, Ontario
 P4N 7N6

April 5

91

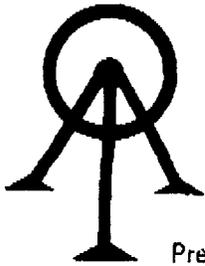
Work Order # : 910380
 Project : 5755

SAMPLE NUMBERS	Customer	Gold ppb	
241475	789	46	
241476	790	13	
241477	791	14	
241478	792	23	
241479	793	15	
241480	794	75	
241481	795	27	
241482	796	9	
241483	797	25	
241483	797	24	Check
241484	798	45	
241485	799	28	
241486	800	24	
241487	801	34	
241488	802	45	
241489	803	166	
241490	804	40	
241491	805	7	
241492	806	7	
241492	806	9	Check
241493	807	58	
241494	808	28	
241494	808	16	Check



Per: _____

G. Duncan



ACCURASSAY LABORATORIES

A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO

BOX 426

KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1

TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.I.

39264

Certificate of Analysis

Mr. Duncan McIvor
Homestake Mineral Development
P.O. Box 290
Timmins, Ontario
P4N 7N6

Page: 1

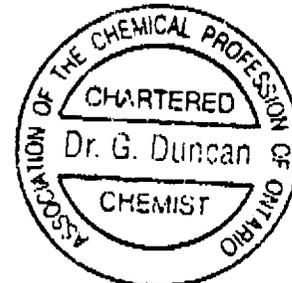
March 12

91

Work Order # : 910207A
Project : 5755

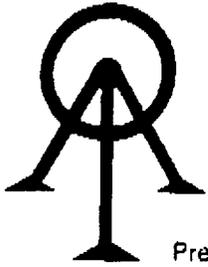
METALLICS GOLD

Accurassay Customer	#1 Pulp Assay g/tonne	#2 Pulp Assay g/tonne	Metallics Assay g/tonne	Total g/tonne	% Met. in pulp
238152 2436	7.603	7.570	4.546	7.501	2.83



Per:

G. Duncan



ACCURASSAY LABORATORIES
 A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO
 BOX 426
 KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
 TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

39265

Certificate of Analysis

Page: 1

Mr. Duncan McIvor
 Homestake Mineral Development
 P.O. Box 290
 Timmins, Ontario
 P4N 7N6

March 12

91

Work Order # : 910208A
 Project : 5755

M E T A L L I C S
G O L D

Accurassay Customer		#1 Pulp Assay g/tonne	#2 Pulp Assay g/tonne	Metallics Assay g/tonne	Total g/tonne	% Met. in pulp
238158	2442	1.288	1.030	1.186	1.159	1.36



Per: G. Duncan



ACCURASSAY LABORATORIES

A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO
 BOX 426
 KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
 TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.I.

39266

Certificate of Analysis

Page: 1

Mr. Duncan McIvor
 Homestake Mineral Development
 P.O. Box 290
 Timmins, Ontario
 P4N 7N6

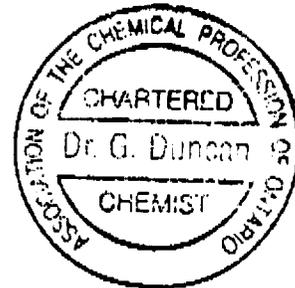
March 12

91

Work Order # : 910211A
 Project : 5755

METALLICS GOLD

Accurassay Customer		#1 Pulp Assay g/tonne	#2 Pulp Assay g/tonne	Metallics Assay g/tonne	Total g/tonne	% Met. in pulp
238256	3753	3.020	3.149	2.496	3.056	4.93



Per: _____

G. Duncan



ACCURASSAY LABORATORIES
 A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO
 BOX 426
 KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
 TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

39267

Certificate of Analysis

Mr. Duncan McIvor
 Homestake Mineral Development
 P.O. Box 290
 Timmins, Ontario
 P4N 7N6

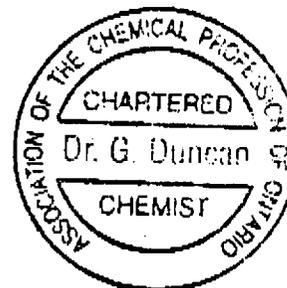
March 12

Page: 1
 91

Work Order # : 910212A
 Project :

**M E T A L L I C S
 G O L D**

Accurassay Customer		#1 Pulp Assay g/tonne	#2 Pulp Assay g/tonne	Metallics Assay g/tonne	Total g/tonne	% Met. in pulp
238278	3775	2.457	1.702	No Met.	2.080	No Met.
238279	3776	0.823	0.876	1.373	0.857	1.44
238291	3788	1.293	1.279	1.202	1.286	0.43



Per:

G. Duncan



ACCURASSAY LABORATORIES

A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO
 BOX 426
 KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
 TEL.: (705) 567-3381

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

39268

Certificate of Analysis

Page: 1

Mr. Duncan McIvor
 Homestake Mineral Development
 P.O. Box 290
 Timmins, Ontario
 P4N 7N6

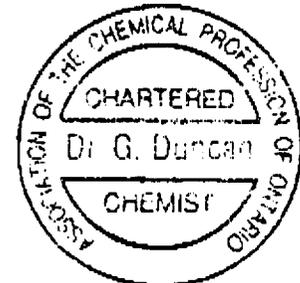
March 12

91

Work Order # : 910220A
 Project : 5755

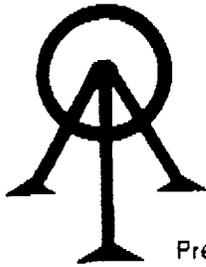
METALLICS GOLD

Accurassay Customer		#1 Pulp Assay g/tonne	#2 Pulp Assay g/tonne	Metallics Assay g/tonne	Total g/tonne	% Met. in pulp
238444	4003	1.256	1.353	0.893	1.294	2.59
238453	4012	3.616	3.404	No Met.	3.510	No Met.



Per:

G. Duncan



ACCURASSAY LABORATORIES

A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO

BOX 426

KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1

TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

39269

Certificate of Analysis

Page: 1

Mr. Duncan McIvor
Homestake Mineral Development
P.O. Box 290
Timmins, Ontario
P4N 7N6

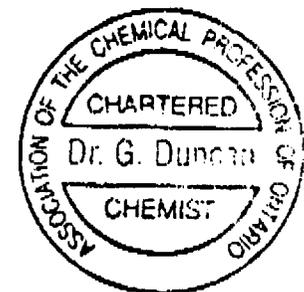
March 12

91

Work Order # : 910228A
Project : 5755

METALLICS GOLD

Accurassay Customer		#1 Pulp Assay g/tonne	#2 Pulp Assay g/tonne	Metallics Assay g/tonne	Total g/tonne	% Met. in pulp
238564	4070	0.910	0.816	0.409	0.859	0.86
238568	4074	1.150	1.103	0.748	1.120	1.65
238572	4078	1.118	1.490	No Met.	1.304	No Met.



Per:



ACCURASSAY LABORATORIES
 A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO
 BOX 426
 KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
 TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

39270

Certificate of Analysis

Page: 1

Mr. Duncan McIvor
 Homestake Mineral Development
 P.O. Box 290
 Timmins, Ontario
 P4N 7N6

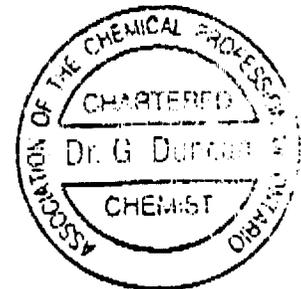
March 12

91

Work Order # : 910229A
 Project :

M E T A L L I C S
G O L D

Accurassay Customer		#1 Pulp Assay g/tonne	#2 Pulp Assay g/tonne	Metallics Assay g/tonne	Total g/tonne	% Met. in pulp
238602	6908	1.045	1.049	No Met.	1.047	No Met.
238603	6909	1.375	1.321	No Met.	1.348	No Met.



Per: _____

G. Duncan



ACCURASSAY LABORATORIES
 A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO
 BOX 426
 KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
 TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

39272

Certificate of Analysis

Page: 1

Mr. Duncan McIvor
 Homestake Mineral Development
 P.O. Box 290
 Timmins, Ontario
 P4N 7N6

March 12

91

Work Order # : 910230A
 Project : 5755

M E T A L L I C S
G O L D

Accurassay Customer		#1 Pulp Assay g/tonne	#2 Pulp Assay g/tonne	Metallics Assay g/tonne	Total g/tonne	% Met. in pulp
238620	6926	4.298	4.424	No Met.	4.361	No Met.
238621	6927	5.338	5.530	3.064	5.388	1.94
238626	6932	1.828	1.788	No Met.	1.808	No Met.
238627	6933	2.967	2.854	1.685	2.831	6.46
238628	6934	2.921	3.371	No Met.	3.146	No Met.



Per: G. Duncan



ACCURASSAY LABORATORIES
 A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALF, ONTARIO
 BOX 426
 KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
 TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

39469

Certificate of Analysis

Page: 1

Mr. Duncan McIvor
 Homestake Mineral Development
 P.O. Box 290
 Timmins, Ontario
 P4N 7N6

April 2

01

Work Order # : 910360
 Project : 5755

SAMPLE NUMBERS		Gold	Platinum	Palladium	
Accurassay	Customer	ppb	ppb	ppb	
241213	482	104	<15	<10	
241214	485	225	<15	<10	
241215	495	475	<15	<10	
241216	602	858	<15	<10	
241217	603	350	<15	<10	
241218	655	233	<15	<10	
241219	664	650	<15	<10	
241219	664	615	<15	<10	Check



Per:

G Duncan



ACCURASSAY LABORATORIES

A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALF, ONTARIO

BOX 426

KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1

TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T

39417

Certificate of Analysis

Page: 1

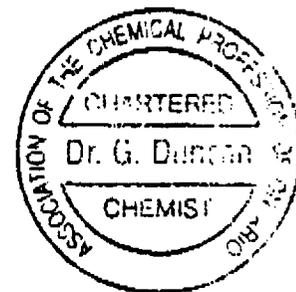
Mr. Duncan McIvor
Homestake Mineral Development
P.O. Box 290
Timmins, Ontario
P4N 7N6

April 2

91

Work Order # : 910368
Project : 5755

SAMPLE NUMBERS		Gold	Platinum	Palladium	
Accurassay	Customer	ppb	ppb	ppb	
241302	685	5	<15	<10	
241303	589	<5	<15	<10	
241304	720	13	<15	<10	
241304	720	13	<15	<10	Check



Per: _____

G Duncan



ACCURASSAY LABORATORIES

A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO
BOX 426
KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph.D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

39505

Certificate of Analysis

Page: 1

Mr. Duncan McIvor
Homestake Mineral Development
P.O. Box 390
Timmins, Ontario
P4N 7N6

April 2

91

Work Order # : 910349A
Project : 5755

METALLICS GOLD

Accurassay Customer		#1 Pulp Assay g/tonne	#2 Pulp Assay g/tonne	Metallics Assay g/tonne	Total g/tonne	% Met. in pulp
241019	455	0.782	0.817	0.321	0.796	0.77
241034	601	1.149	1.173	0.264	1.152	1.01



Per: _____

G Duncan



ACCURASSAY LABORATORIES

A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO
BOX 426
KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph. D., C. Chem (Ont), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.P.C.S.T.

39518

Certificate of Analysis

Page: 1

Mr. Duncan McIvor
Homestake Mineral Development
P.O. Box 290
Timmins, Ontario
P4N 7N6

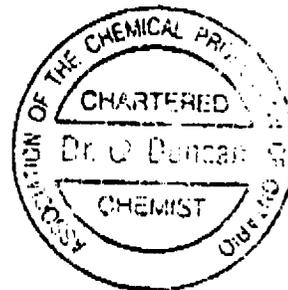
April 2

91

Work Order # : 910351A
Project : 5755

METALLICS GOLD

Accurassay Customer	#1 Pulp Assay g/tonne	#2 Pulp Assay g/tonne	Metallics Assay g/tonne	Total g/tonne	% Met. in pulp
241092 659	0.951	1.006	No Met.	0.979	No Met.



Per: _____

G. Duncan



ACCURASSAY LABORATORIES

A DIVISION OF BARRINGER LABORATORIES LIMITED, REXDALE, ONTARIO
BOX 426
KIRKLAND LAKE, ONTARIO, CANADA P2N 3J1
TEL.: (705) 567-3361

President: Dr. GEORGE DUNCAN, M.Sc., Ph.D., C. Chem (Ont.), C. Chem (U.K.), M.C.I.C., M.R.S.C., A.R.C.S.T.

39430

Certificate of Analysis

Page: 1

Mr. Duncan McIvor
Homestake Mineral Development
P.O. Box 290
Timmins, Ontario
P4N 7N6

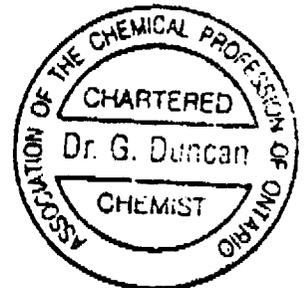
March 21

91

Work Order # : 910316A
Project : #5755

METALLICS GOLD

Accurassay Customer		#1 Pulp Assay g/tonne	#2 Pulp Assay g/tonne	Metallics Assay g/tonne	Total g/tonne	% Met. in pulp
250544	440	2.085	2.126	1.057	2.102	0.33



Per: _____

G. Duncan

NOTES

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

ⓧ THIS TWP. IS SUBJECT TO FOREST ACTIVITY IN 1993/94. FURTHER INFORMATION ON FILE (JULY 22 1993)

Ⓣ THE SURFACE AND MINING RIGHTS ARE WITHDRAWN FROM PROSPECTING, STAKING OUT, SALE OR LEASE UNDER SECTION 36 OF THE MINING ACT, R.S.O. 1990 DATED 96-OCT-24 AT 10:50 P.M. ORDER NO. P96/96-NER

R2 W P 21/97 NER M&SR

Ⓢ SECTION 36 W-P-26/97 NER M&S NOV 24/97

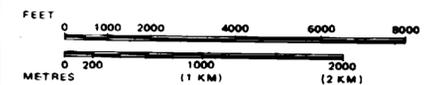
LEGEND

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

DISPOSITION OF CROWN LANDS

TYPE OF DOCUMENT	SYMBOL
PATENT, SURFACE & MINING RIGHTS	●
" SURFACE RIGHTS ONLY	○
" MINING RIGHTS ONLY	◐
LEASE, SURFACE & MINING RIGHTS	◑
" SURFACE RIGHTS ONLY	◒
" MINING RIGHTS ONLY	◓
LICENCE OF OCCUPATION	◔
ORDER-IN-COUNCIL	OC
RESERVATION	◕
CANCELLED	◖
SAND & GRAVEL	◗

SCALE: 1 INCH = 40 CHAINS



TOWNSHIP

TULLY

M.N.R. ADMINISTRATIVE DISTRICT

TIMMINS

MINING DIVISION

PORCUPINE

LAND TITLES / REGISTRY DIVISION RECORDING
COCHRANE

DATE OF ISSUE
JUN 09 1998
PROVINCIAL RECORDING
OFFICE - SUDBURY



Ministry of
Natural
Resources

Ministry of
Northern Development
and Mines

Date
ACTIVATED JULY 14, 1992
BY D.C.
CHECKED BY G.W.

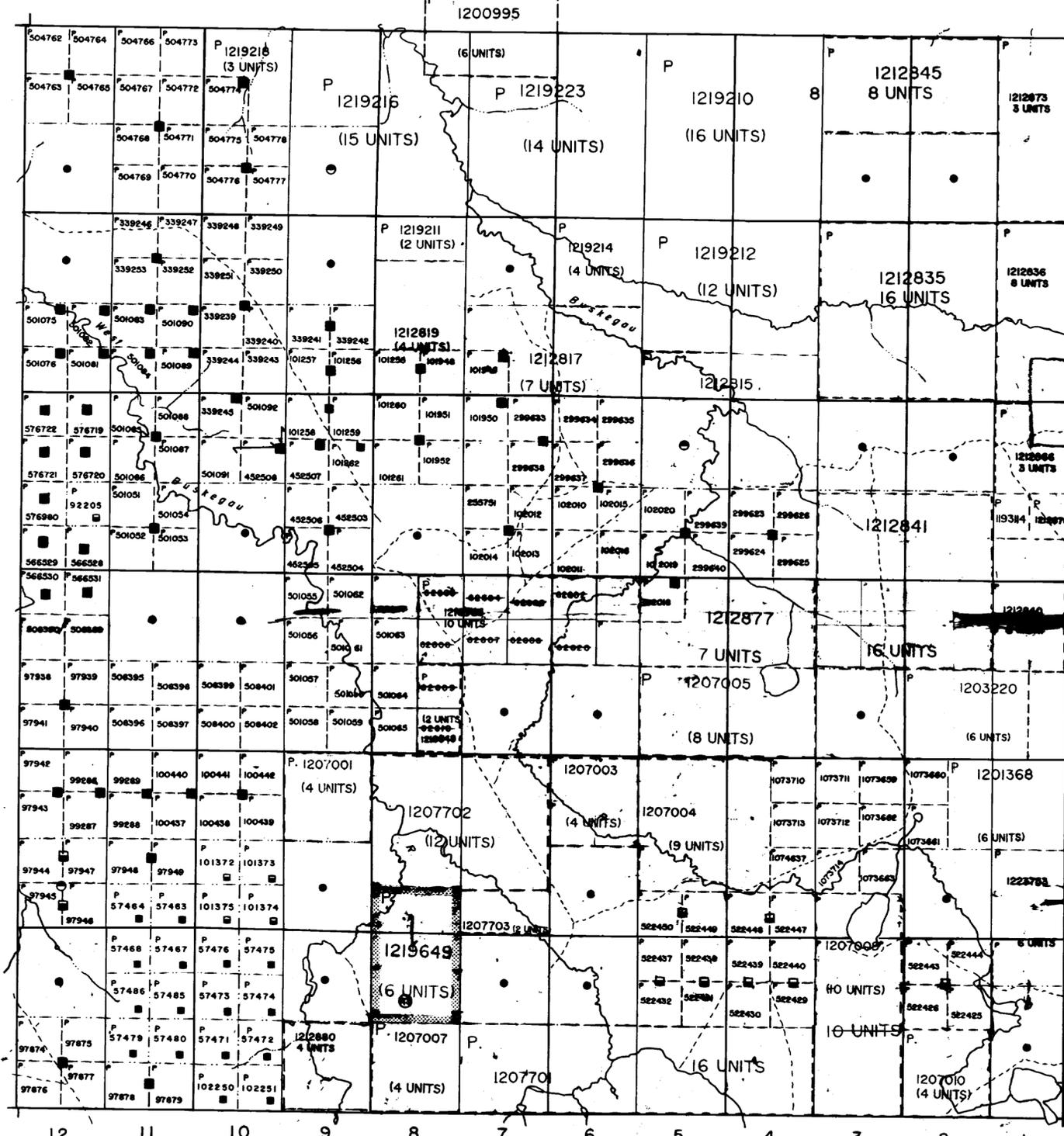
Number
G-3985

DUFF Tp. M.466

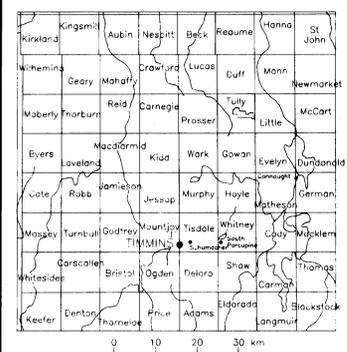
PROSSER Tp. M.571

LITTLE Tp. M.535

GOWAN Tp. M.285



42A145E2001 0M91-082 TULLY



LEGEND

Geology

ROCK UNITS:

8	DIABASE
7	FELSIC INTRUSIONS
6	MAFIC, ULTRAMAFIC INTRUSIONS
5	SEDIMENTS
4	CALC-ALKALIC FELSICS
3	CALC-ALKALIC ANDESITES
2	CALC-ALKALIC BASALTS
1	THOLEIIC BASALTS
[Hatched]	ALTERATION/MINERALIZATION ZONE
[Dashed]	INFERRED SHEAR ZONES

SYMBOLS

[Solid line]	GEOLOGICAL CONTACT
[Dashed line]	INFERRED THRUST FAULT
[Circle]	DDH - UNIDENTIFIED
[Circle with dot]	DDH - IDENTIFIED
[Circle with cross]	RC HOLE
[Circle with dot and cross]	DDH - PROPOSED
[Trench symbol]	TRENCH
[Road symbol]	ROAD
[Dashed line]	PROPERTY BOUNDARY

Geophysics

GROUND

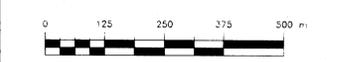
[Line]	HORIZONTAL LOOP (MAX-MIN)
[Line]	VERTICAL LOOP
[Line]	TURAM
[Line]	JUNIOR CRONE

AIRBORNE - O.G.S. INTERPRETATION

[Symbol]	1-2 CHANNEL (350, 450 MICROSECONDS)
[Symbol]	3-4 CHANNEL (550, 670 MICROSECONDS)
[Symbol]	5-6 CHANNEL (790, 910 MICROSECONDS)
[Symbol]	7-8 CHANNEL (1050, 1190 MICROSECONDS)
[Symbol]	9-10 CHANNEL (1350, 1510 MICROSECONDS)
[Symbol]	11-12 CHANNEL (1680, 1870 MICROSECONDS)

AIRBORNE - QUESTOR INTERPRETATION

[Symbol]	1-2 CHANNEL (350, 450 MICROSECONDS)
[Symbol]	3-4 CHANNEL (550, 670 MICROSECONDS)
[Symbol]	5-6 CHANNEL (790, 910 MICROSECONDS)
[Symbol]	7-8 CHANNEL (1050, 1190 MICROSECONDS)
[Symbol]	9-10 CHANNEL (1350, 1510 MICROSECONDS)
[Symbol]	11-12 CHANNEL (1680, 1870 MICROSECONDS)



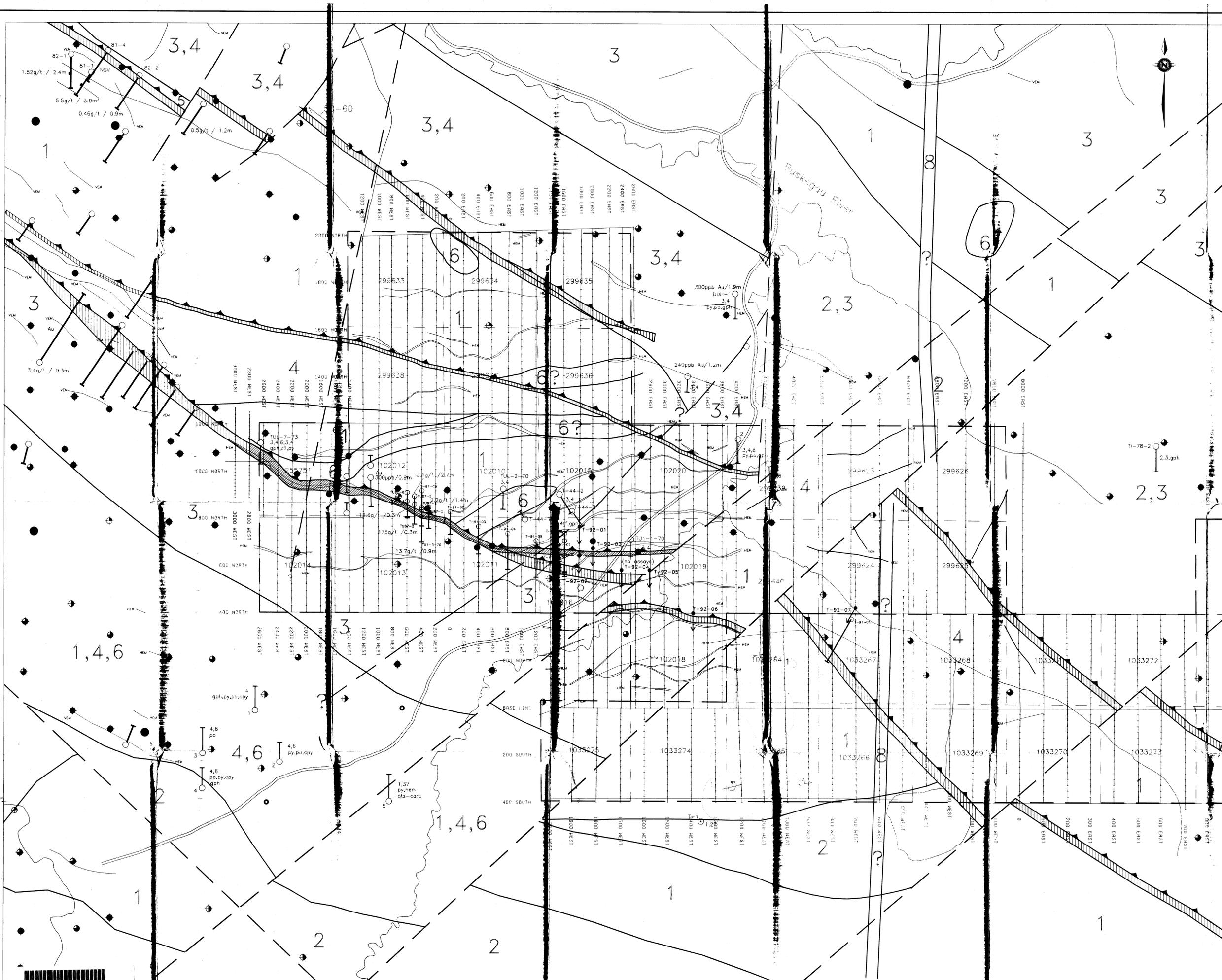
HOMESTAKE
MINERAL DEVELOPMENT COMPANY

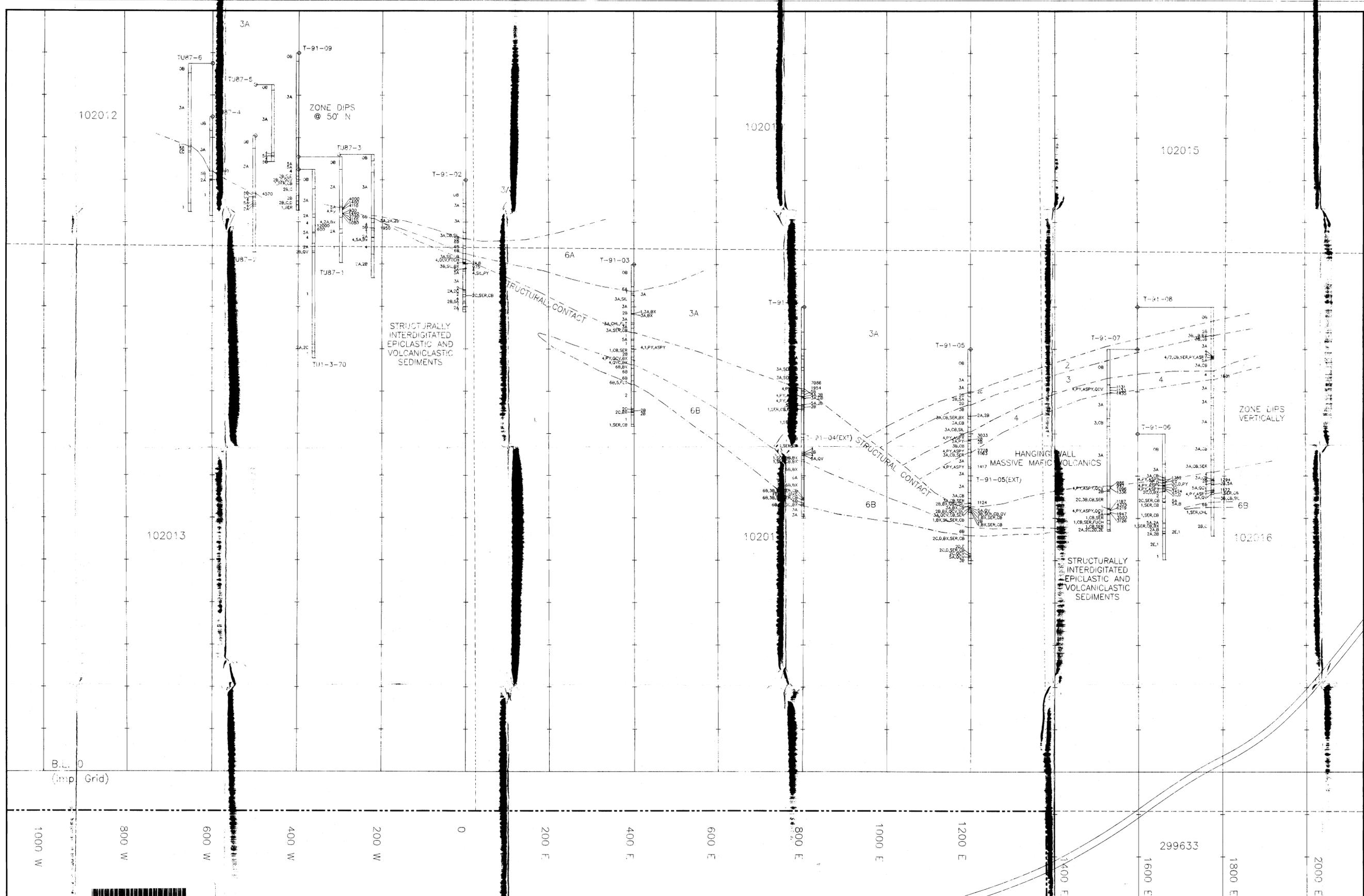
TULLY TOWNSHIP PROPERTY

Geological & Geophysical
Compilation

Drawn: P.C.W. Supervised: Bending
Date: Nov. 1989. Revised: May, 1991
Province: Ontario. NTS: 42 A/14
Scale: 1:5,000. Drawing: full-comp.

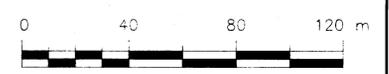
M.V.W. WHITE & Associates Ltd.
TIMMINS, ONTARIO





- GEOLOGICAL LEGEND**
- 1 Coarse Volcaniclastic Fragments (Undifferentiated)
 - 2 Epilastic Metasediments (Undifferentiated)
 - 2A Argillite
 - 2B Graphitic Argillite
 - 2C Siltstone
 - 2D Graywacke
 - 2E Conglomerate
 - 3 Mafic Metavolcanics (Undifferentiated)
 - 3A Massive -subvolcanic Basalt
 - 3B Andesite to Basalt
 - 4 Variably Altered (Carbonate-Serpentine-Silica-Sulphides) Brecciated, Veined Mafic Metavolcanics
 - 5 Fault Zone
 - 5A Graphitic Gouge, Mud, Clay
 - 5B Quartz Vein
 - 6 Ultramafic Intrusive Rocks (Undifferentiated)
 - 6A Peridotite
 - 6B Talc-Chlorite-Magnesite Altered Ultramafic (may in part be Komatiite Flows)

- Modifiers**
- py Pyrite
 - ASPY Arsenopyrite
 - OPY Chalcopyrite
 - SPH Sphalerite
 - CHL Chlorite
 - SIL Silicification
 - SER Sericitization
 - UB Carbonatization
 - FUCH Fuchsite
 - GR Graphite
 - QV Quartz Veining
 - QCV Quartz-Carbonate Veining
 - BX Brecciated
 - FLT Fault / Rubble
 - SNFLK Stratiform Textured Carbonate Alteration
 - SPX Spinifex
- Au (ppb)**



HOMESTAKE
MINERAL DEVELOPMENT COMPANY

TULLY TOWNSHIP PROJECT

1991 Diamond Drilling Program
Grid Base Map

Drawn: P.C.W.	Supervised: D. McIvor
Date: March, 1991	Revised:
Province: Ontario	NFS: 42 A/14
Scale: 1:1,000	Drawing: 58-1000



102012

10201

102015

102013

10201

102016

B.L. 0
(Imp. Grid)

1000 W
800 W
600 W
400 W
200 W
0
200 E
400 E
600 E
800 E
1000 E
1200 E

299633

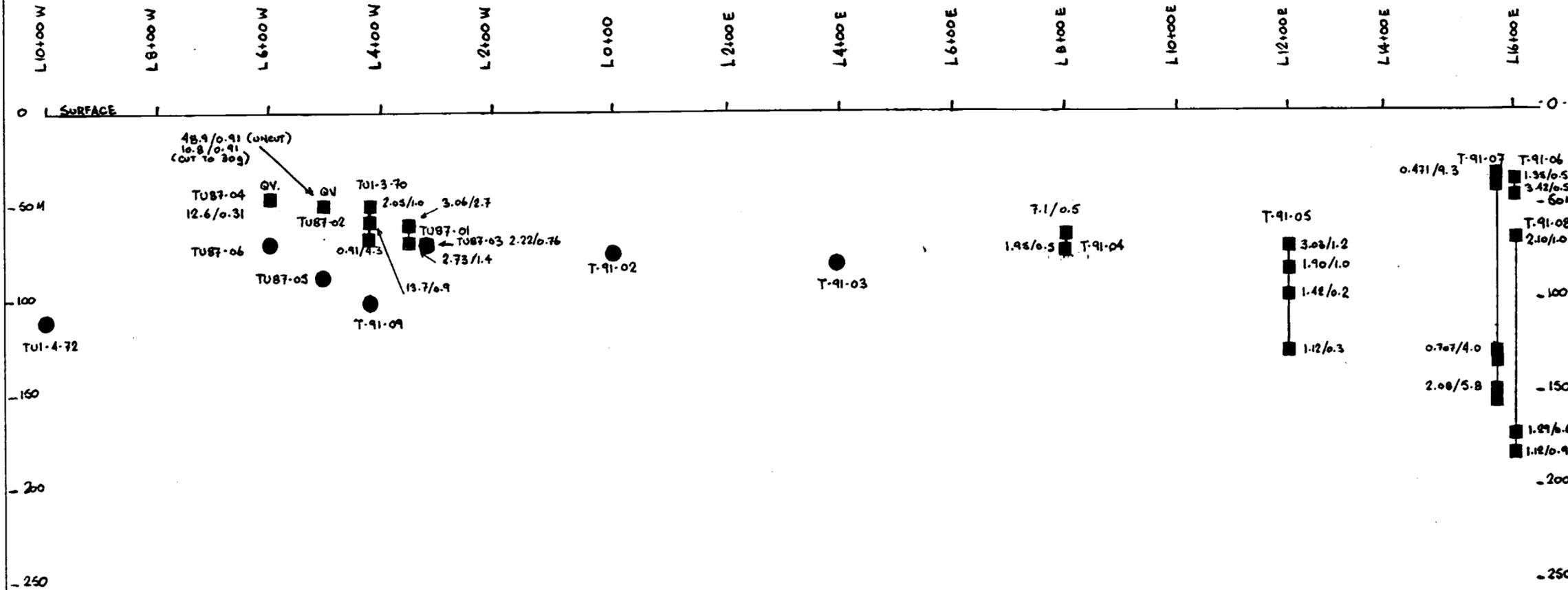
1600 E

1800 E

2000 E



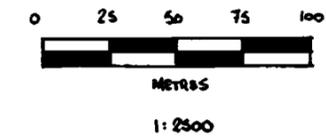
(IMPERIAL GRID LINES)



■ 2.9/1.6 ANOMALOUS (> 1 GPT) INTERSECTION (VALUES IN GPT/M)

● BARREN HOLE

ALL PIERCE POINTS ARE CARBONATIZED, SERICITED MAFIC VOLCANICS (UNLESS OTHERWISE INDICATED)



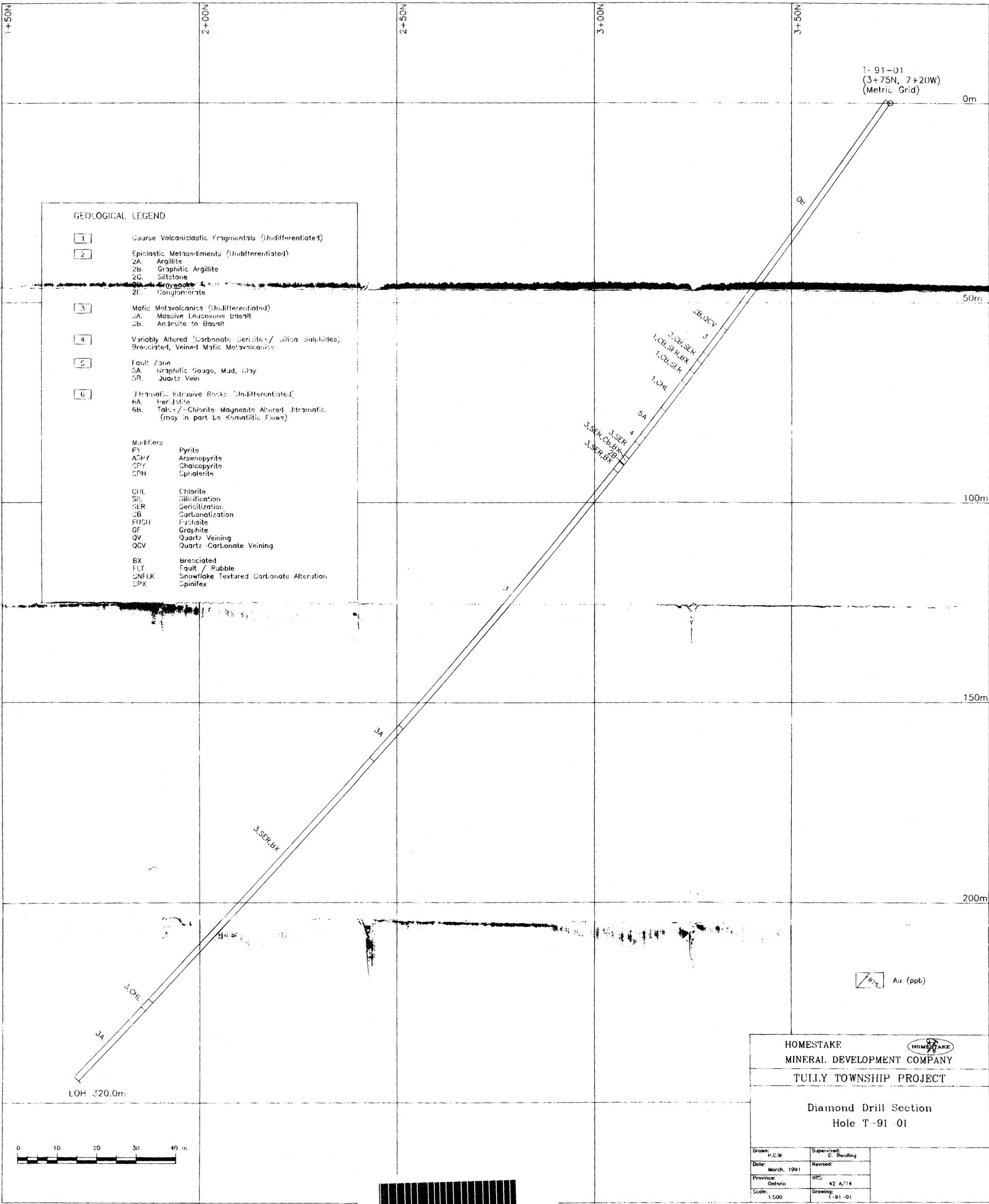
HOMESTAKE CANADA LTD.

TULLY PROPERTY
MAIN MINERALIZED ZONE
VERTICAL LONGITUDINAL 120 DEGREES
LOOKING NORTHEAST

INFINITE SPHERE OF INFLUENCE



42A14SE2001 OM91-082 TULLY



T-91-01
(3+75N, 7+20W)
(Metric Grid)

0m

50m

100m

150m

200m

GEOLOGICAL LEGEND

- 1 Course Volcaniclastic Fragmentals (Undifferentiated)
 - 2 Epiclastic Metasediments (Undifferentiated)
 - 2A. Argillite
 - 2B. Graphitic Argillite
 - 2C. Siltstone
 - 2D. Graywacke
 - 2E. Conglomerate
 - 3 Mafic Metavolcanics (Undifferentiated)
 - 3A. Massive Leucoxene Basalt
 - 3B. Andesite to Basalt
 - 4 Variably Altered (Carbonate, Sericite / Silica Sulphides) Brecciated, Veined Mafic Metavolcanics
 - 5 Fault Zone
 - 5A. Graphitic Gouge, Mud, Clay
 - 5B. Quartz Vein
 - 6 Ultramafic Intrusive Rocks (Undifferentiated)
 - 6A. Peridotite
 - 6B. Talc +/- Chlorite-Magnesite Altered Ultramafic (may in part be Komatiitic Flows)
- Modifiers
- FY Pyrite
 - ASP Arsenopyrite
 - CPY Chalcopyrite
 - SPH Sphalerite
- CHL Chlorite
 - SIL Silicification
 - SER Sericitization
 - CB Carbonatization
 - FUCH Fuchsite
 - GF Graphite
 - QV Quartz Veining
 - QCV Quartz-Carbonate Veining
- BX Brecciated
 - FLT Fault / Rubble
 - SNFLK Snowflake Textured Carbonate Alteration
 - SPX Spinifex

EOH 320.0m



Au (ppb)

HOMESTAKE
MINERAL DEVELOPMENT COMPANY
TULLY TOWNSHIP PROJECT

Diamond Drill Section
Hole T-91-01

Drawn: P.C.W.	Supervised: E. Bending
Date: March, 1991	Revised:
Province: Ontario	NTS: 42 A/14
Scale: 1:500	Drawing: T-91-01



Imperial Grid
 7+00N 8+00N 9+00N 10+00N 11+00N 12+00N 13+00N 14+00N
 T-91-02
 (14+00N, 0+00E)
 (Imp. Grid) 0m

GEOLOGICAL LEGEND

1 Coarse Volcaniclastic Fragmentals (Undifferentiated)

2 Epiclastic Metasediments (Undifferentiated)
 2A. Argillite
 2B. Graphitic Argillite
 2C. Siltstone
 2D. Graywacke
 2E. Conglomerate

3 Mafic Metavolcanics (Undifferentiated)
 3A. Massive Leucoxene Basalt
 3B. Andesite to Basalt

4 Variably Altered (Carbonate-Sericite+/-Silica-Sulphides)
 Brecciated, Veined Mafic Metavolcanics

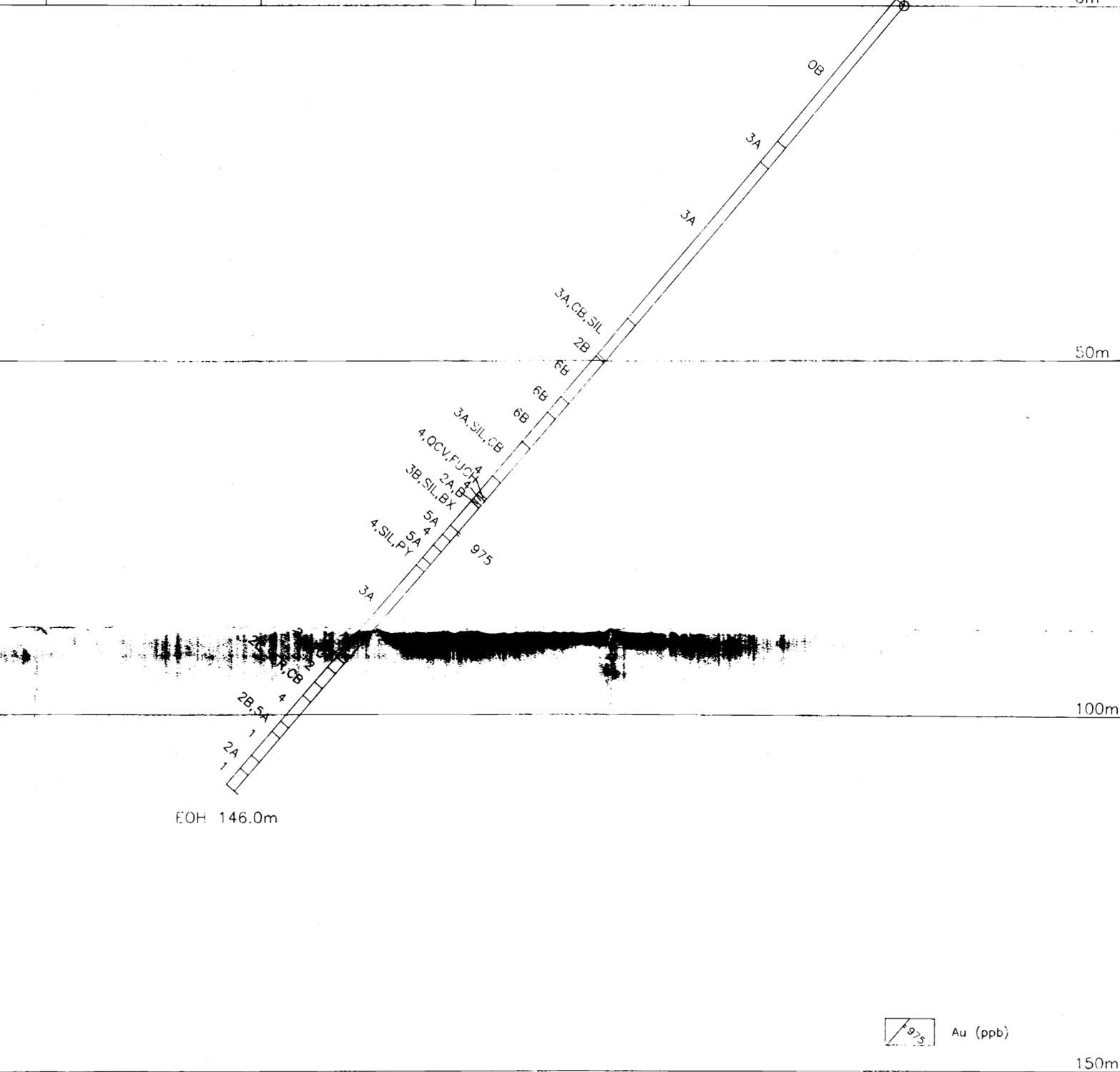
5 Fault Zone
 5A. Graphitic Gouge, Mud, Clay
 5B. Quartz Vein

6 Ultramafic Intrusive Rocks (Undifferentiated)
 6A. Peridotite
 6B. Talc+/-Chlorite-Magnesite Altered Ultramafic
 (may in part be Komatiitic Flows)

Modifiers
 PY Pyrite
 ASPY Arsenopyrite
 CPY Chalcopyrite
 SPH Sphalerite

CHL Chlorite
 SIL Silicification
 SER Sericitization
 CB Carbonatization
 FUCH Fuchsite
 GF Graphite
 QV Quartz Veining
 QCV Quartz-Carbonate Veining

BX Brecciated
 FLT Fault / Rubble
 SNFLK Snowflake Textured Carbonate Alteration
 SPX Spinifex



HOMESTAKE
 MINERAL DEVELOPMENT COMPANY

TULLY TOWNSHIP PROJECT

Diamond Drill Section
 Hole T-91-02

Drawn: P.C.W.	Supervised: D. Bending
Date: March, 1991	Revised:
Province: Ontario	NTS: 42 A/14
Scale: 1:500	Drawing: T-91-02



Imperial
Grid

5+00N

6+00N

7+00N

8+00N

9+00N

10+00N

11+00N

12+00N

T-91-03
(12+00N, 4+00E)
(Imp. Grid)

0m

50m

100m

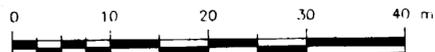
150m

GEOLOGICAL LEGEND

- [1] Coarse Volcaniclastic Fragmentals (Undifferentiated)
 - [2] Epipelagic Metasediments (Undifferentiated)
 - 2A. Argillite
 - 2B. Graphitic Argillite
 - 2C. Siltstone
 - 2D. Graywacke
 - 2E. Conglomerate
 - [3] Mafic Metavolcanics (Undifferentiated)
 - 3A. Massive Leucoxene Basalt
 - 3B. Andesite to Basalt
 - [4] Variably Altered (Carbonate-Sericite+/-Silica-Sulphides)
Brecciated, Veined Mafic Metavolcanics
 - [5] Fault Zone
 - 5A. Graphitic Gouge, Mud, Clay
 - 5B. Quartz Vein
 - [6] Ultramafic Intrusive Rocks (Undifferentiated)
 - 6A. Peridotite
 - 6B. Talc+/-Chlorite-Magnesite Altered Ultramafic
(may in part be Komatiitic Flows)
- Modifiers
- FY Pyrite
 - ASPY Arsenopyrite
 - CPY Chalcopyrite
 - SPH Sphalerite
- CHL Chlorite
 - SIL Silicification
 - SER Sericitization
 - CB Carbonatization
 - FUCH Fuchsite
 - GF Graphite
 - QV Quartz Veining
 - QCV Quartz-Carbonate Veining
- BX Brecciated
 - FLT Fault / Rubble
 - SNFLK Snowflake Textured Carbonate Alteration
 - SPX Spinifex

EOH 170.0m

 Au (ppb)



HOMESTAKE
MINERAL DEVELOPMENT COMPANY

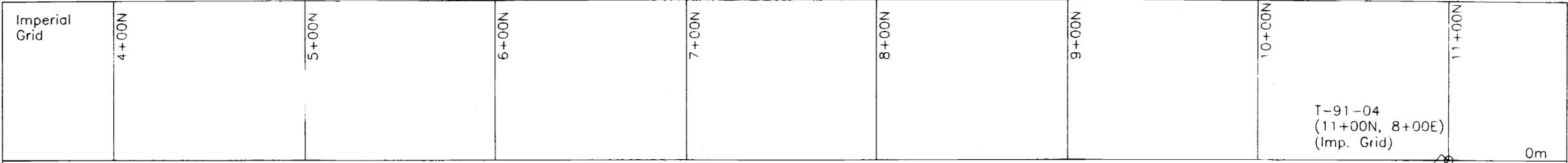


TULLY TOWNSHIP PROJECT

Diamond Drill Section
Hole T-91-03

Drawn: P.C.W.	Supervised: C. Bending
Date: March, 1991	Revised:
Province: Ontario	NTS: 42 A/14
Scale: 1:500	Drawing: T-91-03

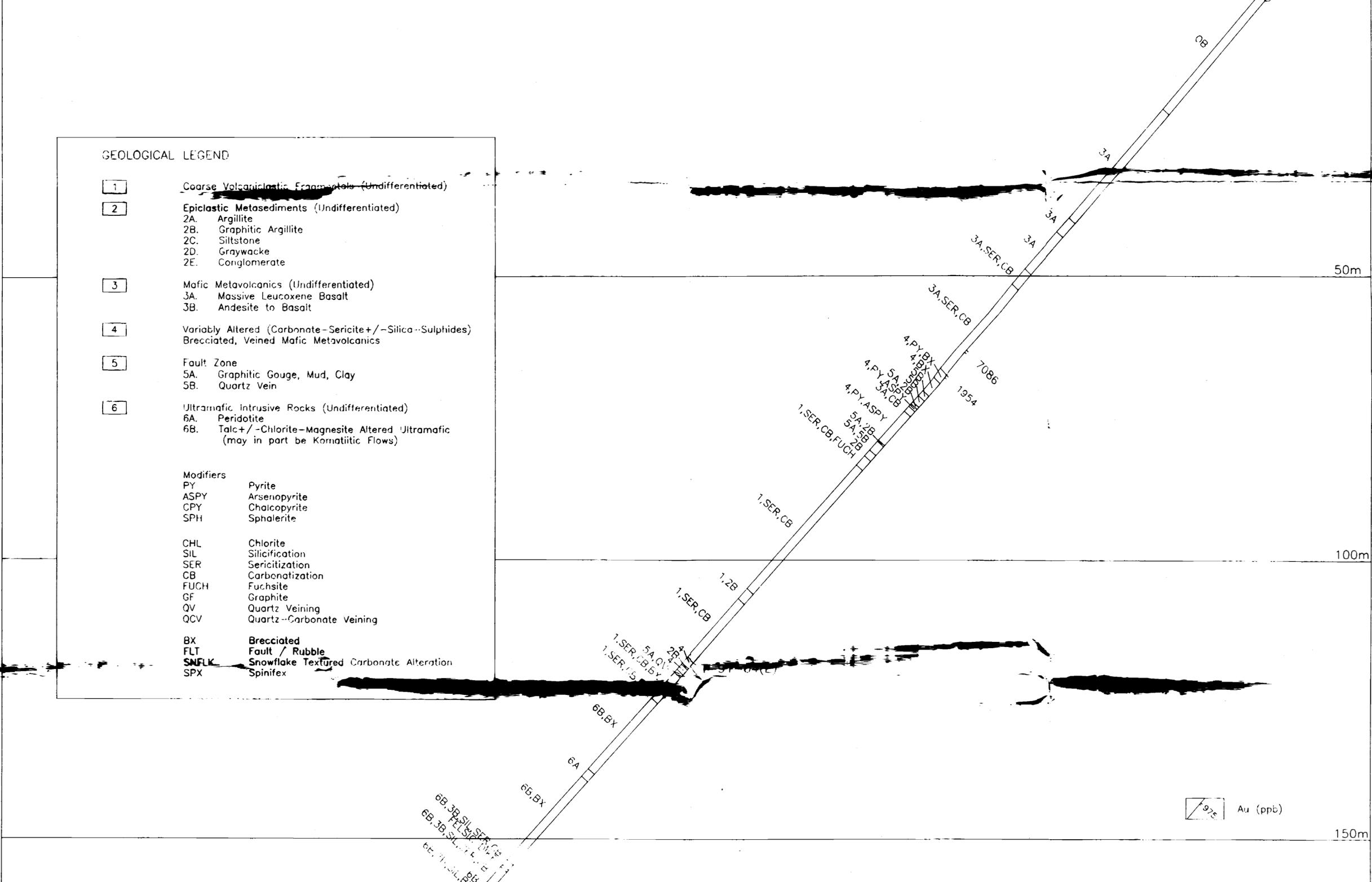




GEOLOGICAL LEGEND

1	Coarse Volcaniclastic Fragments (Undifferentiated)
2	Epiclastic Metasediments (Undifferentiated)
2A	Argillite
2B	Graphitic Argillite
2C	Siltstone
2D	Graywacke
2E	Conglomerate
3	Mafic Metavolcanics (Undifferentiated)
3A	Massive Leucoxene Basalt
3B	Andesite to Basalt
4	Variably Altered (Carbonate-Sericite +/- Silica-Sulphides) Brecciated, Veined Mafic Metavolcanics
5	Fault Zone
5A	Graphitic Gouge, Mud, Clay
5B	Quartz Vein
6	Ultramafic Intrusive Rocks (Undifferentiated)
6A	Peridotite
6B	Talc +/- Chlorite-Magnesite Altered Ultramafic (may in part be Komatiitic Flows)

Modifiers	
PY	Pyrite
ASPY	Arsenopyrite
CPY	Chalcopyrite
SPH	Sphalerite
CHL	Chlorite
SIL	Silicification
SER	Sericitization
CB	Carbonatization
FUCH	Fuchsite
GF	Graphite
QV	Quartz Veining
QCV	Quartz-Carbonate Veining
BX	Brecciated
FLT	Fault / Rubble
SNFLK	Snowflake Textured Carbonate Alteration
SPX	Spinifex



HOMESTAKE MINERAL DEVELOPMENT COMPANY	
TULLY TOWNSHIP PROJECT	
Diamond Drill Section T-91-04 & T-91-04(EXT)	
Drawn: P.C.W. Date: April, 1991 Province: Ontario Scale: 1:500	Supervised: D. Bending Revised: May, 1991 NTS: 42 A/14 Drawing: 91-4ext



Imperial
Grid

3+00N

4+00N

5+00N

6+00N

7+00N

8+00N

9+00N

10+00N

T-91-05
(10+00N, 12+00E)
(Imp. Grid)

0m

GEOLOGICAL LEGEND

- 1 Coarse Volcaniclastic Fragmentals (Undifferentiated)
- 2 Epiclastic Metasediments (Undifferentiated)
 - 2A. Argillite
 - 2B. Graphitic Argillite
 - 2C. Siltstone
 - 2D. Graywacke
 - 2E. ~~_____~~
- 3 Mafic Metavolcanics (Undifferentiated)
 - 3A. Massive Leucoxene Basalt
 - 3B. Andesite to Basalt
- 4 Variably Altered (Carbonate-Sericite+/-Silica-Sulphides)
Brecciated, Veined Mafic Metavolcanics
- 5 Fault Zone
 - 5A. Graphitic Gouge, Mud, Clay
 - 5B. Quartz Vein
- 6 Ultramafic Intrusive Rocks (Undifferentiated)
 - 6A. Peridotite
 - 6B. Talc+/-Chlorite-Magnesite Altered Ultramafic
(may in part be Komatiitic Flows)

Modifiers

- PY Pyrite
- ASPY Arsenopyrite
- CFY Chalcopyrite
- SPH Sphalerite

- CHL Chlorite
- SIL Silicification
- SER Sericitization
- CB Carbonatization
- FUCH Fuchsite
- GF Graphite
- QV Quartz Veining
- QCV Quartz-Carbonate Veining

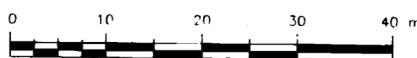
- BX Brecciated
- FLT Fault / Rubble
- SNFLK Snowflake Textured Carbonate Alteration
- SPX Spinifex

50m

100m

150m

9/3 Au (ppb)



EOH 235.0m

HOMESTAKE MINERAL DEVELOPMENT COMPANY

TULLY TOWNSHIP PROJECT

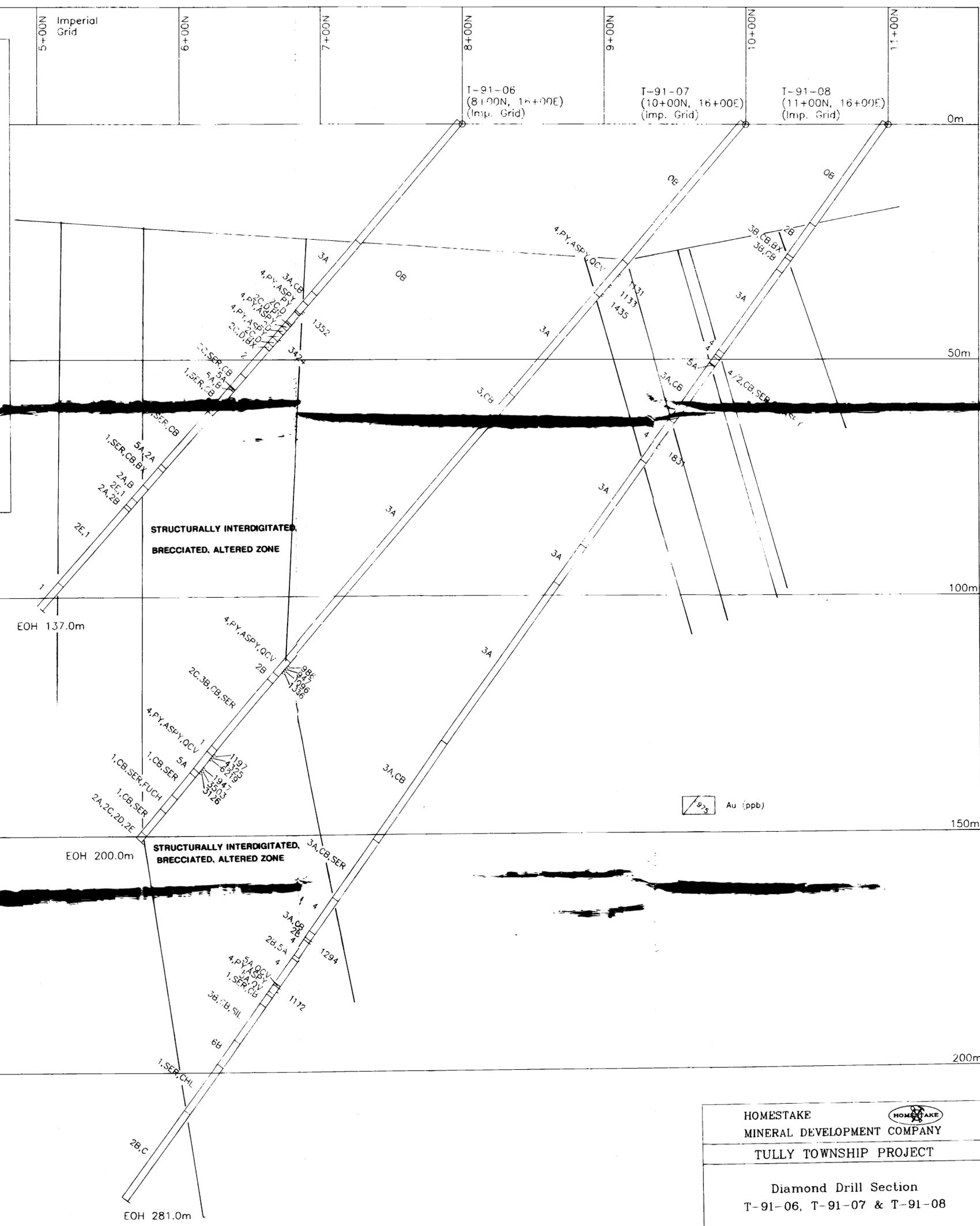
Diamond Drill Section
T-91-05 & T-91-05(EXT)

Drawn: P.C.W.	Supervised: D. Rending
Date: April, 1991	Revised: May, 1991
Province: Ontario	NTS: 42 A/14
Scale: 1:500	Drawing: 91-Sext



GEOLOGICAL LEGEND

- 1 Coarse Volcaniclastic Fragmentals (Undifferentiated)
 - 2 Epiclastic Metasediments (Undifferentiated)
 - 2A. Argillite
 - 2B. Graphitic Argillite
 - 2C. Siltstone
 - 2D. Graywacke
 - 2E. Conglomerate
 - 3 Mafic Metavolcanics (Undifferentiated)
 - 3A. Massive Leucoxene Basalt
 - 3B. Andesite to Basalt
 - 4 Variably Altered (Carbonate-Sericite+/-Silica-Sulphides) Brecciated, Veined Mafic Metavolcanics
 - 5 Fault Zone
 - 5A. Graphitic Gouge, Mud, Clay
 - 5B. Quartz Vein
 - 6 Ultramafic Intrusive Rocks (Undifferentiated)
 - 6A. Peridotite
 - 6B. Talc+/-Chlorite-Magnesite Altered Ultramafic (may in part be Komatiitic Flows)
- Modifiers
- FY Pyrite
 - ASPY Arsenopyrite
 - CPY Chalcopyrite
 - SPH Sphalerite
- CHL Chlorite
 - SIL Silicification
 - SER Sericitization
 - CB Carbonatization
 - FUCH Fuchsite
 - OV Quartz Veining
 - QCV Quartz-Carbonate Veining
 - BX Brecciated
 - FLT Fault / Rubble
 - SNFLK Snowflake Textured Carbonate Alteration
 - SPX Spinifex

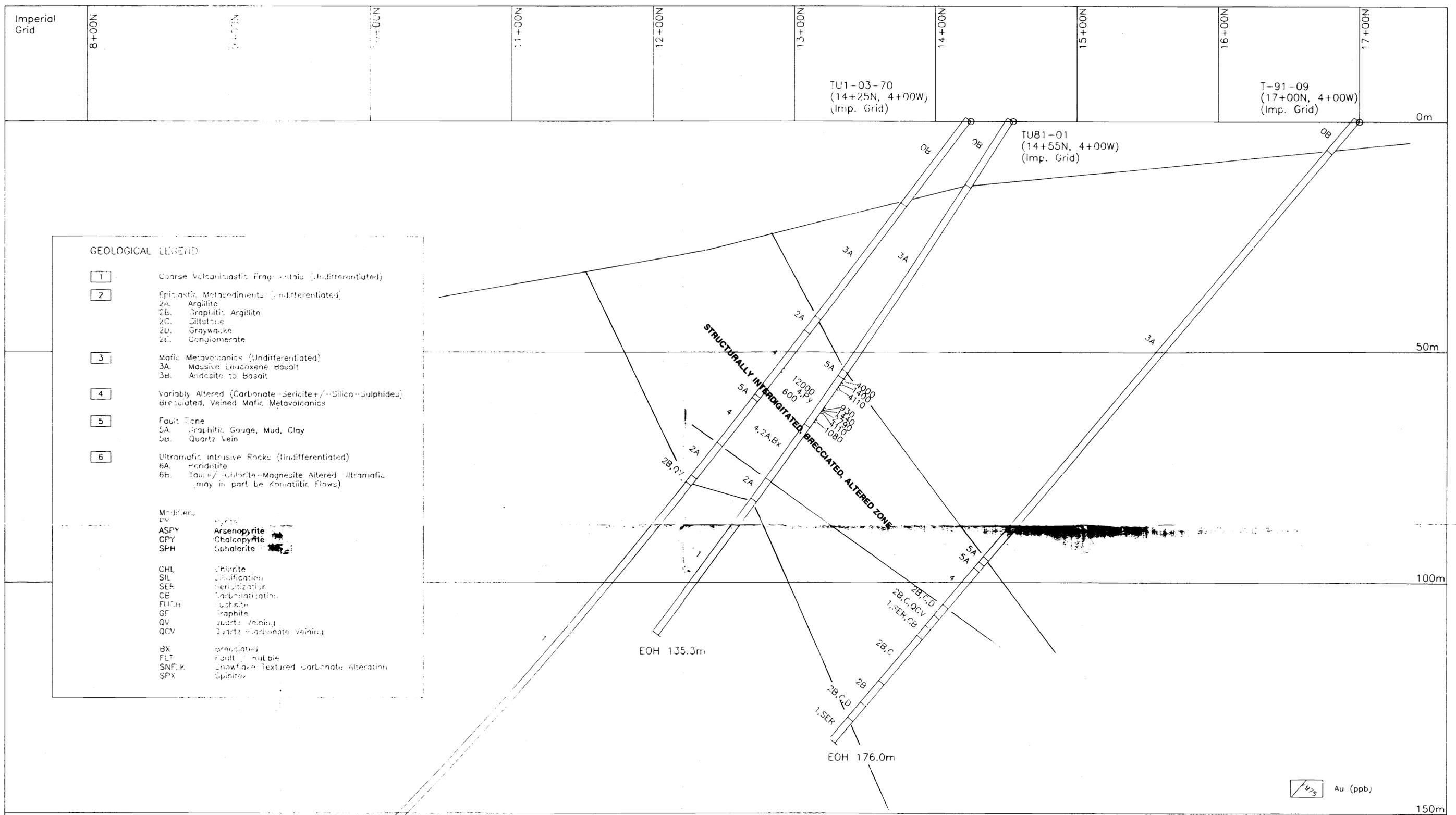


HOMESTAKE MINERAL DEVELOPMENT COMPANY
 TULLY TOWNSHIP PROJECT

Diamond Drill Section
 T-91-06, T-91-07 & T-91-08

Drawn: P.C.W.	Supervised: D. Bending
Date: Murch, 1991	Revised:
Province: Ontario	NTS: 42 A/14
Scale: 1:500	Drawing: T-91-678





GEOLOGICAL LEGEND

1	Coarse Volcaniclastic Fragments (Undifferentiated)
2	Epiblastic Metasediments (Undifferentiated)
2A	Argillite
2B	Graphitic Argillite
2C	Siltstone
2D	Graywacke
2E	Conglomerate
3	Mafic Metavolcanics (Undifferentiated)
3A	Massive Leucovene Basalt
3B	Andesite to Basalt
4	Variably Altered (Carbonate-Sericite+-Silica-Sulphides) Brecciated, Veined Mafic Metavolcanics
5	Fault Zone
5A	Graphitic Gouge, Mud, Clay
5B	Quartz Vein
6	Ultramafic Intrusive Rocks (Undifferentiated)
6A	Peridotite
6B	Talc/Sulphide-Magnesite Altered Ultramafic (may in part be Karamitic Flows)

Modifier	Symbol
ASP	Arsenopyrite
CPY	Chalcopyrite
SPH	Sphalerite
CHL	Chlorite
SIL	Silicification
SER	Sericitization
CB	Carbonatization
FLTH	Fuchsite
GP	Graphite
QV	Quartz Veining
QCV	Quartz-Carbonate Veining
BX	brecciated
FLT	Fault
SNFLK	Snowflake Textured Carbonate Alteration
SPX	Spinitex

HOMESTAKE

MINERAL DEVELOPMENT COMPANY

TULLY TOWNSHIP PROJECT

Diamond Drill Section
T-91-09, TU87-01 & TU1-03-70

Drawn: P.C.W.	Supervised: D. Bending
Date: April, 1991	Revised:
Province: Ontario	NTS: 42 A/14
Scale: 1:500	Drawing: T-91-09

