AR2009-055

REPORT OF WORK

For

Lochaber Lake Claim Block

Antigonish County Nova Scotia

NTS Map Sheet 11E 08/D

Centered on NAD 83 20T 573000 E, 5027400 N

May 2009

DNRMPT JUN15'09 10:48

By: Gerard Mazerolle BSc. Geol

Date: 8 May 2009

REPORT OF WORK

Lochaber Lake Claim Group

Antigonish County Nova Scotia

11E/08-D

Lic 07306

Centered on NAD 83 20T 573000 E, 5027400 N

HELD BY

Gerard Mazerolle and Scott Grant c/o: G. Mazerolle 88 Brookland Street Antigonish, NS. B2G 1V9

TABLE OF CONTENTS

Claim Group information	2
Table of Contents	3
Executive summary	4
Executive Summary Results	4
Introduction	5
Location and Access	6
Figure 1 Regional Location	7
Figure 2 Property Location	8
License Tabulation	8
Previous work	9
Geology	9
Work Performed	12
Work Diary	13
Conclusions and Recommendations	13
Bibliography	14
Statement of Qualifications, G Mazerolle	18

LIST OF FIGURES

Figure 1✓	Regional Location Map
Figure 2 🗸	Property Location Map
Figure 3 🗸	Drill Hole Location Map
Figure 4 🗸	Drill Hole Locations (Great Horne)

Appendix I - Drill Logs 🗸

Appendix II - Analytical Results and Analytical Procedures 🗸

Appendix III - Figures 3 and 4 \checkmark

Mary

Executive Summary - 2009

The dominant geological feature in the Claim group area is the Cobequid – Chedabuctou transform faults 1-2 and 7-8 kilometers south of the mineral property. They trend nearly east to west and divide the province into two different rock assemblages with different characteristics.

The southern is largely Ordovician to Devonian age Meguma group rocks with Windsor group evaporates and related sediments overlying basement granitic rocks. The rocks north of the fault have more variety though they are of equivalent age. There are more volcanic extrusive rocks and more frequent red and gray mudstones and finer sediments as well as more medium to coarse clastic sediments. The politic, Meguma rocks do not appear north of the faults. Younger intrusive volcanic and intrusive rock outcrops on and just south of the claims

The area north of the fault is the source of the coarser clastic rocks found in the beds of the basin between the two above mentioned faults. Brendon Murphy PhD St F.X.U (personal communication). Movement on the faults is believed to be in the range of 200 kilometers. The rocks in the basin south of the fault have a source in the southeastern part of Cape Breton Island. (ibid)

Mineralization in the Lochaber lake area is believed to originate in developments arising from events associated with this major structure. The quartz copper rich veins at the old College Grant mine (10% Cu over one meter) the West Lochaber deposit (1/3% Cu in 3-6 million tones of rock – both part of the present claim block) and the nearby Copper lake showing testify of a significant mineralizing event in and around the claim group.

Executive Summary RESULTS

MD.

The work in 2007-08 familiarized us with the nature of the property and the previous work. It was felt that there lacked one aspect of the past work that was lacking. That was that there was available a large amount of rock available at the core library in Stellarton that cannot be fully understood just by reading the old core logs. In fact two holes stored there have no core log record. They are LC83-01 and LC83-02. It was determined to examine all the rock available from the property, re-log the holes and create a log record for the two holes needing such work. Five samples were collected from this examination

and sent for analysis of their gold and 32 other elements by SGS Laboratories of Toronto.

The most notable observation is that the volcanics intersected in a number of the holes near the base of the limestone mineralized section was seen to be an intermediate — basic volcanic flow. It is best seen in the Goliath hole M19-97. It is water lain flow with a thinner bottom chill margin. The top has some calcite and rare chalcopyrite in the amygdules. The top chill zone is three times thicker than the basil chill zone. There is greater alteration at the top. A fault (near strike slip) separates the magnetic coarse basil core of the flow from the more altered non magnetic top of the flow. This is a significant observation as the known deposit sulfides could have a black smoker fumarole source somewhere in the basin

INTRODUCTION

M

The core examination did reveal that there is hematite associated with the gabbro – volcanic rock as well as some of the sediments observed on the property the previous year. The Hematite alteration at Lochaber is less intense and less widespread than at Mt Tom. In the process of comparing the mineralization it was realized that the Lochaber rocks have never been assayed for gold. The core samples taken from the old Lochaber holes in 2009 have therefore been sent for gold analysis. The 32 other elements in the analysis will permit a better comparison of other IOCG showings with such data. In 2009 an assessment file by Scominex was found that shows two anomalous heavy mineral concentrate (HMC) gold sample values in McNabb Brook 400 meters north of the Lochaber property. No HMC samples were taken by Scominex from within the Lochaber claim block. If a gold association can be linked to the Lochaber property the economics for exploration here will be greatly enhanced.

The presence of the world experts in IOCG deposit exploring along the Cobequid fault (Minataur Resources) has dropped much of their original 27,000 claims but they have maintained a ring of 720 claims centered on this Lochaber exploration license.

It would appear that Minotaur Resources has a gravity anomaly of interest on or near the Lochaber license.

With a grasp of the assets of the property it will then be easier to interest a larger exploration company in committing the resources to properly explore the true potential of the claim group.

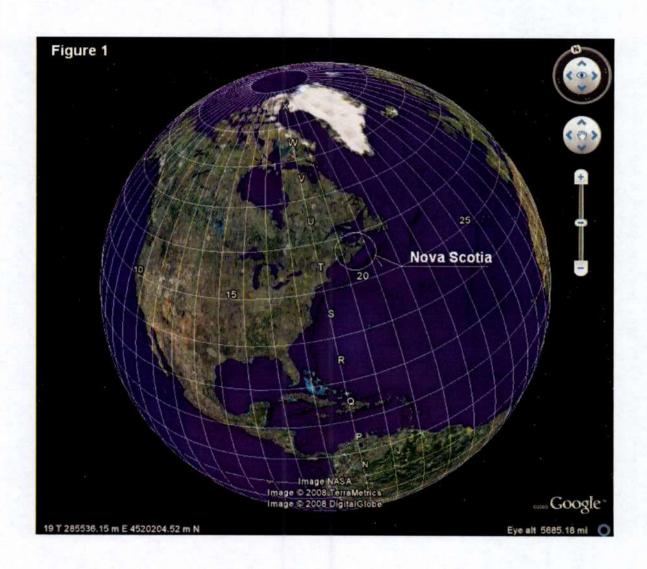
Ten days were spent at the core library examining and re-logging the core available there.

LOCATION AND ACCESS

The property is located about 35 kilometers southeast of the town of Antigonish which is located on the Trans Canada Highway. The number seven paved highway leads from Antigonish down the east side of Lochaber Lake. Just past the end of the lake an all weather dirt road branches to the west up the west side of the lake. At the south end of the lake another secondary road heads west to give access to the west side of the claim block.

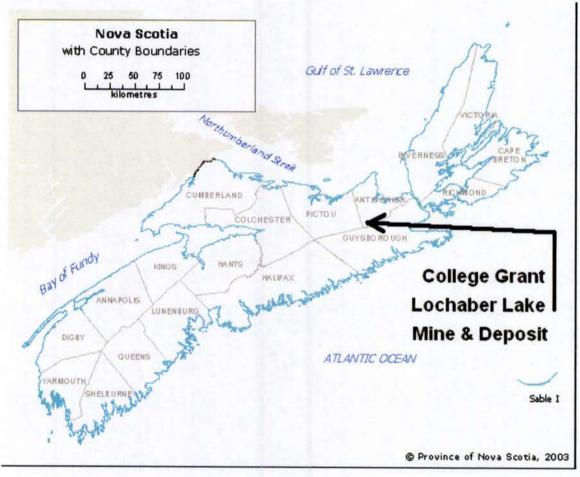
The claims are located on the west side of Lochaber Lake near its southern end. The eastern side of the claims is traversed by an all weather dirt road along this side of the lake. From this road there are a number of private roads that turn westward and climb the hill from the lake to give access to the northeastern claims of the block. Near the southern end of the lake the College Grant road turns north and gives excellent access to all parts of the property by way of some excellent woods roads and 4X4 trails branching off of it.

The local relief on the property ranges from 50 to 100 feet over the bulk of the property on the plateau west of Lochaber Lake. The relief from Lochaber Lake to the plateau to the west is in the order of 300-400 feet. The land is well treed on the steeper slopes and in a few pockets in the north east. The remainder is generally covered with recent growth or young tree farms and blueberry fields. Much of the treed areas are low, sometimes wet ground.



LOCATION MAP

Figure 2



LICENCE TABULATION

The fifty claims of License # 07306 are in the first year of their license. They are all positioned on NTS map sheet 11E/08-D of the Nova Scotia Claim map system. The claims are in the name of Gerard Mazerolle with Scott Grant as a 50% unrecorded partner in the claims. The claims are enumerated as follows. (See Figure 3)

Claim	Tract	Reference Map
ABGH JKQ	20	11 E 08 D
CDEF GHJK LMNO PQ	21	11 E 08 D

EFGH JKLM NOPQ	22	11 E 08 D
ABCD EFGH JKLM	27	11 E 08 D
ABCD H	28	11 E 08 D

PREVIOUS WORK

Rich copper quartz veins were discovered and exploited in the early days of settlement in the area. The first mention of copper here has a date of 1887. A shaft was sunk at College Grant sometime later. Some exploitation of the rich quartz copper ore was undertaken at that time. The shaft has been recently filled in and is now surrounded by blueberry fields. In the 1980's the department of natural resources drilled three holes about 800 meters northeast of the old shaft on a magnetic feature that is related to a linear diorite - gabbroic intrusion into which the veins are believed to have developed.

The known Copper bearing veins are located in the southwest part of the present claim group.

In the central to northeast portion of the present claim block along strike with the above mentioned intrusion(s), work By Great Horn Mining Syndicate (Great Horn) in the 1970 located and drilled a resource of about three million tones of about 1/3% copper with another possible 3 million tones of about the same grade. Over the years VLF-EM, Magnetic, soil and till geochemistry surveys as well as trenching and drilling have been carried out over the ground covered by the present claims by the Nova Scotia government and various companies.

Recent work By Goliath Copper Fields Limited state; as a result of their drilling; that the deposit contains higher grade material than given in the Great Horn resource and that the deposit extends to the northeast and southwest of the Great Horn deposit. The wide mineral intersections 25 to 65 metres, open the door to a resource of significant size on the claims of the license. Further the presence of mineralization in the footwall of the impure limestone- siltstone in a synclinal structure about 500 meters across gives continued exploration in the area a strong probability of adding to the known resource.

GEOLOGY

The property is metamorphosed to greenschist facies and the younger carboniferous rocks overlap the older Ordovician age maroon felsic volcanic rock found in the north and Northwest of the claims. The

younger sediments; outcrop in the form of a northeast – southwest trending anticline with maroon siltstone – shale (with a sandy facies in the west) are underlain by tan weathering dolomitic limestone which is above a gray – blue ribbon limestone near the core of the anticline.

Through this structure, trending in the same direction, is a diabase or gabbroic intrusions following closely a splay fault off of the east – west Cobequid fault a few kilometers south of the claims.

Sample CG-06-08 found last year is a fractures chlorite (greenstone) with hematite and chalcopyrite in the fractures. This now is believed to be a greenstone (intermediate-basic volcanic flow)

Mineralization is said to be contained in the lower 65 meters of a weakly metamorphosed calcarious rocks. They are dolomitic or bleached limestone in close proximity to this fault. Some evidence of alteration is seen by the presence of epidote, chlorite, calcite, hematite mineralization in veins and fractures. The rock series contains units of maroon to gray argillites, ribbon limestone – shale, siltstone and black to green – gray shale. These rocks strike northeast to southwest with some local deviations to about 016° north the most common exception. Bedding dip is to the northwest usually at about -75°. There are various dips indicating some folding but there is only one indication of a large anticline described above. Goliath says that there is an andesite flow or sill near the base of the mineralization. This was seen and verified in some of the core logged by the author. The best section is in hole M19-97 the rock is believed to be an andesite by the author.

This is a significant observation as it indicates that subsea volcanism was taking place at or near the same horizon as the Lochaber Lake deposit. This opens the possibility that the fine economic sulfides disseminated in preferred limestone — marl laminations have a black smoker source located in the depositional basin near the volcanic flows upper surface. The economic minerals in the lower 65 metres of the limestone-marl would be the drift of smoker sulfides and not originating from emplacement in a secondary fracture system developed at a later date. It needs to be noted that some of the Lochaber sulfides are in fractures and in small fractures but the overall sense is that the mineralization is primarily associated with the edges of some fine bedding laminations.

The College Grant and Lochaber lake deposits are located along the Copper Lake (4 km NE of the Claims Block) College Grant fracture zone. A fault is reported from drill holes to be 7 feet wide and about 100 feet (33 Metres) above the lower siltstone at the West Lochaber deposit. This too was observed by Mazerolle in re-logging the core. This fault is also best seen in Goliath hole M19-97. A very strong fault is recorded in most of the re-logged drill holes at a very low angle to the known NE strike of the bedding. It is also less than 100 feet (33 meters) above the Limestone-marl contact.

ጠ

The altered diorite intrusion at college Grant and diabase dykes (logged in the previous drill holes – Mazerolle sees them as an intermediate flow or flows). These intermediate bodies follow the NE-SW trend of the fault - fracture as it passes along a syncline near the base of the limestone – marl unit. This limy unit is in excess of 210 metres thick. The limestone has varying degrees of purity from finely banded blue gray limestone with fine black shale inter-beds to cream colored massive pure limestone – dolomite. The massive pure limestone is seen in float samples in the brook downstream of the deposit. This unit is overlain by red to gray siltstones.

Old logging has suggested that drilling results show that these rocks are cut by diabase as well as small feldspathic dykes. Re-logging of available core by Mazerolle suggests that there is at least one intermediate mafic flow a few tens of meters above the base of the limestone — marl maroon siltstone contact. It is entirely possible that the other "dykes" logged previously by others are also volcanic flows. The mafic rocks (dykes) have been detected by the magnetic surveys that have been conducted on the property by others. The mafic rocks (dykes) trend with the fracture zone and the bedding in a NE – SW direction.

The West Lochaber deposit is located in the bottom 25 to 65 meters of the calcareous unit. In other words the volcanic flow is in the 65 meters of the mineralized Lochaber copper deposit horizon.

Goliath Copper reports that a reef limestone sequence was intersected in some of their drill holes. They believed that copper mineralization was related to or of higher tenor near this reef. This reef was seen in Goliath hole M18-97 from 268.75 to 295.33 feet. The limestone has a red to pink hue it is very vuggy and is not mineralized. A well formed crystal of barite was observed in one of the vugs. Barite is seen in pale pink to cream colored coarse carbonate veins or beds when it is sufficiently large enough to be noticed by hefting or by the lack of fizz when 10% hydrochloric acid is added. The author believes that barite is more common than previously thought. It appears in the marble and coarse crystalline part of the deposit and the use of a gravity survey may be helpful in locating any barite concentrations

associated with the deposit. There is sufficient drilling to have located most of the dense basic rock and therefore that gravity signature should be extractable from the results leaving barite – sulfide sources that could then be drill tested.

WORK PERFORMED

In 2009 all the work time was spent examining the drill core in storage at the Stellarton Core facilities of the Nova Scotia Department of Natural Resources. The core was logged for the first time in detail in the case of LC-83-01 and LC83-02. All the other holes were reexamined and a new log written for them. The activity was of value as the author is certain that the volcanic unit within the deposit envelope is a volcanic flow and not a dyke as previously reported. Barite was also observed to be a notable constituent of the deposit envelope. Five core samples were collected for multi element assay to see the element distribution in the mineralization of the deposit. Gold is part of that assay package presently being completed by SGS Laboratories of Toronto.

In preparing for a Prospectors and Developers display on the property a 1987 regional heavy mineral concentrate (HMC) survey map by Scominex was found. It shows two notable gold values in McNabb Brook less than 400 meters from the northeast corner of the property and on strike with the deposit horizon. The values are 1420 ppb which is down stream of the second value of 1360 ppb gold in that brook. No samples were taken in the waters draining the present Lochaber Lake claims. It is therefore of top priority to test the core, rocks and drainage sediments of the property for their gold content, since that has never been done and the presence of gold would add significantly to the economics of the deposit.

The holes examined at the core library are:

Goliath Copper drill holes

M17-97

M18-97

M19-97

Government drill holes

LC83-01 - no known log - sample #247753, 0.9meters, Sheared gabbro

LC83-02 -no known log

LC83-03 Samples #247754 – 1.0meter. cu minerals #247755 – 0.5meter. Py check for gold

(1)

LC83-04 Samples #247751 - 1.0 meter. Gray Ls below breccia, py #247752 - 1.20meter. 3%diss.py chalky Ls

Great Horn Mining syndicate drill holes

GH#08 - 1971 -very poor condition logged by box number

GH#10 - 1971

GH#13 --1971

In speaking with a local land owner he mentioned that the "old people" had said that there was gold in a brook north of the College Grant showing. No gold is known in rocks on the property. Low levels of silver accompany the quartz, carbonate, copper veins at College Grant.

WORK DIARY

The work in 2009, examination of and logging the drill core presently available from the property claims was completed on 25, 26, 27, 30, 31 March, 01, 02, 03, 07, and 08 April. Prepare samples for shipping and choose assay codes by studying the analytical methods for each took .5 day on 09 April. Martin Flurin was hired as helper on the on the 1, 2, 3, 7, 8 of April. The drill logs were typed by Sandy Mazerolle over two days 18, 19, May.

The report was written in two days the 08 and 12 of May 2009.

G. Mazerolle 25, 26, 27, 30, 31 March. 1, 2, 3, 7, 8, April - Core

G. Mazerolle half day 9 April -Assay selection. 8, 12, May report.

S. Mazerolle 18, 19 May type drill logs

Martin Flurin, Antigonish -1, 2, 3, 7, 8, April help moving core.

CONCLUSIONS AND RECOMMENDATIONS

The recent drilling on the property by Goliath Copper returned copper intersections of 5 feet with greater than 1% copper in the area of the Great Horne deposit. There can be no doubt that the drilling to date has not completely delineated the Great Horne deposit nor has drilling tested either of the soil anomalies to the Northeast and the southwest. The property has drill ready targets in the carbonate contact zone from east of the goliath drilling at about 20T 0574500E, 5028325N (about 300 meters from the brook outcrops) extending to the southwest for about 2.0 kms to the area of the College Grant mine.

Location of the most recent grid is needed along with brushing it out and extending it to the southwest to the area of the College Grant mine. Additional till sampling of the base of the limestone sequence along the trend southwest of the work done by Goliath should be done to locate additional drill targets over and above the two additional soil copper anomalies already detected but not drilled by Goliath. They did not do this work because of the low copper price (70 cents/lb), when they held the property. The grid base line was cut out only 10 years ago so parts of it should still be detectable. Four wheeler roads should give good access to equipment suitable for sampling the till along this trend down to about 10 meters depth. If good control of the location of the carbonate lower contact is possible 70 to 100 till samples would be sufficient to test one kilometer of the contact. Samples should be taken at 50 meter intervals with every second line having sample stations 25 M and 50m from the baseline. This would test 200 m wide by 1.2km long (poor control) or 1.5km with good contact location data.

A full compilation of data on the property in a computer data base would be helpful in modeling the potential of various areas and would be invaluable in guiding any future drilling.

The property is ready for deposit delineation drilling after a control grid is established and some of the previous work correlated with it.

The re-logging of the drill core extends the possibility of mineralization being associated with the possible syngenetic deposition of the sulfides.

An effort should be made to determine who took the samples for study from some of the holes re-logged The location and size of those study samples were identified in the new drill hole logs. (see appendix I) An attempt should then be made to obtain a record of the results of that study. There are more than fifty such samples identified in the relogged holes.

Lastly the property drainage should have heavy mineral concentrate samples collected at about 300 meter intervals and those analyzed by INNA for their gold content. It would be a great addition to the database on the property to see if gold is associated with mineralization on the property.

Gerard J Mazerolle BSc Society Mazerolle OSc.

BIBLIOGRAPHY

Northcote, K.E., O'Riley, G.A., McMullin, J.M. 1987, Lochaber lake Copper, Mines and Minerals Branch, Report of Activities 1987, Part A, pp 144-145.

Doiron, M.L., 1985, A petrographic Study of the College Grant Copper deposit, Antigonish County, Nova Scotia, B.SC Thesis, St Francis Xavier University.

Northcote, K.E., Demont, G.J. and Armitage, A.E., Lochaber lake Copper in Selected Mineral Occurrences of the Antigonish area, Open File report 89-003, pp13-21.

Northcote, K.E., Demont, G.J. and Armitage, A.E., College Grant in Selected Mineral Occurrences of the Antigonish area, Open File report 89-003, pp 07-11.

- 3. Geological Map for Part of NTS 11E/08, Lochaber Area, Nova Scotia [1:50 000], by Murphy, J B, St Francis Xavier University; Rice, R J, St Francis Xavier University, Open File Map ME 2005-112, 2005, 0 page(s), 1 map(s). ISN: 20829
- 4. Iron, Copper, Gold, Copper Lake, Antigonish County, Nova Scotia. Report on Diamond Drilling, and Drill Core Sampling and Chemical Analyses [Drilling on the Copper Lake Property, Exploration Licences 05219 and 05256], by Setterfield, T. Monster Copper Resources Incorporated; Wallbridge Mining Company Limited, Assessment Report ME 2005-029, 2005, 65 page(s), 7 map(s). ISN: 20909
- 13. Base Metals, Lochaber Lake Area, Antigonish County, Nova Scotia. Report on Geological Mapping, a Compilation of Previous Work on the Property, and an Airborne EM and Magnetic Survey [Report of Mineral Exploration Activities in the Lochaber Lake Area, Exploration Licences 04300, 04279, 04032, 04333, 04034, 04033, 04026, 04332, 04025, 04029, 04031, 04278], by Palmer, D A S, Goliath Copperfields Limited; Ross, J D; King, M S; Sial Geosciences Incorporated, Assessment Report ME 2000-066, 2000, 82 page(s), 47 map(s). ISN: 19669

- 16. Copper, West Lochaber, Antigonish County, Nova Scotia. Report on Trenching, Rock Sampling and Geochemical Analyses, a Till Geochemical Survey, and Drilling and Drill Core Geochemistry, by Ross, J D, Goliath Copper Fields Limited; Mitz, L R; Thomson, A C, Assessment Report ME 1998-028, 1998, 51 page(s), 4 map(s). ISN: 19101
- 18. Copper, West Lochaber, Antigonish County, Nova Scotia. Report on Magnetometer Survey, Exploration Licences: 01672, 01672A and 01672B, by Scott, F, Fenton Scott Management Incorporated; Geosleuths Limited; Mitz, L R, Assessment Report ME 1997-043, 1997, 11 page(s), 6 map(s). ISN: 18696
- 19. Copper, Limestone, Lochaber Lake, Antigonish County, Nova Scotia. Report on the Geology, Exploration History, Resource Estimates and Marketing Analysis of the Lochaber Lake Copper Deposit, by Hannon, P J F, MineTech International Limited; Scott, F, Fenton Scott Management Incorporated; Mitz, L R, Assessment Report ME 1996-022, 1996, 26 page(s), 1 map(s). ISN: 18206
- 35. Base Metals, Precious Metals, West Lochaber, Antigonish County, Nova Scotia. Report on Prospecting, Rock Sampling and Chemical Analyses [Engineering Report Covering Work Carried Out on the Lochaber Claim Group Licence No. 13384], by Dawe, J E; Tri-Explorations Limited, Assessment Report ME 1989-258, 1989, 36 page(s), 5 map(s). ISN: 11562
- 37. Gold, College Grant, Antigonish County, Nova Scotia. Report on Prospecting, Rock Sampling and Chemical Analyses [Report Covering the Work Carried Out on the Lochaber Lake Claim Block Exploration License No. 13384], by Dawe, J E; Tri-Explorations Limited, Assessment Report ME 1988-305, 1988, 13 page(s), 3 map(s). ISN: 11029
- 44. Geology of North Lochaber Lake, Antigonish County, Nova Scotia [NTS 11E/08], by Daneau, M, St Francis Xavier University, Thesis ME 641, 1986, 48 page(s), 6 map(s). ISN: 10774
- **45.** Style and implication of Shear Zone Deformation of Acadian Age in Southern Antigonish Highlands, Nova Scotia, by Rennie, C F, St Francis Xavier University, Thesis ME 761, 1986, 59 page(s), 9 map(s). ISN: 11823
- **48. Drilling Logs of Government Core Drills-1984,** by MacDougall, I, Nova Scotia Department of Mines and Energy; Polley, D E, Nova Scotia Department of Mines and Energy, Report ME 1985-004, 1985, 27 page(s), 11 map(s). ISN: 9103
- **50.** Drilling Logs of Government Core Drills 1983, by MacDougall, I, Nova Scotia Department of Mines and Energy; Polley, D E, Nova Scotia Department of Mines and Energy, Report ME 1984-005, 1984, 38 page(s), 12 map(s). ISN: 6969

- 54. Copper, Lochaber Lake, Antigonish County, Nova Scotia. Report on Geology and Soil and Till Geochemical Surveys, by McCulloch, P D; Bluestack Resources Limited, Assessment Report ME 11E/08D 13-B-19(03), 1983, 17 page(s), 13 map(s). ISN: 5716
- 58. Copper, Lochaber Lake, Antigonish County, Nova Scotia. Report on a Till Geochemical Survey, by McCulloch, P D; Bluestack Resources Limited; Selco Incorporated, Assessment Report ME 11E/08D 13-B-19(02), 1982, 16 page(s), 3 map(s). ISN: 5586
- 64. Geophysical Series for Antigonish-Pictou Highlands, High Resolution Aeromagnetic Total Field, Vertical Gradient and Summary Maps: Scale 1:25 000, by Geological Survey of Canada; Nova Scotia Department of Mines and Energy, Open File Report ME 461, 1980, 0 page(s), 30 map(s). ISN: 1180
- 80. The Geology of the North Section of the Lochaber Lake Area, Antigonish County, Nova Scotia, by Ball, R G, St Francis Xavier University, Thesis ME 006, 1976, 19 page(s), 5 map(s). ISN: 520
- 84. The geological relationship of the Rocks bordering the Chedabucto Fault immediately south of Lochaber Lake, by Hearn, W, St Francis Xavier University, Thesis ME 150, 1976, 15 page(s), 2 map(s). ISN: 5419
- 85. The Geology of Chisholms Island, Lochaber Lake, Antigonish County, Nova Scotia, by MacDonald, R B, St Francis Xavier University, Thesis ME 223, 1976, 37 page(s), 8 map(s), ISN: 5748
- 86. College Grant Copper Mine and its geologic setting, by Kontak, D J, St Francis Xavier University, Thesis ME 196, 1976, 45 page(s), 7 map(s). ISN: 6110
- 93. Copper, Lochaber Lake, Antigonish County, Nova Scotia. Report on Lochaber Lake Copper Property Reserves, by Hooper, M J, Great Horn Mining Syndicate Incorporated; Great Horn Mining Syndicate Incorporated, Assessment Report ME 11E/08D 13-B-19(01), 1972, 10 page(s), 0 map(s). ISN: 2744
- 96. Copper, College Grant, Antigonish County, Nova Scotia. Miscellaneous Memo, by Holbrooke, G L; Shea, F S; Goudge, M G, Assessment Report ME 11E/08D 13-B-09(00), 1966, 3 page(s), 1 map(s). ISN: 2422
- 98. Total Heavy Minerals Soil Geochemical Map of the College Grant Area-11E/08D [1:7 200], by MacCormack, L, Nova Scotia Department of Mines and Energy, Open File Map ME 1966-018, 1966, 0 page(s), 1 map(s). ISN: 10017
- 99. Soil Geochemical Map of the College Grant Area-11E/08D [1:7 200], by MacCormack, L, Nova Scotia Department of Mines and Energy, Open File Map ME 1966-017, 1966, 0 page(s), 1 map(s). ISN: 10018

- 100. Geological Map of the College Grant Area-11E/08D [1:7 200], by MacCormack, L, Nova Scotia Department of Mines and Energy, Open File Map ME 1966-016, 1966, 0 page(s), 1 map(s). ISN: 10019
- 106. Surficial Geology Map of the Lochaber Area, 11E/08E [1:50 000], by Nova Scotia Department of Mines and Energy; MacNeill, R H, Nova Scotia Research Foundation Corporation, Open File Map ME 1956-028, 1956, 0 page(s), 1 map(s). ISN: 9453
- 119. Copper in Nova Scotia, by Messervey, J P, Nova Scotia Department of Mines and Energy, Annual Report 1928, 1929, page(s) 355-394, 0 map(s). ISN: 1575

STATEMENT of QUALIFICATIONS

- I, Gerard J. Mazerolle, of Antigonish, Nova Scotia do hereby certify that:
 - 1. I am a consulting geologist residing at 88 Brookland Street, Antigonish, Nova Scotia
 - I am a graduate of St. Francis Xavier University of Antigonish having a B.Sc. and B.Ed degree from that institution.
 - 3. I have been practicing my profession for forty years in Canada and Maine, USA.
 - 4. I am a member of the Prospectors & Developers Association of Canada.
 - 5. I completed the work described in this report on these claims in the year 2008 and 2009.
 - 6.
 - 7. I do have a direct interest in the mineral claims described in this report being half owner with Scott Grant..

Sarahaf Mantrolle Gerard J. Mazerolle





Diamond Drill Record	partment of Mine		DDH # LC-83-0	4	D# ONE
Diamond Drill Record .		Property	DDH # LC-83-0	1	Page# ONE
Property: Lochaber Lake - College Grant	Azimuth: 174° Az		Depth	Dip	Azimuth
Location:	Dip at Collar: -45°				
Easting: 20T 572706.18 E	Date Started: 12 October	er 1983			
Northing: 5027850.95N	Date Completed: Noven	nber 1983			
Elevation of Collar: N/A					
Total Depth: 652ft. (199M)	Core size: NQ				
REMARKS:					·
Location approximate					
· · · · · · · · · · · · · · · · · · ·					
				ł	

.

 \bigcirc

Hole # LC-83	-01	Diamond Drill Record	Page_02	of _02	COMPANY: Nova Scotia Department of Mines					
1-41										
Interval Meters	Rock Type	D	Planar	(Clo #	Interval	Sample	A	Assays	A	
	ROCK Type	Description	Feature	Sample #	From To	Length	Au oz/T	Ag oz/T	Au ppb	
From To 0 - 0.70m	Overburden	No core	Angle				 			
0 - 0.70m	Overbarden	INO COIE		 			<u> </u>			
0 - 0.80m	Gabbro - Diabase	Fine to medium grained, slightly propalitic altered Gabbro. Feldspars give a spotty appearance. Feldspars are slightly greenish altered. No carbonate and strongly magnetic. Tr very minor pyrite (py) – COULD BE BOULDER								
0.80 - 94.50m	Maroon Mudstone - siltstone	Generally competant rock. Locally fine laminations. From 10 m to 68.80m numerous fractures with carbonate and green chlorite 10° - 30°. From 13 - 27.1m (1meter competant section 16.1 - 17.5m) Largely shattered rock to 35m. Broken core 45.70 - 53m; 62.0 - 68.90m. Bedding is largely 45° to the CA. Local Qtz veining 54.85m, 2 cm;55.42 - 55.49m. Carbonate veining with shearing and chlorite. Some alteration - bleached specks in paler bands as at 60.40m. At 87.20m carbonate with dendritic manganese some epidotein veins& shears as at 82 to 86 m. Broken core 85.40 - 90.15m. Change in core size at 90m (295ft). Qtz carbonate veins at 87.90 top for 10 cm; at 89.60 - 89.80m	06.00m- 25°; 16.20m-30°; 35.50m- 45°; 58.00m- 25°; 60.00m- 40°; 69.30m- 40°;							
94.50 - 94.97m	lithic limestone?	Fine grained calcarious mudstone, ocre colored ocre- blue- gray. Grades to a conglomerate for 30 cm -Tops over?								
94.97 - 195.99m	Maroon sandy -	Well broken maroon sandy siltstone, some blue gray sections. Local qtz, qtz- carbonate chlorite veins up to 3-4 cm thick usually across core at 40° - 70° to CA. At 156.36m to 162.46m section about 20% qtz carbonate veinlets some chlorite. Gouge zone 161.50 to ??.??- friable earthy core.	100.00m 40°; 120.30m 35°			٠				
195.99 -198.13m		Much clay alteration, locally some relict fine bands as at 196.95 - 197m. Transition section to highly epidotized very friable sheared with hematite tr py gabbro. Carbonate vein at 197.28m - 197.37m coarse grained. Well altered epidotized very friable broken Gabbro. Trace of pyrite -	197.00m 70°							
198.13 -199.03m		sampled.		#427753	198.13-199.03m	0.90 m				
199.03	EOH									
· · · · · · · · · · · · · · · · · · ·										
				<u> </u>						
							1			

Diamond Drill Record	Property	DDH # LC83-02		Page# ONE
Property:Lochaber Lake - College Grant	Azimuth: 170° Az	Depth 49.38m	Dip	Azimuth
Location:	Dip at Collar: -45°			
Easting: 20T 572886.09E	Date Started: November 1983			
Northing: 5027806.94N	Date Completed: December 1983			
Elevation of Collar: N/A				
Core Size NQ				
REMARKS:				-

Hole #_LC83	-02	Diamond Drill Record	Page_02	of _02	COMPANY:Nova Scotia Department of Mines					
Interval	<u> </u>		Planar		Interva		Sample	_	Assays	-
- IIICI TGI	Rock Type	Description	Feature	Sample #		To		Au oz/T	Ag oz/T	Au ppb
From To	Trees Type	Decempton.	Angle	Oumpic #	110/11		Longar	AG 021	/ / OD T	Tra ppo
	Overburden	Broken and ground core. Mostly maroon silty mudstone, but there are two pieces of gabbro that are highly epidotized and altered with 0.5% disseminated pyrite				-				
4.88m -13.41m	Marcon silty mudstone	well broken core to 6.40m some shearing - slippage evident, some 2-3mm carbonate veinlets. From 6.40 to 7.32m gray silty- sandy interbeds, some white clay on some fracture surfaces.	08.40m- 38°: 11.50m- 23°							
13.41 - 44.81m	LOST CORE	Box footage numbers jump to 44.81m Then there are fragments about 0.80m of fregments to the end of the hole marked at 49.38m					<u></u>			
44.81 - 49.38m	Maroon silty mudstone	Rubble is maroon siltstone- mudstone		·						
49.38m	ЕОН		ļ. <u></u> .							
			ļ	<u></u>		!		_	<u></u>	
			 					- 		
			 	<u></u>		-+				
	<u> </u>	-	<u> </u>	 			_			· <u> </u>
			- 	-		\dashv		-		_
<u></u>						\neg				
. <u>-</u> -				<u> </u>						<u> </u>
	<u> </u>		ļ		<u> </u>					
			ļ							_
- ·			 							·
	 		 -					<u> </u>	<u> </u>	
		<u> </u>	 -						_	
			-	 						<u> </u>

Diamond Drill Record		Property	DDH # LC83-03		Page#
Lochaber Lake - College Grant	Azimuth: 172° Az		Depth: 150.6 m	Dip	Azimuti
Location:	Dip at Collar: -45°				
Easting: 20T 572411.67 E	Date Started: Decemb	per 1983			
Northing: 5027610.10N	Date Completed: Feb	ruary 1984			
Elevation of Collar: N/A					
Core Size: NQ					
REMARKS:					

.

Hole #_LC83	-03	Diamond Drill Record	Page_02	of _02	COMPANY:	Nova Sc	otia Depa	rtment of	<u>Mines</u>
Interval			Planar	<u> </u>	Interval	Sample		Assays	
	Rock Type	Description	Feature	Sample #			Au oz/T		Au ppt
From To	110011195	B B B B B B B B B B B B B B B B B B B	Angle	Campie ii	110111	Longar	110 021	rig CD.	7.4 22
	Overburden	Red clay cemented stones of 2-4cm diameter	7 419.0	 			<u> </u>	 	
	0.01001001	Medium grained altered epidote, chlorite, hematite, possible pillow	 	 	-		 		
		boundaries? Carbonate associated with red hematite smeared surfaces.							
		Most shear surfaces are serpentanized as well many have chlorite							
		concentrations. Minor diss. Py about 0.5%. From 34.7 - 49.80m much		!			Ì		
		broken core good hematite - epidote throughout this section. Lost core 30		İ					
		cm of core here representing 2.82m from 58.60- 61.32m. Bottom 60cm of						1	
		Gabbro - volcanic is much broken- sheared - hematized. Lower contact in						1	İ
i		broken core from 63.92- 64.06m. Lower contact angle 30° to the Core axis	l						
13.00 - 64.06m G	Gabbro - volcanic	(CA)					!		
		Cream to greenish - gray limestone. Contact is dolomitic for about 10 cm.	1	1					
		Rock is banded with 1-2% diss py in fine blebs associated with the lower							
		part of the fine gray laminations. Some brown marl bands - locally 1% diss.		ļ					
54.06 -107.44m L	Limestone	Py.	64.20m- 55°	<u>'</u>			ļ <u>.</u>		
		64.06 - 70.23m light white with 15% gray bands					<u> </u>		
	· .	77.23 - 77.90m Gray with 15% white pale bands more py with gray bands					<u> </u>		
	Best min. section	77.90- 85.28m Very white with 5% gray sulfide rich blebby bands.			78.78-79.78m		<u>L</u>		
		Much of this cut1/4 gone- assayed? Bornite seen at 78.60m.			Core Previous				
		85.28 - 92.76m Med.gray LS about 3% sulfides in the darker bands, pink hu	<u>e</u>		2m 1/2 core		80.47-85.1		
		92.76 - 99.19m Again very light colored with differential weathering.		·	3m 1/2 core		91.76-92.1		
		Appears to be less sulfides some pale greenish hue to the rock.			6m 1/2 core		93.83-94.5	4m 1/2 core	<u> </u>
		99.19 - 106.37m dark graphitic bands appear less pyrite		66.22-67.1	6m 1/2 core		99.63-101.	80m 1/2 <u>co</u> r	re
		106.37 - 107.44 Green chloritic looking bands in this transition section.			8m 1/2 core			7.0m 1/2 co	
		1-4cm bands at 106.38 - 39; 106.40 - 41; 106.4850;			0m 1/2 core			3.76m 1/2 o	
		106.5457; 106.7074; 106.7678; 106.8387;107.06 -107.07m		70.20-78.2	2m 1/2 core		110.87-112	2.14m 1/2 a	ore
		80% fine chlorite fractured with 10 -20% carbonate veinlets up to 5mm			:]		İ
	Chloritic volcanics	thick. Minor py.			2.15m 1/4 core				
108.43-112.23m		Light gray core surface, dark gray fresh surface. Diss py mottled appearance		79.03-80.0	7m 1/4 core				
	Maroon Sandy	Tiger banded tan and maroon bands with 2-4mm white carbonate bands	1	1	')]	İ
112 <u>.2</u> 3-118.52m	siltstone	grades rapidly over 20 cms to next unit		<u> </u>					
		more massive bands of siltstone. Some intervals of gray to pale pink		}					
		sandstone layers as at 123.49- 124.29m; 136.10 - 141.43m. Gray and red							1
		beds for the next 10 meters or so then maroon- red mudstone- siltstone with							1
	Maroon siltstone	the usual 2-4mm carbonate veinlets.							
159.57	EOH								1

Diamond Drill Record		Property	DDH # LC83-04		Page# ONE
Property: Lochaber Lake - College Grant	Azimuth: 352° Az		Depth: 288m	Dip :	Azimuth
Location:	Dip at Collar:-45°				
Easting: 20T 572429.02E	Date Started:Februa	ry 1984			
Northing: 5027588.52N	Date Completed:Apr	il 1984			
Elevation of Collar: N/A					
Core Size: HQ to 50m; BQ to end of hole					
REMARKS:		•			
		_			

Hole #_LC83	-04	Diamond Drill Record	Page_02	of_03	COMPANY N	lova Scot	ia Depart	ment of I	Mines
Interval			Planar		Interval	Sample	_	Assays	
mortal	Rock Type	Description	Feature	Sample #			Au oz/T		Au ppb
From To	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Angle						
									<u> </u>
0.00 - 16.00m	Overburden	Ground rock fragments of pale rhyolite porphyry and dark maroon rhyolite porphyry. Both are fine grained matrix and locally epidote altered.							
10100111		perprisity and the granted to the country operate and country oper							<u> </u>
		Medium grained gabbro with local shearing with intense epidote as well as							
		brick red hemitite in some shears (pillow lava selvages?) Rock is NOT	İ	1		ŀ			
16.00m - 139.30	Gabbro	magnetic. <1% disseminated pyrite. Carbonate minerals in shear selvages.							<u> </u>
		From 46m - 61.57m Fault gouge of clay & epidote gabbro gouge. Not							
	Volcanics?	magnetic little carbonate				<u> </u>	<u> </u>		<u> </u>
		61.57 - 76.51m still fault but some sections are holding together. Has a							
	-	magnetic response and carbonate minerals increasing down section(hole)							
		Locally carbonate 30 - 50%. Hematite smears decreases to zero this				1			
		section				ļ			
		Sub- Section 74.25 - 75.00m Limestone conglomerate turbadite (or fault				1			
	· 	gouge) Approximate contact angle 15° to CA. Favour terbidite fault would							İ
	Limestone	have produced more crushing of limestone clasts -clasts are too rounded for							
	Conglomerate?	gouge.	<u> </u>						
		Below the limestone conglomerate a good magnetic gabbro friable areas about 20 cm wide. Local epidote rich zones and carbonate smears on							1
		fractures							•
		30% epidotized section from about 99m to 102m it is a less magnetic rock		1			<u> </u>		
		section							
· · ·	·	Coarse almost leuco gabbro. 30% of feldspar laths are epidotized rock 30 -	<u></u>			-			
139.30-167.26m	Coarse Gabbro	40% feldspars							
		Much epidote 40 - 6\80% locally. Some fractures have hematite coating as							
		at 169.65m. Broken core at 167.28- 168.57m. More sheared and broken							
		rock as one approaches the limestone contact. Limestone is caught up in							
<u>167.26-173.76m</u>	Gabbro fine-medium	the contact shearing from 172.21 to 173.56m.							ļ <u>. </u>
		Gray - white at the start. Gray from 175.26m to 181.36m. Then gouge that							
		is white- rusty earthy 177.73 - 178.18m. The gouge limestone is less limy	į) o 47				ļ	
173.7 -285.90m	Limestone	now a dolomite. There is pyrite in some core at 180.90m.	ļ	#247755	174.77-175.27m	1.00m			
		Core footage problem: block 184.40 to block 187.45 has only 68cm of		1					
		rock -broken and ground core							

 \bigcirc

.

Hole #_LC83	-04	Diamond Drill Record	Page_03	of _03	COMPANY Nova Scotia Department of Mines						
Interval	·		Planar	ļ	Interval	Sample		Assays			
- Interval	Rock Type	Description	Feature	Sample #	From To	Length	Au oz/T		Au ppb		
From To	Trook Type		Angle	CONTROL II	110	Longo	710 02	7.1g 0.2.1	- to ppo-		
		Subsection - pale color then slight pale gray hue. Locally pinkish sections. Some bedding down core axis	189.50m- 22°								
		203.20 - 203.50m Fault gouge green clay with limestone fragments Shattered core from 203.50 to 220m. Pyrite scattered in carbonate veinlet at 220.50m about 20% uhedral crystals in 5mm veinlet. Rock is gritty- sandy limestone to about 230.10m. Core is much broken from 227 - 247m, some gouge intervals as at 230.30 230.50m; 233.17 233.85m; 238.26 - 239.80m, some breccia sections with fine calcite veinlets Sub Unit 248.80 - 270.40m Very white with fine faint dark pyritic streaks.	200.00m- 10°; 212.20m- 15°; 220.50m- 18°; 224.03m- 05°; 230.00m- 0°; 240.00m- 52°;								
		Locally fractured sheared and clay rich bedds. Is similar to hole LC83-01 that I samples. At the bottom of this section Limestone is vuggy and less banded more breccia. Sub Unit 270.40 - 275.25m white limestone overall is a breccia zone that has been recemented 20% vugs some limy ocre fractures no visable sulfides	254.51m- 65°	#247751 #247762	247.80-248.80m 248.80-250.00m	1.00m 1.20m					
		Sub Unit 275.25 - 277.82.82m more gray timestone breccia less white calcite cement									
		277.82 281.34m no vugs pale white core - gritty. at 281.34 - 281.94 Fault gouge yellowish clay soapstone locally. (vuggy sections have about 1% diss. Pyrite									
	Maroon Siltstone - Mudstone	Moderately broken with stress fractures filled with calcite veinlets short and thin veins no mineralization							 .,		
	EOH	THE THE STATE OF T	-		 						
					 		_		· .		
			<u> </u>					!			
				<u> </u>							
					<u> </u>						

COMPANY:Goliath Copper		Core Size BQ			
Diamond Drill Record		Property	DDH # M-17-97		Page# ONE
Property: Lochaber Lake	Azimuth:130°		Depth: 261 feet	Dip	Azimuth
Location:	Dip at Collar: -45°				
Easting:L 1+90 NE	Date Started:June 20	1997			
Northing: 1+30 NW	Date Completed: Jur	ne 23, 1997			
Elevation of Collar:					
REMARKS: See Original drill logs Goliath Copper assessment report 1997 for hole					
Location discrepencies with old Great Horn	e holes	-			
					. =
					

Hole #_M-17-97		7	Diamond Drill Record F		of 02	COMPANY: Goliath Copper					
1-1				Distant	<u> </u>	1-1		0			<u> </u>
interva Feet	1	Darly Trees		Planar		Interva		Sample	4	Assays	A
	 -	Rock Type	Description	Feature	Sample #	From	Τφ	Length	Au oz/T	Ag oz/T	Au ppb
From	То	<u></u>		Angle	ļ	 		ļ	}		
0 - 47'	—— '	Overburden		ļ	 			ļ			
47 – 227ft	t I	Limestone - Marl	Top section to 127 ft is mostly gray limestone with 15 - 20% marl at the top of the hole increasing down hole. At 127 ft. Marl content is 25 - 30% maximum.								
			Mineralised with sulfides as disseminations related to the edges of calcarious rich bands - but - disseminated throughout rock. Mostly fine pyrite, chalcopyrite and some bornite. Some mineralization associated with carbonate veining - rare. Py cubes .5mm in these veinlets. Mineralization best from 58ft - 66 ft in the section from 47ft to 137 ft. Core is split (asayed) to 207ft mineralization continues to 223 ft.								
			Much coarse pink - white carbonate veins starting at 138.5ft to 154 ft, with no sulfides. At 76 feet a 3 inch vein of bariteas well as in the section given above but it is not pere veins in the larger section. At 144ft to 145 feet barite section with some malachite								
			The section from 154 - 197 ft is slightly more mineralized with sulfides - py, cpy,bo.				-				
227 261	N	Maroon Siltstone -									
			standard maroon banded siltstone - mudstone wioth about 10 % calcarious				-			,	
		- Mudstone	cement. Calcarious cement near zero at bottom of the hole			<u> </u>			<u> </u>		
	261	EOH				1					
				<u></u>		<u> </u>					
							<u> </u>				
		·									
_				· .							
				ļ							
		····									
											<u> </u>

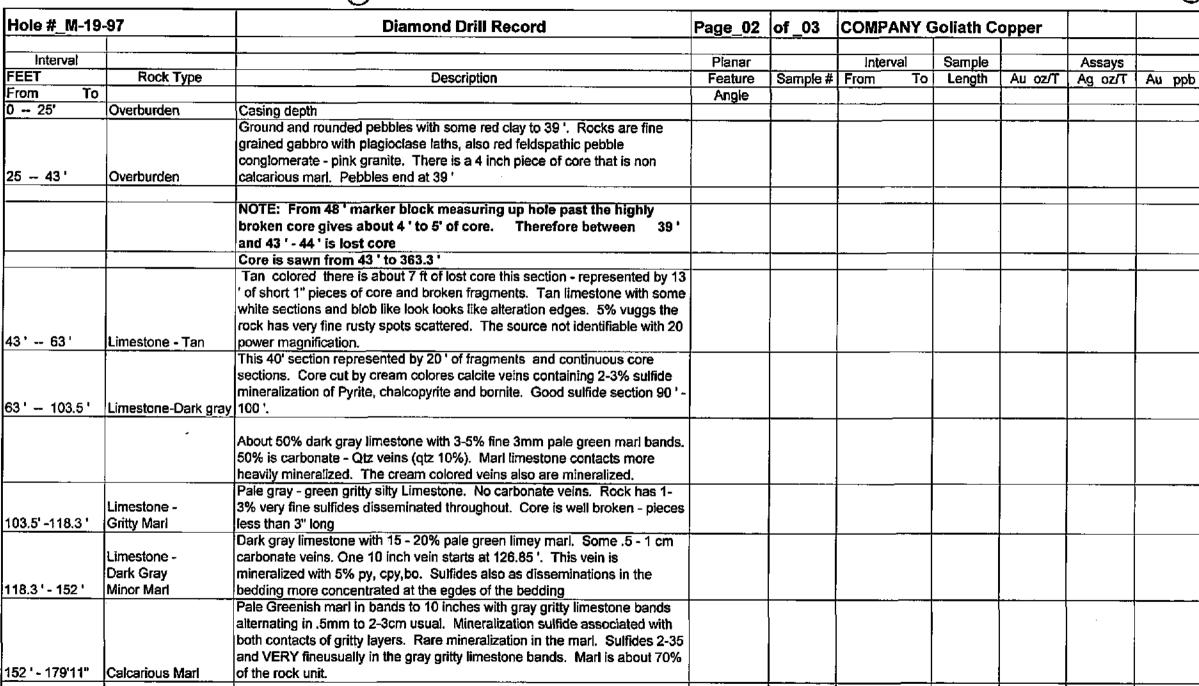
<u> </u>			0		0
COMPANY:Goliath Copper Diamond Drill Record		Core Size BQ Property	DDH # M-18-97		Page# ONE
Property:Lochaber lake	Azimuth:		Depth: 398 feet	Dip	Azimuth
Location:	Dip at Collar: -90°				
Easting: L 1+90 NE	Date Started: June 24	4,1997			
Northing: 1+35NW	Date Completed: Jun	e 26,1997			
Elevation of Collar:					
REMARKS:For detaild collar location see original drill logs in the assessment reports There is some discrepency with the old great horne holes on their location map					



Hole #_M-18	3-97	Diamond Drill Record	Page_2	of _2	COMPANY:				
····									
Interval			Planar		interval	Sample		Assays	
Feet	Rock Type	Description	Feature	Sample #	From To	Length	Au oz/T	Ag oz/T	Au ppb
From To	<u> </u>		Angle	<u> </u>				<u> </u>	<u>] </u>
		of ft is sawn two feet only not sawn.							
0 - 30 ft	Overburden								
		Mostly gray banded with disseminated pyrite, chalcopyrite and bornite. Most mineralization is associated near lamelle edges in about .5mm bands.	:						
30 - 26 <u>8.75 f</u> t	Limestone	About 1-3% sulfides overall locally higher fro short sections.							
- 200.7011		Some carbonate and quartrz carbonate veins as at 68 to 73.3 ft. The lower 2 feet has copper and galena - (it carries silver) running up the core axis at 08°. There are other narrow unmineralized veins about 2-3 inches wide in the section from 98 ft to 151.75 ft. The core is about 50% marl. At 151.75 ft a 16 inch carbonate vein with 10% quartz starts it cuts the core axis at 45°.							
		Mineralization is associated with non mart lamanee or shear stress						ļ. 	
		fractures. Minor copper mineralization in some veins.							
		Carbonate veins: 168.75 170.75 ft; 173.75 - 174.11 ft; 180.2 - 181ft; 183.2 - 185 ft; 192.75 - 193.50ft; 198.5 - 199.25 ft; 238.75 - 240.25 ft; 251.2 - 252.2 ft; 253.2 - 255.7 ft; There are some smaller veins nut they are not recorded. At 209.75 there is a 2 inch carbonate - 50% red hematite vein 2 inches thick. Some of the larger veins have pyrite, chalcopyrite low grade - nothing							
·		spectacular.							_
268.752 <u>95.33</u> '	Vuggy Limestone	red, pink, white vuggy limestone (reef limestone?) foliated at 30° CA Tr sulfides in marl bands only.							
		With greenish marl some fractures carry fine low grade py, cpy. Locally there are some Carbonate - quartz and quartz veins as at 326.5 328 ft; 332.8 - 333.2ft; 356 - 356.5ft; 357.2 - 257.6ft. There is some chlorite locally							
295.33- 398 ft	Gray Limestone	and some rare selvages of narrow graphitic bands.					i		
398 feet	EOH								
				<u> </u>					
			i –						
 	·-			1					
			····	<u> </u>			· · · · · · · · · · · · · · · · · · ·		·-
				· -					
				1			 		
			 	 	 		 		

			0		Θ
COMPANY:Goliath Copper Diamond Drill Record		Core Size BQ Property	DDH # GC-M-19-97		Page# ONE
Property:Lochaber Lake	Azimuth:		Depth: 387 feet	Dip	Azimuth
Location:	Dip at Collar: -45°				
Easting: L 1+18 NE	Date Started: June 30), 1997			
Northing: 1+70NW	Date Completed: July	, 2, 1997			
Elevation of Collar:					·
REMARKS: There is some discrepency with the hole location of the Great Horne holes					
	-				
•					





Hole #_GC-N	l-19-97	Diamond Drill Record F	Page_03	of _03	COMPANY Goliath Copper				
_									
Interval			Planar		Interval	Sample		Assays	
	Rock Type	Description	Feature	Sample #	From To	Length	Au oz/T	Ag oz/T	Au ppb
From To		-	Angle	i i			<u> </u>		
									,
i		Marl and gray gritty finely banded limestone transition. Much paler colored							
		unit, about 50: 50 mart: limestone. Less sulfides in the gritty bands edges							
179'11" - 184.75	Marl - transition	only. Also there appears to be less cpy and no bornite seen.]						
		Gray (dark) limestone with 10 - 15% narrow (1-2cm) marl usual. Some							<u> </u>
		minor white carbonate veins(less than 1cm) scattered in the section.	i	1					
		Bedding is laminated with the usual 1-3% sulfides(bornite seen rarely).		İ				Į	l
		Sulfides usually along the band edges. Near the bottom of the unit below	ነ	1)]	
	Limestone	about 242 ' sulfides are more evenly disseminated in the increasingly gritty							
184.75' - 245.5 '	Dark Gray	unit.						<u> </u>	
		Rounded fine limestone pebbles (minor maristone) in a mari - carbonate							
		matrix. Pebbles are of various types, dark - gray banded, pinkish, rare red]			i		
Ī	Limestone	and some cream - tan limestone. Sulfides are present in small rare patches		1					
245.5' - 252.8'	conglomerate	ог ол fractures. (possible breccia??)		1					
		Similar to dark gray limestone of 184.75 section above. From the upper							
		contact to 258' rock is 80% green marl bands then 80% darl gray limestone		!					i
		beds to 298'. Then 90% marl to bottom contact. Sulfide minaralization of			ļ				
	Limestone	the usual style(1-3% diss py, cpy,bo along band edges. Some disseminated							
252.8' -308.66'	Dark Gray	sulfides usually in the limestone beds.							
		Chloritic flow top is up. Bottom contact is chill zone over about 7-8 inches.							
		Chill zone is bleached a paler green. Core of the flow has crystal size							
		increase upwards from the bottom chill margin, coarse crystals from 322.5'							
		to 327'. Above 322.5' rock is fine grained. The top two feet has white blobs							
		with black rinds around them - amygdules. The upper contact thicker than	!						<u> </u>
}		the bottom as it would be in a water laid environment. The upper contact is							
		nearly parallel to the core axis at 05°. The limestone above the extrusive is							
		not bleached or thermally altered. There is some cpy in the amygdules.							
		There are some .5 cm carbonate veinlets in the volcanics. rock is rarely	UC - 05°						i
308.66' - 329.5'	Internediate Volcanic		LC - 34°				l		İ
		starts as about 60% marl bands and moves to 80% marl from 351 to 361'.							
329.5' - 361 '	Mart	The rock is still mineralized with 1-2% fine sulfides.	338' - 39°						
		Mudstone - fine andstone, rare pale maroon pinkish sections. The rock is							
361 – 378'	Mudstone	un mineralized with sulfides.	361' - 38°						
387 feet	EOH								
							<u> </u>		<u> </u>

Diamond Drill Record		Property	DDH# GH-08-197		Page# ONE
Property:Lochaber Lake	Azimuth:		Depth: 311 Feet	Dip	Azimuth
Location:	Dip at Collar: - ??º Tov	vards the ESE			
Easting: about L1+18NE	Date Started:				
Northing: 1+70 NW	Date Completed:				
Elevation of Collar:					
	·				
REMARKS: The core contained in the core boxes examined is in very poor condition. Most of the drill footage markers are not readable. Some are in a box that is not possible ie box 4 contains a distance chip that reads 264 feet. Box 5 to the end of the	Note: There is some discrepency for the Great horne holes on the Goliath location map which depicts all				

Hole #_GH	I-08-1971	Diamond Drill Record	Page_02	of _03	COMPAI	VY:G	Freat Ho	ne Minin	g Syndica	ate
Interval			Planar	 -	Interva	.	Sample		Assays	
11101701	Rock Type	Description	Feature	Sample #		To		Au oz/T		A., mmh
From To	Nock Type	Безсприон		Sample #	FION	10	Length	Au 02/1	Ag oz/T	Au ppb
BOX #1	<u> </u>		Angle	 	 -					
BUX #1	<u>.</u>	18 (ith search and the region I may be unit and in the cutting to the COV	<u> </u>	- 	ļ <u> </u>			!		
		With coarse carbonate veins. Locally mineralized with sulfides to 5%, mostly	ĺ							
		pyrite some cpy. Sulfides also disseminated in the limestone. Some veins of								
44 01-6		coarse limestone are heavy and probably have a good propertion of Barite			i					
41 - 64.5ft	Gritty - sandy	locally.		<u> </u>	<u> </u>					
	pale gray Limestone								•	
BOX #2					<u> </u>					
Not sure it is								i		
next in		j			!]	
sequenc <u>e</u>	Gray Gritty Limestone					- 1				
BOX #3						T		í		
				1		\neg		Ì		
Contains chip	ı j	·		1		- 1				
83ft in it.	Pale Green									
	Gritty Limestone						·-			
BOX #4				<u> </u>						
Contains				†		\dashv				
Chip 113 Ft		;				- 1				
	Gray Banded	Mineralization seems mostly pyrite as disseminated euhedral crystals.				ļ				
	Limestone] [·-···-	
BOX #5				 					 	
Chip 158 ft ?	1			 						
Distance to						-				
160ft in		All banded gray - pale green marl - limestone most sulfides are along edge		1						
	Greenish	of darker limestone bands. Some bornite seen.								
DOXIIO IILS	Mart-Limestone	of darket intestorie bands. Some porfile seen.		 		-				
BOX #6	Wait-Limestone	<u> </u>		1				_		
DUA #0		At 400 ft cook town from months are all to see the deal cook to the		 		\rightarrow			ļ <u>.</u>	
Chi- 400# i-		At 168 ft rock turns from mostly greenish marl to mostly dark gray banded				Į				
Chip 160ft in	0-4-0	limestone with some greenish marl bands. 1-2% very fine sulfides some				1				
	Dark Gray Limestone	Cpy & Bornite seen.		<u> </u>						
	20-25% Marl			ļ						
				!						

 \ominus

Hole #_GH-0	08-1971	Diamond Drill Record	Page_03	of _03	COMPA	NY:Ģ	reat Ho	rne Minin	ng Syndicate		
Interval			Planar -	<u> </u>	Interva		Sample		A		
	Rock Type	Description	Feature	Sample #		То		A11 07/T	Assays	A. mmfa	
From To		Sescription	Angle	Sample #	FIORE	-10	Length	Au oz/T	Ag oz/T	Au ppb	
BOX #7	 -		Angle					<u> </u>			
<u> </u>		Very finely mineralized locally diseminated sulfidesusually on the edge of	·	-							
		fine bands of limestone. Some cream colored carbonate veins running						ľ			
		down core for 8-10 incheslong. Veins are not bearing sulfides. Aboutr 2-3%		ļ					1		
183- 206ft	Dark Gray Limostone	sulfides overall. Some Cpy,Bo and mostly py.						!			
BOX #8	Dark Gray Enfestorie	sundes overall. Some Cpy, Bo and mostly by.									
- BOX #0	· 	Corporate value about 500/ of the 51. Deak is greenish and another		ļ							
		Carbonate veins about 50% of top 5'. Rock is greenish marl mostly. From									
	Marl with cream	211' very broken gritty marl. Carbonate breccia with marl cement as in				- }		ļ			
		Goliath hole #4. About 214' largly mari to dark gray limestone by 221' to the						1			
200 2001 48	carbonate Breccia	end of this box. About 2-3% sulfides in darker rock. High marl lower									
206 - 229'4"	filled fault zone	sulfides.									
BOX #9	<u> </u>								·-		
		About 1-2% sulfides along bedding edges also in some carbonate veinlets									
229'4" - 252'	Dark Gray	ру,сру, bo. Rare <1cm white carbonate barren veinlets.		<u> </u>		- 1					
- · <u>·</u> ·	Limestone				-						
BOX #10											
252' - 262'		About 1-2% sulfides as above		<u> </u>							
	Limestone		 -								
		Green chloritic with amygdules near the top section. Some cpy, bornite and									
		malachite on old exposed fractures. At 267' section with carbonate vein		1					·		
		with vuggy carbonate crystals over 4 inches. The volcanics never gets							i		
		coarse grained. The lower contact is ground core. Just below the ground		ļ !		\ \		Ì			
		core the limestone layers do not fizz unless scratched. Marl layers not now				-					
262' - 273'6"	Volcanic rock	calcarious. No sulfide mineralization.		!							
	Intermediate										
3OX #11				 -					-		
273' 6"- 300'	Mari	Mari contains only 20% fine calcarious bands. The mari is not calcarious. No	sulfides	 							
300' - 311"		Gritty siltstone sandy feel in part	2011069						- 		
		yy warray raws in pract		<u> </u>							
311 EOH		· · · · · · · · · · · · · · · · · · ·		 	· · · · · ·	 [-					
	 			ļ .	•		_				

 Θ

Diamond Drill Record		Property	DDH # GH10-1971		Page# ONE
Property:Lochaber Lake	Azimuth:		Depth: 298 feet	Dip	Azimuth
Location:	Dip at Collar: - ??º to	wards the ESE			
Easting: About L 0+10 NE	Date Started:				
Northing: about 0+60NW	Date Completed:				
Elevation of Collar:					
		·			
REMARKS: There is some discrepend Great horn hole locations as depicted					

Hole #_GH10	0-1971	Diamond Drill Record	Page_02	of _03	COMPANY	reat Ho	rne minin	g Syndic	ate
Interval	<u>-</u>		Planar		Interval	Comple	<u> </u>	A	
FEET	Rock Type	Description	Feature	Sample #	<u> </u>	Sample Length	Au oz/T	Assays Ag oz/T	Au ppb
From To		Description	Angle	Ognibie #	FIGURE 10	Lengui	Au 021	Ag 02/1	Au ppu
0 - 42'	OVERBURDEN		Aigle				<u> </u>		-
42 ' - 138 '	Limestone	About 1:1 dark gray and light colored bands with 1-3% sulfides in bands and as disseminations.					-		
		Sawed samples taken for study by someone at - 61'; 62.5'; 65.3'; 74'?; and 83.6'.							
		possible barite bearing carbonate vein from 65 - 68 feet; this interval sparse core left. Some definitely heavy as study section 65.3'. Gritty vuggysandy limestone for 8 inches at 86 ft, possible marker horizon. The core surface looks granitic gray-white fragments.							
		Coarse cream carbonate veins at: 65-68'; 95.6 - 96.6'; 98 - 98.66'; 99 - 101.6'; 105.25 -105.6';113.3 - 122.2'.	126.5' - 52°	<u> </u>					
		The limestone between veins is nicely mineralized to 3% sulfides locally with py, cpy, tr Bo. Some minor pyrite in some veins that are strain fractures most sulfides are associated with bedding transitions. Cu estimate about .2 .3% in bedding.							
138 ' - 149.5 '	Pale "sandy' feel	Limestone - sandstone - conglomerate. Possibly a turbidity flow with the tops up the hole. A sample taken for slide study by others at 143'.							
<u> </u>	Limestone								"-
149.5 - 214.5	Limestone - Marl	Top portion has 20 -25% marl bands decreasing down hole then incteasing again. Mineralization sulfides are traces only EXCEPT at the lower contact for 5-8 inches about 5% sulfides as disseminations and in blebs and stringers. Lower contact not seen limestone is slightly harder.							
	70% - 30%							_	
214.5' - 237.6'	Intermediate	Intermediate to basic volcanic rock with scattered amygdules as at 220'. Some sulfides in fractures py, cpy Bp. Study slice taken by others at 218.5'; 222.5' and 239.6' this last section is well epidotized. Rock is locally epidotized locally some dark green chloriteblebs. Some amygdules are calcarious or epidotized.						"	
	Volcanics	anioni iono di opinotecot.	_				 		
237.6'-276'	Limestone - Marl		238 ' 53° 260' 55°		-			.	

Hole #_	GH10	-1971	Diamond Drill Record	Page_03	of _03	COMPANYG	reat Hor	ne Mining	Syndica	ite
Inter	val	Post Type		Planar	Complete	Interval	Sample	A.:	Assays	
Erom	To	Rock Type	Description	Feature	Sample #	From To	Length	Au oz/T	Ag oz/T	Au ppo
From	10			Angle						
276 <i>-</i> 284	1.5 '	Green silty Mudstone	Less carbonate in rock gradually - some does not fizz. Grades rapidly to maroon silty mudstone. Some banding and crossbedding							
284.5' - 2	298 '	Maroon silty	Some banding and crossbedding	289' 48°		<u>'</u>				
		Mudstone								
298 '		EOH		1			-			
										<u> </u>
			·		<u> </u>	· · · · · · · · · · · · · · · · · · ·		<u> </u>		
	i			 	 			-		
	_			 						
				 		 				
				+						
		· 		 	 					
				- 	-			 -		
-				 -						
				<u> </u>						
								<u> </u>		
				<u> </u>						
				1	ŀ	-				
				<u> </u>	_				,	
									٠,	
	ĺ			<u> </u>				<u> </u>		
				 						
		<u> </u>	-	 - · 	<u> </u>	-		-		
				 	-					
				<u> </u>	-					
				ļ		-				
				 		·		_		
				<u> </u>						
				<u> </u>						
							_			
				- · · · · · · · · · · · · · · · · · ·						
		·		 	<u> </u>					

Diamond Drill Record		Property	DDH # GH13-1971		Page# ONE
Property:Lochaber lake	Azimuth:		Depth: 635 feet	Dip	Azimuth
Location:	Dip at Collar: -??º to	owards the ESE			
Easting: About L1+75SW	Date Started:				
Northing: about 0+75 NW	Date Completed:				
Elevation of Collar:	·				
REMARKS:See the original drill log for the collar location					,
There is some discrepency in the location of he Great Horne drill holes on the Goliath					
<u> </u>					
·					
					1

		Θ

Hole #_GH13	3-1971	Diamond Drill Record	Page_02	of_03	COMPA	NY:C	reat Ho	ne Minin	g Syndic	ate
]	<u> </u>					
Interval			Planar	<u> </u>	Interva		Sample		<u>As</u> says	
Feet	Rock Type	Description	Feature	Sample #	From	То	Length	Au oz/T	Ag oz/T	Au ppb
From To			Angle	<u></u>						
0 - 60	Overburden									
60 - 121.5'	Limestone	Finely laminated 5mm bands - white bleached gritty well broken limestone.				i	_			
	Bleached - gritty	Some clay throughout2-5%. Layers about 53° to the core axis (CA) at 73'.	· —							1
		Core is not sampled to 99 feet. Some malachite associated with freesh						i		1
		carbonate veins between 94' and 99'.	73' - 53°		<u> </u>					
		 Some light - gray limestone pieces - sections starting at 92' increasing down								
	•	hole. The sampled section has sulfides along movement surfaces 1-5%]							
		locally. Locally 1 to 8 inch sections of core stained ocre from 106' to 110'.	101' 23°		ļ			,	l	
		Transition called just at a massive pink coarse carbonate vein with traces of	101 23		<u> </u>					
		Cpy. Rock has been split and sampled. Local carbonate veins to 8 ".	1					ľ	•	
121.5' - 298'	Limestone - Banded	Mineralization by copper seems very sparse.								
121.5 - 296	Limestone - banded	Willeralization by copper seems very sparse.		 					<u> </u>	<u> </u>
Da		At 144' 4" to 145'4" very small vermillion colored spots Cuprite - ruby silver				1				
	Dark Gray	type colorcan be scrubbed off with a stiff brush - An oxide? Product.		}						ĺ
		134' to 135' clay gouge some of the fine bands are a pale green marl	151' 05°					·		·
	· · ·	Sub Unit 188' to 196.5' pale green silty marl.					,			
		The section is all sampled to 318.5 '		<u> </u>						
		From 200' to 246' bedding is largly down the core axis 0° to 05° beds are								_
		also contorted and more competant. Locally 2-3% sulfides but overal % is				- 1				
		very low. Sulfides usually in bands. Some contorted carbonate veins at 238	,	1	:	1			·	1
		- 240' with some cpy traces <1% end box #8				l		!		
		Box #9 & 10 are dark gray limestone very rare Cpy usually with pyrite as fine								
		stringers		İ		-				
-	,-	The last 3 feet of the unit is mixed with a very fine grained volcanic rock		_						
		mixed with blebs of a more mafic chloritic rock. A zone of movement								
		Epidotized intermediate volcanic rock. From 300' to 336' amygdules of								· · · · · · · · · · · · · · · · · · ·
		carbonate with some vessicules. There are also rafts of gray banded								
		carbonate caught up in the volcanics as at 305- 310ft Also at 316 ft		:						
		There are also wide carbonate veins cutting the volcanisc as at 319.5' to				-				
298' 366	Intermediate	336ft - 20% volcanisc that section no sulfides.								l
		Someone took samples for study at 319.66'; 340' and 348ft.								
		also at 352.5°; 355.9°.		-		-				
		MICO EL DOMO COOLO ,								

 \cap

Hole #_GH13	-1971	Diamond Drill Record	Page_03	of_03	COMPA	NY G	reat hor	n Mining	Syndicat	te
<u> </u>			81		1-1				4	<u> </u>
Interval			Planar		Interv		Sample	ļ	Assays	
Feet	Rock Type	Description	Feature	Sample #	From	То	Length	Au oz/T	Ag 02/1	Au ppb
From To			Angle					<u> </u>		<u> </u>
	Continued	Veins of carbonate 340.6' to 347.8' about 30% volcanics- carbonate is							!	
298' - 366	Volcanic Rock	vuggy. Volcanics locally epidotized.						ļ		ļ
		At 362.6' volcanic rock is coarsely mottled light - dark chlorite to 366 ft.	<u> </u>	ļ				<u> </u>		<u> </u>
366 - 368'	Limestone - Tuff	Possible very fine green chlorite enriched limestone - marl bands	<u></u>							
<u> </u>	interlayering									<u> </u>
		Local minor hard bands, less carbonate - rock is siliceouswith some epidote								
368 417.25	Cream Limestone	alterationvery fine sulfides ,15	400' - 4 <u>1°</u>					<u> </u>		<u> </u>
	green - mari									
417.25 435'		bedded - minor calcarious cement <10%	430' - 39°							
	Mudstone									
435'	EOH									
			i –							
									<u> </u>	
· · · ·			············ ·						·	
				-					· · · · · · · · · · · · · · · · · · ·	
			<u> </u>							
			<u> </u>	 						
				·				 		
				 				<u> </u>		
										
	·									+
		1		-		\dashv		 		
	· -		_					1		
								}	-	
- ····			-	 -				-		
	·		<u> </u>	 					<u> </u>	+
<u>-</u>						-	·	-		
										
			_						_	
	· · · · · · · · · · · · · · · · · · ·									 - -
			<u></u>			.				
										<u> </u>
			_							
				l						ŀ

 Θ

ANALYTE	WtKg	Au	Al	Ba	Ca	Cr	Cu	Fe	K	Mg	Mn	Na	Р	Sr	Ti	Zn
METHOD	WGH79	FAI323	IMS14B	IMS14B	IMS14B	IMS14B	IMS14B	IMS14B	IMS14B	IMS14B	IMS14B	IMS14B	IMS14B	IMS14B	IMS14B	IMS14B
DETECTION	0.001	5	0.01	5	0.01	1	0.5	0.01	0.01	0.01	5	0.01	50	0.5	0.01	1
UNITS	kg	ppb	%	ppm	%	ppm	ppm	%	%	%	ppm	%	ppm	ppm	%	ppm
247751	0.733	<5	0.16	67	>15	2	9.8	0.92	0.03	0.23	4210	<0.01	170	1070	<0.01	29
DUP-247751	<0.001	<5	0.16	67	>15	2	15.2	0.92	0.03	0.23	4270	0.01	180	1060	<0.01	32
247752	0.71	<5	0.48	87	>15	1	3.6	1.14	0.05	0.11	1750	<0.01	130	365	<0.01	3
247753	0.338	7	5.13	64	6.27	108	443	6.89	0.03	3.08	1320	<0.01	730	248	0.06	164
247754	0.528	<5	0.25	57	>15	3	2	1.17	0.07	0.27	840	<0.01	240	1150	<0.01	6
247755	0.499	<5	0.44	69	>15	13	3.8	1.24	0.02	0.24	1930	<0.01	300	363	<0.01	10
ANALYTE	WtKg	Ag	As	Bi	Cd	Ce	Co	Ga	Hg	La	Mo_	Ni	Pb	Rb	Sb	Sc
METHOD	WGH79	IM\$14B	IMS14B	IMS14B	IMS14B	IMS14B	IMS14B	IMS14B	IMS14B	IMS14B	IMS14B	IMS14B	IMS14B	IMS14B	IMS14B	IMS14B
DETECTION	0.001	0.1	1 1	0.02	0.01	0.05	0.1	0.1	0.01	0.1	0.05	0.5	0.2	0.2	0.05	0.1
UNITS	kg	. ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
247751	0.733	<0.1	13	0.05	0.14	15.5	3.1	0.7	0.05	88	5.91	23.2	14.7	1.5	0.86	2.4
DUP-247751	<0.001	<0.1	11	0.05	0.14	15	3	0.7	0.05	7.7	5.7	23.8	14.3	1.4	0.83	2.4
247752	0.71	<0.1	4	0.32	0.02	73.9	2.1	1.9	0.03	38.5	4.48	13.7	9.5	2.2	0.21	2.1
247753	0.338	<0.1	3	0.18	0.04	12.2	50.6	13.2	0.02	5.3	0.75	77.3	2.6	1.1	0.41	25.4
247754	0.528	<0.1	<1_	0.07	0.03	18.6	5.7	0.8	0.04	9.4	2.96	23	13.6	3	0.16	3.5
247755	0.499	<0.1	6	0.3	0.02	14.8	7.7	1.9	0.06	6.6	2.77	27.6	5.9	0.9	0.31	4.3
ANALYTE	WtKg	Sn	Th	Ti	U	V	W	Υ								
METHOD	WGH79	IMS14B	IMS14B	IMS14B	IMS14B	IMS14B	IMS14B	IMS14B								
DETECTION	0.001	0.3	0.1	0.02	0.05	11	0.1	0.05								
UNITS	kg	ppm	ppm	ppm	ppm	_ppm	<u>bbm</u>	ppm								
247751	0.733	<0.3	1.2	0.06	3.59	2	<0.1	7.65								
DUP-247751	<0.001	<0.3	1.2	0.05	3.51	2	<0.1	7.61								
247752	0.71	<0.3	7	0.07	2.02	· <1	<0.1	21.1								
247753	0.338	0.7	0.6	<0.02	0.28	157	<0.1	10.1								
247754	0.528	<0.3	1.9	0.03	1.67	2 ·	<0.1	9.2								
247755	0.499	<0.3	2.1	0.03	2.28	12	<0.1	10.6			_					

.

ŧ

Rock sample description - Core samples take March - April 2009 By J Mazerolle

Sample 26-03-01 - #427753 From 198.13 to 199.03 interval 0.90 m OF Hole LC-83-01

The rock is a highly epidotized chloritic Gabbro. It is well sheared and fractured sample was rubble. There is a trace of disseminated pyrite observed. Epidote is about 60-70%

Sample 27-03-01 - #247754 From 78.78 to 79.78 m OF Hole LC-83-03

Light white -tan Limestone with fine .5mm bands with sulfides some disseminated sulfides - sulfides about 3%. Some bornite was seen.

Sample 29-03-01 - #247755 From 174.77 to 175.27 m OF Hole LC-83-03

Medium gray limestone – marble. Locally rusty hue to the core some disseminated sulfides – rusty spots - very fine – most is pyrite. Sulfides to 3% locally

Sample #247751 From 247.80 to 248.80m OF Hole LC-83-04

Dark gray limestone it is the footwall of a breccia zone – not the zone itself. Pyrite to 2% very fine. Numerous short small stress fractures healed with carbonate.

Sample #247752 From 248.80 to 249.20m OF Hole LC-83-04

White chalky limestone with very pale greenish hue under magnification. Very faint narrow bands. Very fine sulfides hard to see even with 20 power then only able to see 25% of grains. Pyrite 2%?





Certificate of Analysis

Work Order: TO106078

...

To: COD SGS Minerals

P.O. Box 439 Whiffen Head Road ARNOLD COVE NF A0B 1A0 Date:

Jun 10, 2009

P.O. No.

JERRY MAZEROLLE

Project No.

DEFAULT

No. Of Samples

5

Date Submitted Report Comprises May 05, 2009

Pages 1 to 5

(Inclusive of Cover Sheet)

Distribution of unused material:

Return to client: 5 Cores

DNRMPT AUG04'09 11:10

Certified By

Operations Manager

SGS Minerals Services (Toronto) is accredited by Standards Council of Canada (SCC) and conforms to the requirements of ISO/IEC 17025 for specific tests as indicated on the scope of accreditation to be found at http://www.scc.ca/en/programs/lab/mineral.shtml

Report Footer:

L.N.R.

= Listed not received

LS.

= Insufficient Sample

n.a.

= Not applicable

- = No result

*INF = Composition of this sample makes detection impossible by this method M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion

Methods marked with an asterisk (e.g. *NAA08V) were subcontracted Methods marked with the @ symbol (e.g. @AAS21E) denote accredited tests

This document is issued by the Company under its General Conditions of Service accessible at http://www.sos.com/terms-and-conditions.htm. Attention is drawn to the limitation of ilability, indemnification and jurisdiction issues defined therein.

JING: The sample(s) to which the findings recorded herein (the "Findings") relate was (were) drawn and / or provided by the Client or by a third party acting at the Client's "dwection. The Findings constitute no warranty of the sample's representativity of the goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted. The findings report on the samples provided by the client and are not intended for commercial or contractual settlement purposes. Any unauthorized alteration, forgary or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Canada Inc.

Mineral Services 1885 Lestie Street Toronto ON M3B 2M3 t(416) 445-5755 t(416) 445-4152 www.sgs.com



Final: TQ106078 Order: JERRY MAZEROLLE

Page 2 of 5

Element Method Det.Lim. Units	Wikg WGH79 0.001 kg	Au FAI323 5 ppb	0.01	IMS14B 5	0.01	IMS14B	IMS14B 0.5	0.01	0.01	Mg IMS148 0.01 %
247751	0.733	<5	0,16		>15		9.6			0.23
*Rep 247751	<0.001	<5	D.16		>15	2	15.2	0.92	0,03	
247752	0.710	<5	0.48		>15		3.6			0.11
247753	0.338	7	5.13		6.27			6.89		3,08
247754	0.528	<5					2.0	1.17		0.27
247755	0,499	<5	0.44	69	>15	13	3.8	1,24	0.02	0.24



This document is issued by the Company under its General Conditions of Service accessible at http://www.ags.com/terms_and_conditions.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

INIG: The sample(s) to which the findings recorded herein (the "Findings") relate was (were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representably of the goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted. The findings report on the samples provided by the client and are not intended for commercial or contractual settlement purposes. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be presecuted to the fullest extent of the law.



Final: TO106078 Order: JERRY MAZEROLLE

Page 3 of 5

Element	Mn	Na	Р	Sr	Ti	Z'n	Ag	As	Βij	Cd
Method	IMS14B	IMS14B	IMS14B	IMS14B	IMS14B	IMS14B	JM\$14B	IM\$14B	IMS14B	IMS14B
Det.Lim.	5	0.01	50	0.5	0.01	1	0.1	1	0.02	0.01
Units	ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
247751	4210	<0.01	170	1070	<0.01	29	<0.1	13	0.05	0.14
*Rep 247751	4270	0.01	180	1060	<0.01	32	<0.1	11	0.05	0.14
247752	1750	<0.01	130	365	<0.01	3	<0.1	4	0.32	0.02
247753	1320	<0.01	730	248	0.06	164	<0.1	3	0.18	0.04
247754	840	<0.01	240	1150	<0.01	6	<0.1	<1	0.07	0.03
247755	1930	<0,01	300	363	<0,01	10	<0.1	5	0.30	0.02



This document is issued by the Company under its General Conditions of Service accessible at http://www.sgs.com/terms_and_conditions.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

ting: The sample(s) to which the findings recorded herein (the "Findings") relate was (were) drawn and / or provided by the Client or by a third party acting at the Client's duection. The Findings constitute no warranty of the sample's representativity of the goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are sald to be extracted. The findings report on the samples provided by the client and are not intended for commercial or contractual settlement purposes. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be procedured to the fullest extent of the law.



Final: TO106078 Order: JERRY MAZEROLLE

Page 4 of 5

Element Method	Ce IMS14B	Co IMS14B	Ga IMS14B	_	Le IMS148	Mo IMS14B	Ni IMS14B	Pb IMS14B	Rb IMS14B	Sb IMS14B
Det.Lim.	0.05	0.1		0.01				0.2	0.2	0.05
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	mqq
247751	15.5	3.1	0.7	0.05	0,8	5.91	23.2	14.7	1.5	0.86
*Rep 247751	15.0	3.0	0.7	0.05	7.7	5.70	23.8	14.3	1,4	0.83
247752	73,9	2.1	1.9	0.03	38.5	4,48	13.7	9.5	2.2	0.21
247753	12.2	50.6	13.2	0.02	5.3	0,75	77.3	2.6	1.1	0.41
247754	18.6	5.7	6,0	0.04	9,4	2.96	23,0	13,6	3.0	0.16
247755	14.8	7.7	1.9	0.06	6.6	2,77	27.6	5.9	0.9	0.31



This document is issued by the Company under its General Conditions of Service accessible at http://www.sos.com/ferms-and-conditions.htm. Attention is drawn to the limitation of liability, Indemnification and jurisdiction issues defined therein.

JING: The sample(s) to which the findings recorded herein (the "Findings") relate was (were) drawn and / or provided by the Client or by a third party acting at the Client's or accepts no liability with regard to the origin or accepts from which the sample(s) is/ere said to be extracted. The findings report on the samples provided by the client and are not intended for commercial or contractual settlement purposes. Any unauthorized attention, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the lew.



Final: TO106078 Order: JERRY MAZEROLLE

Page 5 of 5

Element	Sd	Sn	Th	π	Ü	V	W	Y
Method	IMS14B	IMS14B	IMS14B	IMS14B	IM\$14B	IMS14B	IMS14B	IMS14B
Det.Lim.	0.1	0.3	0.1	0.02	0,05	1	0.1	0.05
Units	ppm	p bm	ppm	ppm	ррт	ppm	ррm	ppm
247761	2,4	<0.3	1.2	0.08	3.59	2	<0.1	7,65
*Rep 247751	2.4	<0.3	1.2	0.05	3.51	2	<0.1	7.61
247752	2.1	<0.3	7,0	0.07	2.02	<1	<0.1	21.1
247753	25.4	0.7	0.6	<0.02	0,28	157	<0.1	10.1
247754	3.5	<0.3	1.9	0.03	1.67	2	<0.1	9.20
247755	4.3	<0.3	2.1	0.03	2.28	12	<0.1	10.6



This document is issued by the Company under its General Conditions of Service accessible at http://www.sgs.com/terms_and_conditions.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therain.

Ing: The sample(s) to which the findings recorded herein (the "Findings") relate was (were) drawn and / or provided by the Client or by a third party exting at the Client's constitute no warranty of the sample's representativity of the goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted. The findings report on the samples provided by the client and are not intended for commercial or contractual settlement purposes. Any unauthorized alteration, forgery or fatsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

IMS14B: The Determination of 36 Elements by Aqua Regia and ICP-MS.



Parameter(s) measured, unit(s):

Silver (Ag); Aluminum (Al); Arsenic (As); Barium (Ba); Bismuth (Bi); Calcium (Ca); Cadmium (Cd); Cerium (Ce); Chromium (Cr); Cobalt (Co); Copper (Cu); Iron (Fe); Gallium (Ga); Mercury (Hg); Potassium (K); Lanthanum (La); Lithium (Li); Magnesium (Mg); Manganese (Mn); Molybdenum (Mo); Sodium (Na); Nickel (Ni); Phosphorus (P); Lead (Pb); Rubidium (Rb); Antimony (Sb); Scandium (Sc); Tin (Sn); Strontium (Sr); Thallium (Tl); Thorium (Th); Titanium (Ti); Uranium (U); Vanadium (V); Tungsten (W); Yttrium (Y); Zinc (Zn): ppm and %

2 Typical sample size:

0.25 g

3 Type of sample applicable (media):

Crushed and Pulverized rocks, soils and sediments

4 Sample preparation technique used:

Crushed and pulverized rock, soil and /or sediment samples are digested by Aqua Regia, 3:1 HCI: HNO₃.

5 Method of analysis used:

The digested sample solution is aspirated into the inductively coupled plasma Mass Spectrometer (ICP-MS) where the ions are measured and quantified according to their unique mass.

6 Data reduction by:

The results are exported via computer, on line, data fed to the Laboratory Information Management System with secure audit trail.

7 Figures of Merit:



Element	Reporting Limit (ppm)	Element	Reporting (ppm)	Element	Reporting (ppm)	Element	Reporting (ppm)
Ag	0.10	Cu	0.50	Ni	0.50	TI	0.02
AI	0.01 (%)	Fe	0.01 (%)	P	50	U	0.05
As	1.00	Ga	0.10	Pb	0.20	V	1.00
Ba	5.00	Hg	0.01	Rb	0.20	W	0.10
Bi	0.02	K	0.01 (%)	Sb	0.05	Υ	0.05
Са	0.01 (%)	La	0.10	Sc	0.10	Zn	1.00
Cd	0.01	Mg	0.01 (%)	Sn	0.30		
Ce	0.05	Мп	5.00	Sr	0.50		
Cı	1.00	Mo	0.05	Th	0.10		
Co	0.10	Na	0.01 (%)	Tì	0.01 (%)		

8 Quality control:

The ICP-MS is calibrated with each work order. An instrument blank and calibration check is analyzed with each run. Preparation blanks and reference materials are analyzed randomly within the batch, one replicate every 12 samples. All QC samples are verified using LIMS. The acceptance criteria are statistically controlled and control charts are used to monitor accuracy and precision. Data that falls outside the control limits is investigated and repeated as necessary.





FAI323: The Determination of Gold, Platinum and Palladium by Fire Assay and ICP- OES.



Parameter(s) measured, unit(s):

Gold (Au); Platinum (Pt); Palladium (Pd) : ppm

Typical sample size:

30.0 g

3 Type of sample applicable (media):

Crushed and pulverized rocks.

4 Sample preparation technique used:

Crushed and pulverized rock sample are weighed and mixed with flux and fused using lead oxide at 1100°C, followed by cupellation of the resulting lead button (Dore bead). The bead is digested using 1:1 HNO₃ and HCl and the resulting solution is submitted for analysis.

5 Method of analysis used:

The digested sample solution is aspirated into the inductively coupled plasma Optical Emission Spectrometer (ICP-OES) where the atoms in the plasma emit light (photons) with characteristic wavelengths for each element. This light is recorded by optical spectrometers and when calibrated against standards the technique provides a quantitative analysis of the original sample.

6 Data reduction by:

The results are exported via computer, on line, data fed to the Laboratory Information Management System (LIMS CCLAS EL) with secure audit trail.

7 Figures of Merit:

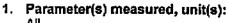
E	lement	Reporting Limits ppm
	Au	0.005
	Pt	0.010
	Pd	0.005



Quality control:

The ICP-OES is calibrated with each work order. An instrument blank and calibration check is analyzed with each run. Preparation blanks and reference materials are analyzed randomly within the batch, one replicate every 12 samples. All QC samples are verified using LIMS. The acceptance criteria are statistically controlled and control charts are used to monitor accuracy and precision. Data that falls outside the control limits is investigated and repeated as necessary.

PRP89: Crush to 75% passing 2 mm & Pulverize to 75 µm.





Typical sample size:

< 250 g

3. Type of sample applicable (media):

Geological and metallurgical samples (ores, concentrates, rocks, soils and metallurgical process products)

4. Sample preparation technique used:

Samples require various preparation procedures to ensure sample homogeneity, representative sub-samples and prevent cross contamination. The stepwise procedure may involve all steps or some of the steps depending upon the state of the sample as received. The sample is died at 70 +/-10°C for 24 hours, if received wet or client specified. The next step involves crushing to reduce the sample size to 2mm 10 mesh (9 mesh Tyler). The sample is then split via a riffle splitter continuously in order to divide the sample into a 250g sub-sample for analysis and the remainder is stored as a reject.

Pulverizing is done using pots made either hardened chrome steel or mild steel material. Crushed material is transferred into a clean pot and the pot is placed into a vibratory mill. Samples are pulverized to 85% passing 75 micron 200 mesh or otherwise specified by the client.

5. Method of analysis used:

This may involve various analyses depending upon the analytes requested and sample type.

6. Data reduction by:

Computer, on line, data fed to Laboratory Information Management System with secure audit trail.

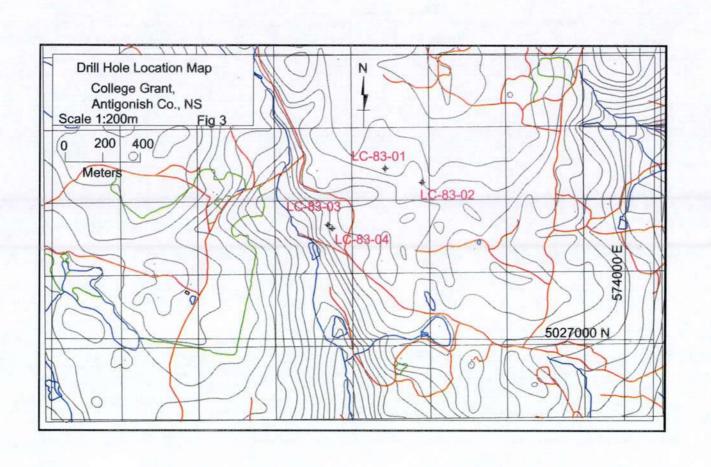
7. Figures of Merit: Quality Control

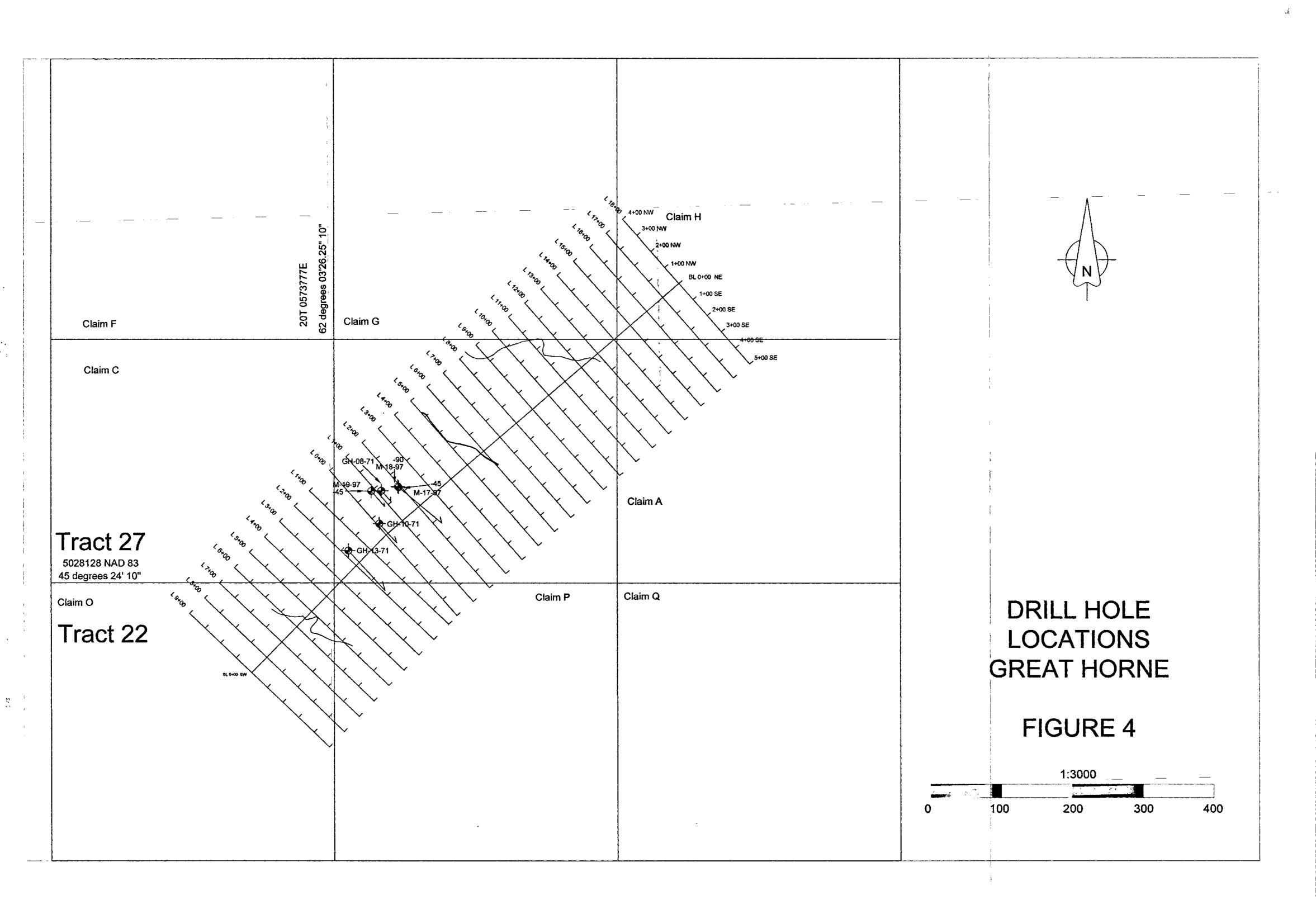
Crushing/ Pulverizing Parameters	Frequency	Quality Control Requirement
Cru. Prep. Blank	At the start of batch	75% passing 9 mesh (2mm) (Tyler)
Cru. Prep. Replicates	every 50 samples	75% passing 9 mesh (2mm) (Tyler)
Cru. % Passing Checks	Every 50 samples	75% passing 9 mesh (2mm) (Tyler)
Pul. Prep. Blank	At the start of batch	85% passing 200 mesh (75 um)
Pul. Prep. Replicates	every 50 samples	85% passing 200 mesh (75 um)
Pul. % Passing Checks	Every 50 samples	85% passing 200 mesh (75 um)



Appendix III









Form 10 - Statement of Assessment Work Expenditure (pursuant to the Mineral Resources Act, S.N.S. 1990, c. 18, s. 43(1))

UNRMPT JUNE 5'09 10:48

7 306 Date of issue 1910(1, 2007 (Complete as necessary to substantiate the total claimed.)

Re: Licence No. 07306 Date of issue 19101



			<u> </u>	V
		Type of Work		Amount Spent
	Prospec	gnix	days	
2.	Geologi	cal mapping	days	
	Trench	ng/sbipping/refilling		
	Assayin	g & whole rock analysis		 `
) <u>.</u>	Offser la	borstory	 *-	
 J.				ļ
٠.	Grid; (a)	Line cutting	km	
	(b) (e)	Picket setting Flagging	km km	
, -	Geophy	sical surveys		
	(8)	EMAVLE .	km.	
	(b) (c)	Mag or Grad	Km	
	(c)	Rediometric	km	
	(d)	Combination Other	km	
	(e)		km	
	Geophy	sical surveys		·
	Ground	:		
	(a)	EMVLF	km	
	(b)	Selsmic soundings		
	(c) (d)	Magnetic/telluric IP/resistivity	km	
	(0)	Gravity	km	
	(n)	Other	km km	
				<u> </u>
l <u>.</u>		mice) surveys		
	(a)	Lake, atream, spring (f) Water		
		(ii) Sediments	samples	
	(b)	(i) Rock	samples	<u> </u>
	(9)	(ii) Core	samples	272 6 £
		(iii) Chips	samples	~ 7.7.2 ==
	(c)	(i) Soil	samples	
		(ii) Overburden	samples	
	(d)	Gas	samples	
	(e)	Biogeochemistry	samples	
	(1)	Sample collection Mothed Codes	days	
	(g)	5/11 BUI-0-		3500
0.	Drilling:			
	(a) -	Diamond (# holes/m)	/m	•
	(b)	Percussion (# holes/m)		
	(c)	Rotary (# holes/m)		
	(d)	Auger (# holes/m)	<u> </u>	
	(6)	Reverse circulation (# holes/m)	/m	
	(f) (g)	Logging, supervision, etc. Sealing (# holes)	days	FT, 000
			<i>*</i>	
1. Ot	her (describe) Hosistent Logging	5 Pays	9 2000
			3 .495	7 9
				47
		 Subtotat 		1 8122 PT
				7 0,7 - 2=
verhe	ad costs			1
		to a series of the VC	A 15A.45	#
2.	Secretar	ial services 2 the ys from sing Johny may	2- PAYS	3000
3.	Drafting	services	<i>F3Doy</i>	350
4.			 	
		rpenses (rent, hest, light, etc.)		
5.	Field su	ppiles .	r	
6.	Compen	sation paki to landowners		
7.	Jag of the	Report Writing	2 Dzys	1400=
B. 12		escribe) The aspertation		554 40
, 2	т х	10 Teys X - 44 / Not Subtotal		\$ 2 C a4 75
_		Grand total	+	10 7 7 05
		J.L.N. WUII		1 10, +2+

List the names of the persons who conducted the work reported in the previous table and the dates during which the work was performed.

Name	Address	Dates Worked
Gerard Mazerolle	88 Brook land St.	merch 25, 26, 17, 30, 31
		April 1,2,3,7,8,94D
		May 8 12 Typolag 18,19
		may 20 20 pros Logs
Martin Flauren	92 Brock Kind St.	April 1,2,3,7,8
1-00-1		
<u></u>		
,		
·		
	_	
-		
		,,
		•

I hereby certify that the information is ment work credit and that it is the tota	n this form is true and correct, that it had of all work conducted on the licence	is not before been submitted for assess- during the past licensed year,
As LICENSE hu (position in company or licenses)	I am duly au	thorized to make this certification.

ment work credit and that it is the total of all work conducted on the licence during the past licensed year,
As License holder I am duly authorized to make this certification.
(position in company or licensee)
Name and address of livensee: Gerard J. Mo 7 210/14
Dated at Antig 07134 in the Province of Nova Scotia on 12 June 2009 Name and address of licensee: Gerard J. Mazerolle. 88 Brook land Street, Antigonish, NS. BLG-IV9
Signature Gerard J. Marcholle.
For further information, contact the Registrar of Mineral and Petroleum Titles at 1-902-424-4068.