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MineQuest Report #156 Ref. No. RM3804 87-249-16041

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VANCOUVER, B.C.

M.R. # ...... \$.....

GEORGINA 1987 GROUP

Geochemistry and Preliminary Geology

Nanaimo Mining Division

N.T.S. 92F/168E

Latitude 49°15'N Longitude 124°14'W

Owner(s): L.O. Allen R.J. Bilquist

by

A.W. Gourlay

οf

FILMED

Operator: MineQuest Exploration Associates Ltd.

		Record				
<u>Claim</u>		Number	<u>Units</u>	Date	Reco	orded
Georgina	1	2033	20	Feb.	18,	1985
Georgina	2	2303	20	Mar.	11,	1986
Georgina	3	2304	14	Mar.	11,	1986
Georgina	4	2296	01	Mar.	11,	1986
Georgina	6	2297	01	Mar.	11,	1986
Georgina	7	2298	01	Mar.	11,	1986
Georgina	8	2299	01	Mar.	11,	1986
Georgina	9	2300	01	Mar.	11,	1986
Georgina	10	2301	01	Mar.	11,	1986
Georgina	11	2303	01	Mar.	11,	1986

Vancouver, B.C.

April, 1987

# GEOLOGICAL BRANCH ASSESSMENT REPORT



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#### INTRODUCTION

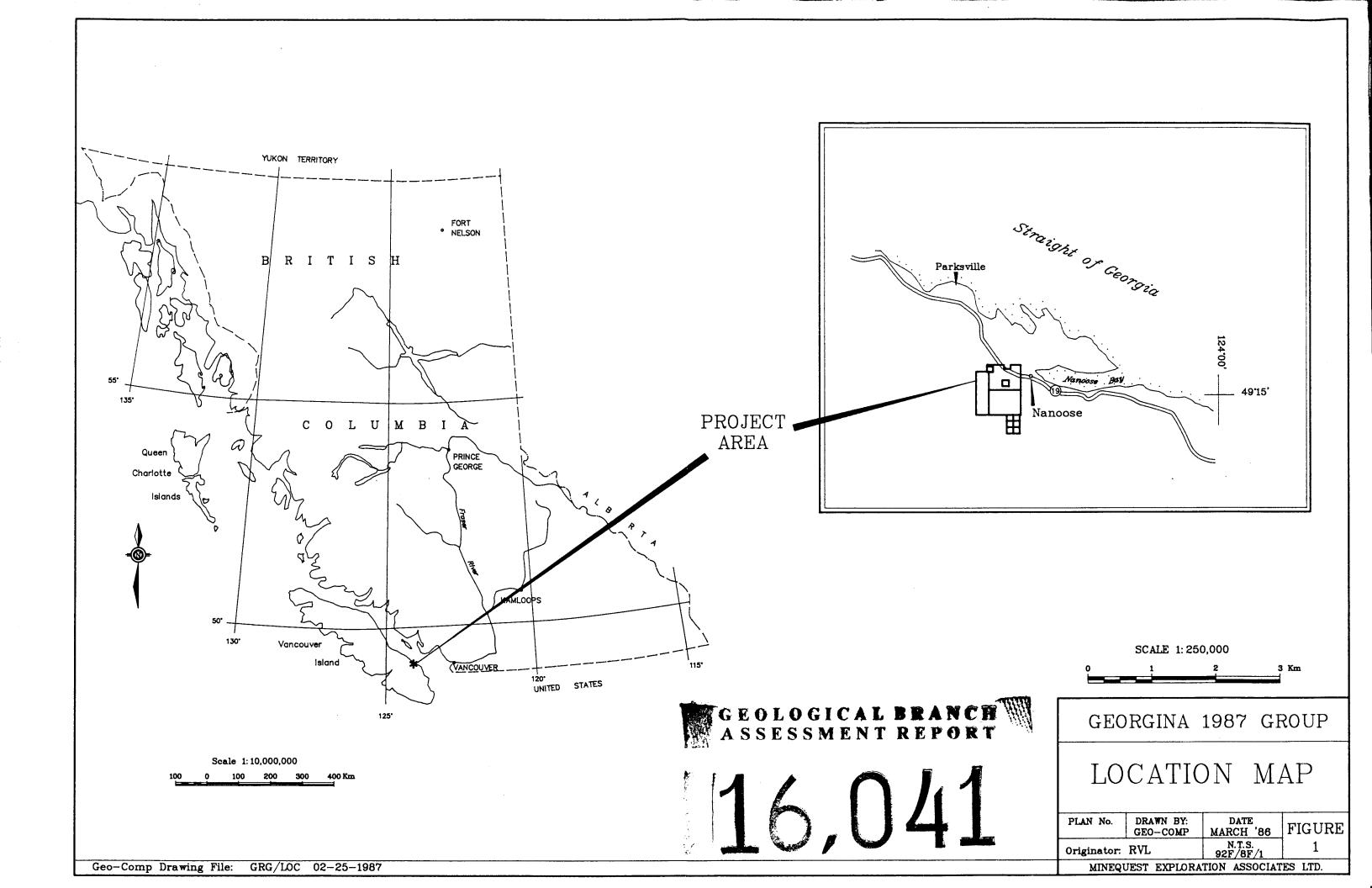
The GEORGINA 1 claim was staked to cover a reported copper showing either within or closely associated with Sicker Group volcanic rocks and sediments. GEORGINA 2 to 11 claims cover the presumed extension of Sicker Group rocks, as mapped by Muller (1980). This report describes geological mapping, rock chip sampling, and silt sampling carried out in January, 1987.

## 2.0 LOCATION, TOPOGRAPHY AND ACCESS

The GEORGINA claims lie on Vancouver Island, British Columbia, two kilometres west of Nanoose Bay and 20 kilometres northwest of Nanaimo.

Topography, which ranges from 40 to 120 metres above sea level, is subdued. Vegetation consists of third growth conifers with open spaces where arbutus trees flourish.

The Island Highway traverses the property, nearly all points of which can be reached by a network of gravel roads. A B.C. Hydro power line crosses the claim from northwest to southeast. Parts of the claim are scheduled for residential development.

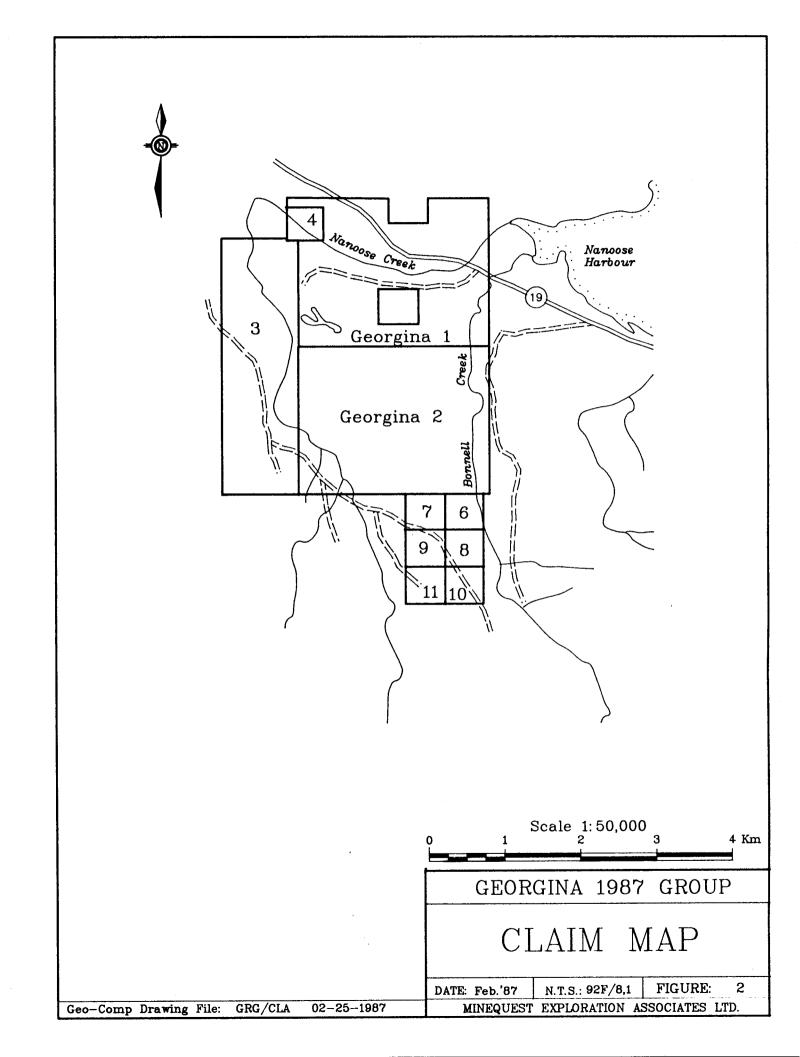


## OWNERSHIP AND CLAIM STATUS

The property consists of the claims listed below.

Claim	Record Number	Units	Due Date Before Submission of this Report	Registered Owner
Georgina 1	2033	20	Feb. 18, 1985	L.O. Allen
Georgina 2	2303	20	Mar. 11, 1986	11
Georgina 3	2304	14	Mar. 11, 1986	R.J. Bilquist
Georgina 4	2296	01	Mar. 11, 1986	11
Georgina 6	2297	01	Mar. 11, 1986	11
Georgina 7	2298	01	Mar. 11, 1986	11
Georgina 8	2299	01	Mar. 11, 1986	88
Georgina 9	2300	01	Mar. 11, 1986	n
Georgina 10	2301	01	Mar. 11, 1986	11
Georgina 11	2302	01	Mar. 11, 1986	11

The GEORGINA claim surrounds, in its south central part, a single unit claim (West Bay) and partially surrounds another single unit claim (North Bay) astride its northern boundary.



## 4.0 HISTORY AND PREVIOUS WORK

The following mineral occurrences are reported on or near the GEORGINA claims:

Name: Bonnell Creek

Minfile

Number: 92F379

Comment: "The old workings on the west bank of creek are on an E-W trending quartz vein, a few feet wide. Minor Cu

mineralization, with much Cu stain was

seen in the vein".

Commodities Present: Cu

Bibliography:

1. BCDM Open File

Name: Georgina

Minfile

Number: 92F178

Comment: "Chalcopyrite occurs in quartz veins in greenstone volcanics west of a fault separating greenstones from younger conglomerates of Upper Cretaceous age. Gold and silver were also produced".

Commodities

Present: Au, Ag, Cu

Bibliography:

1. BCDM Open File (Prop. Rpt., GUNNEX Ltd., 1965)

2. BDM MMAR 1934-F7, 1935-646, 1936-F63

3. GSC Paper 68-50-38

In 1985 and 1986 the GEORGINA 1 claim was the focus of prospecting and silt sampling by Messrs. Allen and Bilquist, and a preliminary geological examination by R.V. Longe, P.Eng.

## **GEOLOGY**

## 5.1 Regional Features

Most of the claims are underlain by sedimentary and volcanic rocks of the Myra Formation, a subdivision of the Sicker Group. Outliers of the overlying Comox Formation (Cretaceous sandstone, conglomerates and shales) occur at several locations. Triassic volcanics of the Karmutsen Formation are shown (Muller, 1980) to stratigraphically overlie the Sicker rocks to the southeast of the claims and to lie in fault contact to the southwest.

Buttle Lake Formation (old name): limestone, calcarenitic, crinoidal, commonly recrystallized; interbedded with subordinate or equal thicknesses of calcareous siltstone and chert; some diabase sills Sediment-Sill Unit (not a formational name): thinly bedded to massive argillite, siltsone and chert with interlayered sills of diabase

Myra Formation (new name): basic to rhyodacitic banded tuff, breccia and (?) lava; thinly bedded to massive argillite, siltstone, chert

Nitinat Formation (new name): metabasaltic lavas, pillowed or agglomeratic, commonly with large conspicuous uralitized pyroxene phenocrysts and amygdules of quartz and dark green minerals; minor massive to banded tuff.

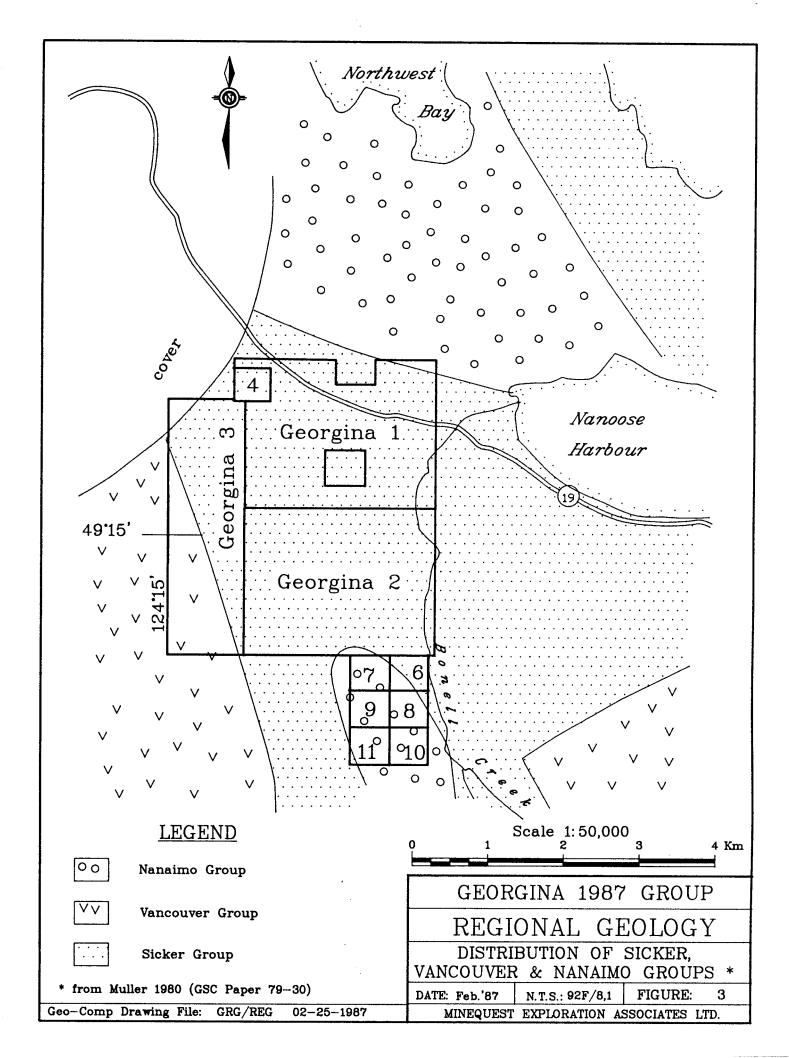
Subdivisions of Sicker Group, from Muller, 1980

#### 5.2 Airborne Magnetics

A well-developed magnetic feature (Longe, 1986) trends across the claim in a north-northwest, south-southeast direction, parallel to the schistose foliation. The outcrops of basic intrusive rocks are responsible for the magnetic anomaly with which they coincide.

## WORK CARRIED OUT IN 1987

The field program consisted of three days of reconnaissance mapping and rock chip sampling by the author and R.J. Bilquist, an experienced prospector, followed by two days of prospecting and silt sampling parts of Nanoose and Bonnell Creeks by Messrs. R.J. Bilquist and C. Bilquist.



## 7.0 RESULTS OF THE 1987 PROGRAM

#### 7.1 Property Geology

Lithologies on the property have been divided into six units based on field observations (see Figure 4).

Unit 1 is a black shale with thin interbeds of grey, very fine grained tuff. The shale is massive to finely laminated, with less that 1% disseminated pyrite, and occasionally has a cherty fracture. Interbeds of grey tuff range up to 10mm in thickness and carry up to 1% disseminated pyrite.

Unit 2 is intermediate to felsic volcanic rocks that have been weakly brecciated and cross-cut by numerous pyrite stringers. This unit is light grey weathering and variably iron stained. fresh surface these rocks are grey coloured and contain rare blocks of shale and argillite, up to 70cm in size. The volcanic rocks are generally massive and siliceous, and often display a breccia-like texture on weathered surfaces that is not readily visible on fresh faces. Angular fragments up to 5cm size are supported by a fine to medium grained matrix. Pyrite stringers range up to 1mm thick and to 10cm in length, have a random orientation, and occasionally end in irregular blebs up to 1cm in size. Total sulphide content varies from three to five percent.

Unit 3 is maroon and grey schist that is weakly phyllitic. Colour variation appears to reflect banding but is not always associated with a change in grain size. Locally the maroon colour has a blotchy appearance and may be an alteration feature rather than a primary texture. Grain size varies from very fine to medium grained, with only rare disseminated pyrite.

Unit 4 is andesite tuff, apple green on a fresh surface that weathers to a cream colour. Texture varies from finely laminated to massive, with fragmental beds that have fragments elongate parallel to the foliation. Fragments are subrounded, mostly 1-2cm size andesite and very rare black, angular sedimentary fragments. In one outcrop the andesite is brecciated and hosts numerous white and grey quartz veins.

Unit 5 is diorite intrusive rock. Grain size varies from fine to coarse grained with the ground mass carrying 2-3% magnetite. Quartz is anhedral, both feldspar and hornblende are anhedral to euhedral, and there is weak chlorite alteration of the hornblende.

Unit 6 is fossiliferous sandstone and conglomerate of the Cretaceous Nanaimo Group.

Units 1 through 5 are included within the Myra Formation of Muller (1980). Recent work by Massey and Friday (1987) in the Cowichan Lake area suggests that these units may be part of the McLaughlin Ridge Formation, a succession of volcanic sandstone, breccia, conglomerate, mafic flows, and felsic flow and tuffs. At present direct correlation of lithologies in both the Nanoose Uplift and Cowichan-Horne Lake Uplift is not possible. However, the presence of sulphide bearing brecciated felsic volcanic rocks within the same general sequence as mineral deposits at Buttle Lake is most encouraging.

## 7.2 Rock Geochemistry

A total of 31 rock chip samples were collected and 26 were analyzed for gold and a thirty element suite by Acme Analytical Laboratories Ltd. of Vancouver, B.C.

Two samples (87115, 201) collected from the waste pile at the winze of the Georgina showing returned 4110 and 3420 ppb gold with elevated arsenic and copper values. These are samples of quartz-carbonate vein with pyrite and arsenopyrite.

Samples from the brecciated felsic volcanic rocks (87106-110, 201-203) returned a single high of 375 ppb gold from silicifed volcanic rocks. Copper is commonly several hundred ppm and a high arsenic of 453 ppm was returned from a sample of silicified felsic volcanic rocks with banded pyrite.

Sample 211, a quartz vein, possibly hosted by diorite intrusive, produced 275 ppb gold and 948 ppm arsenic.

Two samples from Bonnell Creek, 241 and 243, massive strataform pyrite and chalcopyrite in quartz carbonate, returned weak gold values of 13 ppb and copper of 891 ppm, and 8550 ppm respectively.

## 7.3 Silt Geochemistry

Thirty-four samples were collected and analysed for gold and a thirty element suite by Acme Analytical Laboratories Ltd. of Vancouver, British Columbia.

Two samples from Bonnell Creek, upstream from the anomalous rock samples, returned gold values of 134 and 112 ppb. Copper and zinc values from Bonnell Creek are consistently higher than those from Nanoose Creek (76 ppm versus 33 ppm and 84 ppm versus 61 ppm for copper and zinc respectively).

Two samples from Nanoose Creek produced 21 and 155 ppb gold in an area of no outcrop. The source of these anomalies has not been found.

#### GENERAL CONCLUSIONS

- 1. The GEORGINA claims are underlain by black shale, felsic volcanic rocks, maroon and grey schist, and andesite of the Myra Formation, part of the Sicker Group. These rocks have been intruded by fine to coarse grained diorite, and are unconformably overlain by fossiliferous sandstone and conglomerate of the Nanaimo Group.
- 2. Anomalous gold values of 3 and 4 g/tonne have been returned from samples collected at the waste pile of the Georgina Showing Winze. Geochemically anomalous copper and gold values are found in brecciated and siliceous felsic volcanic rocks that are cross-cut by pyrite stringers. Anomalously high copper values and weak gold values were returned from strataform sulphides and quartz-carbonate veins in Bonell Creek.
- 3. Geochemically anomalous gold values have been returned from silt samples collected from both Bonell and Nanoose Creeks.
- 4. The presence of brecciated felsic volcanic rocks cross-cut by pyrite stringers within the Myra Formation is encouraging. Geochemically anomalous gold and copper values from these rocks, and geochemically anomalous gold values from silts suggest that this property is prospective for auriferous massive sulphides similar to those found at Buttle Lake.

#### RECOMMENDATIONS

It is recommended that:

- The remaining portions of Bonnell and Nanoose Creeks be silt sampled at 100 metre intervals.
- 2. A grid be established covering the felsic volcanic rock outcrops and then southeast to cover the copper showing in Bonnell Creek. Baseline should be oriented at 145° AZM, crosslines at 50 metre spacings.
- 3. Orientation soil and biogeochemical surveys be conducted over the felsic volcanic outcrops and along strike. Samples should be collected at 10 metre intervals along grid lines.
- 4. Geological mapping on the grid at an 1:2,500 scale.
- 5. Geophysical surveys be carried out on the grid.
  Magnetometry surveys to define the limits of the
  diorite, Crone EM surveys may prove an effective
  tool in locating sulphides.

Andrew W. Gour

May 11, 1987

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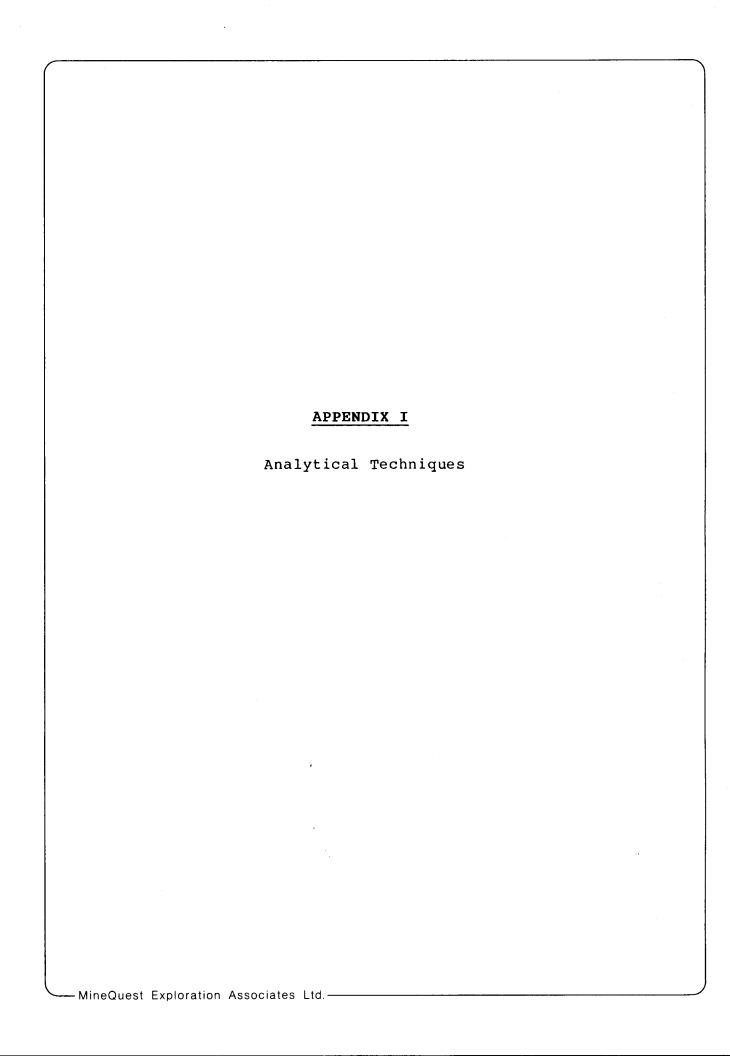
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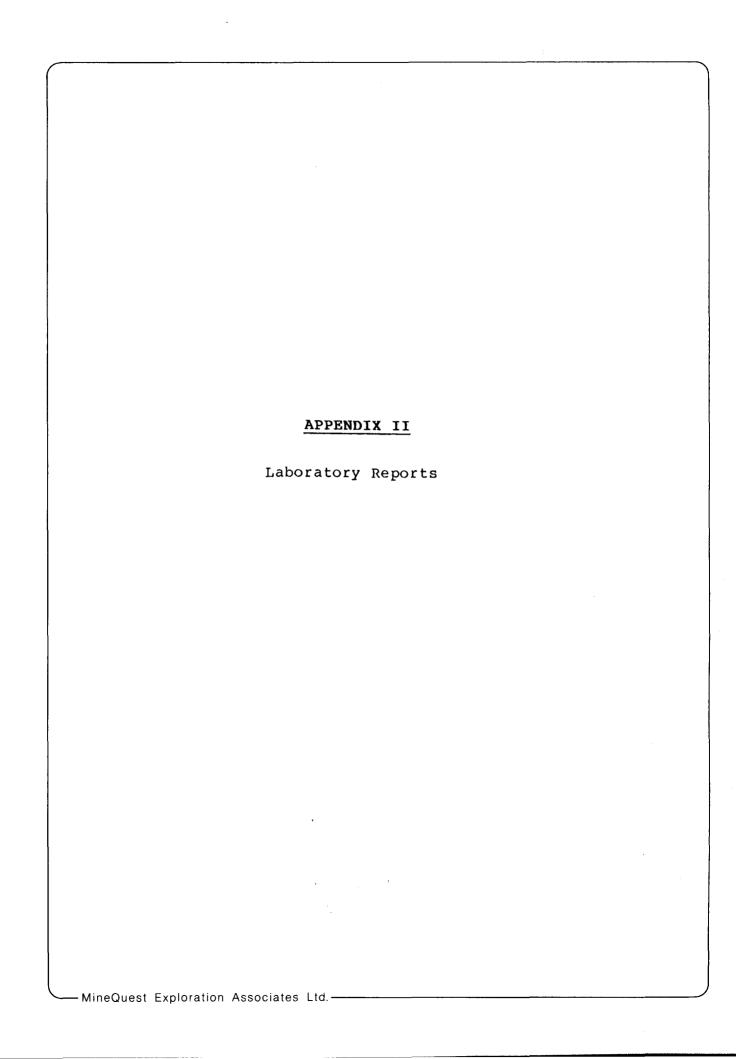
## APPENDIX I

## Analytical Techniques

All rock chip and silt samples were forwarded to Acme Analytical Labs in Vancouver, British Columbia for preparation and analysis.

Rock samples were crushed to -3/16". A split of 200 grams was ground to 98% -100 mesh. Silt samples were dried and sieved to -80 mesh.

The prepared rock and silt samples were then subjected to a 30-element ICP (inductively coupled plasma) analytical technique, after digestions for one hour at 95°C in 3:1:2-HCl:HNO3:H2O. In addition, gold contents were determined by fire assay extraction followed by atomic absorption analysis. It is important to note that the ICP technique is only partial for several of the elements reported.



ACME ANALYTICAL LABORATORIES LTD.

852 E.HASTINGS ST. VANCOUVER B.C. V6A 1R6

PHONE 253-3158

DATA LINE 251-1011

#### GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 MCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN.FE.CA.P.CR.MG.BA.TI.B.AL.NA.K.M.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: ROCK CHIPS AUXI ANALYSIS BY FA+AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: JAN 30 1987 DATE REPORT MAILED:

Feb 4/87

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6R6 87104	1	85	22	51	. 1	6	10	584	4.83	18	5	ND	1	11	1	2	2	52	. 24	.089	5	11	.91	48	.07	2	1.29	.04	.08	1	6	
6RS 87105	1	52	9	85	. 1	8	e	998	3.64	Ģ	5	ND	1	23	1	2	2	26	. 68	.172	6	9	.73	69	. 15	3	1.16	.02	.10	1	6	
5R6 87106	ì	90	10	70	.1	63	20	1044	5.32	62	5	ND	1	25	1	2	2	91	. 85	.083	7	13	1.46	57	.08	3	2.17	.04	.04	1	2	
GRG 87107	1	210	10	83	. 1	82	40	1374	7.76	20	5	ND	2	74	1	2	2	107	3.76	.061	13	99	2.15	115	.01	6	2.79	.01	.11	1	1	
5R6 87108	2	618	7	52	, 4	9	14	4273	8.07	48	5	ND	6	310	1	2	2		18.64		13	8	1.01	72	.01	7	1.61	.01	.09	1	5	
6R5 87109	1	52	4	15	. 1	17	5		1.53	15	5	ND	1	50	1	2	2		1.5!		5	12	.37	79	.01	4	.39	.02	.08	1	3	
GRS 87110	4	95	9	70	. 1	19	11	1082	3.17	14	5	NĐ	2	26	1	2	2	35	1.96	.042	6	19	.60	92	.01	7	1.09	.03	.07	1	6	
6R5 87111	1	36	2	42	.1	17	8	300	1.73	2	5	NĎ	1	64	1	2	2	30	1.11	.013	2	13	.61	17	.08	6	1.31	.01	.01	1	1	
GRG 87112	1	50	12	75	.1	16	10	1237	3.78	6	5	ND	1	13	1	2	. 2	57	.27	. 033	5	27	1.30	89	.14	2	1.62	.03	.07	1	5	
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GR6 87113	1	66	9	76	.1	17	9	906		3	5	ND	2	14	1	2	3	35	. 64		4	15	1.16	210	. 12		1.45	.02	.09	1	5	
6R6 87114	1	46	13	32	.1	7	6		1.49	6	5	NĐ	1	12	1	2	4	23	.10	.033	3	5	.33	47	.01	4	.55	.02	.02	1	4	
6RE 87115	1	85	2	4	1.2	11	10	949	1.12	3504	5	9	4	241	1	3	2		19.57		11	3	.15	9	.01	10	.12	.01	.02	1	4110	
6R6 87201	1	84	2	24	.1	13	7	887	2.07	59	5	ND	3	141	1	2	2	15			6	5	.88	93	.01	4	.18	.02	.04	1	375	
6R6 87202	1	201	5	89	.1	82	40	1579	7.61	48	5	ND	3	97	1	2	2	101	5.14	.063	12	101	2.01	117	.01	5	2.83	.01	.13	1	4	
GRG 87203	9	187	5	54	.1	22	15	1138	3.53	453	5	ND	1	13	1	2	2	28	. 64	.058	7	13	. 45	93	.01	4	.96	.02	.09	1	12	
6R6 87204	1	148	50	85	.1	7	23	1977	8.51	32	5	MD	1	25	1	2	4	62	.32	.159	8	å	1.12	71	.01	10	1.91	.03	.12	1	6	
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5R6 87208	1	11	2	23	.1	12	5	485	1.33	2	5	ND	1	26	1	2	2	28	2.63	.016	2	19	.44	12	.13	182	1.69	.01	.01	1	9	
6R6 87210	1	69	6	86	.1	49	17	2246	5.30	2	5	ND	1	13	1	2	2	107	.47	.055	3		2.05	71	.18		2.27	.04	. 05	1	3	
6R6 87211	1	19	3	23	.1	10	5	940	3.97	948	5	NĐ	1	10	1	2	2	13	1.08	.010	2	9	.11	17	.01	5	.09	.01	.02	1	275	
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DATA LINE 251-1011

#### GEOCHEMICAL ICP ANALYSIS

.500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HMOJ-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
THIS LEACH IS PARTIAL FOR MN.FE.CA.P.CR.MG.8A.TI.8.AL.MA.K.M.SI.ZR.CE.SM.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: ROCK CHIPS AUXX ANALYSIS BY FA+AA FROM 10 GRAM SAMPLE.

DATE RECEIVED: FEB 23 1987 DATE REPORT MAILED: Feb 27/67

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6R6-242								731																								
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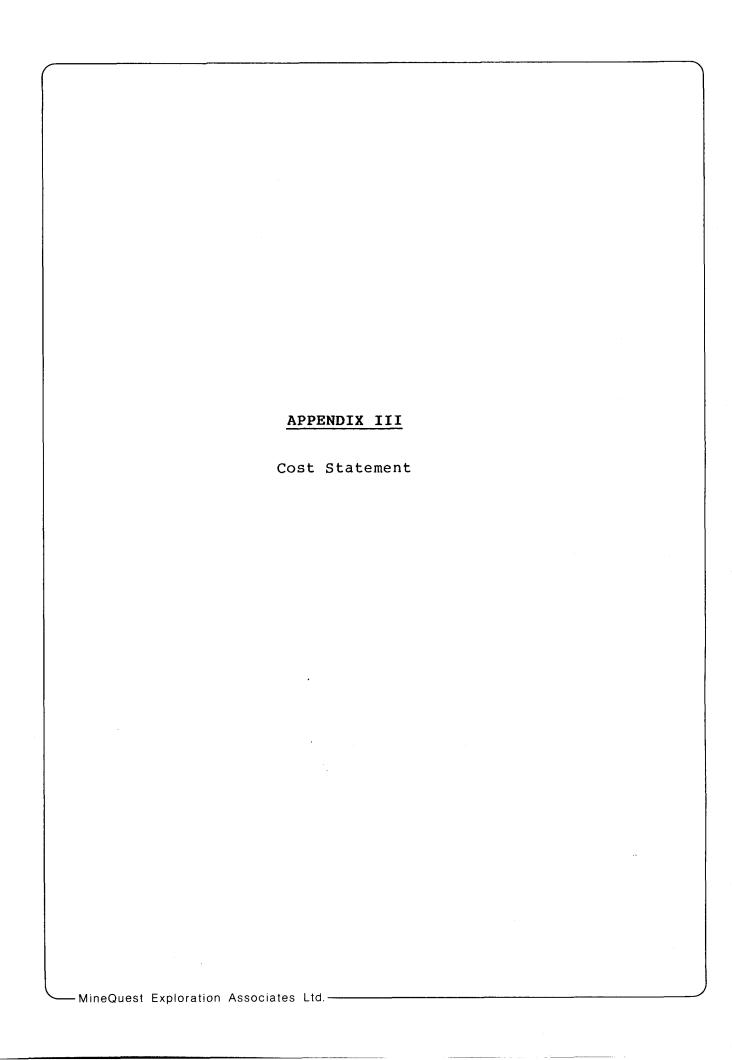
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- SAMPLE TYPE: SILT -BOMESH AU4 ANALYSIS BY AA FROM 10 GRAM SAMPLE.

							H	INE	UEST	EX	PLOF	RATI	DN	PRO	JECT	_	GE	ORGI	NA	FIL	.E #	87-	-061	2						PA	GE	1
SAMPLE	No PPH	Co PPN	Pb PPH	In PPN	Ag PPK	Ni PPH	Co PPM	lin PPN	Fe I	As PPH	U PPR	Au PPK	Th PPH	Sr PPH	Cd PTH	Sb FFN	Bi PPB	V PPR	Ca 1	P	La PPN	Cr PPN	Họ I	Ba PPH	Ti I	a PPH	A1 I	Na I	K I	¥ 77%	Aut PPB	
GRE-301	1	95	11	103	.4	39	18	790	5.31	13	4	10	2	53	1	2	2	100	1.16	.051	4	42	1.18	217	. 10	18	2.43	.07	.07	1	3	
GR6-302	1	83		89	.2	39	17	738	4.81	14	5	10	1	47	1	2	2	74	1.04	. 050	4	24	1.14	215	.21	14	2.38	. 04	.06	1	1	
6RG-303	!	67	10	62	.2	32	15	683	5.36	6	5	XD	2	38	1	2	2	117	. 89	.045	7	42	. 92	162	. 17	8	1.96	.04	. 05	1	1	
6R6-304	1	80	8	84	.2	36	14	456	4.91	11	5	Ю	1	39	1	2	7	78	.94	.044	5	41	1.12	180	* . i?	13	2.25	. 05	.05	1	1	
GR6-305	1	82	7	79	.3	22	14	622	4.74	12	5	140	1	41	1	2	2	99	.91	.047	4	37	1.08	187	.19	14	2.15	.05	.05	1	2	
6R6-306	í	66	,	77	.2	34	15	594	4.15	10	5	KS	1	35	1	2	2	80	.85	.043	5	35	1.00	148	.17	15	1.97	.04	.05	1	1	
6R6-307	1	75	•	81	.1	36	16	661	4.58	12	5	10	1	38	1	2	2	85	.92	.047	5	38	1.11	153	.17	10	2.23	.05	. 05	1	2	
ER6-308	1	67		69	.2	29	15	553	5.13	11	5	10	1	31	1	2	2	117	.78	.045	5	41	.91	147	.19	7	1.82	.04	.04	1	112	
GRG-309	1	75	•	86	.3	37	14	635	4.66	10	5	100	1	41	1	2	2	86	. 10	.047	5	39	1.00	158	.14	11	2.16	. 65	.04	1	1	
SR6-310	i	27	2	42	.1	17	1	393	3.16	4	5	10	1	24	1	2	2	73	.75	.036	6	22	.38	74	.17		1.42	.02	.03	1	2	
GRG-311	i	59	7	43	.2	27	13	425	5.64	•	5	10	. 1	32	1.	2	2	150	.80	.053	7	43	.67	121	.17	4	1.57	.03	.04	1	134	
SR6-312	1	91	14	108	.3	41	19	799	5.42	20	5	10	1	46	1	2	2	75	1.02	. 053	7	43	1.24	177	.14	•	2.70	.07	.07	1	2	
6R6-313	1	70	12	147	.2	53	19	882	6.00	27	5	KD.	1	17	1	2	2	72	.47	.039	11	37	.54	129	.05	4	1.90	.02	.05	1	1	
ERG-314	2	40	11	89	.1	29	10	606	3.43	16	5	10	1	26	1	2	2	87	.75	. 045	10	26	.49	164	.12	5	1.49	.02	.03	1	1	
ER6-315	2	22	7	100	.2	39	11	870	4.38	18	5	10	1	22	1	2	2	80	.61	.026	14	29	.49	130	.16	7	1.86	.03	.03	1	1	
ERG-316	3	53	18	130	.2	32	13	795	3.95	16	5	113	1	31	i	2	2	88	.87	.064	13	30	.57	221	.12	11	2.11	.02	.04	1	2	
<del>6R6-</del> 317	1	31	7	67	.1	22	12	598	3.52	25	5	10	1	24	1	2	2	73	.71	.042	7	23	.43	110	-12	4	1.11	-02	.03	1	2	
686-318	1	31	8	63	.1	22	11	663	3.21	21	5	10	1	34	1	2	2	75	.82	.041	7	25	.40	106	.14	7	1.20	.03	.03	1	155	
ER6-319	. 1	27	8	57	.1	19	10	621	3.01	17	5	10	1	26	1	2	2	82	.78	.040	6	23	. 42	94	. 18	4	1.24	.03	.43	1	1	
6R6-320	1	20	8	50	.1	19	•	459	2.93	15	5	10)	1	27	i	2	2	€1	1.00	.040	4	23	.42	83	.18	6	1.14	.03	.63	1	21	
6R6-321	1	28	6	43	.2	24	12	470	3.15	24	5	10	1	38	1	2	2	131	1.12	.041	7	41	. 45	29	.17	5	1.41	.04	.03	1	2	
<del>5</del> 86-322	i	35	8	71	.1	23	13	654	3.69	28	5	ND	1	27	1	2	2	94	.91	. 034	7	30	. 48	101	.18	•	1.40	.03	.43	1	1	
ERG-323	1	45	10	91	.1	36	10	815	5.49	42	5	16	1	20	i	2	2	116	.74	. 044	6	20	. 59	87	. 18		1.30	.03	.63	1	1	
6R6-324	1	36	12	46	.1	26	13	421	4.04	27	5	113	1	34	1	2	2	102	.07	.041		29	.47	71	.17	7	1.33	.03	.43	1	3	
6R6-325	1	44	10	49	1	24	14	697	4.43	40	5	10	1	22	1	2	2	110	.86	.040	7	30	.62	62	.22	5	1.42	.04	.03	1	t	
6R6-326	1	51	•	55	.1	17	9	642	2.76	4	5	10	ı	28	1	2	2	90	.81	.053	12	28	.43	47	.19	5	2.63	.02	.02	1	2	
5R6-327	1	30	- 11	58	.1	21	10	584	3.36	23	5	10	1	25	1	2	2	87	.87	.042	6	24	.44	83	. 17	4	1.18	. 03	.03	1	1	
6RG-328	1	35	7	43	.1	21	11	470	3.40	27	5	R)	1	27	1	2	2	86	.74	. 043	6	26	.44	90	.17	8	1.21	. 63	. 63	i	1	
6R6-329	1	25	7	48	.2	21	•	447	3.09	20	5	MD.	1	21	1	2	2	84	.83	.038	5	24	. 43	43	. 17	4	1.02	.03	.63	1	1	
ERE-330	1	33	•	54	.1	22	ii	472	3.35	21	5	10	1	27	1	2	2	89	.71	.040	6	29	.43	90	.18		1.44	.03	.03	1	2	
ER6-331	1	29	5	50	.1	17	10	528	3.21	15	5	110	1	24	1	2	2	91	. 20	.035	5	25	.41	75	.19		1.21	.03	.02	1	1	
ER6-332	1	31	5	52	.1	22	10	640	3.51	5	5	10	1	21	1	2	2	71	.47	.041	11	42	.44	104	.17	2	2.72	.02	.63	1	1	
ERG-333.	1	28	4	54	.1	22	10	555	3.23	20	5	10	1	26	1	2	2	86	.94	.037	6	24	. 42	86	. 17		1.21	.03	.02	1	1	



## APPENDIX III

## Cost Statement - Georgina Claims

## January 1 to March 31, 1987

## FEES, WAGES AND SALARIES

A.W.	Gourlay	3 days	at	\$385.00	\$ 1,155.00	
A.W.	Gourlay	12 hours	at	\$64.00	768.00	
R.J.	Bilquist	5 days	at	\$185.00	 925.00	\$ 2,848.00

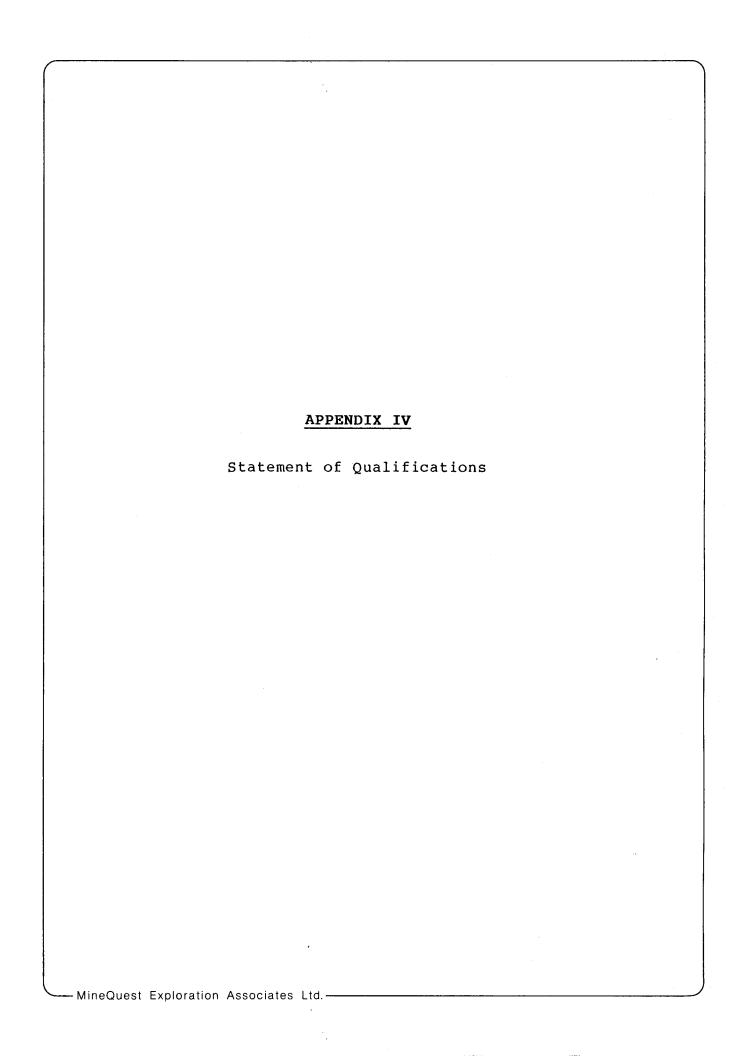
## CASUAL STAFF

69.00

## **DISBURSEMENTS**

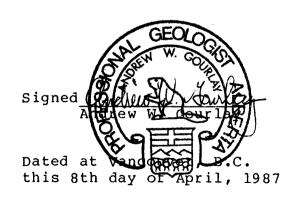
Fuel and lubricants	36.83
Taxis, parking, fares	44.00
Groceries	15.62
Food & accommodation	153.62
Analyses	756.00
Claim recording & renewal	315.00
Telephone	9.90
Drafting (est.)	350.00
Reprographics	63.37
Photocopies	40.00
Maps	<u>21.12</u> 1,805.46

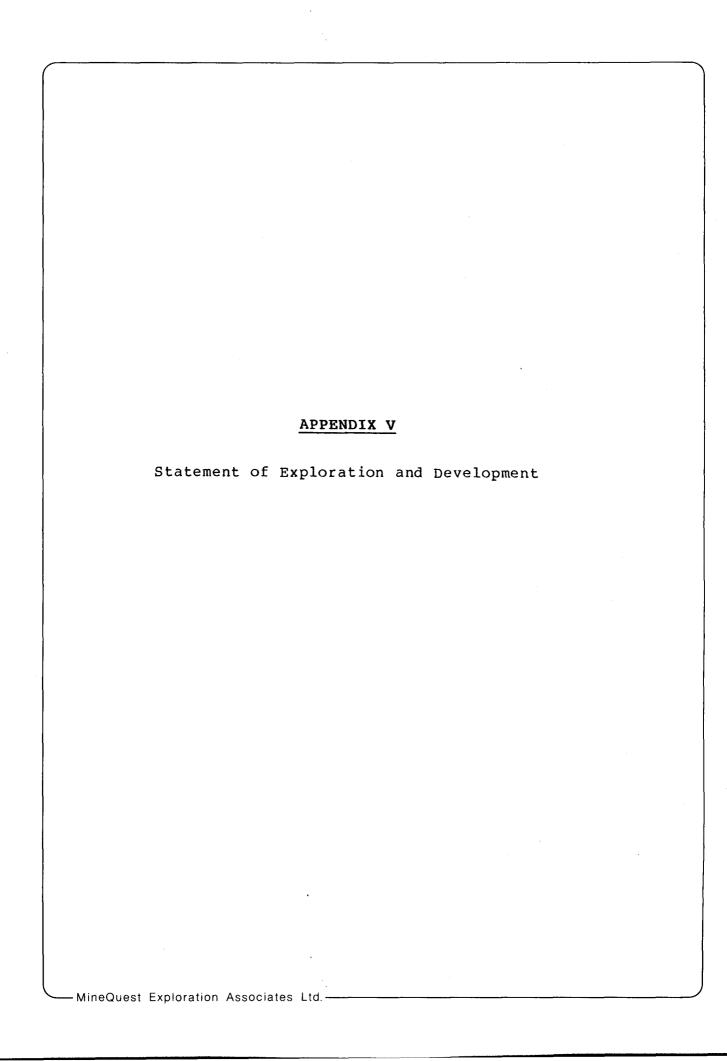
\$ 4,722.46



## STATEMENT OF QUALIFICATIONS

- I, Andrew W. Gourlay, hereby certify that:
- 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 10 years.
- 5. The information used in this report is based on notes, maps, and data on file at MineQuest Exploration Associates Ltd. and personal execution of the geological mapping.





## Province of British Columbia Ministry of Energy, Mines and Petroleum Resources Division - TITLES BRANCH

M.E. # \$ VANCOUVER, B.C.

## MINERAL ACT

## STATEMENT OF EXPLORATION AND DEVELOPMENT

A. M. Gourlay  Charmol  201-311 Water Street  P.O. Box 81  P.O. Box 128  Vancouver, B.C.  VB LBS 669-2251  Von LXO 247-8363 VOR 1XO  Von LXO 247-8363  Von LXO 2						
201-311 Water Street P.O. Box 81 P.O. Box 128 Vancouver, B.C. Gabriola Island Gabriola Island VANCOUVER, B.C. Gabriola Island Gabriola Island VANCOUVER, B.C. Triaphone Number) Volid subsisting F.M.C. No. GOURAW 269274 Valid subsisting F.M.C. No. GOURAW 269274 Valid subsisting F.M.C. No. GOURAW 269274 Valid subsisting F.M.C. No. 284708 284345 Valid subsisting F.M.C. No. 233, 2303, 2304, 2296, 2297, 2299, 2390, 2300, 2301, 2302 GRORGINA 1, 2, 2, 4, 6, 7, 8, 9, 10, 11 GRORGING No. 19 Situate at NARQUSE, HATDOUX in the NARALINO Maining Division, to the value of at least 61,00, dollars. Work was done from the 1st day of January 19 87, to the 16thay of February 19 87.  2. The following work was done in the 12 months in which such work it required to be done:  (COMPLETE APPROPRIATE SECTIONIS) A, B, C, D, FOLLOWING) A. PHYSICAL (Trenches, open cuts, sits, piss, shafts, reclamation, and construction of roads and traits)  (Give details at required by section 13 of regulations.)  SUB-RECORDER RECTIVE  TOTAL PHYSICAL  In with to apply \$ of physical work to the claims litted below.  (Sites number of years to be applied to each claim, its menth of record, and identify sech claim by name and record no.)  It with to apply \$ of this prospecting work to the claims litted below.  (Sites number of years to be applied to each claim, its menth of record, and identify sech claim by name and record no.)	- <b>I.</b>	'Agent for	R.J. Bilo	·	L.O. Alle	en
VAIRCOUVER, B.C.  V6B 1B8 669-2251  V6R 1X0 247-8363 VOR 1X0  Volid subsisting F.M.C. No. GOURAW 269274  Valid subsisting F.M.C. No. GOURAW 269274  Valid subsisting F.M.C. No. GOURAW 269274  Valid subsisting F.M.C. No. 284708 284345  Valid subsisting F.M.C. No. 233, 2303, 2304, 2296, 2297, 2298, 2299, 2300, 2301, 2302  Sinuse as NARQOSE, HATDOUX In the NARAÍTIO Moning Division, to the value of at least 61.00 dollar. Work was done from the 185 day of January 1987, to the 16thbay of February 1987.  2. The following work was done in the 12 months in which such work is received to be done.  (COMPLETE APPROPRIATE SECTIONIS) A, B, C, D, FOLLOWING)  A. PHYSICAL (Trenches, open cutt, edits, pits, shefts, reclamation, and construction of roads and valid)  Give details as reculred by section 13 of regulations.)  SUG-PITCORDER RCCCTYCD  FEB 1 0 1987  JAT. 9 3 VANCOUVER, B.C.  TOTAL PHYSICAL  I wish to apply \$ of physical work to the claims listed below.  (State number of years to be applied to each claim, its month of record, and identify each claim by name and record no.)  I wish to apply \$ of this prospecting work to the claims listed below.  (State number of years to be applied to each claim, its month of record, and identify each claim by name and record no.)			P.O. Box	81	P.O. Box	128
Valid subsisting F.M.C. No. GOURAW 269274 Valid subsisting F.M.C. No. 284708 284345  VALID Subsisting F.M.C. No. GOURAW 269274 Valid subsisting F.M.C. No. 284708 284345  TATE THAT  1. I have done, or caused to be done, work on the GEORGINA 1987. GFOUP  GEORGINA 1, 2, 3, 4, 6, 7, 8, 9, 10, 11			Gabriola		Gabriola	Islan
ITATE THAT  1. I have done, or caused to be done, work on the SERRGINA, 1987, Group.  GEORGINA, 1,2,3,4,6,7,8,9,10,11.  GEORGINA, 1,2,3,4,6,7,8,9,10,11.  Record No.1d.  2033,2303,2304,2296,2297,2298,2299,2300,2301,2302  Situate at Nangose, Harbour in the Nanaimo Mining Division, to the value of at least 61,00.  dollars. Work was done from the 1st day of January 1s. 87. no the 16th, ayor February 1s. 47.  2. The following work was done in the 12 months in which such work is required to be done:  (COMPLETE APPROPRIATE SECTION(S) A, B, C, D, FOLLOWING)  A. PHYSICAL (Transher, open cuts, edits, pits, shafts, reclamation, and construction of roads and trailed  (Give datasis as required by section 13 of regulations.) COST  SUB-HECORDER  FEB 1 & 1987  IAR. # \$						47-884
ITATE THAT  1. I have done, or caused to be done, work on the SERRGINA, 1987, Group.  GEORGINA, 1,2,3,4,6,7,8,9,10,11.  GEORGINA, 1,2,3,4,6,7,8,9,10,11.  Record No.1d.  2033,2303,2304,2296,2297,2298,2299,2300,2301,2302  Situate at Nangose, Harbour in the Nanaimo Mining Division, to the value of at least 61,00.  dollars. Work was done from the 1st day of January 1s. 87. no the 16th, ayor February 1s. 47.  2. The following work was done in the 12 months in which such work is required to be done:  (COMPLETE APPROPRIATE SECTION(S) A, B, C, D, FOLLOWING)  A. PHYSICAL (Transher, open cuts, edits, pits, shafts, reclamation, and construction of roads and trailed  (Give datasis as required by section 13 of regulations.) COST  SUB-HECORDER  FEB 1 & 1987  IAR. # \$	Valid subsisting F.M.C. No. GOURAW 269274	• •	Valid subsisting F.M.	C. No	08 2843	45
GEORGINA 1, 2, 3, 4, 6, 7, 8, 9, 10, 11  Record No.(s) 2033, 2303, 2304, 2296, 2297, 2298, 2299, 2300, 2301, 2302  Situate at Nanoqse, Harbour in the Nanaimo Mining Division, to the value of at least 6100 dollar. Work was done from the 1st day of January 19, 87, to the 16th/sey of February 19, 87  2. The following work was done in the 12 months in which such work is required to be done:  (COMPLETE APPROPRIATE SECTION(S) A, B, C, D, FOLLOWING)  4. PHYSICAL (Trenches, open cuts, adits, phs, shafts, reclamation, and construction of roads and trails)  (Give details as required by section 13 of regulations.)  COST  SUB-HRCORDER RECENTED  FEB 18 1937  I.A.R. # \$ VANCOUVER, B.C.  TOTAL PHYSICAL  I wish to apply \$ of physical work to the claims listed below.  (State number of years to be applied to sech claim, its month of record, and identify each claim by name and record no.)  I wish to apply \$ of this prospecting work to the claims listed below.  (State number of years to be applied to sech claim, its month of record, and identify each claim by name and record no.)						
Situate atNADQSSE_Harbout in theNanaimo	GEORGINA 1,2,3,4,6,7,8,9,10,	.11			Claimle	
of January 19 87 to the 16thusy of February 19 87  2. The following work was done in the 12 months in which such work is required to be done:  (COMPLETE APPROPRIATE SECTION(S) A, B, C, D, FOLLOWING)  A. PHYSICAL (Trenches, open cuts, edits, pits, shefts, reclamation, and construction of roads and trailis)  (Give details as required by section 13 of regulations.)  COST  SUB-HECORDER RECHARD  FEB 1 8 1987  IAR. # \$.  VANCOUVER, B.C.  I wish to apply \$ of physical work to the claims listed below.  (State number of years to be applied to each claim, its month of record, and identify each claim by name and record no.)  I wish to apply \$ of this prospecting work to the claims listed below.  (State number of years to be applied to each claim, its month of record, and identify each claim by name and record no.)						١.
2. The following work was done in the 12 months in which such work is required to be done:  (COMPLETE APPROPRIATE SECTIONIS) A, B, C, D, FOLLOWING)  A. PHYSICAL  (Trenches, open cuts, edits, pits, shafts, reclamation, and construction of roads and trails)  (Give details as required by section 13 of regulations.)  COST  SUB-HECGIRDER RECHIVED  FEB 1 & 1987  MAR. #	to the value of at least 6100	dolla	rs. Work was done from	n thelst	da	Y
(COMPLETE APPROPRIATE SECTIONIS) A, B, C, D, FOLLOWING)  8. PHYSICAL (Trenches, open cuts, adits, plats, shafts, reclamation, and construction of roads and trailis)  (Give details as required by section 13 of regulations.)  SUB-HECORDER RECTIVED  FEB 1 8 1987  MAR. # \$ VANCOUVER, B.C.  I wish to apply \$	ofJanuary 19.87	o the	6.th <sub>day of</sub> I	ebruary	19 .87	
A. PHYSICAL (Trenches, open cuts, adits, pits, shefts, reclamation, and construction of roads and trails)  (Give details as required by section 13 of regulations.)  SUB-HTCORDER RECTIVED  FEB 1 2 1987  I.H.R. # \$  VANCOUVER, B.C.  I wish to apply \$ of physical work to the claims listed below.  (State number of years to be applied to each claim, its month of record, and identify each claim by name and record no.)  I wish to apply \$ of this prospecting work to the claims listed below.  (State number of years to be applied to each claim, its month of record, and identify each claim by name and record no.)	2. The following work was done in the 12 months in which s	uch work is req	uired to be done:			
(Give details as required by section 13 of regulations.)  SUB-HECORDER RECTIVED  FEB 1 & 1987  I.I.R. # \$  WANCOUVER, B.C.  I wish to apply \$ of physical work to the claims listed below.  (State number of years to be applied to each claim, its month of record, and identify each claim by name and record no.)  I wish to apply \$ of this prospecting work to the claims listed below.  (State number of years to be applied to each claim, its month of record, and identify each claim by name and record no.)	(COMPLETE APPROPRIATE SE	CTION(S) A	, B, C, D, FOLLO	WING)		
SUB-RECORDER RECTIVED  FEB 1 8 1987  MAR. # \$	A. PHYSICAL (Trenches, open cuts, adits, pits, shafts, r	eclamation, and	construction of roads	and trails)		
SUB-HECORDER RECTIVE  FEB 1 8 1987  M.R. # \$ VANCOUVER, B.C.  I wish to apply \$ of physical work to the claims listed below.  (State number of years to be applied to each claim, its month of record, and identify each claim by name and record no.)  I. PROSPECTING (Details in report submitted as per section 9 of regulations.)  (The Itemized cost statement must be part of the report.)  COST  I wish to apply \$ of this prospecting work to the claims listed below.  (State number of years to be applied to each claim, its month of record, and identify each claim by name and record no.)	(Give details as required by section 13 of	regulations.)		С	OST	7
SUB-HECORDER RECEIVED  FEB 1 8 1987  M.R. # \$						
SUB-HFCORDER RECEIVED  FEB 1 & 1987  I.A. #						
FEB 1 8 1987						
TOTAL PHYSICAL  I wish to apply \$						1
TOTAL PHYSICAL  I wish to apply \$ of physical work to the claims listed below.  (State number of years to be applied to each claim, its month of record, and identify each claim by name and record no.)  PROSPECTING (Details in report submitted as per section 9 of regulations.)  (The itemized cost statement must be part of the report.)  L wish to apply \$ of this prospecting work to the claims listed below.  (State number of years to be applied to each claim, its month of record, and identify each claim by name and record no.)					[ 0 1301	
I wish to apply \$ of physical work to the claims listed below.  (State number of years to be applied to each claim, its month of record, and identify each claim by name and record no.)  1. PROSPECTING (Details in report submitted as per section 9 of regulations.) (The itemized cost statement must be part of the report.)  1 wish to apply \$ of this prospecting work to the claims listed below.  (State number of years to be applied to each claim, its month of record, and identify each claim by name and record no.)		. <b></b>				:
I wish to apply \$						
I wish to apply \$		· • • • • • • • • • • • • • • • • • • •				
I wish to apply \$		· · · · · · · · · · · ·	<u></u>			ا
(State number of years to be applied to each claim, its month of record, and identify each claim by name and record no.)  B. PROSPECTING (Details in report submitted as per section 9 of regulations.) [The itemized cost statement must be part of the report.]  Let wish to apply \$		T	OTAL PHYSICAL			.]
COST   COST	(State number of years to be applied to each claim, its mo	onth of record,	and identify each claim			
[The itemized cost statement must be part of the report.]  COST  I wish to apply \$ of this prospecting work to the claims listed below.  (State number of years to be applied to each claim, its month of record, and identify each claim by name and record no.)	•••••		• • • • • • • • • • • • • • • • • • • •			•
[The itemized cost statement must be part of the report.]  COST  I wish to apply \$ of this prospecting work to the claims listed below.  (State number of years to be applied to each claim, its month of record, and identify each claim by name and record no.)						
(State number of years to be applied to each claim, its month of record, and identify each claim by name and record no.)				C	ost	1
(State number of years to be applied to each claim, its month of record, and identify each claim by name and record no.)	•					
(State number of years to be applied to each claim, its month of record, and identify each claim by name and record no.)				· · · · · · · · · · · · · · · · · · ·		ك
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		report submitted as per section 8 of 20d cost statement must be part of 1		COST
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0501001011	50011/01/			
	(Details in r (The itemiz	ICAL, GEOCHEMICAL report submitted as per section 5, 6 zed cost statement must be part of to s of work in space below.)		
Geological Ma	pping	, Rock Chip sample	ing, Silt Sampling	4700
	• • • • • •			4500
	<del></del>		TOTAL OF C AND D	4700
/ho was the operator (prov the financing)?	rided	Address 201-311	est Exploration A	
arable Assessment Con	dies (BAC			T
ortable Assessment Cre		·		AMOUNT
mount to be withdrawn if	om owner(	(s) or operator(s) account(s):		
		Name of t	Owner	
May be no more than 30 poor of value of the approved submitted as assessment w	work	1. MineQuest Expl As	loration ssociates Ltd.	1400
C and (or) D.)		<b>3</b>	••••••	
		4	1	1400
		T	TOTAL WITHDRAWAL	1400
		TOTAL OF C AND (OR) D	PLUS PAC WITHDRAWAL	6100
I wish to apply \$ 6		of this work to the claim		
CLAIM GEORGINA 1/		CORD # "" UNITS"" MC		APPLTED ""YEARS EAR
'GEORGINA' 2/		30350	Mar 21	0.0.0
GEORGINA 3/.		30414 296 1		4 <u>001</u> 100 1
GEORGINA 6/.		29.7		100 · · · · · · · · · · 1 · · · · · · ·
GEORGINA 8	2	299	Mar	100
GEORGINA 9/	23 23	3001	Mar Mar	1001
	23	3021		1001
Value of work to be cr	edited to po	ortable assessment credit (PAC) acc	count(s).	
	(May only	y be credited from the approved value	ue of C and (or) D not applied to	claims.}
		Nam	•	AMOUNT
owner(s) name.	1			
operator(s) name (party providing	1	• • • • • • • • • • • • • • • • • • • •		
	<b>2</b>		•••••	

a.W. Jouley
(Signapure of Applicant)

