

SUMMARY REPORT
ON 1986 EXPLORATION ACTIVITY
MIDNIGHT GULCH PROPERTY

For: Yukon Economic Development
Mines & Small Business
Box 2703, Whitehorse, Yukon
Y1A 2C6

By: Allan Montgomery (B.Sc.)
Island Mining & Explorations Co. Ltd.
706-595 Howe Street
Vancouver, B.C.
V6C 2T5

February 1987

INTRODUCTION

The following report was prepared in compliance with Schedule B of the Exploration Incentives Program, Yukon Economic Development: Mines and Small Business for Island Mining & Explorations Co. Ltd.'s Midnight Gulch Property; Designation Number E1P86-035.

Reports and maps covering parts of the property have been the source of most of the information summarized in this report and have been included in this report.

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1. GENERAL

(1) Previous work

The Midnight Gulch area was originally staked as the Hidden Ore Group around 1907. Several silicified rhyolite dykes with narrow quartz veins were trenched and three adits were driven into the rhyolite dykes. Exploration discontinued in the 1930's and was not resumed until Island Mining & Explorations Co. Ltd. staked the JL 1-24 claims in 1980.

The Ton claims were staked by Inco in 1983 and optioned by Island Mining in 1985. The remaining claims were also staked at this time.

Surface sampling, prospecting and mapping have been continuing sporadically since 1980.

(2) Surface Evaluation

During the 1986 field season exploration activities were carried out on Island Mining & Explorations Co. Ltd.'s Midnight Gulch Property located in the Bennett Lake-Wheaton River Region, Yukon. Work carried out on the JL, Ton and Island fractional claims included diamond drilling, geochem, prospecting, trenching and mapping.

Five NQ diamond drill holes totalling 748 ft (228 m) tested gossans and trench mineralization in the Road zone grid and Hill zone grid areas (Figure 1) on the Ton claims. Fill-in soil sampling to supplement a 1985 soil grid was completed locally on the Ton and JL claims. Rock and soil sampling which included sampling of new and old trenches as well as old adits was completed on the Ton, JL and Island fractional claims. Five cat trenches were completed on the Ton and Island fractional claims. Mapping included 1:500 scale of the dyke swarm north of Midnight Gulch and the road grid area and 1:5000 scale mapping locally over the Ton and JL claims.

(3) Details of Underground Work

N/A

(4) Methods of Sampling and Analysis

Drilling, trenching and prospecting and soil grid sampling was carried out during the 1986 field program. Samples were analyzed for Au and Ag and occasionally for Pb, Zn, As and Sb. All analytical work was done by ACME Analytical Laboratories Ltd., Vancouver. In addition to standard sampling, three 2 kg soil samples were collected on the JL claims and panned for gold (see Appendix B). Analytical methods were as follows:

Rock and Core

Samples weighing 0.50 g were crushed to -100 mesh and digested in an HCl-HNO₃-H₂O solution. Ag with or without Pb, Zn, As and Sb was analyzed by ICP; F.A.-A.A. was used to detect Ag when ICP analysis returned high values. Samples weighing 10 g, prepared as above, were analyzed for Au by A.A. or F.A.-A.A. (for high Au).

Soil

Analytical methods used were similar to the above methods after drying and sieving to -80 mesh.

(5) Analytical Results

See Appendix A

(6) Conclusions and Recommendations

Diamond drilling, trenching, geochem, prospecting and sampling, and mapping have located and evaluated a number of anomalous zones on the JL, Ton and Island fractional claims. Significant gold and silver values have been located and mineralized quartz veining is known to occur in rhyolite dykes. However, as yet a large mineralized zone has not been defined. Recommendations have been made in the appended report on the JL 1480 claims by Tom Garagan, the geologist in charge of the 1986 program. Recommendations similar to these also apply to the bordering Ton claims.

2. GEOLOGICAL

(1) Table of Formations

See Table 1

(2) Rock Types, Structures, Veins or Mineralized Zones

Regional Geology

The Wheaton River is situated near the eastern margin of the Coast Plutonic complex. The regional geology is described by Wheeler (1961) and Lambert (1974).

The Coast Plutonic complex consists of foliated and non-foliated granitoid rocks which intrude and underlie (roof pendants) low-grade metamorphosed sediments and volcanics of the Mesozoic Whitehorse-Nechako Trough and quartzites, schists and gneisses of the Early Paleozoic Yukon Group.

Subaerial rhyolite and andesite flows and pyroclastics of the Tertiary Skukum Group unconformably overlie the above units. Late stage rhyolite and basaltic-andesite dykes and plugs related to the Skukum volcanics cut the Skukum Group and surrounding rocks.

The gold, silver and antimony deposits in the area are related to Tertiary faulting and emplacement of rhyolite dykes associated with Skukum Group volcanism.

Local Geology

The Midnight Gulch property is underlain by Mesozoic volcanics which are intruded by quartz diorite of the Coast Plutonic complex. A northwest trending rhyolite dyke swarm is located north and west of Midnight Gulch. The rhyolite dykes are intensely silicified and contain several thin precious metal bearing fractures.

(3) Interpretation of Geological Observations

- the property is underlain by triassic basalt and andesite flows and tuffs
- triassic (Lewis group) rocks are intruded by Cretaceous quartz diorite and quartz monzonite
- a swarm of tertiary rhyolite to felsite dykes trending 120° to 145° has intruded the Triassic volcanics; individual dykes dip 40° to 80°N

TABLE OF FORMATIONS - MIDNIGHT GULCH

UNIT	AGE	LITHOLOGY
Qs	Quaternary	Unconsolidated Surficial Debris
-----Unconformity		
Esk	Tertiary	Rhyolite, Felsite and Latite Dykes, Quartz Veins
-----Unconformity		
kdg	Cretaceous	Coast Plutonic Belt: Quartz Diorite, Monzonite
-----Unconformity		
uTRLV	Triassic	Lewis River Group Meta-Andesite, Basalt flows and tuffs

TABLE I GEOLOGICAL FORMATION - MIDNIGHT GULCH AREA

- mineralization, consisting of milky white quartz veins and stockwork with or without galena, sphalerite, pyrite and minor chalcopyrite and native gold, occurs within sericitized and locally silicified dykes, veining has also been located in quartz diorite float
- dyking appears to be controlled by trend of folding in volcanics
- volcanics are ankerite and may be fuschite altered adjacent to dykes

* see also Appendix B and C reports

(4) Conclusions and Recommendations

Similar to many of the prospects in the Wheaton River area, mineralized quartz veining is intimately associated with tertiary rhyolite dyking. The pattern and location of dyking and alteration associated with dyking can be used as a guide to locating mineralized dykes.

4. GEOCHEMISTRY

(1) References to Available Geology

Holcapek, F. 1981: Evaluation Report on the JL 1-24 mineral claims, Midnight Gulch. Private report for Island Mining & Explorations Co. Ltd.

Lambert, M.B. 1974: The Bennett Lake Cauldron Subsidence Complex, British Columbia and Yukon Territory. G.S.C. Bull. 227.

Wheeler, J.O. 1961: Whitehorse Map Area, Yukon Territory. 105D. G.S.C. Memoir 312.

(2) Methods of Sampling and Analysis

Methods of sampling have been outlined in Section 1 (4) of this report. Core sampling concentrated on rhyolite dyking with quartz veining and/or sulphides and/or brecciation and silicified and altered zones. Samples were analyzed for Au and Ag.

The majority of rock and soil samples were collected from 1986 and older trenches and from adit dumps and outcropping dykes. Rock samples were collected as grab, chip and float.

Samples were generally analyzed for Au and Ag and, occasionally, also for Pb, Zn, As and Sb.

Grid soil samples were collected on the JL and Ton claims locally at various spacing and at 50 m spacing along the 4000' elevation contour south of Midnight Gulch. Grid sampling was follow-up to 1985 sampling. See also Appendix B. Soil samples were analyzed for Au and Ag.

(3) Analytical Results and Sample Locations

- see Appendix A for analytical results, and Appendix D for sample locations, descriptions and results

- see also Figures 1, 2, 3 and 4 for plotted sample locations on Ton claims*

* for soil grid sample located on the JL claims and not plotted, grid coordinates can be extrapolated from the Ton claims.

(4) Interpretation of the Data

A number of area of anomalous soil grid samples and rock and soil samples have been located on the property, including anomalous results in the dyke swarm area north of Midnight Gulch. This may represent a number of undiscovered areas of mineralization distributed over the claim area.

(5) Conclusions and Recommendations

Mineralized areas appear to be detectable by soil sampling and trenching. A number of anomalous areas (Figure 1-4 and Appendix B) have been identified which merit further examination. Anomalous soil values on the mid west side of the Ton claims, the dyke swarm north of Midnight Gulch and areas outlined in Appendix B on the JL claims warrant priority as 1987 exploration targets. See also recommendations, page 5, Appendix B.

5. TRENCHING

(1) Location

Trenches in Hill Grid area: See Figure 3; for claim boundaries and topography, see Figure 2 (grid coordinates on these two maps are equivalent)

Trenches in Road Zone area: See Figure 4; grid coordinates plotted on Figure 4 correspond to Figure 2 grid

(2) Dimensions and Volume of Workings

Trenches range from 5 to 10 m across and from 24 to 75 m in length and are approximately $\frac{1}{3}$ to 2 m deep; approximate total volume of material removed is 1820 m³.

(3) Material Excavated

Unconsolidated overburden makes up the material excavated from the trenches. The trenches in the Road Zone did not reach bedrock because of permafrost.

(4) Analytical Results

Samples were taken from 1986 and previous trenches on the Ton claims. Sample locations and results are plotted on Figures 3 and 4.

6. DRILLING

(1) Summary

Five NQ diamond drill holes totalling 784 ft (228 m) were drilled on the Ton claims. The purpose of drilling was to test gossans and mineralization in trenches. Although some quartz veining within dykes, and silicified and brecciated zones were intersected, good mineralization was not encountered (see Figures 5 to 7). Drilling was also plagued with bad ground problems.

(1a) Drilling Contractor

G. & D. Diamond Drilling Co. Ltd.

(1b & c) Drill Hole Data

Hole	Size	Start	Finish	Bearing	Dip	Overburden (m)
86-MH1	NQ	Sept. 10	Sept. 16	218°	-51°	12.2
86-MH2	NQ	Sept. 17	Sept. 20	233°	-65°	12.2
86-MR1	NQ	Sept. 23	Sept. 30	215°	-50°	4.6
86-MR2	NQ	Oct. 1	Oct. 3	035°	-50°	3.7
86-MR3	NQ	Oct. 4	Oct. 9	035°	-50°	18.0

Table II DRILL HOLE DATA

(1d) Core Storage Location

Core is stored at the Omni-Resources Inc. Skukum Creek camp, located in the Wheaton River valley at the base of Mt. Reid and Chieftain Hill.

(2) Drill Hole Location

See Figures 3 and 4

(3) Drill Logs

See Appendix E

(4) Core

Core from one complete hole will be submitted early in the 1987 field season.

APPENDIX A

ANALYTICAL RESULTS

CM ANALYTICAL LABORATORIES LTD.
51 HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: OCT 14 1986

DATE REPORT MAILED: *Oct. 17/86.*

GEOCHEMICAL ICP ANALYSIS

.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.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: CORE AU** ANALYSIS BY FA+AA FROM 10 GRAM SAMPLE.

ASSAYER: *D. Toy* DEAN TOYE. CERTIFIED B.C. ASSAYER.

ISLAND MINING PROJECT-MIDNITE GULCH FILE# 86-3203 PAGE 1

DRILL CORE

SAMPLE#	Ag PPM	Au** FPB
3T 3070	.2	3
3T 3071	.2	10
3T 3072	2.9	30
3T 3073	.3	23

ACME ANALYTICAL LABORATORIES LTD.
35th E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PL E 253-3158 DATA LINE 251-1011

DATE RECEIVED: OCT 8 1986

DATE REPORT MAILED:

Oct 10/86

GEOCHEMICAL ICP ANALYSIS

.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.CA.P.CR.NG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: CORE AU** ANALYSIS BY FA+AA FROM 10 GRAM SAMPLE.

ASSAYER: *D. Toy* BEAN TOYE. CERTIFIED B.C. ASSAYER.

ISLAND MINING PROJECT-MIDNITE GULCH FILE#86-3111

PAGE 1

SAMPLE#	Ag PFM	Au** PPB
3T3064.	.5	26
3T3065.	1.9	16
3T3066.	.2	2
3T3067.	.3	17
3T3068.	.3	6
3T3069.	.2	5

CMF ANALYTICAL LABORATORIES LTD.
5. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: SEPT 26 1986

DATE REPORT MAILED: *Oct 1/86*

GEOCHEMICAL ICP ANALYSIS

.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.CA.P.CR.NG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: CORE AU** ANALYSIS BY FA+AA FROM 10 GRAM SAMPLE.

ASSAYER: *D. Deys*. DEAN TOYE. CERTIFIED B.C. ASSAYER.

ISLAND MINING

PROJECT-MIDNITE GULCH FILE# 86-2881

PAGE 1

SAMPLE#	Ag PPM	Au** PPB
3T3007	.6	7
3T3008	.4	11
3T3009	.5	127
3T3010	.3	6
3T3011	.2	17
3T3012	.5	4
3T3013	.5	128
3T3014	.6	74
3T3015	.4	164
3T3016	.6	39
3T3017	.1	6
3T3018	1.0	6
3T3019	.5	8
3T3020	.9	3
3T3021	.8	10
3T3022	.5	13
3T3023	.3	6
3T3024	.1	5
3T3025	.2	9
3T3026	.3	2
3T3027	.3	5
3T3028	.2	3
STD C/AU-R	6.9	490

ACME ANALYTICAL LABORATORIES LTD.
352 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: SEPT 23 1986

DATE REPORT MAILED: *Sept 26/86*

GEOCHEMICAL ICP ANALYSIS

.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.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.V.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: CORE AU** ANALYSIS BY FA+AA FROM 10 GRAM SAMPLE.

ASSAYER: *D. Toye* DEAN TOYE. CERTIFIED B.C. ASSAYER.

ISLAND MINING PROJECT-MIDNITE GULCH FILE # 86-2825 PAGE 1

SAMPLE#	Ag PPM	Au** PPB
3T3054	.4	1
3T3055	.6	3
3T3056	.7	4
3T3057	.5	23
3T3058	.7	1
3T3059	1.2	22
3T3060	.7	7
3T3061	.4	2
3T3062	.3	2
3T3063	.5	1
STD C/AU-R	7.0	510

ACME ANALYTICAL LABORATORIES LTD.
857 S. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PH 253-3158 DATA LINE 251-1011

DATE RECEIVED: SEPT 22 1986

DATE REPORT MAILED: *Sept 25/86*

GEOCHEMICAL ICP ANALYSIS

.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.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: CORE AU88 ANALYSIS BY FA+AA FROM 10 GRAM SAMPLE.

ASSAYER: *D. Toy* DEAN TOYE. CERTIFIED B.C. ASSAYER.

ISLAND MINING PROJECT-MIDNITE GULCH FILE#86-2811 PAGE 1

SAMPLE#	Ag PPM	Au** PPB
3T3029	.4	5
3T3030	1.1	210
3T3031	1.8	184
3T3032	1.2	99
3T3033	1.5	179
3T3034	7.4	74
3T3035	.6	89
3T3036	.2	61
3T3037	.4	1
3T3038	.2	1
3T3039	.2	1
3T3040	.3	1
3T3041	.1	1
3T3042	.7	14
3T3043	.6	23
3T3044	.4	20
3T3045	.6	10
3T3046	.8	1
3T3047	.9	3
3T3048	1.3	10
3T3049	.7	4
3T3050	.2	1
3T3051	.2	1
3T3052	.2	2
3T3053	.3	200
STD C/AU-R	7.2	485

AC ANALYTICAL LABORATORIES LTD.
85 HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: SEPT 17 1986

DATE REPORT MAILED:

Sept 22/86

GEOCHEMICAL ICP ANALYSIS

.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.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.

- SAMPLE TYPE: SOILS -BONESHK/ROCKS AU** ANALYSIS BY FA+AA FROM 10 GRAM SAMPLE.

ASSAYER: *D. Toy* DEAN TOYE. CERTIFIED B.C. ASSAYER.

ISLAND MINING

PROJECT-MIDNITE GULCH FILE#86-2703

PAGE 1

	SAMPLE#	Ag PPM	Au** PPB
NOT LISTED USE Au-Ag GRID COORD.	19+00E 5+60N	3.5	1290
	19+00E 5+50N	4.9	2790
LISTED	3T1048	3.3	2900
	3T1049	.9	17
	3T1050	.6	40
	3T2023	.2	3
	3T2024	.3	10
	3T2025	.4	6

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS, VANCOUVER B.C.
PH: (604)253-3158 COMPUTER LINE:251-1011

DATE RECEIVED SEPT 16 1986
DATE REPORTS MAILED *Sept 22/86*

ASSAY CERTIFICATE

SAMPLE TYPE : CORE - CRUSHED AND PULVERIZED TO -100 MESH.
AG** AND AU** BY FIRE ASSAY

ASSAYER: *D. Toye* DEAN TOYE . CERTIFIED B.C. ASSAYER.

ISLAND MINING PROJECT MIDNITE GULCH . FILE# 86-2672A

PAGE# 1

SAMPLE	Ag** oz/t	Au** oz/t
3T3001	.01	.001
3T3002	.10	.001
3T3003	.11	.001
core 3T3004	.02	.001
3T3005	.02	.001
3T3006	.01	.001

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS, VANCOUVER B.C.
PH: (604)253-3158 COMPUTER LINE:251-1011

DATE RECEIVED SEPT 16 1986
DATE REPORTS MAILED *Sept 22/86*

GEOCHEMICAL ASSAY CERTIFICATE

SAMPLE TYPE : ROCK - CRUSHED AND PULVERIZED TO -100 MESH.
Au** - 10GM FIRE ASSAY CONCENTRATION. HNO3 LEACHED.
AQUA REGIA DIGESTION. GRAPHITE FURNACE AA ANALYSIS.

ASSAYER: *D. Toye* DEAN TOYE . CERTIFIED B.C. ASSAYER

ISLAND MINING PROJECT MIDNITE GULCH FILE# 86-2672 PAGE# 1

SAMPLE	Ag oob	Au** oob
<small>Plotted map 1:5000 scale</small> 3T2022	.1	2

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS, VANCOUVER B.C.
PH: (604) 253-3158 COMPUTER LINE: 251-1011

DATE RECEIVED SEPT 1986
DATE REPORTS MAILED *Sept 16/86*

ASSAY CERTIFICATE

SAMPLE TYPE : PULP
ANAL BY FIRE ASSAY

ASSAYER *D. Toye* DEAN TOYE , CERTIFIED B.C. ASSAYER

ISLAND MINING PROJECT MIDNITE GULCH FILE# 86-2316 R PAGE# 1

	SAMPLE	Au** oz/t
LIST	317295	.032
"	3T1023	.577
NOT ANALYSED ?	3T1026	.034

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE 253-3158 DATA LINE: 251-1011

DATE RECEIVED: SEPT 10 1986

DATE REPORT MAILED: *Sept. 12/86*

ASSAY CERTIFICATE

SAMPLE TYPE: ROCK CHIPS AU** AND AG** BY FIRE ASSAY

ASSAYER: *Deane Toye* DEAN TOYE. CERTIFIED B.C. ASSAYER.

ISLAND MINING PROJECT-MIDNITE GULCH FILE# 86-2578 PAGE -1-

SAMPLE#	Ag**	Au**
	OZ/T	OZ/T
3T1044	.07	.002
3T1045	.02	.001
3T1046	.03	.048
3T1047	.74	.001
NOT LISTED ? 3T2020	2.15	.194
NOT LISTED ? 3T2021	17.41	.146

ACME ANALYTICAL LABORATORIES LTD.
 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
 PHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: SEPT 4 1986

DATE REPORT MAILED: *Sept 10/86*

GEOCHEMICAL ICP ANALYSIS

.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.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.

- SAMPLE TYPE: SOILS - BONESH AU88 ANALYSIS BY FA+AA FROM 10 GRAM SAMPLE.
 P9 - ROCKS

ASSAYER: *D. Toye* DEAN TOYE. CERTIFIED B.C. ASSAYER.

ISLAND MINING

PROJECT-MIDNIGHT GULCH FILE# 86-2474

PAGE 1

	SAMPLE#	Ag PPM	Au** PPB
Au-Ag 1:5000 Geochem map	L150E 12+00N	.1	18
	L150E 11+50N	.1	1
	L150E 11+00N	.1	8
	L150E 10+50N	.1	9
	L150E 10+00N	1.5	5
	L150E 9+50N	.1	5
	L150E 9+00N	.1	3
	L150E 8+50N	.1	2
	L150E 8+00N	.2	7
	L150E 7+50N	.2	18
L150E 7+00N	.1	25	
L150E 6+50N	.1	2	
L150E 6+00N	.2	1	
L150E 5+50N	.2	1	
L150E 5+00N	.1	32	
L250E 12+00N	.4	1	
L250E 11+50N	.7	18	
L250E 11+00N	1.5	5	
L250E 10+50N	.1	190	
L250E 10+00N	.4	91	
L250E 9+50N	.2	122	
L250E 9+00N	3.9	10	
L250E 8+50N	.7	9	
L250E 8+00N	.3	1	
L250E 7+50N	.4	3	
L250E 7+00N	.2	4	
L250E 6+50N	.1	32	
L250E 6+00N	.2	2	
L250E 5+50N	.3	7	
L250E 5+00N	.1	6	
L350E 12+00N	.1	7	
L350E 11+50N	.1	1	
L350E 11+00N	.3	5	
L350E 10+50N	.4	3	
L350E 10+00N	.5	36	
L350E 9+50N	.8	1	
STD C/FA-AU	7.2	49	

SAMPLE#	Ag PPM	Au** PPB
L350E 9+00N	1.1	4
L350E 8+50N	.3	1
L350E 8+00N	.7	8
L350E 7+50N	.6	44
L350E 7+00N	.4	1
L350E 6+50N	.3	147
L350E 6+00N	.3	15
L350E 5+50N	.4	34
L350E 5+00N	.3	9
L450E 12+00N	.2	14
L450E 11+50N	.1	30
L450E 11+00N	.2	9
L450E 10+50N	.4	12
L450E 10+00N	.3	6
L450E 9+50N	.3	18
L450E 9+00N	.3	1
L450E 8+50N	.3	5
L450E 8+00N	.8	42
L450E 7+50N	.5	12
L450E 7+00N	.8	13
L450E 6+50N	.4	16
L450E 6+00N	.6	4
L450E 5+50N	.6	1
L450E 5+00N	.3	36
L550E 12+00N	.3	8
L550E 11+50N	.2	5
L550E 11+00N	.2	10
L550E 10+50N	.1	12
L550E 10+00N	.3	120
L550E 9+50N	.7	9
L550E 9+00N	.2	37
L550E 8+50N	.3	55
L550E 8+00N	.5	17
L550E 7+50N	1.5	330
L550E 7+00N	.3	5
L550E 6+50N	.6	12
STD C/FA-AU	7.0	50

SAMPLE#	Ag PPM	Au** PPB
L550E 6+00N	.2	16
L550E 5+50N	.3	10
L550E 5+00N	.3	12
L650E 12+00N	.1	2
L650E 11+50N	.1	7
L650E 11+00N	.1	6
L650E 10+50N	.1	1
L650E 10+00N	.1	13
L650E 9+50N	.2	8
L650E 9+00N	.2	5
L650E 8+50N	.2	66
L650E 8+00N	.3	3
L650E 7+50N	2.2	11
L650E 7+00N	.2	48
L650E 6+50N	.3	22
L650E 6+00N	.3	43
L650E 5+50N	.1	3
L650E 5+00N	.2	1
L750E 12+00N	.1	10
L750E 11+50N	.1	1
L750E 11+00N	.1	1
L750E 10+50N	.1	2
L750E 10+00N	.1	78
L750E 9+50N	.2	1
L750E 9+00N	.1	4
L750E 8+68N	.1	2
L750E 8+50N	.2	7
L750E 8+18N	.1	5
L750E 8+00N	.1	92
L750E 7+68N	.1	42
L750E 7+50N	.4	57
L750E 7+18N	.1	12
L750E 7+00N	.4	37
L750E 6+68N	.3	8
L750E 6+50N	.6	13
L750E 6+18N	.7	310
STD C/FA-AU	7.1	51

SAMPLE#	Ag PPM	Au** PPB
L750E 6+00N	.3	35
L750E 5+68N	.2	51
L750E 5+50N	.3	104
L750E 5+18N	1.7	40
L750E 5+00N	1.0	13
L750E 4+68N	1.7	24
L850E 12+00N	.3	7
L850E 11+50N	.1	10
L850E 11+00N	.1	190
L850E 10+50N	.1	2
L850E 10+00N	.3	21
L850E 9+50N	.1	1
L850E 9+00N	.3	23
L850E 8+50N	.2	1
L850E 8+00N	.3	1
L850E 7+50N	.4	41
L850E 7+00N	.7	2
L850E 6+50N	.9	51
L850E 6+00N	.6	11
L850E 5+50N	.2	1
L850E 5+00N	.3	1
L875E 12+00N	.1	7
L875E 11+50N	.1	4
L875E 11+00N	.3	8
L875E 10+50N	.3	4
L875E 10+00N	.1	7
L875E 9+50N	.3	6
L875E 9+00N	.4	5
L875E 8+50N	.2	1
L875E 8+00N	.2	1
L875E 7+50N	.1	1
L875E 7+00N	.2	1
L875E 6+50N	.7	23
L875E 6+00N	.2	52
L875E 5+50N	.5	23
L875E 5+00N	.4	30
STD C/FA-AU	7.3	52

SAMPLE#	Ag PPM	Au** PPB
L1900E 12+00N	.6	4
L1900E 11+50N	.8	16
L1900E 11+00N	.3	2
L1900E 10+50N	.6	6
L1900E 10+00N	.5	3
L1900E 9+50N	.4	27
L1900E 9+00N	.6	13
L1900E 8+50N	.3	4
L1900E 8+00N	.5	5
L1900E 7+50N	.5	13
L1900E 7+00N	.6	5
L1900E 6+50N	.4	2
L1900E 5+50N	3.6	3100
L1900E 5+00N	.5	67
L1900E 4+50N	.7	520
L1900E 4+00N	.5	47
L1900E 3+50N	.5	20
L1900E 3+00N	.2	15
L1900E 2+50N	.7	40
L1900E 2+00N	.4	30
L1900E 1+50N	.3	37
L1900E 1+00N	.2	32
L1900E 0+50N	.9	25
L1900E 0+00	.8	29
L2000E 12+00N	.3	1
L2000E 11+50N	.4	2
L2000E 11+00N	.4	7
L2000E 10+50N	1.2	20
L2000E 10+00N	1.2	18
L2000E 9+50N	.4	1
L2000E 9+00N	.5	22
L2000E 8+50N	.6	17
L2000E 8+00N	4.0	3040
L2000E 7+50N	.3	6
L2000E 7+00N	.4	1
L2000E 6+50N	.6	1
STD C/FA-AU	7.2	50

NOT BORED

USE AU AS GEO
FOR COORDINATES

SAMPLE#	Ag PPM	Au** PPB
L2000E 6+00N	1.1	12
L2000E 5+50N	.3	123
L2000E 5+00N	.5	6
L2000E 4+50N	.4	2
L2000E 4+00N	.4	25
L2000E 3+50N	.5	32
L2000E 3+00N	.5	29
L2000E 2+50N	.6	35
L2000E 2+00N	.6	29
L2000E 1+50N	.3	14
L2000E 1+00N	.2	5
L2000E 0+50N	.3	6
L2000E 0+00	.4	28
L2100E 12+00N	.1	3
L2100E 11+50N	.1	4
L2100E 11+00N	.1	1
L2100E 10+50N	.3	1
L2100E 10+00N	.7	26
L2100E 9+50N	.2	3
L2100E 9+00N	.3	6
L2100E 8+50N	.2	8
L2100E 8+00N	.4	6
L2100E 7+50N	.3	24
L2100E 7+00N	.4	36
L2100E 6+50N	.3	5
L2100E 6+00N	.3	13
L2100E 5+50N	.4	14
L2100E 5+00N	.3	52
L2100E 4+50N	.6	44
L2100E 4+00N	.6	75
L2100E 3+50N	2.8	61
L2100E 3+00N	.6	57
L2100E 2+50N	.5	52
L2200E 12+00N	.1	3
L2200E 11+50N	.4	7
L2200E 11+00N	.2	4
STD C/FA-AU	7.1	52

SAMPLE#	Ag PPM	Au** PPB
L2200E 10+50N	.5	6
L2200E 10+00N	.3	4
L2200E 9+50N	.3	4
L2200E 9+00N	.2	48
L2200E 8+50N	.5	11
L2200E 8+00N	.5	5
L2200E 7+50N	.3	3
L2200E 7+00N	.1	1
L2200E 6+50N	.4	9
L2200E 6+00N	.1	42
L2200E 5+50N	.2	1
L2200E 5+00N	.1	2
L2200E 4+50N	.2	3
L2200E 3+50N	.2	1
L2200E 3+00N	.3	3
L2200E 2+50N	.1	29
L2200E 2+00N	.2	33
L200E 1+50N	.2	9
4000 +1	.3	4
4000 +2	.4	6
4000 +3	.4	25
4000 +4	.4	38
4000 +5	.4	9
4000 +6	.8	25
4000 +7	.3	1
4000 +8	.2	4
4000 +9	.3	3
4000 +10	.1	5
4000 +11	.6	30
4000 +12	.3	16
4000 +13	.7	43
4000 +14	.4	21
4000 +15	.6	22
4000 +16	.7	100
4000 +17	.3	19
4000 +18	.1	8
STD C/FA-AU	6.9	51

4000' contour
50m INTERVALS
ACROSS INSIDE OF
GULCH FULLY SOUTH OF
MIDNIGHT GULCH

SAMPLE#	Ag PPM	Au** PPB
4000 +19	.3	6
4000 +20	.2	3
4000 +21	.2	5
4000 +22	.2	10
4000 +23	1.3	4
4000 +24	.6	64
4000 +25	2.2	290
4000 +26	.3	126
3T7002	1.4	30
3T7003	1.1	31
3T7004	.1	1
3T7005	.4	2
3T7006	.7	15
3T7007	.9	6
3T7008	2.9	15
3T7009	.4	33
STD C/FA-AU	7.2	48

PLOTTED
 ROAD COSSAN
 TRENCH MAP

NOT PLOTTED ?
 "

NOT PLOTTED ?

PLOTTED MUGLIO MAP

SAMPLE#	Rock	Ag PPM	Au** PPB
311300		31.0	1380
311301		2.7	110
311302		1.2	81
311303		12.2	1720
311304		3.7	38
311305		.6	105
311306		.6	230
311307		9.1	980
312299		1.0	170
3T1034		.3	23
3T1035		.1	2
3T1036		.1	9
3T1037		2.4	19
3T1038		.6	23
3T1039		.3	1
3T1040		.4	4
3T1041		.9	56
3T1042		.2	7
3T1043		.6	120
STD C/FA-AU		7.1	52

LISTED

ST-1041

ST-1042

1.0

7.1

30

48

ACME ANALYTICAL LABORATORIES LTD.
352 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: AUG 29 1986

DATE REPORT MAILED: *Sept. 5/86...*

GEOCHEMICAL ICP ANALYSIS

.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.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM. ---
- SAMPLE TYPE: ROCK CHIPS AU** ANALYSIS BY FA+AA FROM 10 GRAM SAMPLE. ---

ASSAYER: *D. Toy* DEAN TOYE. CERTIFIED B.C. ASSAYER. ---

ISLAND MINING PROJECT-MIDNITE GULCH FILE # 86-2361781 PAGE 10

SAMPLE#	Ag PPM	Au** PPB
3T1030	.4	22
3T1031	.3	410
3T1032	.9	58
3T1032B	.1	10
3T1033	.2	4

ACME ANALYTICAL LABORATORIES LTD.
 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
 WE 253-3158 DATA LINE 251-1011

DATE RECEIVED: AUG 27 1986

DATE REPORT MAILED: *Sept 2/86..*

GEOCHEMICAL ICP ANALYSIS

.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.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.
 - SAMPLE TYPE: P1-SOILS P2-3 ROCKS AU** ANALYSIS BY FA+AA FROM 10 GRAM SAMPLE.

ASSAYER: *D. Toye* DEAN TOYE. CERTIFIED B.C. ASSAYER.

ISLAND MINING PROJECT-MIDNITE GULCH FILE # 86-2316 PAGE 1

	SAMPLE#	Ag PPM	Au** PPB
ACTED ROAD GULCH	3T7001	.6	17
LISTED	317295	5.1	1210
	317296	2.7	205
	317297	.5	45
NOT PARTED GRID UNUSUAL	2+00E 11+85N	.1	51
	2+00E 11+75N	.1	11
	2+00E 11+00N	.2	29
	2+00E 11+00N-B	.3	175
	2+00E 10+50N-SUN	.3	8
	3+00E 8+00N	1.2	10
	STD C/FA-AU	7.2	52

SAMPLE#	Ag PPM	Au** FPB
86-23-01	.1	5
86-23-02	.1	1
312298	3.0	55
321184	1.0	150
321185	.2	3
321186	.1	2
321187 (321187?)	.1	2
321188 (321188?)	.1	2
321189	.3	3
322183	.1	2
3D1001	.4	3
3D1002	.3	11
3D1003	.2	105
3D1004	.5	8
3D1005	5.4	465
3D1006	.4	2
3D1007	.3	35
3D1008	.3	7
3D1009	.3	23
3D1010	.3	4
3D1011	.1	2
3D1012	.1	10
3D1013	.2	24
3D1014	.1	5
3D1015	.1	13
3D1016	.1	165
3D1017	.3	11
3D1018	.1	10
3D1019	.1	12
3D1020	.2	2
3D1021	.3	6
3D1022	.3	1
3D1023	1.5	23
3D1024	1.5	25
3D1025	.7	9
3D1026	.3	195
3D1027A	.8	85
STD C/FA AU	7.2	50

LISTED

SAMPLE#	Ag PFM	Au** FPB
3D1027B	1.0	90
3D1028	2.5	65
3D1029	.2	49
3D1030	.1	59
3D1031	.2	28
3T1017	.6	17
3T1018	1.6	30
3T1019	.1	3
3T1020	3.5	270
3T1021	.9	12
3T1022	.2	36
3T1023	16.0	12000
3T1024	.2	9
3T1025	.7	100
3T1026	93.1	1050
3T1027	2.2	2
3T1028	.6	3
3T1029	28.9	385
3T2012	.6	280
3T2013	.4	18
3T2014	.2	6
3T2015	.4	3
3T2016	.2	70
3T2017	12.6	355
STD C/FA-AU	7.3	55

LISTED

NOT LISTED

Assay required for correct result

ME ANALYTICAL LABORATORIES LTD.
 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
 PHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: AUG 21 1986

DATE REPORT MAILED:

Aug 26/86

GEOCHEMICAL/ASSAY CERTIFICATE

.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.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.

- SAMPLE TYPE: SOILS/ROCKS AU# ANALYSIS BY AA FROM 10 GRAM SAMPLE. AU# ANALYSIS BY AA FROM 10 GRAM SAMPLE.

ASSAYER: *D. Dejeu* DEAN TOYE. CERTIFIED B.C. ASSAYER.

ISLAND MINING

PROJECT-ISLAND

FILE # 86-2176

PAGE 1

*LISTED
 Au-Ag GRAD*

LISTED

SAMPLE#	Cu PPM	Pb PPM	Ag PPM	As PPM	Sb PPM	Au# PPB	Au OZ/T
1550E 775N	124	79	1.1	9	2	265	-
1580E 750N	76	46	.6	5	2	8	-
1590E 750N	97	28	.7	2	6	5	-
1600E 730N	144	81	1.3	8	2	95	-
1600E 740N	132	36	.9	3	2	30	-
1600E 750N	157	18	.9	4	2	8	-
1600E 760N	243	20	.9	4	2	11	-
1600E 770N	44	27	.5	3	3	1	-
1600E 780N	97	26	1.0	2	6	3	-
1600E 790N	61	51	.9	4	2	4	-
1610E 750N	98	23	.9	6	5	30	-
611288	26	2	.2	2	4	1	-
611289	5	3139	9.2	9	2	14600	.455
611290 (612290)	18	912	3.5	11	2	365	-
611291	3	58	.8	2	2	575	-
611292	5	67	.6	7	2	590	-
611293	5	1019	2.1	6	2	100	-
611294	9	43	.5	11	2	195	-
611295	5	11	.9	4	2	575	-
611296	7	44	.5	2	2	565	-
671179	8	16	.5	4	2	9	-
671180	17	790	3.7	33	2	925	-
STD C/AU 0.5	60	44	7.4	44	18	490	-

APPENDIX B

PRELIMINARY REPORT ON 1986 EXPLORATION ACTIVITIES
JL 1-80 CLAIMS

DECEMBER 10, 1986

**PRELIMINARY REPORT
ON 1986 EXPLORATION ACTIVITIES
JL 1-80 CLAIMS**

**for
ISLAND MINING & EXPLORATION CO.LTD.
706-595 Howe Street
Vancouver, B.C., V6C 2T5**

**by
T.GARAGAN
AURUM GEOLOGICAL CONSULTANTS INC.
1614-675 West Hastings Street
Vancouver, B.C., V6B 4W3**

December 10, 1986

INTRODUCTION

This summary was prepared at the request of Mr. E. Bergvinson of Island Mining and Exploration Co. Ltd. and summarizes the exploration carried out on the JL 1-80 claims under the supervision of T. Garagan of AURUM Geological Consultants Inc. The following is only a preliminary report and a more detailed report with maps can be prepared if requested, at a later date.

Exploration during the 1986 field season consisted of soil sampling, rock sampling, geological mapping and road building. Some followup mapping and sampling of 1985 results was also carried out.

PERSONNEL

Exploration was carried out under the supervision of T. Garagan of AURUM Geological Consultants Inc. with assistance from R. Zuran, G. Nickolson and M. Zan Wermeskerken. Grid soil sampling was performed by MBW Surveys. A bulldozer was borrowed from Shakwak Exploration Co. Ltd. to do some of the road building. The remaining road building was done by Joe Corcoran Construction Ltd of Watson Lake Y.T.

CLAIM STATUS

The following is the claim status for the J1 1-80 claims, pending approval by the Whitehorse Mining Recorder:

JL 1-3,5,7,9,11-12	:	renewed to	October 22,1990
JL 4,6,8,10,13-16,18-24	:	renewed to	October 22,1991
JL 17	:	renewed to	October 22,1992
JL 25-48	:	renewed to	October 15,1991
JL 49-80	:	renewed to	October 15,1990

GEOLOGY AND PROSPECTING

Geological mapping was carried out at 1:500 scale in the area of the rhyolite dyke swarm in the upper part of Midnite Gulch. The remainder of the property was prospected and mapped locally at 1:5,000 scale. Much of the geological mapping had been carried out by C. Verley during the 1985 season and repetition was not necessary.

The JL claims are underlain by northwest trending folded Triassic meta intermediate volcanics and tuffs which are intruded by Cretaceous quartz diorite and quartz monzonite. On the north side of Midnite Gulch, the volcanics are intruded by a Tertiary rhyolite dyke swarm. The dyke swarm appears to be up to 400m (1300') wide [individual dykes 0.5 (1.6') to 4m (13') across] and trends 120 to 145. Individual dykes within the swarm dip between 40 and 80 N. Several other similar trending dykes are present both north and south of Midnite Gulch.

Mineralization in the Midnite Gulch area is exposed in trenches, in dumps around adits and in outcrop at approx. 20+00E/8+00N (outcrop, adit), approximately 21+00E/4+75N (old trench), 19+00E/6+75N (outcrop) and 25+50E/2+85N (adit dump). Mineralization occurs within sericitized and locally silicified rhyolite (to felsite) dykes and consists of milky white quartz stockwork and veining with up to 15% galena, sphalerite and pyrite and minor chalcopyrite and native gold. Narrow (5-25cm) quartz-calcite veins with trace to 1-5% pyrite, chalcopyrite, galena and sphalerite were found in boulders and subcrop within quartz diorite near the north end of the JL claims. These veins have not been defined, but appear related to similar veins located on Mt. Stevens and Mineral Hill to the north.

SOIL SAMPLING

Soil samples were collected on grid lines and on a contour line between lines sampled during the 1985 field season and the TON 1-16 claim boundary. Samples were collected at 50m intervals from 0+00N to 12+00N on lines 19+00E to 22+00E. Samples were also collected at 50m intervals at the 4000' contour level, around the inside of the creek gully, south of Midnite Gulch. Soil samples were also collected at the 810 ppb gold anomaly (gully south of Midnite Gulch) and at 10m and 20m upslope from the sample. All soil samples were analysed for gold and silver.

Soil samples collected at 19+00E/5+50N and 20+00E/8+00N carried 2100 ppb gold and 3.6 ppm silver; 3040 ppb gold and 4.0 ppm silver. The sample collected at 20+00E/8+00N was taken below the dump of the old adit and the anomalous value is probably associated with mineralization at this location. A second sample taken at the 19+00E/5+50N location and another sample taken 10m uphill of this sample carried 2790 ppb gold and 4.9 ppm silver

and 1290 ppb gold and 3.5 ppm silver, respectively. In addition, 3,2kg soil samples collected at this location, when panned, all contained 1-3 grains of fine (0.1 to 0.2mm in diameter) visible gold. Although 4 rock samples of silicified rhyolite dyke rock were collected in this area, the source of this anomaly has not yet been located. Two soil samples collected down hill at 4+50N and 4+00N on the same line contained 67 and 52 ppb gold, respectively. One sample taken east of this anomaly (20+00E/5+00N) contained 123 ppb gold. The above 2 areas (19+00E/5+50N and 20+00E/8+00N) warrants further exploration including cat trenching and diamond drilling.

Three samples at the south end of the 4000' contour line contained between 64 and 290 ppb gold and 0.3 and 2.2 ppm silver. These anomalous values are related to the gold anomaly located in this area during the 1985 season (up to 810 ppb gold and 4.1 ppm silver). In the same area, the samples collected at the 810 ppb gold anomaly location contained between 45 and 1210 ppb gold and 0.5 and 5.1 ppm silver. Much of this area is covered with bush and trees and the source of this anomaly is still not known. The anomaly appears to be significant and some cat trenching (side cuts in the hill) should be carried out in this area to locate the source of the anomaly.

ROCK SAMPLING

Thirty-two rock samples were collected on the JL claims. All the samples were analysed for gold and silver. A few samples were also analysed for copper, lead, arsenic and antimony. The sample descriptions and results are listed in Table 1.

The best result is 0.577 opt gold and 16.0 ppm silver in a sample of quartz-galena-sphalerite-pyrite veins in dump material beside a caved trench (possibly an initiated adit) at 21+00E/4+75N. A grab sample of quartz veined and silicified rhyolite dyke above the 20+00E/8+00N adit contained 2900 ppb gold and 2.3 ppm silver. A similar grab sample taken from the lower adits at 25+50E/2+85N contained 980 ppb gold and 9.1 ppm silver. The above samples all occur within the rhyolite dykes in the Midnite Gulch area and all warrant followup work.

Samples of thin quartz-calcite veins in the northern part of the JL claims contain up to 1720 ppb gold and 31 ppm silver. These veins are too narrow to warrant followup work.

ROAD BUILDING

A road with a series of switchbacks was started from the TON claims down the hill facing the Wheaton River on the north side of Midnite Gulch. The road was being built to allow road access for drilling on the showings in Midnite Gulch. It was not completed because the cat was overturned at approximately 19+75E/7+75N (approx. 4500' elevation). The lowest drill target area is at 25+50E (approx. 3300' elevation). The road would have to be near completion before the commencement of a drill program during the 1987 field season. At least 10 to 15 days of cat work is probably required (depending on outcrop and permafrost).

DISCUSSION

Exploration on the JL claims has outlined 4 areas within the Midnite Gulch rhyolite dyke swarm which warrant detailed follow up. These are as follows:

1. Au in soils at 19+00E/5+50N.
2. Old trench in silicified and veined rhyolite with 0.577 opt Au at 21+00E/4+75N.
3. Veined and silicified rhyolite in adit area around 20+00E/8+00N.
4. Veined and silicified rhyolite in adit area around 25+50E/2+85N.

Exploration including diamond drilling in similar mineralization on the TON claims has shown that although the mineralization may be high grade locally, its extent and tonnage potential is usually limited. Therefore, exploration on these four showings should be designed to outline the zones with the economic tonnage potential and areas of limited tonnage potential should be eliminated as early in the program as possible.

The gold soil anomaly on the south side of the gully south of Midnite Gulch represents the most interesting gold soil anomaly on the property. Values in soils within this area are up to 1210 ppb gold. The area is treed but the surrounding geology

consists of Triassic volcanics cut by several faults and the source of the anomaly maybe related to these zones. A bulldozer trenching program in this area is recommended to help locate the source of the gold soil anomaly.

RECOMMENDATIONS AND BUDGET

The following program and budget is recommended for the 1987 field season.

1. Cat trenching of southern Au anomaly, followed by mapping and sampling.
2. Finishing access road down Midnite Gulch to allow drill access.
3. Diamond drilling 1500' to 2000' HQ core (5' core barrel) in Midnite Gulch dyke swarm area.

BUDGET

Geology (supervision, reports, assistants):	\$ 14,000
Bulldozer work:	\$ 25,000
Diamond Drilling (2000'HQ):	(approx.) \$ 55,000
Analytical:	\$ 2,000
Camp Costs:	\$ 4,000
	<hr/>
	\$100,000
Contingency 10%:	\$ 10,000
	<hr/>
Total:	\$110,000

This budget is preliminary and actual figures would depend on the drill contract and the efficiency of the drill crew (possibly bad ground).

A followup program and budget would depend largely on the results of the initial program.

STATEMENT OF QUALIFICATIONS

I, THOMAS GARAGAN, hereby certify that:

1. I am a geologist with Aurum Geological Consultants Inc. of 1614 675 West Hastings Street, Vancouver, B.C. and that I caused to be performed the work described in this report.
2. I obtained a Bachelor of Science degree with Honours in Geology from the University of Ottawa, Ontario, in 1980.
3. I am a fellow of the Geological Association of Canada (F3819) and a member of the Mineralogical Association of Canada.
4. I have been engaged in mineral exploration and geological survey mapping on a full and part time basis for 19 years, of which 6 have been spent on mineral exploration programs in the Yukon Territory.
5. I have no interest in the claims or securities of Island Mining and Exploration Co. Ltd., nor do I expect to obtain any.

DATED at Calgary, Alta., this 22 day of December, 1986.


Thomas Garagan,
Geologist

AURUM GEOLOGICAL CONSULTANTS INC.

SAMPLE NO.	LOCATION	DESCRIPTION	ATTITUDE	WIDTH METERS	ANALYTICAL RESULTS					
					Au ppb	Ag ppm	Pb ppm	Zn ppm	As ppm	Sb ppm
612290	approx. 8+00N/20+00E	sample of stockpiled qtz of covered adit tr gn good ser		grab	365	3.5	18	912	11	2
312298	approx. 10m upslope from 8297 (soil sample)	subcrop weakly foliated meta-intermed volc 5% py, intrusive clasts ??			55	3.0				
3T1019	approx. 22+80E/4+20N	ser & sil rhy dyke @ qtz stkw			3	0.1				
3T1020	upper adit 25+50E/2+85N	dump material a.a. 1-2%gn			270	3.5				
3T1021	near a.a.	beside trench a.a.			12	0.9				
3T1022	approx. 22+50E/4+50N				36	0.2				
3T1023	abandoned adit ? approx. 21+00/4+75N	not found previously, dump material qtz vn @ 1-5% gn sp-py in a.a.			12000 (0.577)	16.0				
671180	19+00E/6+90N	siliceous rhy tr diss py		1.4m	925	3.7	17	16	4	2
322183	5m upslope of 24+50E /6+00N	silicified meta volcs.		float	2	0.1				
321184	10m upslope from 25+50E/5+75N	rhyolite dyke	qtz vn 120/70S	width varies	150	1.0				
321185	N end of anomaly at 37066 & 370676	rhyolite breccia	105/45N	10.2 cm	3	0.2				
321186	foras cliff approx. above anomaly fr. 37066-37067	rhyolite, qtz ankerite alt.	flt 135/80NE	grab 40m	2	0.1				
322187		same as 321185			2	0.1				
322188		rhyolite breccia		grab	2	0.1				
322189		0.3m wide shear	010/90	0.3m	3	0.3				
3T2015		platey weather carb alt. rx		grab	3	0.4				
3T2014	southern anomaly 815 ppb Au	carb alt. basalt @ qtz-cc vein		grab 10 by 30cm boulder	6	0.2				

AURUM GEOLOGICAL CONSULTANTS INC.

SAMPLE NO.	LOCATION	DESCRIPTION	ATTITUDE	WIDTH METERS	ANALYTICAL RESULTS					
					Au ppb	Ag ppm	Pb ppm	Zn ppm	As ppm	Sb ppm
312299	N part of JL claims	qtz boulder tr gn-py			170	1.0				
311300	N part of JL claims	ca-qtz vn @ tr py	011/68E	3cm	1380	31.0				
311301	N part of JL claims	qtz stockwork tr py	060/58SE	6cm	110	2.7				
311302	N part of JL claims	a.a #301 & #300	007/80E	4cm	81	1.2				
311303	N part of JL claims	qtz vn @ tr py	080/65S	20cm	1720	12.2				
311304	N part of JL claims	qtz vn	156/58NE	10cm	38	3.7				
311305	N part of JL claims	100m downslope from #303	060/50SE	10cm	105	0.6				
311306	N part of JL claims 10m downslope fr #305	carb-qtz vn, same vein as #305	035/64SE	25cm	230	0.6				
312307	adjacent to cabin	qtz vn lim in fract.		grab	980	9.1				
3T1044	19+00E/6+90N (671180)	comp chip across rhy @ qtz	140/60E	6m	.002 (opt)	0.07 (opt)				
3T2024	19+00E/5+65N	sericitized & silicified rhy @ thin qtz vn		grab	10	0.3				
3T2025	19+00E/5+50N	a.a.		grab	6	0.4				
3T1048	20+00E/8+00N adit	a.a. brecciated		grab	2900	3.3				
3T1049	rd on strike of above adit	silicified & sericitized dyke @ tr qtz 5% py cubes		4m comp chip	17	0.9				
3T1050	11+00E/5+75N	a.a. tr gn	115/65N	4m chip	40	0.6				

APPENDIX C

ASSESSMENT REPORT
CAT TRENCHES

ISLAND FRACTIONAL CLAIMS #1 AND #2

NOVEMBER 1986

ASSESSMENT REPORT

**CAT TRENCHING
ISLAND FRACTIONAL CLAIMS #1 AND #2
(YA93380,81)
Whitehorse Mining District**

**NTS 105D-2,3
Latitude 60 13'N
Longitude 135 0'W
August 29,1986**

**for
ISLAND MINING and EXPLORATION CO. LTD.
706-595 Howe Street
Vancouver, B.C., V6C 2T5**

**by
T.GARAGAN
AURUM GEOLOGICAL CONSULTANTS INC.
1614-675 West Hastings Street,
Vancouver, B.C., V6B 4W3**

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INTRODUCTION	1
CLAIM OWNERSHIP	1
LOCATION, ACCESS AND PHYSIOGRAPHY	1
HISTORY	1
GEOLOGY	1
EXPLORATION	2
DISCUSSION	2
REFERENCE	3

List of Figures

- Figure 1: Location Map: Island Fraction 1 and 2 claims
Figure 2: Claim Map: Ton T1-16, JL 1-80, Island Fraction 1 and 2 claims
Figure 3: Cat Trenching, Island Fractions 1 and 2 Midnite Gulch

List of Appendices

- Appendix A: Analytical Results and Methods
Appendix B: Aurum Personnel
Appendix C: Statement of Qualifications

INTRODUCTION

This report describes the cat trenching carried out on the Island Fr.1 and Island Fr.2 claims by Aurum Geological Cons. Inc. for Island Mining & Exploration Co. Ltd. of Vancouver. A single cat trench was dug on the claims and two rock samples and one soil sample were taken from the trench.

CLAIM OWNERSHIP

The Island Fr.1 and Island Fr.2 claims (YA93380,81) are owned by Canadian Nickel Company Limited of Copper Cliff, Ontario and are optioned to Island Mining & Exploration Co. Ltd. of Vancouver, B.C. The adjacent Ton 1-16 claims are part of the same option agreement.

LOCATION, ACCESS & PHYSIOGRAPHY

The claims are located in 105D-2 and D-3 of the Whitehorse Mining district at latitude 60 13' N and longitude 135 10' W. The claims are situated between Dickson Hill and Mt. Stevens, immediately west of the Wheaton River and Midnite Gulch (Fig. 1 & 2).

Access is by a 9 km road which leads from the Annie Lake road at Partridge Creek to the claims. Partridge creek is located 29 km along the Annie Lake road from the Klondike highway (highway #2).

The property is located above treeline, at 1500m elevation in a broad saddle between Dickson Hill and Mt. Stevens. Outcrops are sparse and the area is covered by typical alpine vegetation.

HISTORY

Exploration in the Midnite Gulch area has been carried out since 1906 when several trenches and a few adits were dug and blasted. The area has been restaked several times since then and the present adjacent Ton 1-16 and JL 1-80 claims were staked between 1980-1983. The Island fraction claims were recorded September 3, 1985.

GEOLOGY

The Island fraction claims are situated near the eastern margin of the coast plutonic complex. The regional geology is described

by Wheeler (1961) and Lambert (1974) and will not be repeated here.

The claims are underlain by blocky dark green weathering Triassic, Lewis River group basaltic and andesitic flows. The volcanics are locally strongly sheared in a northwesterly direction and are intruded along the shears by Tertiary(?) very fine grained felsite to rhyolite dykes. The dykes maybe up to 6 m wide on the Island claims.

The felsic dykes are weakly to moderately silicified and the volcanics are ankerite and occasionally fuschite altered in the shear zone adjacent to the dykes. Mineralization on the adjacent Ton claims occur within the altered dykes and consists of quartz stockwork zones with up to 5% galena with minor sphalerite, pyrite, chalcopyrite and native Au.

EXPLORATION

A cat trench was dug on the Island Fractional 1&2 claims in an attempt to expose a 5-10m wide altered and mineralized felsic dyke which had been exposed in trenches to the east on the Ton claims (Fig.3). Bedrock was exposed in only 10% of the trench due to permafrost, hence the large dyke was not exposed.

The outcrop consists of ankerite altered and sheared andesite which is cut by 2 thin sericitized rhyolite dykes. The dykes are cut by thin quartz veins. Two rock samples were taken from the altered dykes and a soil sample was taken from a small gossan. The samples were analysed for gold and silver. The sample results and location are plotted in Figure 3 and the sample and results are listed in Appendix A. The geochemical values are low with the best value being 56 ppb Au and 0.4 ppm Ag in sample # 3T1041.

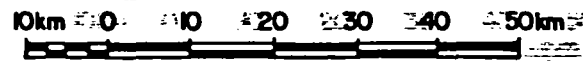
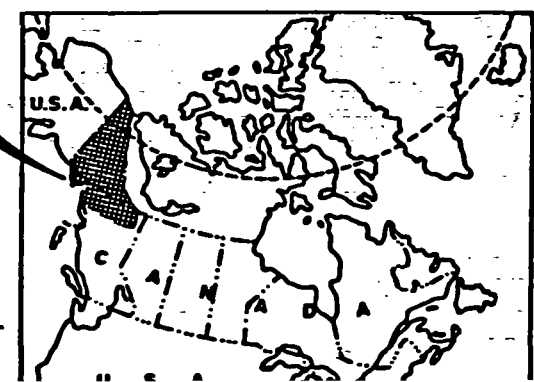
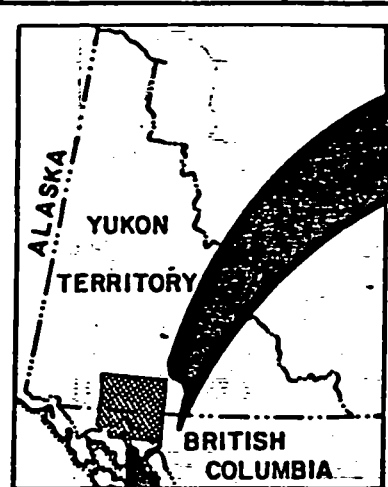
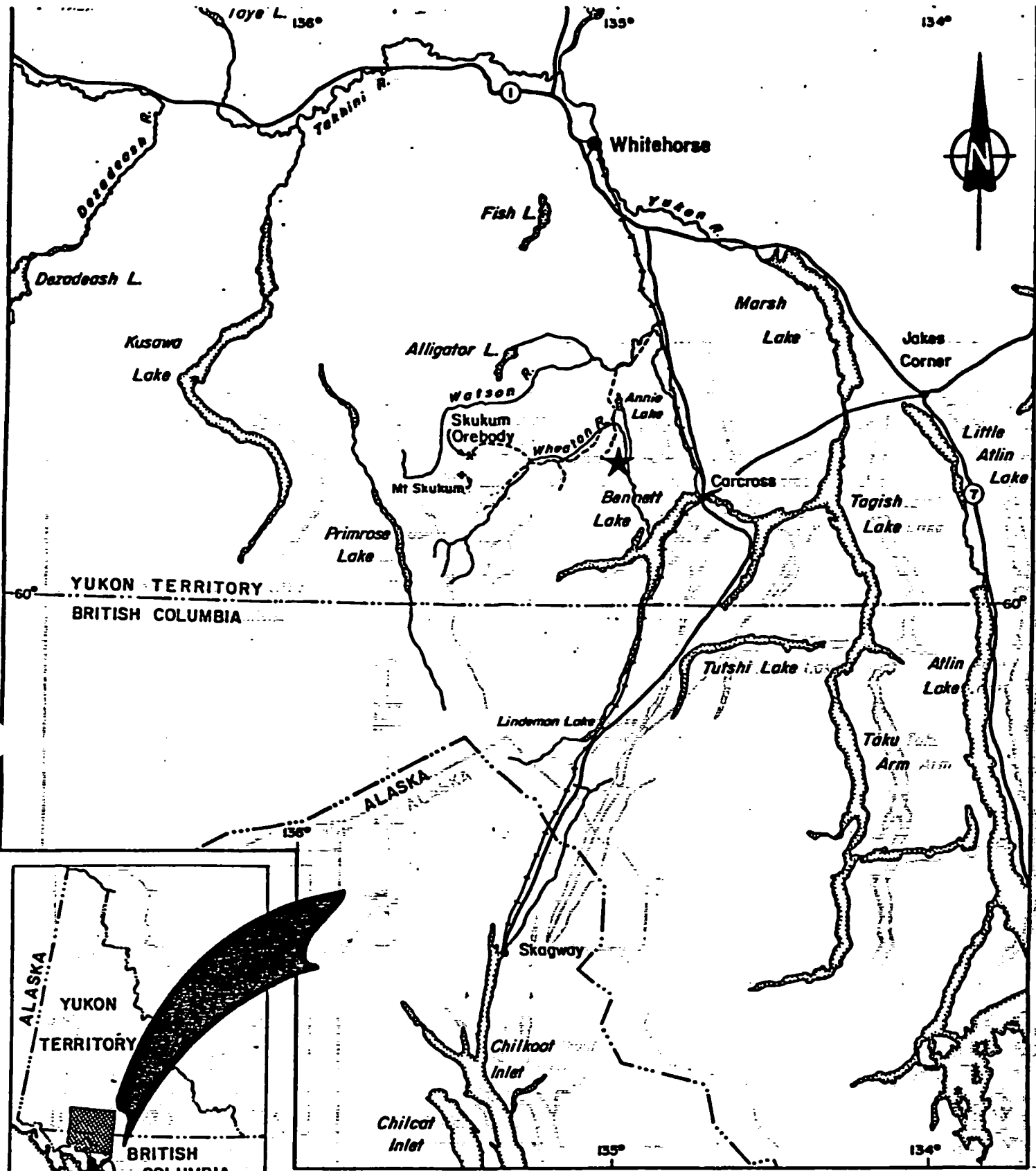
DISCUSSION

The target of the cat trench (approx 6m wide dyke) was not reached due to permafrost. The trench should be deepened during the 1987 season after the exposed permafrost has had more time to melt.

REFERENCES

**LAMBERT, M.B. 1974: The Bennett Lake Cauldron Subsidence Complex,
British Columbia and Yukon Territory. G.S.C.
Bull. 227.**

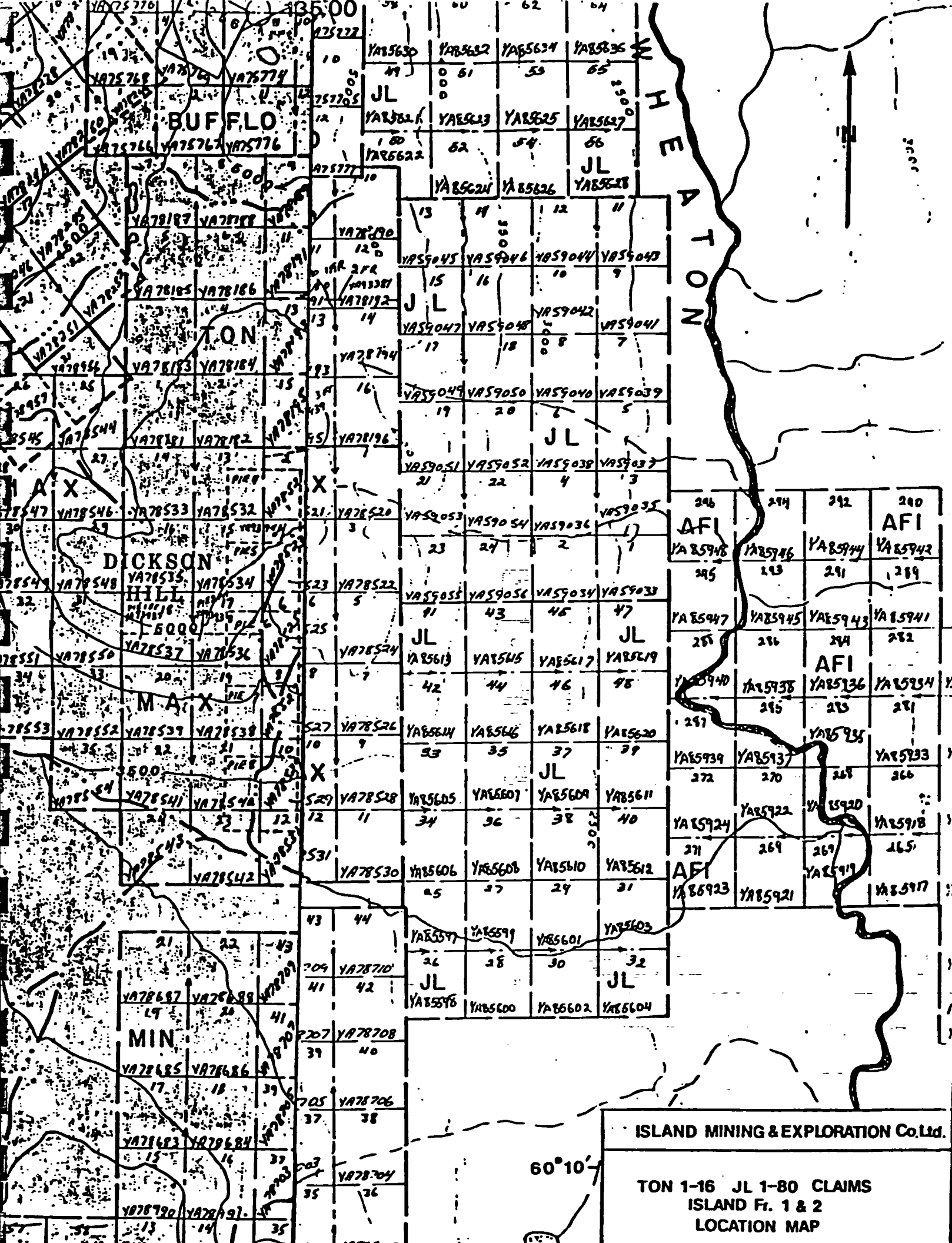
**WHEELER, J.O. 1961: Whitehorse Map Area, Yukon Territory.
105D. G.S.C. Memoir 312.**



ISLAND MINING & EXPLORATION Co.Ltd.

ISLAND Fraction .1 & 2

LOCATION



ISLAND MINING & EXPLORATION Co.Ltd.

TON 1-16 JL 1-80 CLAIMS
 ISLAND Fr. 1 & 2
 LOCATION MAP

60° 10'

APPENDIX A
ANALYTICAL RESULTS AND METHODS

Results

type	sample_#	Au(ppb)	Ag(ppm)
rock	3T1041	56	0.4
rock	3T1042	7	0.2
soil	377009	33	0.4

Methods

The analyses were carried out by Acme Analytical of Vancouver. The soil sample was dried and sieved to -80 mesh and a split is analysed. Rock samples are pulverized and a split of the -200 mesh fraction is analysed.

Gold analyses are by fire assay techniques, but after preparation of the bead, it is dissolved in acid and the gold content is determined by atomic absorption spectrophotometry.

In silver analyses the sample is dissolved in hot aqua regia and analysed by atomic absorption spectrophotometry.

APPENDIX B

AURUM PERSONNEL
1614-675 West Hastings Street
Vancouver, B.C. V6B 4W3

T. Garagan, B.Sc.

**Director,
Geologist.**

**Project
supervision,
mapping,
sampling.**

APPENDIX C

STATEMENT OF QUALIFICATIONS

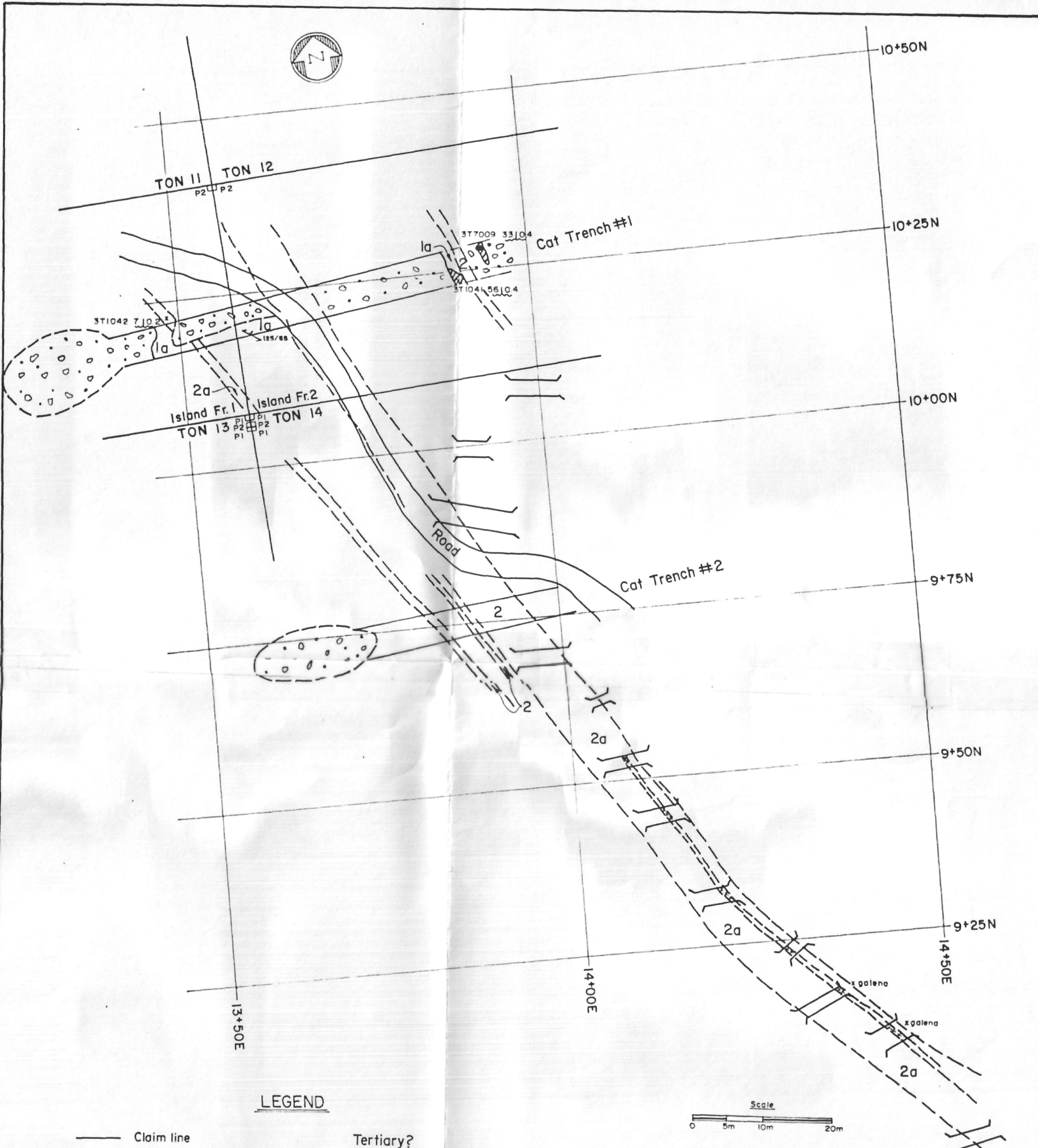
I, THOMAS GARAGAN, hereby certify that:

1. I am a geologist with Aurum Geological Consultants Inc. of 1614 675 West Hastings Street, Vancouver, B.C. and that I caused to be preformed the work described in this report.
2. I obtained a Bachelor of Science degree with Honours in Geology from the University of Ottawa, Ontario, in 1980.
3. I am a fellow of the Geological Association of Canada (F3819) and a member of the Mineralogical Association of Canada.
4. I have been engaged in mineral exploration and geological survey mapping on a full and part time basis for 9 years, of which 6 have been spent on mineral exploration programs in the Yukon Territory.
5. I have no interest in the claims or securities of Island Mining and Exploration Co. Ltd., nor do I expect to obtain any.

DATED at Calgary, Alta., this 6th day of November 1986.



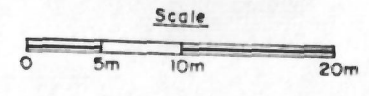
Thomas Garagan,
Geologist



LEGEND

- Claim line
- Grid line
- Claim post
- Cat trench
- Previous existing trenches
- Overburden
- o Gossan
- x Vein & brecciated vein
- x Rock sample
- Soil sample
- Tertiary?
- 2 Fine grained felsite-rhyolite
- 2a Silicified & sericitized rhyolite
- Triassic Lewis River Group
- 1 Metabasalt-andesite
- la carbonate altered & sheared volcanics with occasional fuschite

* Assays recorded in this manner Au(ppb) | Ag(ppm)



ISLAND MINING & EXPLORATION CO. LTD.	
CAT TRENCHING ISLAND FRACTIONS 1,2 MIDNITE GULCH	
Aurum Geological Consultants Inc.	Scale: 1:5,000
Drawn by: H.D.P.	Date: 86/10/23 Figure: 3

APPENDIX D

1986 SAMPLE LOCATIONS,
DESCRIPTIONS AND RESULTS: MIDNIGHT GULCH

AURUM GEOLOGICAL CONSULTANTS INC.

SAMPLE NO.	LOCATION	DESCRIPTION	ATTITUDE	WIDTH METERS	ANALYTICAL RESULTS					
					Au ppb	Ag ppm	Pb ppm	Zn ppm	As ppm	Sb ppm
612290	approx. 8+00N/20+00E	sample of stockpiled qtz of covered adit tr gn good ser		grab	365	3.5	18	912	11	2
312298	approx. 10m upslope from #297 (soil sample)	subcrop weakly foliated meta-intermed volc 5% py, intrusive clasts ??			55	3.0				
3T1019	approx. 22+80E/4+20N	ser & sil rhy dyke @ qtz stkw			3	0.1				
3T1020	upper adit 25+50E/2+85N	dump material a.a. 1-2%gn			270	3.5				
3T1021	near a.a.	beside trench a.a.			12	0.9				
3T1022	approx. 22+50E/4+50N				36	0.2				
3T1023	abandoned adit ? approx. 21+00/4+75N	not found previously, dump material qtz vn @ 1-5% gn sp-py in a.a.			12000 (0.577)	16.0				
671180	19+00E/6+90N	siliceous rhy tr diss py		1.4m	925	3.7	17	16	4	2
322183	5m upslope of 24+50E/6+00N	silicified meta volcs.		float	2	0.1				
321184	10m upslope from 25+50E/5+75N	rhyolite dyke	qtz vn 120/70S	width varies	150	1.0				
321185	N end of anomaly at 37066 & 370676	rhyolite breccia	105/45N	10.2 cm	3	0.2				
321186	foras cliff approx. above anomaly fr. 37066-37067	rhyolite, qtz ankerite alt.	flt 135/80NE	grab 40m	2	0.1				
322187		same as 321185			2	0.1				
322188		rhyolite breccia		grab	2	0.1				
322189		0.3m wide shear	010/90	0.3m	3	0.3				
3T2015		platey weather carb alt. rx		grab	3	0.4				
3T2014	southern anomaly 815 ppb Au	carb alt. basalt @ qtz-cc vein		grab 10 by 30cm boulder	6	0.2				

AURUM GEOLOGICAL CONSULTANTS INC.

SAMPLE NO.	LOCATION	DESCRIPTION	ATTITUDE	WIDTH METERS	ANALYTICAL RESULTS					
					Au ppb	Ag ppm	Pb ppm	Zn ppm	As ppm	Sb ppm
312299	N part of JL claims	qtz boulder tr gn-py			170	1.0				
311300	N part of JL claims	ca-qtz vn @ tr py	011/68E	3cm	1380	31.0				
311301	N part of JL claims	qtz stockwork tr py	060/58SE	6cm	110	2.7				
311302	N part of JL claims	a.a #301 & #300	007/80E	4cm	81	1.2				
311303	N part of JL claims	qtz vn @ tr py	080/65S	20cm	1720	12.2				
311304	N part of JL claims	qtz vn	156/58NE	10cm	38	3.7				
311305	N part of JL claims	100m downslope from #303	060/50SE	10cm	105	0.6				
311306	N part of JL claims 10m downslope fr #305	carb-qtz vn, same vein as #305	035/64SE	25cm	230	0.6				
312307	adjacent to cabin	qtz vn lin in fract.		grab	980	9.1				
3T1044	19+00E/6+90N (671180)	comp chip across rhy & qtz	140/60E	6m	0.002 (opt)	0.07 (opt)				
3T2024	19+00E/5+65N	sericitized & silicified rhy @ thin qtz vn		grab	10	0.3				
3T2025	19+00E/5+50N	a.a.		grab	6	0.4				
3T1048	20+00E/8+00N adit	a.a. brecciated		grab	2900	3.3				
3T1049	rd on strike of above adit	silicified & sericitized dyke @ tr qtz 5% py cubes		4m comp chip	17	0.9				
3T1050	11+00E/5+75N	a.a. tr gn	115/65N	4m chip	40	0.6				

Date: August / Sept. ⁽¹⁹⁸⁶⁾ Project: Tou J.L (Manganite) Area: GUNNET LAKE / WHEATON RIVER Page 1 of 5

Sample No.	Location	Description	Attitude	Width	Analytical Results					
					Au	Ag	Cu	Pb	Hg	Sb
611288 611288	HILL GRID	Bull qtz vein, trace py, limonite highly fractured.		~ 25cm.	1	0.2	26	2	2	4
612290	ADIT STOCKPILE	Grab sample of stockpiled qtz. of caved adit. trace py, good sericite			363	3.5	18	912	11	2
612291	7568 HILL GRID	Grab; milky qtz & trace py			575	0.8	3	58	2	2
612292	7568 HILL GRID	Grab; trace altered py in milky white qtz; moderate sericite			590	0.6	5	67	7	2
612293	7568 HILL GRID	qtz stringer zone, sericitized base RH	~ 179/28NE	1m.	100	2.1	5	104	6	2
612294	HILL GRID	Sample qtz stringers, up to 3% py in host; altered (ch. sericite) RH.			193	0.5	9	43	11	2
612289	7568 HILL GRID	Grab; trace ga, sericite in milky qtz.			14600	9.2	5	3139	9	2
317295	# 386015 resampled	Soil sample @ 10 ppb Au resampled.			1210	5.1				
317296	10m upslope from -295	soil			205	2.7				
317297	10m upslope from -294.	soil			45	0.5				
312298	~ 10m upslope from -297.	Subcrop - weakly foliated meta-intermediate volcanic & ep, up to 5% py; Intrusive clasts??			55	3.0				
3T1017	16025 E / 9.55N	sericite zone and silicified by dms with qtz stockwork	-	grab	17	0.6				
3T1018	16025 E / 9.50N	23 2' 2.5' # 40	-	"	20	1.6				
3T1019	~ 22180E / 4.20N	23	-	"	3	0.1				
3T1020	upper adit 25.50 E / 2.15N	23 2' 2.5' # 40	-	"	270	3.5				
3T1021	near adit # 4	23 2' 2.5' # 40	-	"	12	0.7				
3T1022	~ 22150E / 4.50N		-	"	34	0.2				
3T1023	~ 2216 14.5N		-	"	12000	11.2				

Date: August / 80

Project: TON J.L.

Area: BENNET LAKE / WHEATON RIVER

Page 2 of 5

Sample No.	Location	Description	Attitude	Width	Analytical Results				
					P ₁	P ₂	P ₃	P ₄	P ₅
3T2012 ✓	N7150E / 8175N on road	limonite stained Qtz filled breccia within	-	grab	280	0.6			
3T2013 ✓	"	gossan on road	-	"	18	0.4			
671180 ✓	1/2 way between sample #7568 and 4300' out.	siliceous rhy. Tr diss PY.	-	1.4m	925	3.7	17	16	4
671179 ✓	From old pit w/ shovel. ~ 7150N, 15150E.	Qtz intruding foliated meta-volcanic Carb + Stricite alt.	-	Grab	9	0.5	8	790	33
322183 ✓	5 m. UPSLOPE OF 2450 E 600 N	VERY CONTORTED + SILICIFIED META-VOLCANICS. 2% PY (AGGLOMERATES 1-3mm) REMNANTS OF (PLAG?) PHENOCRYSTS MINOR SER. CHL. ALT. ABOT. MAG.	-	FLOAT.	2	0.1			
321184 ✓	10 m UPSLOPE (@ 290°) FROM 2550 E 575 N	ANYOLITE DYKE SATURATED WITH QTZ. LENSES AND VEINS. UP TO 5% PY. PARTLY LEACHED. HEM. ON FRACTS SEE SKETCH ON MAP.	Qtz. veins E 120/70 S	WIDTH OF VEINS VARY.	150	1.0			
321185 ✓	N. END OF ANOMALY AT 37066 + 37067 ALSO ABOT. IN TALUS THROUGHOUT ANOMALY, AND AS LARGE BOULDER ~ 20 m UPSLOPE FROM SAMPLE LOCATION.	ANYOLITE BRK. CCT. MX. CUTS DIRECTION OF FOLIATION. ANGULAR CLASTS UP TO 2" ORANGE-BROWN WEATHERING OF CCT. ABOT. CHL. IN WALL ROCK & CLASTS. WALL ROCK: FOLIATED METAVOLCANICS, OCCASIONALLY GRANULAR. SOME QTZ. CLASTS IN BRK.	105/45 N	4"	3	0.2			
321186 ✓	FORMS CLIFFS ~ 30 m ABOVE ANOMALY FROM 37066 - 37067	LARGE FOLIATED, BUT SLIGHTLY GRANULAR ANYOLITE. RICH IN QTZ ANKERITE ALTN.	FLTN. 135/80 NE	GRAB. WIDTH ~ 40 m	2	0.1			
322187 ✓	SEE MAP JL CLAIMS	SAME AS 321185. VERY ABUNDANT IN FLOAT, PROBABLY IN PLACE.	-	-	2	0.1			
322188 ✓	SEE MAP JL CLAIMS	QTZ ANY. BRK. CCT. MX. ANGULAR CLASTS UP TO 2 cm ABOT. QTZ. WALL ROCK: META VOLCANIC. ONLY SMALL OUTCROP SO. ORNTN. + WIDTH UNKNOWN.	-	GRAB.	2	0.1			
321189 ✓	SEE MAP JL CLAIMS	1' WIDE SHEAR 6" GAUGE 6" SHEARED GR. OT. ABOT. QTZ. FRACTURED, PROP. ALT. GR. OT. WALL ROCK.	010/90	1'	3	0.3			

Date: _____

Project: _____

Area: BENNET LAKE / WHEATON RIVER

Sample No.	Location	Description	Attitude	Width	Analytical Results	
					A ₁	A ₂
2D1001-31	Trenches	Qtz veins in brecciated rhyolite P. David			Various sec	5-
23-01, 02 ✓	2+00 E 11+00 N	D. David: rhyolite dikes	125°		5,1	0.1, 0.1
3T1024 ✓	15+50E / 8+40N	across serritized and partly silicified rhy with Qtz veins	125°/70 N	1.3m	9	0.2
3T1025 ✓	16+00E / 7+49N	chip across upper part of dyke at #7568 (qtz veins)	130/25 N	1m	100	0.7
3T1028 ✓	~8150E / 15+00N	silicified rhy with qtz veins	145/75 E	grab	2	2.2
3T1028 ✓	"	fract. altered & sheared basalt	125°	"	3	5.5
3T1029 ✓	215+25E / 11+15N	bull qtz vein up to 1m wide	120/55 NE	"	335	23.2
3T1030	~14+00E / 8+75N	composite chip across #1 type rhyolite w/ distinct quartz	120/45° N	4m	22	0.4
3T1031	"	bull quartz in dump adjacent to trench		grab	410	0.3
T1032, 32B	~7+25 N / 15+50E	bull qtz vein & volcanics along strike with felsite dyke	140/45° N	grab	535	0.9, 0.1
T1033	~17+10E / 7+10N	grab of lodde vein = altered rhyolite	-	grab	4	0.2
T2015	"	platy weathering carbonate altered rx (unknown comp)		grab	3	0.4
T2014 ✓	J.L. claim Southern anomaly (8150E Au)	carbonate altered basalt with qtz veins	-	grab 10 x 30 cm bulb	6	0.2
T2016 ✓	~7+50E / 8+00N	8-10cm wide limestone qtz vein breccia	-	grab	70	0.2
T2017 ✓	"	silicified vein brecciated qtz rhyolite w/ gnasep, py, mag stringers	-	grab 35 x 30 cm bulb	355	12.6
T1034	Trench #1 Road Section	serritized rhyolite dikes up thin qtz vein		grab	23	0.3
T1035	Trench #2 "	clay altered qtz dikes		2.4m	2	0.1
T1036	" "	qtz veins in clay altered rhyolite	~120/45 NW	grab	9	0.1
T1037	hill Trench zone Trench #1	composite chip of limestone breccia		0.75m (grab)	1.9	2.4
T1038	" "		130°/width		2	0.6

Date: August Project: Island Area: BECKET LAKE / WRECKED RIVER ARE Page 4 of 5

Sample No.	Location	Description	Attitude	Width	Analytical Results				
					Pb	Fe	Cu	Ag	Au
12299	plotted JL CLAIMS	giz boulder in ck. bed 15cm dia. trace ga, py. 10% limonite			170	1.0			
11300	"	carbonate-giz vein + trace py (aprox 1/2cm sq) vein rust weathering in spots	011/68°E	3cm.	1580	31.0			
11301	"	giz stockwork, trace py (1/2cm sq) (milky)	060/52SE	6cm.	110	2.7			
11302	"	milky white giz vein, part of stockwork (-30, 300)	007/80°E	4cm	81	1.2			
11303	"	milky giz vein + trace py sericite alt., minor chit. alt.	1080/65S	~20cm.	1720	12.2			
11304	"	milky giz vein, rusty patches. 1 crystal of gal found (3/4cm sq)	156/5ENE	10cm.	38	3.7			
311305	"	~10cm downslope from -303. milky giz vein + carbonate (1m) @ margins; no sulphides	060/50SE	10cm	105	0.6			
311306	10m downslope from -303	carbonate-giz vein, weak sericite alteration; same vein as -305	1035/64° SE	~25cm.	230	0.6			
112307	adjacent to cabin JL CLAIMS	grab sample; milky white giz + limonite in fractures			980	9.1			
12295	actual HILL GRID	grab sample 2 traverses NW from "2.502" trench.			575	0.9	5	11	4
11296	plotted. HILL GRID	milky white giz vein, sericite alteration	?		565	2.5	7	4	2
3T1040	1.5m Trench #1			0.8m	4	0.4			
3T1041	" #2			0.4m	56	0.9			
3T1042	" #2			1.2m	7	3.2			
3T1043	17+25E / 8150N			3m	120	0.6			

Date: 1986

Project: TON, JL MIDNIGHT GULCH

Area: BENNET LAKE / WESTON RIVER

Page 5 of 5

Sample No.	Location	Description	Attitude	Width	Analytical Results
3T1044	1900 E / 6+90N (671100)	compacted chip across 2a rhyolite with gtz	170/60E	6m	
T1045	15135E / 8+60N	grab of units above	-	grab.	
T1046	15170E / 8120N	partly weathered rhyolite w/ gtz - thin pin	-	grab	
T1047	15115E / 8+30N	stream next to bank of stream thin gtz w/ 10-15% aa	-	" "	
T2022	Shikwak head near P2Tm 15+16	brecciated and calcareous altered hornbl. cul by gtz-ba veins	-	Grab	
T2023	~1875E / 5+75N	1-2cm thick gtz - rhyolite	-		
T2024	19+00E / 5+65N	same as T2023	-		
3T2025	19100E / 5+50N	aa	-		
3T1048	120100E /				
3T1049	Road		115/65N	4m	
3T1050	~19100E / 5+75N	aa + to rhyolite	115/65N	4m chip	

Date: 1986

Project: Midnite Gulch

Area:

Page 1 of 4

Sample No.	Location	m (ft)	Description	Attitude	Width m (ft)	Analytical Results	
3001	B6-MH-1 ~ 7185N/16+40E -50°: 218°	16.3-16.6 (53.5-54.5)	silicified + veined ry		0.3m (1')	0.001	0.01 (opt)
3002		16.6-16.8 (54.5-55.1)	Qtz veined ry w/ thin galena-py		0.2m (0.6')	0.001	0.1
3003		17.8-18.8 (58.4-61.7)	Qtz veined meta-ole w/ thin "		1m (3.3')	0.001	0.11
3004		20.6-21.1 (67.6-69.2)	" " " "		0.5 (1.6')	0.001	0.02
3005		21.95-22.25 (72.0-73.0)	" " " "		0.3 (1')	0.001	0.02
3006	26.2-26.6 (86.0-87.3)	" " " "		0.4 (1.3')	0.001	0.01	
3007	32.8-33.0 (107.4-108.3)	silicified thysolite		0.2 (1.7')	7	0.6 (PPb/PPM)	
3008	35.2-36.6 (115.5-120.1)	" " " "		1.4 (4.6')	11	0.4	
3009	37.5-38.2 (123-125.3)	" " w/ ataxite		0.7 (2.3')	127	0.5	
3010	39.5-40.4 (129.6-132.5)	brecciated ry		0.9 (3.0')	6	0.3	
3011	44.2-44.4 (145-145.7)	" " " ruck		0.2 (1.7')	17	0.2	
3012	44.8-45.5 (147-147.3)	Ser. ry w 5-8% py		0.7 (2.3')	4	0.5	
3013	47.2-48.2 (154.9-158.1)	" " " "		1.0 (3.3')	128	0.5	
3014	48.2-49.3 (158.1-161.7)	" " " "		1.1 (3.6')	74	0.6	
3015	49.3-49.8 (161.7-163.4)	Silicified py w Qtz sacks		0.5 (1.6')	164	0.4	
3016	49.8-50.6 (163.4-166)	silicified ry		0.8 (2.6')	39	0.6	
3017	55.8-57.2 (183.1-187.7)	sheared meta-ole		1.4m (4.6')	6	0.1	
3018	59.9-59.3 (192.2-194.6)	silicified ry w 10% py		0.4 (1.3')	6	1.0	
3019	59.3-60.3 (194.6-197.8)	Ser ry		1.0 (3.3')	8	0.5	
3020	60.3-61.3 (197.8-201.1)	" " " "		1.0 (3.3')	3	0.9	
3021	61.3-62.3 (201.1-204.4)	" " " "		1.6 (3.3')	10	0.8	
3022	62.3-63.3 (204.4-207.7)	" " " "		1.0 (3.3')	12	0.5 / 6 0.3 (302)	

ate: 1986 Project: Michigan Creek Area: _____ Page 2 of 4

Sample No.	Location	Description	Attitude	Width	ANALYTICAL RESULTS
373024		67.3-67.8 (220.8-222.9) silicified ry	0.5m (1.6')		5 0.1 PPL/PPLM
3025		67.8-68.8 (222.4-225.7) ser "	1.0m (3.3')		9 0.2
3026		68.8-69.8 (225.7-229) ser "	1.0m (3.3')		2 0.3
3027		69.8-70.1 (229-230) silicified ry w Qtz micrite	0.3m (1')		5 0.3
3028		70.1-70.45 (230-231.1) ark: v.ole w " veins	0.35m (1.1')		3 0.2
3029		76.4-76.75 (250.7-251.2) silicified " " "	0.35 (1.1')		5 0.4
~~~~~					
3030	86-MH-2 -65°:233°	17.0-17.5m 55.8-57.4 partly sil. ry w qtz veins	0.5 (1.6')		210 1.1
3031	50m loc no MH-1	17.5-18.0 57.4-59.1 " "	0.5 (1.6')		184 1.8
3032		18.0-18.7 - 61.4 " "	0.7 (2.3')		99 1.2
3033		18.7-19.02 - 62.4 " " "	0.32 (1.05')		179 1.5
3034		19.02-19.25 - 63.2 quartz-galena-sphalerite vein	0.23 (0.75')		74 7.4
3035		19.25-22.4 - 75.1 sil. brecciated chert in gneiss	365 (120)	Zone of ~10% recovery	89 recovery 0.6
3036		25.0-25.5 82-83.7 silicified metabasite zone	0.5 (1.6')		61 0.2
3037		27.4-27.85 89.9-91.4 " ry w/ qtz stockwork	0.45 (1.5)		1 0.4
3038		27.85-28.3 - 91.8 bleached metabasite	0.45 (1.5)		1 0.2
3039		30.2-30.6 99.1-100.4 veined metabasite	0.4 (1.3)		1 0.2
3040		30.9-32.2 101.4-105.6 sil. ry. w qtz-gn-sp veins	1.3 (4.3)	Zone of 30% recovery	0.3
3041		34.4-34.86 112.9-114.4 " " w qtz stockwork	0.46 (1.5)		1 0.1
3042		36.5-36.8 119.8-120.7 ry w/ qtz stockwork	0.3 (1')		14 0.7
3043		39.0-39.5 128-129.6 " "	0.5 (1.6')		23 0.6
3044		29.5-40.0 - 131.2 " "	0.5 (1.6')		20 0.4
					10 0.6

Date: 1986

Project: m. dn. to Gulch

Area:

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Sample No.	Location	Description	Attitude	Width	Analytical Results	
					A _u	A _g
3T3046		40.5-41.0m 132.9-134.5 gtz floodal-ry		0.5 (1.6)	1	0.8 (PPb/PPM)
3047		41.0-41.5 -136.2		0.5 (1.6)	3	0.9
3048		41.5-42.2 -138.9		0.5 (1.6)	10	1.3
3049		42.2-42.5 -139.4		0.3 (1')	4	0.7
3050		42.5-43.5 -142.7 meta and w gtz skat.		1.0 (3.3')	1	0.2
3051		44.1-44.4 144.7-145.7 veins		0.3 (1')	1	0.2
3052		47.8-50.0 156.8-164 gtz veins		grabs of gtz vein material in zone of 5% recovery	2	0.2
3053		55.9-56.5 182.4-186.5 gtz-ser alt ry		0.95 (3.1')	200	0.3
3054		65.4-65.9 214.6-216.2 meta. and w gtz veins		0.5 (1.6')	1	0.4
3055		65.9-66.5 -218.2 Sil ry w gtz. stwk.		0.6 (2.0)	3	0.6
3056		66.5-67.0 -219.8		0.5 (1.6)	4	0.7
3057		67.0-67.5 -221.5		0.5 (1.6)	23	0.5
3058		67.5-68.0 -223.1		0.5 (1.6)	1	0.7
3059		68.0-68.5 -224.7		0.5 (1.6)	22	1.2
3060		68.5-69.15 -226.9		0.65 (2.1')	7	0.7
3061		69.5-70.2 228-230.3 ankhalt. meta and w gtz veins		1.05 (3.4')	2	0.4
3062		75.7-78.0 248.4-255.9 sil. meta and w gtz veins		2.3 (7.5')	2	0.3
3063		78.0-78.3 -256.9 " " " "		0.3 (1')	1	0.05

Date: 1986

Project: MIDNIGHT GULCH

Area:

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Sample No.	Location	Description	Attitude	Width	Analytical Results	
					Ag	As
ST 3064	HOLE 86-MR-1	10.35 - 10.8 MTR BASALT + ASI CUT BY A 1CM QTE VN		0.45m	26	0.5 PPB/PPM
3065	"	10.8 - 11.2 BRECCIA QTE, CALCITE, PY, TRC CPY PRESENT		0.4m	2	0.2
ST 3066	86-MR-2	58.4 - 58.7 INTENSIVE ANKERITE + CLAY ACID BRACT 5% QTE UN		0.3m	2	0.2
3067	"	60.7 - 60.9 SILICIFIED + CARBONATE ACID BRAD VOLCANICS 10% QTE ANKERITE - CALCITE UN		0.2m	17	0.3
3068	"	62.8 - 63.3 BRAD, ALD + SILICIFIED VOLCANICS W/ QTE STRANDED		0.5m	6	0.3
3069	"	68.65 - 69.7 MTR BASALT - ANDESITE 20% CALCITE - QTE UN		1.05m	5	0.2
3070	86-MR-3	31.6 - 32.9 MTR BASALT - ANDESITE TRC QTE, 5% QTE PY		1.3m	3	0.2
3071	"	57.9 - 58.2 EPIDOTE SILICIFIED ALD VOLCANICS		0.3m	10	0.2
3072	"	58.2 ~ 58.4 ANKERITE VOLCANIC W/ 40% QTE UN		P 0.2m	30	2.9
3073	"	58.4 - 59.4 ANKERITE VOLCANIC W/ 40% QTE VN		P 1.0	23	0.3

**APPENDIX F**

**CLAIM STATUS**

APPENDIX F CLAIM STATUS

CLAIM NAME/NUMBER	HOLDER
TON 1-16	INCO*
JL 1-24	ISLAND
JL 25-80	ISLAND
AFI 183-296	ISLAND
GRAY 1-4	ISLAND
ISLAND 1, 2 FRACTIONS	ISLAND

* Canadian Nickel-Co. Ltd.

**APPENDIX G**

**PERSONS AND CONTRACTORS EMPLOYED ON PROJECT**

APPENDIX G - Contractors & Employees

Acme Analytical Laboratories Ltd.

852 E. Hastings St.  
Vancouver, B.C.  
V6A 1R6

Aurum Geological Consultants Inc. (Tom Garagan)

604 -675 W. Hastings St.,  
Vancouver, B.C.  
V6B 1N2

CP Air Lines Ltd.

One Grant McConachie Way  
Vancouver International Airport, B.C.  
V7B 1V1

Val Celuszak

Box 5255  
Whitehorse, Yukon  
Y1A 4Z1

Joe Corcoran Construction Ltd.

Box 35  
Watson Lake, Yukon  
Y0A 1C0

Frontier Helicopters Ltd.

P.O. Box 220  
Abbotsford, B.C.  
V2S 4N9

G & D Diamond Drilling Co. Ltd.

6212 - 180A Street  
Surrey, B.C.  
V3S 5V3

Pat Garagan

Ste. 4 - 707 3rd Avenue NW  
Calgary, Alberta  
T2N 0J3

MBW Surveys Ltd.

#5 Teak Avenue  
Whitehorse, Yukon  
Y1A 4W5

Terri L. Michael

Box 491  
Watson Lake, Yukon  
Y1A 4Z1

Allan Montgomery (5 days for writing report)

4764 Moss Street  
Vancouver, B.C.  
V5R 3T2

George Nicholson

Box 567  
Squamish, B.C.  
V0N 3G0

Jim O'Rourke

Box 5255  
Whitehorse, Yukon  
Y1A 4Z1

Shakwak Exploration Company Limited

Ste 310, 14078 4th Avenue  
Whitehorse, Yukon  
Y1A 4K8

David Strain

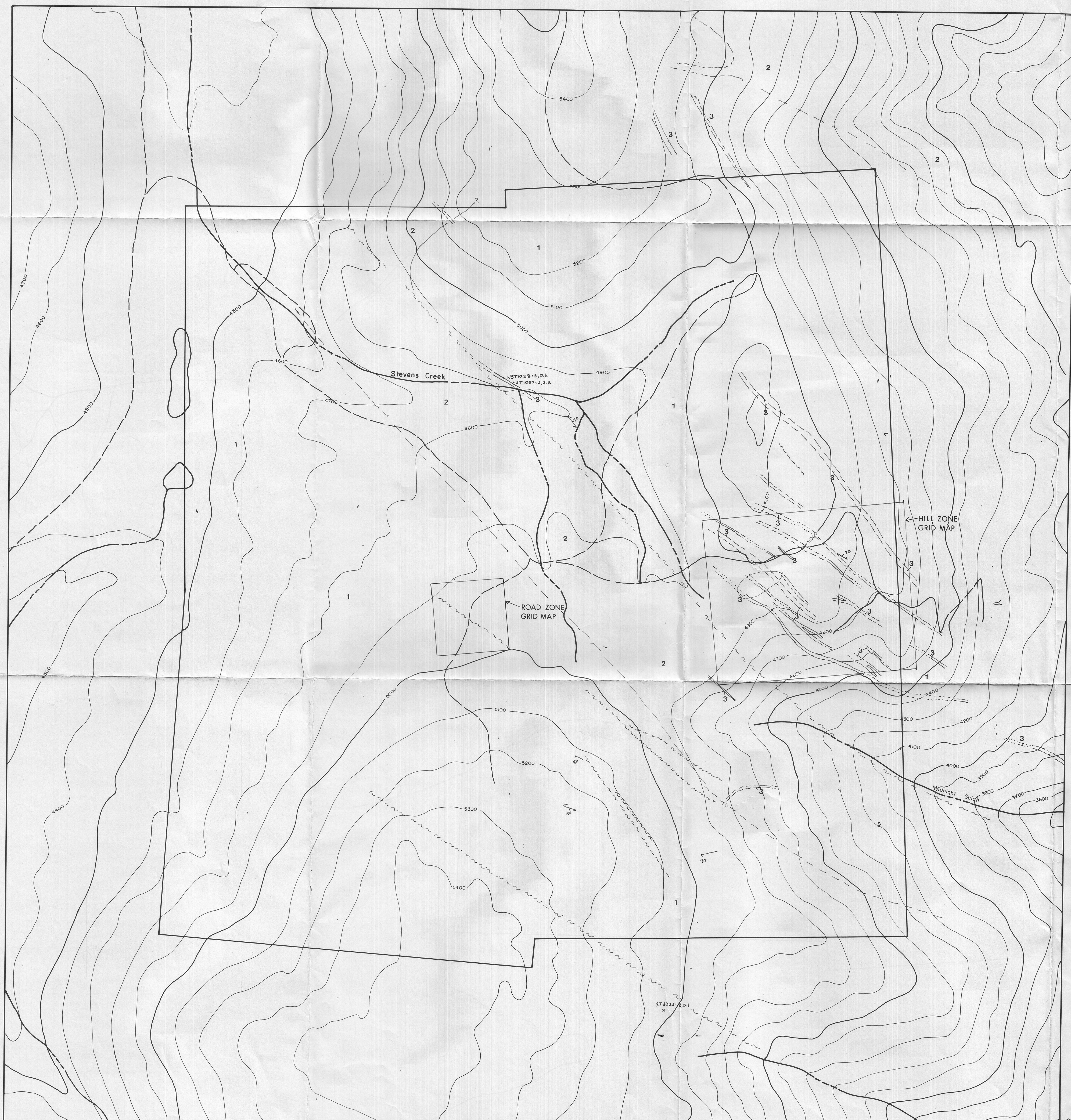
Box 214  
Atlin, B.C.  
V0W 1A0

Marco Vanwermeskerken

5443 Wildwood Crescent  
Tsawaaseen, B.C.

Rick Zuran

#7 - 2386 W. 5th Avenue  
Vancouver, B.C.  
V6K 1S5



- LEGEND:**
- TERTIARY
    - 3 RHYOLITE, FELSITE, LATITE DYKES
  - CRETACEOUS
    - 2 QUARTZ DIORITE TO MONZANITE
  - TRIASSIC
    - 1 META ANDESITE, BASALT FLOWS AND TUFFS
  - GEOLOGICAL CONTACT (defined, approximate, assumed)
  - ~~~~~ FAULT
  - 70 FOLIATION
  - 70 JOINTING
  - ADIT
  - ROAD

X 31028.3,66 ROCK SAMPLE: Au(ppb) Ag(ppm)

Figure 1

NOTES: -claims surveyed by MBW Surveys Ltd.  
 -CC 43, 44 government survey monuments  
 -topography from Dept. of Energy, Mines and Resources 1:50,000 scale map 105D/2/3  
 -contour interval 100 feet  
 -magnetic declination 30°E (1985)

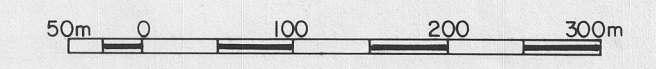
ISLAND MINING & EXPLORATION CO. LTD.

SIMPLIFIED GEOLOGY

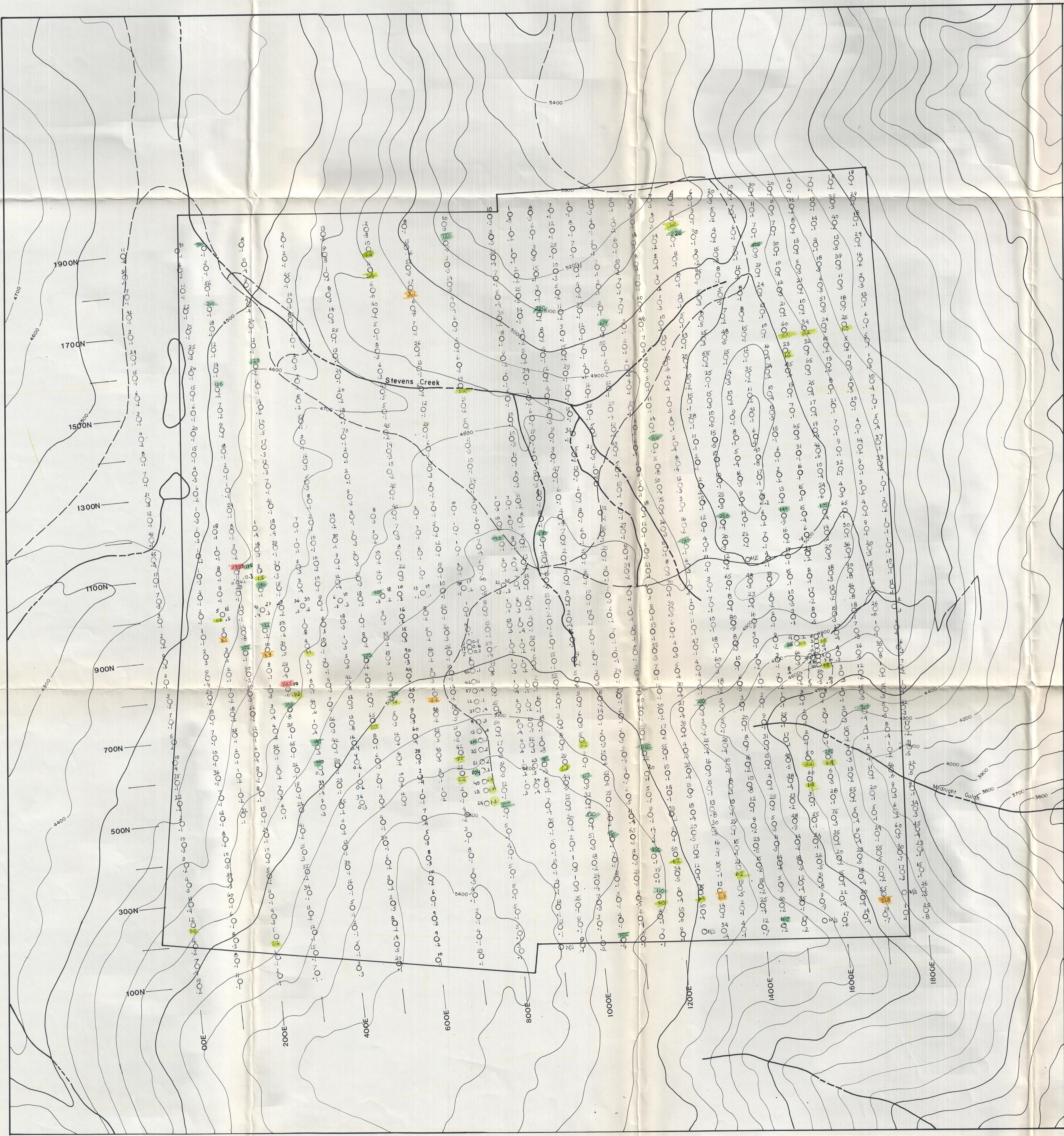
TON 1-16 MINERAL CLAIMS

WHEATON RIVER-CARCROSS MAP SHEETS, NTS 105D/2,3  
 WHITEHORSE MINING DISTRICT, YUKON TERRITORY

SCALE 1:5,000



by AURUM GEOLOGICAL CONS. INC.  
 adapted from  
 AMERLIN EXPLORATION SERVICES LTD.



**EXPLANATION**

Soil Sample Site - Au in ppb, Ag in ppm				
Au	1 to 1450	1 to 99	100 to 499	>500
Ag	0.1 to 5.8	0.1 to 0.9	1.0 to 2.0	>2.0

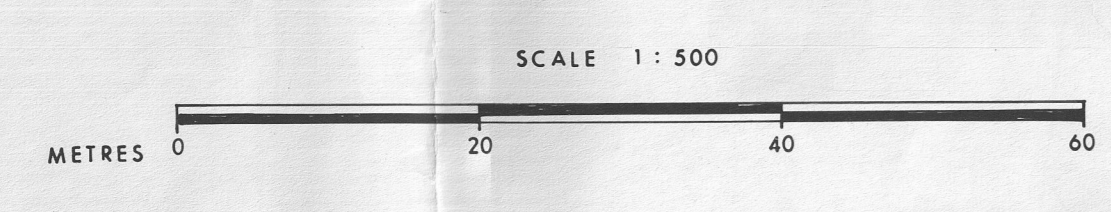
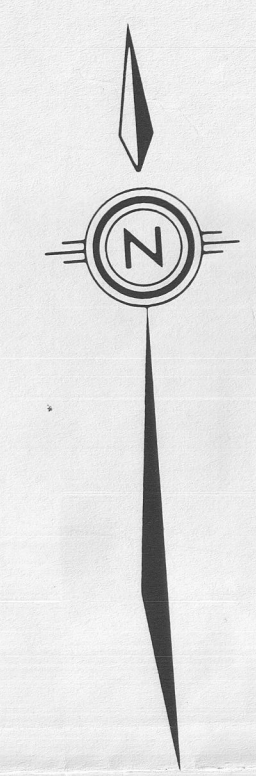
Figure 2

NOTES - claims surveyed by MBW Surveys Ltd.  
 - CC 43, 44 government survey monuments  
 - topography from Dept. of Energy, Mines and Resources 1:50,000 scale map 105D/2,3  
 - contour interval 100 feet  
 - magnetic declination 30°E (1985)

ISLAND MINING & EXPLORATION CO. LTD.  
 AuAg SOIL GEOCHEMISTRY  
 TON 1-16 MINERAL CLAIMS  
 WHEATON RIVER-CARCROSS MAP SHEETS, NTS 105D/2,3  
 WHITEHORSE MINING DISTRICT, YUKON TERRITORY

SCALE 1:5,000  
 50m 100 200 300m  
 by AURUM GEOLOGICAL CONS. INC.  
 adapted from  
 AMERLIN EXPLORATION SERVICES LTD.

October, 1986



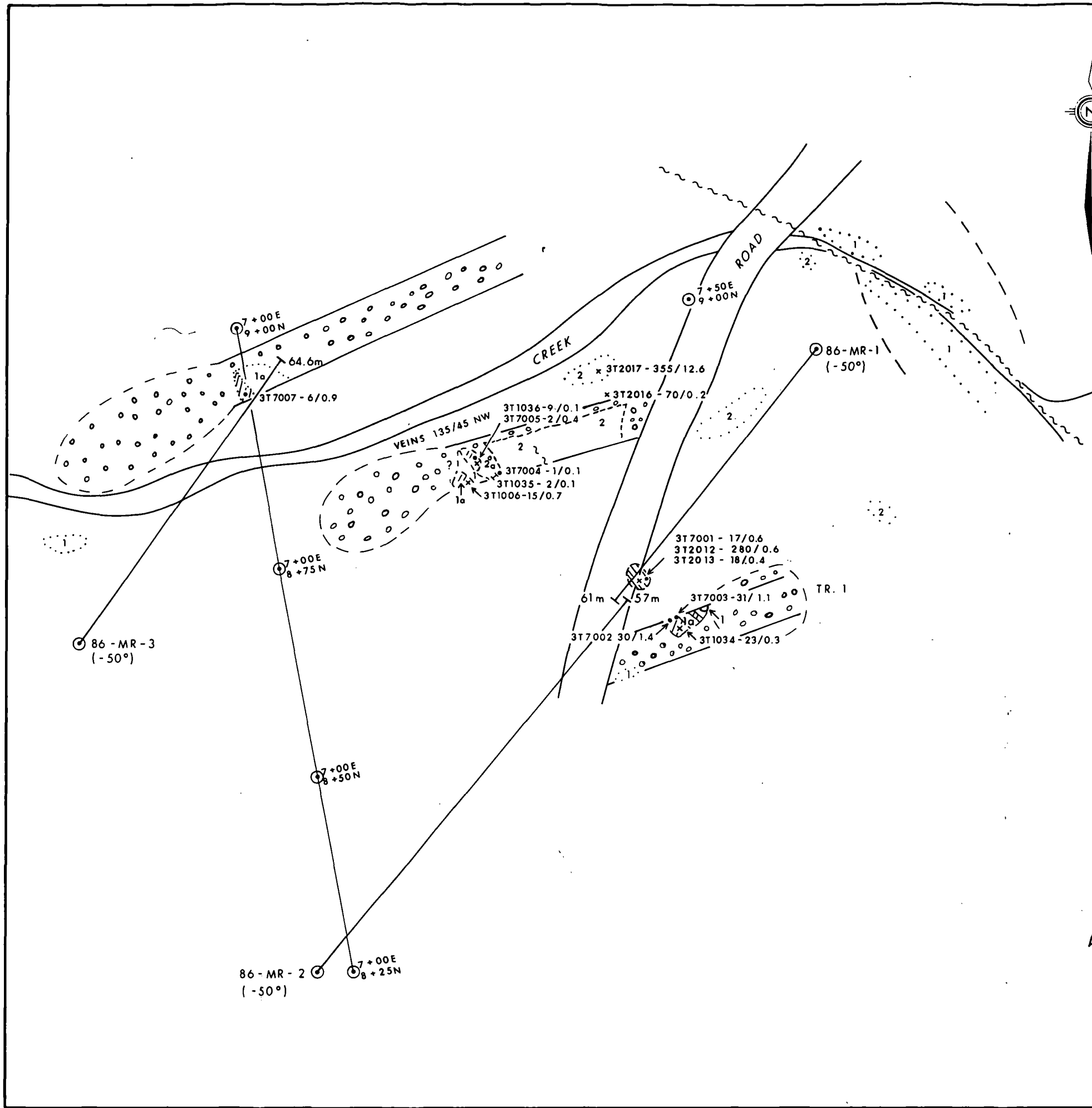
**LEGEND**

- TERTIARY (T)**
- 1 FELDSPAR - QUARTZ EYE PORPHYRITIC RUBBLY WEATHERING RHYOLITE
  - 2 FINE GRAINED FELSITE TO RHYOLITE
  - 2a: SILICIFIED AND SERICITIZED
  - 2b: LIMONITE STAINED AND BRECCIATED
  - 2c: FELSITE TO DIORITE
- TRIASSIC**
- 1a: FINE GRAINED ANDESITE AND BASALT FLOWS AND TUFFS
  - 1b: CARBONATE ALTERED, LIMONITE STAINED AND SHEARED VOLCANICS WITH OCCASIONAL FUSCHITE
  - 1c: WACKES AND SILTSTONES

- GEOLOGICAL CONTACT (DEFINED, ASSUMED)
- FAULT
- FOLIATION (INCLINED)
- JOINTING (INCLINED)
- XXX QUARTZ STOCKWORK
- QUARTZ VEINS
- OUTCROP
- GOSSAN
- OVERBURDEN
- CLIFF
- DDH - COLLAR (DEPTH)
- TRENCH (CIRCA 1908-1950's)
- CAT TRENCH (1986)
- CLAIM POST
- GRID

A: U.S. 902 - UNDERHILL SURVEY PT. 902  
 4/0.4 - 311040 ROCK SAMPLE Au - ppb, Ag - ppm (UNLESS OTHERWISE INDICATED)  
 33/0.4 - 317009 SOIL SAMPLE Au - ppb, Ag - ppm

Figure 3



**LEGEND**

- TERTIARY**
- 3 SERICITIZED FELSITE
  - 2 MEDIUM GRAINED HBL QUARTZ DIORITE  
2a STRONGLY KAOLINIZED
- TRIASSIC**
- 1 FINE GRAINED ANDESITE AND BASALT FLOWS  
1a CARBONATE ALTERED AND LIMONITE STAINED
- GEOLOGICAL CONTACT (APPROX.)
- ~~~~ FAULT
- ..... OUTCROP
- //// GOSSAN
- ⊗ RUBBLE COVERED TRENCH
- ⊗ x 3T2017 ROCK SAMPLE (CHIP, GRAB) - Au (ppb) Ag (ppm)
- ⊙ 3T7001 SOIL SAMPLE Au (ppb) Ag (ppm)
- ⊗ 64.6m  
86-MR-3 DIAMOND DRILL HOLE : DEPTH

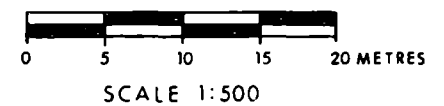


Figure 4

<b>ISLAND MINING AND EXPLORATION LTD.</b>			
TON 4			
<b>ROAD GOSSAN TRENCHES</b>			
<i>AURUM GEOLOGICAL CONSULTANTS INC.</i>			
FIELD WORK BY :	DRAFTED BY :	DATE :	FIGURE :
T. G.	K. C.	DECEMBER 1986	



100.7 / km: 31023  
 100.2 / : 41293  
 146pt, 9.2 : 41287  
 515.0.8 : 41291  
 570.0.6 : 41282

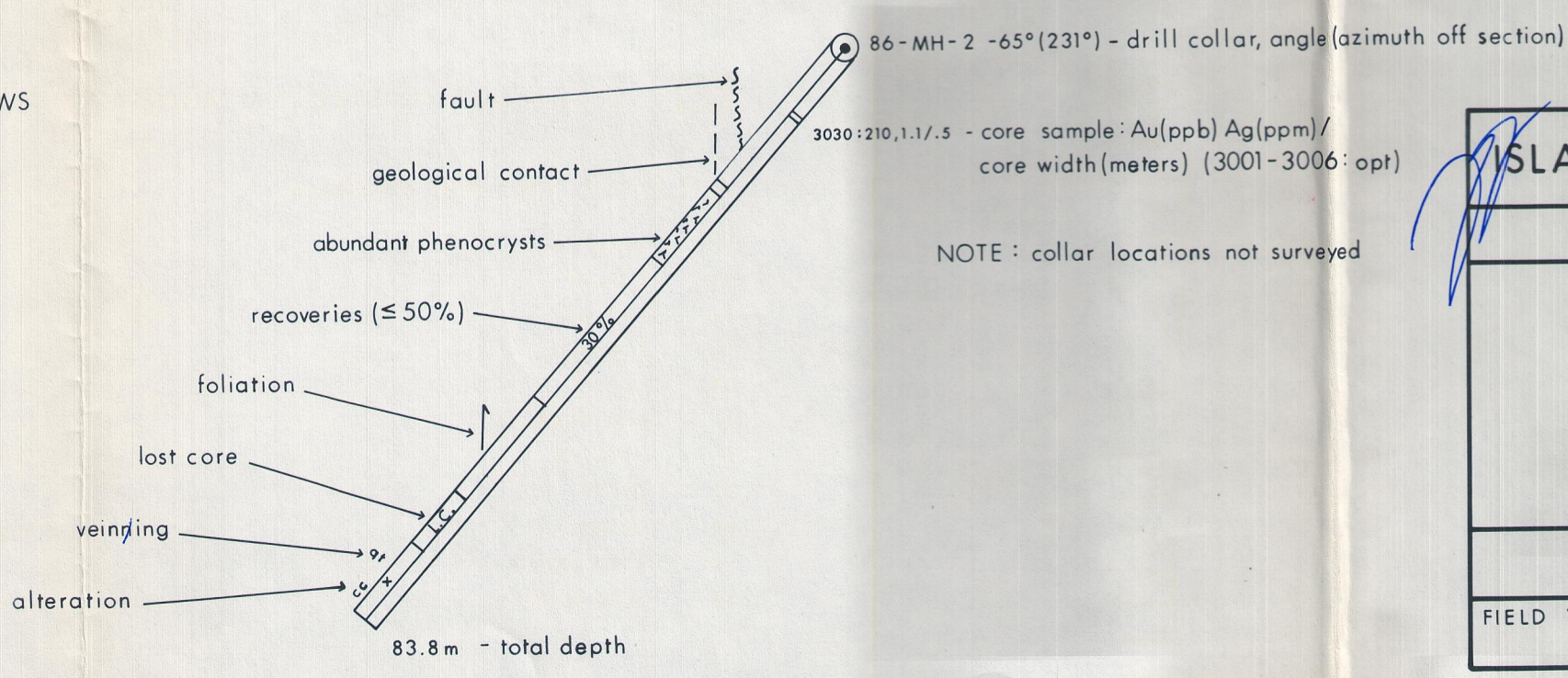
Figure 5

LEGEND:

- OVERBURDEN
- TERTIARY
  - RHYOLITE, FELSITE, LATITE
- TRIASSIC
  - META BASALT, ANDESITE: TUFF- FLOWS

ALTERATION AND VEIN MINERALS

- An : ankerite
- cc : calcite
- Se : sericite
- fs : fuschite
- qt : quartz
- Si : silicification
- cl : chlorite
- py : pyrite
- gn : galena
- cp : chalcopryite
- sp : sphalerite



NOTE: collar locations not surveyed

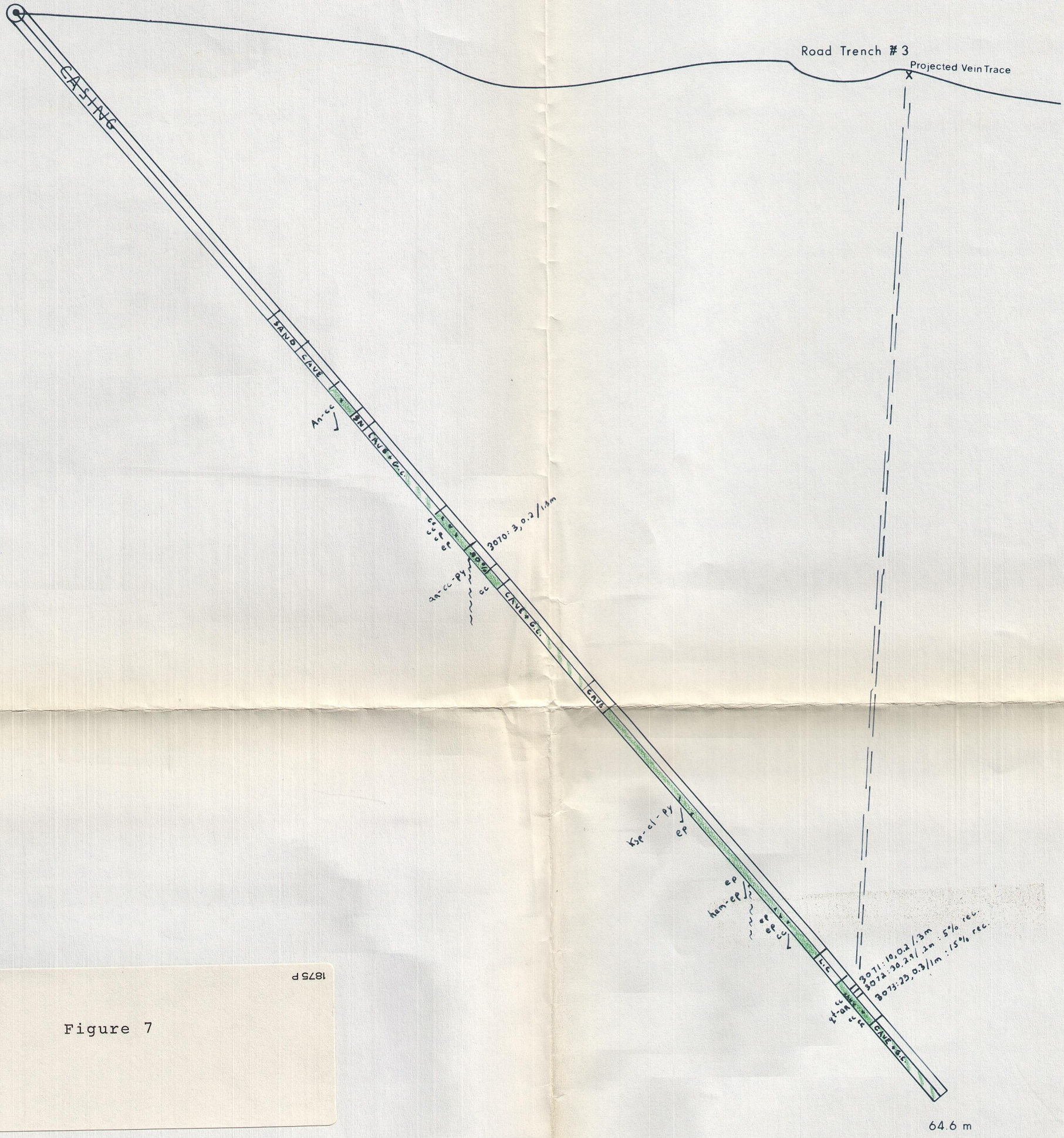
SCALE 1:200  
 0 1 2 3 4 5 m

ISLAND MINING & EXPLORATION CO. LTD.			
TON 14			
DDH-86-MH-1,2			
AURUM GEOLOGICAL CONSULTANTS INC.			
FIELD WORK BY:	DRAWN BY:	FIGURE:	DATE:
			DECEMBER, 1986



035° →

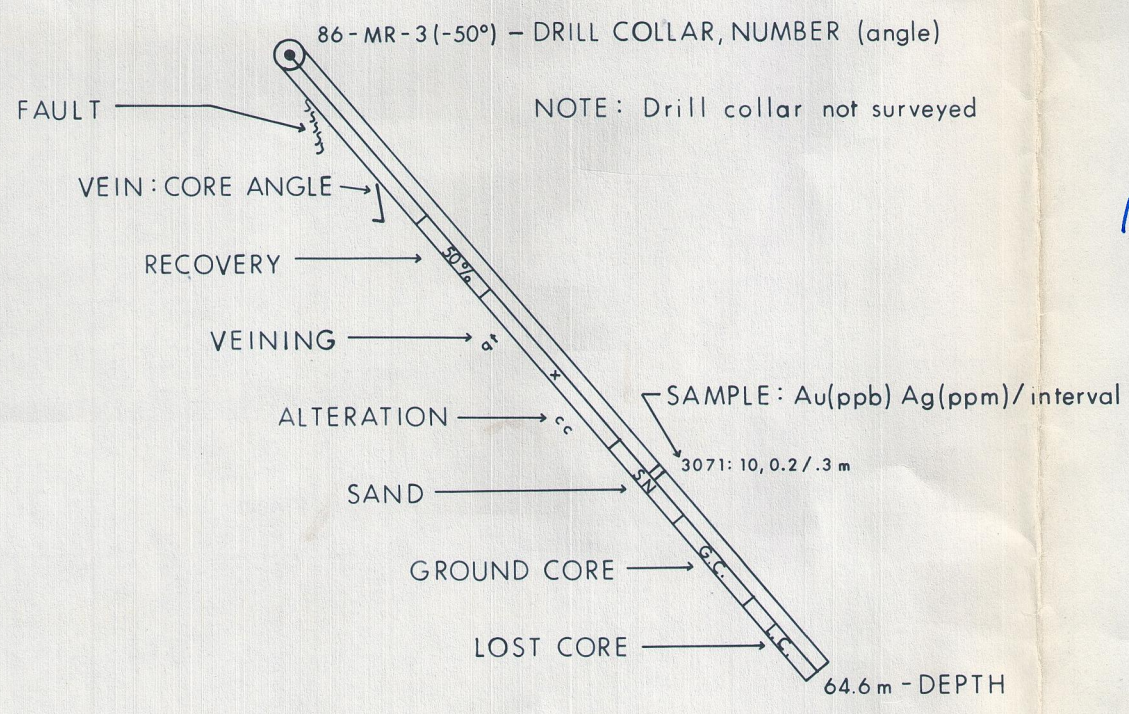
86-MR-3 (-50°)



1875 P  
Figure 7

**LEGEND:**

TRIASSIC  
 META ANDESITE, BASALT: TUFFS AND FLOWS



SCALE 1:200  
 0 1 2 3 4 5 m

ISLAND MINING & EXPLORATION CO. LTD.			
TON 4			
DDH-86-MR-3			
AURUM GEOLOGICAL CONSULTANTS INC.			
FIELD WORK BY:	DRAWN BY:	FIGURE:	DATE:
			DECEMBER, 1986

APPENDIX E

DRILL LOGS



Property	TON Claims:Midnite Gulch	NTS	105-D-2	Claim	TON 14	Elevation	Azimuth	218	Length	57 m	Dip	-51°	
Coordinates	7+85N/16+40E.		Dip Tests	Advance		Depth	282'(86.6m)		Date Collared	Sept. 10		Date Completed	Sept.
Purposes	To test underneath 0.5 and 2.6 oz Au in trench					Drilled by	G & D Drilling (NQ)		Assays by	Acme		Logged by	T. Garagar

Interval (m)		Rec'y %	RQD (35)	DESCRIPTION	Sample No.	Interval		Core Width	Au	Ag	
From	To		# of pieces			From	To				
0	12.2			Overburden and casing.				(m)			
12.2	16.8			Felsite (? rhyolite?) orange brown, fine grained with 15-20% fine to medium grained feldspar phenocrysts in a fine grained feldspar-quartz (~ 20%) matrix. The feldspars are slightly to moderately sericitized throughout the section with alteration increasing in intensity near the bottom. Minor thin quartz veinlets in lower 1 m of section. 2-3% pyrite, partly altered to Mn.							
12.2	13.4	75%	0								
13.4	15.5	75%	.16								
15.	16.8	75%	.28								
				16.3-16.8: Partly silicified quartz flooding with 5% quartz filled fractures (< 1 mm thick) and increased sericite.	3T3001	16.3	16.6	0.3	.001 opt	.01 opt	
				16.6-16.8: Quartz veining and brecciation up to 1-2 cm thick with 5% galena.	3T3002	16.6	16.8	0.2	.001 opt	.1 opt	
				Broken core: 13.6-13.7, 15.2-15.3, 15.5-15.7, 16.5-16.8.							
16.8	22.9			Foliated meta-andesite; very fine grained, medium grey-green to orange brown in zones of ankerite alteration. Foliation is more intense in altered zones. C/A: 85°.							
16.8	17.7	75%	0								
17.	19.8	45%	.21	16.7-17.2: Strongly foliated ankerite-fuschite altered andesite with 5-10% fuschite and 5% Mn.							
19.8	22.9	90%	0.6	17.2-19.5: Alteration as above, but less intense with less Mn and poorly developed fabric.							
			(35)	17.8-18.8: Broken core with 0.8 m lost. Rubble consists of strongly foliated meta volcanic with 15% quartz vein rubble with 1-2% galena.	3T3003	~17.8	18.8	~ 1 m	20% recovery	.001	.11
				Zones of moderate to weakly ankerite-fuschite (2-3%) altered as follows: 20-20.1 m, 20.5-21.00 m, 21.2-21.8 m, 22.7-22.9 m. The carbonate zones are locally bleached, indicating the possible development of sericite: 16.7-17.2, 20.8, 21.2, 21.5.							
				Two types of veins are present in this section. An earlier grey quartz occurs parallel to the schistosity and locally contains trace chalcocite and galena with minor associated hematite alteration.							

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Au	Ag
From	To					From	To			
16.8	22.9	cont'd		The veins do not exceed 2 cm in width and those >1 cm occur at: 19.4, 20 (tr. galena), 20.5, 22.2 (3-5% chalcopyrite, fuschite), 22.4, 22.6 (cp, py-ank). The grey quartz veins are cut by later ank. veinlets and locally banded fine grained (sugary) yellow-white quartz veins up to 4 cm wide. These veins (when containing quartz) have ankerite margins and the veins x-cut the fabric. Those >1 cm: 19.3, 19.9, 20.8, 20.86-20.9. Zone: 20.93-21.06, 21.5, 22.05-22.09, 22.35. The zones at 21.5 and 22.05 are associated with bleached volcanics. The veins carry trace pyrite. C/A: 22.09: 60° 20.93: 35° 21.06: 45°						
					3T3004	20.6	21.1	0.5	.001	.02
					3T3005	21.95	22.25	0.3	.001	.02
22.9	23.4	70%	0	Rhyolite (felsite): light yellow brown, very fine grained with 10% fine grained feldspar phenocrysts and 5% very fine grained pyrite (Mn altered). The matrix is partly quartz flooded (5-10% silica) and partly sericitized. The upper 10 cm contains thin (1-5%) quartz veins every 1-2 cm which x-cut the core at a variety of angles. 22.9-23.0: Badly broken core.						
23.4	29.4			Foliated meta andesite tuff: medium green, fine grained with medium grained fragments elongated along foliation.						
23.4	25.9	50%	0	Appears to be 25% clasts (lithic) which are stretched at a 1 to 5 ratio.						
25.9	29.4	70%	.26	Chlorite is developed parallel to the foliation and is also present as an alteration of the rock fragments. Ankerite-fuschite alteration is developed in several zones but is concentrated along the dyke-volcanic contact. Foliation C/A: 80°, weakly magnetic where fresh. 23.4-23.7: Strongly ankerite altered and sheared with 1-2% fuschite. The zone is strongly bleached (? ser.) Contains 1 thin quartz vein. Shearing C/A: 045°.						

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Au	Ag
From	To					From	To			
23.4	29.4	cont'd		23.8-25.9: Ankerite-fuschite altered volcanic with several (2-5%) thin (2 mm) white quartz-ankerite veins varying between 90° and 20° C/A, 1-10 cm apart.						
				23.8-24.8: Lost core. Rubble consists of above and minor rhyolite with quartz veins.						
				25.9-26.1: Broken core.						
				26.2-26.6: More strongly foliated volcanic with 15% fine grained quartz in veins and quartz flooding with 5% fuschite and minor ankerite. Quartz veins are thin (i.e. < 1 cm).	3T3006	26.2	26.6	0.4	.001	.01
				27.0: ~ 0.9 m lost core.						
				28.8-29.4: Ankerite-fuschite (<5%) altered with a 5 cm wide quartz vein at 29.1 surrounded by a bleached zone with 10% fuschite.						
29.4	38.2			Rhyolite: light red brown to sandy brown, very fine grained with 5-10% (increases lower down) fine to medium grained euhedral						
29.4	31.4	90%	0.3	feldspar phenocrysts which are strongly sericitized (grass green)						
31.4	32.0	60%	0	near the top and only slightly sericitized lower in the section						
32.0	32.5	60%	0	(grey green). The top 5 cm is silicified and contains 5-7% very						
32.5	33.8	75%	0.23	fine grained Mn after pyrite.						
33.8	35.4	95%	0.44	Broken and/or ground core: 31.2-32, 32.25-32.5, 33-33.8 (0.2 m						
			(30)	lost), 35.12.				(ppb)	(ppm)	
35	36.6	50%	0.1	The dyke is quartz flooded locally with minor thin quartz filled	3T3007	32.8	33.0	0.2	7	0.6
36.6	37.5	60%	0	fractures: 32-32.2, 32.8-33, 35.25-36.05.						
37.5	38.2	70%	0	The broken core from 35.12-37.5 is moderately sericite-carbonate	3T3008	35.2	36.6	1.4	11	0.4
				altered with calcite coated fractures every 1-3 cm.						
				37.5-38.1: Rhyolite is cut by several thin (< 1 cm) quartz veins	3T3009	37.5	38.2	0.7	127	0.5
				(average one every 4-5 cm) with minor ankerite. The rhyolite is						
				moderately to very strongly (quartz flooded) silicified and con-						
				tains 5-7% fine to medium grained pyrite cubes.						
				37.6-38.1: Broken core.						
38.2	39.5	7%	0	Ground core: includes 1.2 m lost core.						
				-0.1 m sheared fuschite/ankerite altered meta andesite.						

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Au	Ag
From	To					From	To			
39.5	40.4	80%	0	Breccia: rhyolite, grey green; silicified and clay altered breccia formed in part by an intense clay-ankerite quartz stockwork. The fragments are intensely silicified near the bottom and are strongly sericitized at top with zone in between being a mixture of both. The fragments are subrounded, up to 1 cm across and are both clast and matrix supported. They are locally hematized and ankeritized. The matrix consists of fine grained orange brown clay and carbonate with minor quartz. The fragments consist of rhyolite with 5% grey quartz and contain minor disseminated pyrite and galena. The top part of the zone is less brecciated and is cut by a 2 cm quartz-ankerite-barite vein at 39.6, C/A: 20°.	3T3010	39.5	40.4	0.9	6	0.3
40.4	41.9	80%	.25 (>20)	Rhyolite, light brown, very fine grained with 15% fine grained feldspar phenocrysts and 2-3% fine to medium grained quartz-eyes. The feldspars are partly clay altered. 40.4-40.5: Partly sericitized. 40.7-41.0: Clay calcite veinlets in 3 zones 10 cm apart. 41.2-41.4, 41.6-41.8: Brown clay seams.						
41.9	43.2	70%	0	Rhyolite, light brown, rubbly core in places; fine grained with medium to coarse grained euhedral feldspar phenocrysts (15%) and quartzeyes (10%). The matrix has a pinkish tinge to it (clay alteration) and the feldspars are altered to a pinkish white clay (possibly ankerite) and hematite (trace). The matrix also contains approximately 5 to 10% calcite alteration. This unit is probably a coarser grained version of the above. 42.0-42.4, 42.8-43.2: Broken and rubbly.						
43.2	44.2	90%		Rhyolite, fine grained as in 40.4-41.9. Trace to 5% calcite alteration.						
44.2	44.4	100%	1	Breccia: medium brown, matrix supported, fragments angular to subrounded, varying between 0.2 to 2 cm across in a sandy-clay-ankerite matrix. The fragments consist of 50% foliated fuschite altered meta-volcanic, 10% grey quartz and 30% fine	3T3011	44.2	44.4	0.2	17	0.2

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Au	Ag
From	To					From	To			
44.2	44.4	cont'd		The matrix is locally sericitized with minor quartz-carbonate flooding. A few of the fragments have thin reaction rims (? composition).						
44.4	44.6	100%	1	Meta-andesite tuff. Strongly foliated with highly contorted and tightly folded fabric. Ankerite-fuschite altered with very fine grained pyrite along foliation.						
44	44.8	30%	0	Broken and ground meta volcanic and rhyolite core.						
44.8	45.5	100%	.33	Rhyolite, light brown to green brown, very fine to fine grained with 15% fine to medium grained grey euhedral and broken feldspar phenocrysts and 5% elongate? quartz. Contains 5-7% fine disseminated pyrite. Top 5 cm is sericitized with minor thin (1-2 mm) quartz veins. Also contains several 1-5 mm qtz-ank-py veins throughout (~ 3-5%) with variable core angles.	3T3012	44.8	45.5	0.7	4	0.5
45.5	46.3			Lost core.						
46.3	47.2	75%	0	Foliated meta andesite lithic lapilli to ash tuff; medium green-brown with 25% chlorite altered andesite fragments. The unit is orange brown near the upper contact due to ankerite alteration. The fabric is also stronger at this point. C/A: 80°. Contains 1% thin x-cutting (<2 mm variable C/A) ankerite-quartz veinlets throughout.						
47.2	50.6			Rhyolite: light-medium brown, fine grained with 15% elongate quartz-sericite-(chlorite) clots (? replaced feldspars) and 5% euhedral feldspar phenocrysts. Contains 5% disseminated pyrite cubes which occur within the quartz sericite zones. The unit is quartz flooded locally and contains thin (3-5 mm) grey quartz-ankerite-pyrite (limonite) veins at C/A 0-40° at: 47.6, 47.75, 48, 48.4, 48.5, 49.1, 49.2.	3T3013	47.2	48.2	1.0	128	0.5
					3T3014	48.2	49.3	1.1	74	0.6
47.2	49.3	90%	0.4		3T3015	49.3	49.8	0.5	164	0.4
			(37)		3T3016	49.8	50.6	0.8	39	0.6
49.3	49.8	100%	.24							
			(~15)							
49.8	50.6	75%	0	49.3-49.8: Quartz flooded with clay clots and 10% sericite cut by a moderately developed stockwork (10% veining) of 0.5 to 2						

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Au	Ag
From	To					From	To			
47.2	50.6	cont'd		Veining is 40% of the rock for 10 cm at 49.7. Contains 8-10% pyrite with 2-3% occurring in veins. The grey quartz veins contain 5% ankerite and are brecciated by a later milky white quartz phase (5% of veins).						
50.6	51.5			Lost core.						
51.5	55.8	80%	.58 (35)	Meta-andesite tuff/andesite: medium green, foliated, fine grained with lapilli size fragments which are flattened near the contacts. Unit is slightly magnetic. Fol: C/A: 70°. Contains 2-5% calcite veinlets. Upper 20 cm: ank-altered; rest 1-2% epidote.						
55.8	57.2	80%	.38 (2) 10cm)	Sheared and strongly ankerite altered above. Orange brown. Cut by quartz-calcite (10%) stockwork (25% veining) from 55.9-57.0. The rock contains ~5-10% calcite. The veins do not exceed 1 cm thick. The ankerite decreases dramatically in the lower 20 cm.	3T3017	55.8	57.2	1.4	6	0.1
57.2	58.9	80%	.12	Meta-andesite lithic lapilli tuff as before; foliation C/A: 80°, with trace carbonate veining. 58.5: 10 cm clay gouge and broken core.						
58.9	64.3			Rhyolite: light brown to green brown; very fine grained with fine to medium grained euhedral grey feldspar (15%) phenocrysts and 5-7% very fine to fine grained yellow clay altered to sericitized feldspar phenocrysts (probably Kspar). The coarser phenocrysts are partly sericite and silica altered, as in 47.2-50.6. The matrix is locally sericitized and quartz flooded which is accompanied by thin (<.5 cm) quartz filled fractures: 59.4, 60.9, 61.2, 62.0, 62.9, 64.0.	3T3018	58.9	59.3	0.4	6	1.0
					3T3019	59.3	60.3	1.0	8	0.5
58.9	59.3	90%	.25		3T3020	60.3	61.3	1.0	3	0.9
59.3	59.7	90%	0		3T3021	61.3	62.3	1.0	10	0.8
59.7	60.5	95%	.16		3T3022	62.3	63.3	1.0	13	0.5
60.5	62.6	90%	.17		3T3023	63.3	64.3	1.0	6	0.3
62.6	63.1	100%	.74 (3) 10cm)	58.9-59.3: Strongly silicified with 10% pyrite and 15% quartz-ankerite (5% of vein)-pyrite (tr.) thin veining. The unit contains 3-5% disseminated pyrite.						
63.1	64.3	90%	.17							

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Au	Ag
From	To					From	To			
64.3	67.26	100%	.79	Meta andesite lithic ash to lapilli tuff, as before, strongly foliated adjacent to dyke contacts with moderate ank. alt.						
			(13 > 10cm)	Foliation C/A 65°, lower contact C/A 85°.						
				64.45-64.55: Strongly ankeritized with 2 cm clay gouge.						
				66.3: 4 cm clay gouge.						
				Minor calcite veining and alteration throughout.						
67.26	70.1	95%	.35	Rhyolite: light green to brown, very fine grained with fine grained partly clay altered feldspar phenocrysts (5%).	3T3024	67.3	67.8	0.5	5	0.1
			(11 > 10cm)	The upper and lower contacts are sericitized and quartz flooded from 67.26-67.8, 69.3-70.1.	3T3025	67.8	68.8	1.0	9	0.2
				69.8-70.1 is strongly silicified (40% silica) with abundant quartz microfractures.	3T3026	68.8	69.8	1.0	2	0.3
					3T3027	69.8	70.1	0.3	5	0.3
70.1	75.1	90%	.49	Meta andesite tuff as above. 1-2% calcite veining.						
			(15 > 10cm)	71.1: Amygdules (5%), therefore minor interbedded flows.						
				70.1-70.4: Ankerite and sericite altered with minor quartz veining with a 2 cm wide quartz vein. C/A 10° at 70.35.	3T3028	70.1	70.45	0.35	3	0.2
				72.2: Quartz veinlet, C/A 10°.						
				73.2: 2 mm wide quartz vein and gouge, C/A 5°.						
				73.5: 20 cm broken core.						
				74.1: 2 cm wide zone with quartz filled tension gashes. C/A 45°.						
75.1	75.45	95%	0	Meta andesite-chlorite schist: medium green, strongly foliated, C/A 90°. 15% calcite veining parallel to schistosity.						
				75.2: Clay seam.						
75.45	76.35	90%	0	Meta andesite tuff, medium to dark green, weakly foliated, C/A 90°. Slightly carbonate altered.						
				75.8: 3 cm clay gouge and calcite vein.						
				76.25: 1-2 mm qtz-hem-cal. vein. C/A 20°.						
76.35	76.4	?	0	Green clay gouge.						

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Au	Ag
From	To					From	To			
76.4	76.75	80%	0	Meta andesite tuff. 40% silica flooding and quartz veining with tr. ankerite and 3-5% fuschite. 76.45: 2 cm wide quartz vein. ) C/A 75° 76.7: 4 cm wide quartz vein. ) Parallel to foliation	3T3029	76.4	76.75	0.35	5	0.4
76.75	77.7	80%	0	"Poker chip" meta andesite-chlorite feldspar schist: strongly foliated, C/A 65°. May actually be more felsic.						
77.7	78.4	85%	0	Meta-andesite tuff, medium/dark green, aa: 75.45-76.35.						
78.4	79.1	100%	0	"Poker chip" meta andesite a.a.						
79.1	86.6	95%	.28 (17 > 10cm)	Meta andesite tuff and flows, medium/dark green, fine to medium grained. Weakly foliated, C/A 70° with local areas of strong foliation (schistose). 5% calcite alteration and 1-2% x-cutting calcite veinlets. Quartz veins >1 cm at 82.9 and 83.2. Clay gouge: 79.2, 79.75, 81.1, 82.3, 83.2, 84, 85.3.						
				E.O.H.						

Property TON Claims, Midnite Gulch NTS 105-D-2 Claim TON 14 Elevation Azimuth 233° Length 35 m Dip -65°  
 Coordinates 7+85N/16+40E Dip Tests 65° at 83.8 m Advance Depth 83.8 m Date Collared Sept. 17 Date Completed Sept. 20  
 Purposes As in MH-1, test possible northwest plunge Drilled by G & D Drilling Assays by Acme Logged by T. Garagan

Interval(m)		Rec'y %	RQD (# frags > 10 cm)	DESCRIPTION	Sample No.	Interval		Core Width (m)	Au	Ag	
From	To					From	To				
0	12.2			Casing							
12.2	19.02			Rhyolite-felsite, medium green brown, very fine grained with fine to medium grained sericitized feldspar phenocrysts (20%)	3T3030	17.0	17.5	0.5	210	1.1	
					3031	17.5	18.0	0.5	184	1.8	
					3032	18.0	18.7	0.7	99	1.2	
12.2	15.2	40%	0	Contains 2-4% disseminated pyrite and 5% accicular fine grained clay altered feldspars	3033	18.7	19.02	0.32	179	1.5	
15.2	15.8	58%	.2(1)	12.2 - 15.2: broken and ground core							
15.8	16.5	25%	0	16.25 - 16.9: lost core							
16.5	17.1	33%	0	17.5 - 18.92: partly silicified with 5% quartz veining and 5-7% disseminated pyrite. Veins have various C/A and are 1-5 mm wide							
17.1	18.92	85%	.23(4)	17.9 ground core 18.8: 3 cm wide quartz-fuschite vein with trace galena and pyrite. Core is ground here.							
19.02	19.25	90%	0	Quartz vein, white, with 5-7% fuschite, 2-3% galena, ~ 1% sphalerite and trace -1% pyrite. Contains a 3 cm zone of ankerite-fuschite altered metavolcanic, strongly sheared C/A: 75°. Bottom 2-3 cm is ground core.	3T3034	19.02	19.25	0.23	74	7.4	
19.25	22.9	~10%	0	Rhyolite: silicified and brecciated, ground and broken core with 3 m lost.	3T3035	19.25	22.9	3.65	10% recovery	89	0.6
22.9	27.4			Meta-andesite, medium green to orange brown, fine grained, moderately foliated C/A: 60°							
22.9	25.9	60%	.19(3)	22.9: 1 m lost core. Ankerite altered from: 22.9-24.2, 24.4-24.6, 25.8-27.4.							
25.9	27.4	66%	.41(4)	1-2% calcite altered and several thin (< .5 cm) quartz veins parallel to foliation. Fine grained white quartz veins occur at 24.7, 24.8, 25.3 (3 cm), 25.35 (1 cm), 25.4 (4 cm), trace fuschite, C/A: 30-90°.	3T3036	25.0	25.5	0.5	61	0.2	

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Au	Ag
From	To					From	To			
22.9	27.4	cont'd		The ankerite alteration increases in intensity towards the lower contact with 5% fuschite occurring in the lower 20 cm. 25.9: 40 cm lost core. Minor ground core with yellow-white fine grained quartz fragments.						
27.4	27.85	80%	0	Rhyolite, grey-green, very fine grained, quartz flooded with 5-7% disseminated pyrite cubes. Cut by a very fine quartz vein stockwork (veins: 1-2 mm wide). The veins occupy 5% of the rock. 27.5 - 27.7: broken core.	3T3037	27.4	27.85	0.45	1	0.4
27.85	28.3	100%	.3(1)	Meta-andesite tuff, strongly bleached and foliated with 3-5% fuschite. Fol. C/A: 75°. Strong bleaching may be caused by very fine grained silica and clay.	3T3038	27.85	28.3	0.45	1	0.2
28.3	30.9	90%	.35 (7)	Meta-andesite lithic lapilli to ash tuff, foliated, orange brown to light green, ankerite-fuschite altered (2-3%). 29.6-30.0: less altered. Foliation C/A: 60°. 30.2-30.9: strongly ankerite altered with several quartz veins (usually < 1 cm). 5 cm quartz vein with 10% fuschite at 30.2 and 30.6. Veins are parallel to foliation.	3T3039	30.2	30.6	0.4	1	0.2
30.9	32.2	30%	0	Rhyolite: ground core throughout. Fine grained with 15% medium grained sericite altered feldspar phenocrysts. Minor quartz flooding. 10% of the fragments consist of bull quartz with 5% sphalerite and galena with trace pyrite.	3T3040	30.9	32.2	1.3	1	0.3
32.2	34.4	95%	.91 (7)	Meta-andesite lapilli tuff as before, medium green, fine to medium grained. Foliation C/A: 55°. Cut by 5% quartz veinlets (1-3 mm) and 1-2% quartz filled tension gashes. Minor hemetite associated. 32.2 - 32.4: ankerite altered.						

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Au	Ag
From	To					From	To			
34.4	~42.5			Rhyolite, light red brown to light green, in sericitized zones. Very fine grained. With 5-10% fine grained feldspar phenocrysts and 2-3% Mn altered disseminated pyrite. Contains several narrow zones of sericitization with quartz veining and flooding as follows:						
34.4	36.6	90%	.34	34.4-34.86: Moderately developed quartz vein stockwork with 1-10 mm wide sericite alteration haloes. Veins do not exceed 5 mm. Contain 5-10% limonite. Upper contact is sericitized for 3 cm.	3T3041	34.4	34.86	0.46	1	0.1
36.6	38.4	90%	.12	36.5-36.8: Quartz flooding with intense quartz veining stockwork with 10% ankerite and 50% quartz vein material from 36.7-36.8. The remaining section has 2-3% quartz-ankerite veinlets.	3T3042	36.5	36.8	0.3	14	0.7
38.4	41.5	70%	.29	39.5-43.5: Rhyolite is fine to medium grained.	3T3043	39.0	39.5	0.5	23	0.6
41.5	42.5	80%	0	39-40.5: 2-5% quartz flooding with 5-7% disseminated pyrite and 10% sericite. A 1 cm wide quartz (ank-py) vein is subparallel to the core from 39.8 to 40.1.	3044	39.5	40.0	0.5	20	0.4
				40.5-42.2: Quartz flooded with 10-30% quartz. Minor thin quartz veinlets throughout and 10% disseminated pyrite in the most intensely silicified zones. Feldspars are sericitized. 41.9-42.2: 2-5% quartz veinlets.	3045	40.0	40.5	0.5	10	0.6
				41.6-41.8: 0.2 m lost core.	3046	40.5	41.0	0.5	1	0.8
					3047	41.0	41.5	0.5	3	0.9
					3048	41.5	42.2	0.5	10	1.3
					3049	42.2	42.5	0.3	4	0.7
42.5	45.5	85%	.4	Foliated meta-andesite lithic lapilli tuff; medium green to light orange brown. Foliation C/A: 65°. Contains several zones of more intense ankerite-fuschite alteration with quartz veining.	3T3050	42.5	43.5	1	1	0.2
			(7)	42.5-43.5: Ankerite-fuschite (10%) altered volcanic cut by several quartz veins between 1 mm and 1 cm wide which coalesce into an intense stockwork and brecciated zone between 42.7 and 42.8 and 43-43.2.						
				The veins consist of fine grained, white quartz and clear grey quartz with minor ankerite (5% pyrite and 5% lim.) The veins are locally banded. The foliation is contorted in this zone.						
				43.5-43.7: Lost core.						

Interval		Recy %	ROD	DESCRIPTION	Sample No.	Interval		Core Width	Au	Ag	
From	To					From	To				
2.5	45.5	cont'd		43.7-43.75: Intense quartz-ankerite-fuschite (also sericite) altered meta-volcanic which is cut and brecciated by an intense quartz vein stockwork with 30% quartz (5% ank.) Similar zones also occur at 44.15-44.21, 44.28-44.21, 44.37-44.4, 44.9-44.94, with ankerite altered meta-volcanic between the upper 2 zones and for 5 cm above the zones. The remainder of the core contains 2-5% quartz veins (<1 cm wide) throughout. The lower contact is gradational.	3T3051	44.1	44.4	0.3	1	.2	
5.5	47.8	50%	0	Meta-andesite tuff; intensely ankerite-fuschite altered with the lithic-lapilli (15%) fragments totally altered to fuschite-sericite, and the matrix altered to ankerite. 45.8-46.0: Minor quartz flooding and sericitization of matrix. 46.0-47.7: Broken core with 1 m lost. Core fragments in this zone consist almost entirely of the above with 2 fragments of white quartz vein material.							
7.8	47.9	95%	0	Quartz-ankerite vein; fine grained white to yellow white with 30% ankerite, 10% fuschite, 3-5% pyrite and 1-2% limonite.							
					3T3052	47.8	50.0	-	Grab of splits of vein material	2	0.2
7.9	50.0	-	-	Caving and lost core. Core fragments consist of 45% veining, 45% rhyolite and 10% sericitized volcanics.							
50.0	55.9	95%	.75 (22)	Rhyolite: medium green to light red brown. Grain size is highly variable from a very fine grained dyke with fine grained euhedral feldspar phenocrysts (15%) and rare quartz-eyes to a fine to medium grained rock with medium to coarse grained K-feldspar (5%), quartzeyes (15%) and 10% fine to medium grained plagioclase phenocrysts. The K-spars are slightly alunitized and the plagioclases are partly carbonate-sericite altered throughout. The matrix is slightly calcite altered (1-3%). The contacts between the 2 types is gradational. The coarser grained unit occurs at: 50.5-50.7, 51.4-53.4. 51.3-51.4: Cave. A 4-5 cm wide bleached zone occurs around fractures at 54.8 and 55.0. The fracture at 54.8 contains a 1-2 mm wide calcite limonite vein. The fracture at 55.0 is dry. C/A: 45°. 53.8-55.9: 1% calcite filled fractures.							

Interval		Recy %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Au	Ag
From	To					From	To			
55.9	56.85	90%	.32	Rhyolite; light orange-brown. Fine grained with medium grained quartz-sericite "fiamme" shaped blebs. May be altered glass within banded rhyolite. Blebs aligned C/A 45°.	3T3053	55.9	56.85	0.95	200	0.3
				This unit is slightly to moderately quartz flooded throughout with a moderately developed quartz-limonite-calcite micro-fracture stockwork.						
				56.1-56.4: broken core.						
56.85	57.0	90%	0	Meta andesite tuff: ankerite-sericite altered.						
57.0	57.35	-	-	Caved.						
57.35	65.9	95%	.78 (34)	Meta-andesite lithic lapilli to ash tuff with interbedded flows? Medium-dark green. foliation C/A: 50-60°.						
				65.4-65.9: Strongly ankerite-sericite altered with a 1 cm banded yellow-green quartz vein subparallel to the core from 65.5-65.8.	3T3054	65.4	65.9	0.5	1	0.4
				The unit is weakly carbonate (calcite) altered throughout with 1-2% quartz-calcite veins throughout (1 mm to 1 cm wide), but in no concentration.						
				The rock contains 2-5% epidote with 2 areas (63.8 and 64.25) containing 15%.						
65.9	69.15			Rhyolite, light grey green to grey brown. Very fine grained with 10% fine grained euhedral feldspars which can only be seen in the less altered parts of the dyke.						
				The rhyolite is partly quartz flooded throughout (moderate to intense) with 5-10% sericite, minor fuschite near the lower contact. Also contains 5% disseminated pyrite.						
65.9	66.8	80%	0	The dyke is cut by a moderately developed quartz vein stockwork	3T3055	65.9	66.5	0.6	3	0.6
66.8	67.5	60%	0	(5-10% veining). The veins vary between 1 mm and 2 cm (rare)	3056	66.5	67.0	0.5	4	0.7
67.5	68.0	100%	.52	wide. Have variable C/A and contain 10% ankerite and 2-3%	3057	67.0	67.5	0.5	23	0.5
			(2)	pyrite. A 2 cm vein at 67.75 is vuggy in places, an ankerite core	3058	67.5	68.0	0.5	1	0.7
68.0	68.6	90%	0	and trace galena.	3059	68.0	68.5	0.5	22	1.2
68.6	69.15	95%	.38		3060	68.5	69.15	0.65	7	0.7
			(1)							

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Au	Ag
From	To					From	To			
				Broken core: .5 m at 66.8 (10 cm lost) .2 m at 67.1 .3 m at 68.6						
69.15	70.2	95%	.40 (4)	Meta-andesite lapilli tuff, altered, light green to medium red brown. Fine grained with 20% lithic (andesite) lapilli fragments which are partly elongated parallel to the foliation. C/A: 50°. Strongly ankerite-sericite altered with the sericite content increasing towards the upper contact. 69.5: cut by a 2 cm fine grained yellow-white quartz vein with poorly defined banding. Contains 5% ankerite. C/A: 70°. 70.0: cut by a similar 1 cm wide vein. C/A: 55°. The remainder of the unit is cut by 1% thin quartz veins with associated sericite and/or fuschite alteration.	3T3061	69.15	70.2	1.05	2	0.4
70.2	75.7	90%	.33 (6)	Meta-andesite lithic lapilli to ash tuff (as before) to chlorite schist. Foliation C/A: 45°. Trace to 3% calcite and contains 2-3% calcite veining with minor quartz veining. 72.8: 2 cm quartz vein. C/A parallel to foliation. 70.5: two 5 mm quartz veins with 10 cm wide ankerite altered zone. Cuts foliation at an acute angle. Unit is ankerite altered: 73.9 to 74.1 and 75.4 to 75.7. Clay gouge: 70.9.						
75.7	78.0	30%	0	Rhyolite, light green brown, very fine grained. Moderately quartz flooded and sericitized. Cut by a very fine and weak to moderately developed (10% veining) quartz-clay-ankerite stockwork. Unit contains 5% disseminated pyrite. The rhyolite is usually bleached adjacent to the fractures and some of the fractures contain a fine grained pink alteration halo (possibly Kspar). Very poor recovery throughout the zone and the core is broken up. 40 cm lost between 77.4 and 78.0.	3T3062	75.7	78.0	~ 2.3	30% recovery	2 0.3
78.0	83.8			Foliated meta-andesite and andesite tuff. Medium green to dark green, very fine to medium grained; possibly interbedded flows and tuffs.						



Property TON Claims: Midnite Gulch	NTS 105-D-3	Claim TON 4	Elevation	Azimuth 215°	Length 38 m	Dip -50°
Coordinates 8+91N/7+62E	Dip Tests -48° (61 m)	Advance	Depth 61 m	Date Collared Sept. 29	Date Completed Sept.	
Purposes ?? To test underneath road gossan			Drilled by G & D Drilling	Assays by Acme	Logged by T. Garagan	

Interval (m)		Rec'y %	ROD (# Fragments > 10 cm)	DESCRIPTION	Sample No.	Interval		Core Width (m)	Au	A
From	To					From	To			
0	4.6			Casing						
4.6	9.2			Quartz diorite: light grey-green, medium to coarse grained, equigranular with 20% mafics consisting of 15% hornblende and 5% biotite, both of which are partially altered to chlorite; contains 15% interstitial quartz. Cut by 2-3% chlorite-Mn fractures.						
4.6	5.9	95%	0							
5.9	7.9	75%	0							
7.9	9.2	95%	.23							
				The feldspars are only slightly sericitized throughout except from 8.9-9.2 (moderate). 5.8: Hematite stained. 5.9-6.0, 6.2-6.3: Ground core. Lower contact is intrusive.						
9.2	10.8	90%	.47	Meta basaltic andesite lithic lapilli to ash tuff, medium-dark green. Unit is moderately magnetic which persists in areas of veining. Cut by 2-3% narrow calcite veinlets and is 5% calcite altered throughout. 9.2, 9.45, 10.3-10.8: Moderate ankerite alteration. 9.7: 5 mm ank-cal-qtz vein. C/A: 75°.						
				10.35 and 10.5: Cut by a .5 cm to 1 cm wide quartz (cockscomb) -limonite vein at shallow angles to core (5-10°). May be part of same vein. Associated with strong ankerite alteration and minor pyrite.	3T3064	10.35	10.8	0.45		26
				10.6: Ground core.						
10.8	11.2	95%	.58	Breccia: orange-brown fragments in a grey-green matrix. Fragments occupy 80% of the rock and are comprised of angular clast supported fragments of ankerite-calcite-quartz altered meta basalt in a matrix of calcite (60%), quartz-pyrite (5%), trace chalcopryrite vein material with 10% chlorite and 10% ankerite. 11.15-11.2: Ground core.	3T3065	10.8	11.2	0.4		2

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width
From	To					From	To	
11.2	17.5			Meta basaltic-andesite, medium to dark green, fine grained with local development of medium to coarse grained euhedral				
11.2	12.8	80%	0	Augite phenocrysts. The phenocrysts, where developed, occupy				
12.8	16.8	75%	.08	10-20% of the rock.				
16.8	17.5	100%	.81	The phenocrysts may be developed in the centre of the flow.				
			(3)	The volcanic is strongly magnetic, except within the last 1 m near the intrusive contact.				
				Contains 1-2% calcite veining throughout and trace to 1% epidote coated fractures, 2-5% calcite alteration. The veins are <3 mm wide.				
				11.5: Trace quartz veinlets.				
				16.4: 3 cm green qtz-cal-ank (banded with 60% quartz, 35% calcite and 5% ankerite) vein. C/A: 5°.				
				Ground core: 12.3-12.4, 13.2-13.3.				
17.5	24.4	90%	.12	Quartz diorite to quartz monzonite as above. Grey white to pink white. Hornblende-biotite (20%) with 2-5% sericitization of feldspars.				
				Contains 1-2% xenoliths of mafic volcanics which average 1-3 cm across. One zone from 20.1-20.3 consists of mafic volcanic cut by aplitic veins up to 3 cm across (minor brecciation); may represent a larger xenolith. Contains trace calcite veinlets. Upper and lower contacts are intrusive.				
24.4	24.9	95%	.28	Meta basaltic andesite: medium green, fine grained with 10% medium grained Augite phenocrysts at 24.65. Moderately magnetic with 5% calcite alteration and veinlets. Lower contact C/A: 60° - intrusive.				
24.9	25.8	100%	.53	Quartz monzonite: pink to pink white; medium grained with 10% chlorite altered biotite and hornblende and 10% quartz. The plagioclase is slightly sericitized.				
				25.5, 25.7: 5 cm x 2 cm and greater, mafic xenoliths.				

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width
From	To					From	To	
25.8	61.0			Meta basaltic andesite as before, with several zones of grey-green meta basalt with medium to coarse grained Augite phenocrysts as before. Interbedded with lithic lapilli tuff.				
				Weakly foliated C/A: 45°.				
				1-2% epidote-calcite veinlets throughout with 1-2% disseminated calcite and 1-5% (variable) epidote. Minor hematite on				
25.8	29.0	80%	.17	fractures.				
29.0	32.0	95%	.49	26.7: 2 cm calcite (quartz) vein. C/A: 30°.				
			(8)	27.0: 3 cm quartz-magnetite vein parallel to foliation.				
32.	33.4	80%	.14	C/A: 45°. Contains x-cutting epidote-calcite tension gashes				
33.4	35.4	100%	.33	perpendicular to the zone.				
35.4	36.3	100%	.18	25.8-29.0: 0.8 cm of lost core.				
36.3	37.8	90%	.43	29.8-30.0, 30.2-30.3: broken core.				
			(4)	32.1-32.2: Quartz vein breccia zone with 40% vein material. The				
37.8	39.2	95%	.34	veins are 0.2 to 1 cm wide and contain 80% quartz and 20%				
			(4)	calcite.				
39.2	40.7	100%	.5	32.6: 1 cm quartz vein. C/A: 10°.				
			(5)	34.2: Epidote microfracturing (10% EP) for 5 cm.				
40.7	42.1	100%	.39	36.3: K-spar-quartz-epidote 1 cm vein. C/A: 65°. Cut by				
			(3)	malachite coated fracture (20% Cu).				
				36.4: 0.5 cm quartz-epidote vein.				
				36.5-36.6: Brecciated zone with epidote filled fractures and 25%				
				epidote.				
				36.6-37.2: 5% epidote fracturing.				
42.1	43.9	100%	.29	39.2: 10% malachite in .5 cm chlorite-quartz vein.				
			(3)	39.55-39.7: Two zones of 30% quartz flooding along foliation.				
43.9	45.9	100%	.53	C/A: 40°.				
			(4)	41.1-41.3: 20% epidote alteration of matrix.				
45.9	47.5	95%	.53	41.7-42.1: Hematite stained shear with slickensides, subparallel				
			(5)	to the core, i.e. C/A ~ 10° plunge of slickensides: C/A: 60°.				
47.5	49.5	100%	.43	The calcite alteration is decreasing down the hole.				
			(4)	46.4: Shear zone with calcite-hematite, C/A: 30°.				
				47.2: 0.5 cm epidote vein, C/A: 40°.				
				48.25-48.35: Epidote-quartz alteration, parallel to foliation.				
				C/A: 50°.				

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width
From	To					From	To	
25.8	61.0	cont'd		51.5: Hematite and slickenside coated fractures. C/A: 5° 52.2: Broken core and gouge with hematite, chlorite and slickenside on fracture surfaces. C/A: 55°.				
49.5	52.3	90%	.5	Slickenside plunge is parallel to C/A. (6) 52.45: Hematite coated shear with slickensides, C/A: 55°.				
52.3	55.9	100%	.51	53.4: aa. C/A: 5°. (10) 54.4: Chlorite shear with slickensides, C/A 5°.				
55.9	57.6	100%	.61	55.5: 1 cm quartz-feldspar-epidote vein, C/A: 50°. (5) 57.4: Foliation C/A 60°.				
57.6	59.1	90%	.3	57.5: Hematite-chlorite gouge with slickensides. (3) C/A: 50°.				
59.1	61.0	100%	.88	57.9: 3 cm with 15% epidote alteration. (8) 58.4-58.8: Broken core with 15% epidote and 5% calcite alteration.				
				<u>E.O.H.</u>				

Property TON Claims: Midnite Gulch NTS 105-D-3 Claim TON 4 Elevation Azimuth 035° Length 57 m Dip 50°  
 Coordinates ~8+25N/6+95E Dip Tests None: drillers forgot!! Advance Depth 85.3 Date Collared Oct. 1 Date Completed Oct. 3  
 Purposes To test ROAD gossan from other side Drilled by G & D Drilling Assays by Acme Logged by T. Garagan

Interval (m)		Rec'y %	RQD (# of fragments >10 cm)	DESCRIPTION	Sample No.	Interval		Core Width (m)
From	To					From	To	
0	3.7			Casing				
3.7	53.9			Meta basaltic andesite ash and lapilli tuff and flows as in MR-1. Medium dark green. Very fine grained to fine grained with ash to lapilli sized lithic fragments and up to 15% Augite phenocrysts (flows). A fine grained non-descript unit dominates. The rock is locally magnetic. Contains 1-5% calcite alteration and 1-2% calcite veinlets. Hematite coated fractures, which cut all other zones and usually contain slickensides, are common from 0 to 16.4 m. The rock is locally foliated. There are several zones of epidote alteration and vein, vein brecciation which are listed with other variations below: 0-11.1: Broken and ground core. 11.3-14.8: Highly fractured core. 4.2 m: Ankerite altered volcanic cut by a 3 cm wide ankerite-calcite-quartz vein with trace pyrite. C/A: 40°. 13.75-13.9: Epidote vein and breccia zone with 40% epidote. C/A: 80°. 14.35: 2 cm epidote vein and breccia with hematite altered volcanic fragments in vein. 80% epidote. C/A: 85°. 14.7, 16.6, 21.22: Ground core. 14.4-16.4: 5% epidote veining and alteration. 16.4-16.5: Intensely epidotized meta-volcanic with 25% epidote. 16.7-16.8: 20% epidote veining up to 2 cm wide. C/A: 50-90°. 17.5: Anastomosing quartz-calcite vein and breccia up to 2 cm wide. C/A: 40°. 17.9-22.2, 21.0, 22.0: Broken core. 21.0 - ground core and gravel with 40% fragments of ankerite altered and veined volcanic. 22.0-23.0: 10% epidote altered and veined with a zone from 22.5 to 23.0 containing 30% epidote. 25.5-27.5: Broken core; 26.5 ground core; 0.5 m lost. 27.9: 0.5 cm ankerite-epidote vein. C/A: 80°.				
3.7	11.3	70%	0					
11.3	14.3	75%	0					
14.3	16.8	70%	0					
16.8	22.2	70%	.03					
22.2	23.8	85%	0					

Interval		Recy %	RQD	DESCRIPTION	Sample No.	Interval		Core Width
From	To					From	To	
3.7	53.9	cont	/d					
23.8	24.4	85%	0	30.7-30.8: 50% epidote alteration.				
24.4	25.0	70%	0	31.0: 2 cm wide epidote altered zone.				
25.0	25.9	80%	.14	31.7-31.8: 30% epidote veining and alteration.				
25.9	26.5	50%	0	32.8: 2 cm epidote-calcite-hematite vein.				
26.5	27.1	60%	0	34.3: 0.6 m lost core.				
27.1	28.2	80%	.33	35.1-36.3: Broken core.				
28.2	30.2	95%	.43	36.1: Hematite fracture and 2 cm wide epidote vein. C/A: 55°.				
30.2	32.3	80%	.26	37.3: Hematite-clay gouge, 0.3 m lost core.				
32.3	35.1	79%	.56	39.9: 2 cm wide epidote (20%)-quartz (10%) alteration zone.				
			(6)	C/A: 40°.				
35.1	35.7	85%	0	40.5: 0.1 m lost core.				
35.7	37.3	100%	.6	42.2-42.35: Broken core.				
			(5)	42.3-42.4: Partly silicified with 15% magnetite, 25% SiO ₂ ,				
37.3	39.0	85%	.35	minor calcite, 15% epidote.				
39.0	40.5	95%	.61	43.0-43.1: Broken core with 2 cm aplite "vein".				
			(4)	43.1: 60% epidote altered (1 cm wide) along a limonite-Mn				
40.5	42.5	90%	.66	coated fracture. C/A: 10°.				
			(7)	44.2-46.6: 5% epidote alteration.				
42.5	43.6	95%	.8	45.4-46.3: Broken core, 0.5 m lost.				
			(5)	46.6: Broken core.				
44.2	46.6	80%	.08	46.7: 3 cm aplite "vein". C/A: 30°.				
46.	49.7	85%	.11	46.75: 1cm aplite "vein". C/A: 30°.				
			(1)	47.1-47.2, 47.45-47.5, 47.7-47.8: Epidote altered volcanic with				
49.7	53.9	90%	0	minor hematite; 15-30% epidote.				
				47.8-49.7: 3% calcite-hematite (tr.) veinlets.				
				47.8-48.5: Broken core - 0.4 m lost.				
				49.7-53.9: 5% calcite veining and alteration.				
				52.1: 1 cm aplite "vein". C/A: 80°.				
53.9	54.1	100%	-	Granite, pink, fine grained with medium grained felspar pheno-				
				crysts. Fragments of basalt (not rotated) at lower contact, i.e.				
				anastomosing dyke. 5% chlorite after mafics. C/A: 20°.				
54.1	56.8	95%	.48	Meta basaltic andesite as before with 10% medium grained				
			(3)	broken and euhedral augite phenocrysts.				
				54.6-54.7: Broken core.				

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Au	Ag
From	To					From	To			
56.8	57.6	100%	.38 (1)	Quartz monzonite-granite, light green white to pink. Medium grained biotite-hornblende quartz monzonite which varies to a fine grained pink granite (56.8-57.1). The upper contact is intrusive. C/A: 35°. The granite-quartz monzonite contact is gradational over 1 cm, i.e. possibly indicates a composite dyke. The lower contact is faulted and the underlying volcanics have slickenside on the fracture surfaces.						
57.6	62.8	90%	.46 (15)	Meta basaltic andesite as above; 3-5% calcite veinlets. 57.6: Fractures with slickensides. C/A: 65°. 58.4-58.7: Intensely ankerite-clay altered basalt (75% replacement) with 5% quartz veinlets (1 mm wide) every 2-5 cm. Vein C/A: 50-80°. 1 cm calcite vein at top. 60.3-60.35: Calcite vein and breccia zone. 30% calcite and 5% quartz. C/A: 80°. 60.7-60.9: Silicified and partly carbonate altered and brecciated volcanics with 10% quartz-ankerite-calcite veining up to 1 cm wide. C/A: 70°. 61.6: 1 cm wide calcite filled shear. C/A: 85°. 62.1: Hematite-chlorite coated shear with slickensides. C/A: 30°. 62.6-62.75: Calcite (10%) altered.	3T3066	58.4	58.7	0.3	2	.2
				60.7-60.9: Silicified and partly carbonate altered and brecciated volcanics with 10% quartz-ankerite-calcite veining up to 1 cm wide. C/A: 70°. 61.6: 1 cm wide calcite filled shear. C/A: 85°. 62.1: Hematite-chlorite coated shear with slickensides. C/A: 30°. 62.6-62.75: Calcite (10%) altered.	3T3067	60.7	60.9	0.2	17	.3
62.8	63.3	90%	0	Breccia, ankerite altered and partly silicified volcanic cut by a quartz stockwork which has caused brecciation. The stockwork grades to a massive quartz vein breccia at 62.95-63.15. C/A: 70°. The vein breccia is vuggy in places with the vugs filled with limonite. The upper part of the zone contains a 2 cm wide banded quartz-hematite chlorite-calcite vein and shear. The zone contains 10% ankerite veining. No sulphides were seen and the volcanics on either side of the zone are unaltered.	3T3068	62.8	63.3	0.5	6	.3
63.3	66.9	80%	.34 (7)	Meta basalt-andesite aa: 5% calcite veining. 63.7: 3 cm quartz-ankerite vein breccia. C/A: 85°. 63.8: 3 cm quartz vein zone. 65.4-65.5: 50% quartz-ankerite veining, 1-5 mm wide every 1 mm to 1 cm.						

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Au	Ag
From	To					From	To			
66.9	68.3	-	-	Lost core.						
68.3	68.65	100%	.66 (1)	Meta basalt-andesite aa.						
68.65	69.7	60%	0	Meta basalt-andesite aa. 20% carbonate altered with 5% calcite-quartz veining (20%: 68.65-68.7) and a 10 cm quartz-ankerite-clay vein at the bottom. The quartz is limonite stained and occurs as narrow 1 mm to 1 cm veins. C/A: 75°. The vein is also partly silicified throughout and contains fractures with well developed slickensides near the top. C/A: 35°.	3T3069	68.65	69.7	1.05	5	.2
69.7	85.3			Meta basalt-andesite aa. 5% calcite veining with 5-10% quartz-hematite. Slightly magnetic with minor epidote and quartz veining, as listed below:						
69.7	71.0	80%	0							
71.0	72.4	90%	.13 (1)	73.6: 3 cm quartz vein, C/A: 75°. 73.6-74.6: Hematite-slickensides on fracture.						
72.4	73.3	90%	.41 (2)	74.6-75.6: Lost core. 74.6: 2 cm epidote vein and 30% epidote alteration.						
73.3	75.6	57%	0	80.6: Broken core.						
75.6	77.1	80%	.15 (2)	81.7: 5 cm ankerite stockwork. 84.4-85.3: Ground core.						
77.1	80.2	95%	.08							
80.2	81.4	90%	.14 (3)							
				E.O.H.						

Property	TON Claims: Midnite Gulch	NTS	105-D-3	Claim	TON 4	Elevation		Azimuth	035°	Length	41 m	Dip	-50°			
Coordinates	8+71N/6+75E		Dip Tests		-48° (64.6 m)		Advance	Depth	64.6 m	Date Collared	Oct. 4	Date Completed	Oct. 6			
Purposes	Another test on ROAD gossan					Drilled by			G & D Drilling		Assays by		Acme	Logged by		T. Garagan

Interval (m)		Rec'y %	ROD (# of frags. >10 cm)	DESCRIPTION	Sample No.	Interval		Core Width (m)	A u	Ag
From	To					From	To			
0	18			Casing - in caved meta basalt and sand.						
18	19.8	-	-	Sand: green, fine grained from meta-basalt-andesite.						
19.8	22.1	-	-	Cave.						
22.1	23.6	60%	0	Meta basaltic-andesite, medium green, same as in MR-1,2; slightly magnetic, 2-4% calcite veinlets, C/A: 25°. 1-2% hematite microfractures with slickensides. C/A: 5-15°. 10% calcite alteration and 2-3% ank. veining. 22.6: Ground core.						
23.6	24.4	-	-	Sand.						
24.4	29.4	-	-	Ground core, cave with pieces of above.						
29.4	31.6	75%	.15	Meta basalt-andesite with coarse grained Augite phenocrysts and lithic lapilli, 2-3% calcite veinlets and 2-3% epidote alteration. 30.2-30.3: Epidote vein stockwork with 15% epidote veining. All veins are randomly orientated and 1-2 mm wide.						
31.6	32.9	50%	.27 (2)	Meta basalt-andesite aa orange brown; strongly ankeritized and sheared with thin (1-5 mm) ankerite and calcite veinlets parallel to the shear direction. C/A: 30°. Trace 1-2% quartz, 5% disseminated pyrite.	3T3070	31.6	32.9	1.3	3	0.2
32.9	33.7	70%	.3 (2)	Meta basalt-andesite aa 5% calcite veinlets, variable C/A, 1-5 mm wide. 33.3-33.5: Moderately sericitized alteration with 10% ankerite.						
33.7	39.6	-	-	Cave and broken core of above.						
39.6	64.6	-	-	Meta basalt-andesite medium grey-green, fine grained with 5-10% medium grained Augite phenocrysts, slightly to strongly						

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	Au	Ag
From	To					From	To			
39.6	64.6	cont'd		magnetic locally. 1-2% calcite alteration. Epidote altered and other zones are listed below: 39.7-41.4: Cave.						
39.6	41.1	40%	0	46.7: 1 mm chlorite-pyrite fracture with 4 mm Kspar alteration						
41.1	42.4	38%	.15	rim. C/A: 25°.						
42.4	44.2	100%	.48	47.6-47.7: Epidote stockwork zone with 30% epidote veining.						
44.2	46.6	81%	.47	47.8-50.5: Broken core with 3-5% epidote veining 1mm to 2 cm wide.						
46.6	48.2	100%	.56							
48.2	50.0	90%	.1	48.7: Limonite stained chips.						
50.5	53.0	90%	.37	50.8-50.9: 60% epidote veining 1 mm to 4 cm wide, minor hematite. C/A: 35°.						
53.0	55.8	100%	.37							
55.8	58.2	31%	.12	51.3: Hematite coated fractures with slickensides, C/A: 35°.						
58.2	64.6	?	-	51.9: 3 cm zone of 30% epidote veining and alteration, C/A 45°.						
				53.1: 1 cm zone of epidote veining with an adjacent 3 cm zone of 10% epidote alteration.						
				53.4: 1 cm epidote vein which forks, C/A 40°.						
				53.4-53.6: 10% epidote alteration.						
				53.8: 2 cm calcite filled shears with 10% quartz, 15% chlorite, C/A: 50°.						
				56.2-57.9: Ground and broken core, 1.5 m lost. Fragments consist of epidote altered volcanic with chlorite-hematite shears with well developed slickensides.						
				57.9-58.2: Epidote-sericite altered volcanics cut by 20% chlorite-calcite tension fractures with associated slickensides. Calcite C/A 35° Chlorite C/A: 60°.	3T3071	57.9	58.2	0.3	10	0.2
				58.2-58.4: 5% recovery broken and ground core consisting of ankerite volcanic with 40% quartz veining. Veins appear to be 1-2 cm wide - similar to zone in MR-2.	3T3072	58.2	~58.4	? 0.2	30	2.4
				58.4-59.4: As in 57.9-58.2 with 15% recovery.	3T3073	58.4	59.4	? 1.0	23	0.3
				59.4-59.7: 5% calcite veining with 1-2% hematite coated shears with slickensides, C/A 70°.						
				59.7-64.6: Cave and lost core. E.O.H.						

86-035

VOL. 3.

GEOLOGICAL, GEOCHEMICAL,  
AND AIR PHOTO INTERPRETATION REPORT  
ON THE AFI 45 - 182 CLAIMS, WHITEHORSE M.D., YUKON

Claims: Afi 45-160  
Afi 161-164 fr.  
Afi 165-182  
Afi 297-300 fr.

Location: 1. NTS Map No. 105 D/2  
2. 70 km South of Whitehorse, Yukon  
3. Latitude 60° 07' N  
Longitude 134° 44' W

For: Omni Resources Inc.  
706 - 595 Howe Street  
Vancouver, B.C.  
V6C 2T5

By: Harmen J. Keyser, B.Sc.  
Aurum Geological Consultants Inc.  
1614 - 675 West Hastings Street  
Vancouver, B.C.  
V6B 4W3

April 7, 1986



## SUMMARY

The Afi 45-182 claims consist of 134 mineral claims and 8 fractional claims in the Whitehorse Mining District, Yukon. They are accessible by road from Carcross.

Situated in the gold- and silver-bearing Montana Mountain area, the property is underlain by two thick sequences of Mesozoic volcanic and sedimentary lithologies which have been intruded by granitoid rocks of the Coast Plutonic Complex. Cretaceous to Tertiary felsic dikes occur on the ground, and this is interpreted as a suitable host for precious metal deposits.

Results of 1985 exploration work described in this report have outlined one main target: gold-silver vein-type mineralization associated with arsenic and antimony at the southeast corner of the property. Large untested areas remain to be explored.

A program of geochemical sampling, prospecting, and geological mapping is proposed for the 1986 field season.

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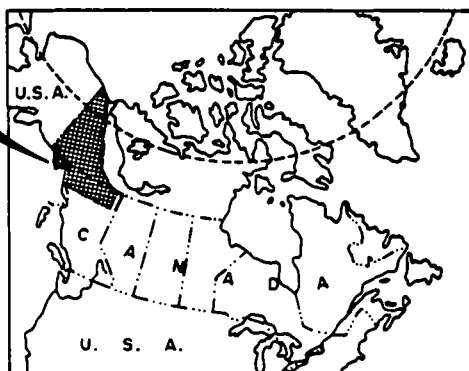
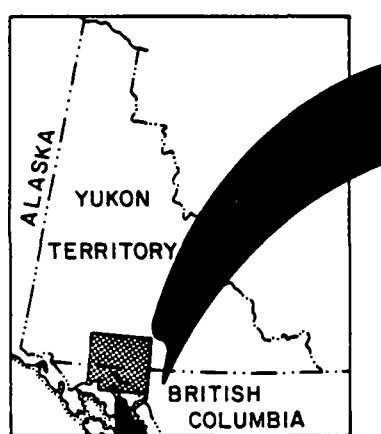
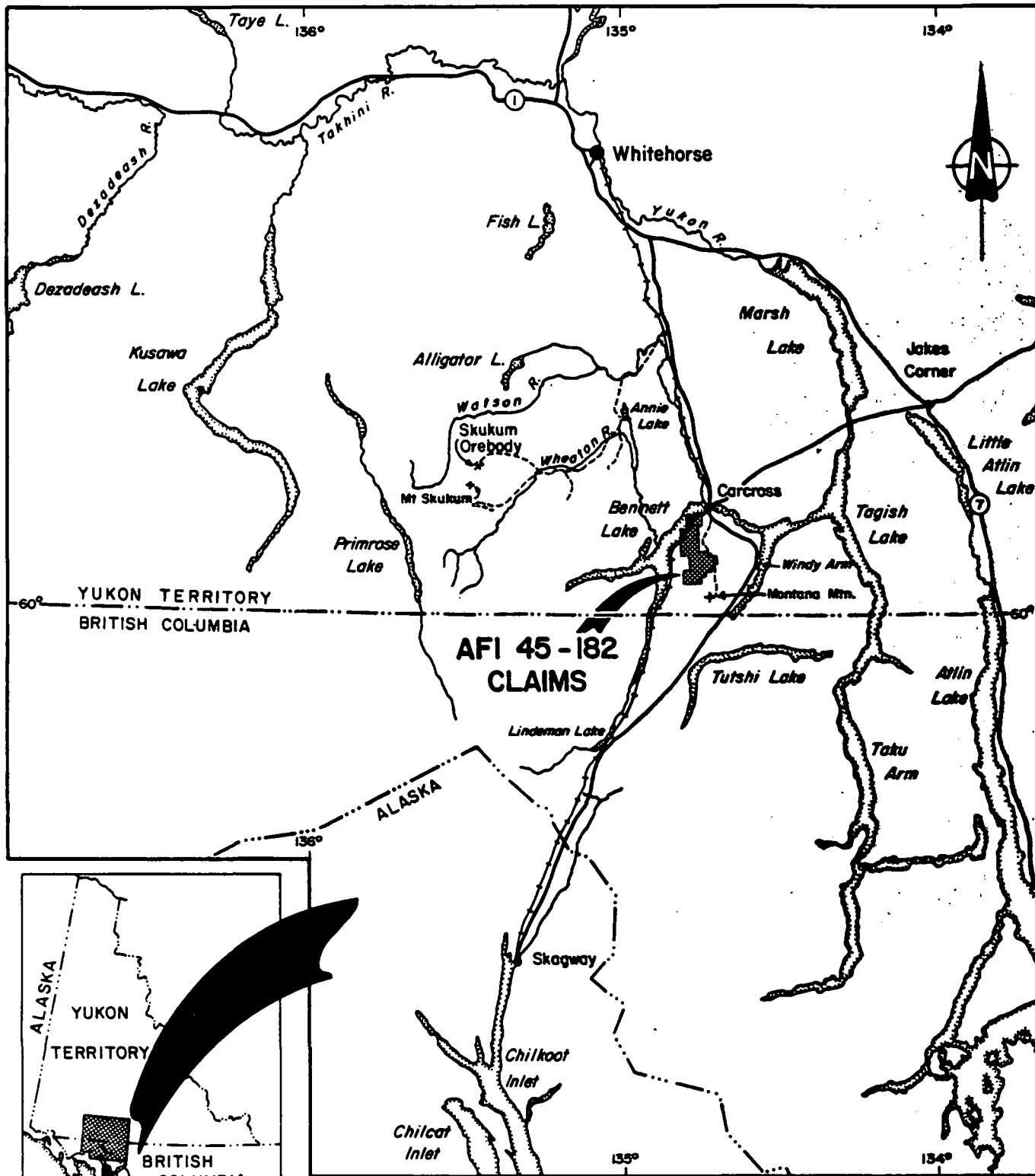
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## INTRODUCTION

This report was prepared at the request of Mr. Ernest Bergvinson, president of Omni Resources Inc. Its purpose is to assess the economic potential of the Afi 45-182 claims through a description of an exploration program carried out in August and September of 1985.

The property is located 70 kilometers south of Whitehorse, Yukon (Figure 1) and is accessible by road.

Exploration work carried out in 1985 consisted of a program of prospecting; geological mapping; geochemical rock, soil, and stream sediment sampling; and aerial photography and interpretation. Soil sampling was by MBW Surveys Ltd. and aerial photography was flown by North West Survey Corporation (Yukon) Ltd. The remaining work was carried out by Omni Resources Inc. and Aurum Geological Consultants Inc.



OMNI RESOURCES INC.	
AFI 45-182 CLAIMS	
LOCATION	
Aurum Geological Consultants Inc.	April, 1986
Drawn by N.H.	Checked by H.K. Scale 1:1,000,000
FIGURE 1	

### LOCATION AND ACCESS

The Afi 45-182 claim group is located in southwestern Yukon Territory, about 70 kilometers south of Whitehorse. Centred at latitude 60° 07' N and longitude 134° 44' W, the claims cover an area known as Brute Mountain between Bennett Lake and Montana Mountain.

Access to the property is by gravel road from Carcross. Alternatively, access is provided by helicopters based at Whitehorse.

## HISTORY

Considerable prospecting was carried out in the Montana Mountain-Windy Arm area starting in the late 1800's, culminating in the discovery of at least 19 gold and silver (and related metals) deposits. Although none are presently active, reported production to 1968 totals 28,762 oz gold and 1,024,421 oz silver (Roots 1981).

The Afi 45-182 claims were staked by Omni Resources Inc. in 1984 to cover potential gold- and silver-bearing ground. No mineral occurrences or records of previous exploration are known.

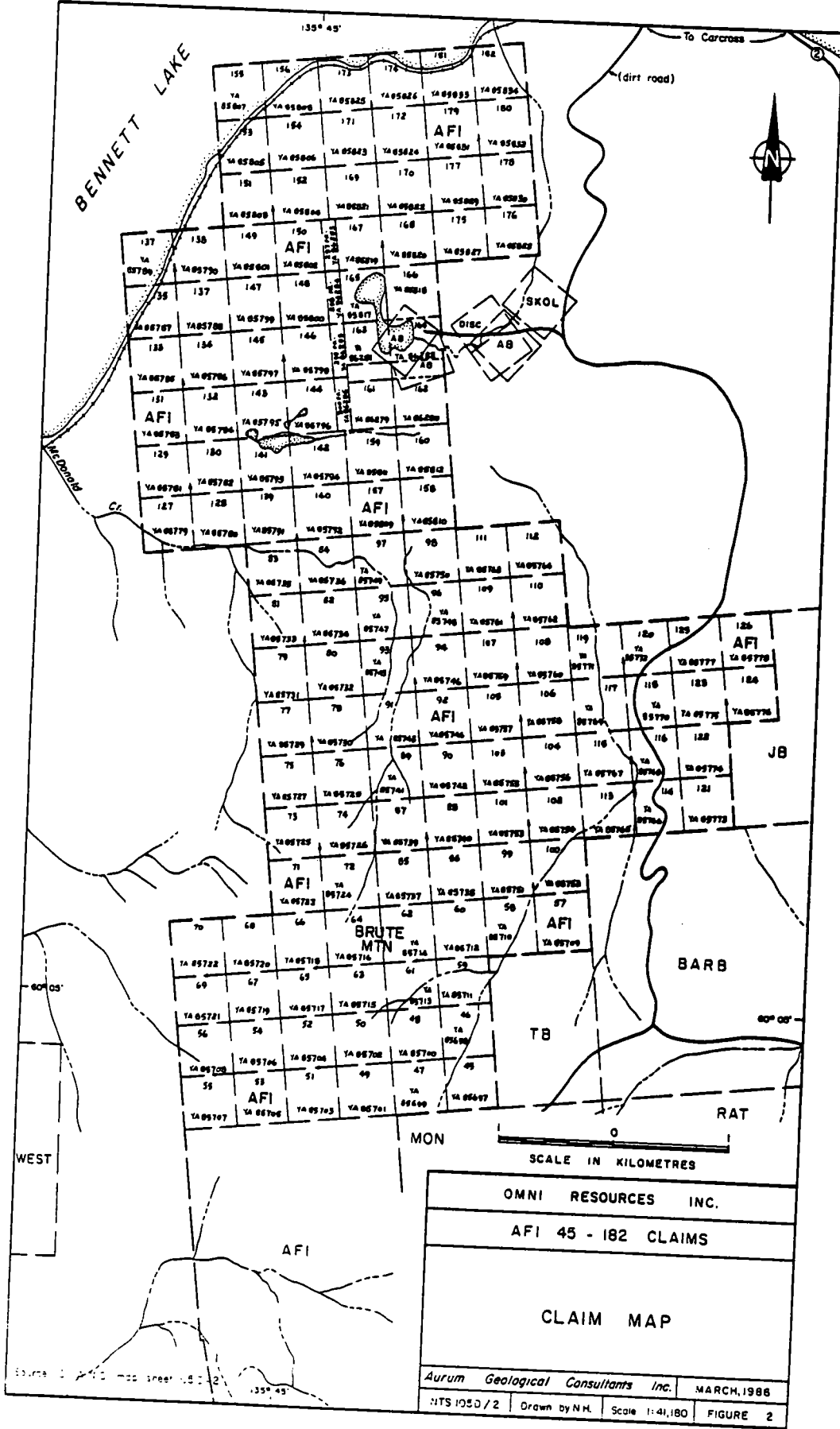
PROPERTY

The property consists of 134 contiguous two-post and 8 fractional mineral claims (Figure 2) staked under the Yukon Quartz Mining Act. Total area covered is approximately 2885 hectares (7128 acres). Claim data is as follows:

<u>Claim Name</u>	<u>Grant No.'s</u>	<u>Mining District</u>	<u>Recording Date</u>	<u>Expiry Date*</u>
Afi 45-160	YA85697-812	Whitehorse	Oct. 12, '84	Oct. 12, '85
Afi 161-164 fr.	YA86279-282	Whitehorse	Dec. 12, '84	Dec. 12, '85
Afi 165-182	YA85817-834	Whitehorse	Oct. 12, '84	Oct. 12, '85
Afi 297-300 fr.	YA86283-286	Whitehorse	Dec. 12, '84	Dec. 12, '85

* pending approval of 1985 assessment work.

The claims are owned completely by Omni Resources Inc. and are shown on D.I.A.N.D. Quartz and Placer Sheet 105D-2.



OMNI RESOURCES INC.  
 AFI 45 - 182 CLAIMS  
 CLAIM MAP  
 Aurum Geological Consultants Inc. MARCH, 1988  
 NTS 1050 / 2 Drawn by N.H. Scale 1:41,180 FIGURE 2

Source: 1:50,000 map sheet 155-2  
 135° 45'

## CLIMATE, TOPOGRAPHY, AND VEGETATION

The climate in the Bennett Lake area is variable, with hot summers and long cold winters somewhat moderated by the nearby Pacific Ocean. Precipitation is light, in the area of 60 cm annually, with heavy snowfalls occurring during the winter months.

The property is situated in in the Cordilleran physiographic region in a transition zone between the Coast Mountains to the west and the Yukon Plateau to the east. Topography is rugged to precipitous, with elevations ranging from 650 m (2150 ft) at Bennett Lake to 2140 m (7020 ft) above sea level on the property. Pleistocene glaciation has greatly affected the area, and such glacial features as U-shaped valleys, aretes, cirques, tarns, moraines and outwash plains are common.

Vegetation consists of stunted spruce and poplar typical of southwestern Yukon. Alpine shrubs and grasses occur above an elevation of 1100 meters (3600 ft). Ridges and plateaux are typically covered with felsenmeer.

## GEOLOGY

### REGIONAL GEOLOGY

The Afi 45-182 claims are situated at the western edge of the Intermontane Tectonic Belt, where the Whitehorse Trough overlies the Atlin Terrane. The Coast Plutonic Belt lies immediately west of the claim area. Wheeler (1961) and Roots (1981) have adequately described the regional geology of the area.

Basement rocks in the area are mafic volcanic flows of the Carboniferous Atlin Terrane, and are partly overlain by carbonates. An elongate package of Mesozoic volcanic and sedimentary strata, called the Whitehorse Trough, unconformably overlies the Atlin Terrane. Components of this succession include the Lewes River Group and the Laberge Group.

Of particular interest are volcanic to subvolcanic complexes of the Carmacks and possibly Skukum Groups and granitoid plutons related to the Coast Plutonic Belt which intrude and/or unconformably overlie all pre-Cretaceous lithologies in the area.

Faulting, lithologic attitudes, and other regional trends are generally northwest.

### GEOLOGY OF THE AFI 45-182 CLAIMS

Property geology (Figure 3) is much more complex than can be shown on the previously described regional mapping. Rock exposures are restricted to higher ridge flanks, and probably constitute less than 5% of the total property area.

Andesite, basalt, pyroclastics, limestone, and limestone breccia of the Triassic Lewes River Group (map unit uTRLW) are the oldest exposed lithologies on the Afi 45-182 claims (Wheeler 1961). They occur along the western margin of the property and were not examined during the 1985 exploration program.

Lying east of the Lewes River Group along a disconformable (?) north-trending contact are black argillites, conglomerates, and other sediments of the Laberge Group (map unit JL). These Jurassic rocks dip steeply to the east, and metamorphism and hydrothermal alteration is evident in several locations.

Leucocratic medium grained equigranular to granitoid rocks (map unit Kgd) intrude the Mesozoic strata at the northern and eastern portions of the property. Based on an overall mineralogy of feldspar (% plagioclase > % orthoclase), 60%; quartz, 25%; and mafic minerals, 15%, they can be classified as granodiorite, locally approaching granite. Hornblende usually predominates over biotite, and both typically exhibit some degree of chloritization. These rocks are thought to be late Cretaceous in age, although Roots (1981) considers them to be early Tertiary.

Light colored, sometimes rusty weathering, rhyolite (map unit Tr) has been observed to cut the Mesozoic strata in several locations as dikes. Although age relations with the granitoid rocks have not been established, the rhyolite is thought to be younger and is probably a hypabyssal equivalent to the Eocene Skukum Group.

Mafic minerals in the granodiorite locally show parallelism, suggesting that regional deformation took place after the intrusion. No major faults have been mapped. Dikes and air photo lineaments determined as part of this report do not show an apparent preferred attitude.

A tabulated geological history of the property and area is given as Table 1.

TABLE 1. Geological History of the Afi 45-182 claim group area.

<u>Unit</u>	<u>Age *</u>	<u>Event/lithology</u>
Qs	Quaternary	Unconsolidated surficial and glacial debris.
---	Pleistocene	Glacial erosion; unconformity.
Tr	Eocene (?)	Skukum Group (?); Emplacement of rhyolite dikes; Mineralization (?).
Kgd	Cretaceous	Coast Plutonic Belt; Granitoid intrusions; folding, faulting, metamorphism, erosion. Mineralization (?).
JL	Jurassic	Laberge Group; Argillite, conglomerate, greywacke, quartzite; Part of Whitehorse Trough.
---	early Jurassic	Disconformity (?).
uTRLW	upper Triassic	Lewes River Group; Volcanic flows, pyroclastic deposits, and limestone reef complexes; Part of Whitehorse Trough.
---	lower Triassic (?)	Unconformity.
---	Carboniferous	Atlin Terrane; Mafic volcanic flows.

* modified from Wheeler, 1961.

## GEOCHEMICAL RESULTS

A total of 295 soil samples, 25 stream sediment samples, and 9 rock samples were collected for geochemical analyses during the 1985 exploration program on the Afi 45-182 claims. All samples were analyzed for total gold, silver, lead, zinc, arsenic and antimony contents by Acme Analytical Laboratories Ltd. of Vancouver, B.C. Analytical methods are described with the analytical reports (Appendix).

Threshold anomalous values were arbitrarily determined as follows:

Gold;	25 ppb
Silver;	1.4 ppm
Lead;	50 ppm
Zinc;	100 ppm
Arsenic;	60 ppm
Antimony;	5 ppm

Rock sample locations and values are plotted on Figure 3. For soil and sediment samples, gold and silver values are shown on Figure 4; and lead, zinc, arsenic, and antimony are plotted on Figure 5.

### ROCK GEOCHEMISTRY

Of the nine rock samples taken, only one can be considered to have anomalous results. Sample 421074 returned 35 ppb gold, 1778 ppm arsenic, and 42 ppm antimony.

### STREAM SEDIMENT GEOCHEMISTRY

Stream sediment samples were collected from 25 creeks and drainages along the west flank of Brute Mountain. They were taken conventionally from the active portion of creek bed loads; or if drainages were dry, from obviously water-transported material. Results show that zinc is anomalous in most of the samples, which probably reflects elevated zinc abundances in black argillites of the Laberge Group.

Gold was anomalous in samples 426072, 426077, 426081, and 416116. Samples 416116, 416117, and 426081 were anomalous in lead. Samples

426065, 416115, 416116, 426077, 416117, 416118, 416120, and 426081 were anomalous in arsenic. Like zinc, arsenic may be enriched in the black argillites. Antimony was anomalous in samples 426064, 416115, 416116, 426077, and 426081.

#### SOIL GEOCHEMISTRY

Twelve sampling lines were established at spacings of 200 to 914 meters with sampling stations at 50 to 114 meters. This reconnaissance soil "grid" yielded 322 sample sites with 27 samples unobtainable due to scree or deep humus. Samples were taken with a mattock mainly from the 'B' soil horizon (where developed) at depths varying from 5 to 30 cm.

Gold values range from 1 to 230 ppb, with 16 samples deemed to be anomalous. Most of these occur in the southeast part of the property.

Values for silver are quite low; ranging from 0.1 to only 9.5 ppm. The four anomalous values are concentrated in the southeast property corner.

Lead and zinc values range from 2 to 152 and 8 to 308 ppm respectively. The 14 anomalous lead and 30 anomalous zinc values are clustered in the southeast corner of the property.

Antimony values vary from 2 to 6 ppm, yielding only a single anomalous sample. Arsenic analyses produced 23 anomalous samples with values ranging from 2 to 468 ppm. Anomalous sample locations for both elements are found concentrated in the southeast property corner.

## CONCLUSIONS AND RECOMMENDATIONS

The regional geological setting of the Afi 45-182 claim group is a thick Mesozoic volcano-sedimentary succession which has been intruded during the upper Cretaceous by granodiorites. Tertiary (?) rhyolitic dikes were emplaced in the Mesozoic strata, and possibly in the granitoid rocks. Vein-type gold and gold-silver mineralization in the nearby Wheaton River area, and to a lesser extent the Montana Mountain-Windy Arm area, is typically dike controlled. Felsic diking on the Afi 45-182 claims therefore provides a setting that is highly permissive for the development of precious metal deposits.

The property is a gold-silver prospect. Although mineralization has not been located to date, anomalous geochemical values in stream sediment and soil samples indicate areas of elevated precious metal abundances and may reflect as yet undiscovered gold-silver mineralization. Anomalous values are concentrated near the southeast corner of the property, proximal to known precious metals mineralization on the adjoining ground. The sampling density and coverage remains low, and large areas are yet to be explored. Sample spacings are such that large anomalous areas could easily have been bypassed.

Gold and silver anomalies may directly indicate precious metal mineralization. Arsenic and antimony are closely related to gold-silver veins at the Montana Mountain-Windy Arm district; therefore arsenic and antimony may be used as pathfinder elements on the Afi 45-182 claims.

Results of the 1985 exploration program on the Afi 45-182 claims warrant additional work. The following work is recommended:

1. Gridded soil geochemistry should be carried out over areas where anomalous results were disclosed in the 1985 program, at a grid spacing of 25 x 100 or 50 x 100 meters. The main area of interest is the southeast property corner.

2. The reconnaissance scale soil geochemistry should be continued, to fill in areas not yet covered.
3. Geological mapping with combined prospecting and stream sediment sampling should be continued, particularly over the central higher elevation part of the property. Special attention should be paid to structure, evidence of vein systems, and hydrothermal alteration and mineralization. An effort should be made to complete ground follow-up of lineaments and anomalies outlined by the 1985 work.

Any further work (geophysics, trenching, road building, drilling, etc.) would be contingent on results of the above work.

Respectfully submitted,



Harmen J. Keyser, B.Sc.

April 7, 1986

REFERENCES

Roots, C.F.;1981: Geological Setting of Gold-Silver Veins on Montana Mountain. In: Yukon Geology and Exploration 1979-80. Geology Section, Department of Indian and Northern Affairs, Whitehorse.

Wheeler, J.O.; 1961: Whitehorse Map-Area, Yukon Territory. G.S.C. Memoir 312 (includes Map 1093 A).

STATEMENT OF QUALIFICATIONS

I, HARMEN J. KEYSER, hereby certify that:

1. I am a geologist with AURUM GEOLOGICAL CONSULTANTS INC. of 1614-675 W. Hastings St., Vancouver, B.C.
2. I am a graduate of Saint Mary's University, Halifax, Nova Scotia with a degree in geology (B.Sc., 1981).
3. I am a member of the Geological Association of Canada (A3759).
4. I have no interest in the claims or securities of Omni Resources Inc., nor do I expect to obtain any.
5. I am the author of this report on the Afi 45-182 claims near Montana Mountain, Yukon, which is based on my personal examination of the property August 24, 25, and 26, 1985, and on published maps and reports.
6. I consent to the use of this report in a company report or statement, provided that no portion may be used out of context in such a manner as to convey a meaning differing materially from that set out in the whole.



April 7, 1986

Harmen J. Keyser, B.Sc.

APPENDICES

STATEMENT OF COSTS

C.N. Forster; Aug. 24, Sept. 7, 8, 1985 3 days @ \$350.00/day:	\$ 1050.00
H.J. Keyser; Aug. 24, 25, 26, 1985 3 days @ \$300.00/day:	900.00
M. Van Wermeskerken; Aug. 25, 26, 27, 1985 3 days @ \$200.00/day:	600.00
R. Zuran; Aug. 25, 27, 1985 2 days @ \$200.00/day:	400.00
MBW Surveys Ltd.; contract soil sampling:	5000.00
Northwest Surveys; aerial photography:	4492.37
Helicopter Charter; 8.9 hrs. @ \$525.00/hr.:	4672.50
Truck & ATV rental:	950.00
Mobilization/Demobilization:	2678.76
Analytical Costs:	3331.20
Camp Costs:	700.00
Report Preparation:	<u>2000.00</u>
TOTAL 1985 EXPENDITURES:	<u>\$ 26, 774.83</u>

MONTANA MT.

ALME ANALYTICAL LABORATORIES LTD.  
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6  
PHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: AUG 31 1985

DATE REPORT MAILED: *Sept 6/85*

### GEOCHEMICAL ICP ANALYSIS

.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.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.

SAMPLE TYPE: P1- SOILS -80 MESH P2 ROCKS AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

ASSAYER: *V. Saundry* DEAN TOYE OR TOM SAUNDY. CERTIFIED B.C. ASSAYER

OMNI RESOURCES PROJECT - 105 D3-(-02)-1 FILE # 85-2162 PAGE 1

SAMPLE#	Pb PPM	Zn PPM	Ag PPM	As PPM	Sb PPM	Au* PPB
416115	32	131	.3	220	9	16
416116	56	156	.4	73	6	31
416117	23	143	.2	104	2	24
416118	37	141	.4	75	2	18
416119	26	126	.2	96	2	14
416120	36	149	.4	63	2	10
<i>NO COUNTS</i> 416121	15	95	.2	32	2	9
426061	12	107	.1	5	2	3
426062	20	112	.2	35	2	8
426063	16	107	.2	8	2	5
426064	20	106	.1	12	2	8
426065	38	171	.4	71	2	20
426066	19	128	.2	7	2	7
426067	11	78	.2	6	2	8
426068	16	104	.2	7	2	2
426069	12	93	.1	7	2	4
426070	16	107	.2	11	2	5
426071	28	174	.3	22	2	13
426072	38	182	.3	22	2	28
426075	31	134	.2	53	4	7
426076	26	122	.2	16	2	8
426077	53	231	.4	102	7	32
426078	9	95	.1	35	2	2
426079	17	87	.1	29	2	2
426080	20	114	.3	39	2	14
426081	78	285	1.0	73	6	58
STD C/AU-0.5	38	133	7.1	39	15	520

SAMPLE#	Pb PPM	Zn PPM	Ag PPM	As PPM	Sb PPM	Au* PPB
421073	16	7	.2	20	2	2
421074	10	19	.3	1778	42	35
111109	14	31	1.5	70	2	100
111110	9	49	.6	7	2	12
111111	15	75	.2	40	2	2
411114	6	9	.1	11	2	8
432029	4	36	.2	4	2	4
431031	14	13	.1	5	2	1
432032	4	1	.1	2	2	1
432033	5	66	.1	2	2	1
232034	5	23	.1	3	2	8
STD C/AU-0.5	40	135	6.9	39	15	510

ACME ANALYTICAL LABORATORIES LTD.  
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6  
PHONE 253-3158 DATA LINE 251-1011

DATE RECEIVED: SEPT 4 1985

DATE REPORT MAILED: *Sept 9/85*

### GEOCHEMICAL ICP ANALYSIS

.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.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.  
- SAMPLE TYPE: ROCKS AND SOILS AU* ANALYSIS BY AA FROM 10 GRAM SAMPLE.

ASSAYER: *V. Saundry* DEAN TOYE OR TOM SAUNDRY. CERTIFIED B.C. ASSAYER

OMNI RESOURCES PROJECT-105 D/3-02(01) FILE # 85-2217 PAGE 1

SAMPLE#	Pb PPM	Zn PPM	Ag PPM	As PPM	Sb PPM	Au* PPB
432030	210	55	.5	7	2	14 — Montana
142085	4785	1118	190.1	1071	17	690
147086 SOIL	463	1163	11.0	276	4	280
147087 SOIL	468	1319	11.1	269	3	100

ALBERTA MT

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 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.CA.P.CR.MG.BA.TI.B.AL.NA.K.W.SI.ZR.CE.SN.Y.NB AND TA. AU DETECTION LIMIT BY ICP IS 3 PPM.  
- SAMPLE TYPE: SOILS -80 MESH. AU ANALYSIS BY AA FROM 10 GRAM SAMPLE.

ASSAYER: *D. Dejeu* DEAN TOYE OR TOM SAUNDRY. CERTIFIED B.C. ASSAYER

OMNI RESOURCES	PROJECT - 105D2-01				FILE # 85-2997	PAGE 1
SAMPLE#	50 Pb PPM	100 Zn PPM	20 Ag PPM	60 As PPM	5 Sb PPM	25 Au* PPB
L1002	16	99	.3	20	3	4
L1003	77	151	1.1	67	3	7
L1004	25	90	.4	30	2	3
L1005	25	103	.2	29	2	5
L1006	23	61	.2	26	2	2
L1007	8	58	.3	19	2	2
L1008	11	38	.1	15	2	3
L1009	13	33	.2	10	2	11
L1010	11	62	.1	17	3	15
L1011	4	30	.2	9	2	2
L1012	5	31	.1	9	2	9
L1013	13	47	.1	20	2	1
L1014	13	59	.1	15	2	1
L1015	8	47	.1	18	2	3
L1016	12	47	.1	16	2	90
L1017	21	47	.5	121	2	5
L1018	12	48	.5	34	2	4
L1019	13	42	.1	14	2	3
L2001	13	49	.3	35	2	6
L2002	19	52	.3	50	3	7
L2003	23	59	.4	52	2	8
L2004	17	59	.4	27	3	5
L2005	36	89	.4	42	2	2
L2006	15	53	.2	60	2	2
L2007	18	75	1.0	28	2	1
L2008	18	55	.1	26	2	10
L2009	13	76	.1	12	2	29
L2010	9	42	.2	16	2	8
L2011	11	48	.2	23	2	15
L2012	18	62	.2	30	2	46
L2013	18	50	.3	21	2	5
L2014	11	37	.2	14	2	7
L2015	12	51	.1	24	2	2
L2016	10	63	.2	33	2	4
L2017	9	42	.1	16	2	14
L2018	11	61	.1	26	2	7
L2019	12	30	.1	10	2	4
STD C/AU 0.5	40	134	7.0	38	15	480

SAMPLE#	Pb PPM	Zn PPM	Ag PPM	As PPM	Sb PPM	Au* PPB
3052	13	88	.3	9	2	2
3053	8	41	.2	8	2	19
3054	11	47	.2	10	2	2
3055	15	164	.2	28	2	2
3056	6	82	.3	27	2	2
3057	6	95	.2	22	2	10
3058	11	93	.1	4	2	1
3059	4	69	.1	22	2	6
3060	2	8	.1	3	2	1
3061	2	10	.1	2	2	1
3062	11	71	.3	13	2	2
3063	12	47	.1	13	2	4
3064	8	48	.1	8	2	1
3065	7	31	.1	6	2	2
3066	5	32	.1	13	2	1
3067	10	39	.1	17	2	1
4051	10	52	.1	14	2	1
4052	11	49	.1	10	2	2
4053	8	35	.2	8	2	1
4054	11	69	.2	11	2	1
4055	8	55	.1	10	2	1
4056	9	49	.1	8	2	1
4057	8	64	.1	8	2	17
4058	5	49	.2	4	2	1
4059	6	59	.2	3	2	1
4060	8	57	.2	10	2	9
4062	7	24	.1	7	2	1
4063	10	33	.3	21	2	1
4064	6	62	.2	4	2	2
4065	14	63	.1	12	2	1
4066	9	72	.2	84	2	1
4067	11	108	.3	11	2	1
4068	17	84	.2	15	2	3
4069	17	77	.3	19	2	1
4070	9	30	.2	4	2	1
5019	20	116	.4	14	2	10
STD C/AU 0.5	41	137	7.1	39	13	485

SAMPLE#	Pb PPM	Zn PPM	Ag PPM	As PPM	Sb PPM	Au* PPB
5020	17	59	.3	12	2	1
5021	5	22	.1	7	3	2
5022	18	<u>100</u>	.3	18	2	5
5023	6	69	.1	12	2	7
5024	12	81	.3	12	3	3
5025	8	65	.3	14	2	10
5026	8	74	.1	18	2	8
5027	13	69	.3	24	2	3
5028	16	<u>135</u>	1.2	30	2	5
5029	7	50	.2	17	2	7
5031	4	45	.1	3	2	1
5034	7	59	.2	10	2	5
5035	11	30	.1	10	2	11
5036	16	63	.3	18	2	2
5037	7	47	.2	19	2	13
5038	12	56	.2	20	2	2
5041	14	56	.4	23	2	24
5042	9	46	.2	23	2	3
5043	11	72	.3	28	2	2
5044	11	55	.2	36	2	1
5045	15	81	.3	18	2	2
5046	8	62	.2	17	2	2
5047	4	25	.1	5	2	3
5048	10	<u>148</u>	.2	15	3	17
5049	9	70	.2	12	2	2
5050	7	44	.1	8	2	1
6026N	10	32	.2	18	3	1
6025N	16	<u>113</u>	.5	28	2	4
6024N	12	<u>104</u>	.6	16	2	3
6023N	8	<u>162</u>	.1	23	2	5
6022N	7	82	.2	26	2	2
6021N	9	72	.1	27	2	3
6020N	7	95	.2	14	2	3
6019N	10	55	.1	22	2	6
6018N	10	88	.2	20	2	3
6017N	11	<u>127</u>	.1	18	2	1
STD C/AU 0.5	38	133	7.1	39	16	480

SAMPLE#	Pb PPM	Zn PPM	Ag PPM	As PPM	Sb PPM	Au* PPB
6016N	10	85	.3	15	2	5
6015N	11	66	.2	26	2	1
6014N	12	72	.1	34	2	3
6013N	13	86	.1	24	2	1
6012N	20	<u>122</u>	.2	18	2	7
6011N	15	<u>134</u>	.2	27	2	2
6010N	17	92	.2	24	2	2
6009N	11	<u>176</u>	.1	29	2	1
6008N	17	<u>131</u>	.7	29	2	2
6007N	12	67	.2	17	2	1
6006N	7	41	.1	12	2	1
6005N	5	55	.2	23	2	3
6003N	9	65	.3	15	2	2
6002N	10	50	.1	26	2	1
6001N	15	81	.4	54	2	1
6000N	16	77	.2	71	2	4
3031N	13	54	.1	17	2	<u>45</u>
3030N	6	41	.1	11	2	3
3029N	10	45	.4	14	2	1
3028N	10	75	.1	18	2	1
3027N	4	51	.1	23	2	2
3026N	11	52	.1	24	2	2
3024N	10	55	.1	12	2	1
3023N	6	69	.1	19	2	2
3022N	8	66	.1	18	2	3
3021N	16	60	.1	18	2	2
3020N	11	54	.1	22	2	6
3019N	8	56	.1	15	2	2
3018N	2	46	.1	9	2	4
3017N	6	48	.1	16	2	2
3016N	7	35	.2	16	2	1
3015N	12	36	.1	24	2	1
3014N	9	42	.1	9	2	1
3013N	13	48	.1	15	2	14
3012N	7	30	.1	6	2	9
3011N	7	54	.1	10	2	4
STD C/AU 0.5	39	133	7.0	39	16	490

SAMPLE#	Pb PPM	Zn PPM	Ag PPM	As PPM	Sb PPM	Au* PPB
3010N	13	54	.1	11	2	2
3009N	10	43	.5	11	3	1
3008N	7	55	.1	12	2	4
3007N	14	61	.1	11	3	2
3006N	12	64	.2	11	3	2
3005N	10	57	.1	12	3	2
3004N	23	76	1.0	16	2	1
3003N	12	60	.1	9	2	2
3002N	13	59	.2	10	2	1
3001N	15	67	.3	13	2	2
3000N	12	60	.2	30	2	5
✓ 10+00E/0+00E	5	97	.1	10	2	4
10+00E/0+50E	9	94	.1	14	3	1
↓ 10+00E/1+00E	4	105	.1	12	2	1
10+00E/1+50E	10	71	.1	7	2	2
10+00E/2+00E	4	70	.1	9	3	4
10+00E/2+50E	13	90	.1	10	2	5
10+00E/3+00E	12	122	.1	16	2	2
10+00E/3+50E	20	116	.1	17	2	1
10+00E/4+00E	19	99	.2	19	2	1
10+00E/4+50E	15	86	.1	12	2	5
10+00E/5+00E	8	82	.2	11	2	6
10+00E/5+50E	7	81	.1	10	2	3
10+00E/6+00E	7	63	.1	7	2	6
10+00E/6+50E	12	73	.2	11	2	3
10+00E/7+00E	12	71	.1	12	3	2
10+00E/7+50E	14	70	.1	12	2	1
10+00E/8+00E	12	75	.1	7	2	2
10+00E/8+50E	6	75	.1	7	2	4
10+00E/9+00E	10	56	.1	7	2	1
10+00E/9+50E	16	58	.3	8	2	1
10+00E/10+00E	11	54	.1	9	3	5
10+00E/10+50E	10	49	.1	8	2	3
10+00E/11+00E	9	41	.1	7	2	5
10+00E/11+50E	16	61	.1	11	3	2
✓ 10+00E/12+00E	11	52	.1	16	2	3
STD C/AU 0.5	38	132	7.0	39	14	475

SAMPLE#	Pb PPM	Zn PPM	Ag PPM	As PPM	Sb PPM	Au* PPB
10+00N 12+50E	18	60	.2	18	2	23
10+00N 13+00E	20	64	.3	21	2	22
10+00N 13+50E	17	56	.1	21	3	5
10+00N 14+00E	14	43	.2	19	2	7
10+00N 14+50E	13	51	.2	27	2	16
10+00N 15+00E	12	60	.2	23	2	1
10+00N 15+50E	13	42	.1	10	3	13
10+00N 16+00E	14	48	.1	18	2	<u>230</u>
10+00N 16+50E	15	56	.2	17	2	2
10+00N 17+00E	16	52	.1	18	2	<u>46</u>
10+00N 17+50E	11	48	.2	19	2	10
10+00N 18+00E	20	51	.2	21	2	4
10+00N 18+50E	17	63	.8	46	2	3
10+00N 19+00E	21	65	.3	52	2	14
10+00N 19+50E	24	55	.4	51	2	3
10+00N 20+00E	21	68	.5	49	2	2
10+00N 20+50E	26	68	.5	53	3	14
10+00N 21+00E	27	65	.6	33	2	<u>55</u>
10+00N 21+50E	17	47	.3	28	2	<u>3</u>
10+00N 22+00E	24	75	.4	40	2	<u>42</u>
10+00N 22+50E	28	58	.8	40	4	17
10+00N 23+00E	14	61	.3	23	2	2
10+00N 23+50E	13	35	.1	19	2	3
10+00N 24+00E	14	62	.3	20	2	12
10+00N 24+50E	14	50	1.4	17	3	7
10+00N 25+00E	22	62	.1	23	2	6
10+00N 25+50E	21	76	.2	30	3	2
10+00N 26+50E	19	71	.3	22	2	7
10+00N 27+00E	15	70	.3	24	3	9
✓ 6+00N 0+50E	16	88	.2	17	2	2
✓ 6+00N 1+00E	10	65	.1	12	2	7
6+00N 1+50E	10	55	.1	9	2	13
6+00N 2+00E	23	<u>101</u>	.2	22	3	10
6+00N 2+50E	14	66	.3	8	2	2
6+00N 3+00E	21	67	.3	17	2	2
6+00N 3+50E	17	83	.1	18	2	16
STD C/AU-0.5	36	134	7.0	40	15	485

SAMPLE#	Pb PPM	Zn PPM	Ag PPM	As PPM	Sb PPM	Au* PPB
6+00N 4+00E	14	87	.3	8	2	1
6+00N 4+50E	6	73	.1	9	2	3
6+00N 5+00E	13	88	.3	14	2	1
6+00N 5+50E	13	92	.3	11	2	2
6+00N 6+00E	13	67	.2	10	2	2
6+00N 6+50E	11	<u>100</u>	.1	15	2	1
6+00N 7+00E	9	77	.3	8	2	1
6+00N 7+50E	19	71	.4	12	2	1
6+00N 8+00E	15	78	.7	11	2	1
6+00N 8+50E	14	64	.3	10	2	7
6+00N 9+00E	10	63	.2	21	2	3
6+00N 9+50E	25	81	.7	58	2	2
6+00N 10+00E	28	72	.3	<u>63</u>	2	<u>75</u>
6+00N 10+50E	23	61	.3	<u>103</u>	2	4
6+00N 11+00E	22	50	.2	26	3	3
6+00N 11+50E	18	41	.1	19	2	1
6+00N 12+00E	13	25	.3	10	3	1
6+00N 12+50E	25	49	.4	23	2	1
6+00N 13+00E	21	53	.2	28	3	4
6+00N 13+50E	17	56	.1	17	2	2
<hr/>						
4+00N 4+00E	13	65	.1	14	2	3
4+00N 5+00E	12	69	.2	15	2	14
4+00N 5+50E	16	71	.2	13	2	2
4+00N 6+00E	12	91	.5	19	2	4
4+00N 6+50E	21	<u>104</u>	.1	21	2	1
4+00N 7+50E	30	81	.3	35	2	5
4+00N 9+50E	<u>99</u>	58	<u>6.2</u>	<u>121</u>	2	6
4+00N 10+00E	<u>80</u>	<u>167</u>	<u>1.2</u>	<u>259</u>	3	10
4+00N 10+50E	27	53	.3	35	3	1
4+00N 11+00E	28	48	.7	29	3	2
4+00N 11+50E	20	52	.1	21	2	7
4+00N 12+00E	30	40	.3	23	2	4
4+00N 12+50E	29	54	.2	29	2	8
4+00N 13+00E	36	57	.6	27	3	1
4+00N 13+50E	39	63	.3	44	2	1
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2+00N 0+00E	17	65	.2	14	2	1
STD C/AU-0.5	41	137	6.9	39	14	500

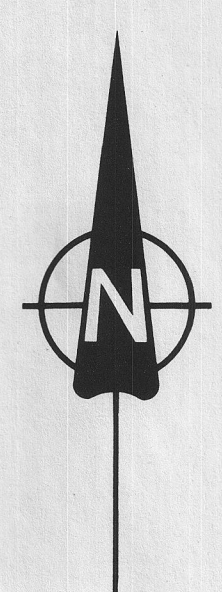
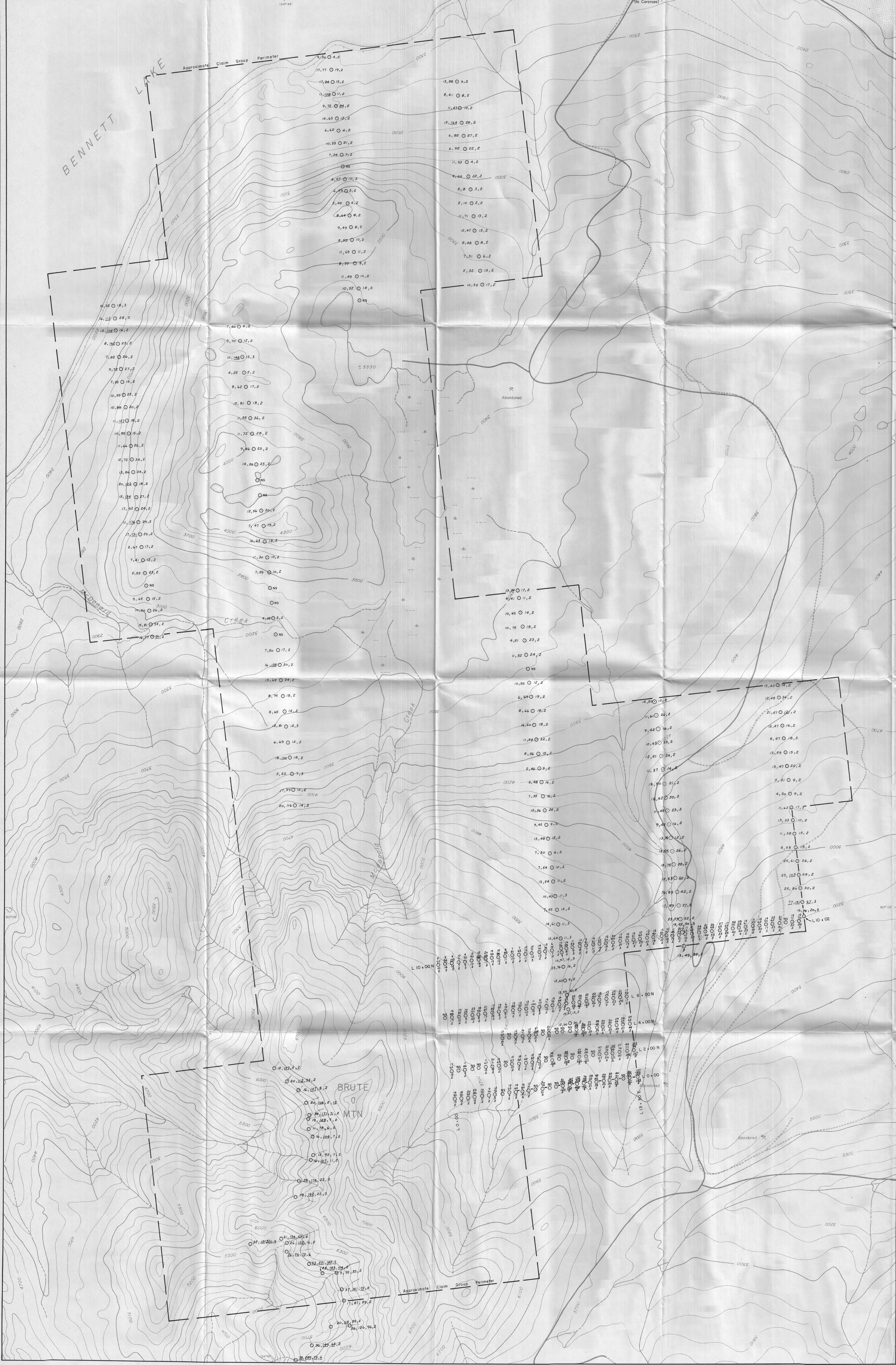
SAMPLE#	Pb PPM	Zn PPM	Ag PPM	As PPM	Sb PPM	Au* PPB
2+00N 1+00E	11	86	.2	4	2	3
2+00N 2+50E	11	67	.1	12	2	5
2+00N 3+00E	20	71	.1	12	2	7
2+00N 3+50E	12	69	.2	10	2	5
2+00N 4+50E	15	63	.3	10	2	3
2+00N 5+00E	18	62	.2	12	2	7
2+00N 5+50E	11	69	.1	11	2	4
2+00N 6+00E	15	87	.2	12	2	44
2+00N 6+50E	14	67	.1	12	2	11
2+00N 7+50E	34	85	.2	106	2	12
2+00N 8+50E	84	110	.5	208	3	18
2+00N 9+50E	57	82	.7	231	2	4
2+00N 10+00E	36	68	.7	117	2	9
2+00N 11+00E	47	72	1.1	57	3	32
2+00N 11+50E	33	72	.5	50	2	20
2+00N 12+00E	152	99	9.5	171	6	85
2+00N 12+50E	37	74	1.0	47	2	26
2+00N 13+00E	49	77	1.2	140	2	13
2+00N 13+50E	52	94	.7	107	2	20
0+00N 0+00E	19	90	.2	15	2	6
0+00N 0+50E	18	90	.3	15	2	4
0+00N 1+00E	20	92	.2	11	2	6
0+00N 1+50E	23	89	.3	12	2	10
0+00N 2+00E	10	73	.2	11	2	4
0+00N 2+50E	9	70	.2	7	2	2
0+00N 3+00E	12	76	.3	9	2	1
0+00N 4+00E	12	65	.2	9	2	2
0+00N 4+50E	14	69	.3	13	2	5
0+00N 5+00E	16	60	.3	15	2	1
0+00N 5+50E	17	71	.3	17	2	2
0+00N 6+50E	30	74	.8	51	2	2
0+00N 8+00E	51	109	.4	120	2	7
0+00N 8+50E	147	242	1.0	292	3	38
0+00N 9+00E	132	308	2.7	468	4	110
0+00N 9+50E	79	138	.6	143	4	14
0+00N 10+00E	28	52	.4	37	2	95
STD C/AU-0.5	39	135	7.1	39	15	480

SAMPLE#	Pb PPM	Zn PPM	Ag PPM	As PPM	Sb PPM	Au* PPB
0+00N 10+50E	48	86	.4	56	2	8
0+00N 11+00E	<u>59</u>	73	.6	55	2	19
0+00N 11+50E	<u>35</u>	45	.7	39	2	2
0+00N 12+00E	44	91	.4	<u>65</u>	2	5
0+00N 13+00E	<u>80</u>	<u>127</u>	.8	<u>97</u>	4	10
0+00N 13+50E	<u>137</u>	<u>139</u>	1.1	<u>183</u>	2	4
STD C/AU-0.5	<u>38</u>	<u>136</u>	7.1	<u>37</u>	13	490
	14	30	4	23	1	16

*Handwritten note:* 0+00N 11+50E

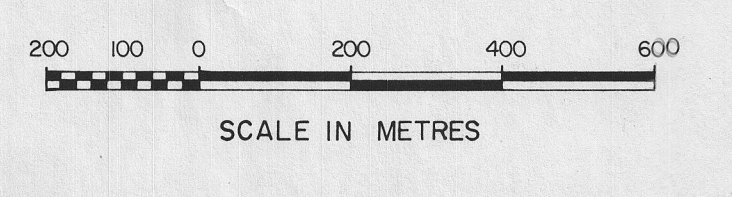






**LEGEND**

- soil sample location, flanked by analytical results
- stream sediment sample location, followed by analytical results
- elemental order  
Pb (ppm)  
Zn (ppm)  
As (ppm)  
Sb (ppm)
- ⊗ anomalous value  
Pb ≥ 50ppm  
Zn ≥ 100ppm  
As ≥ 60ppm  
Sb ≥ 5ppm
- elevation contour; interval 100 ft.
- streams, creeks
- lakes, ponds
- swamp
- dirt road
- cart track
- narrow gauge railway
- power line
- ⊗ mill; mine



OMNI RESOURCES INC.  
AFI 45-182 CLAIMS  
MONTANA MOUNTAIN AREA, YUKON

**GEOCHEMICAL RESULTS**  
Pb - Zn - As - Sb

Aurum Geological Consultants Inc. APRIL, 1986  
NTS I05 D/2 Drawn by H.K., N.H. Scale 1:10,000 FIGURE 5