MineQuest Report No. 249
Ref.: RM1019

ZIG PROPERTY

REVERSE CIRCULATION PERCUSSION DRILLING

FEBRUARY, 1991

South Central British Columbia
Nicola Mining Division

NTS 92H/15

Latitude 49° 59' N

Longitude 120°35' W

UTM 674000 m. E. 5522000 m. N.

for
Rayrock Yellowknife Resources Inc.

by
A.W. Gourlay

of
MineQuest Exploration Associates Ltd.

Claim Name	Record Number	Units	Record Date
ZIG 1	2244	20	Aug 12, 1992
ZIG 2	2242	20	Aug 13, 1992
ZIG 3	2243	20	Aug 12, 1992
ZIG 4	2255	20	Sept. 8, 1992
ZIG 5	2256	12	Sept. 23, 1992
ZIG 6	2389	10	May 24, 1991
ZIG Fr.	2458	1	Sept. 22. 1991
ZUL 1	2249	12	Aug. 18, 1992
ZUL 2	2250	12	Aug. 17, 1992
ZUL 3	2378	4	Feb. 15, 1993

Vancouver, B.C. March, 1991

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF APPENDICES

1.0 INTRODUCTION

This report presents the results of a reverse circulation percussion drill program carried out on the Zig Property during the winter of 1991.

1.1 Location, Access, and Topography

The Zig Property is located 150 kilometres northeast of Vancouver and 34 kilometres south of Merritt in south-central British Columbia (Figure 1). The claims are situated within National Topographic System area 92H/15E and are centred at approximately 49°50'N latitude and 120°35'W longitude.

Access to the claims is by road from Merritt. The claims are crossed by a network of forestry and secondary gravel roads, and numerous abandoned logging trails. The surface rights covering approximately 40% of claims are held by private owners.

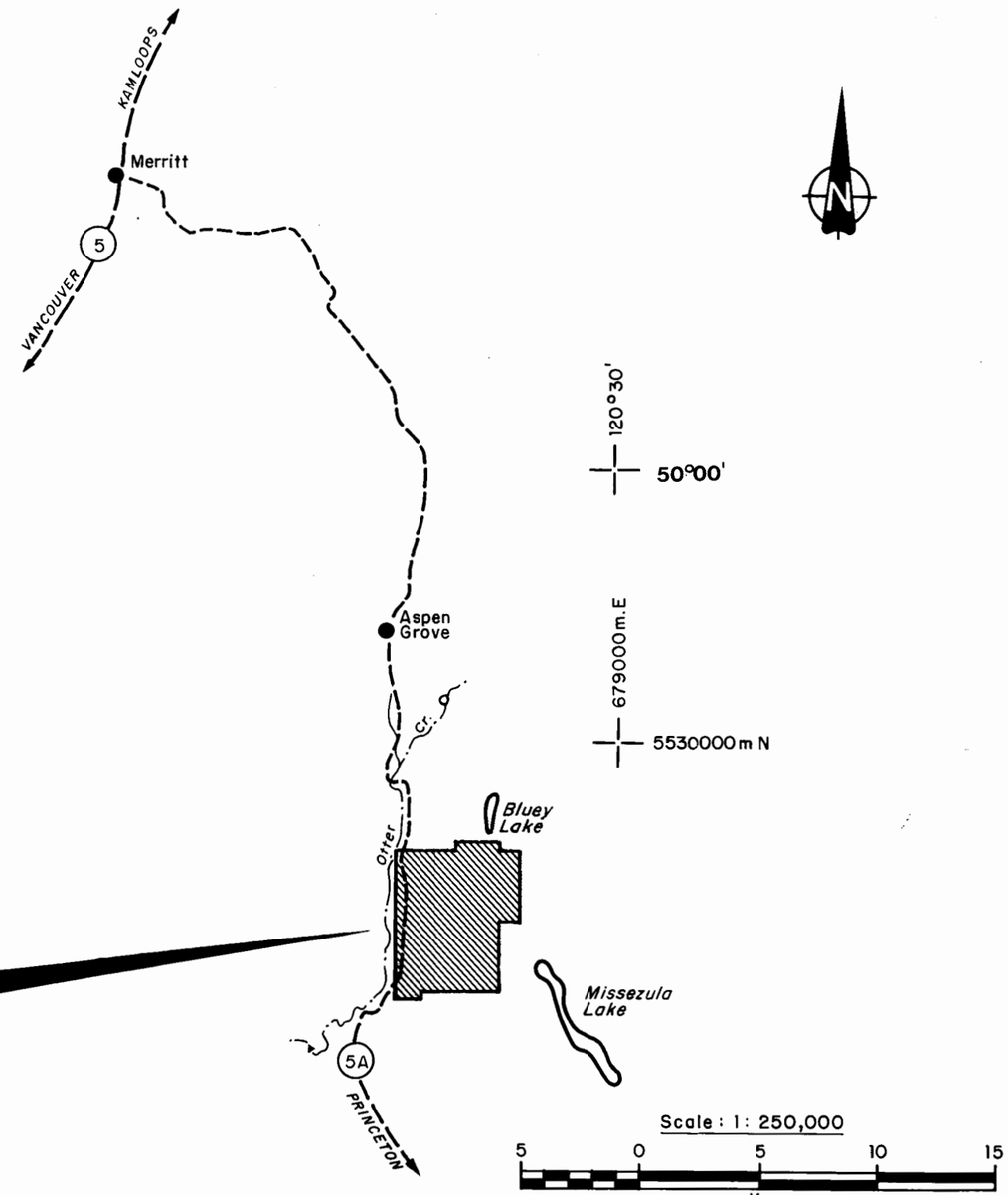
Relief within the property is about 365 metres from Otter Creek (975 m) to the high ground (1340m) along the southern boundary of the claims. The property covers grassland and open deciduous forest, with local thickets of dense scrub. The area is being selectively logged, and is used as rangeland.

There are several ponds and lakes that may be used as a source of water for drilling.

1.2 Property Definition and History

Prompted by renewed interest in the potential for copper-gold porphyry systems and the result of the Mt. Milligan discovery, George Vernon identified the opportunities presented by open ground within the Aspen Grove Camp. The Zig Property and adjoining ground, was staked by MineQuest Exploration Associates Ltd. in conjunction with Mr. Vernon during 1989 and 1990.

BRITISH COLUMBIA
Scale 1:7,500,000



RAYROCK YELLOWKNIFE RESOURCES INC.

ZIG PROPERTY

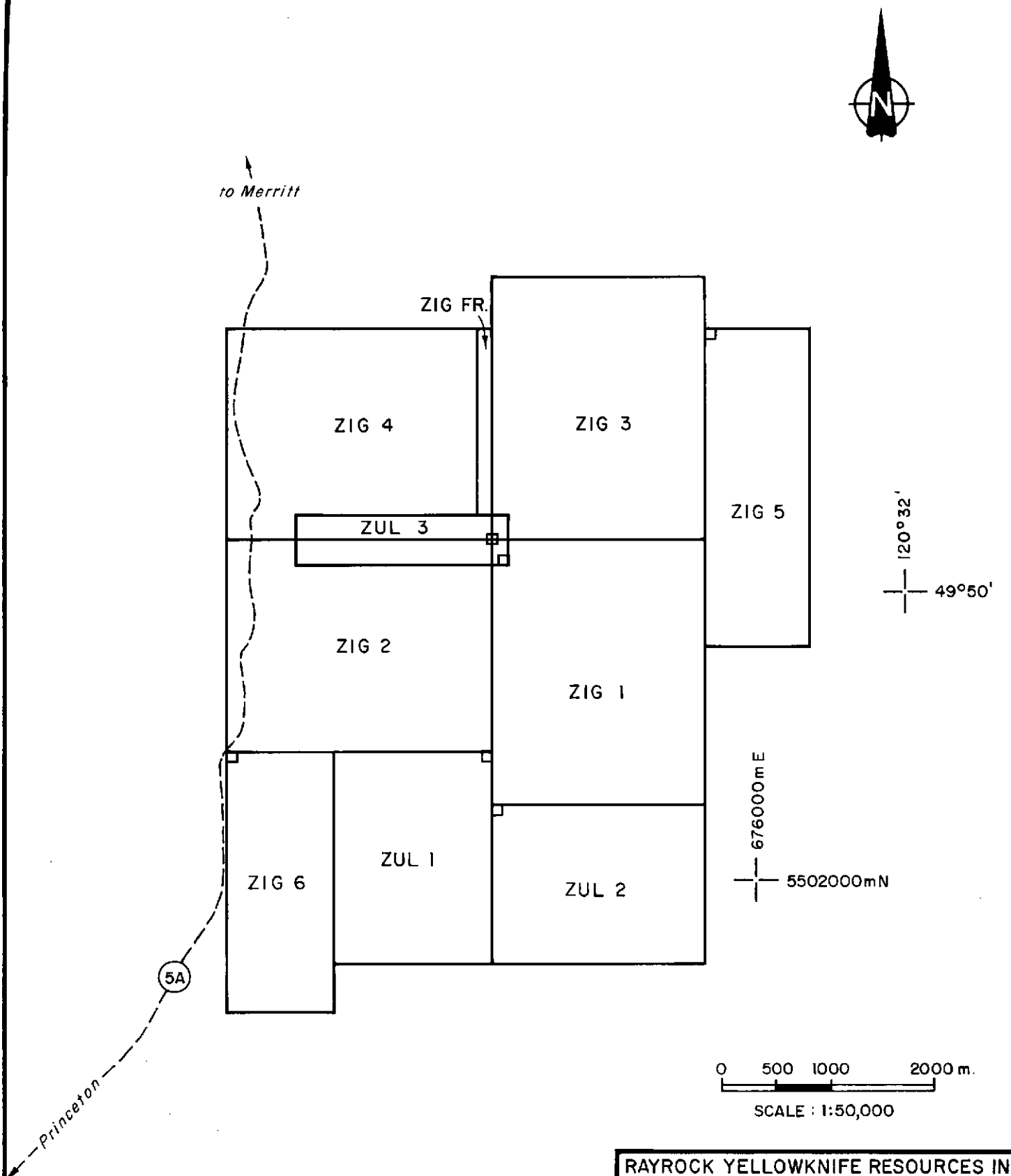
LOCATION MAP

PLAN NO.	DRAWN	DATE	Fig.
	C.D.	Aug.'90	1
Revised		N.T.S. 92 H/15	

MINEQUEST EXPLORATION ASSOCIATES LTD.

Although the Aspen Grove camp has been explored since the turn of the century, the only reported work on the Zig Property dates from the early 1970's (Minfile References, Appendix I). During 1973, Noranda Exploration Co. Ltd. carried out an airborne magnetometry survey, followed by geological mapping and a ground VLF-EM survey. Cominco Ltd. staked claims in 1978 and performed a limited amount of IP and magnetometry surveys in conjunction with geological mapping, trenching, and a small soil sampling program. During 1979 Cominco extended the soil coverage and the magnetometry survey, and carried out a six hole percussion drill program. Of six holes collared, only two penetrated bedrock, both intersecting altered diorite. One hole returned 105 feet grading 0.14% Cu. In 1985 Vanco Explorations Ltd. carried out soil sampling and some reconnaissance geological mapping on a number of grids located on ground now covered by the ZIG Claims. Geochemical gold values associated with copper were reported in rocks. Work in 1987 by Laramide Resources Ltd. consisted of soil and rock geochemistry on the claims and to the south. The copper-gold association in rocks was confirmed.

During 1990 MineQuest Exploration Associates Ltd. carried out a program of line cutting and 56.15 kilometres of Induced Polarization survey. In addition, a limited amount of prospecting and rock chip sampling was completed.



RAYROCK YELLOWKNIFE RESOURCES INC.

ZIG PROPERTY

CLAIM MAP

Originator A.W.G.	Drawn C.D.	Plan No.	FIG.
Revised Mar'91	Date Aug.'90	NTS 92H/15	2

MINEQUEST EXPLORATION ASSOCIATES LTD.

1.3 Claim Status

The claims listed below are in good standing as of March 31, 1991, and are held by MineQuest Exploration Associates Ltd. under the terms of an option agreement between Rayrock Yellowknife Resources Inc., MineQuest, and George W. Vernon.

Claim Name	Record Number	Units	Due Date Before Submission of this Report
ZIG 1	2244	20	Aug 12, 1992
ZIG 2	2242	20	Aug 13, 1992
ZIG 3	2243	20	Aug 12, 1992
ZIG 4	2255	20	Sept. 8, 1992
ZIG 5	2256	12	Sept. 23, 1992
ZIG 6	2389	10	May 24, 1991
ZIG Fr.	2458	1	Sept. 22. 1991
ZUL 1	2249	12	Aug. 18, 1992
ZUL 2	2250	12	Aug. 17, 1992
ZUL 3	2378	4	Feb. 15, 1993

1.4 Summary of Work - Current Program

Work carried out in this exploration program, which took place from January 15 to February 18, 1991, consisted of access road and drill site preparation, and 651 m (2135 ft) of reverse circulation percussion drilling in nine holes. A total of 155 samples of drill cuttings were collected.

Drill sites and access roads were prepared by M. Steiner and A. Wardell, under the supervision of G. Vernon. A.W. Gourlay logged the chips and G. Vernon sampled the drill cuttings. The program was under the direction of A.W. Gourlay.

2.0 GEOLOGY

2.1 Regional Geology

Figure 3 illustrates the local setting of the Zig Property, as mapped by Preto (1979). The claims fall within the Nicola Group of upper Triassic volcanic, sedimentary, and intrusive rocks. The Nicola Group and equivalents extend from the British Columbia - Washington border north, through the Quesnel Belt, to the British Columbia - Yukon border.

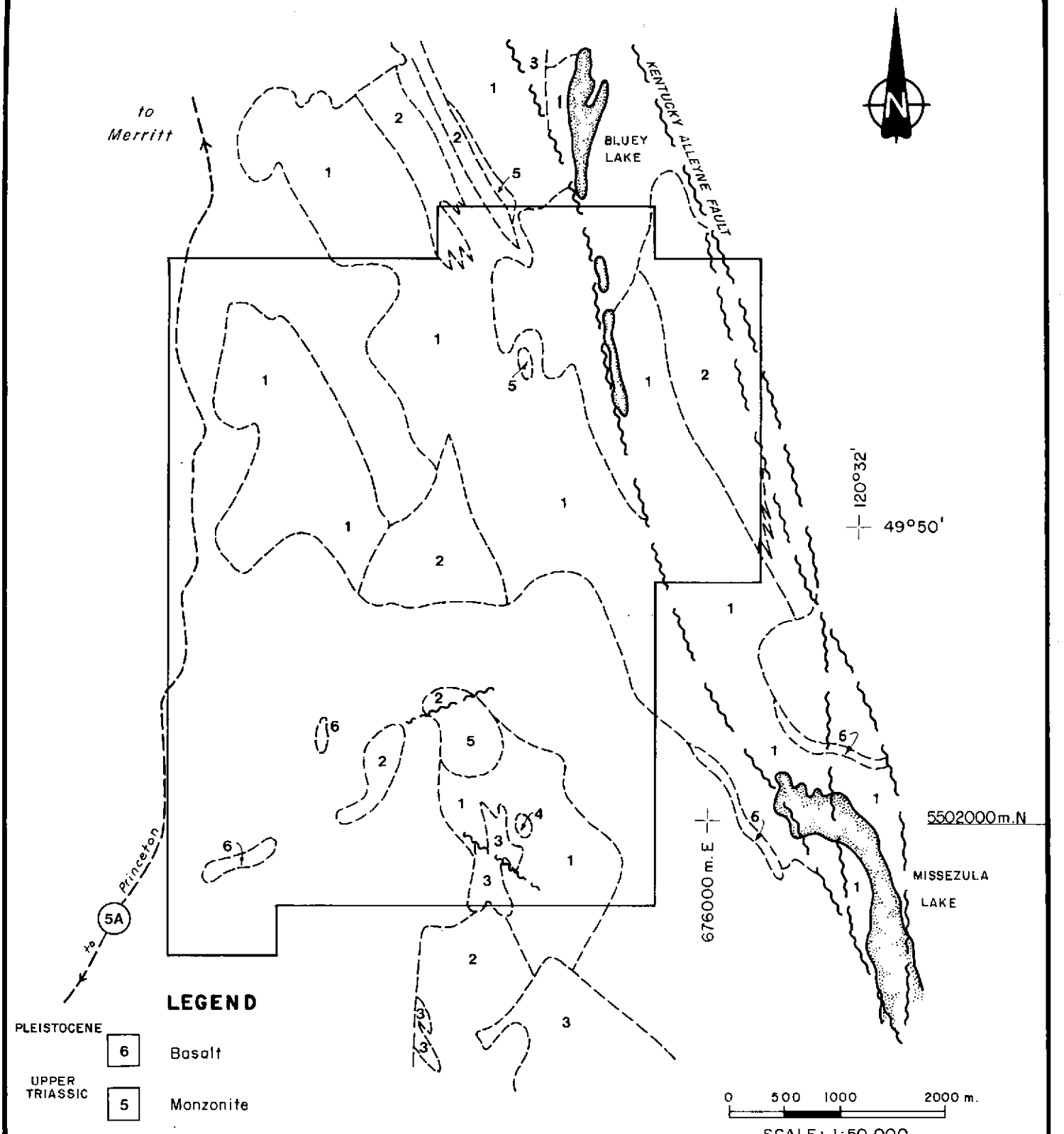
The Nicola Group consists of calc-alkaline to alkaline volcanic rocks and related sediments, and coeval alkaline intrusives. In the Aspen Grove area the distribution of the Nicola Group rocks is controlled by north-northwest trending faults; the Allison Fault to the west and the Kentucky - Alleyne Fault on the east. Preto (1979) defined a Western Belt composed of calc-alkaline flows and tuffs, a Central belt dominated by alkaline to calc-alkaline volcanics and intrusives with minor sedimentary rocks, and an Eastern Belt consisting of sediments, tuffs, and alkaline flows.

The majority of mineral occurrences are found in the Central Belt. While copper sulphides are found throughout the lithologies of the Central Belt, the occurrences of greatest potential are closely related to intrusives and breccias. Preto (1979) and Osatenko (1979) defined several diorite, diorite breccia, and monzonite bodies within the boundaries of the Zig Property.

2.2 Property Geology

The claims lie within the Central Belt of alkaline to calc-alkaline volcanic rocks and intrusive equivalents. Previous work has defined diorite intrusives in the northern portion of the claims, and an area containing diorite, diorite breccia, and monzonite in the south-central part of the property.

No mapping has been completed on the property. The drilling intersected fine grained dacite flows, diorite, and basaltic andesite. Overburden reaches depths of at least 41 metres.



LEGEND

PLEISTOCENE	6	Basalt
UPPER TRIASSIC	5	Monzonite
	4	Diorite Breccia
	3	Diorite
	2	Green and Red Volcanic Breccia
	1	Andesite and Basalt Flows

Geology after : PRETO (1979), As.Report 7165, 17118

RAYROCK YELLOWKNIFE RESOURCES INC.

ZIG PROPERTY

LOCAL GEOLOGY

Originator	Drawn C.D.	Plan No.	FIG.
Revised	Date Aug.'90	NTS 92H/15	3

MINEQUEST EXPLORATION ASSOCIATES LTD.

3.0 REVERSE CIRCULATION PERCUSSION DRILLING

3.1 Drilling and Sampling Procedure

Nine reverse circulation percussion drill holes, totalling 650.72 metres, were drilled using a track mounted drill system designed, owned, and operated by Northspan Explorations Ltd. of Westbank, B.C. Drilling was done on twelve hour, one shift per day basis. Drill hole locations are shown on Figure 4 and the specifications for the drill holes are listed below.

HOLE	DIP	DEPTH (m)	TARGET	GRID N	GRID E
AGR 91-01	-90	68.58	VI	3575	3715
AGR 91-02	-90	36.59	VI	3610	3812
AGR 91-03	-90	60.95	I	7200	4437
AGR 91-04	-90	67.05	VII	3175	5975
AGR 91-05	-90	60.95	VII	3165	5900
AGR 91-06	-90	70.10	VII	3230	5793
Not	-45	27.43	II	6725	6800
Numbered	-52	27.43	II	6725	6800
AGR 91-07	-90	91.43	IV	4393	6586
AGR 91-08	-90	70.10	IV	4396	6500
AGR 91-09	-90	70.10	IV	4392	6437

The drilling was completed between February 4th and 17th, 1991.

Each 3.05 metre (10 foot) interval of bedrock was sampled. All samples were split using a Jones triple-tier riffle splitter, down to approximately 5 kg, 1/8 of original size. Each split sample was collected in doubled plastic bags that were sealed individually with plastic cable ties. All bagged samples were placed in plastic buckets that were sealed and shipped to Acme Analytical Laboratories Ltd. of Vancouver B.C. Duplicate check samples were collected from the reject side of the splitting process and shipped to Eco-Tech Laboratories Ltd. of Kamloops B.C.

From the reject portion of each sample, chips greater than 6mm were sieved and collected for logging. The chips were cleaned with water and examined through hand lens and binocular microscope. Gross lithology, obvious alteration, and sulphide content were noted. Approximately 500 grams of chips were retained from each sample.

3.2 Results

3.2.1 Hole AGR 91-01 (Figure 5)

The first two holes were designed to test Target VI, chargeability and resistivity anomalies defined by both time and phase domain surveys.

Hole AGR 91-01 encountered dacite flows beneath 41.15 m of overburden. The dacite is fine grained with subhedral white feldspar phenocrysts up to 1 mm size and anhedral grey quartz phenocrysts that range up to 2 mm size. Sulphide content varies from a trace to less than 1%.

Copper and gold values reached highs of 40 ppm and 4 ppb respectively, in the monzonite.

3.2.2 Hole AGR 91-02

The second hole was drilled 97 metres east of Hole 91-01 to test the eastern margin of Target VI. Two attempts, both thwarted by clay, were made to reach bedrock; the first was abandoned at 9.14 m, the second at 27.43 m.

3.2.3 Hole AGR 91-03

The third hole tested a sinuous chargeability and metal factor feature at Target I. 60.95 m of overburden were cut from top to bottom of the hole. A wet clay section between 35.05 and 49.36 m may have produced the IP response.

Holes 91-04, 05, and 06 were drilled at Target VII, an area mapped as diorite, diorite breccia, and monzonite by previous workers. Coincident chargeability and resistivity had been defined by time and phase domain surveys.

HOLE AGR 91-01

Location : 3575 N, 3715 E
Inclination : -90
Depth : 68.58 m

Sample Number	Au (ppb)	Cu (ppm)
91101	3	28
91102	4	35
91103	2	25
91104	2	23
91105	2	22
91106	1	25
91107	1	24
91108	2	26
91109	2	40

LEGEND

PLEISTOCENE and RECENT

- Overburden
- Vesicular Olivine Basalt

AGE UNCERTAIN

- Consolidated gravel or poorly consolidated pebble conglomerate

UPPER TRIASSIC

Nicola Group

- Fine grained basaltic andesite
- Fine grained dacite flows
- Lahar
- Fine grained diorite

Note :

All sample numbers prefixed 'AGR'
Complete results tabulated in Appendix III

SCALE 1 : 250

0 5 10 m

RAYROCK YELLOWKNIFE RESOURCES INC.

ZIG PROPERTY

SECTION THROUGH HOLE
AGR 91-01

PLAN No.	DRAWN	DATE	FIG.
	C.D.	Feb, 1991	5
REVISED		N.T.S. 92 H/15 E	

MINEQUEST EXPLORATION ASSOCIATES LTD.

3.2.4 Hole AGR 91-04 (Figure 6)

The fourth hole, on the east side of the geophysical feature, cut 5.5 m of overburden before entering bedrock. From 5.5 to 21.33 m the hole encountered a maroon lahar or breccia containing fragments of monzonite. At 21.33 m the hole cut basaltic andesite tuffs to the bottom of the hole at 67.05 m. The tuffs are very fine grained, grey-green to maroon colour and are interbedded. Pyrite is ubiquitous, averaging 2% throughout the hole.

85 ppm copper and 19 ppb gold were the maximum values returned.

3.2.5 Hole AGR 91-05 (Figure 7)

Beneath 4.0 m of overburden Hole 91-05 intersected maroon lahar or breccia to 24.4 m. Interbedded maroon and grey tuffs are found from 24.4 to 60.96 m, the end of the hole. The tuffs are very fine grained, locally contain up to 40% pale green feldspar phenocrysts, and carry up to 3% disseminated very fine grained pyrite.

Copper reached a high of 134 ppm and gold returned a best value of 15 ppb.

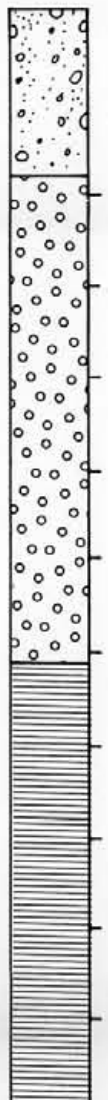
3.2.6 Hole AGR 91-06 (Figure 8)

The westernmost hole drilled at Target VII cut diorite from top to bottom, below 7.92 m of overburden. The diorite is fine to very fine grained and contains up to 20% mafic minerals, probably hornblende, that have been altered to chlorite. Textures are indistinct at the top of the hole but become increasingly distinct with depth as the chlorite alteration decreases.

Copper and gold values are at background levels, with maximums of 266 ppm and 12 ppb respectively.

HOLE : AGR 91-04

Location : 3175 N, 5975 E
Inclination : - 90
Depth : 67.05 m



Sample Number	Au (ppb)	Cu (ppm)
91110	5	50
91111	4	85
91112	1	60
91113	19	87
91114	2	55
91115	1	54
91116	3	53
91117	1	59
91118	1	75
91119	7	61
91120	2	45
91121	3	41
91122	2	46
91123	1	51
91124	3	48
91125	3	39
91126	3	67
91127	1	29
91128	1	34
91129	1	37

LEGEND

PLEISTOCENE and RECENT

- Overburden
- Vesicular Olivine Basalt

AGE UNCERTAIN

- Consolidated gravel or poorly consolidated pebble conglomerate

UPPER TRIASSIC

Nicola Group

- Fine grained basaltic andesite
- Fine grained dacite flows
- Lahar
- Fine grained diorite

Note :

All sample numbers prefixed AGR
Complete results tabulated in Appendix III

SCALE 1 : 250

0 5 10 m

RAYROCK YELLOWKNIFE RESOURCES INC.

ZIG PROPERTY

SECTION THROUGH HOLE
AGR 91-04

PLAN No.	DRAWN	DATE	FIG.
	C. D.	Feb, 1991	6
REVISED		N.T.S. 92 H/15 E	

MINEQUEST EXPLORATION ASSOCIATES LTD.

HOLE : AGR 91-05
Location : 3165 N, 5900 E
Inclination : - 90
Depth : 60.95

Sample Number	Au (ppb)	Cu (ppm)
91130	2	64
91131	3	74
91132	1	78
91133	5	60
91134	3	134
91135	15	77
91136	1	69
91137	5	77
91138	4	88
91139	3	69
91140	4	74
91141	2	76
91142	1	68
91143	2	75
91144	2	97
91145	1	94
91146	5	62
91147	3	56

LEGEND

PLEISTOCENE and RECENT
- Overburden
- Vesicular Olivine Basalt

AGE UNCERTAIN
- Consolidated gravel or poorly consolidated pebble conglomerate

UPPER TRIASSIC

Nicola Group
- Fine grained basaltic andesite
- Fine grained dacite flows
- Lahar
- Fine grained diorite

Note :
All sample numbers prefixed 'AGR'
Complete results tabulated in Appendix III

SCALE 1 : 250
0 5 10 m

RAYROCK YELLOWKNIFE RESOURCES INC.

ZIG PROPERTY

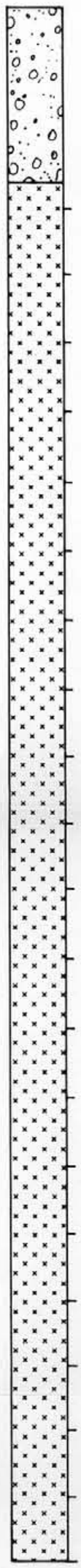
SECTION THROUGH HOLE
AGR 91-05

PLAN No.	DRAWN	DATE	FIG.
	C.D.	Feb, 1991	7
REVISED		N.T.S. 92 H/15 E	

MINEQUEST EXPLORATION ASSOCIATES LTD.

HOLE : AGR 91-06

Location : 3230 N, 5793 E
Inclination : -90
Depth : 70.10 m



Sample Number	Au (ppb)	Cu (ppm)
91148	7	53
91149	12	71
91150	3	52
91151	5	52
91152	4	55
91153	3	80
91154	8	42
91155	8	80
91156	5	115
91157	4	127
91158	3	44
91159	4	49
91160	3	57
91161	2	55
91162	2	42
91163	5	63
91164	3	85
91165	5	266
91166	3	77
91167	4	30

LEGEND

PLEISTOCENE and RECENT

- Overburden
- Vesicular Olivine Basalt

AGE UNCERTAIN

- Consolidated gravel or poorly consolidated pebble conglomerate

UPPER TRIASSIC

Nicola Group

- Fine grained basaltic andesite
- Fine grained dacite flows
- Lahar
- Fine grained diorite

Note :
All sample numbers prefixed 'AGR'
Complete results tabulated in Appendix

SCALE 1 : 250

0 5 10 m

RAYROCK YELLOWKNIFE RESOURCES INC.

ZIG PROPERTY

SECTION THROUGH HOLE
AGR 91-06

PLAN No.	DRAWN C.D.	DATE Feb, 1991	FIG. 8
REVISED		N.T.S. 92 H/15 E	

MINEQUEST EXPLORATION ASSOCIATES LTD.

Target II, a metal factor anomaly defined by the phase domain survey at 68+00 E on Line 6800 N, could not be drilled from the existing drill site. Two attempts were made to reach the target but both holes were abandoned at 27.43 m depth when pea gravel began to bind the drill rods.

The last three holes were drilled on Target IV, a series of IP features defined by the detailed phase domain survey. All three holes intersected the same stratigraphic sequence of overburden, basalt, consolidated gravel, and fine grained tuffs.

3.2.7 Hole AGR 91-07 (Figure 9)

In the seventh hole 3.96 m of overburden covered fine grained, vesicular, slightly magnetic basalt which continued to a depth of 28.04 m. The basalt rests unconformably on consolidated gravels, which extend from 28.04 to 50.90 m. The gravels overlie, again unconformably, a light purple, very fine grained tuff, which continues to the bottom of the hole at 91.44 m.

The highest copper value of the drill program was returned in this hole, 679 ppm, from the tuff, in an interval where malachite and azurite stained chips were noted. The single elevated gold value, 43 ppb, was returned from the consolidated gravel.

3.2.8 Hole AGR 91-08 (Figure 10)

Hole 91-08 intersected the same sequence as hole 91-07: overburden to 5.49 m, basalt to 31.70 m depth, consolidated gravel to 48.77 m depth, and fine grained maroon tuff to the bottom of the hole at 70.10 m.

Copper is at background levels, reaching a maximum of 71 ppm in two consecutive intervals. Gold reaches a high of 1290 ppb, from a sample in the consolidated gravel.

HOLE : AGR 91-07

Location : 4393 N, 6586 E
Inclination : -90
Depth : 91.43 m

Sample Number	Au (ppb)	Cu (ppm)
91168	1	40
91169	6	44
91170	2	45
91171	2	51
91172	3	58
91173	4	54
91174	3	53
91175	2	52
91176	9	63
91177	5	63
91178	8	65
91179	1	61
91180	43	55
91181	7	63
91182	7	97
91183	1	40
91184	5	47
91185	1	28
91186	3	97
91187	4	22
91188	4	679
91189	3	260
91190	2	95
91191	3	106
91192	1	36
91193	1	84
91194	2	54
91195	5	112

LEGEND

PLEISTOCENE and RECENT

- Overburden
- Vesicular Olivine Basalt

AGE UNCERTAIN

- Consolidated gravel or poorly consolidated pebble conglomerate

UPPER TRIASSIC

Nicola Group

- Fine grained basaltic andesite
- Fine grained dacite flows
- Lahar
- Fine grained diorite

Note :
All sample numbers prefixed 'AGR '
Complete results tabulated in Appendix III

SCALE 1 : 250

0 5 10 m

RAYROCK YELLOWKNIFE RESOURCES INC.

ZIG PROPERTY

SECTION THROUGH HOLE
AGR 91-07

PLAN No.	DRAWN	DATE	FIG.
	C.D.	Feb, 1991	9
REVISED		N.T.S. 92 H/15 E	

MINEQUEST EXPLORATION ASSOCIATES LTD.

HOLE : AGR 91-08

Location : 4396 N, 6500 E
Inclination : -90
Depth : 70.10 m

Sample Number	Au (ppb)	Cu (ppm)
91196	9	55
91197	2	49
91198	4	55
91199	1	50
91200	1	50
91201	3	51
91202	1	48
91203	1	71
91204	5	71
91205	3	53
91206	4	55
91207	1290	42
91208	7	31
91209	5	69
91210	51	74
91211	24	71
91212	10	82
91213	20	59
91214	6	27
91215	7	27

LEGEND

PLEISTOCENE and RECENT

- Overburden
- Vesicular Olivine Basalt

AGE UNCERTAIN

- Consolidated gravel or poorly consolidated pebble conglomerate

UPPER TRIASSIC

Nicola Group

- Fine grained basaltic andesite
- Fine grained dacite flows
- Lahar
- Fine grained diorite

Note :

All sample numbers prefixed 'AGR'
Complete results tabulated in Appendix III

SCALE 1 : 250

0 5 10 m

RAYROCK YELLOWKNIFE RESOURCES INC.

ZIG PROPERTY

SECTION THROUGH HOLE
AGR 91-08

PLAN No.	DRAWN	DATE	FIG.
	C.D.	Feb, 1991	10
REVISED		N.T.S. 92-H/15 E	

MINEQUEST EXPLORATION ASSOCIATES LTD.

3.2.9 Hole AGR 91-09 (Figure 11)

The last hole cut 5.49 m of overburden, followed by basalt to 26.21 m depth, consolidated gravel to 29.26 m depth, maroon tuff to 48.77 m depth, and fine grained diorite to the end of the hole at 70.10 m.

Copper values ranged from 15 to 56 ppm, and gold reached a high of 120 ppb in the basalt from 12.19 to 15.24 m, and 110 ppb in the tuff between 36.57 and 39.62 m.

3.3 Thin Sections

One representative sample was selected from each hole for thin section and petrographic description. The fine grained nature of the rocks made field classification and alteration difficult to determine. The thin section descriptions confirmed the rock types and provided a more detailed description of alteration. Complete petrographic reports are found in Appendix IV.

HOLE : AGR 91-09
Location : 4392 N, 6437 E
Inclination : -90
Depth : 70.10 m

Sample Number	Au (ppb)	Cu (ppm)
91216	8	47
91217	1	56
91218	120	50
91219	5	51
91220	6	53
91221	1	53
91222	1	55
91223	2	41
91224	3	24
91225	1	22
91226	110	21
91227	5	33
91228	1	28
91229	2	25
91230	1	20
91231	1	17
91232	6	15
91233	2	34
91234	2	33
91235	1	15
91236	1	15

LEGEND

PLEISTOCENE and RECENT
- Overburden
- Vesicular Olivine Basalt

AGE UNCERTAIN
- Consolidated gravel or poorly consolidated pebble conglomerate

UPPER TRIASSIC

Nicola Group
- Fine grained basaltic andesite
- Fine grained dacite flows
- Lahar
- Fine grained diorite

Note :
All sample numbers prefixed 'AGR '
Complete results tabulated in Appendix III

SCALE 1 : 250
0 5 10 m

RAYROCK YELLOWKNIFE RESOURCES INC.

ZIG PROPERTY

SECTION THROUGH HOLE
AGR 91-09

PLAN No.	DRAWN	DATE	FIG.
	C.D.	Feb, 1991	11
REVISED		N.T.S. 92 H/15 E	

MINEQUEST EXPLORATION ASSOCIATES LTD.

4.0 DISCUSSION

The Zig Property covers alkaline to calc-alkaline volcanic rocks and intrusive equivalents of the Triassic Nicola Group. The Nicola Group and its equivalents have proven to be prospective for copper-gold alkaline porphyry systems, from Copper Mountain near the British Columbia - Washington border, to the Mt. Milligan deposit northwest of Prince George. Features common to these copper-gold porphyry deposits are: magnetic highs associated with diorite intrusives, multi-phase intrusions ranging in composition from diorite to monzonite, breccia bodies, pyrite and magnetite halos, and K-spar alteration.

Portions of the property have been the focus of several exploration programs since 1973. Previous workers have defined Nicola Group volcanic rocks intruded by diorite, diorite breccia, and monzonite, a single IP anomaly, and performed a limited amount of drilling. Government aeromagnetic surveys have outlined several magnetic highs, suggesting that the intrusive rocks may be more widespread than previously recognized. At no time has the entire property been evaluated as a complete package.

Induced Polarization surveys completed during 1990, which covered most of the property, outlined several broad chargeability and resistivity anomalies. Some of these features are in excess of 1000 m wide, and remain open. The seven drill holes that reached bedrock tested restricted portions of three of the anomalies. The drilling confirmed the presence of widespread disseminated pyrite but did not return any copper or gold values of economic significance. Drilling has established the presence of fine-grained dacite flows, dioritic to basaltic andesite, and diorite intrusive.

Although the 1991 drilling did not return any elevated copper or gold values, four areas of copper values at surface (beneath one of which Cominco obtained a significant drill intersection) were not tested during this phase of drilling. The northeast quadrant of the Zig Property remains an attractive target for an alkaline copper-gold porphyry deposit.

5.0 CONCLUSIONS

1. The Zig Property is underlain by volcanic and intrusive rocks of the Triassic Nicola Group. Lithologies encountered during this phase of drilling are dacite flows, fine grained diorite, and fine grained basaltic andesite.

2. The drilling has tested four induced polarization anomalies. Nine drill holes were completed, of which seven reached bedrock.

3. One geophysical feature is caused by a clay layer, the other three are due to disseminated pyrite found in all rock types.

4. Copper values in drill cuttings are at background levels. The maximum value returned was 679 ppm, from an interval of maroon basaltic andesite, where malachite and azurite stained chips were noted.

5. Gold values reached a high of 51 ppb from an andesitic basalt that has undergone moderate propylitic-phyllic alteration. A single value of 120 ppb was returned from the vesicular basalt. One sample from the consolidated gravel produced a high of 1290 ppb, probably the result of placer gold.

6. Much of the rest of the property including the entire northeast quadrant, including sites of known copper mineralization, remains untested.

6.0 RECOMMENDATIONS

1. The property should be geologically mapped, prospected and sampled at a scale of 1:10,000 or 1:5,000.

2. Attention should be paid to areas of anomalous copper in rocks reported from the limited amount of prospecting completed. In particular, the following areas should examined:

   - the area (Figure 4, Site A) near the north boundary of the Zig 3 claim where five chip samples, over approximately 25 metres (from old trenches), returned an average of 0.3% copper. This area was not covered by the induced polarization survey.

   - old trenches (Figure 4, Site B), where one sample returned 2.6% copper.

   - a new road cut between lines 6000 N and 6400 N where three grab samples returned an average of 0.23% copper (Figure 4, Site C).

   - trenches with significant values and Cominco drill hole that returned 0.14% Cu over 105 feet (Figure 4, Site D).

3. All old workings drill holes etc. should be accurately located.

The above program would cost approximately $35,000 and take about three weeks to complete.

7.0 BIBLIOGRAPHY

Gourlay, A.W., 1990,
Zig Property - Geophysics, January - July 1990, Report for Rayrock Yellowknife Resources Inc. by MineQuest Exploration Associates Ltd. (MineQuest Report #231)
Submitted for Assessment

Lefebure, D.V., 1976,
Geology of the Nicola Group in the Fairweather Hills, B.C., Unpubl. M.Sc Thesis, Queen's University

Lisle, T.E., 1985,
Geochemical Geological and Geochemical Report on the BLOO, CLIMAX, THOR, and THOR 2 to 16 Claims. Report for Vanco Explorations Limited.,
B.C.M.E.M.P.R. Assessment Report No. 14141

Mehner, D.T.,1979
Assessment Report on Ground Magnetics, Soil Geochemistry, and Geological Mapping of the Thalia Property. Report for Cominco Ltd.
B.C.M.E.M.P.R Assessment Report No. 7724

Nelson, W.I. and Walker, J.T., 1973
Combined Geological and Geophysical Report on the Adonis Property. Report for Noranda Exploration Company Limited
B.C.M.E.M.P.R Assessment Report No. 4495

Osatenko, M.J., 1979
Assessment Report: Geological, Rock and Soil Geochemical, I.P., and Ground Magnetic Work on the Thalia Property. Report for Cominco Ltd.
B.C.M.E.M.P.R. Assessment Report No. 7165, Part 2 of 2

Preto, V.A., 1979
Geology of the Nicola Group between Merritt and Princeton
B.C.M.E.M.P.R. Bulletin 69

Scott, A., 1979
Geophysical Report on an Induced Polarization Survey on the Thalia Property. Report for Cominco Ltd.
B.C.M.E.M.P.R. Assessment Report No. 7165, Part 1 of 2

Watson, I.M., 1988
Geochemical Report on the BLOO, CLIMAX, THOR, and THOR 2 to 16 Claims. Report for Laramide Resources Ltd.
B.C.M.E.M.P.R. Assessment Report No. 17118

APPENDIX I

MinFile References

APPENDIX I

Minfile References

The following mineral occurrences are reported on the Zig Property:

Minfile Number: 092HNE091

Name(s): Daisy
Gail
Aspen Grove Camp

Commodities Present:
Cu

Capsule Geological Comment:
Claims underlain by tuffs, agglomerate, and green andesite of the Nicola Group. Narrow bands of grey-green agglomerate contain chalcocite, native copper, and malachite concentrated in and around the fragments. Some fractures in the other rock types are coated with malachite.

Bibliography:

1. BCDM MMAR 1901-1179, 1913-222, 1915-224, 1917-233, 1919-189, 1920-168, 1928-222, 1929-245
2. BCDM GEM 1971-287, 1972-135, 1973-156
3. BCDM Ass. Rpt. 175, 4495, 7165, 7724
4. BCDM Expl. in B.C. 1978-E151, 1979-155
5. GSC Map 888A, 889A
6. BCDM Ass. Rpt. 11273

APPENDIX I - MINFILE REFERENCES (Continued)

Minfile Number: 092HNE130

Name(s): Boss 132

Commodities Present:
Cu

Capsule Geological Comment:
Claims underlain by tuffs, agglomerates, and andesite of the Nicola Group. Narrow bands of grey-green agglomerate contain chalcocite, native copper and malachite, concentrated in and around fragments.

Bibliography:
1. BCDM GEM 1972-135, 1973-156
2. BCDM Expl. in B.C. 1978-E151
3. BCDM Ass. Rpt. 4495, 7165, 7724
4. BCDM Expl in B.C. 1979-155

Minfile Number: 092HNE151

Name(s): Boss 78, 80
Thalia

Commodities Present:
Cu

Capsule Geological Comment:
Showing occurs in the central belt of the Nicola Group in grey to green augite-plagioclase andesite porphyry which has been extensively brecciated.

Bibliography:
1. BCDM GEM 1972-135, 1973-156
2. BCDM Expl. in B.C. 1978-E151
3. BCDM Ass. Rpt. 4495, 7165, 7724
4. BCDM Prel. Map #15
5. BCDM Expl. in B.C. 1979-155

APPENDIX II

Laboratory Methods

APPENDIX II

LABORATORY METHODS

The drill cuttings were shipped to Acme Analytical Laboratories Ltd. of Vancouver B.C. The samples were crushed to less than 3/16 inch size, from which a 200 gram split was pulverized to 98% minus 100 mesh. A 0.500 gram sample was digested for one hour at 950 in 3:1:2 HCL:$HNO2_{:H2}O$. Determinations were made with an inductively coupled plasma technique. It must be noted that for several of the elements reported the extraction is only partial. Gold content was determined by fire assay extraction followed by atomic absorption analysis.

Duplicate samples were shipped to Eco-Tech Laboratories Ltd. in Kamloops, B.C. for preparation and analyses. Samples were dried, crushed to minus 10 mesh and then a 250 gram split was pulverized to minus 140 mesh. For gold determinations fire assay was used to concentrate the sample and the bead concentrate was then digested in hot aqua regia for one hour and analysed by atomic absorption. The other elements were determined using the ICP technique after digestion in an aqua regia solution (3:1:2 HCL:$HNO_{4:H}2O$)

APPENDIX III

Laboratory Reports

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Minequest Exploration PROJECT ZIG File # 91-0377 Page 1

500 - 164 Water St., Vancouver BC V6B 1B5

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb	SAMPLE -
AGR 91101	2	28	8	52	.1	13	9	526	1.71	2	5	ND	2	60	.5	2	2	39	1.56	.060	9	14	.62	421	.08	9	.78	.07	.19	1	3	18
AGR 91102	3	35	9	53	.2	14	10	545	2.21	6	5	ND	2	72	1.1	2	2	56	1.85	.075	10	17	.72	201	.11	7	1.06	.07	.18	1	4	30
AGR 91103	3	25	7	43	.1	10	7	350	1.23	2	5	ND	3	68	.2	2	4	27	.92	.049	10	8	.41	291	.07	3	.70	.08	.25	1	2	16
AGR 91104	1	23	7	32	.2	4	4	169	.81	2	5	ND	4	66	.2	2	2	16	.44	.029	8	5	.27	403	.06	3	.59	.11	.36	1	2	18
AGR 91105	2	22	6	33	.1	6	5	379	1.40	2	5	ND	4	70	.2	2	2	19	.46	.034	8	7	.26	413	.06	3	.60	.12	.38	1	2	20
AGR 91106	2	25	6	31	.1	5	4	195	.90	2	5	ND	3	72	.2	2	2	17	.42	.027	7	5	.29	435	.07	4	.64	.13	.41	1	1	20
AGR 91107	1	24	7	28	.2	5	3	139	.85	2	5	ND	3	59	.5	2	2	17	.42	.027	6	6	.30	371	.07	5	.61	.12	.36	1	1	23
AGR 91108	2	26	5	34	.1	8	4	231	1.23	2	5	ND	2	61	.2	2	2	25	.61	.033	6	9	.37	363	.08	3	.70	.12	.34	1	2	24
AGR 91109	2	40	12	43	.1	11	8	428	2.07	2	5	ND	2	74	.6	2	3	54	1.29	.060	7	14	.60	311	.13	5	1.05	.10	.25	1	2	25
AGR 91110	2	50	11	69	.2	4	14	1150	3.07	13	5	ND	1	65	.6	2	2	114	4.91	.134	9	4	1.07	71	.14	24	1.84	.04	.07	1	5	23
AGR 91111	2	85	15	79	.4	5	15	1010	3.35	21	5	ND	2	57	1.1	2	2	124	3.99	.152	10	4	1.15	47	.18	32	2.06	.05	.06	1	4	29
AGR 91112	2	60	14	91	.1	2	12	980	3.00	22	5	ND	1	50	.8	2	2	117	3.37	.136	9	4	1.09	40	.17	29	1.85	.05	.06	2	1	22
AGR 91113	3	87	15	84	.2	5	15	828	3.68	12	5	ND	2	63	1.0	2	2	171	3.96	.141	10	4	1.11	65	.19	35	2.18	.07	.05	1	19	49
AGR 91114	2	55	8	85	.2	4	14	879	2.98	11	5	ND	1	50	.6	2	2	97	3.32	.141	9	4	1.21	39	.17	27	2.00	.06	.05	1	2	25
AGR 91115	2	54	8	82	.1	4	13	901	2.93	26	5	ND	1	55	1.2	2	2	117	4.00	.130	9	4	1.16	29	.19	30	2.02	.06	.04	2	1	25
AGR 91116	2	53	8	94	.5	3	13	1058	2.87	16	5	ND	2	56	1.1	2	2	104	4.45	.131	9	4	1.19	28	.17	24	1.82	.05	.06	1	3	24
AGR 91117	1	59	7	109	.1	3	15	1237	3.37	14	5	ND	1	75	.6	2	2	101	4.94	.154	9	3	1.64	30	.14	19	1.99	.04	.06	1	1	30
AGR 91118	1	75	12	96	.3	1	13	1084	3.29	16	5	ND	1	70	.8	2	3	103	4.69	.151	9	3	1.36	37	.18	26	2.17	.05	.04	1	1	23
AGR 91119	2	61	12	90	.3	2	13	882	3.21	21	5	ND	1	107	.8	2	2	103	4.52	.151	9	2	1.11	98	.21	29	2.04	.05	.04	1	7	24
AGR 91120	1	45	15	72	.1	3	11	867	2.35	26	5	ND	1	53	1.0	2	2	114	3.45	.143	9	4	1.19	22	.16	16	1.65	.07	.03	2	2	45
AGR 91121	1	41	11	68	.2	2	9	835	2.22	22	5	ND	1	51	.7	2	2	112	3.28	.133	9	2	1.14	18	.15	13	1.60	.06	.02	1	3	34
AGR 91122	1	46	10	68	.1	1	10	870	2.52	24	5	ND	1	53	.8	2	2	115	3.87	.127	9	2	1.06	39	.18	15	1.63	.05	.03	1	2	30
AGR 91123	1	51	5	85	.1	1	12	1060	2.97	47	5	ND	1	83	1.0	2	2	109	5.58	.124	8	3	1.15	50	.19	25	1.89	.05	.03	1	1	32
AGR 91124	2	48	5	88	.4	3	13	1098	2.70	31	5	ND	2	85	.7	3	2	104	6.27	.133	9	4	1.09	50	.17	32	2.04	.06	.04	1	1	24
AGR 91125	2	39	12	74	.1	1	12	788	2.72	22	5	ND	1	113	.7	2	5	98	3.59	.136	9	2	.96	53	.17	31	1.93	.07	.06	2	3	36
AGR 91126	1	67	7	75	.1	1	13	896	3.08	10	5	ND	1	87	.7	2	3	93	3.17	.130	9	3	1.02	42	.17	25	1.65	.07	.08	1	3	35
AGR 91127	1	29	7	80	.2	2	12	852	2.88	15	5	ND	1	89	.8	2	2	94	3.40	.129	9	3	1.17	22	.20	23	1.81	.07	.04	1	1	36
AGR 91128	1	34	2	81	.1	2	12	862	2.92	12	5	ND	1	106	.3	2	5	92	3.49	.128	8	3	1.19	19	.20	17	1.79	.06	.04	1	1	33
AGR 91129	1	37	6	91	.1	1	13	1036	3.07	17	5	ND	1	120	.7	2	2	82	4.43	.130	8	2	1.30	35	.20	14	1.69	.06	.04	2	1	30
AGR 91130	3	64	16	90	.2	2	15	1499	4.00	30	5	ND	1	60	1.1	2	2	156	2.79	.139	8	4	.99	105	.19	20	1.77	.04	.10	2	2	30
AGR 91131	2	74	10	100	.2	1	15	1184	4.11	55	5	ND	1	72	.8	2	2	139	2.03	.138	8	3	.86	134	.17	18	1.72	.04	.10	1	3	31
AGR 91132	3	78	9	108	.3	4	17	1501	4.45	70	5	ND	1	105	1.0	2	2	154	3.24	.145	9	4	1.04	179	.20	18	2.01	.04	.08	1	1	25
AGR 91133	1	60	18	94	.1	1	14	962	3.60	20	5	ND	1	84	1.1	2	2	134	3.34	.133	8	3	.97	50	.19	15	1.63	.04	.07	1	5	17
AGR 91134	1	134	7	101	.4	3	14	910	3.64	15	5	ND	2	72	1.1	2	5	121	1.74	.131	11	3	1.33	43	.13	12	1.64	.06	.08	1	3	20
AGR 91135	1	77	9	94	.5	3	14	650	3.49	8	5	ND	2	53	.5	2	2	93	1.43	.145	10	2	1.32	43	.11	10	1.37	.06	.19	1	15	33
AGR 91136	1	69	5	117	.1	1	12	848	3.31	14	5	ND	1	83	.8	2	2	118	2.72	.157	8	2	1.39	110	.18	14	2.14	.08	.07	1	1	31
STANDARD C/AU-R	18	60	37	132	7.1	73	34	1075	3.98	38	15	7	39	52	18.7	15	20	56	.49	.092	39	55	.88	181	.09	35	1.91	.06	.15	11	470	-

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: CUTTING AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: FEB 13 1991 DATE REPORT MAILED: Feb 20/91. SIGNED BY..... D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	AU* ppb	SAMPLE -
AGR 91137	1	77	9	115	.3	3	16	885	3.86	23	5	ND	1	84	.4	4	2	112	2.39	.172	9	2	1.35	89	.19	24	1.77	.05	.11	1	5	21
AGR 91138	1	88	11	106	.4	4	14	983	3.61	11	5	ND	1	90	.8	3	2	127	3.11	.157	9	4	1.36	100	.18	23	2.14	.04	.04	1	4	30
AGR 91139	1	69	11	103	.2	3	13	966	3.34	14	5	ND	1	100	.4	2	3	117	2.60	.157	8	3	1.41	104	.19	21	1.78	.04	.05	1	3	27
AGR 91140	2	74	10	94	.1	3	14	891	3.53	11	5	ND	1	117	.4	2	2	124	2.98	.155	8	3	1.24	131	.18	21	2.01	.05	.05	1	4	28
AGR 91141	3	76	12	100	.2	4	16	901	4.00	16	5	ND	1	100	.2	2	2	132	3.29	.167	8	3	1.11	67	.20	35	2.00	.05	.06	1	2	33
AGR 91142	2	68	7	99	.1	4	15	979	3.35	21	5	ND	1	92	.7	2	2	122	2.99	.155	8	5	1.30	57	.21	32	2.07	.05	.04	1	1	31
AGR 91143	2	75	8	96	.2	4	13	989	3.37	14	5	ND	1	117	.8	2	2	110	3.16	.155	9	4	1.25	97	.19	25	1.99	.05	.04	1	2	29
AGR 91144	2	97	12	95	.1	3	12	970	2.94	12	5	ND	1	58	.8	2	2	117	3.13	.143	8	3	1.13	33	.19	29	2.03	.04	.04	1	2	34
AGR 91145	2	94	10	95	.1	5	12	954	2.93	14	5	ND	1	60	1.0	2	2	123	3.46	.149	9	4	1.15	27	.19	34	2.23	.04	.03	1	1	35
AGR 91146	2	62	11	71	.2	5	13	1008	2.82	28	5	ND	1	142	.6	2	2	135	4.05	.168	10	4	1.29	122	.18	29	2.29	.05	.04	1	5	33
AGR 91147	2	56	13	75	.1	5	13	866	2.98	24	5	ND	1	105	.9	2	2	128	3.59	.158	9	3	1.19	87	.18	31	2.28	.05	.04	1	3	31
AGR 91148	2	53	8	102	.4	4	14	1157	3.03	5	5	ND	1	78	.8	2	2	102	3.74	.130	10	4	1.15	29	.17	18	1.78	.04	.07	1	7	32
AGR 91149	1	71	7	87	.3	5	13	1053	2.92	8	5	ND	1	86	.4	2	2	85	4.12	.146	12	4	.83	55	.09	17	1.26	.04	.17	1	12	65
AGR 91150	1	52	10	120	.6	5	14	1496	3.20	4	5	ND	1	98	.5	2	2	106	4.72	.134	11	4	1.03	63	.11	17	1.75	.04	.06	1	3	63
AGR 91151	1	52	8	123	.5	3	15	1511	3.29	6	5	ND	1	93	.8	2	2	114	4.64	.142	11	4	1.04	33	.12	20	1.84	.04	.05	1	5	50
AGR 91152	2	55	8	116	.5	6	14	1682	3.36	8	5	ND	1	107	.8	2	2	110	4.84	.136	11	4	1.11	32	.12	14	1.73	.04	.07	2	4	40
AGR 91153	1	80	6	95	.3	4	12	1445	2.93	7	5	ND	1	116	.5	2	2	88	5.03	.130	11	3	.96	54	.09	13	1.34	.03	.14	1	3	35
AGR 91154	1	42	11	105	.6	5	14	1376	3.24	6	5	ND	2	91	.2	2	2	103	4.04	.127	11	3	1.01	36	.12	15	1.61	.03	.10	1	8	65
AGR 91155	1	80	5	56	.2	3	10	910	2.72	3	5	ND	1	81	.2	2	2	62	3.63	.122	13	2	.46	61	.04	10	.74	.03	.19	1	8	50
AGR 91156	1	115	7	63	.4	3	11	817	3.18	6	5	ND	1	116	.6	2	2	83	3.29	.124	13	3	.61	31	.06	15	.91	.04	.18	1	5	45
AGR 91157	1	127	6	53	.2	3	9	684	2.88	4	5	ND	1	91	.5	2	2	64	3.30	.123	12	2	.47	28	.03	7	.71	.04	.24	1	4	40
AGR 91158	1	44	6	110	.6	6	14	1232	3.60	5	5	ND	2	99	.6	2	2	109	3.67	.133	11	4	1.09	32	.17	17	1.64	.04	.11	1	3	60
AGR 91159	1	49	7	110	.4	5	14	1273	3.28	8	5	ND	1	98	.3	2	2	100	3.76	.117	10	3	1.07	25	.15	12	1.56	.03	.08	1	4	40
AGR 91160	1	57	8	97	.2	5	13	1194	3.10	7	5	ND	1	97	.7	2	2	93	3.72	.109	9	4	.99	27	.14	12	1.37	.03	.11	1	3	34
AGR 91161	1	55	11	90	.3	7	12	1280	3.06	5	5	ND	1	121	.6	2	2	81	4.10	.116	11	5	.95	71	.08	11	1.19	.03	.16	1	2	30
AGR 91162	1	42	6	89	.1	3	12	1242	3.11	4	5	ND	1	76	.5	2	2	100	3.50	.106	9	4	1.02	33	.13	16	1.49	.04	.11	1	2	29
AGR 91163	2	63	8	72	.4	3	12	972	3.12	7	5	ND	1	63	.8	2	2	113	3.01	.105	9	4	.78	21	.17	22	1.75	.04	.06	1	5	25
AGR 91164	2	85	2	77	.3	5	12	1089	3.15	6	5	ND	1	114	.6	2	2	96	3.33	.108	10	4	.92	33	.12	15	1.40	.04	.13	1	3	25
AGR 91165	1	266	6	80	.4	4	13	1197	3.17	8	5	ND	1	149	.2	2	2	91	3.96	.119	11	3	1.02	37	.09	15	1.45	.03	.15	1	5	28
AGR 91166	2	77	7	79	.5	6	12	999	3.37	8	5	ND	2	71	1.1	2	2	115	2.81	.109	9	5	.82	28	.18	19	1.78	.05	.07	1	3	25
AGR 91167	2	30	6	87	.1	6	12	1022	3.34	7	5	ND	1	88	.6	2	2	115	2.87	.107	9	4	.91	32	.18	19	1.85	.06	.08	1	4	30
STANDARD C	19	59	38	134	6.9	70	32	1052	3.93	38	23	7	39	52	18.5	16	22	55	.47	.089	39	55	.86	185	.09	34	1.88	.06	.15	11	490	-

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Minequest Exploration File # 91-0435 Page 1

500 - 164 Water St., Vancouver BC V6B 1B5

REPORT MAILED FEB 28 1991

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb	MT. lb
AGR 91168	1	40	2	27	.1	65	13	220	1.82	2	5	ND	1	77	.2	2	2	12	.90	.063	6	9	.95	19	.15	2	1.31	.29	.02	1	1	9
AGR 91169	1	44	5	53	.1	73	22	574	3.42	4	5	ND	1	118	.6	2	2	22	1.05	.160	17	24	1.88	74	.23	2	1.79	.55	.09	1	6	23
AGR 91170	2	45	4	58	.1	63	23	607	3.93	6	5	ND	2	167	1.1	2	2	27	1.20	.257	24	18	2.19	46	.28	2	2.22	.95	.16	1	2	20
AGR 91171	1	51	2	59	.1	55	23	589	3.78	3	5	ND	1	169	.7	2	2	26	1.05	.245	22	12	2.08	24	.28	2	2.18	1.08	.20	1	2	13
AGR 91172	3	58	5	66	.2	59	24	637	4.15	3	5	ND	1	196	1.7	4	2	28	1.22	.267	25	15	2.30	21	.41	4	2.69	1.45	.62	1	3	17
AGR 91173	2	54	10	65	.1	59	23	604	4.05	2	5	ND	1	173	1.6	2	2	29	1.23	.257	25	16	2.19	47	.47	2	2.46	1.27	.24	2	4	15
AGR 91174	2	53	2	66	.1	66	23	604	3.94	2	5	ND	1	205	.4	2	2	21	1.16	.234	24	16	2.38	26	.38	2	2.09	1.08	.21	1	3	19
AGR 91175	1	52	10	66	.1	32	18	675	3.71	2	5	ND	2	87	.5	2	4	62	.87	.102	15	30	1.09	96	.23	2	2.20	.26	.21	1	2	23
AGR 91176	1	63	7	65	.1	21	15	774	3.69	8	5	ND	1	49	.8	2	2	85	.75	.082	11	34	.84	109	.18	3	1.99	.05	.19	1	9	41
AGR 91177	1	63	4	61	.1	16	14	764	3.40	10	5	ND	1	44	.7	2	2	82	.78	.088	11	30	.73	144	.16	4	1.87	.04	.17	1	5	17
AGR 91178	1	65	9	59	.2	18	13	812	3.49	7	5	ND	2	55	1.1	2	2	89	.91	.110	10	29	.85	176	.18	6	1.75	.07	.15	1	8	15
AGR 91179	1	61	9	58	.1	15	12	730	3.21	8	5	ND	1	49	.9	2	2	84	.82	.103	9	27	.80	185	.17	4	1.58	.05	.14	1	1	18
AGR 91180	1	55	6	55	.1	16	11	592	3.14	6	5	ND	1	62	.4	2	2	81	.81	.098	9	30	.78	158	.17	4	1.54	.05	.14	1	43	17
AGR 91181	1	63	2	58	.2	18	13	648	3.36	4	5	ND	1	58	.5	2	2	91	.97	.109	8	34	.93	168	.20	4	1.68	.05	.20	1	7	17
AGR 91182	1	97	2	58	.1	8	12	702	3.33	6	5	ND	1	37	.4	2	2	71	.68	.142	9	22	.77	137	.09	7	1.18	.03	.20	1	7	9
AGR 91183	1	40	11	57	.1	3	14	531	3.47	15	5	ND	1	24	.2	2	2	102	.52	.144	10	3	1.06	54	.05	4	1.11	.04	.05	1	1	10
AGR 91184	1	47	8	58	.1	2	14	505	3.35	4	5	ND	1	28	.2	2	2	75	.58	.148	10	4	1.14	260	.04	7	1.17	.04	.10	1	5	17
AGR 91185	1	28	8	62	.1	5	15	592	3.29	14	5	ND	1	29	.4	2	2	74	.72	.147	10	5	1.21	125	.05	5	1.14	.05	.06	1	1	17
AGR 91186	1	97	10	56	.3	4	13	529	3.32	13	5	ND	1	31	.2	2	2	70	.73	.143	9	2	1.11	65	.05	6	1.11	.04	.09	1	3	20
AGR 91187	1	22	5	61	.1	1	15	579	3.38	15	5	ND	1	31	.6	2	2	78	.52	.168	10	2	1.33	204	.05	6	1.15	.04	.05	1	4	15
AGR 91188	1	679	10	64	1.1	4	15	612	3.46	14	5	ND	1	54	.3	2	5	81	.56	.145	10	4	1.38	455	.06	5	1.19	.05	.09	1	4	15
AGR 91189	1	260	5	52	.1	2	11	1081	2.52	3	5	ND	1	85	.5	2	2	45	3.76	.109	8	2	1.18	561	.01	8	.49	.03	.19	1	3	14
AGR 91190	1	95	10	66	.1	6	14	801	3.13	6	5	ND	1	65	.2	2	2	69	2.15	.118	10	3	1.18	459	.01	4	.85	.04	.16	1	2	18
AGR 91191	1	106	2	66	.2	6	13	594	3.32	6	5	ND	1	58	.7	2	2	73	1.12	.119	10	4	1.15	354	.02	3	1.10	.05	.15	1	3	21
AGR 91192	1	36	6	44	.1	2	11	1158	2.77	2	5	ND	1	87	.2	2	2	44	4.08	.111	8	3	1.15	266	.01	6	.40	.02	.25	1	1	19
AGR 91193	1	84	4	63	.3	4	12	754	2.91	4	5	ND	1	75	.3	2	2	50	2.39	.117	9	3	1.04	76	.01	10	.74	.02	.22	1	1	25
AGR 91194	1	54	5	95	.1	3	16	640	3.42	2	5	ND	1	45	.2	2	2	62	.55	.119	9	3	1.18	207	.02	2	1.21	.03	.14	1	2	20
AGR 91195	1	112	4	91	.1	5	14	775	3.57	6	5	ND	1	53	.2	2	5	79	.62	.112	10	3	1.04	51	.02	4	1.04	.04	.08	1	5	26
AGR 91196	1	55	3	65	.2	52	20	681	3.80	3	5	ND	2	138	1.1	2	2	39	1.01	.175	21	22	1.80	113	.28	2	2.53	.67	.22	1	9	23
AGR 91197	2	49	2	62	.1	59	22	558	3.70	4	5	ND	1	151	1.2	2	2	30	1.05	.235	23	16	2.13	25	.37	2	2.02	1.10	.19	1	2	24
AGR 91198	2	55	5	66	.4	59	23	632	3.92	4	5	ND	2	181	.7	2	2	34	1.15	.234	24	17	2.14	44	.45	2	2.22	.95	.18	1	4	28
AGR 91199	2	50	2	64	.2	60	22	710	3.80	7	5	ND	2	161	.9	2	2	30	1.11	.242	25	15	2.09	75	.35	2	1.97	.75	.14	1	1	9
AGR 91200	2	50	5	65	.1	60	23	693	3.85	6	5	ND	1	166	.5	2	2	31	1.17	.231	24	18	2.17	100	.43	2	2.11	.84	.16	1	1	9
AGR 91201	2	51	6	65	.2	56	23	606	3.97	5	5	ND	1	234	1.1	2	2	28	1.11	.219	24	13	2.02	120	.38	2	2.07	.71	.42	1	3	13
AGR 91202	2	48	3	63	.1	72	25	608	3.97	6	5	ND	1	179	.9	2	2	20	1.08	.215	22	15	2.54	49	.35	2	1.84	.82	.39	1	1	18
AGR 91203	1	71	12	67	.1	16	15	593	3.81	6	5	ND	1	58	.4	2	2	92	.80	.116	8	28	1.21	74	.17	2	1.64	.09	.17	1	1	17
STANDARD C/AU-R	19	57	38	131	7.1	72	32	1059	3.90	41	18	7	39	52	18.5	15	21	55	.48	.090	39	58	.87	183	.09	34	1.85	.06	.15	11	490	-

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: cutting AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: FEB 20 1991 DATE REPORT MAILED: Feb 26/91 SIGNED BY ..... D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Au* ppb	WT. lb
AGR 91204	1	71	5	67	.1	21	17	827	3.85	3	5	ND	1	62	.5	2	2	97	.91	.109	9	33	1.18	125	.20	6	1.87	.07	.20	1	5	15
AGR 91205	1	53	2	66	.1	21	15	925	3.43	3	5	ND	1	53	.4	2	8	81	.80	.086	10	32	.84	177	.17	12	1.91	.05	.18	1	3	17
AGR 91206	1	55	6	74	.2	13	19	1359	4.33	4	5	ND	1	36	.9	2	2	89	.76	.115	10	18	1.18	248	.09	10	1.77	.03	.16	1	4	13
AGR 91207	1	42	9	76	.1	6	15	576	3.53	3	5	ND	2	32	.5	2	2	68	.59	.120	9	15	.61	103	.05	9	1.24	.03	.17	1	1290	16
AGR 91208	1	31	6	65	.2	5	12	1041	3.70	5	5	ND	2	28	.3	2	2	59	.50	.125	6	8	.28	159	.03	10	.85	.03	.22	1	7	9
AGR 91209	1	69	9	89	.1	4	16	1780	3.81	4	5	ND	1	27	.4	2	2	62	.52	.141	7	7	.53	254	.02	5	.96	.02	.15	1	5	14
AGR 91210	1	74	8	93	.1	9	16	1533	4.04	4	5	ND	1	30	.2	2	3	87	.55	.136	8	11	1.55	121	.04	9	1.82	.04	.10	1	51	13
AGR 91211	1	71	6	98	.1	6	14	1426	3.53	2	5	ND	1	36	.9	2	2	63	.97	.127	8	8	1.43	134	.03	8	1.75	.02	.17	1	24	13
AGR 91212	1	82	9	75	.1	3	12	1334	2.70	5	5	ND	1	131	.2	2	2	51	8.42	.102	7	7	1.05	109	.02	8	1.26	.01	.16	1	10	15
AGR 91213	1	59	7	84	.1	2	11	1074	3.31	3	5	ND	1	60	.3	2	5	63	2.76	.122	8	5	1.14	67	.04	3	1.25	.03	.10	1	20	20
AGR 91214	1	27	2	73	.1	6	12	1258	3.10	4	5	ND	1	63	.4	2	2	60	3.11	.124	7	3	1.46	57	.05	9	1.41	.03	.09	1	6	23
AGR 91215	1	27	4	75	.1	6	12	1204	3.04	2	5	ND	1	74	.2	2	2	63	4.13	.117	8	8	1.28	86	.04	4	1.34	.03	.12	1	7	20
AGR 91216	2	47	2	66	.1	67	26	686	4.07	2	5	ND	2	177	.7	2	2	24	1.16	.249	26	16	2.48	40	.33	3	2.18	1.08	.19	1	8	26
AGR 91217	3	56	3	69	.1	58	25	667	4.33	2	5	ND	1	170	1.7	2	2	40	1.17	.263	26	22	2.21	49	.54	2	2.43	1.14	.22	1	1	27
AGR 91218	3	50	6	73	.3	73	30	673	4.54	2	5	ND	2	186	1.6	3	2	36	1.03	.239	23	17	2.84	34	.53	3	2.16	1.19	.23	1	120	16
AGR 91219	2	51	3	71	.1	71	26	734	4.42	2	5	ND	1	168	1.4	2	2	40	1.11	.235	23	18	2.63	69	.53	2	2.20	1.02	.19	1	5	13
AGR 91220	2	53	4	71	.2	80	29	666	4.37	3	5	ND	2	168	1.4	2	2	29	1.12	.239	25	20	2.95	63	.45	2	2.07	1.09	.19	1	6	15
AGR 91221	2	53	2	72	.2	74	28	724	4.54	2	7	ND	2	226	.9	2	2	35	1.32	.231	25	22	2.73	225	.51	2	2.24	.65	.21	1	1	13
AGR 91222	2	55	5	70	.1	67	27	709	4.29	2	5	ND	1	201	1.0	2	2	30	1.16	.222	23	20	2.60	101	.42	2	2.03	.58	.25	1	1	18
AGR 91223	1	41	14	76	.1	15	18	963	3.83	5	5	ND	1	63	.4	2	2	63	.70	.138	10	13	.69	146	.11	5	1.24	.12	.21	1	2	10
AGR 91224	1	24	6	90	.1	5	14	1085	3.90	3	8	ND	1	28	.2	2	2	67	.73	.134	9	6	.91	140	.05	6	1.09	.04	.12	1	3	13
AGR 91225	1	22	5	104	.1	6	15	1124	3.54	6	5	ND	1	41	.2	2	2	71	.89	.129	8	6	1.48	79	.05	4	1.32	.05	.07	1	1	13
AGR 91226	1	21	5	64	.1	4	16	1025	3.80	7	6	ND	1	61	.4	3	2	90	.76	.125	8	6	1.39	85	.05	5	1.27	.05	.04	1	110	15
AGR 91227	1	33	3	48	.1	6	13	930	3.05	4	5	ND	1	46	.4	2	3	69	1.82	.119	10	6	1.05	94	.03	5	1.17	.03	.13	1	5	15
AGR 91228	1	28	2	58	.1	4	13	981	2.75	2	5	ND	1	66	.4	2	2	59	3.06	.121	11	6	1.18	191	.02	6	1.26	.03	.15	1	1	12
AGR 91229	1	25	6	57	.1	3	11	1058	2.39	3	5	ND	1	90	.2	2	2	51	4.98	.104	9	3	.78	452	.01	6	.96	.02	.17	1	2	14
AGR 91230	1	20	4	44	.1	3	11	977	2.33	2	5	ND	1	108	.3	2	2	51	5.87	.098	9	3	.70	636	.02	8	.83	.03	.14	1	1	18
AGR 91231	1	17	4	54	.1	6	12	914	2.60	3	5	ND	1	53	.2	2	2	55	2.40	.117	8	4	1.04	205	.03	4	1.07	.03	.09	1	1	19
AGR 91232	1	15	2	52	.1	3	12	897	2.89	2	5	ND	1	74	.2	2	2	64	3.71	.103	9	4	1.00	250	.03	3	1.07	.03	.13	1	6	33
AGR 91233	1	34	4	43	.1	2	12	1210	2.21	3	5	ND	1	123	.2	2	2	45	6.06	.100	8	3	.59	323	.01	4	.68	.02	.18	1	2	25
AGR 91234	1	33	2	44	.1	1	12	1055	2.54	3	8	ND	1	128	.3	2	4	53	6.83	.101	7	5	1.05	179	.01	6	.46	.02	.20	2	2	25
AGR 91235	1	15	3	37	.1	1	10	1048	2.24	3	5	ND	1	107	.3	2	6	46	6.32	.099	8	3	.93	98	.01	2	.61	.02	.16	1	1	22
AGR 91236	1	15	5	40	.1	3	11	886	2.60	4	7	ND	1	110	.2	2	2	61	5.30	.095	8	4	.88	71	.02	6	1.16	.02	.17	1	1	25
STANDARD C/AU-R	19	59	43	132	7.1	70	32	1058	3.99	40	23	7	39	52	18.3	14	20	55	.47	.093	39	59	.87	186	.09	32	1.91	.06	.15	11	510	-

ECO-TECH LABORATORIES LTD.
10041 EAST TRANS CANADA HWY.
KAMLOOPS, B.C. V2C 2J3
PHONE - 604-573-5700
FAX - 604-573-4557

MINEQUEST EXPLORATION ASSOCIATES LTD. ETK 91 - 91

5TH FLOOR, 161 WATER STREET
VANCOUVER, B.C.
V6B 1B5

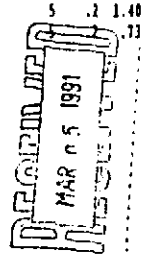
FEBRUARY 28, 1991

VALUES IN PPM UNLESS OTHERWISE REPORTED

19 ROCK SAMPLES RECEIVED FEBRUARY 20, 1991

ET#	DESCRIPTION	AU(ppb)	AG	AL(%)	AS	B	BA	BI	CA(%)	CD	CO	CR	CU	FE(%)	K(%)	LA	MG(%)	MN	MO	NA(%)	NI	P	PB	SB	SN	SR	TI(%)	U	V	W	Y	ZN
91 - 1	AGR 91 901	5	.2	.65	5	4	400	<5	.53	<1	6	21	26	.93	.45	10	.32	181	4	.09	2	300	10	<5	<20	61	.06	<10	22	<10	4	66
91 - 2	AGR 91 902	10	.2	1.15	15	8	270	<5	1.68	<1	14	35	44	2.67	.21	10	.76	513	3	.06	9	900	30	<5	<20	64	.11	<10	76	<10	7	57
91 - 3	AGR 91 903	5	.2	2.63	15	30	40	<5	4.00	<1	21	12	70	6.03	.03	10	1.36	977	<1	.03	2	1770	16	<5	<20	55	.17	<10	231	<10	18	84
91 - 4	AGR 91 904	5	.2	2.09	35	14	20	<5	3.46	<1	17	18	46	3.12	.02	20	1.43	2092	<1	.05	2	1740	10	<5	<20	52	.17	<10	161	<10	18	73
91 - 5	AGR 91 905	5	.2	2.14	30	22	35	<5	3.59	<1	15	23	34	3.38	.02	10	1.15	967	<1	.03	1	1640	10	10	<20	98	.14	<10	146	<10	17	72
91 - 6	AGR 91 906	5	.2	2.55	25	10	80	<5	3.05	<1	21	22	66	3.76	.03	10	1.68	1036	<1	.03	1	2220	12	<5	<20	72	.15	<10	168	<10	18	124
91 - 7	AGR 91 907	5	.2	2.12	20	28	50	<5	3.56	<1	20	25	71	3.85	.03	10	1.26	968	5	.03	3	2130	10	5	<20	88	.16	<10	162	<10	17	101
91 - 8	AGR 91 908	5	.4	1.28	5	8	40	<5	5.67	<1	15	7	94	3.23	.13	10	.98	1617	3	.03	1	1750	8	5	<20	226	.06	<10	107	<10	16	82
91 - 9	AGR 91 909	5	.2	.77	5	8	25	<5	3.56	<1	10	7	129	3.28	.19	10	.52	746	3	.03	<1	1720	6	5	<20	84	.02	<10	86	<10	13	66
91 -10	AGR 91 910	5	.4	1.69	10	10	15	<5	3.62	<1	15	10	66	3.46	.07	10	1.19	1207	3	.02	1	1470	6	10	<20	94	.11	<10	138	<10	13	76
91 -11	AGR 91 911	5	.2	2.99	5	2	20	<5	1.62	<1	34	32	51	4.48	.21	30	2.59	745	5	1.86	57	3420	4	10	<20	101	.23	<10	47	<10	12	61
91 -12	AGR 91 912	5	.2	1.27	10	4	35	<5	.68	<1	18	14	36	4.23	.04	10	1.15	567	2	.04	1	1990	10	10	<20	24	.06	<10	153	<10	15	56
91 -13	AGR 91 913	5	.2	1.46	20	6	170	<5	.68	<1	21	6	19	4.36	.03	10	1.56	693	1	.03	2	2150	8	10	<20	37	.05	<10	123	<10	16	63
91 -14	AGR 91 914	5	.2	.05	10	2	50	<5	2.44	<1	12	4	61	3.22	.15	30	1.20	823	1	.02	2	1500	4	<5	<20	65	.01	<10	78	<10	11	42
91 -15	AGR 91 915	5	.2	2.63	20	<2	100	<5	1.74	<1	34	30	46	6.26	.53	20	2.53	700	5	.58	53	2700	6	5	<20	223	.30	<10	47	<10	12	51
91 -16	AGR 91 916	5	.2	1.45	5	<2	50	<5	2.68	<1	14	14	52	3.93	.08	10	1.30	1166	2	.04	2	1500	8	5	<20	58	.06	<10	105	<10	13	62
91 -17	AGR 91 917	5	.2	2.58	10	<2	60	<5	1.64	<1	40	35	41	6.23	.15	20	2.80	776	6	.06	64	2620	2	5	<20	165	.42	<10	65	<10	10	48
91 -18	AGR 91 918	5	.2	1.40	10	2	55	<5	1.84	<1	15	12	18	3.87	.02	10	1.37	1016	2	.04	2	1600	6	5	<20	59	.04	<10	123	<10	10	39
91 -19	AGR 91 919			.73	10	<2	325	<5	5.34	<1	12	15	28	3.16	.13	10	.52	1555	2	.02	2	1270	8	5	<20	102	.03	<10	100	<10	10	19

NOTE: < = LESS THAN



ECO-TECH LABORATORIES LTD.
CLIFTON S. AYERS
LABORATORY MANAGER

SC91/MINEQUEST

APPENDIX IV

Drill Logs

MINEQUEST EXPLORATION ASSOCIATES LTD.

HOLE No. AGR 91-01

PROPERTY: ZIG

DRILL LOG – CORE

CLAIM BLOCK CODE: AGR
NTS: 92H/15E **UTM:**
CLAIM NAME: ZIG 6
LOCATION – GRID NAME:
GRID N: 5535 N **GRID E:** 3715 E
SECTION: **ELEV:**
AZIM: **LENGTH:** 325 ft
DIP: -90 **CASING LEFT?:** No
CORE SIZE:
CORE STORAGE:

DRILLING CO.: Northspan Explorations Ltd
STARTED: 4 Feb 1991
COMPLETED: 5 Feb 1991
PURPOSE:
CORE RECOVERY:
LOGGED BY: A.W. Gourlay
DATE LOGGED: 5 FEB 1991
ASSAYED BY: Acme Labs, Eco-Tech Labs
LAB REPORT NOS.: 91-0377 ~~&~~ K11-91

SURVEY

DEPTH	AZIM.	DIP	DEPTH	AZIM.	DIP

TEXTURE, ALTER'N, MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL(m) FROM	TO	REC'Y	EST. GRADE	SAM. No.	ASSAYS Au(ppb)	Cu(ppm)	As(ppm)		
0												
		0 – 135 Overburden										
10		- up to 30% clay										
		- sanded green andesitic tuff fragments ... Ep veins										
		- 50% of fragments:										
		- 40% ... tuffs										
20		- ≤ 10% intrusive fragments.										
		- 30 - 50% sand overall										
30												
40												
50												
60												

MINEQUEST EXPLORATION ASSOCIATES LTD. DRILL LOG – CORE | HOLE No. AGS 91-01 | PAGE No. 2

TEXTURE, ALTER'N, MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL(m) FROM	INTERVAL(m) TO	REC'Y	EST. GRADE	SAM. No.	ASSAYS Au(ppb)	Ag(ppm)	As(ppm)
60										
70										
80										
90										
100										
110										
120										
130										
140		[illegible]								
		[illegible]	140	150			91101	3	24	2
		[illegible]								
150										

MINEQUEST EXPLORATION ASSOCIATES LTD. DRILL LOG - CORE | HOLE No. AGR 91-01 | PAGE No. 3

TEXTURE, ALTER'N, MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL(m) FROM	TO	REC'Y	EST. GRADE	SAM. No.	ASSAYS Au(ppb)	Cu(ppm)	As(ppm)
150										
		Grey MNZT, sos 140-150, subhedral white Fs phenos ≤1mm size								
		-v weak chlorite alteration of (Hb) BI.	150	160			91102	4	35	6
		-1-2% pinkish fragments → K-spar alt?								
160		-some clay balls, OB sloughing into hole								
		@ 140 Pull? to ~106'								
		-75% clay balls, v. similar to MNZT	160	170			91103	2	25	2
		-chip sos 140-150, tr BI unaltered.								
170		MNZT, sos 140-150								
		-anhedral clear QZ ~30%, up to 2mm Ø.								
		-≤5% (Hb) BI, 5% each. V. weak ch alt.	170	180			91104	2	23	2
		-Fs unaltered, NO visible SUS.	170	180			91901	5	26	5
180		SOS 140-150								
		≤5% grey aphanitic QZ chips, first noticeable QV(?) content								
		v. rare py assoc. QZ chips	180	190			91105	2	22	2
190		sos 140-150, vfg to fg MNZT, grey								
		-tr dsm PY, vfg, anhedral (CP?).								
			190	200			91106	1	25	2
200		sos 140-150, MNZT								
		- <1% dsm PY + tr CP, locally SUS tarnished bluish.								
		- subhedral to anhedral QZ, subhedral to euhedral Fs, euhedral to	200	210			91107	1	24	2
		subhedral BI (could this be felsic tuff? - Not likely in Nicola).								
210		sos 140-150, MNZT								
		- <1% dsm PY + tr. CP, v.f.g.								
			210	220			91108	2	26	2
220		-sos 140-150 MNZT								
		- <1% dsm PY + tr. PY, v.f.g.								
		225 End	220	225			91109	2	40	2
		POOR SAMPLE, 25% OB clasts.	220	225			91902	10	44	15
230		Hole sloughed and tightened.								
240										

MINEQUEST EXPLORATION ASSOCIATES LTD.

HOLE No. AGR 91-04

PROPERTY: ZIG

DRILL LOG – CORE

CLAIM BLOCK CODE:	AGR
NTS: 92H15E	UTM:
CLAIM NAME:	ZUL 2
LOCATION – GRID NAME:	
GRID N: 3175N	GRID E: 5975E
SECTION:	ELEV:
AZIM:	LENGTH: 220'
DIP: -90°	CASING LEFT?:
CORE SIZE:	
CORE STORAGE:	

SURVEY

DEPTH	AZIM.	DIP	DEPTH	AZIM.	DIP

DRILLING CO.:	NORTHSPAN EXPLORATIONS LTD
STARTED:	8 FEB 1991
COMPLETED:	9 FEB 1991
PURPOSE:	Test East side of TARGET VII
CORE RECOVERY:	
LOGGED BY:	A.W GOURLAY
DATE LOGGED:	8,9 FEB 1991
ASSAYED BY:	ACME LAB, ECO-TECH LABS
LAB REPORT NOS.:	91-0377, ETK 91-91

TEXTURE, ALTER'N, MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL(m) FROM	TO	REC'Y	EST. GRADE	SAM. No.	ASSAYS Au(ppb)	Cu(ppm)	As(ppm)			
0													
		0'-18' OVERBURDEN											
		- drill pad fill											
10													
20		Maroon Bx (or Lahar?) - v.f.g. to aphanitic											
		≤5% felsic chips, v.f.g.											
		<1% dsm SUS, steel grey CC?	20	30			91110	5	50	13			
30		Maroon Bx (?) [from UTC on power line]											
		SUS 20-30											
		≤1% dsm CC(?)	30	40			91111	4	85	21			
		- 5% of chips have Fe stained frx, vnlts and thin bleached zones. All PY oxidized											
40	↳	Maroon Bx(?) SUS 20-30, ≤5% green f.g. to v.f.g. chips											
		- 1-2% dsm SUS, CC(?); steel grey, anhedral, and ½ cubic oxidized PY cubes ≤0.5mm ɸ tr native Cu? CP? v.v.f.g.!!	40	50			91112	1	60	22			
50		SUS 20-30, Maroon Bx (?) 30% Brown chips 1% green intrusive (MONZ?) chips											
		· ≤2% dsm PY, CC?	50	60			91113	19	87	12			
			50	60			91903	5	70	15			
60		v. large sample:											

MINEQUEST EXPLORATION ASSOCIATES LTD. DRILL LOG – CORE | HOLE No. AGR 91-04 | PAGE No. 2

TEXTURE, ALTER'N, MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL(m)		REC'Y	EST. GRADE	SAM. No.	ASSAYS					
60			FROM	TO				Au(ppb)	Cu(ppm)	As(ppm)			
		Maroon Bx, sus 20-30, 10% ogy chips PPX., <5% m.g MNZT											
		frags w 1-2% sus.	60	70			91114	3	55	11			
		-≤1% dsm sus PY (anhedral) + CC?, some frx w PY coatings											
70		(grey v.f.g tuff(?) ≤1% Maroon chips. Grey tuff massive,											
		2% dsm sus PY > CC, frx w PY coatings, v. rare QZ veinlets											
			70	80			91115	1	54	26			
80		60% Maroon chips, 35% grey chips, ≤5% grey to green intrusive											
		chips, ≤2% dsm sus, PY > CC, intrusive chips (fragments?)											
		up to 5% v.f.g dsm sus. PY ≥ CC?	80	90			91116	3	53	16			
90		sus 80-90 intrusive = f.g to m.g MNZT, unaltered, tr											
		chloritization of mafics											
		still ≤2% dsm sus, PY >> CC, v.f.g to vvfg.	90	100			91117	1	59	14			
100		80% Maroon tuff, 20% grey-green tuff, sus 80-90											
		1-2% dsm vvfg sus, PY >> CC(?). sulphide content is											
		remarkably consistent so far.	100	110			91118	1	75	16			
110		80% Maroon chips, 20% grey-green chips (tuff?) sus 80-90											
		≤2% dsm vvfg sus PY >> CC, chips are NON magnetic.											
		[CC = steel grey/blue sus?], tr EP on frx.	110	120			91119	7	61	21			
120		100% Maroon chips sus 80-90 Tuff? (or v.f.g. DRT??)											
		2-3% dsm sus, PY > CC, still anhedral steel-blue sus, non-											
		magnetic, drilling harder, lg sample.	120	130			91120	2	45	26			
		-anhedral to subhedral QZ <0.5mm x, tr EP on frx.	120	130			91904	5	46	35			
130		50% maroon/50% pale green chips, v.f.g tuff, subhedral grey											
		QZ <0.5mm x											
		-≤3% dsm v.f.g to vvfg sus, PY >> CC(?) some PY tarnished	130	140			91121	3	41	22			
		-mod. chloritization of mafics (Hb?).											
140		75% pale green/25% maroon chips, v.f.g. tuff, subhedral											
		to euhedral Fs phenos <0.5mm and now visible some Hb laths											
		weathered red	140	150			91122	2	46	24			
		-≤2% v.f.g to vvfg sus, PY >> CC(?). v. rare QZ chips,											
150		tr QZ? chips											

MINEQUEST EXPLORATION ASSOCIATES LTD. DRILL LOG - CORE | HOLE No. AGR 91-07 | PAGE No. 3

TEXTURE, ALTER'N, MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL(m) FROM	TO	REC'Y	EST. GRADE	SAM. No.	ASSAYS Au(ppb)	Cu(ppm)	As(ppm)
150										
		95% green v.f.g. tuff, 2-4% Epidote chips, ≤1% calcite chips,								
		some skels => open space filling?	150	160			91123	1	51	47
		≤3% dum sus, as before, ?/ass EP+Cc stingers								
160		sas 150-160								
			160	170			91124	1	48	31
170		80% green v.f.g. tuff chips, 15% maroon chips, all else sas								
		150-160								
			170	180			91125	3	39	22
			170	180			91905	5	34	30
180		50% maroon chips 45% green chips ≤5% EP chips; EP								
		content increasing gradually with depth								
		sus as before harder drilling 180 on.	180	190			91126	3	67	10
190		sas 180-190, now noticeable bleaching (silic Kaolin?) as selvage to EP+QZ vnlts, up to 4mm wide, v. hard drilling								
		sus as before, v. rare ?/ass EP vnlts	190	200			91127	1	29	15
		-still v.f.g. tuff								
200		sas 180-190, < 1% iron stained chips, still v.f.g tuff +								
		v.f.g sus as before, large portion is tarnished PY but there is								
		still the steel blue sus -> cc?	200	210			91128	1	34	12
210		sas 180-190, ≤1% QZ+Ct chips. sus as before								
			210	220			91129	1	37	17
220										
		End 226								
			220	230						
230										
			230	240						
240										

MINEQUEST EXPLORATION ASSOCIATES LTD.

DRILL LOG – CORE

HOLE No. AGR 91-05

PROPERTY: ZIG

CLAIM BLOCK CODE: AGR

NTS: 92H15E **UTM:**

CLAIM NAME: ZUL 2

LOCATION – GRID NAME:

GRID N: 3165N **GRID E:** 5700E

SECTION: **ELEV:**

AZIM: **LENGTH:** 200'

DIP: -90° **CASING LEFT?:**

CORE SIZE:

CORE STORAGE:

DRILLING CO.: NORTHSPAN EXPLORATIONS LTD

STARTED: 9 FEB 1991

COMPLETED: 9 FEB 1991

PURPOSE: TEST MIDDLE OF TARGET [illegible]

CORE RECOVERY:

LOGGED BY: A.W. Gourlay

DATE LOGGED: 9 FEB 1991

ASSAYED BY: ACME LABS, ECO-TECH LABS

LAB REPORT NOS.: 91-0347, ETK 91-91

SURVEY

DEPTH	AZIM.	DIP	DEPTH	AZIM.	DIP

TEXTURE, ALTER'N, MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL(m) FROM	TO	REC'Y	EST. GRADE	SAM. No.	Au(ppb)	Cu(ppm)	As(ppm)			
0													
		0'-13' overburden											
10													
		13-20, sample not collected, ~ 50% rounded [illegible] fragments											
20		Mariposa [illegible], <20% subrounded white - pale green [illegible] ≤5 mm ∅, all chips oxidized	20	30			91130	2	64	30			
30		[illegible] 30-40, badly broken ground ⇒ large chips [illegible] pale green: [illegible] ≤1 mm ∅ [illegible] subrounded, distinct [illegible] [illegible]; ≤3% diss [illegible] (YY77CC (sand-[illegible])) [illegible] chips oxidized	30	40			91131	3	74	55			
40		[illegible] 40-42, badly broken ground ⇒ large chips. - ≤1% [illegible] [illegible] veins; [illegible] as before	40	50			91132	1	78	76			
50		Mariposa [illegible]: subrounded [illegible] frags ≤10 mm ∅ in [illegible] matrix (as 20-30). [illegible] frags contained [illegible] subrounded [illegible] (≤2%) ≤1 mm ∅ ≤3% diss [illegible] (YY77CC); else [illegible] matrix. better drilling but still some [illegible]	50	60			91133	5	60	20			
60													

MINEQUEST EXPLORATION ASSOCIATES LTD. DRILL LOG - CORE

HOLE No. ACR 91-05 PAGE No. 2

TEXTURE, ALTER'N, MINERALIZATION, ETC. (m)	GRAPH GEOL.	DESCRIPTION	INTERVAL(m) FROM	TO	REC'Y	EST. GRADE	SAM. No.	ASSAYS Au(ppb)	Cu(ppm)	As(ppm)			
60		sus 50-60, mixed chips, >50% maroon bx (matrix?), [illegible] MNZT as before, v rare [illegible], rare EP stringers, sus as before	60	70			91134	3	134	15			
70		v.f.g. tuff, all small chips to fragments [illegible] maroon and grey chips, ≤5% [illegible] EP in fx, ≤3% diss PY + [illegible] v rare iron stained chips	70	80			91135	5	22	9			
80		30% maroon chips, 30% light green chips all v.f.g., 5% oxidized PY in fx, sus ≤3% diss v.f.g. PY 77 cc(?) in vnlt, <1% MNZT chips	80	90			91136	1	69	14			
			80	90			91966	5	66	25			
90		sus 80-90 as all sus PY? all v.fg [illegible], most appear to be [illegible] PY but too small to positively identify, rare [illegible] vnlts, <1% of chips iron stained	90	100			91137	5	77	23			
100		50% maroon chips, 50% grey chips, rare maroon chips w/ [illegible] grey MNZT (cooking Bx or chert?), sus as before, diss thru both types chips, rare Ca vnlts	100	110			91138	4	88	11			
110		85% grey chips, 20% maroon chips, as before, Sus as before	110	120			91139	3	69	14			
120		sus 110-120, still contains traces of steel blue sus; CC? <1% rare Ca cnfos, v rare PY on fx.	120	130			91140	4	74	11			
130		sus 110-120, 5% iron stained chips, assoc oxidized PY sus as before, rare Ca chips	130	140			91141	2	76	16			
			130	140			91907	5	71	20			
140		90% grey chips, 10% maroon chips; v.fg tuff, as before sus as before, rare EP in fx.	140	150			91142	1	68	21			
150													

MINEQUEST EXPLORATION ASSOCIATES LTD. DRILL LOG - CORE

HOLE No. AGR 91-05 | PAGE No. 3

TEXTURE, ALTER'N, MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL(m) FROM	TO	REC'Y	EST. GRADE	SAM. No.	ASSAYS Au(ppb)	Cu(ppm)	As(ppm)			
150													
		ses 140-150											
			150	160			91143	2	75	14			
160		60% mafic [illegible], 20% [illegible], 30% [illegible] [illegible] [illegible] [illegible] [illegible] 5% [illegible] [illegible] PY	160	170			91144	2	97	12			
170		See 160-170, [illegible] [illegible] 'fresh' PY	170	180			91145	1	94	14			
180		See 160-170, [illegible] [illegible] 'fresh' PY	180	190			91146	5	62	28			
190		See 160-170, [illegible]	190	200			91147	3	56	24			
200		200 EOH											
210													
220													
230													
240													

PROPERTY: ZIG

MINEQUEST EXPLORATION ASSOCIATES LTD.

HOLE No. AGR 91-06

DRILL LOG – CORE

CLAIM BLOCK CODE: AGR
NTS: 92H15E **UTM:**
CLAIM NAME: ZOL 2
LOCATION – GRID NAME:
GRID N: 3230N **GRID E:** 5793E
SECTION: **ELEV:**
AZIM: **LENGTH:** 230'
DIP: -90° **CASING LEFT?:** NO
CORE SIZE:
CORE STORAGE:

SURVEY

DEPTH	AZIM.	DIP	DEPTH	AZIM.	DIP

DRILLING CO.: NORTHERN EXPLORATIONS LTD
STARTED: 10 FEB 1991
COMPLETED: 10 FEB 1991
PURPOSE: TEST W. side of TARGET III
CORE RECOVERY:
LOGGED BY: A.W. GOURLAY
DATE LOGGED: 10 FEB 1991
ASSAYED BY: ACME LABS LTD, ECO-TECH LAB
LAB REPORT NOS.: 91-0377, ETK 91-91

TEXTURE, ALTER'N, MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL(m) FROM	TO	REC'Y	EST. GRADE	SAM. No.	Au(ppb)	Cu(ppm)	As(ppm)			
		0-26' OVERBURDEN											
10													
20													
30		F.g to v.f.g DRT(?) ≤20% Mafics, alt to chl indistinct groundmass < 0.5mm & ≤1% dism sus, mostly PY, tarnished PY. chip dk red colour.	30	40			91148	7	53	5			
40		[illegible] DRT(?) chips, 40% v.f.g MAZT chips = all part of Bx? or later. DRT has Hb laths 2mm length, no chert. MAZT [illegible]? 2-3% dism v.f.g PY + steel blue sus	40	50			91149	12	71	8			
50		V. [illegible] sus 30-40. <5% MAZT chips. Note this DRT(?) has much higher mafic content that mafic tuff in 91-05, or 1-2% DISM v.f.g PY. + blue-steel sus.	50	60			91150	3	52	4			
60													

MINEQUEST EXPLORATION ASSOCIATES LTD. DRILL LOG - CORE

HOLE No. ACS 91-06 PAGE No. 2

TEXTURE, ALTER'N, MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL(m) FROM	TO	REC'Y	EST. GRADE	SAM. No.	ASSAYS Au(ppb)	Cu(ppm)	?(ppm)			
60		Dk red DRT(?) or tuff, sus 30-40											
		≤1% dsm SUS, as before, all textures indistinct, chatter marks	60	70			91151	5	52	6			
70		sus 60-70,											
			70	80			91152	4	55	8			
80		80% dk red chips, 20% green chips (tuff?), 5% ca/carb weak to moderate iron stained. SUS as before. v. rare QV units											
			80	90			91153	3	80	7			
			80	90			91[illegible]	5	94	5			
90		sus 60-70, all dk red chips (DRT?), v. rare indistinct subhedral to anhedral grey Fs phenos ≤1 mm Ø sus as before	90	100			91154	8	42	6			
100		80% dk red (DRT?) chips, 20% light grey MDRT chips, same as 80-90, SUS as before. magnetics (H?) mod to well o/t to cn in DRT	100	110			91155	8	80	3			
110		90% dk red (DRT?) chips, 10% light grey chips, ≤1% dsm v.fg sus, all PY?											
			110	120			91156	5	115	6			
120		Distinct colour change to pinky-red chips 80%, 20% dk red <1% dsm SUS, textures are even more indistinct than before											
			120	130			91157	4	127	4			
							91[illegible]	5	129	5			
130		90% dk red chips 10% pinky-red chips. rare 'fresh' PY on frx assoc. dk green EP(?), still some steel blue v.f.g. sus as well (As? cobalt?)	130	140			91158	3	44	5			
140		Back to 100% dk red chips (DRT? or tuff?) textures still indistinct, same as 60-70, ≤1% sus, dsm and assoc dk green (EP?) on frx.	140	150			91159	4	49	8			
150													

MINEQUEST EXPLORATION ASSOCIATES LTD. DRILL LOG – CORE

HOLE No. A6R 91-06 PAGE No. 3

TEXTURE, ALTER'N, MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL (m) FROM	TO	REC'Y	EST. GRADE	SAM. No.	ASSAYS Au (ppb)	Cu (ppm)	As (ppm)
150		sas 140-150, 1% of chips QZ+Ca, PY assoc mag.Mg QZ+Ca Vnlets. Chlorite alteration of Hb decreasing. Textures in chips becoming distinct, now more like a tuff (ie alignment of [illegible]).	150	160			91160	3	57	7
160		sas 140-150, Ch alt of Hb now v. weak., distinct euhedral Fs phenos, < 1mm, 40% [illegible] 20% Hb, 40% QZ. 1-2% dsm sus, PY + tr reddish sus. ≤1% of chip QZ+Ca, rare hairline QV chips are now magnetic — magnetite.	160	170			91161	3	55	5
170		sas 160-170, weakly altered slightly magnetic dk red DRT? note, the chips have been getting increasingly magnetic with depth. weak chlorite alt of Hb.	170	180			91162	3	42	4
180		100% dk red chips, weakly alt DRT. ≤1% DSM sus, PY, MG. v weak ch alt of Hb.	180	190			91163	5	63	7
190		sas 180-190, ≤1% calcite chips, tr PY assoc Ca vnlts v. rare hairline QV. Sus as before v. rare CP?					91164	3	85	6
			190	200			91910	5	66	10
200		sas 190-200, inc in PY, ≤2% DSM, + tr CP, rare QZ vnlts/ hairline fx, PY as coatings on fx? w assoc CP?	200	210			91165	5	266	8
210		sas 190-200, 2-3% dsm sus, PY + tarnished PY, tr CP? all dk red chips → DRT?	210	220			91166	3	3	8
220		sas 190-200, ≤1% EP as veins and on fx over last 40' sulphides as before.	220	230			91	4	30	7
230		230 EOH								
240										

MINEQUEST EXPLORATION ASSOCIATES LTD.

PROPERTY: 216 | HOLE No. AGR 91-07

DRILL LOG – CORE

CLAIM BLOCK CODE: AGR
NTS: 92H 15 E UTM:
CLAIM NAME: 20L 2
LOCATION – GRID NAME:
GRID N: 4395N GRID E: 6580E
SECTION: ELEV:
AZIM: LENGTH: 300'
DIP: -90 CASING LEFT?: No
CORE SIZE:
CORE STORAGE:

SURVEY

DEPTH	AZIM.	DIP	DEPTH	AZIM.	DIP

DRILLING CO.: NORTHERN EXPLORATIONS LTD.
STARTED: 15 FEB 1991
COMPLETED: 16 FEB 1991
PURPOSE:
CORE RECOVERY:
LOGGED BY: A.W. OUDKLAY
DATE LOGGED: 15,16 FEB 1991
ASSAYED BY: ACME LABS, ECO-TECH LABS
LAB REPORT NOS.: 91-0435, ETK 91-91

TEXTURE, ALTER'N, MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL(m) FROM	INTERVAL(m) TO	REC'Y	EST. GRADE	SAM. No.	ASSAYS Au(ppb)	Cu(ppm)	Ag(ppm)
0										
		0-13 Overburden								
10										
20		v.f.g. dk green tuff, almost aphanitic, no textures visible tr Py as subhedral cubes								
			20	30			91168	1	46	2
30		v.f.g. to aphanitic dk green to black tuff? No textures visible, No sus chip v. slightly magnetic								
		-1% 1mm stained chips	30	40			91169	6	44	4
40		sus 30-40, 1% mm stained chips throughout, v. slightly magnetic.								
			40	50			91170	2	45	6
50		sus 30-40, slightly coarser grain size, subhedral black groundmass, tr Py tr Py? <1% of equigranular stained								
		is this basalt?; very jagged chips	50	60			91171	2	51	3
		vesicular? Still v. slightly magnetic	50	60			91911	5	51	5
60		v. soft drilling speed								

MINEQUEST EXPLORATION ASSOCIATES LTD. DRILL LOG - CORE HOLE No. AGR 91-07 PAGE No. 2

TEXTURE, ALTER'N, MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL (m) FROM	INTERVAL (m) TO	REC'Y	EST. GRADE	SAM. No.	ASSAYS Au (ppb)	Cu (ppm)	As (ppm)			
60		v.f.g to v.v.f.g black, featureless chips, v. slightly magnetic, no visible sus, tr translucent green brown [illegible]?, open-space filling?, chips are clay covered.	60	70			91172	3	54	3			
70		sos 60-70, now <1% dsm vfg PY., still v weakly magnetic, soft drilling continues	70	80			91173	4	54	2			
80		sos 60-70, even under 30x magnification only vague textures visible, tr PY: vvfg dsm.	80	90			91174	3	53	2			
90		92-107 sandy red/brown Fault Zone? v. few chips, mostly as above w ≤5% QZ chips, lots of clay balls	90	100			91175	2	52	2			
100		Fault Zone continues, sos 92-100, mixed chips, rounded to subrounded pebbles ≤2cm ø, green v.f.g tuff, f.g MNZT, QZ, iron stained chips. lg sample due to sluffing in hole.	100	110			91176	9	63	8			
110		Fault Zone continues, inc % of chips, sos 100-110.	110	120			91177	5	63	10			
120		Fault Zone continues, inc % chips, sos 100-110	120	130			91178	8	65	7			
130		Fault Zone continues, inc % of chips, sos 100-110 is this an unconformity beneath basalt?	130	140			91179	1	61	8			
140		Fault Zone continues, still more chips, 60% green mg [illegible], 30% MNZT, mg, 10% mixed QZ, siltstone, chips commonly rounded, cuttings still rusty brown.	140	150			91180	43	55	6			
150													

MINEQUEST EXPLORATION ASSOCIATES LTD.		DRILL LOG - CORE					HOLE No. AGR 91-07	PAGE No. 3		
TEXTURE, ALTER'N, MINERALIZATION, ETC.	GRAPH GEOL	DESCRIPTION	INTERVAL(m) FROM	TO	REC'Y	EST. GRADE	SAM. No.	ASSAYS Au(ppb)	Cu(ppm)	As(ppm)
150		Fault Zone Continues, now 80% green Fg tuff chips, 15% [illegible] MVZT, 5% [illegible] as before	150	160			91181	7	63	4
160		Fault Zone Continues to 167', as before at 167' maroon cuttings, purple or hematite stained, v.fg [illegible] tuff or MVZT?, 1-2% dsm SUS, vvfg PY+?	160	170			91182	7	97	6
170		bedrock at 167' lt purple tuff(?) SUS 167-170, is this a bleeded tuff? rather than v.fg MVZT, textures are indistinct, 1-2% dsm vvfg SUS, PY, tr Native Cu, Bn?, textures are v.fg to vvfg, 75% of PY tarnished	170	180			91183	1	40	15
			170	180			91912	5	36	10
180		lt purple tuff, SUS 170-180, hematite stain? ≤1% QZ chips, white or grey, tr PY assoc QZ, SUS as before ≤2% dsm vvfg PY, tr Native Cu,	180	190			91184	5	47	4
190		lt purple tuff(?) SUS 170-180, inc greenish tinge to chips. < 1% QZ ± Ca chips v rare iron stain on QZ, SUS as before; tr EP on rare greenish chips	190	200			91185	1	28	14
200		lt. purple tuff(?) SUS 170-180, tr Ma ± AZ? stained chips < 1% QZ ± Ca chips, SUS as above.	200	210			91186	3	97	13
210		lt. purple tuff(?) SUS 170-180, v rare Ma stained chips, v. rare QZ ± Ca chips, v weakly iron stained SUS as above	210	220			91187	4	22	15
			210	220			91913	5	10	20
220		lt. purple tuff(?) SUS 170-180 rare QZ ± Ca chips c Bn, Ma, v. rare AZ, ≤2% dsm SUS as before.	220	230			91188	4	679	14
230		lt purple tuff to 234', rock change to pinkish tuff, similar to lt purple tuff but 2-3% QZ chips, tr Ma, ≤5% white QZ hairline vnlts, 1-2% dsm vfg SUS, PY ± Native Cu, PY commonly tarnished	230	240			91189	1	260	3
240										

MINEQUEST EXPLORATION ASSOCIATES LTD. DRILL LOG - CORE

HOLE No. AGR 91-07 PAGE No. 4.

TEXTURE, ALTER'N, MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL(m) FROM	TO	REC'Y	EST. GRADE	SAM. No.	ASSAYS Au (ppb)	Cu (ppm)	As (ppm)
240		pinkish tuff, sus 230-240, v. rare Mc in QZ chips, ≤1% QZ chips, 2-3% iron stained chips, sus as before, 1-2% hairline QV.	240	250			91190	2	45	6
250		pinkish red tuff, sus 240-250, ≤1% QZ chips ICe, 2-3% iron stained chips, ≤2% dim vf g SUS, rare hairline QV.	250	260			91191	3	106	6
260		Colour change to grey/green tuff, slight inc in groundmass size to 1mm, sub., indistinct to distinct white to lt green FS phenos. 1-2% dim v. fg sus; PY, 2-3% white or grey QZ chips, ≤1% iron stained chips, <1% hairline grey QV	260	270			91192	1	36	2
270		Interbedded maroon & dk green tuffs, same litho. as before, abund. cut clay in this run, sus as before, numerous iron stained frx soft drilling chips easily scratched: clay alt.	270	280			91193	1	84	4
			270	280			91914	5	61	10
280		90% maroon tuff, 10% green tuff, as before ≤1% QZ chips, 1-2% dim sus, vvf g PY, mostly tarnished, + steel grey sus, chips easily scratched	280	290			91194	2	54	2
290		sus 280-290, + QZ veinlet w/								
			290	300			91195	5	112	6
300		300 EOH								

MINEQUEST EXPLORATION ASSOCIATES LTD.

HOLE No. AGR 91-08

PROPERTY: ZIG

DRILL LOG – CORE

CLAIM BLOCK CODE: AGR

NTS: 92H/15 UTM:

CLAIM NAME: ZIG 1

LOCATION – GRID NAME:

GRID N: 4396N GRID E: 6500E

SECTION: ELEV:

AZIM: LENGTH: 330'

DIP: -90 CASING LEFT?: No

CORE SIZE:

CORE STORAGE:

SURVEY

DEPTH	AZIM.	DIP	DEPTH	AZIM.	DIP

DRILLING CO.: NORTHSPAN EXPLORATIONS LTD

STARTED: 16 FEB 1991

COMPLETED: 16 FEB 1991

PURPOSE:

CORE RECOVERY:

LOGGED BY: A.W. Gourley

DATE LOGGED: 16 Feb 1991

ASSAYED BY: ACME LABS LTD., ECO-TECH LABS

LAB REPORT NOS.: 91-0435, ETK 91-91

TEXTURE, ALTER'N, MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL(m) FROM	INTERVAL(m) TO	REC'Y	EST. GRADE	SAM. No.	ASSAYS Au(ppb)	Ag(ppm)	As(ppm)
0										
		0-18 Overburden								
10										
		18-30 broken ground, poor sample recovery								
20										
30		Black vesicular basalt, same as type 91-03, massive, fine grained, no visible sulfs, non-magnetic								
			30	40			91196	9	55	3
40		Black vesicular basalt, 5% 30-40								
			40	50			91197	2	49	4
50		Black vesicular basalt, 5% 30-40 slightly magnetic, ground condition highly variable from v. soft to moderately hard								
			50	60			91198	4	55	4
60										

MINEQUEST EXPLORATION ASSOCIATES LTD. DRILL LOG – CORE | HOLE No. ACR 91-08 | PAGE No. 2

TEXTURE, ALTER'N, MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL(m) FROM	INTERVAL(m) TO	REC'Y	EST. GRADE	SAM. No.	ASSAYS Au(ppb)	Cu(ppm)	Ag(ppm)
60		Black vesicular basalt, sos 30-40, slightly magnetic								
			60	70			91149	1	52	7
70		Black Vesicular basalt; sos 30-40, slightly magnetic								
			70	80			91200	1	55	6
80		Black vesicular basalt, sos 30-40, v. slightly magnetic 2-3% qtz veins, slightly iron stained								
			80	90			91201	3	51	5
			80	90			91915	5	46	10
90		Black vesicular basalt, sos 30-40, v. slightly magnetic								
			90	100			91202	1	48	6
100		Black Vesicular basalt to ~ 104', then into loosely consolidated gravel, same as 92-107 in hole 91-07, Mixed lithologies in gravel								
			100	110			91203	1	71	6
110		Loosely to consolidated gravels, as above								
			110	120			91204	5	71	3
120		Consolidated gravels, no caving, as above								
			120	130			91205	3	53	3
130		Consolidated gravels, no caving, as above								
			130	140			1206	4	55	4
140		Consolidated gravels, no caving, as above								
			140	150			91207	1390	52	3
150										

MINEQUEST EXPLORATION ASSOCIATES LTD. DRILL LOG - CORE

HOLE No. AOR 91-08 | PAGE No. 3

TEXTURE, ALTER'N, MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL (m) FROM	TO	REC'Y	EST. GRADE	SAM. No.	ASSAYS Au(ppb)	Cu(ppm)	As(ppm)			
150		Consolidated fine gravel or coarse sand, hummer early firing, no caving, otherwise as above	150	160			91208	7	31	5			
160		Potentially maroon tuff, still v. soft drilling but chips are uniform lithology. V fg tuff(?) texture indistinct, 1-2% v.fg dsm sus; PY, >50% of chips oxidized and iron stained; weathered surface? unsure if last run was not cemented.	160	170			91209	5	69	4			
170		Maroon tuff, chips easily scratched but inc. hard to drill with depth; 1-2% dsm v.fg tarnished PY. <5% oxidized and iron stained chips.	170	180			91210	51	74	4			
180		Maroon tuff, as above, rare lt green cily <5% fg FS phenos, 1-2% dsm sus as before	180	190			91211	24	71	2			
190		Maroon tuff, v.fg <1mmø, texture indistinct, inc harder drilling 1-2% qz chip ± ch, 1-2% dsm v.fg. sus; PY, mostly tarnished	190	200			91212	10	82	5			
200		Maroon tuff, as above, 1-2% v fg to fg tarnished PY., rare distinct texture, subrounded to angular white FS, <1mm ø	200	210			91213	20	59	5			
			200	210			91916	5	52	5			
210		Maroon tuff, as above, ≤1% qz chip ± tr PY. sus as above, 1-2% dsm, v.fg.	210	220			91214.	6	37	4			
220		Maroon tuff, sus 210-220, ≤1% qz chip, 1-2% dsm PY	220	230			91215	7	37	2			
230		230 - EOH.											
240													

MINEQUEST EXPLORATION ASSOCIATES LTD.

HOLE No. AGR 91-09

PROPERTY: 216

CLAIM BLOCK CODE: AGR

NTS: 92 H 15 E UTM:

CLAIM NAME: 216 1

LOCATION – GRID NAME:

GRID N: 4392N GRID E: 6437E.

SECTION: ELEV:

AZIM: LENGTH: 220'

DIP: -90 CASING LEFT?: No

CORE SIZE:

CORE STORAGE:

DRILL LOG – CORE

DRILLING CO.: Nicholson Explorations Ltd.

STARTED: 19 Feb 1991

COMPLETED: 17 Feb 1991.

PURPOSE:

CORE RECOVERY:

LOGGED BY: A.W. GOURLAY

DATE LOGGED: 17. Feb 1991

ASSAYED BY: ACME LABS LTD, ECO TECH LABS

LAB REPORT NOS.: 91-0435 91-91

SURVEY

DEPTH	AZIM.	DIP	DEPTH	AZIM.	DIP

TEXTURE, ALTER'N, MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL(m) FROM	INTERVAL(m) TO	REC'Y	EST. GRADE	SAM. No.	ASSAYS Au(ppb)	Cu(ppm)	Mo(ppm)
0										
10		0-18 overburden								
20		Black, vesicular basalt, fine grained, ≤ 1mm ϕ, very slightly magnetic, massive fracturing chips	20	30			91216	8	47	2
30		Black, massive vesicular basalt, sos 20-30, slightly magnetic								
			30	40			91217	1	54	2
40		Black, massive vesicular basalt, sos 20-30, rare iron stained vesicle filling, slightly magnetic								
			40	50			91218	120	50	2
50		Black, massive, vesicular basalt, sos 20-30, slightly magnetic, ≤ 1% of chips have iron stained/filled vesicles, ≤ 3mm ϕ								
			50	60			91219	5	51	2
			50	60			91917	5	41	10
60										

MINEQUEST EXPLORATION ASSOCIATES LTD. DRILL LOG – CORE HOLE No. AGR 91-04 PAGE No. 2

TEXTURE, ALTER'N, MINERALIZATION, ETC.	GRAPH GEOL.	DESCRIPTION	INTERVAL(m) FROM	TO	REC'Y	EST. GRADE	SAM. No.	ASSAYS Au(ppb)	Cu(ppm)	As(ppm)			
60		Black, massive, vesicular basalt, sos 20-30, slightly magnetic, <1% of chips have iron stained vesicles	60	70			91220	6	53	3			
70		Black, massive, vesicular basalt, sos 20-30, v. slightly magnetic. ≤1% chips have iron stained vesicles, rarely with white aphanitic zeolite filling.	70	80			91221	1	53	2			
80		Black, massive, vesicular basalt, sos 20-30, slightly magnetic, ≤1% of chips have iron stained vesicles	80	90			91222	1	55	2			
90		Fault @ 85' (?) brown clay cuttings consolidated gravel or fault zone? 50% of chips are maroon tuff f.g., 1-2% dissm tarnished v.f.g PY, rest are of banded fragments of maroon tuff, green tuff, rare basalt - lots of clay in cuttings, cuttings all brown (is this weathered paleo surface?)	90	100			91223	2	41	5			
100		Maroon tuff, f.g to v.f.g, subhedral to anhedral white FS phenos, < 1mm in aphanitic groundmass, massive, 1-2% dissm V.f.g sus, all tarnished PY?, v. rare Mn stained chips	100	110			91224	3	24	3			
110		Maroon tuff, sos 100-110, ≤5% lt green chips, similar litho. 1-2% dissm sus as above.	110	120			91225	1	22	6			
120		Maroon tuff, sos 100-110, ≤5% of chips are lt pink, v. similar to 91-07. 1-2% dism v.f.g PY throughout. v. rare steel-blue gas	120	130			91226	110	21	7			
			120	130			71919	5	16	10			
130		Maroon tuff, sos 100-110, inc green tinge to FS phenos (sericite?) 1-2% dism v.f.g PY, as above. ~40% of chips >50% greenish tinge FS phenos.	130	140			91227	5	33	4			
140		Maroon to grey tuff, m.g., ≤50% FS phenos, subhedral to anhedral ≤1.5mm of aphanitic groundmass, 1-2% dism v.f.g sus, all tarnished PY?, <1% white qtz up to 2mm wide, tr v.f.g sus assoc w/ qtz.	140	150			91228	1	28	2			
150													

MINEQUEST EXPLORATION ASSOCIATES LTD. DRILL LOG – CORE

HOLE No. AGR 91-09 PAGE No. 3

TEXTURE, ALTER'N, MINERALIZATION, ETC.	GRAPH GEOL	DESCRIPTION	INTERVAL(m) FROM	TO	REC'Y	EST. GRADE	SAM. No.	ASSAYS Au (ppb)	Cu (ppm)	Ag (ppm)
150		Maroon to grey tuff to 154(?), sas 140-150, from ~154 moderately iron stained mg. Fs pheno rich tuff or DRT?, >50% subhedral to euhedral Fs ≤ 1.5mm. No mafics visible, 1-2% dsm PY as before. ± rare chlorite Hb?	150	160			91229	2	25	3
160		DRT(?) Grained Fs PPX, 30% iron stained chip as above, 70% maroon to grey massive Fs PPX, 50-70% subhedral white Fs pheno ≤1mm easily scratched. ≤1% QV, up to 2mm thick. blue-green rare QV. 1-2% dsm PY.	160	170			91230	1	20	2
170		DRT(?) sas 160-170, note no mafic minerals, this could still be a tuff. <1% QV, commonly w/ iron staining on margins, rare PY., 2-3% dsm tarnished fg, rare CH assoc QV	170	180			91231	1	17	3
180		DRT Maroon <5% CH after Hb. relic subhedral Hb laths ≤1mm ɸ ≤1% white QV, up to 1mm size, rarely to 5mm, tr PY assoc, 1-2% dsm tarnished PY, as before, increasingly harder drilling (need TS).	180	190			91232	6	15	2
190		DRT, maroon, sas 160-170, 40% of chips iron stained, similar to 154-160. 1-2% QZ chip up to 1cm ɸ. 1-2% dsm vfg tarnished PY, as before.	190	200			91233	2	34	3
			190	200			91919	5	28	10
200		DRT(?) maroon massive, sas 160-170, 1-2% QZ chip as above. 1-2% dsm vfg to fg tarnished PY., green CH assoc QV.	200	210			91234	3	33	3
210		DRT(?) continues ≤10% iron stained chips. 1-2% QZ chips as before, 1-2% dsm fg tarnished PY as before.	210	220			91235	1	15	3
220		DRT(?) continues, sas, << 1% QV, sas 1-2% dsm as before. Minor greenish tinge to Fs phenos (sericitization?).	220	230			91236	1	15	4
230		230 - EOH								
270										

APPENDIX V

Polished Sections Descriptions

PETROGRAPHIC REPORT ON SEVEN SAMPLES OF DRILL CUTTINGS FROM FINE-GRAINED NICOLA VOLCANIC ROCKS

Report for:
Andrew Gourlais
MineQuest Exploration Associates Ltd.
5th Floor, 164 Water Street
Vancouver, B.C.
V6B 1B5.

Invoice attached
P.O. # 60987

March 10, 1991.

91108: PLAGIOCLASE-BIOTITE PORPHYRITIC DACITE ?FLOW

Fine (1-5 mm) chips of white or light grey "salt and pepper" textured, very fresh volcanic or high-level intrusive rock characterized by black euhedral needles and books of biotite. The rock is not magnetic and does not react to cold dilute HCl; exotic pebbles are common. In polished thin section, the modal mineralogy is as follows:

Plagioclase (oligoclase phenocrysts)	20%
Biotite (phenocrysts)	10%
Quartz (phenocryst fragments)	10%
Matrix (plagioclase, biotite, ?chlorite, ?quartz)	60%
Opaque (magnetite, rare pyrite)	<1%

This is a fine-grained volcanic rock composed of euhedral plagioclase and biotite crystals set in a virtually undecipherable fine matrix that is probably made up of similar minerals.

Plagioclase phenocrysts are up to 2 mm long and show complex oscillatory compositional zoning that generally does not vary much in An content, from about An_{30} (cores) to An_{20} (rims), based on extinction angles of +3 to -10 degrees for X^001. This is oligoclase; however, one crystal shows an extinction angle of Y^010=22 degrees, Z^001=25 degrees, suggesting more calcic andesine, An_{40}. Relief of the plagioclase is the same as that of quartz.

Biotite phenocrysts are up to 1 mm long, with deep blackish brown pleochroism. Quartz is difficult to distinguish from plagioclase, but a few grains have uniaxial positive character; these are somewhat rounded to broken phenocrysts of about 0.25 mm diameter.

The matrix consists of plagioclase microlites and tiny biotite crystals up to 0.05 to 0.1 mm long, set in unidentifiable very fine-grained material that averages 25 microns in diameter. The latter may consist of some chlorite and probably some quartz, possibly with some devitrified glass. K-feldspar may also be present, but is too fine-grained to identify; staining might resolve this.

The composition of this rock appears intermediate, in the dacite class. Its fine texture suggests an extrusive flow. Traces of opaque are present as subhedral fractured grains up to 0.2 mm across; they are probably magnetite. Rare 10-15 micron subhedral grains of pyrite are associated with the oxides.

91112: PLAGIOCLASE-PYROXENE PORPHYRITIC BASALT FLOW

This sample consists of 0.5 cm diameter chips of grey, brown weathering fine-grained volcanic rock. The rock is not magnetic and does not react to cold dilute HCl. In polished thin section, the mineralogy is approximately:

Plagioclase (albite-oligoclase)	55%
Clinopyroxene (?augite, partly chlorite altered)	15%
Opaque (hematite)	5%
Sericite (after plagioclase)	5%
Apatite	3%
Carbonate (?dolomite)	2%
Matrix (plagioclase, pyroxene, ?chlorite, glass)	15%

This is a very much more crowded porphyritic rock than 91108, consisting of abundant plagioclase and lesser pyroxene phenocrysts in a very fine-grained indeterminate matrix. The lack of biotite and quartz phenocrysts indicates a considerably more intermediate to basic rock.

Plagioclase forms euhedral to subhedral phenecrysts up to 1 mm diameter. They do not display the strong oscillatory zoning seen in 91108, probably due to incipient alteration. The present composition seems to be about albite-oligoclase (An_{10-15}) based on extinction angles of about 12 degrees for X^001 and up to 13 degrees for Y^010. There is no quartz to compare the refractive index to, but the mild alteration to fine flakes of sericite and rarely carbonate, plus the loss of compositional zoning, suggests this composition is due to alteration of an originally more calcic plagioclase (also suggested by the presence of pyroxene). In places, carbonate forms anhedral grains up to 0.5 mm diameter in masses up to several mm across. This may be dolomite, or calcite (if the chips tested with acid did not contain any carbonate).

Mafic phenocrysts are euhedral and up to 0.5 mm in diameter. Some are clear, or very pale greenish, and elongate with extinction angle about 40 degrees, suggesting a clinopyroxene such as augite. Others are octagonal in outline, with fracturing and alteration to a brown amorphous phase or to yellow-green finely fibrous ?chlorite or serpentine suggesting olivine rather than pyroxene, but other grains with this alteration are identifiable as clinopyroxene. On balance, I believe there is only pyroxene in this rock.

Accessories include coarse prismatic grains of apatite up to 0.1 mm long. Opaques are mainly hematite, as rounded to subhedral grains up to 0.3 mm in diameter that may represent martitized former magnetite crystals. Extremely fine (micron-sized) hematite grains in the matrix impart a reddish-purple cast to the rock.

The composition of this specimen is about that of an augite basalt or possibly basaltic andesite, depending on the original composition of the plagioclase. Minor alteration to sericite, carbonate and hematite has occurred.

91133: CHIPS OF FINE HEMATITIC ?BASALT AND COARSER ?HIGH-LEVEL, CALCITE ALTERED DIORITE

Finely porphyritic, purple and green volcanic rock chips to 3 cm in diameter, somewhat weathered. The chips are non-magnetic but white veins in them react to cold dilute HCl. In polished thin section, the rock fragments in this specimen are somewhat heterolithic, ranging from finely porphyritic, strongly hematite-stained (purple) probable basalts like 91112, to clear, coarse, variably calcite altered plagioclase rocks. The mineralogy is approximately as follows:

Fine hematitic basalts		Coarse plagioclase diorites	
Plagioclase (altered)	50%	Plagioclase (albitic)	65%
Opaque (hematite)	20%	Carbonate (calcite)	15%
Quartz (?secondary)	5%	Chlorite	5%
Epidote	5%	Opaque (hematite-goethite)	5%
Sericite	5%	Clay-sericite	5%
Chlorite	5%	?Actinolite	5%
Matrix (unidentified)	5%	Apatite	<1%
?Actinolite	5%		

Plagioclase in these rocks forms subhedral to euhedral crystals up to 1.5 mm long. The crystals lack compositional zoning, and are mildly altered to clay-sericite, epidote, and calcite. These features suggest that the composition as seen now of about albite-oligoclase (An_{10-15}, based on extinction angles Y^010 of about 10 degrees) is not primary but instead due to alteration. The original composition was probably more calcic. Epidote forms small rounded grains up to 0.05 mm diameter in the plagioclase. Calcite forms anhedral fine to coarse (up to 0.7 mm) grains that may replace the whole of a chip.

There are no recognizable mafic phenocrysts in these rocks; a few patches of fine-grained flaky green ?chlorite in both rock types may represent their former presence. The matrix is principally opaque in both rock types, mainly coarse subhedral hematite grains up to 0.5 mm across but including earthy, finely divided hematite. In places there is some secondary-looking quartz making up the matrix as fine chalcedonic grain up to 0.05 mm diameter. Fine needles of a secondary mineral, tentatively identified as actinolite, form felted masses replacing plagioclase in some chips. Euhedral crystals of brownish apatite up to 0.05 mm long are found in the dioritic chips.

Although there is a clear textural difference between the two rock types outlined above, they appear to be compositionally related and are also similar to 91112. The finer, hematitic chips probably represent basaltic flow rocks like 91112 (although clinopyroxene can not be identified in them), whereas the coarser chips look like a high-level intrusive of probable dioritic composition.

91161: FINE DIORITIC ?HIGH-LEVEL INTRUSIVE ALTERED TO AND VEINED BY CALCITE-SERICITE-CHLORITE-HEMATITE

Fine purplish volcanic or high-level intrusive rock with thin green (?chloritic) and white (calcite) veins. The rock is magnetic away from the veins. In polished thin section, the modal mineralogy is as follows:

Plagioclase (albitized)	50%
Clay-sericite (after plagioclase)	15%
Chlorite (after mafics)	10%
Carbonate (calcite)	10%
Quartz (secondary)	5%
Epidote	5%
Opaque (hematite, minor magnetite/ilmenite)	3%
Apatite	2%

The rock chips making up this sample are of two main types: plagioclase-rich ?fine diorites as described in 91133, and quartz-carbonate ?veins, but gradational examples exist, suggesting that the veins are developed in and by alteration of the diorite.

Plagioclase forms subhedral to euhedral crystals up to 2 mm long that are crowded together, with very little or no matrix between. The grains are moderately to in places strongly altered to sericite, carbonate, and quartz. Twinning extinction angles indicate an albitic composition, but this is not likely to be original; they probably were more calcic. Sericite forms fine subhedral flakes up to 0.05 mm long; carbonate forms anhedral grains and aggregates up to 0.3 mm across.

Minor mafic minerals originally present interstitial to the plagioclase have been replaced by a mixture of chlorite that has moderate green pleochroism and carbonate. It forms radiating aggregates up to 0.5 mm across, of 0.05 mm flakes. Minor epidote as subhedral aggregates up to 0.2 mm across, sericite and opaques are associated with these patches. The opaques include hematite as euhedral flakes to subhedral laths up to 0.1 mm long, mixed in places with leucoxene. The hematite forms exsolution laths in what probably originally were magnetite-ilmenite intergrowths up to 0.3 mm across. A few remnants of isotropic magnetite are found at cores of these grains. There is no sulfide present in this rock, in spite of the veining. Large euhedral apatite crystals are up to 0.4 mm long.

Highly altered (?veined) rock is composed of euhedral lath-shaped grains of secondary quartz up to 1 mm long, cemented by subhedral calcite up to 0.5 mm in diameter.

The host rock in this sample appears to have originally been a tightly interlocking aggregate of euhedral plagioclase with minor interstitial mafic and Fe-Ti oxide material, more like a fine dioritic sill than an extrusive volcanic. Moderate propylitic alteration is not accompanied by sulfide mineralization.

91188: FINE PLAGIOCLASE-?PYROXENE PORPHYRITIC ANDESITE ?FLOW ALTERED TO SERICITE-CHLORITE-HEMATITE

Purple fine-grained volcanic rock, non-magnetic. White veins react to cold dilute HCl; minor amounts of blackish ?chalcocite and surrounding green ?malachite noted in the bag of drill cuttings. In polished thin section, the mineralogy of the dominant rock type (the others are highly rust-stained and are probably exotic pebbles that have fallen into the hole) is composed of:

Plagioclase (albitized phenocrysts)	50%
Chlorite (after mafics)	10%
Opaques (hematite)	10%
Clay-sericite (after plagioclase)	10%
?Quartz (secondary)	3%
Apatite	2%
Matrix (fine plagioclase, chlorite, opaques)	15%

This is similar to 91112 and some chips in 91133: a finely porphyritic, hematite-stained volcanic rock composed of plagioclase and minor mafic relict phenocrysts set in a fine matrix of the same minerals, with scattered microphenocrysts of opaque after former Fe-Ti oxides.

Plagioclase forms subhedral to euhedral crystals up to 0.7 mm long that are strongly converted to an albitic composition accompanying mild to moderate sericitization. The plagioclase probably was originally more calcic. Patches of a very fine-grained ?clay mineral and recognizable sericite (muscovite) as subhedral flakes up to 0.025 mm in diameter replace up to 30% of individual plagioclase grains. A weakly seriate texture is formed by progressively smaller crystals down to microlites in the matrix.

Former mafic crystals are represented by areas of chlorite and sericite with subhedral elongated outlines suggestive of ?pyroxene crystals. These areas are up to 1 mm across, formed of chlorite as subhedral flakes up to 0.05 mm in diameter.

The matrix is not decipherable, being too fine-grained for optical determination, but is probably mainly plagioclase microlites, with interstitial chlorite, clay, and possibly minor secondary quartz.

Opaques are subhedral to rounded aggregates up to 0.25 mm in diameter, composed of fine hematite grains of 25-50 micron size. Occasional euhedral lath-shaped hematite up to 0.3 mm long is also found, and fine earthy hematite is present in the matrix of the rock. No sulfide is present; the copper oxide minerals seen in hand specimen are not seen in thin section.

In summary, this is a plagioclase-possibly pyroxene porphyritic fine volcanic rock, probably of about andesitic (or basaltic andesite) composition. It has undergone mild propylitic alteration to sericite, chlorite and hematite.

91212: FINE PLAGIOCLASE-?PYROXENE PORPHYRITIC, POSSIBLY ANDESITIC VOLCANIC FLOW ALTERED TO SERICITE-CHLORITE-CALCITE

Fine purple volcanics with green chloritic and white calcite veins (reaction to cold dilute HCl). The rock is not magnetic. In polished thin section, the modal mineralogy is approximately:

Clay-sericite (after plagioclase)	45%
Chlorite	15%
Plagioclase (albitized relict phenocrysts)	10%
Carbonate (calcite)	10%
Opaque (hematite)	10%
Quartz (secondary)	5%
Apatite	3%
Ilmenite, leucoxene	2%

Most of the chips in this sample are composed of relict plagioclase laths up to 2 mm long set in a variably chloritized and sericitized matrix, with scattered hematite pseudmorphs after ?magnetite. Some chips are almost entirely composed of secondary quartz and carbonate, presumably from veins in the altered host rock.

Plagioclase is mainly pseudomorphed by fine clay-sericite as subhedral flakes up to 0.025 mm long. In places, however, it has been converted to albite (Y^010 = 17 degrees).

In places there are octagonal outlines of former mafic crystals up to 2 mm across, suggestive of pyroxene crystals. They are now completely pseudomorphed by fine chlorite $\pm$ clay-sericite and some calcite, secondary quartz and opaques (hematite mainly). The chlorite has only pale green pleochroism, implying low Fe content.

Accessory minerals include euhedral prismatic apatite up to 0.25 mm long and subhedral hematite up to 0.3 mm across. Lath-like exsolution intergrowths suggest they are probably after former microphenocrysts of Fe-Ti oxides. No sulfides are present in spite of the veining and strong alteration.

The matrix is strongly altered to fine (10-20 micron diameter) sericite, carbonate, chlorite and hematite, with possible minor quartz in places. Veins are areas of intense, coarser-grained carbonate (calcite) and quartz up to 0.5 mm across, or else fine-grained aggregates of the same minerals.

In summary, this is also a fine porphyritic basalt or andesitic basalt that has undergone moderate to strong propylitic-phyllic alteration to sericite, carbonate, quartz and lesser chlorite-hematite.

91230: PLAGIOCLASE-?PYROXENE PORPHYRITIC, POSSIBLE ANDESITIC VOLCANIC FLOW ALTERED TO SERICITE-CALCITE-CHLORITE-HEMATITE

More coarsely porphyritic purple volcanic flow rock characterized by white plagioclase phenocrysts to 1 mm. Thin green and white (chlorite and calcite) veins cut the rock, which react to cold dilute HCl. The rock is not magnetic. In polished thin section, the modal mineralogy is approximately as follows:

Plagioclase (albitized)	30%
Sericite (muscovite)	30%
Carbonate (calcite)	20%
Opaque (hematite)	10%
Chlorite	5%
Quartz (secondary?)	3%
Apatite	2%

As in other samples of this suite, this rock consists primarily of relict plagioclase and lesser mafic phenocrysts set in a relatively minor amount of fine matrix. Both matrix and phenocrysts are altered in this specimen.

Subhedral to euhedral plagioclase phenocrysts are up to 1 mm long and are either clear (albitized: Y^010 = 16 degrees, Z^001 = 10 degreees, An_{5-10}) or are pseudomorphed by fine flakes of sericite and carbonate (25-50 micron diameter).

Former mafic sites are rectangular in outline and up to 0.75 mm long. They are now completely pseudomorphed by muscovite as subhedral flakes up to 0.3 mm long, carbonate as anhedral grains up to 0.2 mm long, and fine opaques that include hematite and possibly minor ?rutile. The coarse interleaving of muscovite suggests the possible former presence of biotite, but in view of the character of the other pseudomorphs (octagonal outlines) suggesting pyroxene, it is not likely. Apatite crystals are subhedral and up to 0.3 mm long; they are characteristically stained bright red by fine hematite dust.

Opaques are mainly subhedral microphenocrysts of hematite up to 0.3 mm across that contain relict exsolution lath textures indicative of former magnetite/ilmenite intergrowths. There is also fine earthy hematite present in the matrix of the rock, as 5-10 micron sized particles. There are no sulfides.

The matrix is heavily altered to fine sericite and carbonate; in places there is also appreciable chlorite, as fine anhedral flakes up to 15 microns in diameter. The chlorite is magnesian (no pleochroism or anomalous birefringence). There may be minor quartz (secondary).

This rock appears to be similar to other plagioclase-?pyroxene porphyritic volcanic ?flow rocks in this suite, possbily andesitic or basaltic andesite in composition. It has undergone significant phyllic alteration (sericite-carbonate $\pm$ chlorite-hematite), but there is no sulfide mineralization.

APPENDIX VI

Statement of Qualifications

APPENDIX VI

STATEMENT OF QUALIFICATIONS

I, Andrew W. Gourlay, hereby certify that:

1. I am presently employed by MineQuest Exploration Associates Ltd. as Senior Geologist.

2. I am a graduate of the University of British Columbia (B.Sc. Hons., 1977, in geology).

3. I am a Professional Geologist in good standing with the Association of Professional Engineers, Geologists and Geophysicists of Alberta, and a Fellow of the Geological Association of Canada.

4. I have practised my profession as geologist for 13 years.

5. The information used in this report is based on reports, maps, and data lists on file at MineQuest Exploration Associates Ltd. and personal familiarity with the project area.

Signed _____
Andrew W. Gourlay

Dated at Vancouver, B.C. this
1st day of April, 1991

APPENDIX VII

Cost Statement

APPPENDIX VII
Cost Statement
For The Period February 1 to March 31, 1991

Fees			
R.V. Longe	2.50 hrs. @ $ 96.00	$ 240.00	
A.W. Gourlay	52.75 hrs. @ $ 75.00	3,956.25	
A.W. Gourlay	14.50 days @ $450.00	6,525.00	
G. Vernon	30.75 hrs. @ $ 43.00	1,322.25	
G. Vernon	15.00 days @ $260.00	3,900.00	
J.A. Turner	.25 hrs. @ $ 64.00	16.00	
			$15,959.50
Temporary Staff			
C. Donders	35.25 hrs. @ $ 36.00	$1,269.00	
M. Steiner	6.00 days @ $180.00	1,080.00	
A. Wardwell	6.00 days @ $180.00	1,080.00	
			3,429.00
GST on Fees			1,357.20
Disbursements			
Analysis		$ 2,400.00	
Bulldozing		1,489.60	
Courier		42.45	
Drilling		26,445.00	
Equipment Rental		1,456.30	
Food and Accommodation		1,825.73	
Freight		543.62	
Fuels and Lubricants		742.21	
Groceries		315.83	
Legal		160.00	
Rental Vehicles		2,120.90	
Reprographics		152.24	
Storage		20.00	
Supplies		1,695.02	
Taxi/Busfare/Parking		107.61	
Telecommunications		307.94	
GST on Disbursements		2,607.14	
Total Disbursements		$42,431.59	
10% on Disbursements		4,243.17	
GST on 10%		297.02	
			46,971.78
MineQuest In-House Charges			
Photocopies			71.85
			$67,789.33

APPENDIX VIII

Statements of Work

910

Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources
MINERAL RESOURCES DIVISION — TITLES BRANCH

DOCUMENT No. _____ OFFICE USE ONLY

SUB-RECORDER
RECEIVED
MAY 24 1991
M.R. # 41 $ 1930 00
VANCOUVER, B.C.
RECORDING STAMP

Mineral Tenure Act
Sections 25, 26 & 27

STATEMENT OF WORK — CASH PAYMENT

Indicate type of title ..... Mineral (Mineral or Placer)

Mining Division ..... Nicola

I, George Vernon (Name)
500 - 220 Cambie Street (Address)
Vancouver, B.C.
(604) 669-2251 (Telephone) V6B 1B5 (Postal Code)
Valid subsisting FMC No. 304993 127863
FMC Code VERNON 127863

Agent for MineQuest Exploration Associates Ltd. (Name(s))
500 - 220 Cambie Street (Address)
Vancouver, B.C.
(604) 669-2251 (Telephone) V6B 1B5 (Postal Code)
Valid subsisting FMC No. 308074 118537
FMC Code MINEXA

STATE THAT: **(NOTE: If only paying cash in lieu, turn to reverse and complete columns G to J and Q to T.)**

1. I have done, or caused to be done, work on the ZIG 2, ZIG 4, ZUL 1 Claim(s)

Record No(s). 2242, 2255, 2249

Work was done from January 1, 19 91, to March 31, 19 91;

and was done in compliance with Section 50 of the Mineral Tenure Act and

Section 19(3) of the Regulation YES [X] NO [ ]

I hereby request that the claims listed in Column G on this Statement of Work be Grouped and I confirm that all claims listed are contiguous YES [X] NO [ ]

FEE — $10.00

TYPE OF WORK

PHYSICAL: Work such as trenches, open cuts, adits, pits, shafts, reclamation, and construction of roads and trails. Details as required under section 13 of the Regulations, including the map and cost statement, must be given on this statement.

PROSPECTING: Details as required under section 9 of the Regulations must be submitted in a technical report. Prospecting work can only be claimed once by the same owner of the ground, and only during the first three years of ownership.

GEOLOGICAL, GEOPHYSICAL, GEOCHEMICAL, DRILLING: Details must be submitted in a technical report conforming to sections 5 through 8 (as appropriate) of the Regulations.

PORTABLE ASSESSMENT CREDIT (PAC) WITHDRAWAL: A maximum of 30% of the approved value of geological, geophysical, geochemical and/or drilling work on this statement may be withdrawn from the owner's or operator's PAC account and added to the work value on this statement.

TYPE OF WORK (Specify Physical (include details), Prospecting, Geological, etc.)	VALUE OF WORK Physical	*Prospecting	*Geological etc.	
Geological (Reports to follow)			$ 42,500	
TOTALS	A +	B +	C $42,500 =	D $ 42,500
PAC WITHDRAWAL — Maximum 30% of Value in Box C Only			E →	E
from account(s) of _____			TOTAL	F $ 42,500

* Who was the operator (provided the financing)? Name Rayrock Yellowknife Resources Inc.
Address 500-30 Soudan Ave.
Toronto, Ont. Phone (416) 489-0022

Transfer amount in Box F to reverse side of form and complete as required.

M38-3024

Cash Payment

$ 42,500 | I WISH TO APPLY $ 18,800 OF THE TOTAL VALUE FROM BOX F AS FOLLOWS:

Columns G through P inclusive MUST BE COMPLETED before work credits can be granted to claims. Columns G through J and Q through T inclusive MUST BE COMPLETED before a cash payment or rental payment can be credited. Columns not applicable need not be completed.

CLAIM IDENTIFICATION / APPLICATION OF WORK CREDIT / CASH IN LIEU OF WORK OR LEASE RENTAL

G	H	I	J	K	L	M	N	O	P	Q	R	S	T
CLAIM NAME (one claim/lease per line)	RECORD No.	No. OF UNITS*	CURRENT EXPIRY DATE	WORK TO BE APPLIED: VALUE	WORK TO BE APPLIED: YEARS	Recording Fees	PRIOR EXCESS CREDIT BEING USED	NEW EXPIRY DATE	EXCESS CREDIT REMAINING	C/L	RECORDING FEE	LEASE RENTAL	NEW EXPIRY DATE
ZIG 2	2242	20	13/08/92	6,000	2	300		13/08/94					
ZIG 4	2255	20	08/09/92	6,000	2	300		08/09/94					
ZIG 6	2389	10	24/05/91	2,000	2	100		24/05/93					
ZUL 1	2249	12	18/08/92	3,600	2	180		18/08/94					
ZUL 3	~~2358~~ 2328	04	15/02/93	1,200	2	60		15/02/95					
	5W												
				18,800		940							
				TOTAL OF K		TOTAL OF M				TOTAL OF Q	TOTAL OF R	TOTAL OF S	

NOTICE TO GROUP No. _____ RECORDED _____

*2 POST, FRACTION, REV. CROWN GRANT AND PLACER CLAIM ARE 1 UNIT EACH

Value of work to be credited to portable assessment credit (PAC) account(s).
[May only be credited from the approved value of Box C not applied to claims.]

Name	Amount
1. Rayrock Yellowknife Resources Inc.	$ 11,850
2. MineQuest Exploration Associates Ltd.	$ 11,850
3.	

e of
r/operator

I, the undersigned Free Miner, hereby acknowledge and understand that it is an offence to knowingly make a false statement or provide false information under the Mineral Tenure Act. I further acknowledge and understand that if the statements made, or information given, in this Statement of Work — Cash Payment are found to be false and the exploration and development has not been performed, as alleged in this Statement of Work — Cash Payment, then the work reported on this statement will be cancelled and the subject mineral claim(s) may as a result, forfeit to and vest back to the Province.

Signature of Applicant

94P

Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources
MINERAL RESOURCES DIVISION — TITLES BRANCH

DOCUMENT No. _____ OFFICE USE ONLY

SUB-RECORDER
RECEIVED
MAY 24 1991
M.R. # 44 $1930.00
VANCOUVER, B.C.
BVH
RECORDING STAMP

Mineral Tenure Act
Sections 25, 26 & 27

STATEMENT OF WORK — CASH PAYMENT

Indicate type of title ..... Mineral (Mineral or Placer)

Mining Division ..... Nicola

I, George Vernon (Name)
500 - 220 Cambie Street (Address)
Vancouver, B.C.
(604) 669-2251 V6B 1B5 (Telephone) (Postal Code)
Valid subsisting FMC No. 304993 (127863)
FMC Code VERN6W (127863)

Agent for MineQuest Exploration Associates Ltd. (Name(s))
500 - 220 Cambie Street (Address)
Vancouver, B.C.
(604) 669-2251 V6B 1B5 (Telephone) (Postal Code)
Valid subsisting FMC No. 308074 118537
FMC Code MINEXA

STATE THAT: **(NOTE: If only paying cash in lieu, turn to reverse and complete columns G to J and Q to T.)**

1. I have done, or caused to be done, work on the ZIG 1, ZIG 3 Claim(s)

Record No(s). 2244, 2243

Work was done from January 1, 19 91, to March 31, 19 91;

and was done in compliance with Section 50 of the Mineral Tenure Act and

Section 19(3) of the Regulation YES [X] NO [ ]

I hereby request that the claims listed in Column G on this Statement of Work be Grouped and I confirm that all claims listed are contiguous YES [X] NO [ ]

FEE — $10.00

TYPE OF WORK

PHYSICAL: Work such as trenches, open cuts, adits, pits, shafts, reclamation, and construction of roads and trails. Details as required under section 13 of the Regulations, including the map and cost statement, must be given on this statement.

PROSPECTING: Details as required under section 9 of the Regulations must be submitted in a technical report. Prospecting work can only be claimed once by the same owner of the ground, and only during the first three years of ownership.

GEOLOGICAL, GEOPHYSICAL, GEOCHEMICAL, DRILLING: Details must be submitted in a technical report conforming to sections 5 through 8 (as appropriate) of the Regulations.

PORTABLE ASSESSMENT CREDIT (PAC) WITHDRAWAL: A maximum of 30% of the approved value of geological, geophysical, geochemical and/or drilling work on this statement may be withdrawn from the owner's or operator's PAC account and added to the work value on this statement.

TYPE OF WORK (Specify Physical (include details), Prospecting, Geological, etc.)	VALUE OF WORK Physical	*Prospecting	*Geological etc.	
Geological (Reports to follow)			$ 42,500	
TOTALS	A +	B +	C $ 42,500	D $ 42,500
PAC WITHDRAWAL — Maximum 30% of Value in Box C Only			E →	E
from account(s) of _____			TOTAL	F $ 42,500

* Who was the operator (provided the financing)? Name Rayrock Yellowknife Resources Inc.
Address 500-30 Soudan Ave.
Toronto, Ont. Phone: (416) 489-0022

Transfer amount in Box F to reverse side of form and complete as required.

F 42,500 I WISH TO APPLY $ 19,400 OF THE TOTAL VALUE FROM BOX F AS FOLLOWS:

Columns G through P inclusive MUST BE COMPLETED before work credits can be granted to claims. Columns G through J and Q through T inclusive MUST BE COMPLETED before a cash payment or rental payment can be credited. Columns not applicable need not be completed.

Cash Payment

CLAIM IDENTIFICATION / **APPLICATION OF WORK CREDIT** / **CASH IN LIEU OF WORK OR LEASE RENTAL**

	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
	CLAIM NAME (one claim/lease per line)	RECORD No.	No. OF UNITS*	CURRENT EXPIRY DATE	WORK TO BE APPLIED: VALUE	WORK TO BE APPLIED: YEARS	Recording Fees	PRIOR EXCESS CREDIT BEING USED	NEW EXPIRY DATE	EXCESS CREDIT REMAINING	C/L	RECORDING FEE	LEASE RENTAL	NEW EXPIRY DATE
1														
2	✓ZIG 1	2244	20	12/08/92	6,000	2	300		12/08/94					
3	ZIG 3	2243	20	12/08/92	6,000	2	300		08/09/94					
4	✓ZIG 5	2256	12	23/09/92	3,600	2	180		23/09/94					
5	✓ZIG Fr.	2458	01	22/09/91	200	2	10		22/09/93					
6	✓ZUL 2	2250	12	17/08/92	3,600	2	180		17/08/94					
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
					19,400 TOTAL OF K		970 TOTAL OF M				TOTAL OF Q	TOTAL OF R	TOTAL OF S	

*2 POST, FRACTION, REV. CROWN GRANT AND PLACER CLAIM ARE 1 UNIT EACH

NOTICE TO GROUP No. _____ RECORDED _____

Value of work to be credited to portable assessment credit (PAC) account(s).
[May only be credited from the approved value of Box C not applied to claims.]

Name of owner/operator	Name	Amount
1.	Rayrock Yellowknife Resources Inc.	11,550
2.	MineQuest Exploration Associates Ltd.	11,550
3.		

I, the undersigned Free Miner, hereby acknowledge and understand that it is an offence to knowingly make a false statement or provide false information under the Mineral Tenure Act. I further acknowledge and understand that if the statements made, or information given, in this Statement of Work — Cash Payment are found to be false and the exploration and development has not been performed, as alleged in this Statement of Work — Cash Payment, then the work reported on this statement will be cancelled and the subject mineral claim(s) may as a result, forfeit to and vest back to the Province.

Georgina D...

Signature of Applicant

10

Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources
MINERAL RESOURCES DIVISION – TITLES BRANCH

DOCUMENT No. _____
OFFICE USE ONLY

SUB-RECORDER
RECEIVED
MAY 24 1991
M.R. # 41 $ 1939.00
VANCOUVER, B.C.
RECORDING STAMP

Mineral Tenure Act
SECTION 28

NOTICE TO GROUP

INDICATE TYPE OF TITLE Mineral
(Mineral or Placer)*

I, George Vernon
(Name)
500 - 220 Cambie Street
(Address)
Vancouver, B.C.
(604) 669-2251 V6B 1B5
(Telephone) (Postal Code)
Valid subsisting FMC No. 304993
FMC Code VERNGW

Agent for MineQuest Exploration Associates Ltd.
(Name)
500- 220 Cambie Street
(Address)
Vancouver, B.C.
(604) 669-2251 V6B 1B5
(Telephone) (Postal Code)
Valid subsisting FMC No. 308074
FMC Code MINEXA

request that the following mineral titles be grouped under group name ZIG EAST 1991-1

Mining Division Nicola
Map No. 92 H/15E

Name of Claim	No. of Units	Title Number
ZIG 1	20	2244
ZIG 3	20	2243
ZIG 5	12	2256
ZIG Fr.	01	2458
ZUL 2	12	2250

Name of Claim	No. of Units	Title Number

(Signature of Applicant)

*NOTE: Mineral claim(s) and lease(s) cannot be grouped with placer claims and leases

MTL 114 REV. 88/07
W-1426

P

Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources
MINERAL RESOURCES DIVISION – TITLES BRANCH

DOCUMENT No. _____
OFFICE USE ONLY

SUB-RECORDER
RECEIVED
MAY 24 1991
M.R. # 41 $ 1930.00
VANCOUVER, B.C.
RECORDING STAMP

Mineral Tenure Act
SECTION 28

NOTICE TO GROUP

INDICATE TYPE OF TITLE Mineral
(Mineral or Placer)*

I, George Vernon
(Name)
500 - 220 Cambie Street
(Address)
Vancouver, B.C.
(604) 669-2251 V6B 1B5
(Telephone) (Postal Code)
Valid subsisting FMC No. 304993
FMC Code VERNGW

Agent for MineQuest Exploration Associates Ltd.
(Name)
500 - 220 Cambie Street
(Address)
Vancouver, B.C.
(604) 669-2251 V6B 1B5
(Telephone) (Postal Code)
Valid subsisting FMC No. 308074
FMC Code MINEXA

request that the following mineral titles be grouped under group name ZIG WEST 1991-1

Mining Division Nicola
Map No. 92 H/15E

Name of Claim	No. of Units	Title Number
ZIG 2	20	2242
ZIG 4	20	2255
ZIG 6	10	2389
ZUL 1	12	2249
ZUL 3	04	2328 SW ~~2358~~

Name of Claim	No. of Units	Title Number

George WA Vernon
(Signature of Applicant)

*NOTE: Mineral claim(s) and lease(s) cannot be grouped with placer claims and leases

MTL 114 REV. 88/07
W-1426

GEOLOGICAL BRANCH
ASSESSMENT REPORT

21,406

120°37'30"

49°51'00"

3000 E

5000 E

7000 E

7600 N

6000 N

4000 N

2400 N

4850 E

671000 mE

5520000 mN

ZIG 5

ZIG 4

ZIG 3

ZIG 2

ZIG 1

ZUL 3

ZUL 1

ZUL 2

ZIG 6

91-01

91-02

91-03

91-04

91-05

91-06

91-07

91-08

91-09

Z.I.G. Fraction

(X) SITE A
Approximate location of Old Trenches
25 m @ 0.3 % Cu (MineQuest, 1990)

SITE B
Grab Sample 2.6% Cu
(MineQuest, 1990)

(X) SITE C
3 Grab Samples Av. 0.23 % Cu
(MineQuest, 1990)

(X) SITE D
Old Trenches
Reported: 15 m @ 0.38 % Cu
10 m @ 0.24 % Cu
DDH (Cominco, 1972)
105 ft. @ 0.14 % Cu

LEGEND

◉ 91-02 Reverse Circulation Percussion Hole, Prefixed 'AGR'

I.P. SURVEY

Chargeability, > 5 MSec

Resistivity, > 1000 Ohm-m

I.P. Features, P. Hallof

GEOPHYSICS BY PACIFIC GEOPHYSICAL LTD. April and June, 1990

SCALE 1 : 10.000

0 500 1000 m

Approximate location of pre-existing claims, established by MQ field surveys

RAYROCK YELLOWKNIFE RESOURCES INC.

ZIG PROPERTY

DRILL HOLE LOCATIONS
and
Summary of Induced Polarization Results

	Originator	Drawn	Date	PLAN NO.	FIG.
	A.W.G.	C.D.	Mar '91	1621	4
Revised				N.T.S. 92H/15	
Revised					

MINEQUEST EXPLORATION ASSOCIATES LTD.