GEOLOGICAL, GEOCHEMICAL, GEOPHYSICAL AND DIAMOND DRILLING

SUMMARY REPORT

ON THE

MCMASTER ZONE
CAROLIN MINE - LADNER CREEK AREA
NEW WESTMINSTER MINING DIVISION
LAT 49° 32' LONG 121° 17'
CARO #3 FR CLAIM
NTS 92H/11W

For

CAROLIN MINES LTD.
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By

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December 6, 1989

CONTENTS

	Page
LIST OF ILLUSTRATIONS AND TABLES	i
EXECUTIVE SUMMARY	ii
INTRODUCTION	1
LOCATION AND ACCESS	2
CLAIM STATUS	3
FIELD PROCEDURES	5
REGIONAL GEOLOGY	6
LOCAL GEOLOGY AND SURFACE MINERALIZATION	7
DIAMOND DRILLING 1975 and 1989	12
GEOCHEMISTRY	15
GEOPHYSICS	15
CONCLUSIONS	16
RECOMMENDATIONS	17
COST ESTIMATE FOR FUTURE WORK	19
REFERENCES	20

Appendix I: Statement of Qualifications
Appendix II: Statement of Costs (McMaster 1989 Programs)
Appendix III: Diamond Drill Contract
Appendix IV: List of Personnel and Dates Worked
Appendix V: Analytical Procedures and Assay Certificate
Appendix VI: Diamond Drill Logs 1989 and 1975 Relogged

List of Illustrations and Tables

			Following Page
Figure 1	Location Map		1
Figure 2	Topographic Map	1:50,000	2
Figure 3	Claim Map	1:50,000	3
Figure 4	Regional Geology		6
Figure 5	Local Geology McMaster Area	1:3,000	7
Figure 6	1975 Assay Map, No. 50F	1:1,200	8
Figure 7	Composite Map,	1:5,000	in pocket
Figure 8	Stratigraphic Column, Idaho Mine		9
Figure 9	McMaster Local Geology,	1:500	in pocket
Figure 10	Cross Section along drill holes M-13,	1:250	in pocket
Figure 11	Cross Section along drill holes M-7 +9,	1:250	in pocket
Figure 12	Cross Section along drill holes M-1, 2, 3 & 8,	1:250	in pocket
Figure 13	Cross Section along drill holes M-4, 5, 10 & 11,	1:250	in pocket
Figure 14	Cross Section along drill hole M-6,	1:250	in pocket
Figure 15	Cross Section along drill hole M-12,	1:250	in pocket
Figure 16	Soil Geochemistry McMaster Area,	1:1,200	in pocket
Figure 17	Ground Magnetometer Results		14

Tables		Page
Table I	List of Claims	3
Table II	Stratigraphic Column McMaster Area	9
Table III	Significant Gold Intersections at McMaster 1975 and 1989 Diamond Drilling	14

EXECUTIVE SUMMARY

The McMaster Zone was found by soil geochemistry in 1975. Relatively high-grade surface assay values, such as; 20 feet averaging 0.54 oz/ton Au were returned from three bulldozer trenches across the zone. The results of a 1,699 foot (seven holes) diamond drill program, which intersected less intense mineralized sections, was interpreted, at the time, to indicate lack of continuity of the sulfide-gold system. The McMaster Zone was recognized as having very similar gold content, sulfide mineralogy, alteration assemblage, host rocks and stratigraphy as the Idaho Zone. However, no work was done on the McMaster Area between November 1975 and September, 1989.

In 1989, the 1975 McMaster core was relogged and the results correlated with new detailed mapping of the old trenches. This re-interpretation suggested that the McMaster area was composed of several fault wedges separated by westerly dipping shear zones. The easterly dipping mineralized zones exposed in the trenches are truncated by the westerly dipping shears and consequently the 1975 drilling penetrated mineralized zones which are not connected with those immediately up-slope from the drill hole collars.

Diamond drilling of 1,369 feet in six holes was completed to test these new concepts. Five separate mineralized zones were recognized from the surface mapping and labelled A to E. Other zones which are not presently exposed on surface were found in hole M-12, M-13, M-9 and M-11. These mineralized zones would be expected to subcrop west of the trenched area. The 1989 drilling indicated continuity within individual fault wedges and two holes stepped out 76 feet to the north (M-13) and 148 feet to the south (M-12), both of which intersected strong gold values:

M-12	8.50 m to 15.00 m	6.5 m	(21.3 ft.)	averaged 0.152 oz/ton Au
M-13	0.91 m to 3.00 m	2.09 m	(6.9 ft.)	averaged 0.124 oz/ton Au
	3.00 m to 12.50 m	9.5 m	(31.2 ft.)	averaged 0.037 oz/ton Au
	12.50 m to 14.34 m	1.84 m	(6 ft.)	averaged 0.160 oz/ton Au.

The strike length of mineralized zone investigated by the drilling to date is 195 m (640 ft.). Down dip extentions are to a maximum of 40 m (131 ft.) as presently tested by the shallow drilling.

Strong gold-in-soil geochemistry suggest the possibililty of extentions of the mineralized zones of up to 500 ft. to the northwest and at least 600 feet to the southeast.

Current work is not detailed or systematic enough to allow a mineral inventory to be calculated. Considering the possible strike length, number of mineralized zones, width of mineralization, gold grades and known extent down dip and general geological parameters, in my opinion, the McMaster Zone has the potential to contain a mineral deposit similar in size and grade to the Idaho Zone which was developed into the Carolin Mine.

A program of continued geological mapping and surface trenching (with a tracked excavator) in conjunction with additional exploration drilling is recommended for 1990 at a cost of $353,500 (Canadian). If this program is successful in extending the McMaster Zone along strike and down dip then a major program of definition drilling will be required to block out potential ore zones.

Respectfully submitted,

December 6, 1989

J.T. Shearer, M.Sc., FGAC
New Global Resources Ltd.

INTRODUCTION

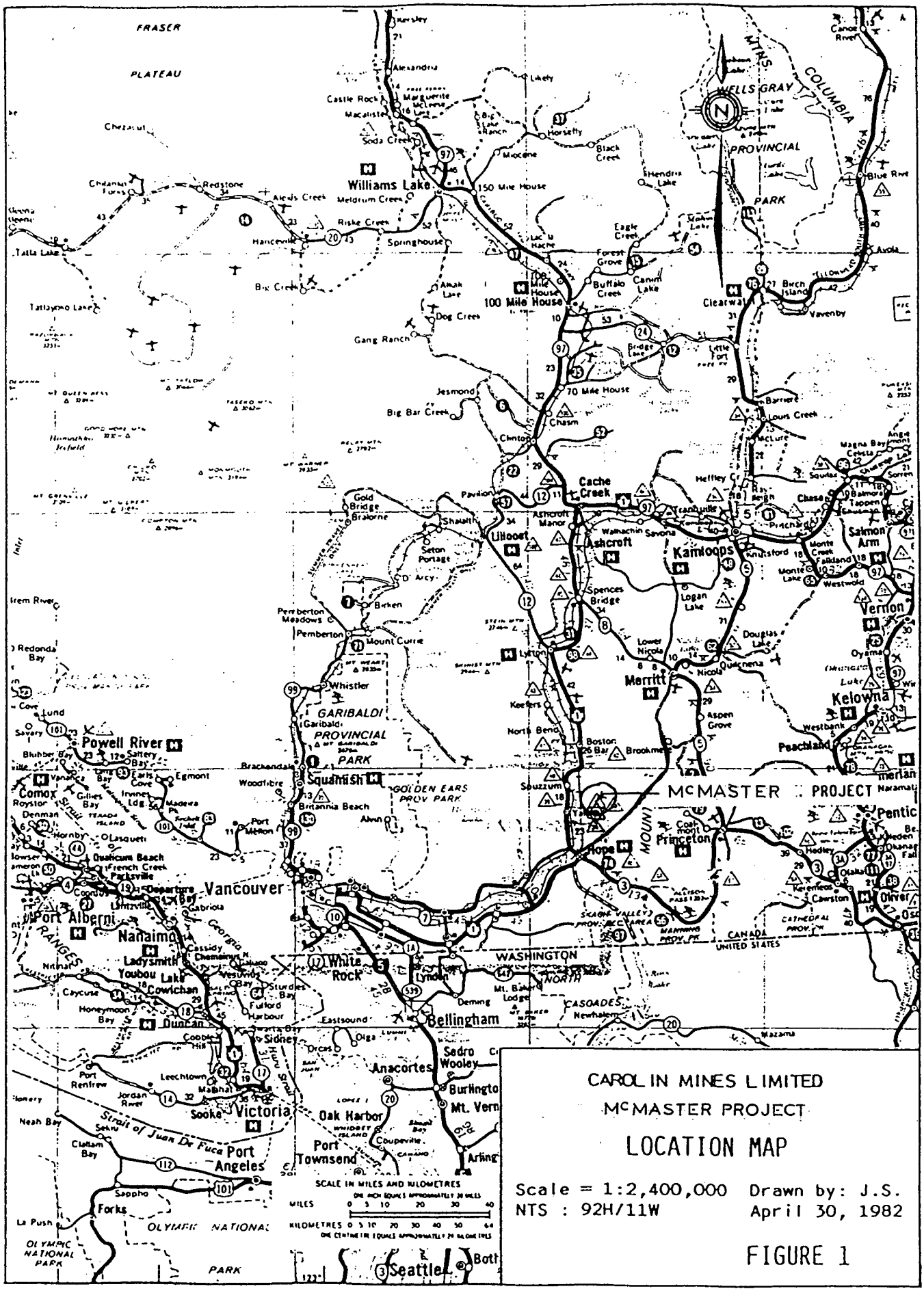
This summary report on the McMaster Zone incorporates a re-interpretation of the 1975 drill data in addition to geological observations, drill logs and complete assay results from the 1989 program.

The McMaster Zone has been known as an important exploration target since its discovery in 1975. Unfortunately, the initial enthusiasm for the zone, created by the relatively high-grade surface trenching results, decreased dramatically after the small diamond drilling program in November 1975 failed to demonstrate continuity of the higher grade sections. The data collected in 1975 did not present a "simple" interpretation comparable to the gross geological simplifications that were being made in the same time period at the Idaho Zone.

The McMaster Zone was discovered by soil geochemistry in early 1975 while the property was under option to Precambrian Shield Resources Ltd. The Zone is located approximately 1,010 meters (3,314 feet) horizontally north of the presently known north end of the Idaho orebody (on 800 level at 900N). The McMaster Zone outcrops at about 1,482 metres ASL (4,862 feet) which places it 431 metres (1,414 ft.) above the Idaho #2 zone outcrop.

The intense gold-in-soil anomaly at the McMaster was investigated by 900 feet of surface excavations in three easterly trending bulldozer trenches. Several discrete quartz-albite-carbonate alteration zones containing abundant pyrite, pyrrhotite and arsenopyrite were uncovered. The style of alteration, sulfide assemblage and host rock sequence are identical to that found in the Idaho orebodies. The trenching demonstrated a strike length of the mineralized zones of approximately 400 feet. Better grade sections in the trenches returned assays ranging from 0.25 oz/ton gold over an 11 foot width to 0.54 oz/ton gold over a 20 foot width.

In November 1975, a total of 1,699 feet of surface diamond drilling in seven holes tested below the trenches to a maximum depth of 300 feet. Similar alteration was encountered in the drill holes but sulfide mineralization was not as intense. The best intersection was 0.13 oz/ton Au over 19.4 feet (M-2) within which 7.1 feet averaged 0.245 oz/ton Au. Unfortunately, since no detail geological mapping was



CAROLIN MINES LIMITED

McMASTER PROJECT

LOCATION MAP

Scale = 1:2,400,000 Drawn by: J.S.

NTS : 92H/11W April 30, 1982

FIGURE 1

completed in and around the trenches, the significance of the drill results could not be correlated into an overall picture. Surprisingly, no further work was permitted at the McMaster Zone until 1989.

The McMaster Zone was re-evaluated in September and October, 1989 by the following program:

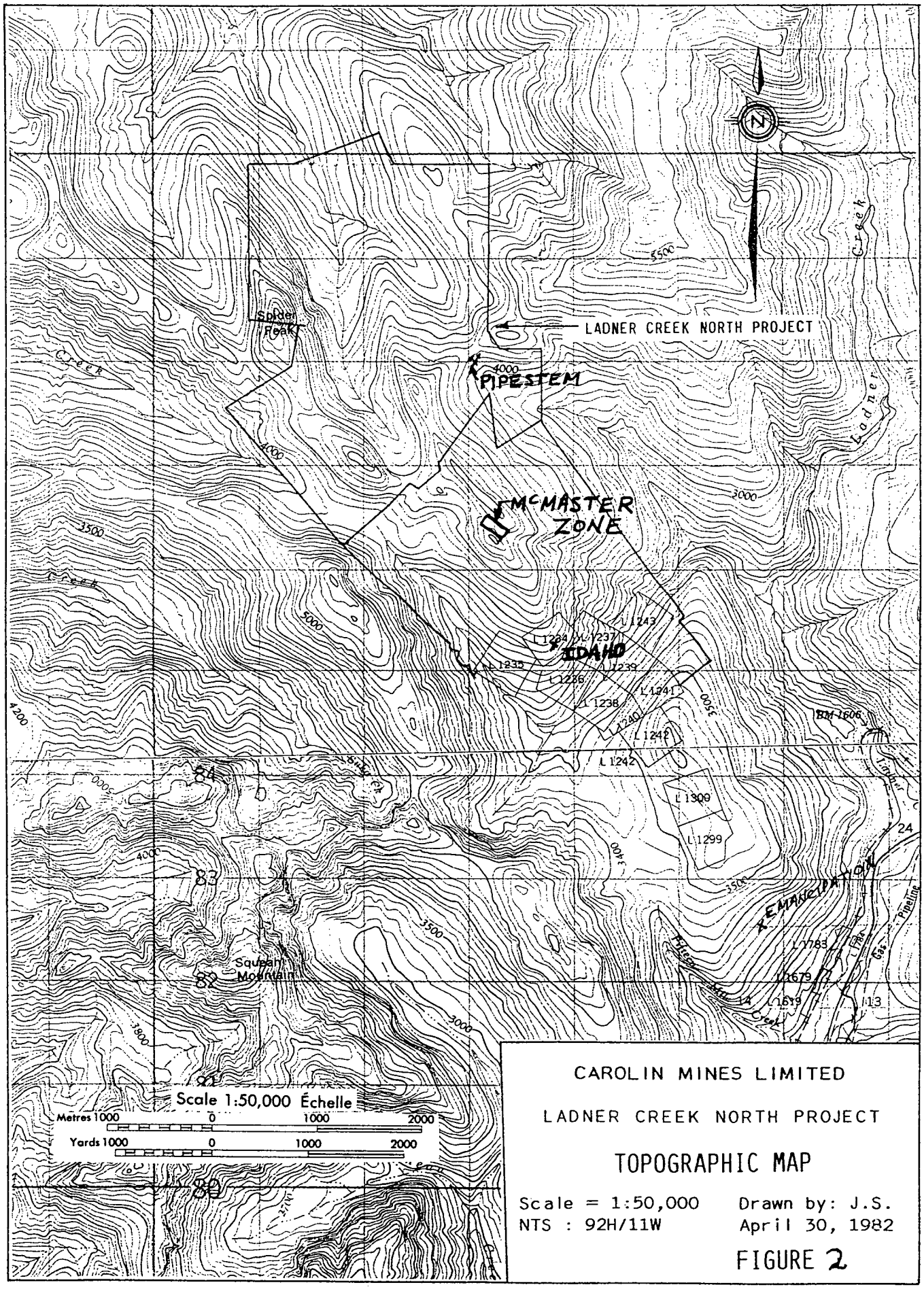
a) re-logging all of the 1975 drill core
b) detail mapping of the trenches at 1:500
c) detail mapping around the zone 1:1000
d) plotting cross-section at 1:250 and plans
e) search of available records for old McMaster data
f) diamond drilling, 1,369 feet in six holes (M-8 to M-13).

This report includes all past and present information on the McMaster area and recommendations for a staged evaluation of the favourable ore potential of the mineralized zones.

LOCATION AND ACCESS

The Ladner Creek North Property is situated between the headwaters of Ladner Creek to the south and upper reaches of the south fork of Siwash Creek to the north. The McMaster Zone at latitude 49° 31' 10", longitude 121° 17' 45" is in the north-central portion of the claim group. The property is 20 km northeast of Hope, B.C., and lies adjacent on the north of the Carolin Mine site as shown on Figures 1 and 2. Elevations in the immediate area range from 1,200 to 1,510 m.

Access from Hope is by the new Coquihalla Highway along the old Kettle Valley Railway grade to km 20 and then up the mine road to the Carolin Mine site. From the mine, a 4-wheel drive gravel and dirt road 8 km long leads north to the McMaster Zone. The west and north sides of the property are accessible by logging roads up Qualark and Siwash Creeks (Figure 3).



CAROLIN MINES LIMITED

LADNER CREEK NORTH PROJECT

TOPOGRAPHIC MAP

Scale = 1:50,000 Drawn by: J.S.

NTS : 92H/11W April 30, 1982

FIGURE 2

CLAIM STATUS

Recently, Carolin Mines Ltd. completed a financial reorganization and asset consolidation, which among other things, enabled the company to arrange 100% ownership in the Carolin mine, mill complex and mineral claims in the Belt. The company also acquired the remaining mineral claim interests in the Ladner Creek North Property and a portion of the Coquihalla Belt property. A partial list of claims is shown in Table 1 and illustrated on Figure 3. The Government-issued claim map is significantly different than the actual claim positions. Carolin Mines Ltd. contracted a legal survey of the common boundary between Ladner Creek North Project and the claims surrounding the Idaho Mine to Tunbridge and Tunbridge Ltd. in 1982. Between June and August most of this boundary, referred to as "the Fence" was located and brushed out and is located just north of McMaster Pond. The relative positions of Cabin 9 and 10, plus Home Gold 5 and 6, were established, but the relatively minor deviation through Caro 17 and Home Gold 15 remain to be calculated. The extreme easterly portion of the Fence along Caro 5 and 6 and a closing loop from east to west have not been surveyed. Fred Tunbridge was involved in staking the Cabin claims with Buster McCombs in 1962.

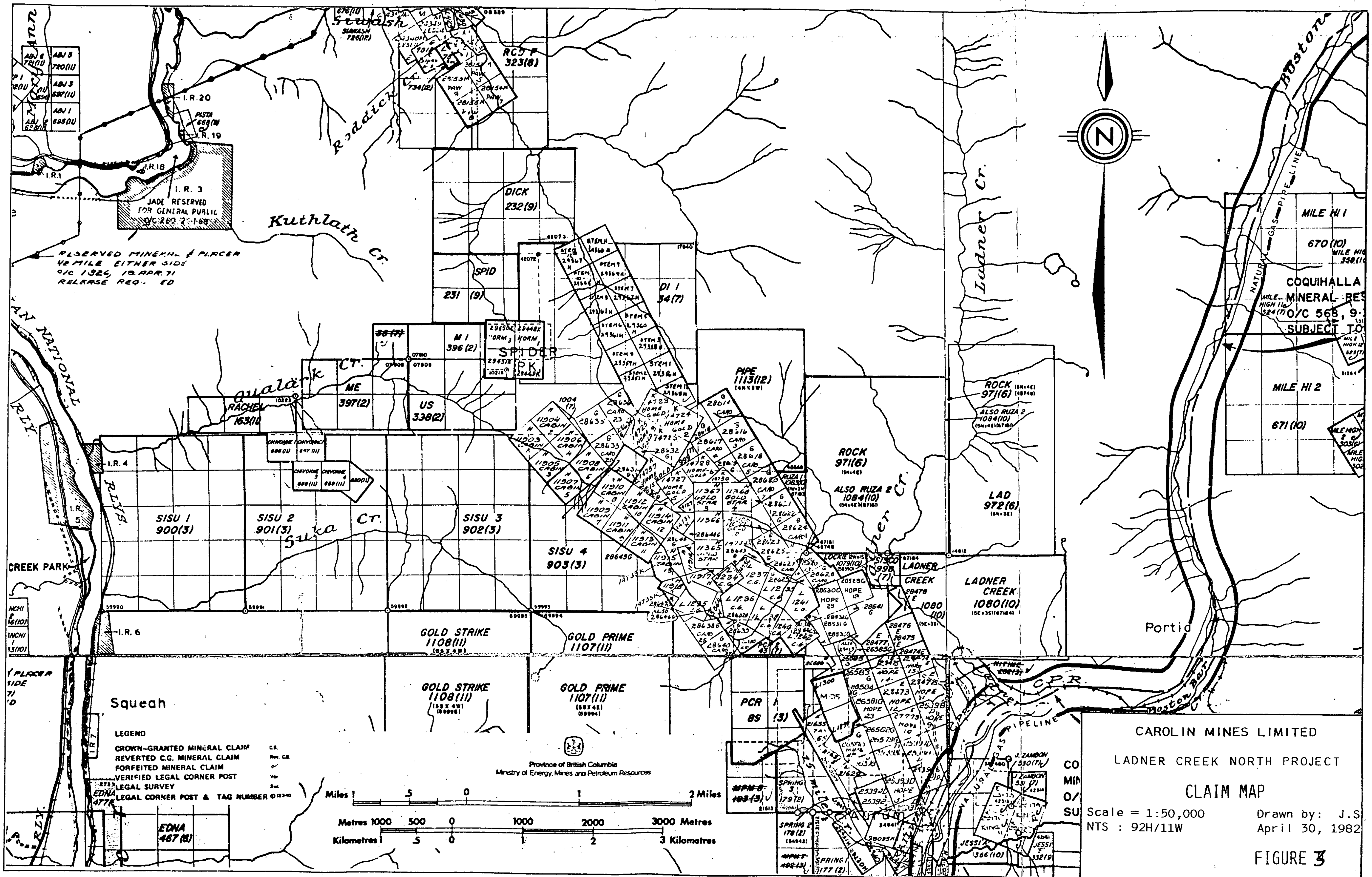
The Carolin property consists of Crown granted mineral claims, located 2-post claims, Modified Grid System claims and several fractions. The pertinent claim data around the Idaho Mine are as follows:

TABLE 1

LIST OF CLAIMS

Name	Record No.	No. of Units	Expiry Date
Caro	#5 - #16	28618 - 28629	
Caro #24 - #27	28637 - 28640	4	June 29, 1991
Caro #29 & #30	28641 - 28642	2	June 29, 1991
Caro #1 Fr - 5 Fr & 6 Fr	28643 - 28646 - 28647	5	June 29, 1991
Sylvia Fraction	13364	1	July 20, 1991
Cabin #9 - #14	11911 - 11916	6	July 21, 1991
Cabin #20 Fr & #21 Fr	11917 - 11918	2	July 21, 1991
Gold Star No. 1 - No. 4	11365 - 11368	4	July 28, 1991
Home Gold #5 - #14	14727 - 14736	10	August 21, 1991
PCR 1	89	6	March 8, 1991
PCR 2	43	2	July 28, 1991
Idaho, Tramway	1234 - 1235	2	Crown grants
Aurum No. 1 - No. 6	1236 - 1241	6	Crown grants
Monitor	1242	1	Crown grant
	Total	63	

Claims to the north are listed below, Carolin Mines Ltd. also owns claims to the north and south of the listed claims.



CAROLIN MINES LIMITED

LADNER CREEK NORTH PROJECT

CLAIM MAP

Scale = 1:50,000 Drawn by: J.S.

NTS : 92H/11W April 30, 1982

FIGURE 3

TABLE I

List of Claims

LADNER CREEK NORTH PROJECT

NAME	RECORD NUMBER	UNITS	DATE LOCATED	DATE RECORDED	EXPIRY DATE	LOCATOR
CABIN #1	11903	1	July 8, 1962	July 21, 1962	July 21, 1991	A. McCombs
CABIN #2	11904	1	July 8, 1962	July 21, 1962	July 21, 1991	A. McCombs
CABIN #3	11905	1	July 8, 1962	July 21, 1962	July 21, 1991	A. McCombs
CABIN #4	11906	1	July 8, 1962	July 21, 1962	July 21, 1991	A. McCombs
CABIN #5	11907	1	July 8, 1962	July 21, 1962	July 21, 1991	A. McCombs
CABIN #6	11908	1	July 8, 1962	July 21, 1962	July 21, 1991	A. McCombs
CABIN #7	11909	1	July 12, 1962	July 21, 1962	July 21, 1991	Rae McCombs
CABIN #8	11910	1	July 12, 1962	July 21, 1962	July 21, 1991	Rae McCombs
CARO #1	28614	1	June 13, 1973	June 29, 1973	June 29, 1991	L. McClelland
CARO #2	28615	1	June 13, 1973	June 29, 1973	June 29, 1991	L. McClelland
CARO #3	28616	1	June 13, 1973	June 29, 1973	June 29, 1991	L. McClelland
CARO #4	28617	1	June 13, 1973	June 29, 1973	June 29, 1991	L. McClelland
CARO #17	28630	1	June 13, 1973	June 29, 1973	June 29, 1991	M. Mathieu
CARO #18	28631	1	June 13, 1973	June 29, 1973	June 29, 1991	M. Mathieu
CARO #19	28632	1	June 13, 1973	June 29, 1973	June 29, 1991	M. Mathieu
CARO #20	28633	1	June 13, 1973	June 29, 1973	June 29, 1991	M. Mathieu
CARO #21	28634	1	June 13, 1973	June 29, 1973	June 29, 1991	M. Mathieu
CARO #22	28635	1	June 13, 1973	June 29, 1973	June 29, 1991	M. Mathieu
CARO #23	28636	1	June 13, 1973	June 29, 1973	June 29, 1991	M. Mathieu
HOME GOLD #1	14723	1	August 6, 1965	August 21, 1965	August 21, 1991	A. McCombs
HOME GOLD #2	14724	1	August 6, 1965	August 21, 1965	August 21, 1991	A. McCombs
HOME GOLD #3	14725	1	August 6, 1965	August 21, 1965	August 21, 1991	A. McCombs
HOME GOLD #4	14726	1	August 6, 1965	August 21, 1965	August 21, 1991	A. McCombs
HOME GOLD #15	14737	1	August 6, 1965	August 21, 1965	August 21, 1991	A. McCombs
DI #1	34	20	July 4, 1975	July 11, 1965	July 11, 1991	D. J. Griffiths
CALEB #1 FRACTION	999	1	July 10, 1980	July 15, 1980	July 15, 1991	W. F. Chase
CABLE #2 FRACTION	1004	1	July 18, 1980	July 21, 1980	July 21, 1991	W. F. Chase
STEM #1	29356	1	June 29, 1974	July 2, 1974	July 2, 1991	G. Beyko
STEM #2	29357	1	June 29, 1974	July 2, 1974	July 2, 1991	G. Beyko
STEM #3	29358	1	June 29, 1974	July 2, 1974	July 2, 1991	G. Beyko
STEM #4	29359	1	June 29, 1974	July 2, 1974	July 2, 1991	G. Beyko
STEM #5	29360	1	June 29, 1974	July 2, 1974	July 2, 1991	G. Beyko
STEM #6	29361	1	June 29, 1974	July 2, 1974	July 2, 1991	G. Beyko
STEM #7	29362	1	June 29, 1974	July 2, 1974	July 2, 1991	G. Beyko
STEM #8	29363	1	June 29, 1974	July 2, 1974	July 2, 1991	G. Beyko
STEM #9	29364	1	June 29, 1974	July 2, 1974	July 2, 1991	G. Beyko
STEM #10	29365	1	June 29, 1974	July 2, 1974	July 2, 1991	G. Beyko
STEM #11	29366	1	June 29, 1974	July 2, 1974	July 2, 1991	G. Beyko
STEM #12	29367	1	June 29, 1974	July 2, 1974	July 2, 1991	G. Beyko
	TOTAL	58 units				

FIELD PROCEDURES (McMASTER ZONE)

All geological work, diamond drilling and project supervision was done under the author's direct supervision by experienced personnel employed by New Global Resources Ltd.

The 1975 grid could not be accurately reconstituted due to the lack of points still existing in the field. A new grid was established over the area of interest in October, 1989.

A baseline (designed 0+00) was cut along the drill access road paralleling the valley bottom east of the McMaster showing. The baseline trends 135° true north. To the south, the baseline extends beyond the end of the road (Station 18+00N) along the forested hillside. The baseline extends from station L17+00N at its southern extremity to station L20+00N at its northern limit. Crosslines perpendicular to the baseline were cut at 30 metre intervals, between L18+20N and L19+70N. The crosslines extend easterly along azimuth 045° for up to 60 metres and westerly along azimuth 225° to up to 180 metres. Stations were established using pickets at 10 metre intervals along these lines. The lines were measured by a hip-chain.

The 1975 trenches and locations were tied into the grid. Minor slough has covered some of the 1975 drill hole collars making precise locations difficult to determine.

Assay intervals and general locations in the trenches were taken from 1975 Map No. 50F (assay plan) and keyed to mineralized zones. Survey pickets and cairns from the 1975 work were tied-in to the 1989 grid. The 1975 core is stored in the McMaster Camp core shack. Relogging of the 1975 core revealed that many of the major fault structures were not recorded and the four letter rock name abbreviations used by D.J. Griffith did not address the complex lithological assemblage encountered. The new logs reflect the rock nomenclature system built-up during mining of the Idaho ore zones 1981-1984 as established by Shearer (1982) and (1984).

Diamond drill logs are in Appendix VI. The drill contract (Appendix III) was awarded in feet and the core was carefully converted into metric lengths at the Idaho core shack. Core recovery was measured on each piece of core and closely estimated through the uncommon, short rubbly sections.

A drill log form was designed for the project featuring from the left side: drilling blocks, boxes, core recovery, graphic columns for alteration, fracturing, sulfides and geology. The center is reserved for normal written descriptions and assay results are listed on the right. Each drill hole was logged on a scale of 1:250.

Each drill core sample was carefully split by a experienced splitter. New Global personnel checked each sample number with the assay ticket number and each bag was numbered. At the end of the shift all samples were placed in a locked aluminum box. Samples were brought to Chemex Labs by truck. The core shack was locked at all times when New Global personnel were not actually working on the core. Analytical procedures (fire assay) at Chemex Labs Ltd. are outlined in Appendix V. A suite of samples from the McMaster drilling project have been sent to a second independent lab for check assay. The results of the check assays are expected shortly.

REGIONAL GEOLOGY

The Idaho and surrounding claims north to the McMaster Zone cover part of the Coquihalla Serpentine Belt and the early to Middle Jurassic Ladner Group rocks which are adjacent on the east (Cairnes, 1924; Monger, 1970). The two groups of rocks are separated by the Hozameen Fault (Figure 4). This assemblage makes up the main elements of the Coquihalla Gold Belt.

General characteristics of the Ladner Creek area have been discussed by Cochrane and Griffith in numerous Carolin Mines Limited private reports since 1973. Some of these are listed in the bibliography. Surface mapping by Ray (1982, 1983) shows that much of the stratigraphy in the immediate vicinity of the Idaho Orebody is inverted. Major folding and tilting of fault panels appear to be of fundamental importance in ore genesis. A summary of the importance of detail stratigraphic

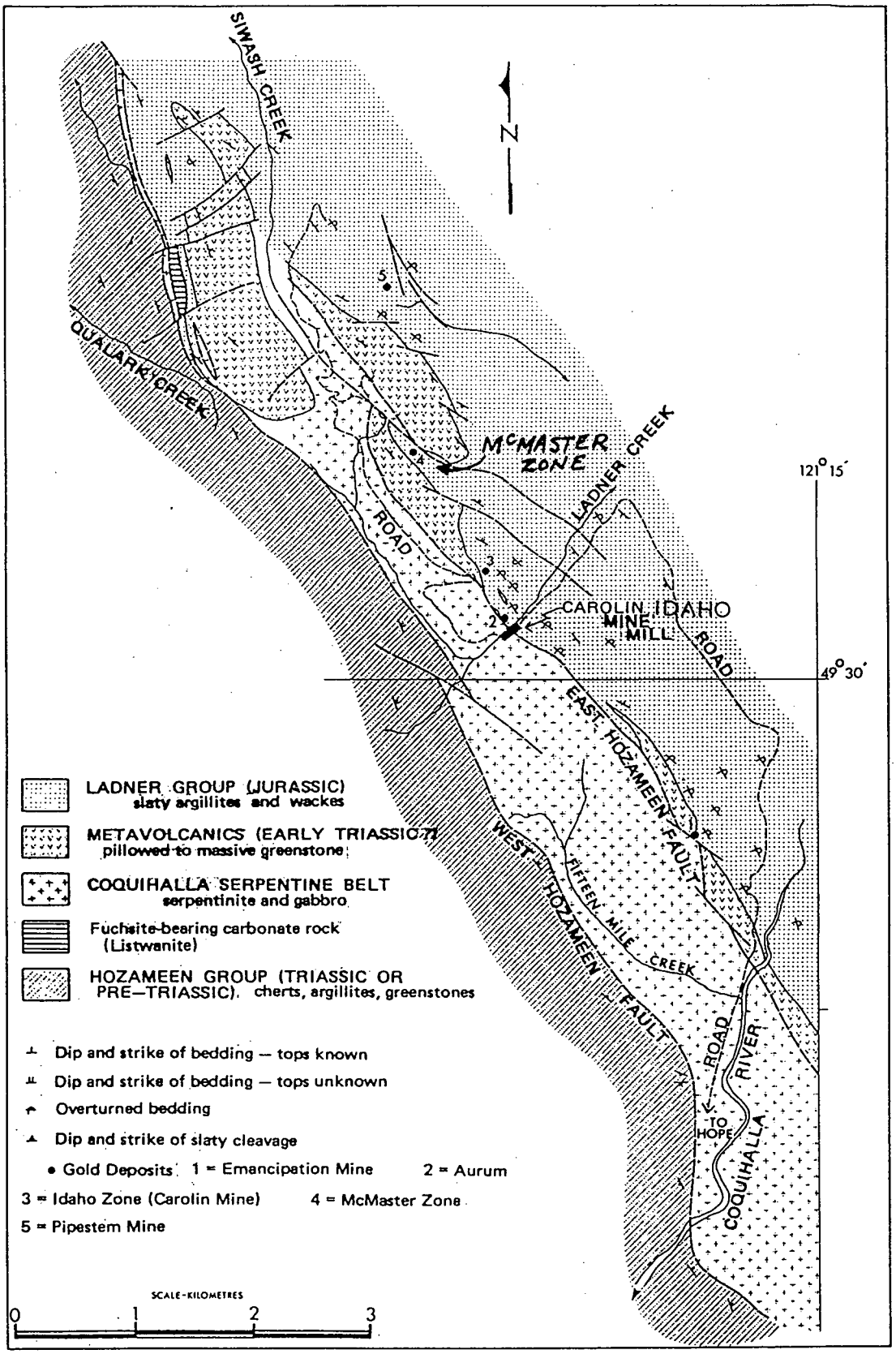


Figure 4 The regional geology of the Carolin-Pipestem-Emancipation gold mines area. (After Ray, 1983).

measurements is contained in Shearer and Niels (1983). The lower Ladner Group rocks represent a transition from a proximal turbidite depositional environment to a progressively distal turbidite and deeper water regime. A regular stratigraphic sequence is recognized within the Ladner Group at the Mine (Figure 8).

The basic structure in the Idaho Mine is a complex, asymmetric antiform which plunges about 20° to the northwest. The ore zones amenable to open longhole stoping are located in the thickened hinge portions of the fold while mineralization generally disappears or thins along the fold limbs (Figure 5). The main fold structure is cut by major late fault structures that run subparallel to the fold axial plane. Cross-cutting faults, trending northeast, appear to be an early element that has moved large blocks of volcanic rocks toward the east.

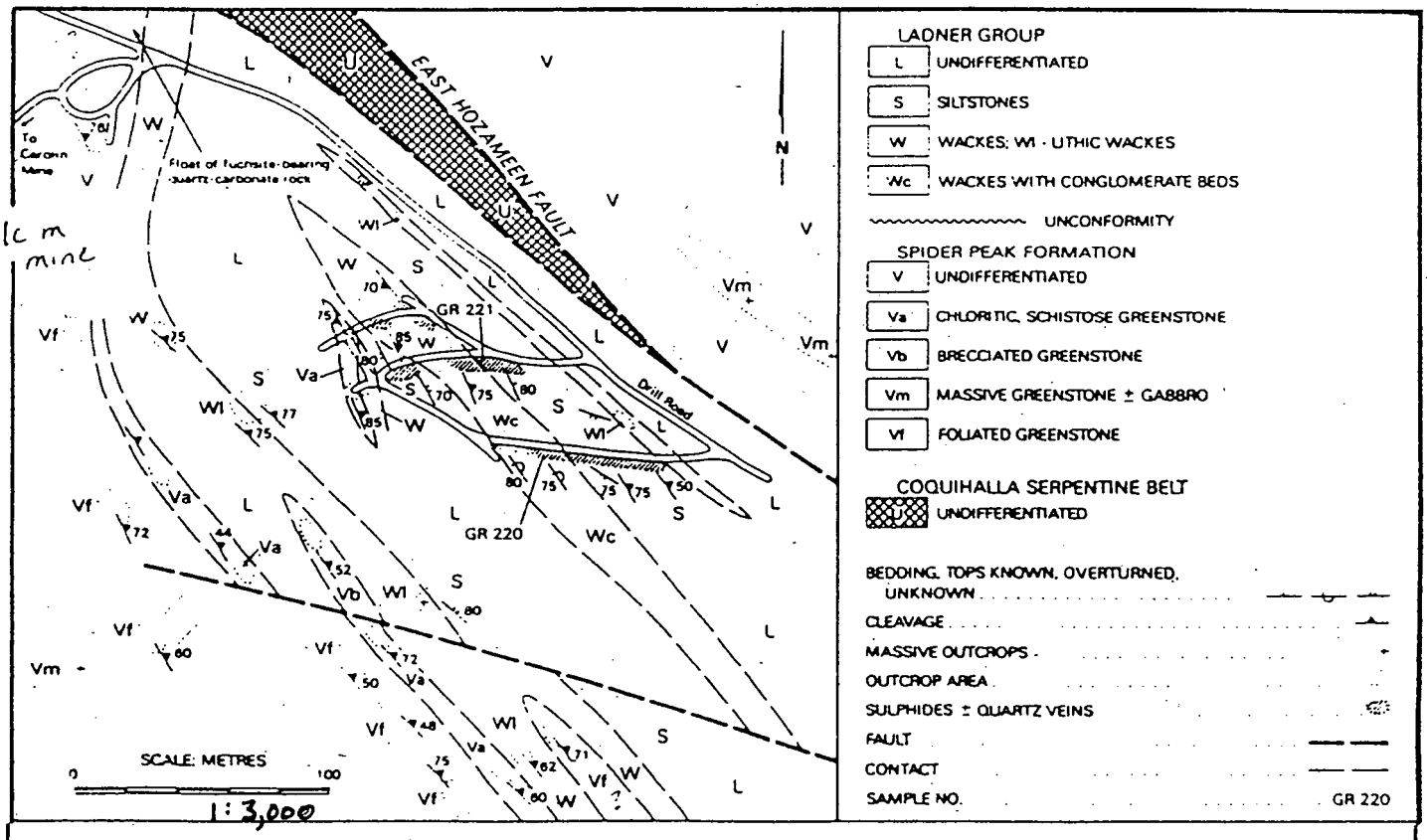
LOCAL GEOLOGY AND SURFACE MINERALIZATION

Detailed geologic mapping was not done at the McMaster Zone in 1975. The only mapping completed was 1:6,000. Government mapping by G.E. Ray in 1983, Figure 5, was a rapid, one day pace and common traverse. During 1989, systematic 1:500 scale mapping was completed around the trenched area, Figure 9, and a 1:1000 scale general map to the south and west was initiated. A composite map (Figure 7, in pocket) illustrates the relationship between the McMaster area and the Idaho and Pipstem Zones.

It became clear once the 1975 drilling was correlated with the detail trench mapping that the McMaster Zone is a series of thin fault wedges stacked on top of westerly-dipping post-mineralization shear zones. These faults appear to be related to a serpentinite-filled structure which occupies the small valley east of the McMaster mineralized zones. Previous work on the north property suggests in the order of 800 metres of strike-slip movement along this fault (the McMaster Pond Fault). The dip-slip component is presently unknown.

The mineralized zones at McMaster can be subdivided from west to east (refer to Figure 9) as follows:

Zone A: Exposed in North Trench - 0.148 oz/ton Au over 4.3 m. Intersected in hole M-7, M-9 and M-13. Strike length of about 100 metres. A Zone is open to the south.



FROM RAY 1989 (in press).

CAROLIN MINES LIMITED

McMASTER PROJECT
GENERALIZED PROPERTY
GEOLOGY MAP

NTS: 92H/11W

FIGURE 5

Zone B: Exposed in Middle Trench - 0.136 oz/ton Au over 2.53 m. Intersected in hole M-1, strike length of about 40 metres. B Zone is open to the south.

Zone C: Highest Grade Zone, exposed in Middle and South trenches - 0.350 oz/ton over 6.59 m and 0.267 oz/ton over 2.93 m. Intersected in holes M-2, M-3, M-10, M-11 but is faulted off above holes M-4, M-5 and M-6. Strike length about 120 metres (as presently known)

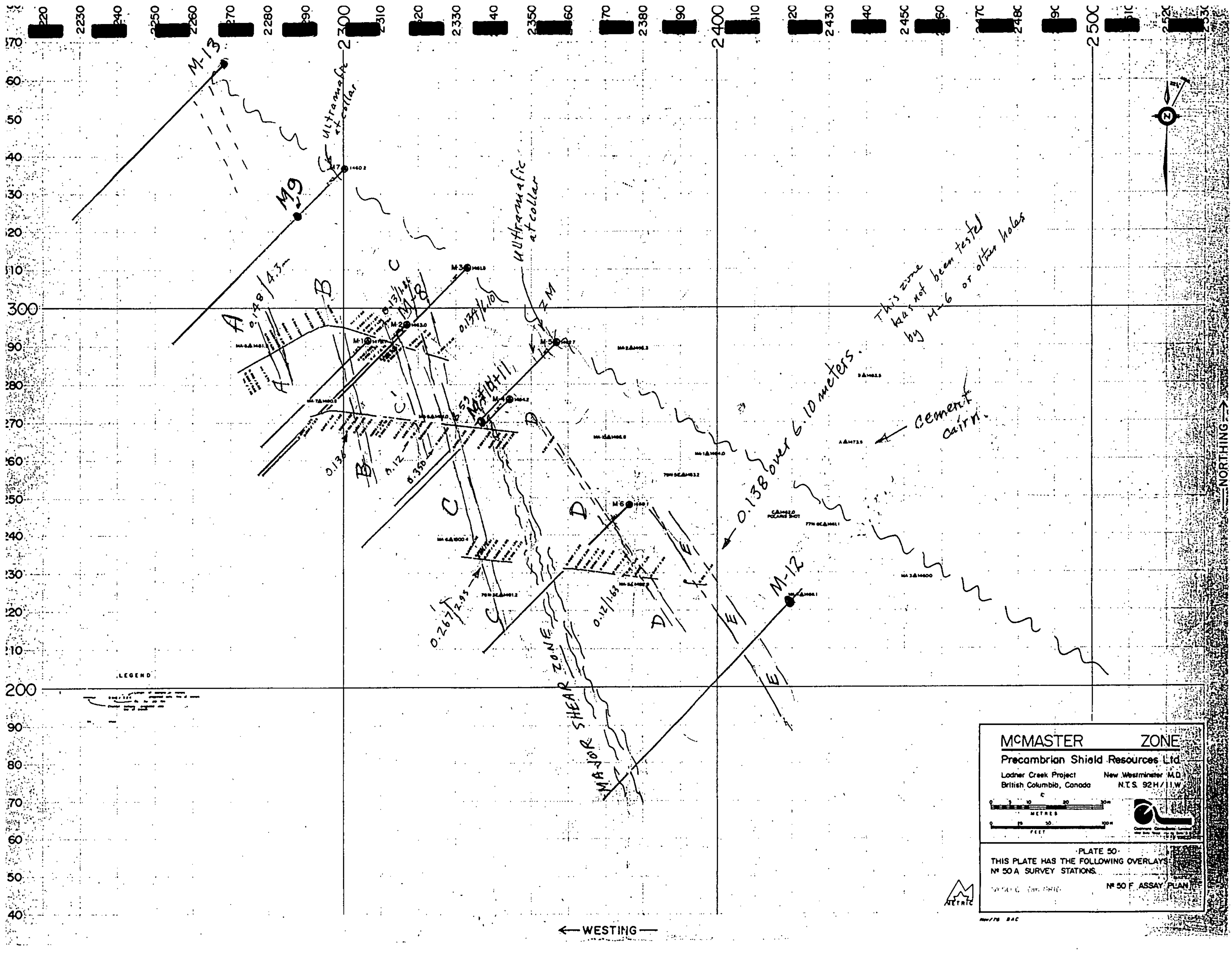
Zone D: Exposed in South Trench, 0.047 oz/ton Au over 3.60 metres. Intersected in hole M-6 and M-12. Strike length about 100 metres. D Zone is open to the south.

Zone E: Exposed in South Trench (now sloughed in), 0.138 oz/ton Au over 6.10 metres. Intersected in hole M-12. 6.50 metres averaged 0.152 oz/ton gold. Strike length as presently known is 50 metres but is open to south.

Note: Other mineralized zones can be expected to the west at depth such as indicated in holes M-9, M-12 and M-13.

The mineralized zones strike about 320° to 340° and dip 60° to the east. The trend of the bedding and mineralized zones appears to be dragged toward the McMaster Pond Fault due to right lateral movement.

The results of the mapping indicate that the McMaster Zone is underlain by the same stratigraphic package of rocks found in the Idaho Mine area (refer to Figure 8) as shown below.


M-13
M9
ultramafic at collar
This zone has not been tested by M-6 or other holes
0.138 over 6.10 meters.
cement cairn
MAJOR SHEAR ZONE
M-12
M-11
M-8
0.48/4.3m
0.267/2.95
0.12/1.63
LEGEND
MCMASTER ZONE
Precambrian Shield Resources Ltd.
Lodner Creek Project
British Columbia, Canada
New Westminster M.D.
N.T.S. 92H/11.W
METRES
FEET
PLATE 50
THIS PLATE HAS THE FOLLOWING OVERLAYS
Nº 50 A SURVEY STATIONS
Nº 50 F ASSAY PLAN
METRIC
← WESTING —
NORTHING →
2300
2400
2500
300
200

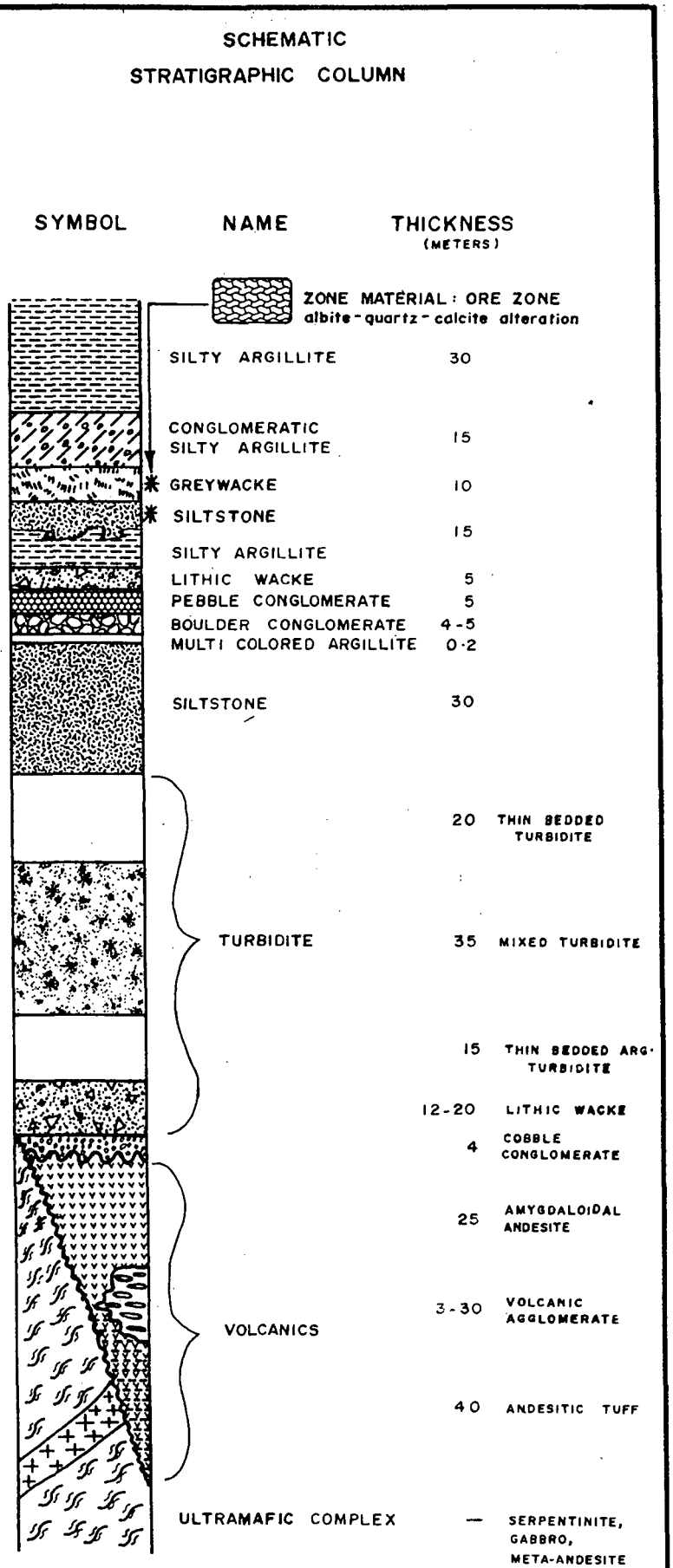


FIGURE 8 STRATIGRAPHY in the vicinity of the CAROLIN MINE.

TABLE II

STRATIGRAPHIC _ - STRUCTURAL PACKAGE AT THE McMASTER ZONE

(structurally "up" to the east)

1) Mylonitic Volcanics (Spider Peak Formation) (displaced along fault)

2) McMaster Pond Fault Structures and Splays (Serpentinite)

3) Variable: Chloritic, Greywacke, Lithicwacke

4) Zone Material - Mineralized Zone containing quartz-albite-carbonate alteration and arsenopyrite, pyrite, pyrrhotite and ± chalcopyrite mineralization

5) Chloritic Greywacke

6) Siltstone
   (a) Siltstone
   (b) Argillaceous Siltstone

7) Turbidite
   (a) Greywacke
   (b) Lithicwacke)
   (c) Conglomerates (pebble to boulder)) graded sequences
   (d) Siltstone)

8) Conglomeratic Argillite (matrix supported clasts)

9) Mylonitic Volcanics

10) Hozameen Fault and Ultramafic Complex

The mineralized zones exhibit the same sulfide mineralization and alteration found in the "Zone Material" of the Idaho ore bodies. Pyrite, arsenopyrite and pyrrhotite predominate, but minor chalcopyrite was observed. The alteration assemblage is pervasive albite-quartz and carbonate.

The rocks at McMaster strike northwesterly, ranging between 300° and 318° on the west part of the trenches, and dip steeply to the northeast between 65° and 80°. Several large, westerly dipping shear zones having been identified trending subparallel to the mineralized zones. These shear zones appear to truncate the mineralized zoned at depth which gives an overall package of thin fault wedges.

Individual rock types in the general McMaster area can be subdivided as follows:

McMaster Zone Rock Types

1) **Myolinitic Volcanics:** found on the east side of the McMaster Valley. These volcanic rocks are characterized by a fine grained greenish highly brecciated, chloritic andesite or basalt.

2) **McMaster Pond Fault Structure:** a northwesterly trending large fault structure that floors the McMaster Valley. This fault structure is filled with an elongate serpentinite body as indicated by the ground magnetometer results.

3) **Serpentinite:** this unit has been observed occasionally at the collars of drill holes located at the base of the McMaster ridge. The serpentinite is characterized by dark green to black highly sheared (slickensided), serpentinite cut by white calc-silicate stringers and occasional antigorite veinlets.

4) **Zone Material:** this rock type is an alteration feature consisting of albite, quartz and carbonate. The rock is characterized by a light grey (may vary to dark charcoal grey) colour that is often cut by coarser quartz-carbonate-albite veins. Pervasive quartz-carbonate-albite flooding is also common. The rock is often well fractured with calcite occurring on vein and fracture margins. Albite is also present as discrete white crystals occurring within the more translucent quartz veins. A dramatically increased level of sulfide mineral in the range of 10 - 20% by volume clearly distinguished "Zone Material" alteration from other altered units. Pyrite, pyrrhotite, arsenopyrite and occasionally chalcopyrite are the primary sulfides. Gold is found associated with this mineral assemblage. The sulfides occur as blebs within veins, coatings along fractures and vein margins and disseminations.

5) **Chloritic Greywacke:** dark green grey, fine grained, massive. Generally found adjacent to Zone Material sections. Chlorite alteration is intense and chloritic laminations are found on slickensided surfaces in sheared areas within this unit. Quartz alteration is normally weak. Carbonate alteration can vary considerably and occurs mainly along fine hairline fractures and as fine stringers.

6) **Siltstone:** in the McMaster Zone two distinct siltstone units were found.

(a) **Siltstone:** grey to greenish grey, very fine grained well bedded unit. There is not change in grain size within the various layers. This sequence can take on a massive appearance when fractured.

(b) **Argillaceous Siltstone:** dark charcoal grey, very fine grained well layered unit. Slight variation in colour of individual layers in parts a strong banded appearance to rock. Graphite is usually abundant along bedding planes and on slickensided surface. Graphite appears to develop readily even in weakly sheared argillaceous siltstones. Carbonate alteration varies considerably and occurs pervasively throughout rock when alteration is strong.

7) **Turbidite:** this sequence of rocks consists of several distinct rock types that exhibit gradational contacts to each other commonly within one bed. The constituent sub units are:

(a) **Greywacke:** a finely clastic greenish grey unit that ranges from relatively even grained to well bedded appearance. The beds differ from siltstone in that grain size gradations are readily observed in layers less than 1 cm thick. Colour ranges from light grey green to dark greenish grey.

(b) **Lithicwacke:** light grey green unit composed of angular elongated clasts. The coarse grained lithicwacke sequence grade in to pebble conglomerates. The lithicwacke units generally have gradational contacts between fine to medium to coarse grained sections although abrupt contacts are observed. Framework grains are always close packed. Alignment of clasts imparts a rough pseudofoliated appearance.

(c) **Pebble Conglomerates:** Pebble conglomerates are generally characterized by a light grey colour and clast size of less than 2 cm diameter. Clasts are close packed and are often flattened. They form the basalt part of the lithicwacke units.

(d) **Siltstone:** light green grey, thin bedded to laminated sections. Gradational grain sizing within layers is not common.

8) **Conglomeratic Argillite:** this unit occurs very commonly in the McMaster Zone area and is a dark charcoal grey coloured sequence. A distinguishing feature is that it is most commonly found as a very loosely packed unit with pebble sized clasts. Dark grey matrix material surrounds most clasts. This unit occurs to the east of the Idaho No. 1 ore zone at 934N.

DIAMOND DRILLING - 1975 AND 1989

In November 1975, a total of 1,699 feet of surface diamond drilling was completed in seven holes. This core was relogged in September 1989, enabling accurate correlation between the recent surface mapping and the subsurface data base. It is a credit to Carolin Mines Ltd. that the 1975 McMaster core was available and in good shape.

In October - November, a further 1,369 feet of diamond drilling was completed in six holes. Drilling has been concentrated on six drill sections: Figures 10 - along hole M-13, Figure 11 - along holes M-7 and 9, Figure 12 - along holes M-1, 2, 3 and 8, Figure 13 - along holes M-4, 5, 10 and 11, Figure 14 - along holes M-6, Figure 15 - along M-12.

Significant mineralized zones are listed in Table III.

On the northern most cross-section (Figure 10), four separate mineralized zones were encountered. Hole M-13 was collared in "A" Zone which is exposed in the new road cut. The other three mineralized zones have not been noted in outcrop, but would be expected to subcrop to the west of the presently trenched area. Future diamond drilling should be done both above and below M-13.

Drill hole M-9 was placed 15 metres above hole M-7 (Figure 11). The zone encountered in M-9 is considerably higher grade than the zone in M-7. Faulting appears to have disrupted the section in the M-7 area as indicated by the density of slickensides and rubbly-broken core.

Four holes have been drilled under the Central Trench (Figure 12). Hole M-1 was collared west of the higher grade Zone "C", and only intersected a narrow part of Zone B. Holes M-2, M-8 and M-3 cut a faulted section of Zone "C" indicating a down-dip extent of 40 metres. Hole M-8 appears to have travelled mainly along a subsidiary west-dipping shear splay related to McMaster Pond Fault. The deeper parts of the holes are less disrupted by faulting and the conglomeratic argillite and turbidite units can be traced throughout the section between holes.

Several small fault slices are evident near the top of holes M-10 and 11 (Figure 13). Short intervals of conglomeratic argillite are associated with argillaceous siltstone, chloritic greywacke and weak zone material farther down the holes. This is in contrast to the turbidite assemblage encountered near the end of M-4 and 5. The wide brecciated fault structure noted in holes M-4 and 5 correlates well with the shear zone mapped in the south and central trenches. Part of Zone "C" was cut in holes M-10 and 11. A narrow mineralized zone was found in M-4 and 5 (Zone "D") which reflects the northern continuation of the Zone "D" exposed in the South Trench.

Hole M-6 intersected a narrow part of Zone "D" (Figure 14). The length of the surface drill rig did not allow a hole to be collared in the South Trench to test Zone "C". Future drilling will require a small drill rig capable of drilling 30 to 50 metre holes.

The most southerly hole (M-12, Figure 15) intersected 6.5 metres averaging 0.152 oz/ton Au. This is Zone "E" which was cut in the South Trench (0.138 oz/ton Au over 6.10 m) but is now covered by slough from the top of the trench. This zone is the most immediate major target for future drilling. To the south, Zone "E" would be expected to diverge from the McMaster Pond Fault structures, thus increasing the possibility of down-dip continuity. Accurate mapping of the cross fault, sub-parallel but 120 m south of the McMaster Pond Fault, will determine the details of the follow-up program to trace Zone "E" toward the south.

TABLE III

SIGNIFICANT GOLD INTERSECTIONS AT McMASTER ZONE

1975 and 1989 DIAMOND DRILLING

Drill Hole	Drill Intersections (m)	Drill Intersections (ft)	Length		Average Grade oz/ton Au
1975					
M-1	12.65 - 16.80 m	41.50 - 55.12 ft.	4.15 m	(13.6 ft)	0.070
M-2	5.80 - 11.53 m	19.03 - 37.83 ft.	5.93 m	(19.45 ft)	0.130
M-3	19.90 - 26.26 m	65.29 - 86.15 ft.	6.36 m	(20.86 ft)	0.110
	62.40 - 64.0 m	204.72 - 209.97 ft.	1.90 m	(6.23 ft)	0.070
M-4	6.32 - 9.70 m	20.73 - 31.82 ft.	3.38 m	(11.09 ft)	0.069
M-5	24.75 - 26.14 m	81.20 - 85.76 ft.	1.39 m	(4.56 ft)	0.050
M-6	6.70 - 12.70 m	21.98 - 41.67 ft.	6.00 m	(19.68 ft)	0.064
M-7	26.71 - 40.00 m	87.63 - 131.23 ft.	13.29 m	(43.60 ft)	0.045
1989					
M-8	10.19 - 15.60 m	33.43 - 51.13 ft.	5.41 m	(17.75 ft)	0.047
M-9	2.74 - 8.48 m	8.99 - 27.82 ft.	5.74 m	(18.83 ft)	0.083
	8.48 - 12.00 m	27.82 - 39.37 ft.	3.52 m	(11.55 ft)	0.035
	12.00 - 22.61 m	39.37 - 74.18 ft.	10.61 m	(34.81 ft)	0.076
	27.4 - 22.61 m	8.99 - 74.18 ft.	19.87 m	(65.20 ft)	0.070
	83.41 - 84.41 m	273.65 - 276.93 ft.	1.00 m	(3.29 ft)	0.090
M-10	2.28 - 6.05 m	7.48 - 19.85 ft.	3.77 m	(12.37 ft)	0.132
M-11	2.44 - 8.74 m	8.00 - 28.67 ft.	6.29 m	(20.63 ft)	0.0677
	8.74 - 17.00 m	28.67 - 55.77 ft.	8.27 m	(27.10 ft)	0.015
	44.69 - 48.09	146.62 - 157.77 ft.	3.4 m	(11.15 ft)	0.023
M-12	8.50 - 15.00 m	27.89 - 49.21 ft.	6.5 m	(26.25 ft)	0.152
includes	12.50 - 15.00 m	41.01 - 49.21 ft.	2.5 m	(8.20 ft)	0.190
	51.5 - 54 m	168.96 - 177.16 ft.	2.5 m	(8.20 ft)	0.053
M-13	0.91 - 3.00 m	2.98 - 9.84 ft.	2.09	(6.85 ft)	0.124
	3.00 - 12.50 m	9.84 - 41.01 ft.	9.5 m	(31.17 ft)	0.037
	12.50 - 14.34 m	41.01 - 47.04 ft.	1.84 m	(6.03 ft)	0.160
	0.91 - 14.34 m	2.90 - 47.04 ft.	13.43 m	(44.06 ft)	0.067
	25.60 - 28.00 m		2.4 m	(7.87 ft)	0.043
	30.28 - 40.00 m		9.72 m	(31.89 ft)	0.032

McMaster Pond

McMaster Zone

FAULT

ANOMALY A

ANOMALY B

L80N

L68N

N

1 inch = 500 feet

0 500 1000 1500 ft.

1 : 6000

0 100 200 300 400 500 m

meters

660 - RELATIVE MAG. VALUES (Gammas)

FAULT ZONE

CONTOUR INTERVAL : 500 gammas

CAROLIN MINES LTD.

McMASTER PROJECT

MAGNETOMETER SURVEY - 1975

SCALE: 1" = 500' 1 : 6000

FIGURE 17

GEOCHEMISTRY

Soil sampling in 1975 outlined very highly anomalous values (in excess of 1,450 parts per billion (ppb), gold) over an area 500 feet long by 100 to 200 feet in width (Figure 16). In addition, anomalous soil results give a well defined (greater than 540 ppb Au) pattern over 1,700 feet in length from line 72N+500E to Line 86N+00E. Lower value gold-in-soil results (greater than 90 ppb Au) continue southeast toward the Montana Adit above the Idaho #2 zone outcrop. The size and intensity of the soil anomaly over the McMaster Zone is similar to the soil anomaly found over the Idaho Zone.

In 1986, follow-up soil sampling was completed by Arctex Engineering Services for Pennant Holdings Ltd. over eleven small grids between the Aurum Zone and the Pipestem Mine. The 72+00N, 5+00E grid is located southeast of the McMaster Zone. Gold values in soil ranged from 10 ppb to 1250 ppb. This grid should be extended to the east to the Rush of the Bull showings in conjuction with excavator.

GEOPHYSICS

Ground Magnetometer Survey (1975)

A wide-spaced ground magnetometer survey covering the McMaster area was conducted during 1975 as part of a much larger program. The magnetometer results indicate the northwesterly trend of the Coquihalla Serpentine Belt. This ultramafic body is bounded by the East Hozameen Fault. The magnetic pattern shows a major dislocation in the strike continuity of the Belt in the McMaster Zone area. The northwest trending general McMaster Pond Fault that occupies the McMaster - Upper Deadman Creek Valley displaces the serpentine 800 metres to the east by right-lateral strike-slip motion.

On a smaller scale, northeast to southwest cross faulting has moved a segment of the serpentinite body eastwards between Line 69N and Line 80N. This cross faulting may have an impact on the continuity of the McMaster Zone mineralization to the southeast.

In the McMaster Zone mineralized area along the ridge west of the cut road (Figure 17) two discrete lower intensity anomalies designated Anomaly A were outlined. These anomalies are probably caused, in part, by pyrrhotite content of argillaceous siltstones, turbidites and conglomeratic argillites adjacent to the gold-bearing quartz - albite - carbonate zones.

A narrow high intensity anomaly (Anomaly B) is located approximately 600 metres southeast of the end of the trench access road. This anomaly may represent a local shear zone which could be associated with mineralized zone material.

CONCLUSIONS

The 1989 work program on the McMaster Zone was successful in correlating the newly collected surface mapping data with the limited subsurface data from the 1975 diamond drilling to form a coherent geological synthesis. This new geological interpretation was tested and extended by a short six hole diamond drill program in October, 1989. The continuity of certain mineralized zones between sections (and to depth) within particular fault wedges has been established.

The five known outcropping zones at McMaster strike about 320° to 340° and dip 60° E. They are truncated at depth by a series of 75° west-dipping post-mineralization faults. Zone C appears to extend to a depth of about 40 metres along cross section M-1, 2, 3 and 8. The Southern (Zone E) and Northern (Zone A) limits of the McMaster Zone are open and the high gold-in-soil results suggest a possible extension 500 feet to the northwest and at least 600 feet to the southeast. The magnitude and scope of the future work required to fully evaluate the McMaster Zone can now be accurately estimated.

Since the McMaster Zone outcrops along a small knoll, the extraction by open cast methods of near surface ore (that may be defined by future programs) is a distinct possibility.

Considering the possible strike length, number of mineralized zones, width of mineralization, gold grades and known extent down-dip and general geological parameters, in my opinion, the McMaster Zone has the potential to contain a mineral deposit similar in size and grade to the Idaho Zone which was developed into the Carolin Mine. (Approximate published reserves at the start of mining of 1.5 million tons averaging 0.141 oz/ton at a 0.08 cut-off with 20% dilution.)

RECOMMENDATIONS

Based on the preliminary results of the 1989 work program, the following orderly exploration program is recommended:

1. Accurately cut lines and conduct 1:1000 geological mapping fill-in-soil sampling and ground magnetometer surveys of the area between lines 68N to L89N (50 metre line spacing with 20 metre stations). Special attention should be given to the old trenches on Line L73N near (west) the "Rush of the Bull" Showing.

2. Road (Tote road) construction by a tracked excavator (Cat 225 or JD 790) south from 77N (present road) to L68N, a distance of 1,000 feet and north to L86N. An excavator operator experienced in mountainous terrain and pioneering roads is essential for this phase of the program. Consideration of paying a premium for the right operator should be entertained.

3. Trenching by tracked excavator at 100 feet intervals following the McMaster Mineralized Zones to the south. Careful mapping and channel / or chip sampling of mineralization encountered is required.

4. 6,000 feet of diamond drilling split between a small (Gopher-type drill capable of 200-300' holes) drill and larger drill capable of 500' to 1,000' holes.

The cost of such a program will be approximately $353,000 (Canadian). (Refer to Cost Estimate on page 19.) If this program is successful in extending the continuity of the McMaster Zones to the north and south and to depth, then a detailed major definition drill program would be required to define mineable ore reserves.

Respectfully submitted,

J.T. Shearer, M.Sc., FGAC
New Global Resources Ltd.

COST ESTIMATE
FOR FUTURE WORK
McMASTER ZONE

PHASE 1990-1, JUNE 1 TO AUGUST 15, 1990

1)	Geological mapping, 1:1000, Grid Control	$ 16,000
2)	Transit-EDM Survey Control	8,000
3)	Road Building (Tracked Excavator), 800 m	22,000
4)	Trenching (Tracked Excavator) at 30 m intervals	28,000
5)	Mob & Demob of Excavator	2,000
6)	Camp Costs (food & supplies) utilizing McMaster Camp	4,000
7)	Transportation	3,000
8)	Analytical (rock and soil)	8,000
9)	Compilation and Report Preparation	4,000
	Sub-total	95,000
10)	Contingencies 10%	9,500
	Sub-total	104,500

PHASE 1990-2, AUGUST 1 TO SEPTEMBER 30, 1990

1)	Diamond Drilling, 6,000 ft. at $35/ft (all in) plus geological supervision	210,000
2)	Analytical	10,000
3)	Compilation and Report Preparation	6,000
	Sub-total	226,000
	Contingencies 10%	23,000
		249,000

GRAND TOTAL $ 353,500

REFERENCES

COCHRANE, D.R., 1973

Aurum, Idaho and Pipestem Gold Occurrence,
Private Carolin Report, 16 pp., July 3, 1973.

1974 B

Report on the Aurum, Idaho, Tramway, Home Gold, Caro,
Gold Star, Cabin and Sylvia Claims
Private Carolin Report, 18 pp., September 11, 1974.

1975 A

Hozameen Gold Belt, Northern Washington State and Southern
British Columbia. Private Carolin Mines Report, 9 pp.,
February 5, 1975.

1975 B

McMaster Zone, Ladner Creek Project,
Private Carolin Mines Report, December, 1975.

CAIRNES, C.E., 1921

Coquihalla Area, British Columbia
Geological Survey of Canada, Sum. Rept. 1920, pt. A.pp.23-41.

1924

Coquihalla Area British Columbia
Geological Survey of Canada, Memoir 139, 187 pp.

1930

The Serpentine Belt of Coquihalla Region
Yale District, British Columbia
Geological Survey of Canada, Sum. Rept. 1929
Pt. A, pp. 144-197.

1944

Hope Area, Geological Survey of Canada
Map 737A, 1" = 4 miles, one sheet

CAMSELL, C. 1919

Coquihalla Map Area, B.C.
Geological Survey of Canada, Sum. Rept. 1919
Pt. B, pp. 30B-35B

CLARKE, W.E. June 11, 1981

North Exploration, 3 pp plus map
Carolin Mines Files

1979 B

As Estmiate of the Potential on the Ladner Creek Gold Property. Exclusive of the Idaho Zone, Private Carolin Mines Report, 27 pp., May 28, 1979.

DAWSON, G.M. 1879

Preliminary Report on the Physical and Geological Features of the Southern Portion of the Interior of British Columbia, Geological Survey of Canad, Rept. of Prog. 1877-78, pt. B., p. 1B-173B.

GOLDSMITH, L.B. and KALLOCK, P., 1986

Geology, Rock and Soil Geochemistry, Carolin Mine Area, Hope, B.C. Prepared for Pennant Holdings Ltd., December 4, 1986, 30 pp.

GRIFFITH, D.J. 1976

Report on Caro 17, 18, 19, 21, 23, 3 fraction and D1 1 claims. B.C. Dept. of Mines, Assessment Report 5883, 4 pp., February 1976 (McMaster Report).

1978

Report on the Caro 1-27, 28-30, 1 fraction, 2 fraction, 3 fraction, 5 fraction, 6 fraction, Idaho, Aurum 1, Tramway, Sylvia, Cabin 1-14, 21, 20 fraction, Goldstart 1-4, PCR 2 and Home Gold 1-15 Claims, Private Carolin Mines Report (Idaho Report).

1979

Work proposed for Carolin Mines Ltd., McMaster Pond Area 6 pp., March 20, 1979, Private Carolin Mines Report.

MAGEE, M., 1987

Geological Evaluation and Plan for Exploration, Ladner Creek Properties, The Winters Co., for Carolin Mines Ltd., June 187, 44 pp.

MCTAGGART, K.C. 1970

Tectonic History of the Northern Cascade Mountains, Geological Association of Canada, Spec. Paper 6, p. 137-148.

MCTAGGART, K.C. & THOMPSON, R.M. 1967

Geology of part of the Northern Cascades in Southern British Columbia, Canadian Journal of Earth Sciences, Vol. 4, pp. 1199-1228.

MONGER, J.W.H. 1970

Hope Map Area, West Half, British Columbia, Geological Survey of Canada, Paper 69-47, 75 pp.

RAY, G.E. 1982

Carolin Mine - Coquihalla Gold Belt Project (92H/611) in Geological Fieldwork, 1981, B.C. Dept. of Mines, Paper 1982 - 1, p. 87-10.

1983

Carolin Mine - Coquihalla Gold Belt B.C. Ministry of Energy, Mines and Pet. Res., Geological Fieldwork 1982, p. 62-84.

1985

The Hozameen Fault System and related Coquihalla Serpentine Belt of Southwestern British Columbia, CJES.

1989

Coquihalla Gold Belt, Bulletin in press.

RAY, G.E. and NIELS, R.J.E.

1984 A

Surface and Underground Geological Structures at the Carolin Gold Mine.
B.C. Ministry of Energy, Mines and Petroleum Resources, Geological Fieldwork 1983, pp. 133-138.
1984 B

Element Zoning Associated with Gold Mineralization at Carolin Mine. B.C. Ministry of Energy, Mines and Petroleum Resources, Geological Fieldwork 1983 paper, 1983-1, pp. 139-149.

RAY, G.E., SHEARER, J.T., NIELS, R.J.E. 1983

Carolin Gold Mine, GAC-MAC-CGU Joint Annual Meeting, Victoria, B.C., May 1983, Guidebook, Fieldtrip No. 4, p. 40-64

SHEARER, J.T. 1982 A

Gological Geochemical and Geophysical Report on the Ladner Creek North Project. Private Carolin Mines Report, 117 pp., April 30, 1982.

1982 B

Preliminary Investigation on Sulfide Distribution, Idaho Orebody, Progress Report 1, Private Carolin Mines Report, 22 pp., 5 figures.

1982 C

Summary Report on the Ladner Creek North Project. Private Carolin Mines Report, 51 pp., Nov. 23, 1982.

1983

Geological Mapping on 800 Track Level to Accompany Figures 1, 2 & 3. Memorandum, February 22, 1983, Carolin Mines Files, 8 pp., 3 maps.

1988

Diamond Drilling Report on the Aurum Project, February 29, 1988, 28 pp., for Carolin Mines Ltd.

1989

Preliminary Summary Report on the McMaster Zone, Private Carolin Mines Report, 5 pp., November 20, 1989.

1989

Progress Report No. 2, Key Geological Concepts Concerning the Idaho Mine and Proposed Joint-Venture North Explorations, in preparation.

APPENDIX I

STATEMENT OF QUALIFICATIONS

STATEMENT OF QUALIFICATIONS

I, Johan T. Shearer of the City of Port Coquitlam, in the Province of British Columbia, do hereby certify:

1. I graduated in Honours Geology (B. Sc. 1973) from the University of British Columbia and the University of London, Imperial College, (M. Sc. 1977).

2. I have practised my profession as an Exploration Geologist continuously since graduation and have been employed by such mining companies as McIntyre Mines Ltd., J.C. Stephen Explorations Ltd., Carolin Mines Ltd. and TRM Engineering Ltd. I am presently employed by New Global Resources Ltd.

3. I am a fellow of the Geological Association of Canada (Fellow No. F439). I am also a member of the Canadian Institute of Mining and Metallurgy, the Geological Society of London and the Mineralogical Association of Canada.

4. I supervised all exploration on the Ladner Creek North Project from February 1981 to November 1982 and worked underground as exploration geologist at the Idaho Mine from November 1982 to February 1984 engaged in detail geological mapping and project supervision. I have logged diamond drill core and supervised the geological staff during the mapping and relogging and drilling in August to November 1989 for the McMaster Program.

5. I have no interest in Carolin Mines Ltd. or any of its affiliated companies, nor do I expect to receive any in the future. I consent to the use of this report in or in connection with a prospectus or in a statement of Material facts relating to the raising of funds.

6. Other New Global personnel working on the McMaster Project were B. Lennan and W. Howell, both graduate geologists. A further note on these individuals is attached.

Dated at Vancouver, British Columbia

J.T. Shearer, M. Sc., F.G.A.C.
December 6, 1989

APPENDIX II

STATEMENT OF COSTS (McMASTER 1989 PROGRAM)

STATEMENT OF COSTS
McMASTER ZONE
1989 EXPLORATION PROGRAM

Labour, Wages and Benefits

J.T. Shearer, M.Sc., Senior Geologist 22.5 days at $300 per day	$ 6,750.00
W.B. Lennan, B.Sc., Project Geologist 39 days at $250 per day	9,750.00
W.A. Howell, B.Sc., Geologist 6 days at $250 per day	1,500.00
S.C. Shearer, Line Cutter, Sampler and Core Splitter 17 days at $140 per day	2,380.00
Sub-total	20,380.00

Expenses

Truck rental	
Redhawk	1,170.00
New Global	778.80
Meals and groceries	1,419.51
Accommodation - motel	504.94
Gasoline	755.53
Camp supplies and survey supplies	111.33
Consultant expenses (W.A. Howell) includes truck rental, gas and food	260.94
Drafting supplies (mylar)	43.25
Reproduction	80.23
Telephone (estimated portion to McMaster)	100.00
Assaying (Chemex Labs, 295 samples at $13.50/sampl)	,3982.50
Diamond drilling (369 ft. x $22.40/ft..)	30,665.60
Cat work on road (estimated portion to McMaster)	1,200.00
Sub-total	41,073.23

Total $61,453.23

APPENDIX III

DIAMOND DRILL CONTRACT

APPENDIX IV

LIST OF PERSONNEL AND DATES WORKED

LIST OF PERSONNEL AND DATES WORKED

ON 1989 McMASTER ZONE

Name	Occupation	Address	Dates Worked
J.T. Shearer	Senior Geologist (M.Sc.)	3832 St. Thomas St. Port Coquitlam, B.C.	Aug 9; Sept 1, 27, 28, 29, 30; Oct 2, 10, 17, 18, 20, 24, 26, 27, 30, 31; Nov 1, 5, 7, 8, 9, 10(½ day), 13, 15 Total 22.5 days
W.B. Lennan	Project Geologist (B.Sc. 1973)	876 Lynwood Ave. Port Coquitlam, B.C.	Sept 8, 23, 24(½ day), 25, 29; Oct 10-20, 23-31; Nov 1-9, 10(½ day), 13-15 Total 39 days
W.A. Howell	Geologist (B.Sc.)	15294 - 96A Ave. Surrey, B.C.	Oct 25-30 Total 6 days
S.L. Shearer	Line Cutter Core Splitter	3345 Mason Ave. Port Coquitlam, B.C.	Sept 25-29; Oct 30, 31; Nov 1-9, 15 Total 17 days

Mr. Lennan graduated from the University of British Columbia in 1973. He has worked continuous as a senior geologist for a number of major companies since graduation.

Mr. Howell graduated from the University of British Columbia in 1972. He has worked continuous in mineral exploration since that time.

APPENDIX V

ANALYTICAL PROCEDURE AND ASSAY CERTIFICATES

Chemex Labs Ltd.
Analytical Chemists • Geochemists • Registered Assayers
212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1
PHONE (604) 984-0221

T[redacted]AROL[redacted]INE[redacted]MIT[redacted]
602 - 700 W. PENDER ST.
VANCOUVER, BC
V6C 1G8
Project : MCMASTER
Comments: CC: J. SHEARER

[redacted]Pa[redacted]. :[redacted]
Tot. Pages: 3
Date : 27-NOV-89
Invoice # : I-8930533
P.O. # :

CERTIFICATE OF ANALYSIS A8930533

SAMPLE DESCRIPTION	PREP CODE		Au oz/T
73051	207	--	0.020
73052	207	--	0.014
73053	207	--	0.048
73054	207	--	0.129
73055	207	--	0.004
73056	207	--	0.008
73057	207	--	0.002
73058	207	--	0.002
73059	207	--	0.032
73060	207	--	0.008
73061	207	--	0.010
73062	207	--	0.010
73063	207	--	0.004
73064	207	--	< 0.002
73065	207	--	0.002
73066	207	--	0.002
73067	207	--	0.002
73069	207	--	0.002
73070	207	--	< 0.002
73071	207	--	0.002
73072	207	--	< 0.002
73073	207	--	0.002
73074	207	--	< 0.002
73075	207	--	< 0.002
73076	207	--	0.006
73077	207	--	< 0.002
73078	207	--	0.139
73079	207	--	0.185
73080	207	--	0.066
73081	207	--	0.104
73082	207	--	0.062
73083	207	--	0.060
73084	207	--	0.008
73085	207	--	0.008
73086	207	--	0.044
73087	207	--	0.032
73088	207	--	0.026
73089	207	--	0.014
73090	207	--	0.018
73091	207	--	0.026

CERTIFICATION : D Chrétien

Chemex Labs Ltd.
Analytical Chemists • Geochemists • Registered Assayers
212 BROOKSBANK AVE. NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1
PHONE (604) 984-0221

To: [redacted] ROL [redacted] NES [redacted] ITE [redacted]
602 - 700 W. PENDER ST.
VANCOUVER, BC
V6C 1G8
Project : MCMASTER
Comments: CC: J. SHEARER

[redacted] Pag[redacted] : 2[redacted]
Tot. Pages: 3
Date : 27-NOV-89
Invoice # : I-8930533
P.O. # :

CERTIFICATE OF ANALYSIS A8930533

SAMPLE DESCRIPTION	PREP CODE		Au oz/T
73092	207	--	0.046
73093	207	--	0.068
73094	207	--	0.030
73095	207	--	0.010
73096	207	--	0.024
73097	207	--	0.062
73098	207	--	0.082
73099	207	--	0.026
73100	207	--	0.056
73101	207	--	0.167
73102	207	--	0.208
73103	207	--	0.158
73104	207	--	0.082
73105	207	--	0.018
73106	207	--	0.004
73107	207	--	0.006
73108	207	--	0.008
73109	207	--	0.016
73110	207	--	0.006
73111	207	--	0.038
73112	207	--	0.018
73113	207	--	0.044
73114	207	--	0.008
73115	207	--	0.024
73116	207	--	0.004
73117	207	--	0.016
73118	207	--	0.038
73119	207	--	0.046
73120	207	--	0.038
73121	207	--	0.010
73122	207	--	0.072
73123	207	--	0.008
73124	207	--	0.006
73125	207	--	0.034
73126	207	--	0.052
73127	207	--	0.004
73128	207	--	0.042
73129	207	--	0.028
73130	207	--	0.036
73131	207	--	0.034

CERTIFICATION : Athnit

[redacted] To [redacted]

602 - 700 W. PENDER ST.
VANCOUVER, BC
V6C 1G8
Project : MCMASTER
Comments: CC: J. SHEARER

Pag[redacted] : 3 [redacted]
Tot. Pages: 3
Date : 27-NOV-89
Invoice # : I-8930533
P.O. # :

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BRITISH COLUMBIA, CANADA V7J-2C1
PHONE (604) 984-0221

CERTIFICATE OF ANALYSIS A8930533

SAMPLE DESCRIPTION	PREP CODE		Au oz/T
73132	207	--	0.024
73133	207	--	0.036
73134	207	--	0.008
73135	207	--	0.036
73136	207	--	< 0.002
73137	207	--	< 0.002
73138	207	--	0.004
73139	207	--	< 0.002
73140	207	--	0.020
73141	207	--	0.073
73142	207	--	0.030
73143	207	--	0.014
73144	207	--	0.016
73145	207	--	0.002
73146	207	--	< 0.002
73578	207	--	0.004
73579	207	--	< 0.002
73580	207	--	0.004
73581	207	--	< 0.002
73582	207	--	0.004
73583	207	--	0.018
73584	207	--	0.022
73585	207	--	0.018
73586	207	--	0.047
73587	207	--	0.040
73588	207	--	0.012
73589	207	--	0.002
73590	207	--	0.006
73591	207	--	0.002
73592	207	--	0.008
73593	207	--	0.004
73594	207	--	0.002
73595	207	--	< 0.002
73596	207	--	0.004
73597	207	--	0.006
73598	207	--	0.030
73599	207	--	0.042

CERTIFICATION : [signature]

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PHONE (604) 984-0221

T[redacted]EW G[redacted]L. R[redacted]RCES[redacted]
548 BEATTY ST.
VANCOUVER, BC
V6B 2L3
Project : CAROLIN (MCMASTER)
Comments:

Pa[redacted]. :[redacted]
Tot. Pages: 1
Date : 5-NOV-89
Invoice # : I-8929436
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8929436

SAMPLE DESCRIPTION	PREP CODE		Au oz/T RUSH
73401	236	--	0.078
73402	236	--	0.040
73403	236	--	0.070
73404	236	--	0.124
73405	236	--	0.050
73406	236	--	0.193
73407	236	--	0.020
73409	236	--	0.030

CERTIFICATION : W. Stan Armanini

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BRITISH COLUMBIA CANADA V7J 2C1
PHONE (604) 984-0221

To: CAROLIN MINES LIMITED

602 - 700 W. PENDER ST.
VANCOUVER, BC
V6C 1G8

Project : MCMASTER
Comments: CC: J T SHEARER

Date : 3-NOV-89
Invoice # : I-8929415
P.O # : NONE

CERTIFICATE OF ANALYSIS A8929415

SAMPLE DESCRIPTION	PREP CODE		Au oz/T RUSH FA
73408	236	---	0.046
73410	236	---	0.060
73411	236	---	0.032
73412	236	---	0.030
73413	236	---	0.126
73414	236	---	0.159
73415	236	---	0.066
73416	236	---	0.086
73417	236	---	0.044
73418	236	---	0.071
73419	236	---	0.070
73420	236	---	0.050
73421	236	---	0.052
73422	236	---	0.052
73423	236	---	0.046
73424	236	---	0.008
73425	236	---	0.006
73426	236	---	0.004
73427	236	---	0.012
73428	236	---	0.006
73429	236	---	0.012
73430	236	---	0.026
73431	236	---	0.003
73432	236	---	0.003
73433	236	---	< 0.003
73434	236	---	< 0.003
73435	236	---	0.003
73436	236	---	0.003
73437	236	---	0.008
73438	236	---	< 0.003

CERTIFICATION : _____

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BRITISH COLUMBIA, CANADA V7J-2C1
PHONE (604) 984-0221

TO: CAROLIN MINES LIMITED
602 - 700 W. PENDER ST.
VANCOUVER, BC
V6C 1G8
Project : MOMASTER
Comments: CC: J T. SHEARER

Date : 20-NOV-89
Invoice # : I-8930335
P.O. # :

CERTIFICATE OF ANALYSIS A8930335

SAMPLE DESCRIPTION	PREP CODE		Au FA oz/T
73439	214	---	0.012
73440	214	---	0.020
73441	214	---	0.008
73442	214	---	< 0.003
73443	214	---	< 0.003
73444	214	---	0.018
73445	214	---	0.010
73446	214	---	0.012
73447	214	---	0.022
73448	214	---	0.016
73449	214	---	0.014
73450	214	---	0.014
73451	214	---	0.014
73452	214	---	0.010
73453	214	---	0.018
73454	214	---	0.090
73455	214	---	0.014
73456	214	---	0.008
73457	214	---	< 0.003
73458	214	---	0.008
73459	214	---	< 0.003
73460	214	---	0.004
73461	214	---	0.174
73462	214	---	0.102
73463	214	---	0.034
73464	214	---	0.160
73465	214	---	0.016
73466	214	---	0.163
73467	214	---	0.032
73468	214	---	0.006
73469	214	---	0.004
73470	214	---	0.008
73471	214	---	0.014
73472	214	---	0.018
73473	214	---	0.006
73474	214	---	< 0.003
73475	214	---	0.004
73476	214	---	< 0.003
73477	214	---	0.013
73478	214	---	< 0.003

CERTIFICATION : W. Glen Bamonte

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BRITISH COLUMBIA, CANADA V7J-2C1
PHONE (604) 984-0221

[redacted] TO[redacted]CROLL[redacted]MINES[redacted]LIMITED[redacted]

602 - 700 W. PENDER ST.
VANCOUVER, BC
V6C 1G8

Project : MCMASTER
Comments: CC: J.T. SHEARER

Date : 20-NOV-89
Invoice # : I-8930335
P.O. # :

CERTIFICATE OF ANALYSIS A8930335

SAMPLE DESCRIPTION	PREP CODE		Au FA oz/T
73479	214	--	< 0.003
73480	214	--	0.008
73481	214	--	0.004

CERTIFICATION : W. Dan Bressani

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To: CAROLIN MINES LIMITED

602 - 700 W. PENDER ST.
VANCOUVER, BC
V6C 1G8

Project : MOMASTER
Comments: CC: NEW GLOBAL RESOURCES

Date : 14-NOV-89
Invoice # : I-8929830
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8929830

SAMPLE DESCRIPTION	PREP CODE		Au FA oz/T
73482	207	--	0.012
73483	207	--	0.026
73484	207	--	0.024
73485	207	--	< 0.003
73486	207	--	< 0.003
73487	207	--	< 0.003
73488	207	--	0.020
73489	207	--	0.006
73490	207	--	< 0.003
73491	207	--	< 0.003
73492	207	--	0.006
73493	207	--	0.012
73494	207	--	0.008
73495	207	--	< 0.003
73496	207	--	< 0.003
73497	207	--	0.004
73498	207	--	0.012
73499	207	--	< 0.003
73500	207	--	< 0.003
73519	207	--	< 0.003
73520	207	--	0.011
73521	207	--	< 0.003
73522	207	--	0.006
73523	207	--	< 0.003
73524	207	--	0.008
73525	207	--	< 0.003
73526	207	--	< 0.003
73527	207	--	0.010
73528	207	--	0.018
73529	207	--	0.072
73530	207	--	0.081
73531	207	--	0.050
73532	207	--	0.032
73533	207	--	0.020
73534	207	--	0.004
73535	207	--	< 0.003
73536	207	--	0.139
73537	207	--	0.104
73538	207	--	0.086
73539	207	--	0.028

CERTIFICATION : W. Stan Bronsan

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212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1

PHONE (604) 984-0221

To: CAROLIN MINES LIMITED

602 - 700 W. PENDER ST.
VANCOUVER, BC
V6C 1G8

Project : MCMASTER
Comments: CC: NEW GLOBAL RESOURCES

Date : 14-NOV-89
Invoice # : I-8929830
P.O. # : NONE

CERTIFICATE OF ANALYSIS A8929830

SAMPLE DESCRIPTION	PREP CODE		Au FA oz/T
73540	207	--	0.038
73541	207	--	0.056
73542	207	--	0.012
73543	207	--	0.016
73544	207	--	0.008
73545	207	--	0.028
73546	207	--	0.124
73547	207	--	0.193
73548	207	--	0.012
73549	207	--	0.018
73550	207	--	0.016
73551	207	--	0.028
73552	207	--	0.016
73553	207	--	0.008
73554	207	--	0.012
73555	207	--	0.010
73556	207	--	< 0.003
73557	207	--	0.006
73558	207	--	< 0.003
73559	207	--	0.004
73560	207	--	0.006
73561	207	--	< 0.003
73562	207	--	0.010
73563	207	--	< 0.003
73564	207	--	< 0.003
73565	207	--	0.014
73566	207	--	0.004
73567	207	--	0.006
73568	207	--	0.012
73569	207	--	0.022
73570	207	--	0.010
73571	207	--	0.010
73572	207	--	0.008
73573	207	--	0.004
73574	207	--	0.006
73575	207	--	< 0.003
73576	207	--	0.008
73577	207	--	0.010

CERTIFICATION : W. Stan Bradshaw

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212 BROOKSBANK AVE., NORTH VANCOUVER,
BRITISH COLUMBIA, CANADA V7J-2C1
PHONE (604) 984-0221

To: CAROLIN MINES LIMITED
602 - 700 W. PENDER ST.
VANCOUVER, BC
V6C 1G8
Project : MCMASTER
Comments: CC: J.T. SHEARER

Date :06-NOV-89
Invoice # :I-8929621
P.O. # :NONE

CERTIFICATE OF ANALYSIS A8929621

SAMPLE DESCRIPTION	PREP CODE	Au oz/T RUSH FA
73501	236 --	< 0.003
73502	236 --	0.008
73503	236 --	0.100
73504	236 --	0.056
73505	236 --	0.024
73506	236 --	0.164
73507	236 --	0.188
73508	236 --	0.198
73509	236 --	0.092
73510	236 --	0.108
73511	236 --	0.051
73512	236 --	0.030
73513	236 --	0.170
73514	236 --	0.264
73515	236 --	0.146
73516	236 --	0.182
73517	236 --	0.188
73518	236 --	0.012

CERTIFICATION : W. Dan Armstrong

APPENDIX VI

DIAMOND DRILL LOGS: 1989 AND 1975 (RELOGGED)

CAROLIN MINES LIMITED

DIAMOND DRILL RECORD

LOCATION: (LEVEL): McMASTER ZONE (SURFACE) | PROJECT: McMASTER | HOLE NUMBER: A2. 225° 89 - M-8

DIP: -55° On Section M-1, M-2 & M-3

LATITUDE:	N	LENGTH: 45.41m (149')	ELEVATION:	CLAIM NUMBER:	
DEPARTURE:	E	CORE SIZE:	DATE LOGGED: Oct 28/89	LOCATION:	IDAHO CORE SHACK
STARTED:	Oct 25/89 at Noon	FINISHED: Oct 26/89 1AM	LOGGED BY: JTS, WBL.	SAMPLED BY:	B. Lennan. B. Howell
O.B. THICKNESS:	4.57m	STARTED: Oct 25, 1989 DS	FINISHED: Oct 25, 1989 DS	CASING:	4.57 m
B.R. THICKNESS:	45.41 m	STARTED: Oct 25, 1989	FINISHED: Oct 26, 1989 MS	TOTAL RECOVERY:	%
CONTRACTOR:	Boivenean	CORE STORED: IDAHO CORE SHACK			

SURVEY: DEPTH	BEARING	ANGLE Reading	ANGLE Correc
(149ft) 45.41m	225	39.5°	51°

PURPOSE: TO TEST M-1, M-2, M-3 SECTION BETWEEN

COMMENT: Holes M-2 & M-3

*Driller estimated bedrock at 3.96 m. Ran casing to 4.57 m

INTERVAL Bedrock (well defined) at 8.53 m

DRILLING INTERVAL | % CORE RECOVERED | BOX Number | SCALE 1:250 | ALTERATION: CHLORITE, CALCITE, ALBITE, SILICA | FRACTURING | MINERAL | GEOLOGY

from	to	
0	3.96	Muddy Overburden
3.96	7.01	CORED BOULDERS?
7.01	8.53	CHLORITIC GREYWACKE - possibly boulders 8.53 - 8.95 : very little core - weathered and ground up?
8.53	10.19	ZONE MATERIAL - Qtz - carbonate - albite flooded coarse lithic wacke to conglomeratic unit. At 9.1m druzy qtz in open fracture 5-10%. Sulfide: mostly py. 1-2% aspy.?
10.19	10.86	ALTERED COARSE LITHIC WACKE - Intensely silicified, py 1-3%
10.86	12.12	ALTERED ARGILLACEOUS SILTSTONE - Dark charcoal grey with qtz - carbonate veins. Disseminated pyrrhotite.
12.12	14.0	ALTERED CONGLOMERATIC ARGILLITE - dark grey loosely packed primarily pebble conglomerate, weak to moderate silicification <1% py
14.0	14.63	ALTERED GREYWACKE - chl. & graphite on foliation planes, 1% py
14.63	15.60	ALTERED COARSE LITHIC - strongly foliated 1-3% py. Fault zone at 15.3 to 15.4m. 65° to C.A.
15.6	19.33	ALTERED SILTSTONE - well layered w/ mod. qtz veining parallel to layering - 45-50° to C.A. Local shearing accompanied by contorted veining. Graphite on shear slickensides. Sulfides 1-3%
19.33	22.8	WEAK ZONE MATERIAL - intensely qtz - carbonate albite veined area in sheared argillaceous siltstones. Local areas 10-15cm across carry contort veins while other cross-cut core at various angles, Sulfide content weak overall with 2-4cm wide zones carrying 5-10% crystalline py.
22.8	27.85	SHEARED ARGILLACEOUS SILTSTONE - ranges from thinly to thickly bedded dark charcoal grey. Veining weak with exception of localized 5-10 cm thick zones with contorted veining. GRAPHITIC FAULT ZONE from 26.6 to 27.2 m. Weakly mineralized - sulfides <1%
27.85	28.3	BOULDER CONGLOMERATIC ARGILLITE
28.30	31.35	SHEARED ARGILLACEOUS SILTSTONE - dark charcoal grey shearing parallel to layering. Graphitic slickenside

SAMPLE NUMBER	METERS from	METERS to	LENGTH METERS	Au oz/ton	
73596	8.95	9.5	0.55	0.009	
73597	9.50	10.19	0.69	0.006	
73598	10.19	10.86	0.67	0.030	
73599	10.86	11.86	1.00	0.092	
* 73051	11.86	13.00	1.14	0.020	
73052	13.0	14.0	1.00	0.019	5.41m of 0.047
73053	14.0	14.63	0.63	0.048	
73054	14.63	15.6	0.97	0.129	
73055	15.6	16.6	1.00	0.009	
73056	16.6	17.6	1.00	0.008	
73057	17.6	18.6	1.00	0.002	
73058	18.6	19.33	0.73	0.002	
73059	19.33	19.83	0.50	0.032	
73060	19.83	20.33	0.50	0.008	
73061	20.33	21.0	0.67	0.010	
73062	21.0	21.5	0.50	0.010	
73063	21.5	22.0	0.50	0.004	
73064	22.0	22.5	0.50	< 0.002	
73065	22.5	22.8	0.30	0.002	
73066	22.8	24.0	1.20	0.002	
73067	24.0	25.5	1.50	0.002	

CAROLIN MINES LIMITED

DIAMOND DRILL RECORD

LOCATION: McMASTER ZONE (Surface)

PROJECT: McMASTER

HOLE NUMBER: 87 M-8

PURPOSE:

COMMENT:

DRILLING INTERVAL	% CORE RECOVERED	BOX Number	SCALE 1:250	ALTERATION: CHLORITE	CALCITE	ALBITE	SILICA	FRACTURING	MINERAL	GEOLOGY	INTERVAL from	INTERVAL to	GEOLOGY
31.7	83	4	31								31.35	31.75	FAULT ZONE - graphitic slickensides.
	100		32								31.75	32.0	SHEARED ARGILLACEOUS SILTSTONE - as from 28.3 - 31.35m
33.22			33								32.0	33.07	ALTERED AND SHEARED BOULDER CONGLOMERATE
	95	34.19	34								33.07	33.45	MEDIUM TO COARSE GRAINED LITHIC WACKE
34.75			35								33.45	37.09	ALTERED AND SHEARED ARGILLACEOUS SILTSTONE - shearing parallel to layering ~ 65° to C.A. Intensely veined and faulted from 34.96 to 36.14 m. Graphite is abundant along fault slickensides. Minor sulfides
36.27	85	5	36										
	100		37										
37.8			38								37.09	40.84	ALTERED BOULDER CONGLOMERATIC ARGILLITE - becomes closely packed from 40.25 - 40.84 m. Moderate intensity qtz - carb. veining with some silica flooding. upper contact 50 - 55° to C.A. (abrupt) lower contact 60° to C.A. (abrupt). Sulfide content ranges from 0 to 5%.
39.31	102		39										
	96	40.87	40										
40.84			41								40.84	44.26	ALTERED ARGILLACEOUS SILTSTONE - weak to moderate qtz - carbonate veining throughout. Sheared. Sulfide mineralization primarily <1% several localized 1-2 cm thick areas with up to 5% py. From 43 to 44.26 m veining decreases dramatically. Well layered ~ 75° to C.A
42.37	100	6	42										
43.89	95		43										
	101	45.41	44								44.26	45.41	FINE GRAINED LITHIC WACKE - dark grey - massive weakly veined. some ARGILLACEOUS SILTSTONE AT 45.33
45.41			45										
			46										E. O. H

SAMPLE NUMBER	METERS from	METERS to	LENGTH METERS	Au oz/ton
73069	37.07	37.5	0.41	0.002
73070	37.5	38.0	0.50	< 0.002
73071	38.0	38.5	0.50	0.002
73072	38.5	39.0	0.50	< 0.002
73073	39.0	39.5	0.50	0.002
73074	39.5	40.0	0.50	< 0.002
73075	40.0	40.84	0.84	< 0.002
73076	40.84	42.0	1.16	0.006
73077	42.0	43.5	1.50	< 0.002

CAROLIN MINES LIMITED

DIAMOND DRILL RECORD

LOCATION: (LEVEL): McMASTER ZONE (SURFACE) | PROJECT: McMASTER | HOLE NUMBER: 89- M-9

DIP: -40 (CASING) DIRECTION- 225° (TRUE)

LATITUDE: N | LENGTH: 106.37m (349ft) | ELEVATION: | CLAIM NUMBER: CARO #3 FR

DEPARTURE: E | CORE SIZE: BQ | DATE LOGGED: October 27- /89 | LOCATION: IDAHO CORE SHACK

STARTED: OCTOBER 26 1989 D.S. | FINISHED: OCTOBER 27 NS 1989 | LOGGED BY: JTS, WBL, WAH | SAMPLED BY: JTS, WBL, WAH

O.B. THICKNESS: (4.57m CASING) 2.13m to BR | STARTED: OCT 26 1989 | FINISHED: OCT 26 1989 | CASING: 4.57m

B.R. THICKNESS: 106.37m (349ft) | STARTED: OCT 26 1989 | FINISHED: OCT 27 1989 | TOTAL RECOVERY: %

CONTRACTOR: Boivenue | CORE STORED: IDAHO CORE SHACK

SURVEY: DEPTH	BEARING	ANGLE Reading	Correc
53.34m	225°	-46.5°	-38°
106.37m	225°	-46.5°	-38°

PURPOSE:
COMMENT: ON M-7 SECTION, higher in elevation through upper Fault slices.

DRILLING INTERVAL (Wooden blocks)	% CORE RECOVERED	BOX Number	SCALE 1:250 METERS
2.13	60		1 2 3
4.26	95		4 5 6
5.79	100		7
7.01	101		8 9
8.53	96	9.45	10
10.05			11 12
11.11	100		13
14.63	93	16.50	14 15 16 17
17.68	91		18 19 20
20.73	100		21 22
23.77	97	23.51	23 24 25
26.82	96		26 27 28
29.87	100	31.00	29 30

ALTERATION: CHLORITE | CALCITE | ALBITE | SILICA

FRACTURING | MINERALIZATION | GEOLOGY

INTERVAL from to

0 - 2.13 NO CORE

2.13 - 2.74 RUSTY SHEARED GREYWACKE - POSSIBLY BOULDERS

2.74 - 8.48 ALTERED AND MINERALIZED GREYWACKE & LITHIC WACKE

some chloritic Greywacke

Bedding in Lithicwacke @ 7.30 10° to core axis

8.48 - 22.61 ZONE MATERIAL: quartz-carbonate-albite rock containing abundant (2-10%) arsenopyrite, pyrite, minor pyrrhotite. irregular to well defined quartz veins + lenses wide white quartz sections, 11.00 - 11.30, granular calcite on vein margins. convoluted quartz banding but mainly parallel up to 20° to C.A.

MAJOR GRAPHITIC FAULT ZONE 15.75 - 16.10, sub parallel to core axis abundant graphite, some rusty partings. Marked change in orientation of quartz veins + lenses, near 90° to C.A.

Gradational lower contact over 50cm.

22.61 - 25.17: ALTERED SILTSTONE: well bedded to thinnly laminated minor greywacke

25.17 - 28.80: PYRITIC SILTSTONE Alternating with altered SILTSTONE

28.80 - 32.69 ALTERED SILTSTONE: minor greywacke

SAMPLE NUMBER	METERS from	METERS to	LENGTH METERS	Au oz/ton			
73401	2.74	4.00	1.26	0.078			
73402		5.00	1.00	0.040			
73403		6.00	1.00	0.070	>5.74m of 0.083 oz/ton Au		
73404		7.00	1.00	0.124			
73405		8.00	1.00	0.050			
73406		8.48	0.48	0.197			
73409		9.00	0.22	0.030			
73407		9.50	0.50	0.020			
73408		10.00	0.50	0.046	>3.52m of 0.035 oz/ton Au		
73410		10.50	0.50	0.060			
73411		11.00	0.30	0.032			
73412		12.00	1.00	0.030			
73413		13.00	1.00	0.126			
73414		14.00	1.00	0.159			
73415		15.00	1.00	0.066			
73416		16.00	1.00	0.086			
73417		17.00	1.00	0.044			
73418		18.00	1.00	0.071	>10.61m of 0.076 oz/ton Au		
73419		19.00	1.00	0.070			
73420		20.00	1.00	0.050			
73421		21.00	1.00	0.052			
73422		22.00	1.00	0.052			
73423		22.61	0.61	0.046			
73424		23.25	0.64	0.008			
73425		24.00	0.75	0.006			
73426		25.17	1.17	0.004			
73427		25.88	0.71	0.012			
73428		27.00	1.12	0.006			
73429		27.90	0.90	0.012			
73430		28.80	0.90	0.026			
73431		29.80	1.00	<0.003			
73432		31.00	1.20	<0.003			

CAROLIN MINES LIMITED

DIAMOND DRILL RECORD

LOCATION: McMASTER ZONE (SURFACE)

PROJECT: McMASTER

HOLE NUMBER: 89- M-9

MISTAKE IN DRILLERS BLOCKS

DRILLING INTERVAL (Driller's Blocks)	% CORE RECOVERED	BOX Number	SCALE 1:250	ALTERATION: CHLORITE	ALTERATION: CALCITE	ALTERATION: ALBITE	ALTERATION: SILICA	FRACTURING	MINERAL	GEOLOGY
		4	31							
31.69	96		32							
		5	33							
34.74	100		34							
			35							
			36							
37.18	84		37							
		38.35	38							
		6	39							
			40							
41.15	85		41							
42.97	101		42							
			43							
			44							
45.72	93	45.82	45							
		7	46							
			47							
48.77	99		48							
			49							
			50							
51.20	101		51							
			52							
		52.90	53							
53.44	97	8	54							
55.17	96		55							
			56							
			57							
			58							
59.13	96		59							
		60.15	60							
			61							
62.17	96	9	62							
			63							
			64							
			65							
65.53	90		66							
67.05	96	67.09	67							
		10	68							
			69							
			70							

PURPOSE:

COMMENT:

INTERVAL from to

28.80 - 32.69 : ALTERED SILTSTONE: well bedded, 60° to C.A. minor greywacke, some bleaching

32.69 - 53.88 : TURBIDITE SEQUENCE: graded beds ranging from pebble conglomerate - lithic wacke to fine siltstone. close-packed coarse lithicwacke 35.76 - 36.21

Fault at 37.18 graphite on slickensides, @ 50° to C.A. colour change to light green distinctly unmineralized.

short, slightly mineralized sections: 42.81 - 42.86; also 41.56 - 41.68.

53.88 - 85.67 ARGILLACEOUS SILTSTONE: dark grey, well bedded.

60.15 to 73 m. intense qtz veining and silica flooding, vuggy qtz in open fractures at - 66.75 to 66.9 m, 67.10 to 67.28 and 67.70 to 67.77 m. Siltstone is brecciated in these areas and takes on a mylonitic appearance. Pyrite 5-10% throughout. mineralization occurs along veins, fractures and as disseminations. Carbonate alteration is intense in areas of intense qtz veining. Weak albite alt'n? occurs sporadically within some qtz carbonate veins. Thin sections of LITHIC WACKE from 71.1 to 71.3, 72.29 to 72.9 and from 74.27 to 74.58

SAMPLE NUMBER	METERS from	METERS to	LENGTH METERS	Au oz/ton
73432	29.80	31.00	1.20	<0.003
73433	31.00	32.00	1.00	<0.003
73434	32.00	33.00	1.00	<0.003
73435	33.00	34.00	1.00	<0.003
73436	34.00	35.00	1.00	<0.003
73437	35.00	36.00	1.00	0.008
73438	36.00	37.18	1.18	<0.003
- NOT SAMPLED -				
73439	61.66	62.50	0.84	0.012
73440		63.00	0.50	0.020
73441		64.00	1.00	0.008
73442		65.00	1.00	<0.003
73443		66.00	1.00	<0.003
73444		67.00	1.00	0.018
73445		68.00	1.00	0.010
73446		69.00	1.00	0.012
73447		70.00	1.00	0.022

CAROLIN MINES LIMITED

DIAMOND DRILL RECORD

LOCATION: McMASTER ZONE (SURFACE)

PROJECT: McMASTER

HOLE NUMBER: 89-M-9

DRILLING INTERVAL	% CORE RECOVERED	BOX Number	SCALE 1: ___	ALTERATION: CHLORITE	CALCITE	ALBITE	SILICA	FRACTURING	MINERAL	GEOLOGY
70.10	96	10	71–74							
73.15	80									
74.62		11	74–79							
76.20	100									
79.25	98									
81.53		12	80–85							
82.29	92								5–15% py	
85.34	91									
88.59	80	13	85–90							
91.44	102									
94.49	99									
95.70	97	14	90–100							3–5% py
98.75	93									
101.19	94									
102.43		15	100–105							
104.24	99									
106.37	80									

PURPOSE:

COMMENT:

INTERVAL from to

53.88 – 85.67 ARGILLACEOUS SILTSTONE contd.
FAULTING occurs between 70.2 and 71 m with rubbly core and core loss. From 73 to 82.41 m poorly mineralized and weakly altered material occurs. Bedding and veining ~ 70° to C.A.

81.6 to 81.8 m FAULTING
82.41 – 84.41 m – Qtz veining and silica flooding is more intense w/ 5–15% pyrite.
84.41 to 84.50 m FAULTING.

85.67 to 94.49 TURBIDITE SEQUENCE
Pale grey, green colour, greyish to charcoal grey argillaceous siltstone sections. Black wispy mineral filling fractures (mn Ox?)

94.49 – 95.41 LAMINATED LITHIC WACKE ... pale grey green colour.
95.41 – 98.41 Flattened clasts of siltstone & argillite lie in sheared foliation planes ~ 60° to C.A. Unit grades fines upwards, minor matrix carbonate No silica, minor albite!
→ SILTSTONE Bedding 70° to C.A. Grey, green occ. qtz / carb veinlet. No matrix carb. Silica & Albite, minor chl. – 3% py dissem. & on foliation planes & occasionally on margins of qtz veins & stringers.
98.41 – 99.8
99.8 to 101.84 ALTERED SILTSTONE – dark grey to black interlaminated siltstone in qtz / albite flooded and veined (25% of rock). weak to Carb, silica & Albite, weak chl. 1–2% py
→ Coarse LITHIC WACKE (CONGL.?) pale green colour, flattened clasts of arg. & siltstone, chl. alt.
101.84 to 105.78 ARGILLACEOUS SILTSTONE Foliated 55° to 60° to C.A.
105.78 to 106.37 TURBIDITE grey green – minor carb, qtz veining

E.O.H.

SAMPLE NUMBER	METERS From	METERS to	LENGTH METERS	Au oz/ton			
73448	70.00	71.00	1.00	0.016			
73449		72.00	1.00	0.014			
73450		73.00	1.00	0.014			
73460		74.0	1.00	0.004			
73451	80.21	81.00	0.79	0.014			
73456	81.00	82.41	1.41	0.008			
73452	82.41	82.90	0.49	0.010			
73453	82.90	83.41	0.51	0.018			
73454	82.41	84.41	1.00	0.090	1.00 m	w/ 0.90	oz/ton
73455	84.41	85.18	0.77	0.014			
73457	97.41	98.41	1.00	<0.003			
73458	98.41	99.8	1.39	0.008			
73459	99.8	100.8	1.00	<0.003			

CAROLIN MINES LIMITED

DIAMOND DRILL RECORD

PROJECT: McMASTER

HOLE NUMBER: 89 - M-10

LOCATION: (LEVEL): McMASTER ZONE (SURFACE)
DIP: -45° DIRECTION 225° (TRUE) SECTION M-4, M-5
LATITUDE: N
DEPARTURE: E
STARTED: Oct 28, 1989 D.S
O.B. THICKNESS: 2.28 m
B.R. THICKNESS:
CONTRACTOR: F. BOIVENEAU

LENGTH: 44.19 m (145 ft)
CORE SIZE: BQ
FINISHED: Oct 29, 1989 N.S.
STARTED: Oct 28, 1989 D.S.
STARTED: Oct 28, 1989 D.S
CORE STORED: IDAHO CORE SHACK

ELEVATION:
DATE LOGGED: Oct 29, 30, 1989
LOGGED BY: W.T.S, W.A.H, W.B.L
FINISHED: Oct 28, 1989 D.S
FINISHED: Oct 29 1989 N.S

CLAIM NUMBER:
LOCATION: IDAHO CORE SHACK
SAMPLED BY: W.B.L, W.A.H
CASING:
TOTAL RECOVERY: %

Night shift Oct 28-29 lost due to frozen pump and bent head.

SURVEY: DEPTH	BEARING	ANGLE Reading	Correc
145' (44.19 m)	225° T	-49.5°	-41°

PURPOSE: To test 2 ZONES above holes M-4 & M-5
COMMENT:

INTERVAL from	to	
0	1.52	OVER BURDEN NO CORE.
1.52	2.28	Rubbly rock - possibly from bedrock as collaring in fault zone
2.28	4.82	solid bedrock at 2.28 m. casing to 2.74 m. ZONE MATERIAL — Light grey, chloritic, overall brecciated appearance, ; sparse lenses of quartz and albite.
4.82	6.40	MINERALIZED AND ALTERED SILTSTONE : well layered.
5.47	6.05	well mineralized zone material
6.40	15.45	CONGLOMERATIC ARGILLITE AND ARGILLACEOUS SILTSTONE: upper section altered, highly veined 10.60-13.6
		well laminated @ 14.70 is 50° to core axis.
		graphite on slickensides at 15.70 minor disseminated pyrrhotite.
15.45	16.27	WEAK ZONE MATERIAL : quartz - albite alteration but sparse sulfides
16.27	18.60	ALTERED ARGILLACEOUS SILTSTONE
18.60	23.60	PYRITIC ALTERED SILTSTONE : (weak zone) mainly dark grey, irregular quartz veining common, pyrite content variable, up to 10% over s
		Interval from 23.16 - 23.60 highly siliceous
23.60	35.80	ARGILLACEOUS SILTSTONE : mainly dark grey thinly to thickly bedded, mainly 70° to core axis
		minor siliceous - veined sections 27.1 - 27.85, most veining sub parallel to bedding ~ 60-70° to C.A

SAMPLE NUMBER	METERS from	to	LENGTH METERS	Au oz/ton			
73461	2.28	3.28	1.00	0.174			
73462	3.28	3.84	0.56	0.102			
73463	3.84	4.18	0.34	0.034			
73464	4.18	5.18	1.00	0.160	0.132 oz/ton	3.77 m	
73465	5.18	5.50	0.32	0.016			
73466	5.50	6.05	0.55	0.163			
73467	6.05	6.60	0.55	0.033			
73468	6.60	7.60	1.00	0.006			
73469	7.60	8.60	1.00	0.004			
73470	8.60	9.60	1.00	0.003			
73471	9.60	10.60	1.00	0.014			
73472	10.60	11.60	1.00	0.018			
73473	11.6	12.4	0.80	0.006			
73474	12.4	12.9	0.50	<0.003			
73475	12.9	14.0	1.10	0.004			
73476	14.0	15.45	1.45	<0.003			
73477	15.45	16.27	0.82	0.013			
73478	16.27	17.0	0.73	<0.003			
73479	17.0	18.6	1.60	<0.003			
73480	18.6	19.85	1.25	0.008			
73481	19.85	20.78	0.93	0.004			
73482	20.78	22.0	1.22	0.012			
73483	22.0	23.0	1.00	0.026			
73484	23.0	23.6	0.60	0.024			
73485	23.6	24.6	1.00	<0.003			
73486	24.6	26.0	1.40	<0.003			
73487	26.0	27.1	1.10	<0.003			
73488	27.1	28.0	0.80	0.020			
73489	28.0	29.0	1.00	0.006			
73490	29.0	30.2	1.20	<0.003			

DRILLING INTERVAL: 1.52, 2.28, 3.35, 4.87, 7.92, 10.97, 14.02, 17.07, 20.12, 23.16, 24.69, 25.91, 26.82, 28.34, 29.87
% CORE RECOVERED: 0, 10, 116, 92, 104, 100, 97, 94, 97, 98, 80, 88, 96, 112, 92
BOX Number: 8.79, 15.9, 23.04, 29.87
SCALE 1: 250 METERS
ALTERATION: CHLORITE, CALCITE, ALBITE, SILICA
FRACTURING
MINERAL %
GEOLOGY: casing to 2.74

CAROLIN MINES LIMITED

DIAMOND DRILL RECORD

LOCATION: Mc MASTER ZONE (SURFACE)

PROJECT: Mc MASTER

HOLE NUMBER: 89 M - 10

DRILLING INTERVAL	% CORE RECOVERED	BOX Number	SCALE 1:250	ALTERATION: CHLORITE	CALCITE	ALBITE	SILICA	FRACTURING	MINERAL	GEOLOGY
30.48			31							
32.0	100		32							
33.53	88		33							
35.05	98		34							
36.57	95		35							
38.1	107		36							
	92		37							
41.15			38							
42.67	89		39							
44.19	98		40							
			41							
			42							
			43							
			44							

PURPOSE:

COMMENT:

INTERVAL from to

23.60 - 35.80 ARGILLACEOUS SILTSTONE: dark grey, well layered. Traces of pyrite @ 33.01 - 33.56, graphitic slickensides at 33.56. chloritic greywacke section 34.81 - 35.55. minor pyrite 35.50 - 35.55

35.80 - 37.30 CONGLOMERATIC SECTION: mainly argillaceous but also altered and bleached.

37.30 - 39.90 - WEAK ZONE MATERIAL - calcareous, slightly pyritic

39.90 - 44.19 (EOH) CHLORITIC GREYWACKE: uniform dark green - grey Not sheared, aside from calcite lenses., very sparse Pyrite - 40.95 - 41.08.

Very chloritic 43.20 - 43.30

END OF HOLE: 44.19 meters (145 feet)

SAMPLE NUMBER	METERS from	METERS to	LENGTH METERS	Au oz/ton
73491	30.2	31.0	0.80	<0.003
73492	31.0	32.0	1.00	0.006
73493	32.0	33.0	1.00	0.012
73494	33.0	33.8	0.80	0.008
73495	33.8	35.5	1.70	<0.003
73496	35.5	37.0	1.50	<0.003
73497	37.0	38.0	1.00	0.004
73498	38.0	39.0	1.00	0.012
73499	39.0	40.0	1.00	<0.003
73500	40.0	41.0	1.00	<0.003

CAROLIN MINES LIMITED

DIAMOND DRILL RECORD

LOCATION (LEVEL): Mc MASTER ZONE (SURFACE)				PROJECT: Mc MASTER	HOLE NUMBER: 89 M-11
DIP: -60° Az 225 true	Section M-4, M-5				
LATITUDE: N	LENGTH: 72.23m (237')	ELEVATION:		CLAIM NUMBER:	
DEPARTURE: E	CORE SIZE: BQ	DATE LOGGED: Oct 31, Nov. 1, 1989		LOCATION: IDAHO CORE SHACK	
STARTED: Oct 29, 1989 NS	FINISHED: Oct 30-31, 1989 N.S	LOGGED BY: JTS, WBL		SAMPLED BY: J.T.S W.BL	
O.B. THICKNESS: 2.44, meters	STARTED: Oct 29, 1989 NS	FINISHED: Oct 29, 1989 NS		CASING: 3.05m	
B.R. THICKNESS:	STARTED: Oct 30, 1989 D.S.	FINISHED: Oct 30-31, NS		TOTAL RECOVERY: %	
CONTRACTOR: F. BOIVENEAU	CORE STORED: IDAHO CORE SHACK				

SURVEY: DEPTH	BEARING	ANGLE Reading	ANGLE Correc
72.23m (237')	225 (T)	-63.5°	-56°

PURPOSE: TARGET - Upper higher grade zone in Fault slice.

COMMENT:

DRILLING INTERVAL	% CORE RECOVERED	BOX Number	SCALE 1:250 METERS	ALTERATION: CHLORITE	CALCITE	ALBITE	SILICA	FRACTURING	MINERAL	GEOLOGY	INTERVAL from	to	DESCRIPTION
			1								0	2.44	OVERBURDEN No CORE (RUBBLE 1.67-2.44).
			2										
2.44	60	2.44	3							ZM	2.44	5.58	CHLORITIC ZONE MATERIAL: Mineralized pyrite
3.05	110		4										
3.45	96		5										
			6								5.58	6.76	ALTERED SILTSTONE
6.70	100		7										
			8							ZM	6.76	8.73	CHLORITIC ZONE MATERIAL
		9.42	9								8.73	11.38	CONGLOMERATIC ARGILLITE
9.75			10										
	93		11								11.38	22.98	SHEARED SILTSTONE: well layered, entire interval cut by many quartz lenses, short highly contorted sections bedding ~ 50° to C.A. Veining dominantly parallel and/or subparallel to layering. Sulphide content less than 2%. Graphite developed along some bedding planes.
			12										
12.80	103		13										
			14										
			15										
15.85		16.50	16										
	98		17										
			18										
18.89			19										
	100		20										
			21										
21.95			22										
			23								22.98	23.62	MASSIVE GREYWACKE - grey, weakly veined, sulphide < 1%
	106	23.62	24								23.62	28.76	GRAPHITIC FAULT ZONE 75° to C.A.
24.99			25								23.76	29.02	HIGHLY ALTERED CONGLOMERATIC ARGILLITE: Brecciated appearance. Qtz-carbonate veining is intense and is contorted. Sulphide 1-5% w/ py. & minor arsenopyrite?
	102		26										
			27										
28.04			28										
	89		29								29.02		WEAKLY SHEARED ARGILLACEOUS SILTSTONE:
31.09		30.80	30										

SAMPLE NUMBER	METERS FROM	TO	LENGTH METERS	Au oz/ton			
73536	2.44	3.0	0.56	0.139			
73537	3.0	3.50	0.50	0.104			
73538	3.50	4.00	0.50	0.086			
73539	4.0	4.50	0.50	0.029			
73540	4.50	5.0	0.50	0.036			
73541	5.0	5.58	0.58	0.056			
73542	5.58	6.00	0.42	0.012			
73543	6.0	6.76	0.76	0.016			
73544	6.76	7.26	0.50	0.008	76.29	1	<0.0677 oz/ton
73545	7.26	7.76	0.50	0.026			
73546	7.76	8.26	0.50	0.124			
73547	8.76	8.73	0.47	0.193			
73548	8.73	9.73	1.00	0.012			
73549	9.73	11.38	1.65	0.018			
73550	11.38	12.0	0.62	0.016			
73551	12.0	13.0	1.00	0.028			
73552	13.0	14.0	1.00	0.016	38.27	1	<0.015 oz/ton
73553	14.0	15.0	1.00	0.009			
73554	15.0	16.0	1.00	0.012			
73555	16.0	17.0	1.00	0.010			
73556	17.0	18.0	1.00	<0.003			
73557	18.0	19.0	1.00	0.006			
73558	19.0	20.5	1.50	<0.003			
73559	20.5	22.0	1.50	0.004			
73560	22.0	22.98	0.98	0.006			
73561	22.98	23.62	0.64	<0.003			
73562	23.62	24.0	0.38	0.010			
73563	24.0	25.0	1.00	<0.003			
73564	25.0	25.5	0.50	<0.003			
73565	25.5	26.0	0.50	0.014			
73566	26.0	26.5	0.50	0.004			
73567	26.5	27.0	0.50	0.006			
73568	27.0	27.5	0.50	0.012			
73569	27.5	28.0	0.50	0.022			
73570	28.0	28.5	0.50	0.010			
73571	28.5	29.02	0.52	0.010			
73572	29.02	30.5	1.48	0.008			

CAROLIN MINES LIMITED

DIAMOND DRILL RECORD

LOCATION:

PROJECT:

HOLE NUMBER: M-11

SCALE 1:250

DRILLING INTERVAL	% CORE RECOVERED	BOX Number
34.14	96	
37.18	97	37.72
40.23	94	
43.28	99	
43.89	54	
44.80	85	45.06
46.33	96	
47.85	108	
49.38	94	
50.9	98	
52.42	98	51.80
53.95	104	
55.47	101	
56.99	92	
58.52	100	58.90
60.04	95	
61.57	89	
63.09	91	
64.62	96	
66.13	73	65.92
66.75	92	
68.27	101	
69.19	87	

ALTERATION | FRACTURING | MINERAL | GEOLOGY

PURPOSE:

COMMENT:

INTERVAL from to

29.02 – 38.61 WEAKLY SHEARED ARGILLACEOUS SILTSTONE:
29.8 to 30 m. Graphitic fault zone. Qtz-carbonate veining less intense & is primarily parallel to subparallel to layering. Small local 5-10cm zones contain contorted veining. Sulphides < 2%

38.61 – 42.70 ALTERED CONGLOMERATIC ARGILLITE:
Noticeable increase in sulphides including < 1% arsenopyrite? Qtz-carbonate veining is not intense other than 5-10 cm localized clots.

42.70 – 44.69 CHLORITIC GREYWACKE: sparsely disseminated pyrite massive

44.69 – 47.09 ZONE MATERIAL: Light grey quartz-albite-carbonate rock. Sharp contact - mainly vein material. Sulphides (py, aspy) 5-8% as disseminations and along fractures and in veinlets

47.09 – 57.52 WEAKLY CHLORITIC GREYWACKE:
short altered section near top of interval. Very massive appearance. Mineralization is very weak to nil. Veining is also noticeably absent except for minor ones that appear to run parallel to layering

SLIGHTLY MORE ALTERED starting 55.47 and below.

57.52 – 72.29 ALTERED ARGILLACEOUS SILTSTONE
EOH:
finely pyritic 57.52 – 59.30. Pyrite is disseminated along qtz-carbonate altered planes parallel to compositional layering. Sulphide content ranges from 2-10%

SAMPLE NUMBER	METERS FROM	METERS TO	LENGTH METERS	Au oz/ton
73573	30.5	32.0	1.50	0.004
73574	32.0	33.50	1.50	0.006
73575	33.50	35.0	1.50	<0.003
73576	35.0	36.5	1.50	0.008
73577	36.5	38.61	2.11	0.010
73578	38.61	40.11	1.50	0.004
73579	40.11	41.61	1.50	<0.002
73580	41.61	42.70	1.09	0.004
73581	42.70	43.70	1.00	<0.002
73582	43.70	44.69	0.99	0.004
73583	44.69	45.19	0.50	0.018
73584	45.19	45.69	0.50	0.021
73585	45.69	46.19	0.50	0.018
73586	46.19	46.69	0.50	0.047
73587	46.69	47.09	0.40	0.040
73588	47.09	48.09	1.00	0.012
				3.40m @ 0.23 oz/ton Au
73589	55.4	56.9	1.50	0.002
73590	56.9	57.52	0.62	0.006
73591	57.52	58.0	0.48	0.002
73592	58.0	58.5	0.50	0.003
73593	58.5	59.3	0.80	0.004
73594	59.3	60.8	1.50	0.002
73595	60.8	61.8	1.00	<0.002

CAROLIN MINES LIMITED

LOCATION:

DIAMOND DRILL RECORD

PROJECT:

HOLE NUMBER: M-11

DRILLING INTERVAL	% CORE RECOVERED	BOX Number	SCALE 1: 250	ALTERATION	FRACTURING	MINERAL	GEOLOGY
71.02	85	10	71				
72.24	119	72.24	72				
			73				

PURPOSE:

COMMENT:

INTERVAL from to

56.52 - 72.2' ALTERED ARGILLACEOUS SILTSTONE:

END OF HOLE 72.23m

(237 feet)

SAMPLE NUMBER	METERS FROM	METERS TO	LENGTH METERS	Au oz/ton

CAROLIN MINES LIMITED

DIAMOND DRILL RECORD

LOCATION: (LEVEL): McMASTER ZONE (SURFACE)		PROJECT: McMASTER	HOLE NUMBER: 89 M-12
DIP: -40° DIRECTION 225° TRUE			
LATITUDE: N	LENGTH: 57.00m (187 feet)	ELEVATION:	CLAIM NUMBER: CARD #3 FR.
DEPARTURE: E	CORE SIZE: BQ	DATE LOGGED: Nov 1, 1989	LOCATION: IDAHO CORE SHACK
STARTED: Oct 31, 1989 D.S	FINISHED: Oct 31 - Nov 1, 1989 N.S	LOGGED BY: J.T.S, W.B.L	SAMPLED BY: J.T.S, W.B.L, S.L.S
O.B. THICKNESS: 5.49m (18ft)	STARTED: OCTOBER 31 1989 D.S	FINISHED: OCTOBER 31 1989 D.S	CASING: 6.71m
B.R. THICKNESS:	STARTED: October 31, 1989 D.S.	FINISHED: OCTOBER 31 / NOVEMBER 1 N.S	TOTAL RECOVERY: %
CONTRACTOR: F. BOIVENEAU	CORE STORED: IDAHO MINE		

SURVEY: ACID

DEPTH	BEARING	ANGLE Reading	ANGLE Correc.
57.00m	225°(G)	-47°	-38°

PURPOSE:
COMMENT: 45 meter step out to South (most southerly hole at McMaster).

DRILLING INTERVAL	% CORE RECOVERED	BOX Number	SCALE 1:250 METERS	ALTERATION: CHLORITE	CALCITE	ALBITE	SILICA	FRACTURING	MINERAL	GEOLOGY	INTERVAL from	to	DESCRIPTION
			1 2 3 4 5								0	5.49	OVERBURDEN: NO CORE minor rubble 4.88 - 5.49, SLIGHTLY ALTERED SILTSTONE
5.49			6								5.49	6.41	SLIGHTLY ALTERED SILTSTONE:
6.71	82		7								6.41	15.00	WELL MINERALIZED ZONE MATERIAL: high pyrite, Pyrrhotite - arsenopyrite content. Typical of higher grade quartz-albite carbonate alteration., Sulfide content 15-20%, at top veining 30° to C.A.
	102		8							ZONE			
			9										
9.75			10					MUD		MATERIAL			Rubbly upper contact; ORANGE-RED MUD from 9.75 - 10.24 31% recovery. possible fault gouge.
	89	12.33	11										veining slightly convoluted at 11.95 - 12.38. veining 70° to CA at 12.80.
			12										
12.80			13										graphite along fractures at 13.05.
	104		14										sheared, abrupt lower contact
			15										
15.85			16								15.00	17.63	GRAPHITIC ARGILLACEOUS SILTSTONE: MAYOR FAULT ZONE 15.85 - 16.70 intense graphite development. Faulted lower contact - graphite..., Possible andesite dyke - 17.05 - 17.32
	85		17										
		19.12	18								17.63	23.97	CHLORITIC GREYWACKE: Dark, relatively uniform, massive - not sheared,
18.90			19										
	93		20										
			21										
21.94			22										
	100		23										
			24										
24.99			25										
		26.03	26										
	91		27								23.97	31.05	SHEARED SILTY ARGILLITE: bleached, lighter grey in places. Intire section graphitic
28.04			28										
			29										
			30								31.05	31.75	Lower contact faulted + mineralized

8.59m = 28.2ft.

SAMPLE NUMBER	METERS FROM	TO	LENGTH METERS	Au oz/ton
73501	5.49	6.41	0.92	<0.003
73502	6.41	7.00	0.59	0.008
73503	7.00	7.50	0.50	0.180
73504	7.50	8.00	0.50	0.056
73505	8.00	8.50	0.50	0.024
73506	8.50	9.00	0.50	0.164
73507	9.00	9.50	0.50	0.198
73508	9.50	10.50	1.00	0.198
73509	10.50	11.00	0.50	0.092
73510	11.00	11.50	0.50	0.139
73511	11.50	12.00	0.50	0.081
73512	12.00	12.50	0.50	0.030
73513	12.50	13.00	0.50	0.170
73514	13.00	13.50	0.50	0.264
73515	13.50	14.00	0.50	0.146
73516	14.00	14.50	0.50	0.192
73517	14.50	15.00	0.50	0.188
73518	15.00	15.50	0.50	0.012
73519	15.50	16.00	0.50	<0.003
73520	16.00	17.00	1.00	0.011
73521	17.00	18.00	1.00	<0.003
73522	18.00	19.00	1.00	<0.006

weighted average of 6.5m over 6.5m = 21.32 feet

@ 0.152 oz/ton

6.5m @ 0.152 oz/ton

CAROLIN MINES LIMITED

DIAMOND DRILL RECORD

LOCATION: McMASTER SURFACE

PROJECT: McMASTER

HOLE NUMBER: 89 M-12

DRILLING INTERVAL	% CORE RECOVERED	BOX Number	SCALE 1: ___	ALTERATION	FRACTURING	MINERAL	GEOLOGY
31.70	72	4	31		~		
			32				
	107	33.8	33		~		
34.13			34				
			35		~		
	100.3	5	36				
37.49			37				
	89		38				
39.01			39				
	86	40.23	40				
40.23			41				
	100		42				
41.75			43				
	89		44				
43.28			45				
	95	6	46				
44.80			47				
	87	47.4	48				
46.33			49				
	95		50				
47.85			51				
	96		52				
49.37			53				
	100		54				
50.90			55				
	98	7	56				
52.42			57				
	104	54.25					
53.95							
	93	8					
55.47							
	98						
57.00							

PURPOSE:

COMMENT:

INTERVAL from to

31.05 – 42.43 CONGLOMERATIC ARGILLITE : many boulders

Bedding 80-90° to core axis.

Intense graphite throughout in narrow sections for example 35.24 ~70° to C.A.

Large rounded clasts common, entire section slightly altered., short silty sections such as 36.76 – 36.93 occur.

42.43 – 46.61 ARGILLACEOUS SILTSTONE : dark grey

46.61 – 50.54 CONGLOMERATIC ARGILLITE : mainly small pebbles

50.54 – 54.96 ALTERED SILTSTONE (MINERALIZED)

sparse pyrite in quartz-albite-carbonate altered zone.

54.96 – 57.00 (EOH) ALTERED SILTSTONE – less mineralized thin bedded.

END OF HOLE 57.00 meters

(187 feet)

SAMPLE NUMBER	METERS FROM	METERS TO	LENGTH METERS	Au oz/ton			
73523	31.05	31.75	0.70	<0.003			
73524	33.50	34.50	1.00	0.008			
73525	34.50	35.50	1.00	<0.003			
73526	35.50	36.50	1.00	<0.003			
73527	50.34	51.00	0.46	0.010			
73528	51.00	51.50	0.50	0.018			
73529	51.50	52.00	0.50	0.072			
73530	52.00	52.50	0.50	0.081			
73531	52.50	53.00	0.50	0.050			
73532	53.00	54.00	1.00	0.032	2.50 m of 0.053 oz/ton Au		
73533	54.00	55.00	1.00	0.020			
73534	55.00	56.00	1.00	0.004			
73535	56.00	57.00	1.00	<0.003			

CAROLIN MINES LIMITED

DIAMOND DRILL RECORD

LOCATION (LEVEL): McMASTER ZONE (SURFACE)		PROJECT: McMASTER	HOLE NUMBER: 89 M-13
DIP: -40° Az. 225°			
LATITUDE: N	LENGTH: 92.05 m (302 ft)	ELEVATION:	CLAIM NUMBER:
DEPARTURE: E	CORE SIZE: BQ	DATE LOGGED: Nov. 5, 1989	LOCATION: IDAHO CORE SHACK
STARTED: Nov. 1, 1989	FINISHED: Nov. 2, 1989	LOGGED BY: W.B.L, J.T.S	SAMPLED BY: W.B.L.
O.B. THICKNESS: 0.61 m	STARTED: Nov. 1, 1989 D.S	FINISHED: Nov. 1, 1989 D.S	CASING:
B.R. THICKNESS: 92.05 m	STARTED: Nov. 1, 1989 D.S	FINISHED: Nov. 2, 1989 D.S	TOTAL RECOVERY: %
CONTRACTOR: F. BOISVENU	CORE STORED: IDAHO CORE SHACK		

SURVEY: DEPTH	BEARING	ANGLE Reading	ANGLE Correc
45.72 m	225°	-45°	-37°
92.05 m	"	-45°	-37°

PURPOSE: To test extension of Zone Material located in DDH m-9 to the south.

COMMENT:

INTERVAL from to

0. - 0.61 OVERBURDEN 0.61 - 0.91 RUBBLE CASING TO 1.52 m

0.91 – 3.66 ZONE MATERIAL – Near surface weathering - very broken up & rusty core. Intensely brecciated, qtz – calcite – albite flooding. Sulfide content is high ~ 15% mainly pyrite with ospy in localized patches.

3.66 – 9.42 ARGILLACEOUS SILTSTONE - Strongly sheared. Shearing has imparted a strong foliation (parallel to layering?) that runs 5-15° to C.A. Qtz – carbonate alteration moderate to strong as fine hairline coatings along foliation planes. Pyrrhotite is main sulfide to 15% - strongly magnetic - ~ 5% py - 1-2% ospy.

9.42 – 14.34 ZONE MATERIAL – very intensely qtz – carbonate albite flooded section. From 10.8 – 11.58 m less intensely altered material. Sulphide content from 11.55 to 14.34 is ~ 15% with crystalline pyrite and arsenopyrite. Wavy banding occurring subparallel to C.A. (5-15°) is displaced by veined microfaults 60-70° to C.A. Vicinity 13.9 m.

14.34 – 23.0 CHLORITIC GREYWACKE – ranges from light green-grey to dark charcoal grey (more argillitic sections). Strong qtz – carbonate alt'n veining, minor albite. (May be considered weak ZONE MATERIAL). Foliation 60° to C.A. Chlorite on slickensides in chl. alt'd areas. Graphite on slickensides in more argillaceous sections. (15.85 - 16.7, 19.45 - 19.9, 21.5 - 22.1) Sulfide content is low - < 2% & for most part is pyrrhotite & pyrite. Increase in sulfides to 3-5% from 21.9 to 22.4 m.

23.0 – 25.6 ALTERED ARGILLACEOUS SILTSTONE – intensely qtz-carbonate veined dark charcoal grey. Dominant veins 55-70° to C.A. although veining cross-cuts C.A. at various angles. Veins to 2 cm thick. Sulfide: < 1%

25.6 – 27.4 PYRITIZED & ALTERED ARGILLACEOUS SILTSTONE dark charcoal grey. Increase in silica flooding. Crystalline py & asp 5-10%

27.4 – 30.28 ARGILLACEOUS SILTSTONE – dark charcoal grey - core cross-cut by 1-2mm qtz – carbonate veinlets at 65-85° to C.A. Sulfides ~ < 2%

SAMPLE NUMBER	METERS from	METERS to	LENGTH METERS	Au oz/ton			
73078	0.91	1.50	0.59	0.139			
73079	1.50	2.00	0.50	0.185	2.09 m @ 0.199		
73080	2.00	2.50	0.50	0.066			
73081	2.50	3.00	0.50	0.104			
73082	3.00	3.66	0.66	0.062			
73083	3.66	4.00	0.34	0.850			
73084	4.00	4.50	0.50	0.008			
73085	4.50	5.00	0.50	0.008			
73086	5.00	5.50	0.50	0.049			
73087	5.50	6.00	0.50	0.032			
73088	6.00	6.50	0.50	0.026	29.5m @ 0.037	13.43m @ 0.067	021
73089	6.50	7.00	0.50	0.019			
73090	7.00	7.50	0.50	0.018			
73091	7.50	8.00	0.50	0.026			
73092	8.00	8.50	0.50	0.096			
73093	8.50	9.00	0.50	0.068			
73094	9.00	9.42	0.42	0.030			
73095	9.42	10.00	0.58	0.010			
73096	10.00	10.50	0.50	0.024			
73097	10.50	11.00	0.50	0.062			
73098	11.00	11.50	0.50	0.082			
73099	11.50	12.00	0.50	0.026			
73100	12.00	12.50	0.50	0.036			
73101	12.50	13.00	0.50	0.167	1.84m @ 0.160		
73102	13.00	13.50	0.50	0.208			
73103	13.50	14.00	0.50	0.158			
73104	14.00	14.34	0.34	0.082			
73105	14.34	15.00	0.66	0.018			
73106	15.00	16.00	1.00	0.004			
73107	16.00	17.00	1.00	0.006			
73108	17.00	18.00	1.00	0.008			
73109	18.00	19.00	1.00	0.016			
73110	19.00	20.00	1.00	0.006			
73111	20.00	21.00	1.00	0.038			
73112	21.00	21.90	0.90	0.018			
73113	21.90	22.40	0.50	0.044			
73114	22.40	23.00	0.60	0.008			
73115	23.00	24.00	1.00	0.024			
73116	24.00	25.00	1.00	0.009			
73117	25.00	25.60	0.60	0.016			
73118	25.60	26.00	0.40	0.038			
73119	26.00	26.50	0.50	0.046	2.4m @ 0.043		
73120	26.50	27.00	0.50	0.033			
73121	27.00	27.40	0.40	0.010			
73122	27.40	28.00	0.60	0.072			
73123	28.00	29.00	1.00	0.008			
73124	29.00	30.28	1.28	0.006			

CAROLIN MINES LIMITED

DIAMOND DRILL RECORD

LOCATION: McMASTER ZONE

PROJECT: McMASTER

HOLE NUMBER: 89 M-13

DRILLING INTERVAL	% CORE RECOVERED	BOX Number	SCALE 1:250	ALTERATION: CHLORITE	CALCITE	ALBITE	SILICA	FRACTURING	MINERAL	GEOLOGY
70.71	100	10	71							
72.29	100	72.69	72							
	105		73							
73.76			74							
	93		75							
75.28			76							
	95		77							
76.81			78	X						
	95		79	X						
78.33		79.39	80							
	105		81	Y						
79.86			82							
	100		83	Y						
81.38			84							
	105		85	Y						
82.29			86							
	94	86.37	87	Y						
			88							
85.95			89	Y						
	98		90	Y						
89.0			91	Y						
	96	92.05	92							
92.05			93							

PURPOSE:

COMMENT:

INTERVAL from to

69.72 – 73 ARGILLACEOUS SILTSTONE – as from 58.77 – 69.0 slight increase in gtz – carbonate veining. Sulfides ~ 1%

73 – 76.81 CONGLOMERATIC ARGILLITE – to argillaceous lithic wacke. Dark charcoal grey. Thin interbeds within main Argillaceous siltstone unit. At 74 m grades to a very fine grained argillaceous siltston.

76.81 – 92.05 (E.O.H) TURBIDITE SEQUENCE – medium green-grey moderately to strongly chlorite altered. Massive unit. At 76.9 m small fault zone

- 76.81 – 86.37 – Greywacke
- 86.37 – 86.9 m Fine grained lithic Wacke
- 86.9 – 87.72 m Greywacke
- 87.72 – 89 Medium to coarse Lithic Wacke
- 89.0 – 90.5 Intensely sheared and altered Lithic wacke
- 90.5 – 92.05 Medium grained Lithic Wacke – massive, poorly veined, light grey greenish, clasts aligned 80° to C.A. minor sulfides

E.O.H.

SAMPLE NUMBER	METERS from	METERS to	LENGTH METERS	Au oz/ton

1975 DIAMOND DRILL HOLES M-1 TO M-7

RELOGGED 1989

PAGE 1 of ___

CAROLIN MINES LIMITED

DIAMOND DRILL RECORD

LOCATION (LEVEL): SURFACE McMASTER		PROJECT: McMASTER	HOLE NUMBER: M-1
DIP: -37° BEARING: 225° T			
LATITUDE: 4291.6 N	LENGTH: 49.7 m	ELEVATION: 1476.7	CLAIM NUMBER: CARO #3 FRAC.
DEPARTURE: 2306.4 E	CORE SIZE: BQWL	DATE LOGGED: Relogged Sept 28/89	LOCATION:
STARTED: Oct 6 1975	FINISHED: Oct 7 1975	LOGGED BY: D.J.G., JTS 1989	SAMPLED BY:
O.B. THICKNESS: 3.66 m.	STARTED:	FINISHED:	CASING:
B.R. THICKNESS:	STARTED:	FINISHED:	TOTAL RECOVERY: %
CONTRACTOR: Shepard Enterprises Ltd	CORE STORED: at McMaster Camp. 1989.		

SURVEY: DEPTH	BEARING	ANGLE Reading	ANGLE Correc
SURFACE	225T	-37	

DRILLING INTERVAL | % CORE RECOVERED | BOX Number | SCALE 1:250 METERS | ALTERATION | FRACTURING | MINERAL | GEOLOGY

PURPOSE:
COMMENT: NOTE: LOG WITHIN [ ] is original Dave Griffith log, rest is 1989 log by J. T. SHEARER.

Drilling interval: Wooden Blocks; 3.66; 4.1; 7.2; [illegible]; 10.0; 12.1?; 13.5; 14.0; 17.0; 18.5; 21.5; 22.0; 22.5; 23.3; 24.8; 24.5?; 30.2

% Core recovered: NO CORE; NOT PRESENTLY MEASUREABLE - CORE SPLIT.

Box number: 3.66; 1; 9.2; 2; 16.7; 3; 23.3; 4; 30.2

NOTE: Many of the wooden blocks have faded and can not be read (approx in pencil.)

Geology column: CHLORITIC GREYWACKE; ZONE MATERIAL

INTERVAL from to

0-3.66 m OVERBURDEN

3.66 - 16.80 [QUARTZ - ALBITE ROCK;] 3.66 - 11.80 CHLORITIC GREYWACKE. slightly mineralized with py + Po, minor quartz - albite - carbonate alteration

[bed 20 inc 70 CLV 70 QZ Par CLV 7% QZ, PAR CLV CLV 10. 1% CA, 2.0% (0.1% - 7.0%) PPr 3.0% (0.% - 15%) py 0.1% MS CPi]

Fractures parallel to core [illegible]

Progressively more altered toward contact, especially euhedral py on frac more abundant irregular quartz veining + patches

11.80 - 12.40 FAULT ZONE: CEMENTED quartz breccia 11.80-12.1? + 30 cm of bleached rock.

12.40 - 16.80 ZONE MATERIAL: Light grey, very abundant quartz in upper part of interval with sparse sulfides down to 14.30 chloritic greywacke 14.0 - 14.3 well mineralized zone material 14.3 - 16.80 with short chloritic greywacke sections. Mostly pyrite, pyrrhotite, trace Aspy.

16.80-27.49 TURBIDITE: greenish grey, well bedded in places with lenticular beds [INTERBEDDED WACKE & ARGL BED/CLV 70 1% Qz PAR CLV 2% CA; 02% PR, 01 AS CP PY] bedding at 20.8 is 70° to CA

Lithic wacke bed - 20.8-21.5, clasts up to 30 mm long.

Mostly fine grained siltstone, greywacke some short sections well layer to laminated 70° to CA uniform fracture

Graphite on slickensides 26.0 associated with minor quartz veinlets

27.49 - 49.70 27.49 - 30.7 SILICIFED ZONE IN TURBIDITE [GREEN WACKE, GREEN ARGL] Most of the quartz veinlets are between 70° and 90° to CA mottled lighter grey

SAMPLE NUMBER	METERS to	METERS from	LENGTH METERS	Au ~~g/tonne~~ oz/ton			
M-1	3.66	4.16	0.50	0.020			
[struck out]	[illegible]	[illegible]	[illegible]	[illegible]			
[struck out]	[illegible]	[illegible]	[illegible]	[illegible]			
-3 [2]/-3	4.80	5.70	0.90	0.010			
-4	5.70	6.30	0.60	0.080			
-6 [5]/-6	6.30	7.20	0.90	0.010			
-7 [6]/-7	7.20	8.30	1.10	0.010		chloritic Greywacke	
-8 [7]/-8	8.30	9.20	0.90	0.010			
-9 [8]/-9	9.20	10.65	1.45	0.020			
-10 [9]/-10	10.65	12.10	1.45	0.030			
-10	12.10	12.65	0.55	0.005			
-12 [11]/-12	12.65	13.25	0.60	0.016			
-12 [13]/-12	13.25	14.13	0.88	0.015		ZONE MATERIAL	
-13	14.13	15.40	1.27	0.035		4.15 m of	
M-14	15.40	16.80	1.40	0.16	←	0.070 oz/ton	
-15	16.80	17.70	0.90	0.010			Au
-16	17.70	20.10	2.40	0.005			
-17	20.10	21.75	1.65	trc			
-18	21.75	23.35	1.60	trc			
-19	23.35	25.50	2.15	trc			
-20	25.50	26.08	0.81	0.005			
-21	26.08	27.49	0.50	0.023	→ graphitic interval, some quartz veinlets		
-22	27.49	29.15	1.65	0.010			
-23	29.15	30.64	1.10	0.020			

CAROLIN MINES LIMITED

DIAMOND DRILL RECORD

LOCATION: SURFACE McMASTER ZONE

PROJECT: McMASTER

HOLE NUMBER: M-1

DRILLING INTERVAL	% CORE RECOVERED	BOX Number	SCALE 1:250 METERS	ALTERATION	FRACTURING	MINERAL	GEOLOGY	PURPOSE: COMMENT: INTERVAL from to
30.7	However core recovery appears to average >95%.	30.7	31				31	30.70 - 36.6 TURBIDITE : greywacke member dark grey
			32				32	
			33				33	minor quartz - calcite veining
33.6			34				34	
			35				35	
		36.6	36				36	36.6 - 46.9 TURBIDITE : greenish greywacke - lithicwacke.
36.6			37				37	
			38				38	sulfides most abundant at 38.0 in quartz stockworks
			39				39	
39.6			40				40	
			41				41	
NO Block			42				42	
43.7		43.5	43				43	prominent greenish colour, minor lithic fragments to 5mm.
			44				44	
			45				45	
			46				46	
46.7			47				47	46.9 - 48.2 LAMINATED SILTSTONE
			48				48	48.2 - 49.7 BLACK ARGILLITE.
49.7		49.7	49				49	
			50				50	END OF HOLE 49.7 meters.

SAMPLE NUMBER	METERS to	METERS from	LENGTH METERS	Au ~~g/Atonne~~ oz/ton				
~~24~~	~~30.64~~	~~31.20~~	0.56	Tre				
25	31.20	32.01	0.81	~~0.005~~				
~~26~~	~~32.01~~	~~32.51~~	0.50	~~0.025~~				
27	32.51	33.60	1.09	0.010				
28	33.60	34.70	1.10	0.020				
~~29~~	~~34.20~~	~~35.40~~	0.70	~~0.030~~				
~~30~~	~~35.40~~	~~35.75~~	0.35	~~0.020~~				
31	35.75	37.55	1.80	0.035				Qtz - carb alt
~~32~~	~~37.55~~	~~37.80~~	0.25	~~0.025~~				
33	37.80	39.05	1.25	0.020				
~~34~~	~~39.05~~	~~39.53~~	0.48					
~~35~~	~~39.53~~	~~41.14~~						
36	39.53	41.14	1.61	0.040				
37	41.14	42.04	0.90	0.005				
38	42.04	42.64	0.60	Tre				
~~39~~	~~42.64~~	~~43.00~~	~~0.36~~	~~0.210~~				
~~40~~	~~43.00~~	~~44.52~~	~~1.52~~	~~Tre~~				
41	44.52	46.20	1.68	0.005				
42	46.20	47.40	1.20	trc				
43	47.40	48.74	1.34	trc				
44	48.74	49.70	0.96	trc.				

CAROLIN MINES LIMITED

DIAMOND DRILL RECORD

PROJECT: IDAHO McMASTER

HOLE NUMBER: M-2

LOCATION (LEVEL): SURFACE McMASTER.

DIP: -35° BEARING: 225 T

LATITUDE: 4295.6 N

DEPARTURE: 2316.9 E

STARTED: Oct 9 1975

O.B. THICKNESS:

B.R. THICKNESS:

CONTRACTOR: SHEPARD ENTERPRISES. LTD

LENGTH: 68.19 m

CORE SIZE: BQWL

FINISHED: Oct 10 1975

STARTED:

STARTED:

CORE STORED: McMASTER CORESHACK.

ELEVATION: 1463.0

DATE LOGGED: Sept 29/89 JTS

LOGGED BY: DJG (1975) JTS (1989)

FINISHED:

FINISHED:

CLAIM NUMBER: CARO #3 FRAC

LOCATION:

SAMPLED BY:

CASING:

TOTAL RECOVERY: %

SURVEY: DEPTH	BEARING	ANGLE Reading	ANGLE Correc.
CASING	225° T	-35°	

DRILLING INTERVAL: 5.6, 7.5, 10.5, 12.2, 13.7, 16.7, 19.4, 19.7, 21.0, 22.5, 23.9, 25.5, 26.4, 27.9, 31.0

% CORE RECOVERED: NO CORE (0–5.6); 5.6; 12.2; 19.4; 23.8; 27.7

SCALE 1:250 METERS

GEOLOGY: OVERBURDEN

PURPOSE:

COMMENT:

INTERVAL from to

0 = 5.60 OVERBURDEN

two pebbles of zone material. at top of Box.

~~5.60 – QUARTZ ALBITE Rock, ALBITE –~~

5.60 – 11.53 CARBONTE Rock BED; – 70 – 0 VAR.,

5.60 – 7.78 ZONE MATERIAL 70; well mineralized. Po, Py Asp. in typical Quartz/albite, carbonate rock AS; 1.0%

7.78 – 11.53 MINERALIZED SILTSTONE: bedding well laminated bedding contorted in places, 25° to CA at 9.6 m.

11.53 – 15.2 LAMINATED SILTSTONE/ARGL BED/ CLV 1GR/CL 55 – 80 10 % 1.0% CA 0.6 RR; Trc (0% – 3.0%) PY 0% AS, CP

bedding at 80° to CA at 11.55, 50° @ 13.0 m

15.20 – 25.47 QUARTZ – CARBONATE VEINING IN SILTSTONE – TURBIDITE (altered but only slightly mineralized interval).

possible Fault Locus @ 19.0 / 18.5 or 16.0

core ground at 25.5 Possible fault zone.

BEDDED ARGL MUBALL SLATE

25.47 BED / CONGLOMERATIC / ARGILLITE

CLV 10 10% CA 0.1% Po

0% AS CP PY.

Very conglomeratic & crowded clasts up to 20 mm, but still floating.

SAMPLE NUMBER	METERS to	METERS from	LENGTH METERS	Au g/tonne
	5.60	7.38	1.78	0.24
	7.38	7.78	0.40	0.31
	7.78	10.80	3.02	0.055
	10.80	11.53	0.73	0.070
	11.53	12.86	0.90	Trc
	12.86	14.26	0.43	0.010
	14.26	16.04	1.40	0.010
	16.04	16.90	1.78	0.020
	16.90	17.90	0.86	0.015
	17.90	18.90	1.00	0.015
	18.30	19.19	0.40	0.010
	19.19	20.55	0.89	0.010
	20.55	22.15	1.36	0.010
	22.15	23.98	1.60	0.005
	23.89	25.47	1.83	AU 02/30
	25.47	27.87	2.40	TRC
	27.87	31.30	3.43	TRC

Typical zone

Not so highly mineralized

well laminated poorly mineralized.

5.93 m of 0.130 oz/ton Au

CAROLIN MINES LIMITED

DIAMOND DRILL RECORD

LOCATION:

PROJECT:

HOLE NUMBER: M-2

PURPOSE:

COMMENT:

DRILLING INTERVAL	% CORE RECOVERED	BOX Number	SCALE 1:250 METERS	GEOLOGY	INTERVAL from to / COMMENT
31.2	4		31	31	25.47-43.75m CONGLOMERATIC ARGILLITE
	32.7		32	32	
			33	33	
			34	34	~~BOX MISSING~~ BOX FOUND LATER
34.3	5		35	35	
			36	36	ALL CONGLOMERATIC ARGILLITE, Bedding mostly 70-80° to CA
			37	37	
37.5			38	38	
	39.6		39	39	very few pebbles toward end of interval - argillite
40.5	6		40	40	
			41	41	short quartz alteration zones 41.2
			42	42	Bedding @ 42.8 is 50° to c.A.
			43	43	
43.5			44	44	43.75 - 44.55m QUARTZ ZONE - CONTACT ZONE
			45	45	44.55 - TURBIDITE greywacke / lithic wacke - siltstone
	46.5		46	46	CLU 0 1.5% CA related by micro graded sequences.
46.6	7		47	47	AS 0.2% PR TRC (-TRC) CP 0.4%
47.6			48	48	(0% - 5.0%) PY
49.1			49	49	
50.5			50	50	
52.0			51	51	
	52.6		52	52	
53.0	8		53	53	
55.5			54	54	
			55	55	very short quartz - albite weakly mineralized zones @ 55.5 10cm wide
58.5			56	56	
			57	57	
			58	58	
	59.4		59	59	
	9		60	60	
	62.5		61	61	
			62	62	BOX MISSING.
			63	63	
			64	64	
			65	65	
			66	66	
	67.6		67	67	END OF HOLE
	68.19		68	68	END OF HOLE 68.19m
			69	69	
			70	70	

Box 5 Missing

?

Box 9 Missing

SAMPLE NUMBER	METERS to	METERS from	LENGTH METERS	Au g/tonne
	[illegible]	33.25	1.95	TRC
	[illegible]	36.43	3.18	Trc
	[illegible]	39.33	2.90	TRC
	[illegible]	41.17	1.84	TRC
	[illegible]	43.75	2.58	TRC
	[illegible]	44.71	0.96	0.015
	[illegible]	45.55	0.84	0.005
	45.55	48.39	2.84	TRC
	[illegible]	49.33	0.94	0.010
	[illegible]	49.93	0.60	0.020
	49.93	50.68	0.75	0.005
	50.68	52.57	0.89	TRC
	52.57	55.87	3.30	TRC
	55.87	57.05	1.18	TRC
	57.05	60.55	3.50	TRC
	60.55	61.00	0.45	0.005
	61.00	61.50	0.50	TRC
	61.50	62.90	1.40	0.005
	62.90	66.52	3.62	Trc
	66.32	67.92	1.40	TRC
	67.92	68.19	0.27	TRC

CAROLIN MINES LIMITED

DIAMOND DRILL RECORD

LOCATION: (LEVEL): SURFACE HOLE McMASTER ZONE
DIP: -40 DIRECTION 225° TRUE
LATITUDE: 4310.7 N
DEPARTURE: 2332.0 E
STARTED: OCT 15 1975
O.B. THICKNESS: 19.90
B.R. THICKNESS:
CONTRACTOR: SHEPARD ENTERPRISES

LENGTH: 100.6 m ( )
CORE SIZE: BQWL
FINISHED: Oct 17 1975
STARTED:
FINISHED:
CORE STORED: McMASTER CAMP 1989.

ELEVATION: 1461.5
DATE LOGGED:
LOGGED BY: D.J.G 1975, JTS 1989 Oct 18/89
FINISHED:
TOTAL RECOVERY: %

PROJECT: McMASTER
CLAIM NUMBER: CARO #3 FRAC
LOCATION:
SAMPLED BY:
CASING:

HOLE NUMBER: M3 M-3

SURVEY:

DEPTH	BEARING	ANGLE Reading	ANGLE Correc
CASING	225	-40°	

PURPOSE:
COMMENT:

DRILLING INTERVAL	% CORE RECOVERED	BOX Number	SCALE 1:	ALTERATION	FRACTURING	MINERAL	GEOLOGY	INTERVAL from	to	GEOLOGY
		NO CORE						0	19.90	0-19.90 OVERBURDEN "10% Recovery"
6.6		6.2						6.6	6.9	silicified "boulders", cherty argillite 6.6-6.9
6.9	No recov							6.9	13.0	No recovery down to 13.0. 10% Recovery.
13.0								13.0	13.6	coarse greywacke boulder? 13.0-13.6.
19.90		? ?						19.90	21.64	(19.90-21.64) ZONE MATERIAL Minor Serp; Bed/CLV/CL/GR 50° INC 65° 15% (5%-50%) QZ PAR CLV 10°; 20% (0%-10%) CA, 0.3% MS 1.0% PR; trc (0%-0.1%) CP; 1.5% PY very brecciated.
22.0								21.64	22.88	MINERALIZED SILTSTONE
								22.88	24.90	pebble conglomerate.
25.0		25.0						24.90	25.50	chloritic Greywacke
								25.50	26.26	Zone Material, well mineralized, graphite at end of interval
27.4								26.26	31.0	CHLORITIC GREYWACKE ... very contorted, sparsely mineralized (28.93m-50.90m)
28.6		32.0								Interbedding Argill/Wacke; Bed/CLV/GR/CL 65° INC 80° 15% (1%-35%) QZ PAR CLV 10°; 1% CA, trc (0%-10%) CA; 0.3% MS 1.0% PR; trc (0%-0.1%)

SAMPLE NUMBER	METERS to	METERS from	LENGTH METERS	Au g/tonne			
M3-1	19.90	6.30	13.60	0.005	26.26		
M3-2	21.64	19.90	1.74	0.12	19.90		
M3-3	22.88	21.64	1.24	0.17	weighted average		
M3-4	24.34	22.88	1.46	0.035	0.110 over	6.36 m	
M3-5	25.32	24.34	0.98	0.14			
M3-6	26.26	25.32	0.94	0.10			
M3-7	27.20	26.26	0.94	0.030	28.26-19.90		
M3-8	28.93	27.20	1.73	0.015	6.36 m.		
M3-9	30.16	28.93	1.23	0.015			

CAROLIN MINES LIMITED

DIAMOND DRILL RECORD

LOCATION:

PROJECT:

HOLE NUMBER: M3

PURPOSE:

COMMENT:

DRILLING INTERVAL	% CORE RECOVERED	BOX Number	SCALE 1:	ALTERATION	FRACTURING	MINERAL	GEOLOGY	INTERVAL from to	SAMPLE NUMBER	METERS to	METERS from	LENGTH METERS	Au g/tonne
		2	31					31.80 - 50.90 PY Graphitic SILTSTONE: platy cleavage.	M3-10	30.96	30.16	0.80	trc
		32.0	32						M3-11	32.37	30.96	1.41	0.020
? Blocks not readable								Pyrite layer at 32.75 FOLDED in an ellipse.					
33.5?			33						M3-12	34.45	32.37	2.08	trc
			34						M3-13	35.45	34.45	1.00	trc
			35										
box 3 broken but still useful			36					calcite - quartz zone 36.6 - 36.9, Faulted; bedding at 55° to CA.	M3-14	36.90	35.45	1.45	0.005
36.6			37										
36.9			38						M3-15	39.20	36.90	2.30	trc
		38.3	39										
			40						M3-16	40.24	39.20	1.04	trc
			41						M3-17	41.10	40.24	0.86	trc
			42										
			43					Fault breccia at 45.7.					
		44.2	44						M3-18	44.60	41.10	3.50	trc
			45					Quartz veining over short intervals 46.0 - 46.4. Faulted 45.0 - 50m. brecciated + healed.	M3-19	45.80	44.60	1.20	0.005
46.0			46										
46.5			47						M3-20	47.80	45.80	2.00	0.005
			48										
			49						M3-21	50.30	47.80	2.50	trc
			50					(50.90m to 62.10m) short Turbidite section	M3-22	50.90	50.30	0.60	trc
		51.4	51				graded bed	50.90 CONGLOMERATIC ARGILLITE and MUDBALL SLATE, GR ARGL; BED/CLU/GR 80°; 4% QZ PAR CLU 4 10°; 5% CA; 0.2% PR; 0.2% PY; 0% AS, CP; Lithic wacke at top of interval	M3-23	53.20	50.90	2.30	trc
			52										
			53					Lost Water 61.0m	M3-24	55.35	53.20	2.15	trc
			54						M3-25	56.15	55.35	0.80	trc
			55										
56.0			56										
			57						M3-26	59.10	56.15	2.95	trc
		58.2	58										
			59										
			60					(62.10m to 79.06m)	M3-27	61.32	59.10	2.22	trc
			61					JURBLDck J ~~GREEN~~ ARGL, BED/CLU/CL 80°-100°; 5% (1% - 20%) QZ	M3-28	62.10	61.32	0.78	trc
			62					62.10 PAR CLU 10°; 2% CA; trc (0% - 0.1%) AS; 0.3% PR; trc (0% - 0.1%) CP; 3% (0% - 9.0%) PY	M3-29	64.00	62.10	1.90	0.070
			63										
			64						M3-30	66.00	64.00	2.00	trc
Box 7 MISSING		65.6	65					Graded cycles throughout from crs Lithic wacke to finely Laminated silty-argillaceous tops.	M3-31	66.60	66.00	.60	0.005
			66										
			67						M3-32	69.48	66.20	3.28	trc
			68										
			69					abundant carbonate veining throughout Box 8					
		72.3	70										

1.90 m @ 0.070 oz/ton

CAROLIN MINES LIMITED

DIAMOND DRILL RECORD

LOCATION:

PROJECT:

HOLE NUMBER: M3

PURPOSE:

COMMENT:

INTERVAL from to

DRILLING INTERVAL	% CORE RECOVERED	BOX Number	SCALE 1:	ALTERATION	FRACTURING	MINERAL	GEOLOGY
		8 72.3	71 72				62.10 – TURBIDITE - good examples of coarse to fine graded cycles. prominent green colour
		9 79.3	73 74 75 76 77 78 79				
79.26		10 84A	80 81 82 83 84				(79.26m - 100.60m) COLOUR CHANGE AT 79.3 – Finer part of cycle more prominent. Bedded Argl's Interbedded Argl's Wacke; Green Argl; Red/CLU/CL 65°/90°, 3% (1.0% - 5.0%) QZ PAR CLU @ 20°) 3% CA; 0.2% PR; 0.1% (0% - 20% JPY; 0% AS, CP. bedding 70° to CA., colour more grey than green.
85.6			85 86 87 88 89 90				c coarser parts at 90.0, Lithic wacke, bedding at 70° to CA.
90.0 91.5?		11 91.6	91 92 93 94 95 96 97 98				Sample 43 cut by carbonate stringers several Lithic wacke – congl grading up to laminated siltstone cycles. silty Laminations @ 93.0 is 70° to CA.
100.60		13 100.6	99 100 101 102 103 104 105 106 107 108 109 110				

SAMPLE NUMBER	METERS to	METERS from	LENGTH METERS	Au g/tonne
M3-33	73.05	69.48	3.57	trc.
M3-34	74.71	73.05	1.66	trc
M3-35	76.70	74.71	1.99	0.005
M3-36	79.03	76.70	2.33	trc
~~M3-37~~	~~79.26~~	~~79.03~~	~~0.23~~	~~0.015~~
M3-38	81.30	79.26	2.04	0.005
M3-39	84.33	81.30	3.03	trc
M3-40	86.80	84.33	2.47	trc
M3-41	88.48	86.80	1.68	trc
M3-42	89.30	88.48	0.82	0.015
M3-43	92.58	89.30	3.28	0.005
M3-44	94.60	92.58	2.02	trc.
M3-45	97.60	94.60	3.00	trc
M3-46	99.75	97.60	2.15	trc
M3-47	100.60	99.75	0.85	trc.

CAROLIN MINES LIMITED

DIAMOND DRILL RECORD

- LOCATION (LEVEL):
- DIP: -35 DIRECTION 225°
- LATITUDE: 4276.0 N
- DEPARTURE: 2344.1 E
- STARTED: Oct 21 1975
- O.B. THICKNESS:
- B.R. THICKNESS:
- CONTRACTOR:
- LENGTH: 67.50 m
- CORE SIZE:
- FINISHED: October 22 1975
- STARTED:
- STARTED:
- CORE STORED:
- ELEVATION: 1464.2
- DATE LOGGED:
- LOGGED BY:
- FINISHED:
- FINISHED:
- PROJECT:
- HOLE NUMBER: M-4 M-4
- CLAIM NUMBER: CARO #3 FRAC
- LOCATION:
- SAMPLED BY:
- CASING:
- TOTAL RECOVERY: %

SURVEY: DEPTH	BEARING	ANGLE Reading	ANGLE Correc

DRILLING INTERVAL	% CORE RECOVERED	BOX Number	SCALE 1:
		NO CORE	1–6
6.32		6.3	
9.70		1	
11.8			
12.0		12.4	12
		2	
18.15		19.2	
22.6		3	
		24.3	
		4	
		33.3	

ALTERATION | FRACTURING | MINERAL | GEOLOGY: chl Graywacke; ZM

PURPOSE:
COMMENT:

INTERVAL from to

0 – 6.32 OVERBURDEN.

6.32 – 8.37 FELDSPATHIC LOW GRADE PYRITIC ZONE MATERIAL
Feldspathic Wacke, Quartz-Albite Rock, Chlorite Greywacke ... 55° INC 70°; 12% QZ PAR CLV 1.10; trc CH, 0.2% PS; 0.4% PR; trc CP; 2.5% (0.5%-5.0%) PY

8.37 – 9.70 ZONE MATERIAL: quartz-albite-carbonate, abundant slickensides.

9.70 – (9.70m – 18.15m) FAULTED SILTSTONE
Interbedded Argil & Wacke; Bed/CLV/CL/GR 55°-65°; 20% (4%-50%) QZ PAR CLV 510°; 1% CA; trc (0%-trc) AS; 1.5% (0.3%-4.0%) PR; trc (0%-0.2%) CP; 0.4% PY
graphitic fault at 11.8 - 12.0, 10.3 - 10.5.

Highly silicified 14.0 – 18.15

18.15 – 19.5 (18.15m–19.5m) FAULT BRECCIA. – Developed within conglomeratic argillite at the top and very graphitic
Brecciated Chert Mudball Slate; Bed/CLV/GR/CL 75°, 35% QZ PAR CLV + 10%; 2% CA; 0.2% PR; 0.4% PY, 0% AS, CP.

CONGLOMERATIC ARGILLITE: sheared and graphitic.

GRAPHITIC THROUGHOUT

Quartz breccia 28.0 – 29.5 probable fault locus

Py + Po @ 29.8, zone type alteration

SAMPLE NUMBER	METERS to	METERS from	LENGTH METERS	Au g/tonne	
M4-1	7.35	6.32	1.03	0.035	3.38 m of 0.069 oz/ton Au
M4-2	8.37	7.35	1.02	0.050	
M4-3	9.70	8.37	1.33	0.11	1.33 m @ 0.11
M4-4	10.05	9.70	0.35	0.015	
M4-5	12.41	10.05	2.36	0.005	
M4-6	13.65	12.41	1.24	0.015	
M4-7	15.45	13.65	1.80	0.015	
M4-8	16.80	15.45	1.35	0.035	
M4-9	18.15	16.80	1.35	0.030	
M4-10	19.20	18.15	1.05	trc.	
M4-11	19.65	19.20	0.45	0.015	
M4-12	20.92	19.65	1.27	0.005	
M4-13	22.18	20.92	1.26	trc	
M4-14	23.94	22.18	1.76	trc	
M4-15	25.50	23.94	1.56	trc	
M4-16	27.35	25.50	1.85	trc	
M4-17	28.60	27.35	1.25	trc	
M4-18	30.50	28.60	1.90	trc	

CAROLIN MINES LIMITED

DIAMOND DRILL RECORD

LOCATION:

PROJECT:

HOLE NUMBER: M4

PURPOSE:
COMMENT:

INTERVAL from to

19.5 — 39.62 CONGLOMERATIC ARGILLITE:

Less Graphite

39.62 (39.62 - 49.10m) TURBIDITE
Interbedded Wacke & Argl; Bed/CLV 80°; 3% QZ PAR CLV; 16% trc PR; 0.4% PY; 0% AS; CP:

Coarse Lithic wacke to fine siltstone cycles.

Intense graphite on slickensides 45.7, + qtz breccia

2cm wide graded beds at 47.7.

(49.10 - 67.50m)
Green Argl, Argl; CLV/CL 80°; 6% (trc 80%) QZ PAR CLV 80° 2% CH; 0.3% PR; trc CP; 0.4% PY; 0% AS.

Brecciated and altered 49.5, Quartz breccia zone 49.5 - 51.2.

51.2 - Sheared + brecciated TURBIDITE

TURBIDITE, green, coarse to fine cycles.

66.0 - EOH 67.5 GRAPHITIC FAULT in conglomeratic argillite and chloritic greywacke.

Drilling interval: 37.9, 39.1, 39.62, 39.9, 47.6, 49.10, 67.50

% core recovered: core loss (37.9 - 39.1)

Box Number: 4 (to 33.3); 5 (to 40.1); 6 (to 47.2); 7 (to 49.0); 8 (to 55.4); 9 (to 62.3); 10 (to 67.5)

Scale 1: — 31 to 69

Geology: ^^^^ (45.5); A A (50-51)

SAMPLE NUMBER	METERS to	METERS from	LENGTH METERS	Au g/tonne
M4-19	33.81	30.50	3.31	trc
M4-20	35.75	33.81	1.94	0.005
M4-21	37.47	35.75	1.72	trc
M4-22	38.52	37.47	1.05	trc
M4-23	39.62	38.52	1.10	0.005
M4-24	40.75	39.62	1.13	0.015
M4-25	42.38	40.75	1.63	trc
M4-26	42.70	42.38	0.32	0.005
M4-27	43.40	42.70	0.70	0.005
M4-28	44.11	43.40	0.71	trc
M4-29	45.33	44.11	1.22	trc
M4-30	48.00	45.33	2.67	trc
M4-31	49.10	48.00	1.10	trc
M4-32	50.58	49.10	1.48	trc
M4-33	51.80	50.58	1.22	0.070
M4-34	54.60	51.80	2.80	trc
M4-35	57.05	54.60	2.45	trc
M4-36	58.85	57.05	1.80	0.005
M4-37	60.23	58.85	1.38	trc
M4-38	61.70	60.23	1.47	0.005
M4-39	62.85	61.70	1.15	trc
M4-40	65.17	62.85	2.32	trc
M4-41	67.50	65.17	2.33	trc

CAROLIN MINES LIMITED

DIAMOND DRILL RECORD

LOCATION (LEVEL):		PROJECT:	HOLE NUMBER: M5 M-5
DIP: -40 DIRECTION - 225° TRUE			
LATITUDE: 4291.0 N	LENGTH: 79.30 meters ( )	ELEVATION: 1462.8	CLAIM NUMBER: CARO #3 FR
DEPARTURE: 2356.9 E	CORE SIZE: BQWL	DATE LOGGED:	LOCATION:
STARTED: OCTOBER 27 1975	FINISHED: OCTOBER 29 1975	LOGGED BY:	SAMPLED BY:
O.B. THICKNESS: 23 m.	STARTED:	FINISHED:	CASING:
B.R. THICKNESS:	STARTED:	FINISHED:	TOTAL RECOVERY: %
CONTRACTOR:	CORE STORED:		

SURVEY: DEPTH	BEARING	ANGLE Reading	ANGLE Correc

DRILLING INTERVAL	% CORE RECOVERED	BOX Number	SCALE 1:	ALTERATION	FRACTURING	MINERAL	GEOLOGY	PURPOSE: COMMENT: INTERVAL from to	SAMPLE NUMBER	METERS to	METERS from	LENGTH METERS	Au g/tonne	
								0 - 23.00 OVERBURDEN						
23.00	23.00	23.00						23.00 - 24.75 TALC SCHIST Light grey to green, highly contorted schistose, slickensides (23.00 - 24.75m) Talc Carbonate Rock; Serpentine; CLV TE 5E ...; 3%; QZ PRR CLV; ...% PY; ...% AS; PR; CP	MS-1	24.75	23.00	1.75	0.010	
						~	ZM	24.75 - 26.14 ZONE MATERIAL - well mineralized, Looks better than 0.05 (24.75m - 26.14m) Quartz-Albite Rock; 35% QZ; P 70° ≥ 20°; 0% ...; 0.1% AS; 0.3% PR; ... FAULTED CONTACTS	MS-2	26.14	24.75	1.39	0.050	*
						~		26.14 - 30.20 Altered + sheared SILTSTONE (TURBIDITE) Quartz veining + brecciation 29.70 - 30.20 (26.14 to 49.90m) Interbedded ARGL & Wacke; Bedding ... 60°; 5% (1.0%-30%)	MS-3	29.16	26.14	3.02	trc	
		29.1 / 2 / 30.0						QZ PRR CLV; 4% CB; 0.2% PR; 0.3% PY; 0% AS; CP	MS-4	30.43	29.16	1.27	0.005	

CAROLIN MINES LIMITED

DIAMOND DRILL RECORD

LOCATION:

PROJECT:

HOLE NUMBER: M5 M-5

DRILLING INTERVAL	% CORE RECOVERED	BOX Number	SCALE 1:	ALTERATION	FRACTURING	MINERAL	GEOLOGY
31.8		2	31–34				
34.5			35				
36.0		36.0	36				
HOLE 37.0		3	37–39				
40.0			40–41				
		42.8	42–43				
		4	44–47				
49.7		49.7	48–49				
		5	50–54				
		55.7	55				
		6	56–60				
box 6 not Full intentional		61.7	61–63				
64.7		7	64–66				
		68.6	67–69				
		8	70				

PURPOSE:

COMMENT:

INTERVAL from to

30.20 – 35.90 CONGLOMERATIC ARGILLITE: chloritic ... pebbles common throughout

35.90 – 49.70 TURBIDITE: mainly fine grained silty cycles sheared in top of interval

2 wooden blocks at 37.0 – HOLE

Fault convolutions at 40.3

graphitic slickensides. 44.8, 10° to c.A. graphite on slickensides 85° to c.A.

GRAPHITIC

(49.70 – 64.85 m) Brecciated Chert Interbedded Wacke & Argl.; Bed/clv/cl/gr 80°; 17% (5% - 30%) Qz PHR clv 20°; 30° CA; tr(0% - tr) AS; 0.2% PR; tr(0% - tr) CP; 0.3% (0.1% - 1.5%) PY

49.70 MAJOR FAULT BRECCIA – intense from 49.70 – 55.0m

Light grey silicification common (bleaching)

Less intense Fault breccia – Developed in conglomeratic Argillite 55.0 – 56.5

56.5 – 64.85 ... SILTY TURBIDITE:

bedding mainly at 85° to CA, minor short sheared sections throughout

64.85 – 67.35 BLEACHED FAULT BRECCIA Green, Buff, Green Wacke/Minor Conglomeratic Argillite ROCKS; Bed/clv/cl 80° - 90°; 8% (1% - 30%) Qz PHR clv 20°; tr(0% - 0.5%) AS; 0.1% PR; tr(0% - tr) CP; 0.5% PY minor sulfides

67.35 – TURBIDITE: greenish, Lithicwacke to siltstone

Minor Fault 69.8 – 70.85 qtz bx

SAMPLE NUMBER	METERS to	METERS from	LENGTH METERS	Au g/tonne
MS-5	31.45	30.43	1.02	trc
MS-6	32.88	31.45	1.43	trc
MS-7	34.37	32.88	1.49	trc
MS-8	36.33	34.37	1.96	trc
MS-9	38.00	36.33	1.67	trc
MS-10	40.00	38.00	2.00	trc
MS-11	40.60	40.00	.60	trc
MS-12	43.04	40.60	2.44	trc
MS-13	44.60	43.04	1.56	trc
MS-14	46.35	44.60	1.75	trc
MS-15	48.25	46.35	1.90	trc
MS-16	49.70	48.25	1.45	trc
MS-17	52.47	49.70	2.77	0.010
MS-18	53.90	52.47	1.43	trc
MS-19	56.05	53.90	2.15	0.005
MS-20	58.50	56.05	2.45	trc
MS-21	59.20	58.50	0.70	0.005
MS-22	61.70	59.20	2.50	trc
MS-23	63.65	61.70	1.95	0.005
MS-24	64.85	63.65	1.20	0.005
MS-25	67.35	64.85	2.50	0.025
MS-26	70.60	67.65	2.95	trc

CAROLIN MINES LIMITED

DIAMOND DRILL RECORD

LOCATION:

PROJECT:

HOLE NUMBER: MS M-5

DRILLING INTERVAL	% CORE RECOVERED	BOX Number	SCALE 1:	ALTERATION	FRACTURING	MINERAL	GEOLOGY
	8		71 72 73 74				
	75.6		75 76				
	9		77 78				
79.30	79.50		79 80				

PURPOSE:

COMMENT:

INTERVAL from to

67.35 - TURBIDITE

sheared turbidite 77.3.

8x 77.8 qtz bx. plus minor pyrite

sheared and minor bleaching, alteration

SAMPLE NUMBER	METERS to	METERS from	LENGTH METERS	Au g/tonne
MS-27	71.20	70.60	0.60	0.010
MS-28	71.95	71.20	0.75	trc
MS-29	72.85	71.95	0.90	0.010
MS-30	76.30	72.85	3.45	trc
MS-31	77.30	76.30	1.00	trc
MS-32	78.20	77.30	0.90	0.005
MS-33	79.30	78.20	1.10	0.005

CAROLIN MINES LIMITED

DIAMOND DRILL RECORD

LOCATION: (LEVEL):		PROJECT:	HOLE NUMBER: M6 (M-6)
DIP: -35° DIRECTION - 225 TRUE			
LATITUDE: N	LENGTH: 67.40 meters ( )	ELEVATION: 1468.1	CLAIM NUMBER: CARO #3 FRC
DEPARTURE: E	CORE SIZE: BQ	DATE LOGGED:	LOCATION:
STARTED: NOVEMBER 1 1975	FINISHED: NOVEMBER 2 1975	LOGGED BY: DJG 1975, JTS 1989	SAMPLED BY:
O.B. THICKNESS: 6.7 meters	STARTED:	FINISHED:	CASING:
B.R. THICKNESS:	STARTED:	FINISHED:	TOTAL RECOVERY: %
CONTRACTOR:	CORE STORED:		

SURVEY: DEPTH	BEARING	ANGLE: Reading	Correc

DRILLING INTERVAL | % CORE RECOVERED | BOX Number | SCALE 1:___ | ALTERATION | FRACTURING | MINERAL | GEOLOGY

PURPOSE:
COMMENT:

INTERVAL from to

0 - 6.690m OVERBURDEN

7.3? start of box

6.70 - 8.62 CHLORITIC GREYWACKE
Quartz-Albite Rock, Interbedded Wacke & Argl; Bed @ 30°, CLV/CL/GR 60° INC 80°; 10% Qz, PAR CLV 80°; 2% CA; 0.1% AS; 10% PR; trc CP; 0.3% PY

8.62 - 10.22 ZONE MATERIAL - Dark stained,

10.22 - 12.75 Altered + slightly mineralized SILTSTONE -

12.75 - 15.00 Altered siltstone

15.00 - 15.40 Quartz veining + breccia (Fault Zone) Graphitic slickensides
Interbedded wacke & Argl; BED/CLV/GR 80° 10% Qz 3% 20% Qz
PHR CLV 80°; 2% CA; 0.2% PR; 0.7% PY; 0% AS, CP

15.40 - 20.50 CHLORITIC GREYWACKE

20.50 - 26.7 Quartz breccia (Fault) in altered siltstone - turbidite

Graphitic slickensides at 22.3 to 22.5

Graphitic

Brecciated Fault Breccia in Conglomeratic Argillite
28.70 Interbedded Chert bed/CLV/CL 75° 15% (20% - 50%) Qz PAR CLV = 0°; trc CA trc PR; 0.3% PY; 0% AS, CP

SAMPLE NUMBER	METERS to	METERS from	LENGTH METERS	Au g/tonne			
M6-1	8.62	6.70	1.92	0.030			
M6-2	10.22	8.62	1.60	0.11			
M6-3	11.12	10.22	0.90	0.040	6.00 m @ 0.364 oz/ton Au		
M6-4	12.70	11.12	1.58	0.075			
M6-5	14.72	12.70	2.02	0.010			
M6-6	15.20	14.72	0.48	0.070			
M6-7	16.48	15.20	1.28	trc			
M6-8	17.87	16.48	1.39	trc			
M6-9	19.60	17.87	1.73	trc			
M6-10	21.45	19.60	1.85	trc			
M6-11	23.25	21.45	1.80	0.005			
M6-12	25.45	23.25	2.20	trc			
M6-13	26.20	25.45	0.75	trc			
M6-14	27.03	26.26	0.83	trc			
M6-15	28.70	27.03	1.67	trc			
M6-16	29.90	28.70	1.20	trc			
M6-17	30.20	29.90	0.30	trc			

CAROLIN MINES LIMITED

DIAMOND DRILL RECORD

LOCATION:

PROJECT:

HOLE NUMBER: M-6

PURPOSE:

COMMENT:

DRILLING INTERVAL	% CORE RECOVERED	BOX Number	SCALE 1:	ALTERATION	FRACTURING	MINERAL	GEOLOGY	INTERVAL from to	GEOLOGY
		4	31					28.70 - 37.65	CONGLOMERATIC ARGILLITE:
		37.4	32						
			33						
			34						
			35						
			36						Sheared low - calcareous shearing
37.65			37					37.65 - 37.65m.	TURBIDITE: green lithic wacke + siltstone cycles
			38						Interbedded Arg L wacke; Bed/CLV 80°; 5% QZ PAR CLV; 0°; 1% CA; 0.1% PR; 1.0% PY; 0% AS, CP
		39.1	39						
			40						Bedding 70° to eA, section slightly sheared.
			41						
			42						
			43						
			44						
		45.5	45						
			46						
47.32			47					47.32m - 67.40	LESS SHEARED TURBIDITE.
			48						Green Arg L, Green Wacke; Bed/CLV 90°; 5% QZ PAR CLV>0; 0.1% PR; 0.4% (0% - 5.0%) PY; 0% AS, CP
			49						
			50						richer green colour, more silty sections
			51						
		53.0	52						Short breccia zone 53.5m., 20 cm long; rubbly core.
			53						
			54						mostly Massive silty turbidite
			55						
		58.5	56						
			57						
			58						
			59						
			60						
			61						Quartz breccia - 61.5 - 61.70.
			62						
			63						
			64						63.6 - graphitic slickensides - then conglomeratic argillite.
		65.1	65						Finely conglomeratic argillite.
			66						
67.40		67.40	67						
			68						
			69						
			70						

SAMPLE NUMBER	METERS to	METERS from	LENGTH METERS	Au g/tonne
M6-18	31.70	30.20	1.50	trc
M6-19	32.40	31.70	0.70	0.010
M6-20	33.60	32.40	1.20	trc
M6-21	34.10	33.60	0.50	0.035
M6-22	34.99	34.10	.89	trc
M6-23	37.65	34.99	2.66	
M6-24	37.96	37.65	0.31	trc
M6-25	40.00	37.96	2.04	trc
M6-26	40.45	40.00	0.45	trc
M6-27	43.26	40.45	2.81	trc
M6-28	43.68	43.26	0.42	trc
M6-29	45.00	43.68	1.32	0.015
M6-30	45.90	45.00	0.90	0.005
M6-31	47.32	45.40	1.92	trc
M6-32	48.05	47.32	0.73	trc
M6-33	48.78	48.05	0.73	trc
M6-34	49.50	48.30	0.12	0.010
M6-35	52.90	49.50	2.90	trc
M6-36	54.50	52.40	2.10	trc
M6-37	57.65	54.50	3.15	trc
M6-38	58.40	57.65	0.75	trc
M6-39	60.50	58.40	2.10	0.010
M6-40	61.20	60.50	0.70	0.065
M6-41	63.25	61.20	2.05	trc
M6-42	64.00	63.25	0.75	0.005
M6-43	67.40	64.00	3.40	trc

CAROLIN MINES LIMITED

DIAMOND DRILL RECORD

LOCATION (LEVEL):		PROJECT:	HOLE NUMBER: M7 M-7
DIP: -4 DIRECTION 225° TRUE			
LATITUDE: 4336.7 N	LENGTH: 84.4 m	ELEVATION: 1460.2	CLAIM NUMBER:
DEPARTURE: 2300.2 E	CORE SIZE:	DATE LOGGED:	LOCATION:
STARTED: November 13 1985	FINISHED: November 14 1975	LOGGED BY:	SAMPLED BY:
O.B. THICKNESS:	STARTED:	FINISHED:	CASING:
B.R. THICKNESS:	STARTED:	FINISHED:	TOTAL RECOVERY: %
CONTRACTOR:	CORE STORED:		

SURVEY: DEPTH	BEARING	ANGLE: Reading	Correc

DRILLING INTERVAL | % CORE RECOVERED | BOX Number | SCALE 1:____ | ALTERATION | FRACTURING | MINERAL | GEOLOGY

PURPOSE:
COMMENT:

INTERVAL from to

0 - 25.35 m OVERBURDEN

(0 - 25.35m) ... OVD

25.35 - 26.71 QZ, 3% ALT + SERPENTINITE : dark green

(26.71 - 40.90m) Quartz Breccia: orange weathering Quartz-Albite-Carbonate-Chlorite Greywacke, weak CL SCHIS; Bed VAR I.C 60°, ELW, CL/GR/SE 5°-60°; 13% (3%-25%) QZ PAR CLV @ 0°, 1% CHL 0.2% AS; 0.02% PR; trc CP; 0.1% PY

SAMPLE NUMBER	METERS to	METERS from	LENGTH METERS	Au g/tonne
M7-1	26.71	25.35	1.36	0.005
M7-2	27.54	26.71	0.83	0.055
M7-3	28.76	27.54	1.22	0.050
M7-4	29.71	28.76	0.95	0.025
M7-5	31.45	29.71	1.74	trc

CAROLIN MINES LIMITED

DIAMOND DRILL RECORD

LOCATION :

PROJECT:

HOLE NUMBER : M7 M-7

PURPOSE :
COMMENT :

% CORE RECOVERED	BOX Number	SCALE 1 : ___	ALTERATION	FRACTURING	MINERAL	GEOLOGY	INTERVAL from	INTERVAL to	DESCRIPTION
	1 31.8	31						26.71	QUARTZ BRECCIA IN CHLORITIC GREYWACKE :
		32							
		33							
		34							
		35							
		36							
		37							
	38.7	38							
		39							Lots of slickensides ; Quartz breccia to 42.54.
		40							(40.90 - 42.54m) Brecciated Chert, Weak CL SCHS; CLV/CL 60°; 20% QZ PAR CLV ; 0% CA; 0.1% AS; trc PR; 0.4% PY; 0% CP
40.90		41							
		42							
42.54		43							(42.54 to 59.40m) Interbedded Argl Wacke ; Bed/CLV/CL/ GR INC 80°; 12% QZ PAR CLV+ ; trc CA; 0.2% PR; 0.7% PY; AS; CP
		44							
	45.6	45							altered siltstone
		46							
		47							
		48							
		49							
		50							Quartz breccia 49.0 - 50.5, brown-orange weathering
	51.9	51							
		52							
		53							
		54							
		55							
		56							
		57							
	58.7	58							Graphitic slickensides 57.2 - 58.5
		59						58.5	TURBIDITE :
59.40		60							(59.40 - 84.40m) Green Argl, Minor Quartz - Albite Rock; /CLV 75° INC 85°; 3% QZ ; PAR CLV 0.0°; trc CA; trc 60% - INC) AS; trc PR; 0.2% PY; 0% CP
		61							
		62							
		63							
		64							
	65.2	65							
		66							
		67							
		68							
		69							
	72.0	70							

SAMPLE NUMBER	METERS to	METERS from	LENGTH METERS	Au g/tonne
M7-5	31.45	29.71	1.74	trc
M7-6	32.45	31.45	1.00	0.020
M7-7	33.00	32.45	0.55	0.075
M7-8	33.85	33.00	0.85	trc
M7-9	34.86	33.85	1.01	0.075
M7-10	36.90	34.86	2.04	0.050
M7-11	38.72	36.90	1.82	0.035
M7-12	40.00	38.72	1.28	0.13
M7-13	40.90	40.00	0.90	0.020
M7-14	41.40	40.90	0.50	trc
M7-15	42.54	41.40	1.14	0.010
M7-16	44.20	42.54	1.66	0.005
M7-17	45.90	44.20	1.20	0.005
M7-18	46.25	45.40	0.85	0.005
M7-19	47.17	46.25	0.92	0.005
M7-20	49.10	47.17	1.93	trc
M7-21	50.85	49.10	1.75	0.030
M7-22	51.90	50.85	1.05	0.010
M7-23	53.90	51.90	2.00	0.010
M7-24	54.71	53.90	0.81	trc
M7-25	57.90	54.71	3.19	0.005
M7-26	59.40	57.90	1.50	0.005
M7-27	60.75	59.40	1.35	0.040
M7-28	62.77	60.75	2.02	trc
M7-29	63.47	62.77	0.70	trc
M7-30	65.95	63.47	2.48	trc
M7-31	68.50	65.95	2.55	trc.
M7-32	70.70	68.50	2.20	trc

13.29 m @ 0.045 oz/ton Au

CAROLIN MINES LIMITED

DIAMOND DRILL RECORD

LOCATION:

PROJECT:

HOLE NUMBER: M7

% CORE RECOVERED	BOX Number	SCALE 1:	ALTERATION	FRACTURING	MINERAL	GEOLOGY
	7	71				
	72.0	72				
		73				
		74				
		75				
		76				
		77				
	784	78				
		79				
		80				
		81				
		82				
		83				
84.40	8446	84				
		85				

PURPOSE:
COMMENT:

INTERVAL from to

58.5 ' TURBIDITE -

Last chunk in box mineralized with pg + altered.

SAMPLE NUMBER	METERS to	METERS from	LENGTH METERS	Au g/tonne
M7-33	70.70	68.50	2.20	trc
M7-33	73.95	70.70	3.25	trc
M7-34	76.50	73.95	2.55	trc
M7-35	78.50	76.50	2.00	trc
M7-36	81.50	78.50	3.00	trc.
M7-37	83.11	81.50	1.61	trc
M7-38	84.40	83.11	1.29	0.030

LEGEND

< 0.09 ppm Au

0.09 - 0.54 ppm Au

0.55 - 1.44 ppm Au

> 1.45 ppm Au

Adit

Trench

Old Claim Marker

Old Camp

L 100 N

BASELINE 2

L 96 N

L 92 N

L 90 N

L 89 N

L 88 N

L 87 N

L 86 N

L 84 N

L 83 N

L 82 N

L 80 N

L 80A N

L 79 N

L 78 N

L 77 N

L 76 N

L 75 N

L 74 N

L 73 N

L 72 N

L 71 N

L 70 N

L 69 N

L 68 N

L 67 N

L 66 N

L 65 N

L 64 N

L 63 N

L 62 N

L 61 N

L 60 N

L 59 N

L 56 N

BASELINE 1

L 89 N

L 88 N

L 86 N

L 84 N

L 82 N

L 80 N

L 79 N

L 78

L 76 N

L 68 N

L 68B N

SWAMP

500 feet

M-13

M-12

+4999'

+4975'

600 feet from M-12

Type ?

Check Trench

Check Trench

McMaster Pond

LEGEND

◎ DIAMOND DRILL HOLE (position not surveyed)

CUT LINE

STATION

TRAIL

GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,877

McMASTER POND AREA

Ladner Creek Project
British Columbia, Canada

New Westminster M.D.
N.T.S. 92H/11W

0 50 100 200 400ft
(1" = 100') FEET (1:1200)
0 10 50 100m
METRES

Drawn: August, 1975. Revised February, 1976. Contours from air photos, flown September, 1974. Interval 100 feet. B.A.C.

FIGURE 16

SOIL GEOCHEM. ANOMALIES: Au - parts per million.

VIEW LOOKING TOWARDS AZIMUTH 315°

ELEVATION (m)

1510
1500
1490
1480
1470
1460
1450
1440
1430
1420

ZONE "E" projected from 20m. south
0.138 over 6.10m

DDH-M-12 (-40°)

ALT'D. SS.
ZM.
ARGILLACEOUS SS.
CHLORITIC GW.
SHEARED SILTY ARGL.
CONGL. ARGILLITE
ARGILLACEOUS SILTSTONE
CONGL. ARGILLITE
ALTERED SILTSTONE (MINERALIZED)
ALTERED SILTSTONE

END of HOLE 56.99m

1+50W 1+40W 1+30W 1+20W 1+10W 1+00W 0+90W 0+80W 0+70W 0+60W 0+50W 0+40W 0+30W 0+20W 0+10W 0+00 0+10E 0+20E 0+30E 0+40E 0+50E 0+60E

STATIONS (10m intervals)

GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,877

0 10 20m

ABBREVIATIONS

CHL.	CHLORITE
SS.	SILTSTONE
ALT'D	ALTERED
CONGL.	CONGLOMERATIC
ZM.	ZONE MATERIAL
ARGL.	ARGILLITE
GW.	GREYWACKE
LW.	LITHIC WACKE
BLDR.	BOULDER
QTZ.	QUARTZ
MIN'RL'D	MINERALIZED

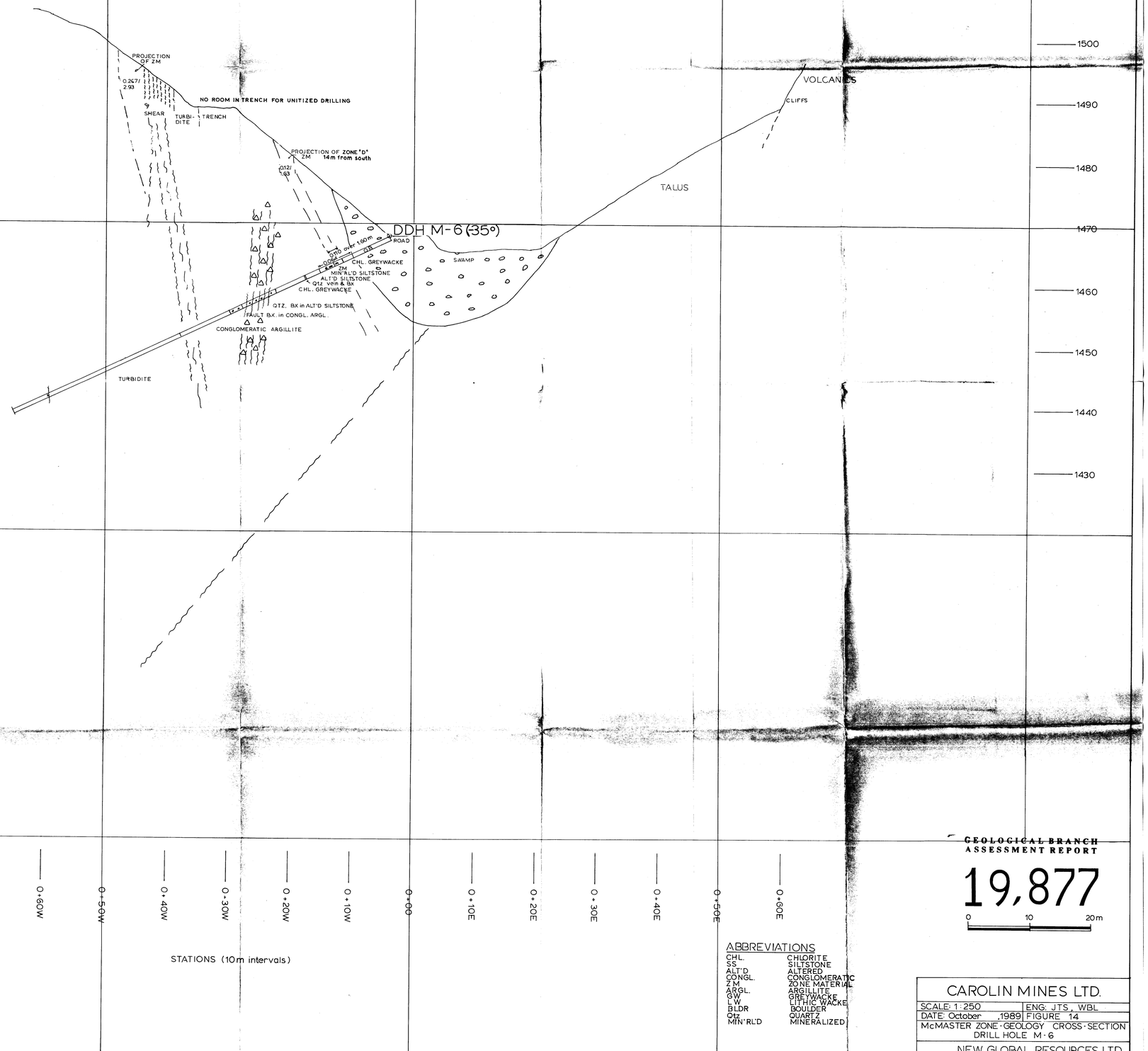
CAROLIN MINES LTD.

SCALE: 1:250	ENG. JTS, WBL
DATE: November, 1989	FIGURE 15

McMASTER ZONE GEOLOGY CROSS-SECTION
DRILL HOLE M-12

NEW GLOBAL RESOURCES LTD.

VIEW LOOKING TOWARDS AZIMUTH 315°



ABBREVIATIONS

CHL.	CHLORITE
SS.	SILTSTONE
ALT'D.	ALTERED
CONGL.	CONGLOMERATIC
ZM.	ZONE MATERIAL
ARGL.	ARGILLITE
GW	GREYWACKE
LW	LITHIC WACKE
BLDR	BOULDER
Qtz.	QUARTZ
MIN'RL'D	MINERALIZED

GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,877

0 10 20m

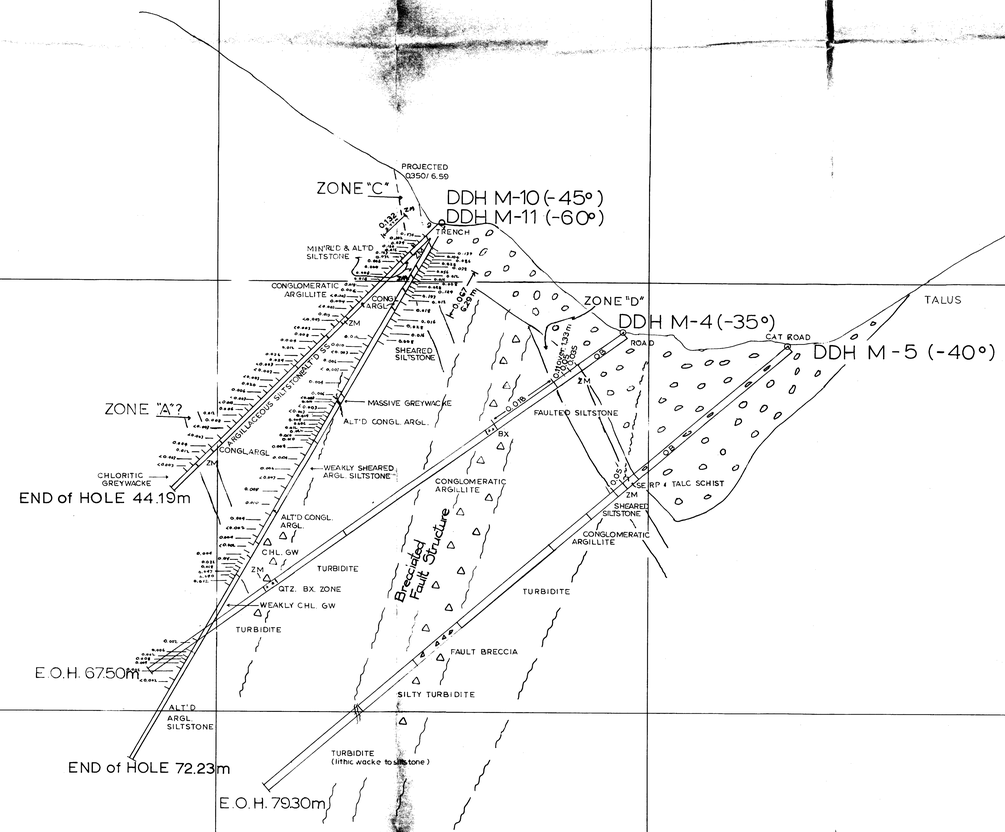
CAROLIN MINES LTD.

SCALE: 1:250	ENG. JTS., WBL
DATE: October ,1989	FIGURE 14

McMASTER ZONE-GEOLOGY CROSS-SECTION
DRILL HOLE M-6

NEW GLOBAL RESOURCES LTD.

VIEW LOOKING TOWARDS AZIMUTH 315°



ELEVATION (m)

1510
1500
1490
1480
1470
1460
1450
1440
1430

1+50W
1+40W
1+30W
1+20W
1+10W
1+00W
0+90W
0+80W
0+70W
0+60W
0+50W
0+40W
0+30W
0+20W
0+10W
0+00
0+10E
0+20E
0+30E
0+40E
0+50E
0+60E

STATIONS (10m intervals)

ABBREVIATIONS

CHL.	CHLORITE
SS	SILTSTONE
ALT'D	ALTERED
CONGL.	CONGLOMERATIC
ZM	ZONE MATERIAL
ARGL.	ARGILLITE
GW	GREYWACKE
L.W.	LITHIC WACKE
BLDR	BOULDER
Qtz	QUARTZ
MIN'RL'D	MINERALIZED

GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,877

0 10 20m

CAROLIN MINES LTD.

SCALE: 1: 250	ENG. JTS., WBL
DATE: October, 1989	FIGURE 13

McMASTER ZONE - GEOLOGY CROSS-SECTION
DRILL HOLES M-4 & M-5, M-10 & M-11

NEW GLOBAL RESOURCES LTD.

ABBREVIATIONS

CHL.	CHLORITE
SS	SILTSTONE
ALT'D	ALTERED
CONGL.	CONGLOMERATIC
Z.M.	ZONE MATERIAL
ARGL.	ARGILLITE
GW	GREYWACKE
L.W.	LITHIC WACKE
BLDR	BOULDER
Qtz	QUARTZ
MIN'RL'D	MINERALIZED

GEOLOGICAL BRANCH ASSESSMENT REPORT

19,877

0 10 20m

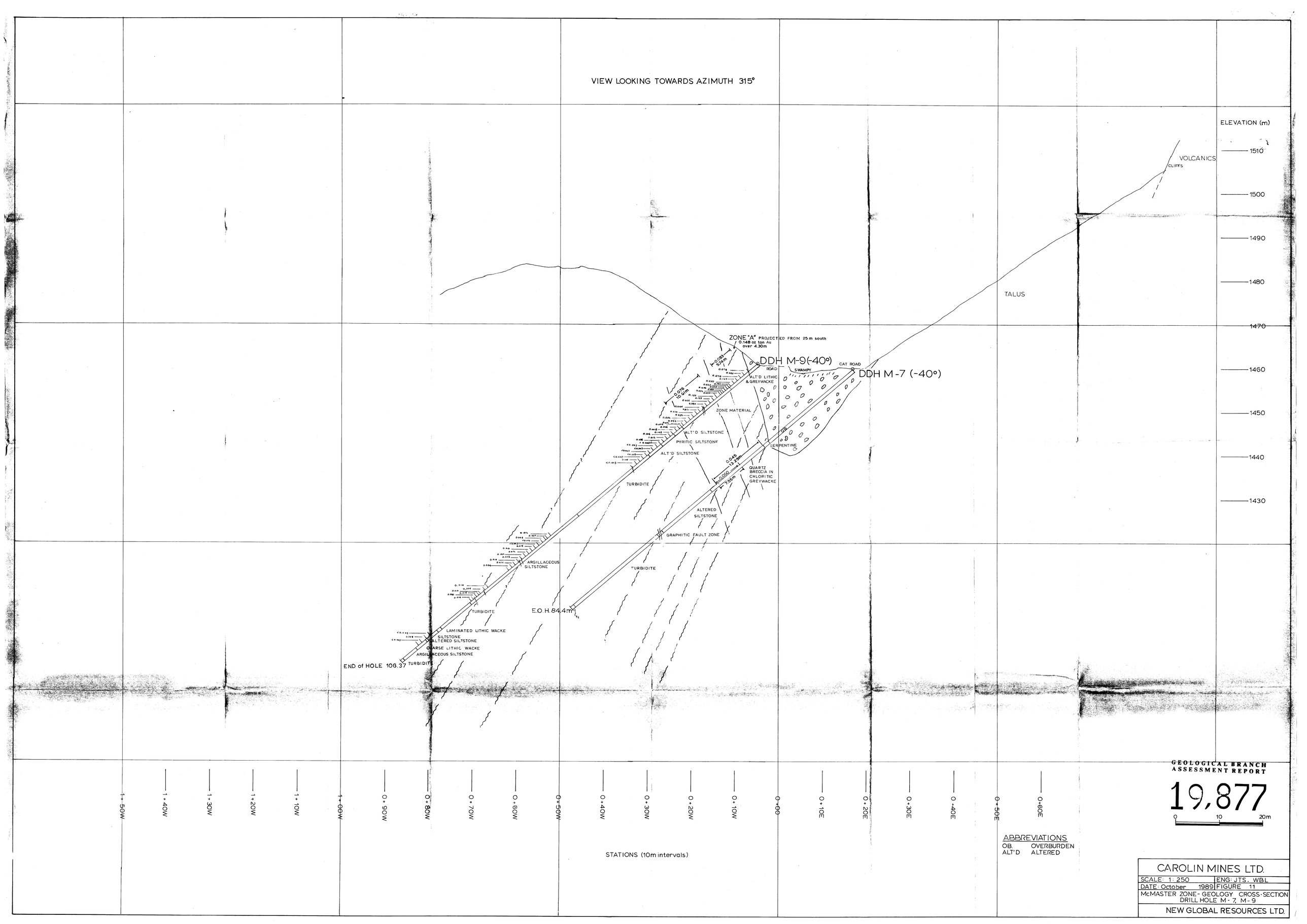
CAROLIN MINES LTD.

SCALE: 1:250	ENG: JTS, WBL
DATE: October, 1989	FIGURE 12

McMASTER ZONE - GEOLOGY CROSS-SECTION DRILL HOLES M-1, M-2 & M-3, M-8

NEW GLOBAL RESOURCES LTD.

VIEW LOOKING TOWARDS AZIMUTH 315°



ABBREVIATIONS

OB. OVERBURDEN
ALT'D ALTERED

GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,877

0 10 20m

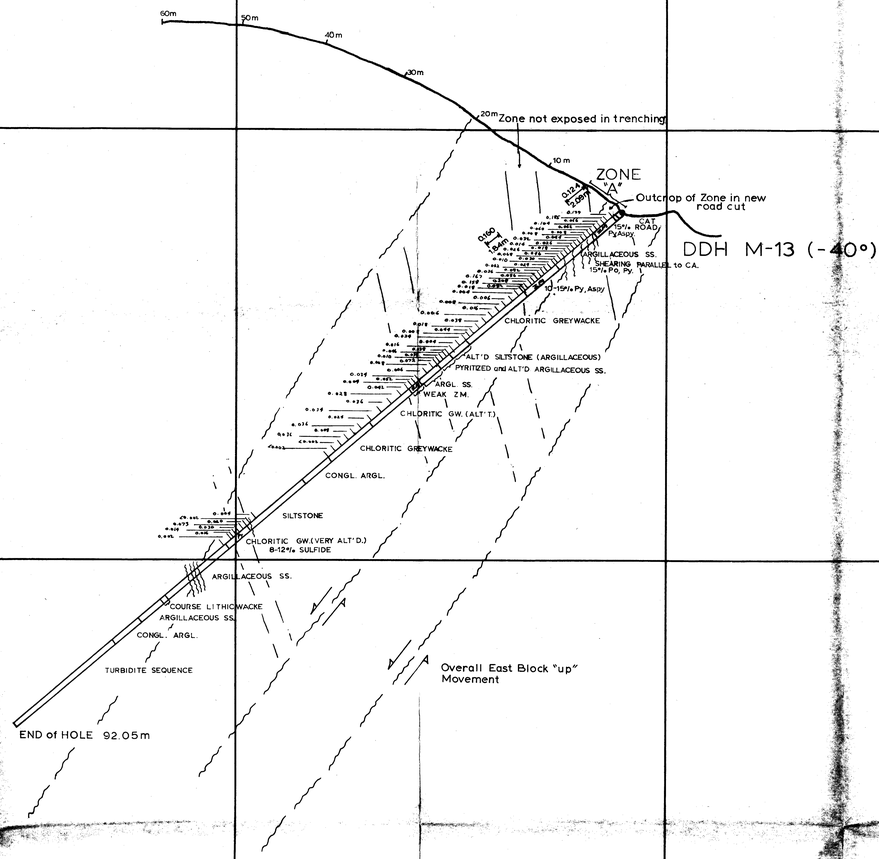
CAROLIN MINES LTD.

SCALE: 1:250	ENG: JTS., WBL
DATE: October 1989	FIGURE 11

McMASTER ZONE - GEOLOGY CROSS-SECTION
DRILL HOLE M-7, M-9

NEW GLOBAL RESOURCES LTD.

VIEW LOOKING TOWARDS AZIMUTH 315°



ELEVATION (m)

1510
1500
1490
1480
1470
1460
1450
1440
1430
1420

1+50W 1+40W 1+30W 1+20W 1+10W 1+00W 0+90W 0+80W 0+70W 0+60W 0+50W 0+40W 0+30W 0+20W 0+10W 0+00 0+10E 0+20E 0+30E 0+40E 0+50E 0+60E

STATIONS (10m intervals)

GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,877

0 10 20m

ABBREVIATIONS

CHL.	CHLORITE
SS.	SILTSTONE
ALT'D.	ALTERED
CONGL.	CONGLOMERATIC
ZM.	ZONE MATERIAL
ARGL.	ARGILLITE
GW.	GREYWACKE
L.W.	LITHIC WACKE
BLDR.	BOULDER
QTZ.	QUARTZ
MIN' RL'D.	MINERALIZED

CAROLIN MINES LTD.

SCALE: 1:250 ENG. JTS, WBL

DATE: November, 1989 FIGURE 10

McMASTER ZONE-GEOLOGY CROSS-SECTION
DRILLHOLE M-13

NEW GLOBAL RESOURCES LTD.

N

BASELINE 0+00

L 20+00N

89-M-13 (-40°)

DDH M-7 (-40°)

89-M-9 (-40°)

ZONE A

ZONE B

89-M-8 (-55°)

DDH M-3 (-40°)

E.O.H. M-13

E.O.H. M-7

DDH M-5 (-40°)

DDH M-2 (-35°)

DDH M-1 (-37°)

89-M-10 (-45°)

89-M-11 (-60°)

E.O.H. M-8

DDH M-4 (-35°)

E.O.H. M-9

E.O.H. M-2 & M-3

E.O.H. M-10

E.O.H. M-5

E.O.H. M-4

E.O.H. M-11

DDH M-6 (-35°)

89-M-12 (-40°)

E.O.H. M-6

ZONE D

E.O.H. M-12

ZONE C

ZONE E

VOLCANICS

TALUS

L 19+40N

L 19+10N

L 18+80N

L 18+50N

L 18+20N

L 17+90N

L 17+60N

L 17+30N

L 17+00N

Serpentite filled fault zone with major movement (horizontal) along ± 800m.

McMaster Pond Fault - dipping to west

GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,877

0 10 20 30 40m

CAROLIN MINES LTD.

SCALE : 1 : 500	ENG. WBL, JTS
DATE : October 1989	FIGURE 9

McMASTER ZONE - GEOLOGY PLAN

NEW GLOBAL RESOURCES LTD.

GENERAL LEGEND
OPEN AREAS, ALPINE MEADOWS, TALUS SLIDES, SNOW SLIDE PATHS
PORTAL
UNDERGROUND WORKINGS
TOPOGRAPHIC CONTOUR (50meter interval)
ROADS
PROPOSED ROAD
STREAM COURSE
TUNBRIDGE & TUNBRIDGE SURVEY (elevation in meters)
IDAHO MINE GRID
GEOCHEMICAL GRID LINES WITH SAMPLE SITES
CLAIM POSTS
2 post claims
legal corner post
post located in field
CLAIM OUTLINE
GEOLOGY
6 LATER DYKES
6a FELDSPAR PORPHYRY
6b QUARTZ-EYE PORPHYRY
5 ALTERATION
5a ZONE MATERIAL : SULPHIDE RICH, ALBITE, QUARTZ, CALCITE, CHLORITE
5b QUARTZ BRECCIA, SILICIFICATION
5c CHLORITE SCHIST
5d BIOTITE SCHIST
4 SERPENINITE SEQUENCE (MELANGE)
4a SERPENINITE
4b GABBRO
4c DIORITE
4d MYLONITIC ANDESITE
4e WHITE ROCK
4f TALC-CARBONATE-MARIPOSITE
3 LADNER GROUP
3a MASSIVE ARGILLITE
3b SILTY ARGILLITE
3c SLATE
3d CALCAREOUS ARGILLITE
3e CARBONACEOUS ARGILLITE
3f KINK BANDED SLATE
3g GREEN ARGILLITE
3h FELDSPATHIC WACKE
3i LITHIC WACKE (ARGILLACEOUS)
3j GREEN WACKE (BLACK CLASTS)
3k GREEN WACKE (WHITE CLASTS)
3l CHERT
3m MUDBALL SLATE
3n MUDBALL CONGLOMERATE
3o CHERT COBBLE CONGLOMERATE
3p SILTSTONE
3q ANDESITE ("GREENSTONE") DYKES(?)
2 LADNER GROUP - VOLCANIC ASSEMBLAGE
2a DIABASE
2b [illegible]
2c [illegible]
MYLONITIC ANDESITE
2d BEDDED LAPILLI TUFF (ANDESITIC)
2e LITHIC TUFF
2f DIORITE (ALTERED ANDESITE)
2g PILLOW LAVA
1 HOZAMEEN GROUP
1a CHERT, RIBBON CHERT
1b ARGILLACEOUS SEDIMENTS
1c BASIC VOLCANICS, BASALT
1d SERPENINITE LENSES
GEOLOGICAL CONTACT, DEFINITE, APPROXIMATE, ASSUMED
INFERRED FAULT
OBSERVED FAULT
OUTCROP, DISCONTINUOUS, LARGE, ISOLATED.
Idaho Mine North
True North
N
LITTLE SPIDER PEAK
SPIDER PEAK
McMASTER POND
McMASTER ZONE
IDAHO DECLINE
800 HAULAGE LEVEL
SAMPLE PLANT SITE
CEDAR LANDING
LADNER CREEK
MILL
HOZAMEEN FAULT
PROPOSED EXCAVATOR ROAD. 1990
HOME-X ADIT
HOMEGOLD
SIWASH CREEK
LEGAL CORNER POST
GEOLOGICAL BRANCH ASSESSMENT REPORT
19,877
SCALE 1:5,000
CAROLIN MINES LIMITED
LADNER CREEK NORTH PROJECT
GEOLOGY
OF THE CENTRAL COQUIHALLA GOLD BELT
COMPOSITE MAP
SCALE: 1:5000
NTS 92H 11/W
DRAWING No. FIGURE 7
DATE/Revisions FEB 2/82
DRAWN BY R.K.B., J.T.S., D.H.
WORK BY J.T.S.
FIGURE 7