

RECEIVED
OCT 29 1990
Gold Commissioner's Office
VANCOUVER, B.C.

FILE NO. 11 01 RD.
ACTION:
FILE NO:

**SUMMARY REPORT ON THE
1989 EXPLORATION PROGRAM
ON THE GNAT PASS PROPERTY**

Liard Mining Division, British Columbia

Location: 1. 24 km south of Dease Lake, B.C.
2. NTS Sheet 104 I5/W
3. Latitude 58° 15'N
Longitude 129° 50'W

For: Integrated Resources Ltd.
700 Toronto Dominion Tower
Edmonton Center, 10205-101 Street
Edmonton, Alberta
T5J 2Z1

By: Gregory Smith, B.Sc. and
Tom Garagan, B.Sc., FGAC, P.Geol.
Aurum Geological Consultants Inc.
412-675 West Hastings Street
Vancouver, British Columbia
V6B 1N2

20,408

GEOLOGICAL BRANCH
ASSESSMENT REPORT

July 12, 1990

INTEGRATED RESOURCES LTD.

DIAMOND DRILLING OF TROY # 1 - 8
EXPLORATION FOR GOLD/SILVER/COPPER

Type of work :- Diamond drilling.

Extent of work:- Eight NQ holes were drilled for a total of 935.7 metres. 496 split core samples were analyzed for gold silver and copper.

Total cost :- \$136216.58

COST BREAKDOWN	NO. OF UNITS	UNIT	RATE/UNIT	AMOUNT
Project geologist	9.56	days	320.00	3,059.20
Geologist	53.00	days	275.00	14,575.00
Assistant I	5.00	days	250.00	1,250.00
Assistant II	5.00	days	220.00	1,100.00
Assistant III	30.50	days	180.00	5,490.00
Driller	234.00	days	29.90	6,996.60
4x4 truck rental	14.00	days	75.00	1,050.00
Truck rental	35.00	days	49.00	1,715.00
D6 tractor rental	130.00	hours	76.58	9,955.40
Drilling equipment rental	68.50	hours	28.75	1,969.38
Footage drilled	2,631.00	feet	20.50	53,935.50
Footage drilled	349.00	feet	22.00	7,678.00
Geochemical:-				
Sample analyses:				
- Gold	496.00	samples	8.75	4,340.00
- Silver	496.00	samples	2.75	1,364.00
- Copper	496.00	samples	1.25	620.00
Sample preparation:				
- crush, pulverize	480.00	samples	3.75	1,800.00
- crush & split	47.00	samples	2.50	117.50
- geochem pulverizing	47.00	samples	1.25	58.75
- overweight samples	375.00	samples	0.35	131.25
Other expenses:-				
Mobilization/demobilization				9,000.00
Core trays & material left in holes				7,291.00
Food & accomodation				2,720.00

				136,216.58
				=====

SUMMARY

Integrated Resources Ltd.'s Gnat Pass property consists of eight contiguous two-post mineral claims located near Dease Lake, British Columbia. It is accessible by road via the Stewart-Cassiar Highway. The ground became an attractive exploration target in the early 1960's with the discovery of low grade copper mineralization on surface. Extensive diamond drilling completed in 1967 and 1968 outlined drill indicated reserves of 25,000,000 metric tonnes of 0.44% copper.

Volcanic and sedimentary rocks of the Stuhini Group underlie most of the property. The Upper Triassic to Lower Jurassic Hotailuh Batholith lies adjacent the property to the south. A quartz feldspar porphyry plug, assumed to be related to the Batholith, has intruded the stratified rocks. Disseminated and fracture controlled chalcopyrite mineralization and associated quartz/sericite alteration is present in the porphyry plug and adjacent volcanic units.

The current work program consisted of partial grid re-establishment, bulldozer trenching and diamond drilling of eight NQ holes totalling 3070 feet (935.7 meters). Results of the work have confirmed previously reported copper grades averaging 0.4%, tested surface geochemical and geophysical targets outlined in the 1960's, and determined the level of gold associated with copper mineralization in the area tested.

The gold potential of the deposit has not been adequately evaluated. A program consisting of data compilation, resampling of the old core and gold analysis is warranted and recommended. Further work would be contingent on successful results of the above work.

TABLE OF CONTENTS

	<u>Page</u>
SUMMARY	i
TABLE OF CONTENTS	ii
INTRODUCTION	1
LOCATION, ACCESS AND PHYSIOGRAPHY	2
PROPERTY	4
HISTORY	6
GEOLOGY	
Regional Geology	8
Property Geology	10
Mineralization and Alteration	12
EXPLORATION	
Diamond Drilling	14
Trenching	22
Petrographic Study	24
CONCLUSIONS AND RECOMMENDATIONS	25
REFERENCES	27

List of Tables

Table 1 - Drill Hole Summary	15
Table 2 - Drill Log Summaries	16
Table 3 - Weighted Averages	20
Table 4 - Trench #17 Results	23

List of Figures

	Scale	
Figure 1 - Location Map	1:1,000,000	3
Figure 2 - Claim Map	1:50,000	5
Figure 3 - Compilation Map	1:3600	11
Figure 4 - Cross Section 0+00N	1"=4'	in pocket
Figure 5 - Cross Section 6+00N	1"=4'	in pocket
Figure 6 - Cross Section 44+25E	1"=4'	in pocket
Figure 7 - Cross Section 52+00E	1"=4'	in pocket

List of Appendices

- Appendix A: Analytical Reports
- Appendix B: Drill Logs
- Appendix C: Petrographic Report
- Appendix D: Statement of Qualifications

INTRODUCTION

This report was prepared at the request of Integrated Resources Ltd. It describes the exploration program carried out on the company's Gnat Pass property between September 10 and October 10, 1989.

Exploration in 1989 focused on the determination of precious metal values associated with known porphyry copper mineralization. Work consisted of partial grid re-establishment, bulldozer trenching and diamond drilling of eight NQ holes totalling 3070 feet (935.7 meters). No attempt was made to compile previous work.

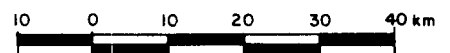
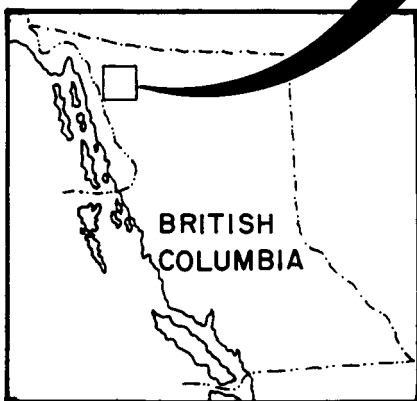
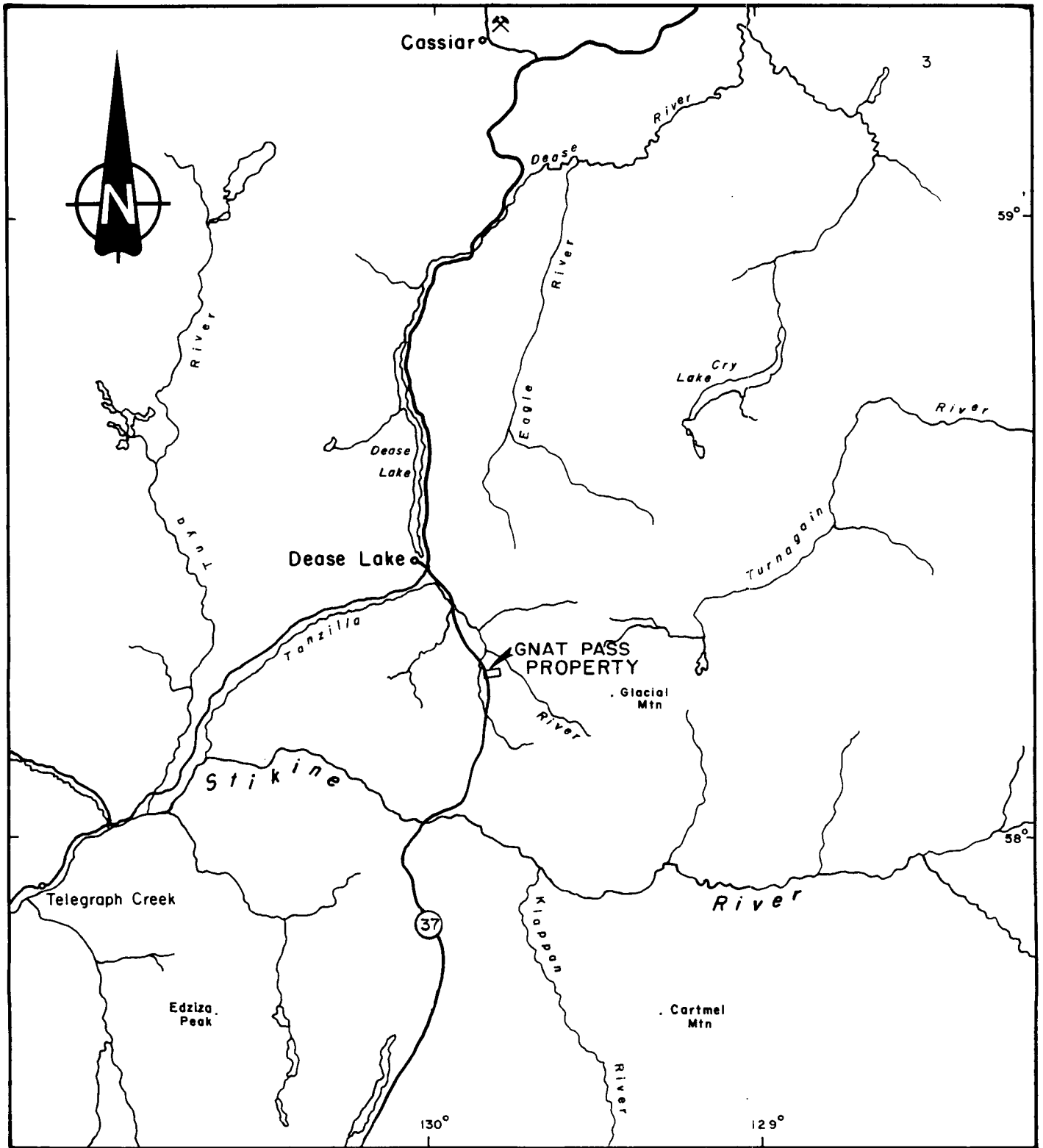
Field work was supervised by Greg Smith of Aurum Geological Consultants Inc. with project supervision by Tom Garagan (also of Aurum) who visited the property twice during the exploration. Drilling was performed by Interex Minerals Ltd. of Vancouver, British Columbia utilizing a Longyear 38 diamond drill.

LOCATION, ACCESS AND PHYSIOGRAPHY

The Gnat Pass property is located in north-central British Columbia, 24 kilometers (15 miles) south of Dease Lake (Figure 1). The approximate geographic coordinates of the property are latitude 58° 15'N and longitude 129° 50'W.

Access is via the Stewart-Cassiar Highway (# 37) which passes near the western boundary of the claims. A four-wheel drive road on the property connects the highway to several drill roads which crisscross the Hill Zone. The four-wheel drive access road and some drill roads were upgraded in 1989 to allow easier access to the drill sites.

The property is situated in a topographically low area at the head of Gnat Pass and directly north of Gnat Lakes. A small gently sloping hill located on the east side of the claim group contains the main area of interest, the Hill Zone. Elevations on the property range from 4000 feet (1219 meters) adjacent to Gnat Lakes to 4400 feet (1340 meters) at the Hill Zone. Shrub and alderbrush cover the low lying sections, with pine and spruce forest dominating the Hill Zone area. The Gnat Pass property is snow covered from late October to May.



INTEGRATED RESOURCES LTD.			
GNAT PASS PROPERTY			
LOCATION MAP			
AURUM GEOLOGICAL CONSULTANTS INC.			JUNE, 1990
NTS 1041/5	Drawn by GS	Scale 1:1000000	Figure 1

PROPERTY

The Gnat Pass property consists of eight contiguous unsurveyed two-post mineral claims covering approximately 167 hectares, and staked under the mineral act of British Columbia (Figure 2). Claim data are as follows:

Claim Name	Record Number	Expiry Date
Troy 1- 8	3628-3635	Aug. 19, 1990

The claims are staked in the Liard Mining Division and are shown on British Columbia Department of Mines and Petroleum Resources Mineral Claim Map M104-I-5W. They are known collectively as the Gnat Pass property, and are optioned by Integrated Resources Ltd. from John Hope, 100% owner of the claims.

HISTORY

The first record of exploration on ground now covered by the Gnat Pass property was in 1960 when Cassiar Asbestos Corporation discovered low grade copper mineralization by prospecting. In 1964 Newconex Canadian Explorations carried out work on the same ground. Lytton Minerals Ltd. performed extensive geophysical and geochemical surveying in 1965 in the area. At that time the property consisted of the June 1-12, Stikine 1-20, September 1-35, and July 1-5 mineral claims. The claims were transferred to Deas Lake Mining prior to 1966 when they carried out additional geochemical and geophysical surveying as well as trenching and drilling of 55 holes totaling 30,936 feet (9,429 meters). Additional drilling was completed the following year (Jeffery, 1966 and Clarke, 1967).

During the late 1960's Hudson's Bay Mining and Smelting (H.B.M. & S.) was involved in the exploration of Gnat Pass. Barr, D.A. et al, 1976, list H.B.M. & S. as the owner of the Gnat Pass deposit and unpublished reports state that they returned in the 1970's to resample selected sections of core. No documentation has been obtained to further enhance the understanding of H.B.M. & S. involvement.

A total of 57,035 feet (17,384 meters) of diamond drill core in 102 holes was drilled in the 1960's (Panteleyev, 1977). Drilling concentrated on the Hill Zone, an area containing copper mineralization exposed on surface. Current drill-inferred reserves are reported to be 25,000,000 metric tonnes of 0.44% copper with an undetermined gold content (Barr et al., 1974).

The Troy 1-8 claims were staked by John Hope (President of Integrated Resources) on July 29, 1986 to cover the previously discovered Creek and Hill Zones. Integrated Resources Inc. completed eight diamond drill holes totalling 3070 feet (935.7 meters) during the period September 10 to October 10, 1989. The drilling attempted to test the precious metal content of previously explored copper mineralization at the Hill Zone and to explore previously outlined soil geochemical anomalies over the Creek Zone. The property was optioned by Integrated Resources Inc. on November 15, 1989.

GEOLOGY

Regional Geology

The Gnat Pass property is situated within the Intermontane Belt; a relatively low trough underlain mainly by Mesozoic sedimentary and volcanic rocks. This belt is bounded to the east by the Omineca Crystalline Belt and to the west lies the Coast Plutonic Complex.

Directly south of the property is the Upper Triassic to Lower Jurassic Hotailuh batholith. This batholith was emplaced along the Stikine Arch, an easterly-trending zone of Permian to mid-Triassic deformation, plutonism and metamorphism. The King Salmon Fault, which forms the border between the Intermontane Belt and the Hinterland Belt, is located 15 kilometers (9 miles) north of the property. The geology of the area has been described by Monger and Thorstad (1978), Anderson (1978, 1980), and Gabrielse (1962, 1976).

The Hotailuh batholith is a multiphase granitoid intrusion emplaced between the Late Triassic and Middle Jurassic. The phases include massive, locally foliated hornblende granodiorite, syenodiorite, granite, quartz monzonite, hornblende diorite, and gabbro. Age dates for the different phases vary between 139 +/-6 million years and 213 +/-11 million years (Wanless et al., 1972). Younger phases of the batholith intrude the Upper Triassic to Lower Jurassic Stuhini group volcanics and sediments, however basal conglomerates and flows contain boulders of earlier phases.

In the Gnat Pass area the Stuhini group rocks consist of a lower unit of interlayered volcanoclastics, greywacke, siltstone and conglomerate. The volcanoclastics and sediments are overlain by massive fine grained feldspar porphyry flows of intermediate composition, with minor interlayered crystal lithic tuffs, and felsic flows. The Stuhini Group rocks dip away from the batholith uniformly at 35 to 45 degrees.

Structure in the area is dominated by large north - south trending faults (Jeffery, 1966). The age and relative movement of these faults is unknown.

Property Geology

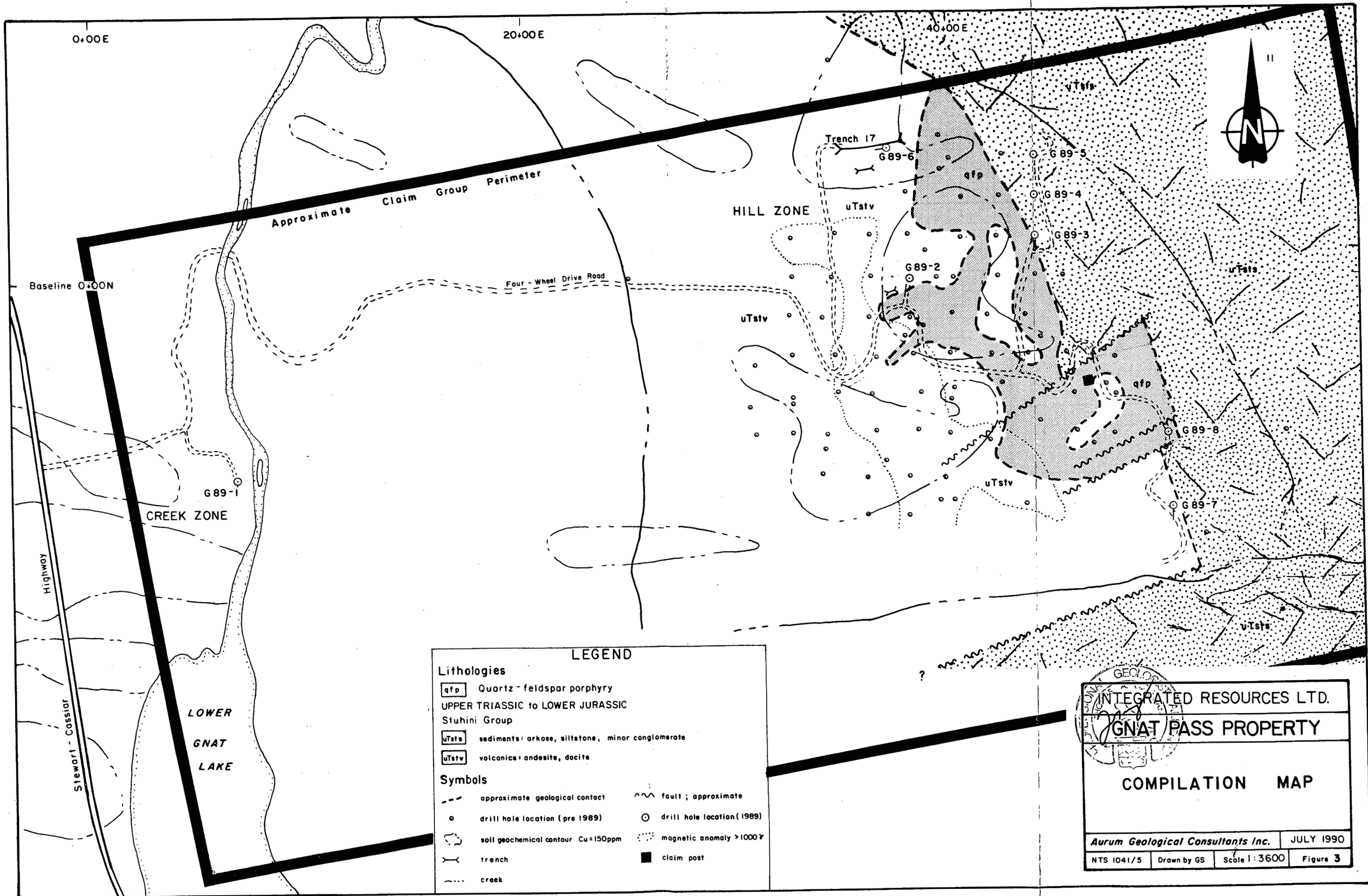
The Gnat Pass property is primarily underlain by Upper Triassic to Lower Jurassic Stuhini Group sediments (uTsts) and volcanics (uTstv). Southern and eastern areas of the property are dominated by interbedded arkose and graphitic siltstone with minor conglomerate. Northern and western sections contain andesite with minor porphyritic andesite, tuff and basalt (Figure 3).

A quartz-feldspar porphyry (qfp) plug of unknown age has intruded the contact zone between the sediments and the volcanics. Previous mapping by Deas Lake Mining has outlined a lenticular body 2000 feet in length and 400 feet wide with a northwest-southeast trend (Jeffery, 1966).

The north-eastern sediment/volcanic contact strikes northwest and dips 45° to the north. This contact was intersected as a brecciated zone ranging from 6 meters wide in G-89-3 to 20 meters wide in G-89-4. Angular fragments of sediments and andesite are cemented in a fine-grained matrix of quartz and sericite. Slickensides were evident on most fracture surfaces.

The southern volcanic/sediment contact is similar to the northern contact and dips moderately to steeply north. In addition to the brecciation, this zone contains a series of small (average width <1 meter) granodiorite and tonalite dykes.

Contacts between andesite and quartz-feldspar porphyry were intersected in holes G-89-2, G-89-6 and G-89-8. Pervasive alteration and intense fracturing made determination of exact contacts difficult. Fracture surfaces were commonly clay-coated and often contained slickensides.



LEGEND

Lithologies	
qfp	Quartz - feldspar porphyry
UPPER TRIASSIC to LOWER JURASSIC	
Stuhini Group	
uTsta	sediments: arkose, siltstone, minor conglomerate
uTstv	volcanics: andesite, dacite
Symbols	
- - -	approximate geological contact
o	drill hole location (pre 1989)
○	drill hole location (1989)
○	soil geochemical contour Cu=150ppm
⋈	trench
⋯	creek
~	fault; approximate
○	magnetic anomaly >1000γ
■	claim post

INTEGRATED RESOURCES LTD.
 GNAT PASS PROPERTY
 COMPILATION MAP
 Aurum Geological Consultants Inc. JULY 1990
 NTS 1041/5 Drawn by GS Scale 1:3600 Figure 3

Mineralization and Alteration

Copper mineralization and related alteration on the Gnat Pass property is hosted within a quartz-feldspar porphyry plug and the surrounding Stuhini volcanics.

Two zones of mineralization are defined on the Gnat Pass property. The Hill zone is an area of both surface and sub-surface copper mineralization which has been extensively drill-tested and contains all of the reported reserves. The Creek zone contains similar mineralized float and copper soil geochemical anomalies but has received little exploration.

Chalcopyrite is the dominant copper mineral present at Gnat Pass. Visual estimates range from <0.1 to 2 percent with significant changes in copper content over tens of centimeters. Chalcopyrite is found as finely disseminated blebs and fracture fillings in altered rock. Tourmaline veins locally contain up to 20% chalcopyrite. Minor pyrite is associated with copper mineralization as finely disseminated euhedral cubes. Trace magnetite, bornite, cuprite, pyrrhotite and possibly native copper are also present.

Large tourmaline/magnetite/chalcopyrite rich silicified andesite boulders were sampled at various locations on surface. These samples contain significant amounts of copper and gold, most notably; grab sample R-51-01 with 19934 ppm Cu and 354 ppb Au, and grab sample R-51-05 which returned 2.78% Cu and 368 ppb Au. According to Sillitoe (1979) gold mineralization in copper/gold porphyry deposits tends to occur in distinct zones, often related to magnetic anomalies. Ground magnetic response, in work performed in the 1960's, suggests the presence of a magnetite enriched zone within the area of known copper mineralization at the Hill Zone.

Late stage calcite (+/- minor quartz) veinlets cross-cut all previously discussed alteration and mineralization throughout the core. Individual veinlets range up to 5 centimeters in width but average 1 millimeter and are dominantly oriented at 10° to 15° to the core axis of vertical holes. Veinlets locally form a stockwork cementing brecciated fragments of altered host rock. Calcite is often associated with clay alteration and clay-coated slickensided fractures. Trace chalcopyrite and pyrite are present as isolated blebs within these veinlets.

The predominant alteration within both the porphyry and the volcanic rocks is pervasive silicification and sericitization/chloritization resulting in a fine-grained light grey-green massive rock. Phenocrysts have been completely replaced by fine grained quartz or albite. These rocks are locally brecciated with angular fragments, averaging 1 cm in diameter, cemented by a stockwork of tourmaline. Tourmaline veining is up to 20% of the rock. Potassium feldspar alteration is sporadic, most often as halos of fresh pink-orange feldspar adjacent to tourmaline filled fractures. Dominant core angle in vertical holes of mineralized fractures is 40 - 45 with an average width of 1 millimeter.

No alteration or mineralization zoning could be identified from the drill holes completed in 1989.

EXPLORATION

Diamond Drilling

A total of 3070 feet (935.7 meters) of diamond core drilling in eight NQ holes (Table 1.) was completed on the Gnat Pass property during the period September 10 to October 10, 1989. The drilling was designed to: 1. test known copper mineralization 2. determine precious metal content, and 3. explore previously outlined copper soil geochemical anomalies at the Creek Zone.

Entire core lengths were placed in core boxes and logged for lithology, structure, mineralization and competency. All core, with the exception of unmineralized sediments in hole G-89-7, was split, sampled and analyzed for total Au, Ag, and Cu by Bondar-Clegg and Company Ltd. of North Vancouver, B.C. Gold analyses were by fire-assay techniques using an atomic absorption finish. A one assay-ton sample was used. Total silver and copper were determined using hot HNO₃-HCl extracting solutions and atomic absorption.

Significant copper mineralization was intersected in five of the eight holes drilled in 1989, all within the Hill zone. Hole G-89-1, drilled at the Creek zone, failed to penetrate overburden, hole G-89-5 was lost in unmineralized sediments and hole G-89-7 intersected unmineralized sediments. Limits of known mineralization were extended to the north and drilling within the deposit confirmed reported copper grades of 0.4 %. Values ranged up to 9863 ppm copper and 208 ppb gold over five feet.

Analytical reports and drill logs are presented in Appendix A and B respectively. Four drill sections (0+00N, 6+00N, 44+25E, and 52+00E) are included as figures 4, 5, 6, and 7 respectively in the pocket of this report. Drill log summaries are presented in Table 2.

Table 1.
 INTEGRATED RESOURCES LTD.
 GNAT PASS PROPERTY
 1989 Drill Hole Summary

HOLE #	GRID COORDINATES	ELEVATION	LENGTH	DIP/AZIMUTH	# of SAMPLES	SAMPLE SERIES
G-89-1	900.0S 640.0E	'N/A	80 ft	-45/180	2 sludge	SL-51-01 - SL-51-02
G-89-2	000.0 3795.0E	4121ft	437 ft	-90	86	205976 - 206086
G-89-3	200.0N 4425.0E	4270ft	277 ft	-90	47	206151 - 206197
G-89-4	400.0N 4425.0E	4227ft	715 ft	-90	143	206201 - 206334
G-89-5	600.0N 4425.0E	4199ft	40 ft	-90	0	
G-89-6	652.5N 3722.5E	4172ft	387 ft	-45/250	66	206351 - 206417
G-89-7	1165.0S 5200.0E	4326ft	527 ft	-55/180	35	206426 - 206460
G-89-8	800.0S 5185.0E	4416ft	607 ft	-90	119	206476 - 206594

Table 2. DRILL LOG SUMMARIES

HOLE G-89-1

Target : test a Cu geochemical soil anomaly detected in 1967 (Creek Zone).

Drill hole lost at 80 feet during casing in overburden due to tight ground conditions. Two sludge samples collected of return after drilling had stopped; both returned non-anomalous values of copper and gold.

HOLE G-89-2

Target : redrill hole #55 (1968) at the Hill Zone to enable comparison between 1989 and 1968 geochemical data.

0 - 3.05m	CASING no recovery
3.05 - 113.95	ANDESITE minor rhyodacite dykes
113.95 - 133.20	QUARTZ-FELDSPAR PORPHYRY silicified/sericitized/vis.Cu
133.20	EOH

The entire hole was sampled over 5 foot (1.52 m) intervals.

HOLE G-89-3

Target : To test for mineralization 200 feet north of hole #89 (1968) within the Hill Zone.

0 - 13.41m	OVERBURDEN no recovery
13.41 - 38.46	ARKOSE no Cu mineralization
38.46 - 47.13	GRAPHITIC SILTSTONE 0.2% (visual estimate) chalcopyrite as fracture fillings from 46.20 to 46.94.
47.13 - 53.19	BRECCIA ZONE fault contact zone. brecciated siltstone / andesite with minor chalcopyrite occurring as blebs in tourmaline filled fractures.
53.19 - 84.43	ANDESITE silicified / sericitized as G-89-2. mineralization and alteration increases with depth of hole.
84.43	EOH

The entire hole was sampled over 5 foot (1.52m) intervals.

Hole was lost at 277 feet (84.43m) do to poor ground conditions.

HOLE G-89-4

Target : To test for mineralization 200 feet north of G-89-3
within the Hill Zone.

0 - 12.80m	OVERBURDEN no recovery
12.80 - 32.65	ARKOSE no Cu mineralization
32.65 - 53.27	GRAPHITIC SILTSTONE no Cu mineralization
53.27 - 55.85	CONGLOMERATE no Cu mineralization
55.85 - 63.26	GRAPHITIC SILTSTONE Cu mineralization in lowermost 1.52m
63.26 - 83.17	BRECCIA ZONE fault contact zone. sporadic Cu mineralization as disseminated chalcopyrite
83.17 - 217.93	ANDESITE minor porphyritic andesite alteration and mineralization as G-89-2
217.93	EOH

The entire hole was sampled over 5 foot (1.52m) intervals.

HOLE G-89-5

Target : To test for mineralization 200 feet north of hole
G-89-4 within the Hill Zone.

0 - 24.99m	OVERBURDEN no recovery
24.99 - 26.52	GRAPHITIC SILTSTONE no Cu mineralization
26.52	EOH

Hole lost at 87 feet (26.52m) due to poor ground conditions.

No samples taken.

HOLE G-89-6

Target : To test depth extension of mineralization reported
in TRENCH #17 (1968/1989) within the Hill Zone.

0 - 9.14m	OVERBURDEN no recovery
9.14 - 12.85	ANDESITE silicified / sericitized
12.85 - 15.85	QUARTZ-FELDSPAR PORPHYRY sericitized / silicified
15.85 - 51.57	ANDESITE silicified / sericitized
51.57 - 51.82	PORPHYRITIC ANDESITE dark grey / fine grained 3% biotite phenocrysts
51.82 - 67.63	ANDESITE silicified / sericitized
67.63 - 70.71	FELDSPAR PORPHYRY sericitized / clay altered
70.71 - 95.81	ANDESITE silicified / sericitized
95.81 - 97.26	FELDSPAR PORPHYRY sericitized / clay altered
97.26 - 117.96	ANDESITE silicified / sericitized
117.96	EOH

The entire hole was sampled over 5 foot (1.52m) intervals.

Mineralization of the type in TRENCH #17 was not encountered.

HOLE G-89-7

Target : To test 1968? IP anomaly within the Hill Zone:
5200E / 1250S to 1350S.

0 - 9.14m	OVERBURDEN no recovery
9.14 - 22.62	ANDESITE silicified / sericitized with <0.1% cpy.(visual estimate)
22.62 - 30.20	CONTACT ZONE breccia / granodiorite / tonalite / minor arkose
30.20 - 39.37	ARKOSE no Cu mineralization
39.37 - 60.50	GRAPHITIC SILTSTONE no Cu mineralization
60.50 - 146.00	interbedded ARKOSE / GRAPHITIC SILTSTONE no Cu mineralization sandstone 127.10 - 129.58
146.00 - 160.63	CONGLOMERATE

160.63 EOH

No significant copper mineralization encountered. The hole was sampled over 5 foot (1.52m) intervals from 9.14m to 43.29m and then intermittently to the end of the hole.

HOLE G-89-8

Target: To test extension of mineralization encountered in holes #30 and #32 (1968) within the Hill Zone. The hole was collared 350 feet east of hole #30.

0 - 3.05m	CASING no recovery
3.05 - 142.50	QUARTZ-FELDSPAR PORPHYRY silicified / sericitized. locally brecciated / tourmaline filled fractures / minor k-feldspar alteration / trace chalcopyrite
142.50 - 152.05	BRECCIA ZONE quartz / sericite matrix 0.2% chalcopyrite (visual estimate)
152.05 - 158.60	ANDESITE dark grey / 1% mafic phenocrysts 5% calcite veinlets 0.2% chalcopyrite (visual estimate)
158.60 - 159.11	QUARTZ-FELDSPAR PORPHYRY silicified / sericitized
159.11 - 185.01	ANDESITE silicified / sericitized
185.01	EOH

The entire hole was sampled over 5 foot (1.52m) intervals.

A total of 496 split core samples were analyzed for total gold, silver and copper. Core geochemistry indicates copper mineralization is widespread and variable, while associated gold values are generally anomalous (average 45 ppb) but rarely significant. Silver values were not significant and are not included in Table 3. Weighted averages for intervals approaching and exceeding the 0.4 % copper grade used to define the deposit, and those samples containing significant amounts of gold are listed below:

Table 3. WEIGHTED AVERAGES

Hole #	Interval From / To (meters)	Length meters/feet	Analyses	
			Au ppb	Cu ppm
G-89-2				
	10.67 / 15.24	4.57/15	25	3187
	incl 12.19/13.71	1.52/5	43	4873
	21.33 / 47.24	25.91/85	14	3135
	incl 22.86/24.38	4.57/15	37	5419
	32.00/33.53	1.53/5	18	4441
	38.00/39.62	1.52/5	17	3720
	42.67/44.20	1.53.5	17	3618
	51.82 / 54.86	3.04/10	40	5193
	57.91 / 60.96	3.05/10	85	4397
	62.48 / 64.01	3.05/10	20	3180
	67.05 / 71.63	4.58/15	35	5937
	incl 68.58/70.01	1.53/5	33	9127
	73.15 / 88.39	15.24/50	43	3722
	incl 73.15/74.67	1.52/5	42	6122
	77.72/82.29	4.57/15	59	6351
	103.63 / 118.21	4.58/15	34	3476
	incl 106.68/108.21	1.53/5	42	5009
	112.78 / 114.30	1.52/5	34	5673
overall	21.00 / 88.39	67.06/220	29	3160
G-89-3				
	45.41 / 48.46	3.05/10	30	6832
	48.46 / 51.51	3.05/10	154	718
	69.80 / 84.43	14.63/48	34	2324

Table 3. cont

G-89-4				
61.57 / 66.14	4.57/15	54	3021	
incl 63.09/64.62	1.53/5	32	5392	
72.24 / 76.81	4.57/15	42	1182	
82.90 / 183.49	100.59/330	20	3101	
incl 82.90/93.57	10.67/35	18	3983	
107.29/119.48	12.19/40	12	3538	
124.05/125.58	1.53/5	125	7960	
160.63/171.30	10.67/35	75	5176	
162.15/165.20	3.05/10	107	7353	
169.77/171.30	1.53/5	208	6943	
180.44/181.97	1.53/5	24	7394	
188.06 / 195.69	7.63/25	21	4594	
200.26 / 217.93	17.67/58	8	3501	
incl 210.93/213.97	3.04/5	19	8303	
overall	82.90 / 217.93	135.03/443	17	3062
G-89-6				
9.14 / 14.33	5.19/17	46	3780	
32.61 / 34.13	4.57/15	45	3430	
98.15 / 108.81	10.66/35	44	2008	
incl 99.67/101.19	1.52/5	26	5057	
107.29/108.81	1.52/5	180	3225	
G-89-7				
15.85 / 20.42	4.57/15	15	1454	
G-89-8				
3.05 / 12.80	9.75/32	34	5034	
incl 5.18/11.28	6.10/20	46	6903	
28.04 / 31.09	3.05/10	31	4194	
38.71 / 60.05	21.34/70	38	2884	
incl 46.33/55.47	9.14/30	38	4023	
67.67 / 99.67	32.00/105	38	4026	
incl 72.24/90.53	18.29/60	54	5657	
75.29/76.81	1.52/5	83	9863	
104.25 / 114.91	10.67/35	17	2511	
incl 113.38/114.91	1.53/5	48	7529	
143.87 / 151.49	7.62/25	27	3371	
162.15 / 185.01	22.86/75	18	2948	
incl 162.15/172.82	9.14/35	26	4323	
overall	3.05 / 185.01	181.96/597	22	2429

Trenching

Bulldozer trenching in 1989 focused on trench #17, first excavated in 1968 (Figure 3). The program deepened and resampled a section of the old trench previously reported to contain anomalous copper and gold values. Trench rubble contained mineralized boulders of silicified andesite with visible chalcopyrite.

A total of 32 continuous chip samples each 2 meters in length were collected in 1989 (Table 4.). The samples consisted of broken rock interpreted to be locally derived. Values ranged up to 1782 ppm copper and 45 ppb gold .

Table 4. TRENCH #17 RESULTS

<u>Sample Number</u>	<u>Sample Width</u>	<u>Au</u> ppb	<u>Ag</u> ppm	<u>Cu</u> ppm
206626	2 meters	21	0.2	1552
206627	2 meters	11	0.2	1255
206628	2 meters	<5	<0.1	1044
206629	2 meters	17	<0.1	1337
206630	2 meters	53	0.2	1624
206631	2 meters	6	0.2	1294
206632	2 meters	29	0.2	1606
206633	2 meters	14	<0.1	822
206634	2 meters	<5	<0.1	1113
206635	2 meters	14	0.1	1331
206636	2 meters	<5	<0.1	1235
206637	2 meters	<5	<0.1	1282
206638	2 meters	21	0.2	1782
206639	2 meters	7	<0.1	1320
206640	2 meters	13	0.1	1124
206641	2 meters	15	0.1	1047
206642	2 meters	22	0.2	1479
206643	2 meters	19	0.1	1161
206644	2 meters	<5	<0.1	1221
206645	2 meters	45	0.1	1217
206646	2 meters	6	<0.1	995
206647	2 meters	18	0.1	1349
206648	2 meters	9	<0.1	1121
206649	2 meters	20	<0.1	1122
206650	2 meters	<5	0.1	1037
206651	2 meters	13	<0.1	727
206652	2 meters	<5	<0.1	506
206653	2 meters	<5	<0.1	323
206654	2 meters	<5	<0.1	370
206655	2 meters	<5	0.1	956
206656	2 meters	<5	<0.1	1007
206657	2 meters	<5	<0.1	619

A second trench completed 75 feet south of and parallel to trench #17 failed to reach bedrock. A grab sample (# R-51-5) of a mineralized / silicified andesite boulder in this trench contained 2.78% copper and 368 ppb gold.

A grab sample (# R-51-1) of a mineralized / silicified andesite boulder collected in a preexisting trench at approximate grid coordinates 3620E and 200S returned 19934 ppm copper and 354 ppb gold.

Construction of the drill pad for hole G-89-8 exposed mineralized quartz feldspar porphyry. Grab samples of silicified porphyry rubble with visible copper mineralization returned copper values up to 2798 ppm and gold values up to 47 ppb.

Petrographic Study

Six core samples were submitted for petrographic analysis to Vancouver Petrographics Ltd. of Fort Langley, B.C. Polished thin sections and complete petrographic reports were prepared for each sample.

The samples were described as belonging to a highly potassic altered facies in a porphyry copper model. They appear to be derived from a porphyritic dacite although some samples are too intensely altered and no protolith could be determined. Other important alteration minerals are carbonate, siderite, chlorite, and epidote. Quartz veins are rare.

Tourmaline forms veins, intense breccia networks and massive replacements. Magnetite, often oxidized to specular hematite, and chalcopyrite are associated with the tourmaline. The complete petrographic report is included as Appendix C.

CONCLUSIONS AND RECOMMENDATIONS

The Gnat Pass property is underlain by Upper Triassic to Lower Jurassic volcanics and sediments intruded by a quartz feldspar porphyry of uncertain age but assumed to be related to the nearby time equivalent Hotailuh batholith.

Previous work has outlined a porphyry copper deposit with drill-indicated reserves of 25,000,000 metric tonnes of 0.44% copper. Prior to the current program the ground was not extensively explored for gold.

The 1989 exploration program:

1. confirmed the copper grades of previous drilling
2. did not intersect significant gold mineralization, however grab samples on surface contained up to 368 ppb
3. was unsuccessful in reaching bedrock within the Creek zone copper soil anomaly
4. extended the area of copper mineralization to the north

The 1989 diamond drilling did not sufficiently test the gold potential of the Gnat Pass deposit. Gold mineralization within porphyry copper-gold systems tends to occur in distinct zones, often related to magnetic anomalies. Large areas of the deposit, including an area with anomalous magnetic response, remain untested.

The following program is recommended:

1. Compilation of all available data relating to the property with specific emphasis on the geology and geochemistry of previous drill core.
2. Relogging, resampling and gold analysis of all suitable old drill core currently on site (estimated to be 60 to 75 % of total core drilled).
3. Should the above program be successful in outlining a gold enriched zone, further exploration consisting of geophysics, soil geochemical surveying and diamond drilling would be warranted and recommended.

This one phase program is estimated to cost approximately \$60,000.

REFERENCES

- Anderson, R.G., 1978: Preliminary Report on the Hotailuh Batholith: Its Distribution, Age and Contact Relationships in the Cry Lake, Spatsizi and Dease Lake Map-areas, North-central British Columbia; in Current Research, Part A, Geological Survey of Canada, Paper 78-1A, p.29-31
- Anderson, R.G., 1980: Satellitic Stocks, Volcanic and Sedimentary Stratigraphy, and Structure Around the Northern and Western Margins of the Hotailuh Batholith, North-central British Columbia; in Current Research, Part A, Geological Survey of Canada, Paper 80-1A, p.37-40
- Anderson, R.G., 1984: Late Triassic and Jurassic Magmatism along the Stikine Arch and the Geology of the Stikine Batholith, North-Central British Columbia; in Current Research, Part A, Geological Survey of Canada, Paper 84-1A, p.67-73
- Barr, D.A., Fox, P.E., Northcote, K.E., and Preto, V.A., 1976: The Alkaline Suite Porphyry Deposits - A Summary; in Porphyry Deposits of the Canadian Cordillera, C.I.M. Special Volume 15, p.359-367
- Clarke, W.G., 1967: June, Stikine, September, Etc. Claims; in Lode Metals of British Columbia 1967, British Columbia Department of Mines and Petroleum Resources Report, p.27
- Gabrielse, H., 1962: Cry Lake Map Area; Geological Survey of Canada, Map 29-1962
- Gabrielse, H., 1979: Geological Map of the Cry Lake Map Area; Geological Survey of Canada, Open File 610
- Jeffery, W.G., 1966: June, Stikine, September, Etc. Claims; in Lode Metals in British Columbia 1966, British Columbia Department of Mines and Petroleum Resources Report, p.19-20
- McMillan, W.J. and A. Panteleyev, 1980: Porphyry Copper Deposits, Geoscience Canada vol.7 num.2 , 14p.
- Monger, J.W.H. and L. Thorstad, 1978: Lower Mesozoic Stratigraphy, Cry Lake and Spatsizi Map Areas, British Columbia; in Current Research, Part A, Geological Survey of Canada, Paper 78-1A, p.21-24
- Ney, C.S. and V.F. Hollister, 1976: Geologic Setting of Porphyry Deposits of the Canadian Cordillera; in Porphyry Deposits of the Canadian Cordillera, C.I.M. Special Volume 15, p.21-2
- Sillitoe, R.H., 1979: Some Thoughts on Gold-Rich Porphyry Copper Deposits; Mineralium Deposita, vol. 14, p.161-174
- Wanless, R.K., Stevens, R.D., Lachance, G.R., and Delabio, R.N., 1972: Age Determinations and Geological Studies; Geological Survey of Canada, Paper 71-2, p.17-21

Appendix A

Bondar-Clegg & Company Ltd.
 130 Pemberton Ave.
 North Vancouver, B.C.
 V7P 2R5
 (604) 985-0681 Telex 04-352667



**Geochemical
 Lab Report**

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

REPORT: V89-06433.0 (COMPLETE)

REFERENCE INFO:

CLIENT: AURUM GEOLOGICAL CONSULTANTS INC.
 PROJECT: 51

SUBMITTED BY: G. SMITH
 DATE PRINTED: 5-OCT-89

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au 30g Gold 30 grams	136	5 PPB	FIRE-ASSAY	Fire Assay AA
2	Ag Silver	136	0.1 PPM	HN03-HCL HOT EXTR	Atomic Absorption
3	Cu Copper	136	1 PPM	HN03-HCL HOT EXTR	Atomic Absorption

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
R ROCK OR BED ROCK	134	2 - 150	136	CRUSH, PULVERIZE	150 135
Z OTHER DRILL TYPES	2				

REPORT COPIES TO: P.O. BOX 5179
 MR. TOM GARAGAN
 INTEGRATED RESOURCES LTD.

INVOICE TO: P.O. BOX 5179
 MR. TOM GARAGAN
 INTEGRATED RESOURCES LTD.



A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

REPORT: V89-06433.0

DATE PRINTED: 5 OCT 89

PROJECT: 51

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM	SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM
R2 205976		17	2.5	123	R2 206016		28	0.8	3100
R2 205977		10	0.8	66	R2 206017		10	0.5	240
R2 205978		<5	0.3	106	R2 206018		31	1.0	4712
R2 205979		<5	0.2	25	R2 206019		33	1.2	9127
R2 205980		7	0.3	473	R2 206020		40	0.8	4080
R2 205981		15	0.4	2570	R2 206021		<5	0.6	289
R2 205982		43	0.6	4873	R2 206022		42	0.8	6122
R2 205983		17	0.3	2118	R2 206023		36	0.5	2520
R2 205984		<5	0.3	151	R2 206024		10	0.4	2101
R2 205985		<5	0.2	201	R2 206025		57	0.8	7415
R2 205986		6	0.1	795	R2 206026		67	0.8	5657
R2 205987		6	<0.1	873	R2 206027		52	0.7	5980
R2 205988		21	0.3	2933	R2 206028		20	0.5	1943
R2 205989		32	0.4	4050	R2 206029		34	0.5	2462
R2 205990		16	0.4	4255	R2 206030		91	0.6	1934
R2 205991		64	0.6	7951	R2 206031		17	0.2	1083
R2 205992		8	0.2	1765	R2 206032		15	0.1	482
R2 205993		13	0.3	2885	R2 206033		<5	<0.1	101
R2 205994		19	0.4	2786	R2 206034		<5	<0.1	126
R2 205995		18	0.3	4441	R2 206035		<5	0.2	137
R2 205996		9	0.1	2327	R2 206036		7	0.2	109
R2 205997		9	0.2	1273	R2 206037		<5	0.1	112
R2 205998		6	0.2	1246	R2 206038		<5	0.1	218
R2 205999		17	0.3	3720	R2 206039		<5	<0.1	127
R2 206000		8	0.2	2539	R2 206040		18	0.1	2060
R2 206001		10	0.9	2173	R2 206041		<5	0.2	363
R2 206002		17	0.3	3618	R2 206042		9	0.2	2314
R2 206003		18	0.4	2716	R2 206043		51	0.4	3106
R2 206004		18	0.3	2625	R2 206044		42	0.6	5009
R2 206005		<5	<0.1	358	R2 206045		<5	<0.1	501
R2 206006		14	0.2	1693	R2 206046		<5	<0.1	298
R2 206007		11	0.2	733	R2 206047		9	0.2	1752
R2 206008		35	0.2	2375	R2 206048		34	1.3	5673
R2 206009		44	0.9	8010	R2 206049		<5	0.8	806
R2 206010		10	<0.1	742	R2 206050		25	0.9	1648
R2 206011		9	0.1	350	R2 206076		8	0.7	922
R2 206012		104	1.0	5048	R2 206077		<5	0.6	242
R2 206013		66	0.9	3745	R2 206078		5	0.6	708
R2 206014		43	0.7	677	R2 206079		14	0.7	1296
R2 206015		12	0.8	3260	R2 206080		5	0.6	558

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

DATE PRINTED: 5-OCT-89

REPORT: V89-06433.0

PROJECT: 51

PAGE 2

SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM	SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM
R2 206081		<5	0.6	225	R2 206185		<5	0.3	180
R2 206082		<5	0.5	422	R2 206186		13	0.3	123
R2 206083		10	0.7	739	R2 206187		15	0.4	109
R2 206084		<5	0.6	472	R2 206188		19	0.4	1327
R2 206085		<5	0.5	73	R2 206189		55	0.5	2863
R2 206086		<5	0.5	104	R2 206190		35	0.6	3080
R2 206151		<5	0.5	20	R2 206191		43	0.5	1969
R2 206152		<5	0.4	19	R2 206192		28	0.4	1791
R2 206153		<5	0.6	16	R2 206193		53	0.3	2510
R2 206154		<5	0.8	20	R2 206194		18	0.3	1998
R2 206155		<5	0.7	23	R2 206195		30	0.3	2422
R2 206156		11	1.1	23	R2 206196		24	0.3	2770
R2 206157		11	1.3	51	R2 206197		34	0.3	2632
R2 206158		<5	1.1	14	R2 R-51-01		354	2.0	19934
R2 206159		<5	1.2	26	Z2 51-SL-1		8	<0.1	152
R2 206160		<5	0.8	29	Z2 51-SL-2		<5	<0.1	100
R2 206161		<5	0.8	52					
R2 206162		<5	0.7	39					
R2 206163		<5	0.4	48					
R2 206164		<5	0.5	24					
R2 206165		<5	0.5	33					
R2 206166		<5	0.4	25					
R2 206167		6	0.3	79					
R2 206168		11	0.5	176					
R2 206169		10	1.0	178					
R2 206170		10	0.8	386					
R2 206171		9	1.0	213					
R2 206172		17	1.7	5115					
R2 206173		43	1.7	8549					
R2 206174		184	0.8	732					
R2 206175		123	0.7	704					
R2 206176		50	0.6	626					
R2 206177		15	0.5	364					
R2 206178		7	0.8	935					
R2 206179		<5	0.3	842					
R2 206180		8	0.3	695					
R2 206181		8	0.3	245					
R2 206182		9	0.2	148					
R2 206183		<5	0.3	90					
R2 206184		6	0.3	113					

Bondar-Clegg & Company Ltd.
 130 Pemberton Ave.
 North Vancouver, B.C.
 V7P 2R5
 (604) 985-0681 Telex 04-352667



**Geochemical
 Lab Report**

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

REPORT: V89-06442.0 (COMPLETE)

REFERENCE INFO:

CLIENT: AURUM GEOLOGICAL CONSULTANTS INC.
 PROJECT: 51

SUBMITTED BY: G. SMITH
 DATE PRINTED: 11-OCT-89

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au 30g Gold 30 grams	134	5 PPM	FIRE-ASSAY	Fire Assay AA
2	Ag Silver	134	0.1 PPM	HN03-HCL HOT EXTR	Atomic Absorption
3	Cu Copper	134	1 PPM	HN03-HCL HOT EXTR	Atomic Absorption

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
R ROCK OR BED ROCK	134	2 -150	134	CRUSH, PULVERIZE -150	87
				CRUSH AND SPLIT	47
				GEOCHEM PULVERIZING	47

REPORT COPIES TO: P.O. BOX 5179

INVOICE TO: P.O. BOX 5179

MR. TOM GARAGAN
 INTEGRATED RESOURCES LTD.

MR. TOM GARAGAN
 INTEGRATED RESOURCES LTD.



A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

DATE PRINTED: 11-OCT-89

REPORT: V89-06442.0

PROJECT: 51

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM	SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM
R2 206201	G 27-4	12	0.8	23	R2 206241		10	0.5	2315
R2 206202	↓	8	0.3	12	R2 206242		75	<0.1	612
R2 206203		9	0.1	16	R2 206243		27	<0.1	340
R2 206204		<5	<0.1	11	R2 206244		19	<0.1	151
R2 206205		6	0.4	16	R2 206245		6	<0.1	482
R2 206206		<5	0.3	14	R2 206246		<5	<0.1	487
R2 206207		7	0.3	15	R2 206247		21	1.1	5426
R2 206208		9	0.4	19	R2 206248		23	0.4	3509
R2 206209		8	0.2	14	R2 206249		20	<0.1	2510
R2 206210		<5	0.4	15	R2 206250		13	<0.1	2204
R2 206211		<5	0.3	11	R2 206251		7	0.5	6972
R2 206212		<5	0.2	11	R2 206252		11	<0.1	1648
R2 206213		<5	0.2	15	R2 206253		28	<0.1	5615
R2 206214		7	0.3	21	R2 206254		<5	0.2	2288
R2 206215		10	0.3	22	R2 206255		6	<0.1	1941
R2 206216		<5	0.2	1169	R2 206256		<5	<0.1	709
R2 206217		6	<0.1	21	R2 206257		6	<0.1	1458
R2 206218		8	0.2	44	R2 206258		14	<0.1	2686
R2 206219		9	0.3	19	R2 206259		6	<0.1	3330
R2 206220		7	0.2	27	R2 206260		22	<0.1	3170
R2 206221		7	0.1	22	R2 206261		12	0.3	2480
R2 206222		9	<0.1	28	R2 206262		10	<0.1	1866
R2 206223		13	<0.1	41	R2 206263		6	<0.1	2817
R2 206224		10	0.2	53	R2 206264		16	<0.1	3776
R2 206225		10	0.3	69	R2 206265		6	<0.1	2310
R2 206226		14	0.3	98	R2 206266		6	<0.1	2736
R2 206227		11	0.5	96	R2 206267		22	<0.1	5578
R2 206228		13	1.4	79	R2 206268		21	<0.1	3067
R2 206229		13	1.2	85	R2 206269		6	0.2	4047
R2 206230		24	1.6	73	R2 206270		14	<0.1	3971
R2 206231		23	1.3	39	R2 206271		6	<0.1	1013
R2 206232		31	1.5	72	R2 206272		<5	<0.1	941
R2 206233		41	1.3	2377	R2 206273		8	<0.1	1517
R2 206234		32	0.3	5392	R2 206274		125	0.1	7960
R2 206235		88	<0.1	1345	R2 206275		6	<0.1	1777
R2 206236		8	<0.1	477	R2 206276		<5	<0.1	1919
R2 206237		12	<0.1	844	R2 206277		<5	<0.1	1082
R2 206238		16	<0.1	704	R2 206278		<5	<0.1	1819
R2 206239		18	0.1	644	R2 206279		<5	<0.1	693
R2 206240		41	<0.1	619	R2 206280		<5	<0.1	1766



A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

DATE PRINTED: 11-OCT-89

REPORT: V89-06442.0

PROJECT: 51

PAGE: 2

SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM	SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM
R2 206281		<5	<0.1	1613	R2 206321		<5	<0.1	249
R2 206282		<5	<0.1	1432	R2 206322		<5	<0.1	202
R2 206283		<5	<0.1	1197	R2 206323		<5	<0.1	366
R2 206284		<5	<0.1	818	R2 206324		<5	0.3	1987
R2 206285		<5	<0.1	2360	R2 206325		7	0.3	3349
R2 206286		7	0.2	1623	R2 206326		20	0.3	4010
R2 206287		6	<0.1	2189	R2 206327		6	<0.1	1445
R2 206288		7	<0.1	3260	R2 206328		6	0.2	4750
R2 206289		8	<0.1	5830	R2 206329		<5	<0.1	1084
R2 206290		<5	<0.1	2750	R2 206330		<5	0.2	2462
R2 206291		22	<0.1	2173	R2 206331		17	0.9	7538
R2 206292		29	<0.1	4075	R2 206332		20	0.9	9069
R2 206293		32	<0.1	3452	R2 206333	6-08-89	<5	<0.1	1357
R2 206294		11	<0.1	4255	R2 206334	5	<5	<0.1	2225
R2 206295		28	<0.1	2557					
R2 206296		41	0.2	3500					
R2 206297		6	<0.1	2031					
R2 206298		33	0.2	5923					
R2 206299		112	0.3	6942					
R2 206300		102	0.3	8213					
R2 206301		6	<0.1	2431					
R2 206302		24	<0.1	1970					
R2 206303		43	<0.1	3809					
R2 206304		208	<0.1	6943					
R2 206305		31	<0.1	1961					
R2 206306		34	0.2	3593					
R2 206307		17	<0.1	2083					
R2 206308		7	0.2	2798					
R2 206309		11	0.6	3670					
R2 206310		15	0.4	3292					
R2 206311		24	0.4	7394					
R2 206312		<5	<0.1	1959					
R2 206313		<5	<0.1	534					
R2 206314		<5	<0.1	786					
R2 206315		6	<0.1	885					
R2 206316		12	<0.1	3736					
R2 206317		19	<0.1	3547					
R2 206318		26	0.4	4250					
R2 206319		41	0.4	5186					
R2 206320		9	0.2	6250					

Bondar-Clegg & Company Ltd.
 130 Pemberton Ave.
 North Vancouver, B.C.
 V7P 2R5
 (604) 985-0681 Telex 04-352667



**Geochemical
 Lab Report**

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

REPORT: V89-0721D.0 (COMPLETE)

REFERENCE INFO:

CLIENT: AURUM GEOLOGICAL CONSULTANTS INC.
 PROJECT: 51

SUBMITTED BY: G. SMITH
 DATE PRINTED: 25-OCT-89

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au 30g Gold 30 grams	132	5 PPB	FIRE-ASSAY	Fire Assay AA
2	Ag Silver	132	0.1 PPM	HNO3-HCL HOT EXTR	Atomic Absorption
3	Cu Copper	132	1 PPM	HNO3-HCL HOT EXTR	Atomic Absorption

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
R ROCK OR BED ROCK	132	2 -150	132	CRUSH, PULVERIZE -150 OVERWEIGHT SAMPLE/LB	132 123

REPORT COPIES TO: P.O. BOX 5179
 MR. TOM GARAGAN
 INTEGRATED RESOURCES LTD.

INVOICE TO: P.O. BOX 5179
 MR. TOM GARAGAN
 INTEGRATED RESOURCES LTD.

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

DATE PRINTED: 25-OCT-89

REPORT: V89-07210.0

PROJECT: 51

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM	SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM
R2 206351	7 607-6	52	0.7	6426	R2 206391		48	<0.1	71
R2 206352		21	0.2	1788	R2 206392		<5	<0.1	12
R2 206353		64	<0.1	2056	R2 206393		<5	<0.1	23
R2 206354		10	<0.1	683	R2 206394		<5	<0.1	25
R2 206355		9	<0.1	247	R2 206395		<5	<0.1	25
R2 206356		14	<0.1	322	R2 206396		<5	<0.1	14
R2 206357		9	<0.1	104	R2 206397		<5	<0.1	27
R2 206358		11	<0.1	103	R2 206398		6	0.2	609
R2 206359		10	<0.1	224	R2 206399		<5	<0.1	346
R2 206360		11	<0.1	135	R2 206400		38	0.5	526
R2 206361		13	<0.1	219	R2 206401		9	0.2	383
R2 206362		14	<0.1	343	R2 206402		8	0.2	664
R2 206363		8	<0.1	357	R2 206403		<5	0.2	520
R2 206364		9	<0.1	539	R2 206404		6	0.3	392
R2 206365		<5	<0.1	238	R2 206405		9	2.5	1220
R2 206366		12	<0.1	1046	R2 206406		26	3.0	5057
R2 206367		87	0.3	7775	R2 206407		11	1.0	1106
R2 206368		36	<0.1	1468	R2 206408		<5	<0.1	126
R2 206369		11	<0.1	53	R2 206409		10	1.3	1131
R2 206370		8	<0.1	39	R2 206410		71	3.4	2175
R2 206371		<5	<0.1	52	R2 206411		180	2.1	3225
R2 206372		<5	<0.1	14	R2 206412		54	0.2	345
R2 206373		<5	<0.1	41	R2 206413		11	0.9	784
R2 206374		<5	<0.1	19	R2 206414		9	0.6	596
R2 206375		6	<0.1	24	R2 206415		<5	0.2	101
R2 206376		6	<0.1	19	R2 206416	6-276	7	0.2	125
R2 206377		<5	<0.1	38	R2 206417	↑ ↓	8	0.3	264
R2 206378		<5	<0.1	68	R2 206426	6-277	6	<0.1	132
R2 206379		6	<0.1	115	R2 206427		7	<0.1	167
R2 206380		8	0.1	97	R2 206428		6	0.1	656
R2 206381		8	<0.1	53	R2 206429		7	<0.1	526
R2 206382		<5	<0.1	40	R2 206430		11	0.1	1253
R2 206383		7	<0.1	180	R2 206431		13	0.2	1517
R2 206384		<5	<0.1	26	R2 206432		20	0.3	1593
R2 206385		9	<0.1	200	R2 206433		7	<0.1	296
R2 206386		12	0.1	204	R2 206434		<5	<0.1	89
R2 206387		8	<0.1	218	R2 206435		<5	<0.1	64
R2 206388		6	0.1	324	R2 206436		<5	<0.1	49
R2 206389		9	0.4	816	R2 206437		<5	<0.1	24
R2 206390		<5	<0.1	83	R2 206438		<5	<0.1	34



A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

DATE PRINTED: 25-OCT-89

REPORT: V89-07210.0

PROJECT: 51

PAGE 2

SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM	SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM
R2 206439		8	<0.1	29	R2 206494		12	<0.1	734
R2 206440		6	0.4	19	R2 206495		8	<0.1	273
R2 206441		<5	0.1	12	R2 206496		<5	<0.1	101
R2 206442		5	<0.1	27	R2 206497		<5	<0.1	147
R2 206443		<5	<0.1	16	R2 206498		16	<0.1	508
R2 206444		<5	<0.1	17	R2 206499		181	0.2	4777
R2 206445		7	<0.1	31	R2 206500		16	<0.1	1656
R2 206446		<5	<0.1	44	R2 206501		15	<0.1	1755
R2 206447		5	<0.1	41	R2 206502		21	<0.1	1625
R2 206448		8	<0.1	40	R2 206503		15	<0.1	1280
R2 206449		9	<0.1	30	R2 206504		42	0.2	3938
R2 206450		<5	0.2	13	R2 206505		45	0.2	4971
R2 206451		<5	0.4	13					
R2 206452		21	0.5	27					
R2 206453		<5	<0.1	14					
R2 206454		<5	<0.1	9					
R2 206455		<5	<0.1	7					
R2 206456		6	0.3	7					
R2 206457		<5	0.4	9					
R2 206458		<5	0.2	12					
R2 206459	089-1	<5	0.1	10					
R2 206460	↑	6	<0.1	8					
R2 206476	027-8	14	<0.1	2083					
R2 206477		51	0.4	4657					
R2 206478		49	1.0	9704					
R2 206479		53	0.2	7594					
R2 206480		32	1.1	5657					
R2 206481		15	<0.1	1807					
R2 206482		9	<0.1	562					
R2 206483		7	<0.1	113					
R2 206484		8	<0.1	60					
R2 206485		8	<0.1	302					
R2 206486		8	<0.1	410					
R2 206487		9	<0.1	353					
R2 206488		17	<0.1	360					
R2 206489		<5	<0.1	54					
R2 206490		15	<0.1	188					
R2 206491		9	<0.1	536					
R2 206492		44	0.1	3740					
R2 206493		18	0.2	4648					

Bondar-Clegg & Company Ltd.
 130 Pemberton Ave.
 North Vancouver, B.C.
 V7P 2R5
 (604) 985-0681 Telex 04-352667



**Geochemical
 Lab Report**

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

REPORT: V89-07211.0 (COMPLETE)

REFERENCE INFO:

CLIENT: AURUM GEOLOGICAL CONSULTANTS INC.
 PROJECT: 51

SUBMITTED BY: G. SMITH
 DATE PRINTED: 8-NOV-89

ORDER	ELEMENT	NUMFR OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Au 30g Gold 30 grams	125	5 PPM	FTRE-ASSAY	Fire Assay AA
2	Ag Silver	125	0.1 PPM	HN03-HCL HOT EXTR	Atomic Absorption
3	Cu Copper	125	1 PPM	HN03-HCL HOT EXIR	Atomic Absorption

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
R ROCK OR BED ROCK	125	2 -150	125	CRUSH, PULVERIZE -150	125
				OVERWRIGHT SAMPLING	252

REMARKS: Assay of high Cu to follow on V89-07211.6

REPORT COPIES TO: P.O. BOX 5179
 MR. TOM GARAGAN
 INTEGRATED RESOURCES LTD.

INVOICE TO: P.O. BOX 5179
 MR. TOM GARAGAN
 INTEGRATED RESOURCES LTD.



A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

DATE PRINTED: 8-NOV-89

REPORT: V89-07211.0

PROJECT: 51

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM	SAMPLE NUMBER	ELEMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM
R2 R-51-02		17	0.3	2067	R2 206542		20	<0.1	1703
R2 R-51-03		20	<0.1	432	R2 206543		8	0.2	1734
R2 R-51-04		47	0.2	2798	R2 206544		8	0.1	1265
R2 R-51-05		368	2.0	>200000	R2 206545		<5	<0.1	854
R2 206506		45	0.2	3980	R2 206546		9	0.1	1168
R2 206507		25	<0.1	1918	R2 206547		22	0.4	3327
R2 206508		40	0.6	6000	R2 206548		48	1.2	7529
R2 206509		29	0.3	3333	R2 206549		8	<0.1	846
R2 206510		16	<0.1	1884	R2 206550		<5	0.1	1539
R2 206511		17	<0.1	1282	R2 206551		14	<0.1	831
R2 206512		19	0.1	1982	R2 206552		22	<0.1	912
R2 206513		<5	<0.1	98	R2 206553		<5	<0.1	874
R2 206514		10	<0.1	848	R2 206554		52	<0.1	1030
R2 206515		6	<0.1	1791	R2 206555		25	<0.1	997
R2 206516		<5	<0.1	497	R2 206556		<5	0.2	2894
R2 206517		7	<0.1	675	R2 206557		<5	<0.1	91
R2 206518		33	0.2	1642	R2 206558		<5	<0.1	164
R2 206519		25	0.4	1966	R2 206559		<5	<0.1	169
R2 206520		20	<0.1	2615	R2 206560		<5	<0.1	393
R2 206521		33	0.4	4654	R2 206561		<5	<0.1	614
R2 206522		57	0.3	5480	R2 206562		<5	<0.1	210
R2 206523		83	0.6	9863	R2 206563		<5	<0.1	398
R2 206524		74	0.5	6066	R2 206564		<5	<0.1	531
R2 206525		44	0.4	4194	R2 206565		<5	<0.1	413
R2 206526		64	0.6	5840	R2 206566		<5	<0.1	289
R2 206527		56	0.7	5894	R2 206567		71	<0.1	539
R2 206528		47	0.7	5750	R2 206568		20	0.2	3200
R2 206529		29	0.5	5000	R2 206569		<5	0.1	1298
R2 206530		25	0.2	1884	R2 206570		52	0.6	6580
R2 206531		38	0.4	4625	R2 206571		13	0.2	1954
R2 206532		98	1.1	8623	R2 206572		48	0.3	3821
R2 206533		9	0.4	2084	R2 206573		<5	<0.1	321
R2 206534		<5	<0.1	400	R2 206574		10	0.2	1038
R2 206535		<5	0.1	1329	R2 206575		30	0.3	1712
R2 206536		18	0.3	5043	R2 206576		43	0.2	2777
R2 206537		26	0.2	2324	R2 206577		6	<0.1	584
R2 206538		6	<0.1	1346	R2 206578		<5	<0.1	92
R2 206539		<5	0.1	340	R2 206579		<5	<0.1	175
R2 206540		19	<0.1	660	R2 206580		<5	0.2	3207
R2 206541		<5	<0.1	68	R2 206581		58	0.7	7706

A DIVISION OF INCHCAPE INSPECTION & TESTING SERVICES

DATE PRINTED: 8-NOV-89

REPORT: V89-07211.0

PROJECT: 51

PAGE 2

SAMPLE NUMBER	FILMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM	SAMPLE NUMBER	FILMENT UNITS	Au 30g PPB	Ag PPM	Cu PPM
R2 206582		20	0.2	5078	R2 206653		<5	<0.1	323
R2 206583		27	<0.1	1602	R2 206654		<5	<0.1	370
R2 206584		36	<0.1	2657	R2 206655		<5	0.1	956
R2 206585		16	0.2	3833	R2 206656		<5	<0.1	1007
R2 206586		24	0.2	6180	R2 206657		<5	<0.1	619
R2 206587		<5	<0.1	531					
R2 206588		<5	<0.1	723					
R2 206589		<5	<0.1	1599					
R2 206590		15	<0.1	2604					
R2 206591		25	0.3	4385					
R2 206592		<5	<0.1	847					
R2 206593		9	0.2	1386					
R2 206594		16	0.2	1881					
R2 206626		21	0.2	1552					
R2 206627		11	0.2	1255					
R2 206628		<5	<0.1	1044					
R2 206629		17	<0.1	1337					
R2 206630		53	0.2	1624					
R2 206631		6	0.2	1294					
R2 206632		29	0.2	1606					
R2 206633		14	<0.1	822					
R2 206634		<5	<0.1	1113					
R2 206635		14	0.1	1331					
R2 206636		<5	<0.1	1235					
R2 206637		<5	<0.1	1282					
R2 206638		21	0.2	1782					
R2 206639		7	<0.1	1320					
R2 206640		13	0.1	1124					
R2 206641		15	0.1	1047					
R2 206642		22	0.2	1479					
R2 206643		19	0.1	1161					
R2 206644		<5	<0.1	1221					
R2 206645		45	0.1	1217					
R2 206646		6	<0.1	995					
R2 206647		18	0.1	1349					
R2 206648		9	<0.1	1121					
R2 206649		20	<0.1	1122					
R2 206650		<5	0.1	1037					
R2 206651		13	<0.1	727					
R2 206652		<5	<0.1	506					

6-28-89
 A
 Trench 17 2m deep

Bondar-Clegg & Company Ltd.
130 Pemberton Ave.
North Vancouver, B.C.
V7P 2R5
(604) 985-0681 Telex 04-352667



Certificate of Analysis

REPORT: V89-07211.6 (COMPLETE)

REFERENCE INFO:

CLIENT: AURUM GEOLOGICAL CONSULTANTS INC.
PROJECT: 51

SUBMITTED BY: G. SMITH
DATE PRINTED: 16-NOV-89

ORDER	ELEMENT	NUMBER OF ANALYSES	LOWER DETECTION LIMIT	EXTRACTION	METHOD
1	Cu Copper	1	0.01 PCT		Atomic Absorption

SAMPLE TYPES	NUMBER	SIZE FRACTIONS	NUMBER	SAMPLE PREPARATIONS	NUMBER
R ROCK OR BED ROCK	1	2 -150	1	AS RECEIVED, NO SP	1

REPORT COPIES TO: P.O. BOX 5179

INVOICE TO: P.O. BOX 5179

MR. TOM GARAGAN
INTEGRATED RESOURCES LTD.

MR. TOM GARAGAN
INTEGRATED RESOURCES LTD.

Bondar-Clegg & Company Ltd.
130 Pemberton Ave.
North Vancouver, B.C.
V7P 2R5
(604) 985-0681 Telex 04-352667



Certificate of Analysis

DATE PRINTED: 16-NOV-89

REPORT: V89-07211.6

PROJECT: 51

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Cu PCT
------------------	------------------	-----------

R2 R-51-05

2.78

- Grade from L 17

Appendix B

AURUM GEOLOGICAL CONSULTANTS INC.

CORE QUALITY LOG

Property: *GNA PASS* Core Size: *NR* Date: *2.20.18* Hole No. *G89-2*
 Coords: Az/Dip: *190°* Logger: *G. SMITH* Page 1 of 3

From To	Int. (m)	Core Rec'd	% Rec'y	RQD Rec'y	RQD	Struc.	Lith'y Unit	SOFT 1 - 10 HARDNESS	FRACTURES/m
0.00									
3.05	3.05	0	0	0	0				
5.18	2.13	.80	38	.44	0.21	FRAGILE 30°	ANDESITE	5	11
6.40	1.22	.84	68	.47	0.39	" 45°	"	4-6	10-20
7.01	0.61	.47	77	.09	0.15	" 46°	"	6	8
8.23	1.22	.80	66	0	0	" 37°	"	6	8
8.30	0.07	.07	100	0	0	" 35°	"	6	
10.06	1.76	1.16	66	.82	0.47	" 37°	"	6	9-20
11.28	1.22	1.20	98	.69	0.57	" 42°	"	2-5	10-15
13.39	2.11	1.52	72	.53	0.25	" 46	"	6	15
14.02	0.62	0.62	98	.37	0.59	" 46°	"	6	15
14.63	0.61	.61	100	.18	0.30	" 27°	"	6	15
16.46	1.83	1.55	85	.60	0.37	" 31°	"	5	15
17.37	0.91	.47	52	.12	0.13	" 50°	"	6	17
17.67	0.30	0.29	97	0	0	" 40°	"	6	20
18.90	1.23	1.18	96	.12	0.10	" 61°	"	6	8
20.42	1.52	1.40	92	0	0	" 50°	"	7	8
21.95	1.53	1.37	90	0	0	" 10	"	7	8
22.20	0.25	0.13	52	0	0	" 90°	"	7	
24.08	1.88	0.97	52	.32	0.17	" 35°	"	7	15
25.91	1.83	1.10	60	.19	0.10	" 46°	"	7	20
27.43	1.52	0.95	62	.14	0.09	" 50°	"	7	15
27.58	0.15	0.11	73	0	0	" 50°	"	7	
27.74	0.16	0.06	38	0	0	" 50°	"	7	
29.26	1.52	0.87	57	0	0	" 45°	"	7	8
29.57	0.31	0.22	71	.11	0.35	" 40°	"	6	8
30.48	0.91	0.85	93	.51	0.56	" 30°	"	5-6	15
31.32	0.84	0.65	65	.44	0.52	" 47°	"	6	10
32.31	0.99	0.74	75	.54	0.55	" 55°	HARDER ANDASITE	6	10
32.92	0.61	0.57	93	.31	0.51	MIN ZONE 42°	ANDASITE	7	10
34.44	1.52	1.32	87	.69	0.45	FRAGILE 45°	"	7	15
35.66	1.22	0.78	64	.35	0.29	" 45°	"	7	8
35.80	0.14	0.09	64	0	0	" 55°	"	7	
38.70	2.90	1.80	62	.77	0.27	FRAGILE 30°	"	3-7	15
41.15	2.45	1.81	74	.62	0.25	" 40°	"	4-8	15
41.78	0.64	0.48	79	.46	0.75	FRAGILE 45°	"	6-7	8
44.81	3.03	2.75	90	1.67	0.55	MIN ZONE 50°	"	4-7	12
46.71	1.90	1.61	85	1.17	0.62	MIN FRACTURE 45°	"	4-7	8
47.85	1.14	0.96	84	.61	0.54	FRAGILE 50°	"	4-7	20
50.90	3.05	2.77	70	1.01	0.33	" 60°	"	5	20
51.83	0.93	0.86	92	.52	0.56	" 45°	RHYODACITE	6	12

Box 1

Box 2

Box 3

Box 4

Box 5

Box 6

Box 7

Box 8

Box 9

Box 10

AURUM GEOLOGICAL CONSULTANTS INC.

CORE QUALITY LOG

Property: *CRAFT PASS* Core Size: *NR* Date: *SEPT 19 89* Hole No. *G-89-2*
 Coords: Az/Dip: */90°* Logger: *G. SMITH* Page 2 of 3

From To	Int. (m)	Core Rec'd	% Rec'y	RQD Rec'y	RQD	Struc.	Lith'y Unit	1 - 10 SOFT HARDNESS	FRACTURES/m
53.95	2.12	1.95	92	1.29	0.61	RTZ VERT 45°	RHYODACITE	5-6	10
57.00	3.05	2.64	87	1.25	0.41	FRACTURE 60°	ANDESITE	6	12
57.10	0.10	0.10	100	0	0	" 33°	"	6	-
60.05	2.95	2.80	95	1.87	0.63	" 47°	"	7	10
62.83	2.78	2.11	76	1.16	0.42	MIN FRAC 42°	"	7	10
63.09	0.26	0.15	58	0	0	?	"	6	0
66.14	3.05	2.55	84	1.01	0.33	FRACTURE 45°	"	6-4	20
67.26	1.12	1.00	89	0.22	0.20	" 50°	"	4-6	0
69.19	1.93	1.73	90	1.11	0.58	" 45°	"	6	15
72.24	3.05	2.59	85	1.32	0.43	" 38°	RHYODACITE	4	20-00
72.60	0.36	0.29	81	0.11	0.31	" 42°	"	4	20
75.29	2.69	2.18	81	0.11	0.41	" 55°	ANDESITE	4-7	20
77.77	2.48	1.96	79	0.85	0.34	" 45°	"	7	20
78.33	0.56	0.41	73	0.09	0.16	" 52°	"	7	15
81.38	3.05	2.61	86	0.93	0.30	" 47°	"	7	20
83.18	1.80	1.50	83	0	0	" 50°	"	7	0
84.43	1.25	1.00	80	0.20	0.16	" 40°	"	7	0
87.48	3.05	2.51	82	1.17	0.38	" 45°	"	6-7	20-15
88.64	1.16	0.89	77	0.24	0.21	" 45°	"	7	10
90.53	1.89	1.44	76	0.34	0.18	" 42°	"	7	20
93.57	3.04	2.25	74	0.30	0.10	" 54°	"	7	0
96.62	3.05	2.65	87	0.60	0.20	" 42°	"	6	0
98.56	1.94	1.43	74	0.09	0.05	" 43°	"	6	0
99.57	1.11	0.82	74	0.22	0.10	" 50°	PORPHYRIC ANDESITE	5	0
102.72	3.05	2.53	83	1.17	0.38	" 47°	"	5	20
103.42	0.70	0.57	81	0.13	0.19	" 42°	ANDESITE	5	0
105.77	2.35	1.46	62	0.24	0.10	" 45°	"	7	0-20
108.81	3.04	2.12	70	0.45	0.15	" 45°	RHYODACITE	5	0
111.86	3.05	2.60	85	1.03	0.34	" 45°	ANDESITE	5	15
114.41	2.55	2.19	86	0.75	0.29	" 45°	"	6	20
114.91	0.50	0.43	86	0	0	" 45°	RTZ-FELDSPAR POR	7	0
117.96	3.05	2.70	89	1.52	0.50	" 45°	"	7	15
119.49	1.53	0.80	52	0.47	0.31	" 50°	"	7	0
121.01	1.52	0.79	52	0	0	" 45°	"	7	0
124.05	3.04	2.26	75	0.20	0.07	" 45°	"	7	0
124.51	0.45	0.37	80	0	0	" 40°	"	7	0

Box 11
Box 12
Box 13
Box 14
Box 15
Box 16
Box 17
Box 18
Box 19
Box 20
Box 21
Box 22
Box 23
Box 24

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Au (PPB)	Ag (PPM)	Cu (PPM)
3.05	10.61			<u>ANDESITE (cont)</u>							
				10.41 - 10.61							
				HONEY CLAY ALTERED							
				- OFF WHITE TO LIGHT GREY PARTY CLAY							
				COMPRISSES 80% OF ROCK							
				- 1% TOURMALINE FILLED FRACTURES AVG							
				WIDTH 1mm							
				- PYRITE 10% AS ISOLATED BLENDS AVG							
				2 mm DIAMETER AND AS REMORIALIZED PLATES							
				COATING FRACTURE PLANE 045°							
10.61	31.10			<u>ANDESITE</u>							
				SILICIFIED / SEMICRYSTAL / K-FELDSPAR ALTERED							
				- FINE GRAINED LIGHT GREEN IN COLOR							
				- COLOR RANGES TO OFF ORANGE/BROWN WITH INCREASE							
				IN K-FELDSPAR CONTENT							
				- ROCK HIGHLY FRACTURED 5% AND OBTAIN ROCK							
				- TOURMALINE OCCURS AS FINE GRAINED BLACK							
				IN FILLING OF FRACTURES AVG WIDTH .5cm							
				± 3% OF ROCK							
				± TRACE CHALCOPYRITE OCCURS AS ISOLATED							
				BLENDS 2mm IN DIAMETER CONCENTRATED							
				ADJACENT TOURMALINE FILLED FRACTURES							
				- CHALCOPYRITE ALSO OCCURS IN FILLING < .5mm							
				DISCONTINUOUS FRACTURES (TRACE AMOUNTS)							
				- FRACTURES RANGE FROM 010- 070° ±							
				DOMINANT ANGLE OF BOTH MINERALIZATION AND							
				MINERALIZATION FRACTURES 045°							
				MINERALIZATION AND ALTERATION AS FOLIOLE 0							

Interval		Rec'y %	ROD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Ag (PPB)	Ag (PPM)	Cu (PPM)
10.61	31.10			ANDESITE CONT SILICIFIED / SERICITIZED (K-FELDSPAR ADHESION)							
				11.52 - 12.50	205981	10.67	12.19	1.52	15	0.4	2570
				- HIGHLY K-FELDSPAR ALTERED ANDESITE - 15% TOURMALINE FILLED FRACTURES RANGING FROM <1mm TO 4mm IN WIDTH => FINE GRAINED BLACK TOURMALINE - BRECCIATED AND TOURMALINE FILLED FRACTURE W/ 50% TOURMALINE SUPPORTING ANGULAR CLASTS OF ALT ANDESITE 1mm - 1cm IN DIAMETER (5% OF ROCK) - .5% CHALCOPYRITE OCCURRING AS ISOLATED PEBBLES .5cm TO 1mm IN DIAMETER - .5% CHALCOPYRITE OCCURRING AS INFILLING IN .5mm FRACTURES 045°	205982	12.19	13.71	1.52	43	0.6	4873
				13.50 - 13.90	205983	13.71	15.24	1.53	17	0.3	2118
				FINE GRAINED PYRITE 1% OF ROCK - OCCURS AS ISOLATED PEBBLES .1mm TO 1mm - .5% CHALCOPYRITE OCCURRING AS ISOLATED PEBBLES AND .5mm INFILLING OF FRACTURES 045°	205984	15.24	16.77	1.53	<5	0.3	151
					205985	16.77	18.29	1.52	<5	0.2	201
				18.90 - 21.60	205986	18.29	19.81	1.52	6	0.1	795
				CONG BLOBBY AND BROKEN - FRACTURES 15% OF ROCK 010° - 045° - MINOR WHITE CLAYEY CLAY ON FRACTURE SURFACES	205987	19.81	21.33	1.52	6	<0.1	873
					205988	21.33	22.86	1.53	21	0.3	2933
					205989	22.86	24.38	1.52	32	0.4	4050

Interval		Recy %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		A ₁ (PPM)	A ₂ (PPM)	Ca (PPM)
10.61	31.10			<u>ANDESITE (cont)</u> <u>SILICIFIED / SERICITIZED / K-FELDSPAR MATRIX</u>							
				25.56 - 26.70	205990	24.38	25.91	1.53	16	0.4	4255
				HIGHLY TOURMALINE / K-FELDSPAR ALTERED ANDESITE - 10% TOURMALINE FILLED FRACTURES 045° - 5% GREEN / PINK K-FELDSPAR ADJACENT TOURMALINE FILLED FRACTURES - 2% QZ / CALCITE VEINLETS 1mm - 5mm WIDTH CROSS CUTTING TOURMALINE FILLED FRACTURE 010° - .5% CHALCOPYRITE OCCURRING AS MASS AND 2mm STRINGERS ASSOCIATED TO BOTH QZ / CALCITE AND TOURMALINE FILLED FRACTURES.	205991	25.91	27.43	1.52	64	0.6	7951
				28.00 - 30.50	205992	27.43	28.96	1.53	8	0.2	1765
				CORE BROKEN AND BLIND	205993	28.96	30.48	1.52	13	0.3	2885
				28.30 - 31.10	205994	30.48	32.00	1.52	19	0.4	2786
				HIGHLY TOURMALINE / K-FELDSPAR ALT ANDESITE - AS 25.56 - 26.70							
31.10	32.39			<u>HORN-BLENDE ANDESITE</u> - ROCK DARK GREEN / GRAY IN COLOR - FINE GRAINED MATRIX - 5% CHALCOPYRITE ALTERED HORN-BLENDE PHENOCRYSTS < 1mm AVG LENGTH < 1mm - 1.5cm LENGTH - SILICIFIED / QZ rich 75% OF ROCK - CALCITE COATINGS ON FRACTURE SURFACES 1% 010 - 035° - TRACE DISSEMINATED CHALCOPYRITE							

Interval		Recy %	ROD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Au (PPB)	Ag (PPM)	Cu (PPM)
32.39	51.00			ANDESITE SILICIFIED / SERICITIZED / K-FELDSPAR ALTERED - AS 10.61 - 31.10 ALTERATION AND MINERALIZATION AS FOLLOWS 32.39 - 33.80 205995 32.00 33.53 1.53 18 0.3 4441 205996 33.53 35.05 1.52 9 0.1 2327 HIGHLY K-FELDSPAR / TOURMALINE ALTERED ANDESITE - 85% FRESH / PINK COARSE K-FELDSPAR CRYSTALS - 15% BLACK / FINE GRAINED TOURMALINE INFILLING FRACTURES - MINOR BRECCIATION ASSOCIATED W TOURMALINE FILLED FRACTURES (5% OF ROCK) ⇒ MATRIX OF FINE GRAINED TOURMALINE SUPPORTING 1mm - 1cm ANGULAR CLASTS OF ALTERED ANDESITE - FRACTURES 015 - 050° DOMINANTLY 045° 10% CHALCOPYRITE OCCURS AS BLEBS < 1mm TO 1mm IN DIAMETER AND AS FRACTURE FILINGS < 1mm IN WIDTH CONCENTRATED IN TOURMALINE 34.44 - 34.77 HIGHLY K-FELDSPAR / TOURMALINE ALTERED ANDESITE - AS 32.39 - 33.80 36.40 - 38.00 205997 35.05 36.58 1.53 9 0.2 1273 205998 36.58 38.10 1.52 6 0.2 1346 CORE BROKEN AND IN SECTIONS GRIND - HIGHLY FRACTURED (10% OF ROCK) - CLAY COATINGS ON FRACTURE SURFACES ⇒ POWDERY / BRUIE ⇒ SLICKENSLIDES @ 080° ON 015° FRACTURE PLANE 205999 38.10 39.62 1.52 17 0.3 3720 206000 39.62 41.14 1.52 8 0.2 2539 - FELDSPAR MODERATELY CLAY ALTERED - TRACE CHALCOPYRITE							

Interval		Rec'y %	ROD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Au (PPB)	Ag (PPM)	Cu (PPM)
32.39	51.00			ANDESITE (CONT) SILICIFIED (SERICITIZED) (K-FELDSPAR ALTERED)							
				41.76 - 45.63	206001	41.15	42.67	1.52	10	0.9	2173
				HIGHLY K-FELDSPAR / TOURMALINE ALTERED ANDESITE	206002	42.67	44.20	1.53	17	0.3	3618
				- AS 32.39 - 33.80	206003	44.20	45.72	1.52	18	0.4	2716
				- BRECCIATION MORE DOMINANT AT 10% OF ROCK							
				- BRECCIATED ZONES UP TO 5cm WIDE ⇒ 1mm TO 1cm ANGULAR FRAGMENT OF ALTERED ANDESITE IN TOURMALINE							
				- 1% CHALCOPYRITE							
				45.63 - 49.47	206004	45.72	47.24	1.52	18	0.3	2625
				CONG. HIGHLY FRACTURED AND BROKEN / IN SECTIONS	206005	47.24	48.77	1.53	<5	<0.1	358
				GROUND	206006	48.77	50.29	1.52	19	0.2	1693
				- AS 36.40 - 38.00							
51.00	54.17			RHYODACITE	206007	50.29	51.82	1.52	11	0.2	733
					206008	51.82	53.34	1.52	35	0.2	2375
				- LIGHT BEIGE / FINE GRAINED MATRIX	206009	53.34	54.86	1.52	44	0.9	8010
				- 5% 1mm QTZ BTGS							
				- ROCK MODERATELY CALICIOUS W MINOR CALCITE ON FRACTURES (1%)							
				- ROCK IS SOFT (EASILY SCRATCHED W KNIFE) AND MODERATELY CLAY ALTERED							
				- 35% OF ROCK TOURMALINE FILLED FRACTURES							
				- 1.5% CHALCOPYRITE OCCURS AS DISSEMINATED BLENDS < 1mm IN WIDTH AND < 1mm WIDE FRINGS							
				FILINGS CONCENTRATED IN TOURMALINE							
				- FRACTURES AT/DOMINANTLY CH5-050°							
				- CONTACTS BRECCIATED / IRREGULAR							

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Au (PPB)	Ag (PPM)	Cu (PPM)
54.17	65.4			ANDESITE							
				SILICIFIED / SORCITIZED / K-FELDSPAR ADHESION	206010	57.86	56.39	1.53	10	<0.1	742
				- ROCK BRACCIATIONS W/ DARTING/BLACK TOMINGING	206011	56.39	57.91	1.52	9	0.1	350
				FILLED FRACTURES SUPPORTING 1mm TO 2cm	206012	57.91	59.44	1.53	104	1.0	5048
				ANGULAR FRAGMENTS OF WHITE / CLAY ALTERED							
				ROCK							
				- FILLED FRACTURES 10% OF ROCK OFF ^o							
				- 2% CRACK CUTTING OR / CALITE VARIANTS							
				010° W/ CLAY ON FRACTURE SURFACES AND							
				SLICKENLIDES AT 080°							
				- 5% CHALCOPYRITE AS ISOLATED BLENDS CLINICAL							
				DANEFEL							
				59.61 - 59.90	206013	59.44	60.96	1.52	66	0.9	3745
				- 95% BLEACH / FINE OBTAINED TOMINGING							
				- 1% CHALCOPYRITE AS BLENDS	206014	60.96	62.48	1.52	43	0.7	677
					206015	62.48	64.01	1.53	12	0.8	3260
65.14	66.84			RHYODACITE	206016	64.01	65.53	1.52	28	0.8	3100
				- AS 51.00-54.17							
66.84	70.85			ANDESITE	206017	65.53	67.05	1.52	10	0.5	240
				- AS 54.17-65.14	206018	67.05	68.58	1.53	31	1.0	4712
					206019	68.58	70.10	1.52	33	1.2	9127
70.15	74.09			RHYODACITE	206020	70.10	71.63	1.53	40	0.8	4080
				- AS 51.00-54.17	206021	71.63	73.15	1.52	45	0.6	289

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Au (PPB)	Ag (PPM)	Cu (PPM)
74.09	99.21			ANDESITE SILICIFIED / SERICITIZED / K-FELDSPAR ALTERED - AS 10.61 - 31.10							
				ALTERATION AND MINERALIZATION AS FOLLOWS							
				74.09 - 74.31	206022	73.15	74.67	1.52	42	0.8	6122
				HIGHLY TOURMALINE / K-FELDSPAR ALTERED ANDESITE - FINE GRAINED BLACK TOURMALINE FILLED FRACTURES 90% OF ROCK - TOURMALINE SUPPORTS BRECCIATED FRAGMENTS OF FRESH / PINK K-FELDSPAR 1mm - 1cm - 2% CHALCOPRITE AS DREBS AND DISCONTINUOUS VENEETS							
				74.31 - 78.35	206023	74.67	76.20	1.53	36	0.5	2520
				BRECCIATED / CLAY ALTERED ALTERED ANDESITE - AS ABOVE WITH MORE INTENSE BRECCIATION AND CLAY ALTERATION OF FELDSPAR FRAGMENTS - PROMINANT FRACTURE ANGLES 040 - 050° - 1% CROSS CUTTING QTZ / CALCITE VENEETS - <1% DISSEMINATED CHALCOPRITE AS DREBS	206024	76.20	77.72	1.52	10	0.4	2101
				78.35 - 78.50	206025	77.72	79.25	1.53	57	0.8	7415
				HIGHLY TOURMALINE / K-FELDSPAR ALTERED ANDESITE - AS 74.09 - 74.31	206026	79.25	80.77	1.52	67	0.8	5657
				82.10 - 85.05	206027	80.77	82.29	1.52	52	0.7	5980
				CONE HIGHLY BROKEN	206028	82.29	83.82	1.53	20	0.5	1943
					206029	83.82	85.34	1.52	34	0.5	2462
					206030	85.34	86.87	1.53	91	0.6	1934
					206031	86.87	88.39	1.52	17	0.2	1083
					206032	88.39	89.91	1.52	15	0.1	482
					206033	89.91	91.44	1.53	<5	<0.1	101
					206034	91.44	92.96	1.52	<5	<0.1	126
					206035	92.96	94.49	1.52	<5	0.2	137

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Au (PPB)	Ag (PPM)	Cu (PPM)
99.21	102.52			PORPHYRITIC ANDESITE	206036	99.49	96.01	1.52	7	0.2	109
				- MATRIX BLACK / FINE GRAINED	206037	96.01	97.54	1.53	<5	0.1	112
				- 10% CHLORITE ALTERED AURITE PHENACITIS	206038	97.54	99.06	1.52	<5	0.1	218
				1mm - 5cm							
				- 1% QUARTZ EYES	206039	99.06	100.59	1.53	<5	<0.1	127
				- 2% CLAY COATED FRACTURES	206040	100.59	102.11	1.52	18	0.1	2060
				⇒ RED BROWN / GREASY / EXTREMELY SOFT							
				⇒ GREEN / EARTH							
				⇒ 040°							
				- 1% QZ / CALCITE FRACTURES							
				⇒ CROSS CUTTING ABOVE AT 010°							
				- TRACE (<0.5%) CHALCOPRITE DISSEMINATED							
				AS <1mm BLASS.							
102.52	105.46			ANDESITE	206041	102.11	103.63	1.52	<5	0.2	363
				SILICIFIED (SERICITIZED) / K-FELDSPAR ALTERED	206042	103.63	105.16	1.53	9	0.2	2314
				AS 10.61 - 31.10							
105.46	107.95			TRHYODACITE	206043	105.16	106.68	1.52	51	0.4	3106
				AS 51.00 - 54.17	206044	106.68	107.21	1.53	42	0.6	5009
107.95	111.00			ANDESITE	206045	108.21	109.73	1.52	<5	<0.1	501
				- SILICIFIED	206046	109.73	111.25	1.52	<5	<0.1	298
				- MINOR SERICITIZATION							
				- MINOR K-FELDSPAR ALTERATION							
				- DARK GRAY / FINE GRAINED							
				2% FRACTURES 040-050°							
				⇒ BLUE/GRAY CLAY on FRACTURE SURFACES							
				1% CROSS CUTTING QZ / CALCITE VEINLETS 010°							
				- 5% PYRITE AS BRASSY CLUSC OCCURRING IN							
				VEINLETS 040-045° <1mm - 1mm WIDE							
				- TRACE CHALCOPRITE AS <1mm BLASS							
				ASSOCIATED = PYRITE							

Interval		Recy %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Au (PPB)	Ag (PPM)	Cu (PPM)
111.00	113.95			<u>Andesite</u>							
				SILICIFIED / SERICITIZED / K-FELDSPAR ALTERED	206047	111.25	112.78	1.53	9	0.2	1752
				- 30% TOURMALINE FILLED FRACTURES	206048	112.78	114.30	1.52	34	1.3	5673
				- 30% FRESH / PINK K-FELDSPAR GLAZES							
				- 1% CHALCOPYRITE AS BLASS CONCENTRATIONS							
				IN TOURMALINE							
				ROCK = GREY / GREEN - PINK DEPENDANT							
				ON RELATIVE AMOUNT OF FELDSPAR							
				- FINE GRAINED							
113.95	133.20			<u>QTZ / FELDSPAR PORPHYRY</u>	206049	114.30	115.83	1.53	<5	0.8	806
					206050	115.83	117.35	1.52	25	0.9	1648
				- VERY LIGHT GRAY / GRAY GREEN	206076	117.35	118.87	1.52	8	0.7	922
				- 5% CLAY ALTERED FELDSPAR PHENOCRYSTS	206077	118.87	120.40	1.53	<5	0.6	242
				- SILICIFIED / MINOR SERICITE ALTERATION	206078	120.40	121.92	1.52	5	0.6	708
				- 5% QTZ / CALITE VEINLETS 1mm TO 2cm							
				WIDE 010 - 020°							
				- 2% CLAY FILLED FRACTURES							
				- WHITE / POWDERY							
				- MINOR DISSMINATED INITE							
				- TRACE DISSMINATED CHALCOPYRITE							
				- CORE HIGHLY FRACTURED AND BROKEN							
				122.43 - 122.94	206079	121.92	123.45	1.53	14	0.7	1276
				- CORE GRAIND 190% CLAY							
				- MINOR 1cm FRAGMENTS OF PORPHYRY IN CLAY							
				- FAULT ZONE							
					206080	123.45	124.97	1.52	5	0.6	558
					206081	124.97	126.49	1.52	<5	0.6	225
					206082	126.49	128.02	1.53	<5	0.5	422
				<u>EOH 133.20 meters (437')</u>	206083	128.02	129.54	1.52	10	0.7	739
					206084	129.54	131.06	1.52	<5	0.6	472
					206085	131.06	132.59	1.53	<5	0.5	73
					206086	132.59	133.20	0.61	<5	0.5	104
							EOH				

.67
89
x|.67
1.90 | 1

AURUM GEOLOGICAL CONSULTANTS INC.							CORE QUALITY LOG			
Property: <i>GNAT PASS</i>		Core Size: <i>NQ</i>		Date: <i>SEPT 21 89</i>		Hole No. <i>C 89-3</i>				
Coords:		Az/Dip: <i>/90°</i>		Logger: <i>L. Smith</i>		Page <i>1</i> of <i>1</i>				
From To	Int. (m)	Core Rec'd	% Rec'y	RQD Rec'y	RQD	Struc.	Lith'y Unit	SOFT HARD Hardness	FRACTURES/mm	
0.00										
13.41	0	0	0	0	0					
14.33	0.92	0.51	55	0	0	Fracture 45°	ARKOSE	4	0	
17.37	3.04	1.90	62	0.67	.22	42°	"	4	0	
19.12	1.75	1.13	65	0.09	.07	45°	"	5	0	
20.42	1.30	0.84	65	0.45	.35	Calcite filled frac 020°	"	4	0	
23.47	3.05	1.76	58	0.94	.31	Bedding 020°	"	5-4	0	
25.67	2.20	1.79	81	1.00	.45	Fracture 47°	"	4-3	20	
26.52	0.35	0.69	81	0.22	.26	" 45°	"	4-3	20	
29.57	3.05	2.30	75	1.55	.51	Calcite filled frac 55°	"	4	15	
30.81	1.24	1.24	100	0.32	.26	Fracture 45°	"	4	15	
32.61	1.80	1.80	100	0.64	.36	" 59°	"	4	15	
35.66	3.05	2.62	86	1.23	.40	Bedding 035°	"	4-5	15	
35.94	0.28	0.28	100	0.28	1.0	Fracture 065°	"	5		
38.71	2.77	2.77	100	2.51	0.9	Bedding 033°	"	5	3	
41.56	2.85	2.85	100	2.47		Fracture 050°	SPHALERITE	5	5	
41.76	0.20	0.20	100	0.20	.87	Frac 060°	"	4		
44.81	3.05	2.41	79	1.14	.37	Calcite filled fracture 010°	"	3	10	
46.85	2.04	1.85	91	1.35	.66	SPY filled fracture 040°	"	3	12	
47.85	1.00	0.91	91	0.66	.66	Calcite filled fracture 040°	ORICHLA	5	6	
50.90	3.05	2.82	92	1.66	.54	Fracture 45°	"	5	10	
52.20	1.30	1.23	95	0.93	.72	" 15°	"	5	5	
53.95	1.75	1.66	95	1.38	.79	" 20°	"	6	7	
57.00	3.05	2.68	88	0.33	.11	" 65°	ANDESITE	7	0	
60.05	3.05	2.48	81	1.02	.33	" 45°	"	7	20	
61.69	1.64	1.40	85	0.63	.41	" 45°	"	7	15	
63.09	1.40	1.20	86	0.80	.57	" 35°	"	7	10	
66.14	3.05	2.84	93	1.88	.62	" 67°	"	7	12	
67.23	1.09	0.94	86	0.63	.58	" 50°	"	7	15	
69.19	1.96	1.70	87	1.08	.55	" 42°	"	7	15	
72.24	3.05	2.85	93	1.37	.45	" 40°	"	7	6	
75.29	3.05	2.88	94	1.40	.46	" 50°	"	7	6	
77.07	1.78	1.49	84	1.04	.58	" 45°	"	7	20	
78.33	1.26	0.97	77	0.41	.33	" 45°	"	7	6	
81.33	3.05	2.28	75	0.90	.30	Calcite filled fracture 020°	"	7-4	20	
82.80	1.22	1.06	87	0.62	.51	TOURMALINE filled frac. 45°	"	7-8	0	
84.43	1.83	1.60	87	0.87	.48	" 40°	"	4-3	0	
FOH1				84.43m						

AURUM GEOLOGICAL CONSULTANTS INC.

DIAMOND DRILL LOG

HOLE No. G-89-3

Page 1 of 5

Property		Coordinates		Dip Tests		Advance		Depth		Date Collared		Date Completed	
GNAT Pass		NTS 104 I SW		NONE						SEPT 19 th 1989		SEPT 20 th	
Claim		Elevation		Azimuth		Length		Dip					
TRUST		1309m				84.43m		090°					
Purposes TEST EXTENSION OF MINERALIZATION N/E OF OLD DRILL HOLES													
Drilled by INTEREX LONGHEAR 38										Assays by		Logged by G. SMITH	
Interval		Recy %	ROD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS				
From	To					From	To		Au (PPB)	Ag (PPM)	Cu (PPM)		
0.00	13.41			OVERBULDER - NO RETURN									
13.41	38.46			ARKOSE - LIGHT GREY / MEDIUM GRAINED - 5% FELDSPAR GRAINS ⇒ AVE DIAMETER 1mm - 2% DISSEMINATED PYRITE OCCURRING AS BIRCHY WELL FORMED CUBES - SLIGHTLY CARBONACEOUS ⇒ CALCITE FILLED FRACTURE AVE 3% OF ROCK AND .5cm IN WIDTH 045° - NUMEROUS CLAY RICH AND CLAY FILLED FRACTURE ZONES ⇒ CLAY DARK TO LIGHT GREY / GREASY FROM 13.41 - 19.25 ROCK HIGHLY BROKEN / BLOCKY / WEATHERED ⇒ FRACTURE SURFACES RUST COATED - 2% GRAPHITIC RICH ARKOSE ⇒ GRAPHITE 15%	206151	13.41	14.93	1.52	<5	0.5	20		
					206152	14.93	16.46	1.53	<5	0.4	19		
					206153	16.46	17.99	1.52	<5	0.6	16		
					206154	17.99	19.51	1.53	<5	0.8	20		
					206155	19.51	21.03	1.52	<5	0.7	23		
					206156	21.03	22.55	1.52	11	1.1	23		
				23.48 - 24.33 CLAY RICH ARKOSE	206157	22.55	24.08	1.53	11	1.3	51		
				- ROCK SIMILAR TO MAJORITY OF ARKOSE EXCEPT 70% GREY CLAY - ZONE GRAY AND CRUMBLY	206158	24.08	25.60	1.52	<5	1.1	14		
					206159	25.60	27.13	1.53	<5	1.2	26		
					206160	27.13	28.65	1.52	<5	0.8	29		
					206161	28.65	30.17	1.52	<5	0.8	52		
				33.07 BEDDING IN ARKOSE 035°	206162	30.17	31.70	1.53	<5	0.7	39		
				- ALTERNATING LIGHT FINE GRAINED LAYERS AND DARK GREY LAYERS ⇒ COARSE FELDSPAR GRAINS	206163	31.70	33.22	1.52	<5	0.4	48		
				- AVE WIDTH 3cm	206164	33.22	34.75	1.53	<5	0.5	24		
				- CONTACTS GRADATIONAL	206165	34.75	36.27	1.52	<5	0.5	33		

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Au (PPB)	Ag (PPM)	Cu (PPM)
				36.35	206166	36.27	37.79	1.52	<5	0.4	25
				BEDDING IN ANKHOE 033°							
				- ALTERNATING LIGHT GREY FINE GRAINED LAYERS AND DARK GREY LAYERS WITH COARSE KALOSATI GRAINS							
				- AVG WIDTH 3cm							
				- CONTACTS GRADATIONAL							
3846	47.13			GRAPHITIC SILTSTONE	206167	37.79	39.32	1.53	6	0.3	79
				BLACK / FINE GRAINED SILTSTONE	206168	39.32	40.84	1.52	11	0.5	176
				- MINOR CONGLOMERATE 10%	206169	40.84	42.37	1.53	10	1.0	178
				⇒ GRAPHITIC MATRIX	206170	42.37	43.89	1.52	10	0.8	386
				1m - 1cm SUB-ROUNDED FRAGMENTS OF ANKHOE AND SILTSTONE COMPOSE 40%	206171	43.89	45.41	1.52	9	1.0	213
				- MINOR ANKHOE 10%							
				- 1% GRAPHITE BANDS 1mm - 1cm WIDE							
				- 1% CLAY FILLED FRACTURES							
				- TRACE DISSEMINATED WHITE AS <1mm BRASSY CUBES							
				46.30 - 46.94	206172	45.41	46.94	1.53	17	1.7	5115
				2-3% CALCOPHILITE AS DISSEMINATED BLAINS / FRACTURE FILLING VEINLETS							
				VEINLETS <1mm - 2mm WIDE							
				020°							

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		A _u (PPB)	A _g (PPM)	C _a (PPM)
47.13	53.19			ORCATED SILTSTONE / ALTERED ANDESITE	206173	48.44	48.46	1.52	43	1.7	8549
				- FAULT CONTACT ZONE	206174	48.46	49.99	1.53	184	0.8	732
				80% ANGULAR FRAGMENTS 1mm - 1.5cm in length	206175	49.99	51.51	1.52	123	0.7	704
				=> 60% SILTSTONE / MINOR ANDESITE	206176	51.51	53.04	1.53	50	0.6	626
				40% ALTERED ANDESITE							
				=> % OF ANDESITE INCREASES WITH DEPTH IN ZONE							
				10% TOURMALINE AS INFILLING IN FRACTURES							
				=> VERY FINE GRAINED / SLAVE							
				2% K-FELDSPAR AS HALOS TO TOURMALINE							
				FILLED FRACTURES							
				<1% CHALCOPRITE OCCURRING AS ELONGATED BEARS							
				CONCENTRATED IN TOURMALINE							
				1% CALCITE AS COATINGS ON FRACTURE SURFACES							
				=> WIDTH < 1mm TO .5mm							
				=> 010-020° CROSSCUTTING TOURMALINE							
				1% CLAY							
				=> GRAY / GREASY							
				=> OCCURRING AS FILLINGS IN FRACTURES 020-050°							
				=> SLICKEN SLIDES 080° DEVELOPED IN CLAY							
				=> MORE ABUNDANT AT TOP OF ZONE							
53.19	62.58			<u>ANDESITE</u>	206177	53.04	54.56	1.52	15	0.5	364
					206178	54.56	56.08	1.52	7	0.8	935
				- GREY TO LIGHT GREEN	206179	56.08	57.61	1.53	<5	0.3	842
				- FINELY CRYSTALLINE	206180	57.61	59.13	1.52	8	0.3	695
				- GENERALLY HARD / HIGHLY FRACTURED AND BROWN	206181	59.13	60.66	1.53	8	0.3	245
				- FINE GRAINED QTZ / VERTICALLY 90°							
				- 5% K-FELDSPAR AS FINE PINK GRAINS / FINE GRAINED							
				- 2% TOURMALINE AS INFILLING OF FRACTURES							
				=> < 1mm TO 3cm WIDE							
				=> 040-050°							
				± TRACE CHALCOPRITE OCCURRING AS ISOLATED BEARS							
				<1mm in length USUALLY CONCENTRATED IN TOURMALINE							
				- MINOR (1%) CALCITE VEINLETS 010-030°							

Interval		Rec'y %	ROD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Au (PPM)	Ag (PPM)	Cu (PPM)
53.19	62.58			ANDESITE (CONT) ALTERATION AND MINERALIZATION AS FOLLOWS 59.00 - 60.50 SILICIFIED / CLAY ALTERED - LIGHT GREEN TO WHITE / FINE GRAINED 70% FINE GRAINED QTZ / SERICITE 20% CLAY ALTERED K-FELDSPAR ⇒ MEDIUM GRAINED K-FELDSPAR .5cm - 1.5cm NOW HIGHLY ALTERED TO WHITE / POWDERY CLAY 5% DISSEMINATED PYRITE ⇒ OCCURRING AS BRASSY WELL FORMED CLUSTERS AUG. WIDTH .1mm - ROCK HIGHLY FRACTURED AND IN PLACES BROKEN AND BRANNED - 2% TOURMALINE AS STOCK WORK OF FINEST FOLLOWS LOCALLY ZONE BRASSY DISSEMINATED WITH TOURMALINE CEMENTING 1mm - 1cm ANGULAR FRAGMENTS OF ALTERED ANDESITE	206182	62.66	62.19	1.52	9	0.2	148
62.58	63.78			<u>PORPHYRITIC ANDESITE</u> 95% WHITE TO LIGHT GREEN FINE GRAINED / FINEST CRYSTALS & AVG. LENGTH <1mm SERICITE / CHLORITE ⇒ MINOR FINE GRAINED QTZ - ROCK SOFT / EASILY SCRATCHED W/ KNIFE 5% FINE GRAINED 1mm PHENOCRYSTS OF HIGHLY CHLORITIZED HORNBLENDE ⇒ CRYSTALS SOFT AND CONTACTS W/ MATRIX IRREGULAR - ROCK NOT HIGHLY FRACTURED - <1% PYRITE AS FINELY DISSEMINATED <1mm BRASSY CLUSTERS	206183	62.18	63.70	1.52	<5	0.3	90

Interval		Recy %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Au (PPB)	Ag (PPM)	Cu (PPM)
6378	8443			ANDESITE!							
				- AS 53.19 - 62.58	206184	63.70	65.23	1.53	6	0.3	113
				ALTERATION AND MINERALIZATION AS FOLLOWS:	206185	65.23	66.75	1.52	15	0.3	180
					206186	66.75	68.28	1.53	13	0.3	123
				79.04 - 83.63	206187	68.28	69.80	1.52	15	0.4	109
				SILICIFIED / CLAY ALTERED	206188	69.80	71.32	1.52	19	0.4	1327
				- AS 59.00 TO 60.50	206189	71.32	72.85	1.53	55	0.5	2863
				82.30 - 82.66	206190	72.85	74.37	1.52	35	0.6	3080
				BAGCIATED	206191	74.37	75.90	1.53	43	0.5	1969
				80% CALCITE VEINS CONTAINING ANGULAR FRAGMENTS	206192	75.90	77.42	1.52	28	0.4	1791
				.5cm - 1.5cm OF ALTERED ANDESITE	206193	77.42	78.94	1.52	53	0.3	2510
				=> CALCITE FRAGS FROM FINE GRAINED / MEDIUM TO .5cm SUBHEDRAL DOGTOOTH CRYSTALS IN VUGS							
				=> ORIENTATION OF VEINS DOMINANTLY 010-020	206194	78.94	80.47	1.53	18	0.3	1998
				82.60	206195	80.47	81.99	1.52	30	0.3	2422
				FELDSPAR PORPHYRY DYKE?	206196	81.99	83.52	1.53	24	0.3	2770
				1.5 cm wide / 015°							
				70% CLAY ALTERED FELDSPAR PHENOCRYSTS							
				30% FINE GRAINED QTZ MATRIX							
				1% PITITE AS FINELY DISSEMINATED < 1mm DIAMETER LENSES							
				.5% CHALCOPHYRITE AS ELONGATED BLEBS CONCENTRATED ALONG FRACTURES AVG LENGTH 1mm							
				83.63 - 84.43	206197	83.52	84.43	0.91	34	0.3	2632
				SILICIFIED / SERICITIZED K-FELSIAN ALTERED ANDESITE							
				AS 53.19 TO 62.58							
				- WITH .3% CHALCOPHYRITE AS ELONGATED BLEBS CONCENTRATED ALONG FRACTURES							
				EOH 84.43							

AURUM GEOLOGICAL CONSULTANTS INC.

CORE QUALITY LOG

Property: *GRANT PASS* Core Size: *2 1/2* Date: *SEPT* Hole No. *G-27-4*
 Coords: Az/Dip: *190°* Logger: *G. SMITH* Page 1 of 3

From To	Int. (m)	Core Rec'd	% Rec'y	RQD Rec'y	RQD	Struc.	Lith'y Unit	1 - 10 SOFT HARDNESS	10 - 100 HARDNESS	FRACTURES/m
0.00										
12.19	0	0	0	0	—	—	—	—	—	—
14.33	2.14	0.80	37	0	0	FRACTURE 45°	ARGOSE	6		∞
17.37	3.04	2.24	74	0.72	0.24	" 50°	"	6		∞
18.25	0.88	0.64	73	0.24	0.27	" 52°	"	6		∞
20.42	2.17	1.59	73	1.21	0.56	BEDDING 030°	"	6		20
23.47	3.05	2.78	91	1.27	0.72	BEDDING 045°	"	6		20
23.92	0.45	0.32	71	0.10	0.22	FRACTURE 10°	"	6		∞
26.52	2.60	1.83	70	0.82	0.32	FRACTURE 45°	"	6		∞
29.31	2.79	2.66	95	1.93	0.69	" 42°	"	6		15
29.57	0.26	0.26	100	0.26	1.00	" 40°	"	6		—
32.61	3.04	2.93	96	2.20	0.72	BEDDING 031°	GRAPHIC SLICING	6		5
34.58	1.97	1.87	95	1.47	0.75	FRACTURE 40°	"	6-4		15
35.66	1.08	1.02	94	0.34	0.31	GRAPHIC SLICING 010°	"	4		20
38.71	3.05	2.50	82	1.94	0.64	CALCITE COATED FRAC 040°	"	6		12
39.99	1.28	1.05	82	0.42	0.33	FRACTURE 045°	"	7		13
41.76	1.77	1.20	69	0	0	GRAPHIC SLICING 010°	"	5		∞
44.81	3.05	2.24	73	0.96	0.31	FRACTURE 040°	"	5		∞
47.85	3.04	2.25	74	0.84	0.28	FRACTURE 040°	"	5		20-30
50.29	2.44	1.92	79	0.67	0.27	" 050°	"	5		20-20
50.90	0.61	0.48	79	0.48	0.79	FRACTURE 050°	"	5		10
53.95	3.05	2.55	84	1.67	0.55	BEDDING 024°	"	5		20
55.76	1.81	1.19	66	0.31	0.17	GRAPHIC COATED FRAC 040°	CONGLOMERATE	7		∞
57.00	1.24	0.82	66	0.11	0.09	GRAPHIC COATED FRAC 010°	"	2		∞
60.05	3.05	1.59	52	0.35	0.11	" 020°	SILTSTONE	4		∞
61.53	1.45	1.29	89	0.52	0.36	" 015°	"	4		10
63.09	1.59	1.42	89	0.78	0.49	CALCITE VENEER 040°	ARGONITE	5		10
66.14	3.05	2.87	97	2.42	0.79	FRACTURE 045°	"	6		7
67.05	0.91	0.82	90	0.56	0.62	CALCITE COATED FRAC 040°	"	6		6
69.19	2.14	1.92	90	1.53	0.71	GRAPHIC COATED FRAC 005°	"	6		7
72.24	3.05	2.66	87	1.09	0.36	FRACTURE 045°	"	6		11
72.75	0.51	0.47	92	0.44	0.86	" 045°	"	6		6
75.29	2.54	2.37	93	0.95	0.37	" 040°	"	6		∞
77.93	2.64	2.37	90	1.62	0.62	CALCITE VENEER 008°	"	7		10
78.33	0.40	0.36	90	0.26	0.65	CALCITE COATED FRAC 0100°	"	8		5
81.38	3.05	2.91	95	2.28	0.75	FRACTURE 040°	"	8		7
83.90	2.52	1.88	75	1.20	0.48	FRACTURE 040°	ARGONITE	8		10
84.43	0.53	0.53	100	0.53	1.00	" 045°	"	8		6
87.48	3.05	3.05	100	1.62	0.53	GRAPHIC COATED FRAC 010°	"	8		10
88.08	1.60	1.52	95	0.80	0.50	CALCITE COATED FRAC 010°	"	8		10

AURUM GEOLOGICAL CONSULTANTS INC.

CORE QUALITY LOG

Property: *GNAT PASS*

Core Size: *NQ*

Date:

Hole No. *G-89-4*

Coords:

Az/Dip: *190°*

Logger: *G Smith*

Page *2 of 3*

From To	Int. (m)	Core Rec'd	% Rec'y	RQD Rec'y	RQD	Struc.	Lith'y Unit	SOFT HARDNESS	FRAC. /mm
90.53	1.45	1.25	86	0.83	0.57	FRAC. 035°	ANDESITE	8	15
93.57	3.04	3.04	100	2.64	0.87	TORNADOE RILL FRAC 048°	"	8	5
94.83	1.26	1.26	100	1.24	0.98	TORNADOE RILL FRAC 040°	"	8	5
96.62	1.79	1.79	100	1.37	0.77	CALCITE VENTURE 010°	"	8	5
99.67	3.05	2.95	97	2.07	0.68	" 020°	"	8	10
100.33	0.66	0.66	100	0.34	0.52	FRAC. 45°	"	8	13
102.72	2.39	2.39	100	1.36	0.57	TORNADOE RILL FRAC 040°	"	7	9
105.77	3.05	2.42	79	1.59	0.52	" 040°	"	7	10
106.18	0.41	0.40	98	0.20	0.49	FRAC. 245°	"	7	10
108.81	2.63	2.55	97	1.53	0.58	CALCITE VENTURE 010°	"	7	10
111.55	2.74	2.65	97	1.52	0.55	" 015°	"	7	10
111.86	0.31	0.30	97	0	0	" 020°	"	7	-
114.91	3.05	2.42	80	1.55	0.51	" 045°	"	7	10
116.93	2.02	1.96	87	0.99	0.49	" 010-045°	"	7	10
117.96	1.03	1.00	97	0.81	0.79	TORNADOE RILL FRAC 040°	"	7	5
121.01	3.05	3.05	100	2.48	0.81	" 045°	"	7-8	5
122.50	1.49	1.49	100	0.86	0.58	" 040°	"	8	7
124.05	1.55	1.55	100	1.36	0.88	CONCORD FILL 010	"	7	7
127.10	3.05	3.05	100	2.00	0.66	TORNADOE RILL FRAC 040°	"	7	15
127.97	0.87	0.87	100	0.68	0.78	" 010-040°	"	7	10
130.15	2.18	2.18	100	1.70	0.78	CALCITE VENTURE 040	"	8-7	5
133.20	3.05	2.90	95	1.74	0.57	" 030	"	7	7
133.89	0.59	0.57	97	0.52	0.88	" 010-040	"	8	3
136.25	2.46	2.40	98	1.70	0.69	TORNADOE RILL FRAC 050°	"	7	5
139.29	3.04	2.77	91	1.61	0.53	FRAC. 040	"	8	10-5
139.68	0.39	0.39	100	0.39	1.00	" 040	"	8	-
142.34	2.66	2.66	100	1.87	0.70	" 040	"	7	10-15
145.16	2.82	2.72	96	1.54	0.55	TORNADOE RILL FRAC 040°	"	7	10
145.39	0.23	0.22	96	0	0	CALCITE VENTURE 010°	"	7	-
148.44	3.05	2.84	93	1.74	0.57	TORNADOE RILL FRAC 045°	"	4-7	15-10
149.31	1.87	1.87	100	1.74	0.93	" 050°	"	7	5
151.49	1.18	1.18	100	0.85	0.72	" 060°	"	7-8	5
154.53	3.04	3.04	100	2.86	0.94	CALCITE VENTURE RILL FRAC 050°	"	7-8	5
155.92	1.39	1.39	100	0.96	0.69	CALCITE VENTURE 020°	"	7-8	5
157.58	1.66	1.66	100	1.45	0.87	TORNADOE RILL FRAC 060°	"	7	4
160.63	3.05	3.05	100	1.90	0.62	FRAC. 042°	"	6-7	7
161.35	0.72	0.72	100	0.35	0.79	CALCITE VENTURE RILL FRAC 040°	"	6-7	7
163.68	2.33	2.33	100	1.82	0.78	TORNADOE RILL FRAC 040°	"	6	5
166.73	3.05	3.05	100	2.26	0.74	" 045°	"	6-7	5
167.29	0.56	0.56	100	0.34	0.61	FRAC. 025°	"	6	5

AURUM GEOLOGICAL CONSULTANTS INC.

CORE QUALITY LOG

Property: GWAT PASS Core Size: NR Date: SEPT Hole No. G-89-4
 Coords: Az/Dip: 190° Logger: G SMITH Page 3 of 3

From To	Int. (m)	Core Rec'd	% Rec'y	RQD Rec'y	RQD	Struc.	Lith'y Unit	1 - 10 SOFT HARDNESS	FRACTURES/m
29 169.77	2.48	2.48	100	2.22	0.90	Fracture 45°	Andesite	5	6
172.82	3.05	3.05	100	2.11	0.69	Tourmaline Filled Frac 50°	"	5	8
172.97	0.15	0.15	100	0.12	0.80	" 55°	"	5	-
30 175.87	2.80	2.80	100	1.60	0.57	Fracture 40°	"	5-6	10
178.62	2.75	2.67	97	1.68	0.61	Tourmaline Filled Frac 010°	"	5	15
31 178.92	0.30	0.30	100	0.30	1.0	" 42°	"	5	-
181.97	3.05	3.05	100	2.68	0.88	" 42°	"	5	4
184.24	2.27	2.27	100	1.62	0.71	Calcite / Iron Veinlet 010°	"	3-4	5
32 185.01	0.77	0.77	100	0.69	0.90	Tourmaline Filled Frac 040°	"	5-4	2
188.06	3.05	3.05	100	2.78	0.91	Calcite Veinlets 25°	"	5-7	4
189.68	1.62	1.62	100	1.27	0.78	Tourmaline Filled Frac 45°	"	7-5	5
33 191.11	1.43	1.43	100	1.04	0.73	Fracture 42°	"	7	7
194.16	3.05	3.05	100	2.17	0.71	Calcite / Iron Veinlet 010°	"	6-7	10
194.92	0.76	0.76	100	0.61	0.80	" 010°	"	7	10
34 197.21	2.29	2.26	99	0.88	0.38	Tourmaline Filled Frac 045°	"	6	20-20
199.16	1.95	1.95	100	0.36	0.18	Calcite Veinlet Fracture 035°	"	5-2	20
35 200.25	1.09	1.09	100	0.53	0.49	Fracture 040°	"	5	20
203.30	3.05	2.77	91	1.46	0.48	Calcite Veinlets Veinlet 040°	"	5	20
204.17	0.87	0.63	72	0.33	0.38	" 010°	"	7-4	15
36 206.35	2.18	1.58	73	0.82	0.38	Calcite 020°	"	7-4	15
209.40	3.05	2.22	73	0.87	0.29	" 010°	"	7-4	20
207.83	0.43	0.40	93	0.12	0.28	Tourmaline Filled Frac 045°	"	6-4	20
37 212.45	2.62	2.43	93	1.33	0.51	" 040°	"	5-4	20
215.26	2.81	2.36	84	1.13	0.40	Calcite Veinlet Fracture 010°	"	5-4	20
38 215.49	0.23	0.19	83	0	0	Tourmaline Filled Frac 42°	"	5-4	-
217.93	2.44	1.28	53	0.30	0.12	" 040°	"	5-4	20

EOH 217.93m (715ft)

AURUM GEOLOGICAL CONSULTANTS INC.

DIAMOND DRILL LOG

HOLE No. G-89-4

Page 1 of 20

Property		Coordinates		Dip Tests		Advance		Depth		Date Collared		Date Completed	
GNAT PASS		NTS 104 I SW		Claim Title		Elevation 1297m		Azimuth		Length 217.93m		Dip 90°	
Purposes				TEST EXTENSION OF MINERALIZATION NE OF OLD DRILL HOLE LOCATIONS				Drilled by		Assays by		Logged by	
								INTERIM		B. G. CLARK		G. SMITH	
Interval		Rec'y %	ROD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS				
From	To					From	To		Au (PPB)	Ag (PPM)	Cu (PPM)		
0.00	12.80			OVERBURDEN - NO RETURN									
12.80	32.65			ARKOSE	206201	12.80	14.33	1.53	12	0.8		23	
				- LIGHT GREY / MEDIUM GRAINED 25% FELDSPAR GRAINS => AVE DIAMETER 1mm	206202	14.33	15.85	1.52	8	0.3		12	
				- 1-2% DISSEMINATED ANHITE OCCURRING AS MASSIVE WELL FORMED CUBES < .5mm AVE DIAMETER	206203	15.85	17.37	1.52	9	0.1		16	
				- SLIGHTLY CALCAREOUS & CALCITE FILLED FRACTURES AVE 1% OF ROCK AND .5cm IN WIDTH 010-045°	206204	17.37	18.90	1.53	<5	<0.1		11	
				- CLAY RICH AND CLAY FILLED FRACTURES 20% OR ABOUT FORM 2%	206205	18.90	20.42	1.52	6	0.4		16	
				=> CLAY DARK GREY TO BLACK / HEAVY	206206	20.42	21.94	1.52	<5	0.3		14	
				- MINOR SILTSTONE AND GRAPHIC SILTSTONE BEDS < 5%	206207	21.94	23.47	1.53	7	0.3		15	
				- MINOR CONGLOMERATE < 5% => 50% SUBMINDED CLAST OF FELDSPATIC SANDSTONE / SILTSTONE 5/100 => AVE CLAST DIAMETER 1cm => MATRIX BLACK / FINE GRAINED / GRAPHIC => 10% FELDSPAR GRAINS AVE DIAMETER .5cm	206208	23.47	24.99	1.52	9	0.4		19	
				- WEATHERED / MUSTY FRACTURING TO 17.50	206209	24.99	26.52	1.53	8	0.2		14	
					206210	26.52	28.04	1.52	<5	0.4		15	
					206211	28.04	29.57	1.53	<5	0.3		11	
					206212	29.57	31.09	1.52	<5	0.2		11	
					206213	31.09	32.61	1.52	<5	0.2		15	

Interval		Recy %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Au (PPB)	Ag (PPM)	Cu (PPM)
55.85	63.26			GRAPHITIC SILTSTONE - AS 32.65 - 53.27	206229	55.47	57.00	1.53	13	1.2	85
					206230	57.00	58.52	1.52	24	1.6	73
					206231	58.52	60.05	1.53	23	1.3	39
					206232	60.05	61.57	1.52	31	1.5	72
63.26	83.17			DISSEMINATED AMPHIBE / ANDESITE - FAULT CONTACT ZONE - ROCK HIGHLY FRACTURED (45°) AND BROKEN - ZONE 80% FINE GRAINED LIGHT GREEN AMPHIBE => SILICIFIED / SERICITIZED K-FELDSPAR AMPHIBE 40% HORNBLAND AMPHIBE AND SILTSTONE - CONTACTS GENERALLY SHARP OFTEN ASSOCIATED WITH CALCITE / QZ VEINLETS - CALCITE / QZ 80/20 VEINLETS 10% OF ZONE => OCCUR ALONG CONTACTS AND CROSS CUTTING FRAGMENTS OF BOTH ANDESITE AND AMPHIBE / SILTSTONE - PERCENTAGE OF ANDESITE IN ZONE INCREASES WITH DEPTH 5% OF ZONE ASSOCIATED WITH ENCLAVES EMERGING CARRIED ALONG CONTACTS 10% FRACTURED, < 1cm (1/4" MAX) OR ENCLAVES SURFACES 0.1-0.2cm - SILICIFIED AT 80° NOTED ON CLAY AVG WIDTH .5cm	206233	61.57	63.09	1.52	41	1.3	2327
					206234	63.09	64.62	1.53	32	0.3	5392
					206235	64.62	66.14	1.52	88	<0.1	1345
					206236	66.14	67.67	1.53	8	<0.1	477
					206237	67.67	69.19	1.52	12	<0.1	844
					206238	69.19	70.71	1.52	16	<0.1	704
					206239	70.71	72.24	1.53	18	0.1	644
					206240	72.24	73.76	1.52	41	<0.1	619
					206241	73.76	75.29	1.53	10	0.5	2315
					206242	75.29	76.81	1.52	75	<0.1	612
					206243	76.81	78.33	1.52	27	<0.1	340
					206244	78.33	79.85	1.52	19	<0.1	151
					206245	79.85	81.38	1.53	6	<0.1	482
					206246	81.38	82.90	1.52	<5	<0.1	487
83.17	186.4			<u>ANDESITE</u> - FINE GRAINED LIGHT GREEN IN COLOR - ROCK COMPLETELY ALTERED TO FINE GRAINED QUARTZ / SERICITE 80/20 - SECONDARY K-FELDSPAR REMAINS FROM 5-80% OF ROCK (AVG 20%) ROCK PINN WITH 75% K-FELDSPAR - ROCK HIGHLY FRACTURED WITH FRACTURES AMOUNTING TO 10-15% - BLACK / FINE GRAINED TOURMALINE FILLS 50% OF FRACTURES AVG WIDTH <.5cm - FRACTURES RANGE FROM 010 TO 080° WITH DOMINANT FRACTURE ANGLE OF 040° FOR BOTH MINERALIZED AND UNMINERALIZED FRACTURES - MINOR CHALCOPHOSITE OCCURS AS ISOLATED BLENDS .5cm AND INFILLING DISCONTINUOUS <.5cm FRAGMENTS							

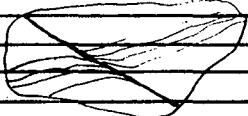
Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Au (PPB)	Ag (PPM)	Cu (PPM)
83.17	186H			ANDESITE (cont)							
				- CHALCOPYRITE 1-1.5% OF ROCK							
				- CHALCOPYRITE MINERALIZATION CONCENTRATED IN TOURMALINE FILLED FRACTURES							
				- 1% BRANCHED QZ / CALCITE VEINETS 1mm/1cm Avg 010°							
				MINERALIZATION AND ALTERATION AS FOLLOWS:							
				83.17 - 90.88	206247	82.90	84.43	1.53	21	1.1	5426
				.5% CHALCOPYRITE AS ISOLATED AREAS AND	206248	84.43	85.95	1.52	23	0.4	3509
				< 1mm STOCK WORK VEINETS	206249	85.95	87.48	1.53	20	< 0.1	2510
				- STOCK WORK (0.25%) SPORADICALLY DEVELOPED	206250	87.48	89.00	1.52	13	< 0.1	2204
				OVER ZONE	206251	89.00	90.53	1.53	7	0.5	6972
				- CHALCOPYRITE VEINETS GRADE TO QZ / CALCITE							
				VEINETS WITH MINOR CHALCOPYRITE							
				- DOMINANT ANGLE 010°							
				84.42							
				TRACE CUPRITE OCCURS WITH CHALCOPYRITE							
				- 1.5cm DIAMETER BLEB OF CHALCOPYRITE							
				CONTAINS 15% METALIC / CRIMSON / PEARLY CUPRITE							
				SPORADICALLY DISTRIBUTED AS 1mm CRYSTALS							
				- MINOR TOURMALINE ASSOCIATED							
				90.88 - 94.91	206252	90.53	92.05	1.52	11	< 0.1	1648
				- TOURMALINE STOCK WORK OF FILLED FRACTURES	206253	92.05	93.57	1.52	28	< 0.1	5615
				10% OF ROCK	206254	93.57	95.09	1.52	< 5	0.2	2288
				- 2.5% CHALCOPYRITE OCCURRING AS AREAS							
				CONCENTRATED IN TOURMALINE	206255	95.09	96.62	1.53	6	< 0.1	1941
				- ROCK HIGHLY K-FELDSPAR ALTHOUGH 20% OR MORE	206256	96.62	98.14	1.52	< 5	< 0.1	709
				FRESH / PINK MEDIUM GRAINED CRYSTALLINE FELDSPAR	206257	98.14	99.67	1.53	6	< 0.1	1458

Interval		Recy %	ROD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Ag (PPB)	Ag (PPM)	Ca (PPM)
83.17	186.14			ANDESITE (cont)							
				100.33 - 104.58	206258	99.67	101.19	1.52	14	<0.1	2686
				- 10% of rock mineralized fractures	206259	101.19	102.72	1.53	6	<0.1	3330
				- AVG WIDTH 1mm	206260	102.72	104.24	1.52	22	<0.1	3170
				- PROBABLY 040 - 045°							
				FRACTURE FILLED WITH TOURMALINE 50%							
				CALCITE 30%							
				QTZ 15%							
				CHALCOPRITE 5% ^{TRACED}							
				- FRACTURES ARE DISCONTINUOUS							
				- MINERALOGY OF FRACTURE FILLING VARIABLE							
				WITHIN FRACTURE FROM TOURMALINE / CHALCOPRITE							
				TO CALCITE / QTZ / CHALCOPRITE							
				104.58 - 105.42	206261	104.24	105.77	1.53	12	0.3	2480
				BRACILIA							
				- ALTERED ANDESITE FRAGMENTS (AVG SIZE 1cm)							
				- CEMENTED BY SERICITE / CHLORITE							
				- FINE GRAINED LIGHT TO DARK GREEN							
				- SOFT							
				- FRAGMENTS 60% OF ROCK							
				- FRAGMENT ALSO CEMENTED LOCALLY WITH							
				CALCITE 5% OF ROCK							
				- 5% BRACILIATED TOURMALINE FILLED							
				FRACTURES							
				- 5% PINK / FLASH K-FELDSPAR ASSOCIATED							
				W TOURMALINE FILLED FRACTURES							

Interval		Rec'y %	ROD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Au (PPB)	Ag (PPM)	Cu (PPM)
83.17	184.14			ANDESITE (CONT)							
				114.00 - 115.76	206267	113.39	114.91	1.52	22	<0.1	5578
				- HIGHLY SILICIFIED / K-FELDSPAR ALTERED	206268	114.91	116.43	1.52	21	<0.1	3067
				- 15% CALCITE / QTZ FILLED FRACTURES AVE WIDTH 1mm							
				- 1% CHALCOPYRITE AS ELONGATED BEADS ALONG FRACTURES							
				- MINOR BIFERATION WITH CALCITE / QTZ CEMENTATION 1cm ANGULAR FRAGMENT OF ALTERED ANDESITE (5% OF ZONE)							
				116.90 - 118.86	206269	116.43	117.96	1.53	6	0.2	4047
				- HIGHLY SILICIFIED / K-FELDSPAR ALTERED							
				- 15% TOURMALINE FILLED FRACTURES 040-045°							
				- 2% CHALCOPYRITE CONCENTRATED IN TOURMALINE AS <1mm TO 1cm BEADS							
				- 5% CALCITE / QTZ FILLED FRACTURE CROSS-CUTTING TOURMALINE AT 010°							
				118.86 - 119.10	206270	117.96	119.48	1.52	14	<0.1	3971
				- HIGHLY SILICIFIED 85% QTZ							
				- FINE GRAINED / DARK GRAY / BRITTLE							
				10% CALCITE / QTZ STUCK WORK	206271	119.48	121.01	1.53	6	<0.1	1013
				1.5% CHALCOPYRITE AS ELONGATED BEADS	206272	121.01	122.53	1.52	<5	<0.1	941
				IN FRACTURES WITHIN STUCKWORK	206273	122.53	124.05	1.52	8	<0.1	1517
				5% K-FELDSPAR FINE 1µm GRANS AS HALOS TO FRACTURES							

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		A _u (PPB)	A _g (PPM)	C _a (PPM)
83.17	106.14			ANDESITE (cont)							
				124.38 - 125.98	206274	124.05	125.58	1.53	125	0.1	7960
				HIGHLY SILICIFIED / K-FELDSPAR ALTERED / SERICITIZATION	206275	125.58	127.10	1.52	6	<0.1	1777
				- 40% FINE GRAINED QTZ w/ 5% SERICITE							
				- LIGHT ORANGE							
				- 30% PINK FINE GRAINED FELDSPAR <small>CONCENTRATED AS HALOS AROUND TOURMALINE FRAGMENTS</small>							
				- 20% TOURMALINE FILLED FRACTURES AS							
				STOCKWORK PREDOMINANTLY 040°-045° AVE WIDTH 1mm							
				- 5% CALCITE / QTZ ASSOCIATED WITH							
				TOURMALINE FILLED FRACTURES \Rightarrow MINERALOGY							
				OF INFILLINGS VARIABLE WITHIN FROM TOURMALINE /							
				CHALCOPRITE TO TOURMALINE / CALCITE / QTZ							
				- MINOR CHLORITE ALTERATION OF TOURMALINE							
				ASSOCIATED WITH INCREASE IN CALCITE / QTZ							
				- CHALCOPRITE 2% AS ELONGATED BLENDS IN							
				TOURMALINE AND INFILLING 1mm WIDE 4cm LONG DISCONTINUOUS FRAGMENTS							
				- 2% CROSS CUTTING (010°) CALCITE / QTZ VEINLETS <small>ASSOC w/ STOCKWORK</small>							
				127.63	206276	127.10	128.63	1.53	<5	<0.1	1919
				4cm TOURMALINE FILLED FRACTURE 045°							
				- K-FELDSPAR ALTERATION HALO 1.5cm on							
				BOTH SIDES							
				- 5% CHALCOPRITE							
				NOTE: 2mm CROSS CUTTING CALCITE / QTZ							
				VEINLET 010°							
				NO CHALCOPRITE VISIBLE IN VEINLET							
				128.01 - 129.01							
				HIGHLY SILICIFIED / K-FELDSPAR ALTERED							
				PINK FINE GRAINED / DARK GREEN - PINK / HARD							
				- 20% STOCKWORK OF 1mm CALCITE / QTZ VEINLETS							
				w/ ASSOCIATED K-FELDSPAR HALOS FOR 1.5mm EITHER							
				SIDE							
				- 2% TOURMALINE FILLED FRACTURES CROSS CUT BY							

Interval		Rec'y %	ROD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Au (PPM)	Ag (PPM)	Cu (PPM)
83.17	186.14			ANDESITE (cont)							
				139.56 - 140.72	206284	139.29	140.82	1.53	<5	<0.1	818
				HIGHLY ALTERED ZONE							
				40% K-FELDSPAR AS PINK HALOS ADJACENT							
				.1mm FRAGMENTS 040°							
				40% BLACK / DARK BROWN CHLORITE / SERICITE							
				ALTERED ANDESITE AS ELONGATED FRAGMENTS							
				TO FRACTURES (SWFT)							
				10% ISOLATED 1mm FELDSPAR GRAINS IN MATRIX							
				5% CALCITE 1072 (95/5) VEINLETS CROSSCUTTING							
				FABRIC OF K-FELDSPAR / CHLORITE ALTERATION							
				.5% CHALCOPYRITE OCCURRING AS ELONGATED							
				BLEBS IN BOTH K-FELDSPAR ALTERED FRAGMENTS							
				AND CALCITE 1072 VEINLETS							
				142.27 - 143.41	206285	140.82	142.34	1.52	<5	<0.1	2360
				BRAGLIA	206286	142.34	143.87	1.53	7	0.2	1623
				30% TOURMALINE FILLED FRACTURES 045°	206287	143.87	145.39	1.52	6	<0.1	2189
				60% SILICIFIED / SERICIFIED / K-FELDSPAR							
				ALTERED ANDESITE AS ANGULAR FRAGMENTS							
				CEMENTED BY TOURMALINE							
				2-3% CHALCOPYRITE AS ISOLATED ELONGATED							
				BLEBS IN TOURMALINE AND AS BLEBS IN							
				ANDESITE FRAGMENTS ARE WIDTH OF CHALCOPYRITE							
				BLEBS 15mm LENGTH /cm							
				NOTE: K-FELDSPAR ALTERATION AS FINE							
				GRAINED CRYSTALS THROUGHOUT ALTERED							
				ANDESITE FRAGMENTS. NO WELL DEVELOPED							
				K-FELDSPAR HALOS ADJACENT TOURMALINE							
				FILLED FRACTURES							
				TOURMALINE MILDLY ALTERED TO CHLORITE (10%)							

Interval		Rec'y %	ROD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Au (PPB)	Ag (PPM)	Cu (PPM)
83.17	186.14			ANDESITE (CONT)							
				146.69 - 147.11	206288	145.39	146.91	1.52	7	<0.1	3260
				ROCK CONSISTS OF ALTERNATING 1mm LAYERS OF LIGHT GREEN SERPENTINE / SERICITE AND DARK GREEN CHLORITE	206289	146.91	148.47	1.53	8	<0.1	5830
				- EXTREMELY SOFT							
				- ORIENTATION OF LAYERS 000° AT TOP OF ZONE IN GRADATION CHANGE TO 040° AT BOTTOM							
				- 10% OF ZONE ANGULAR FRAGMENTS OF ANDESITE COMPLETELY ALTHOUGH TO FRESH 1/PIECE K-FELDSPAR (AVE DIAMETER 2cm)							
				- CHLORITE OCCURS AS FRACTURE FILLERS AND AS BLENDS ALONG THE EDGE OF THE FRAGMENTS ONLY WITHIN K-FELDSPAR (2% OF FRAGMENTS)							
				- TOURMALINE FILLED FRACTURE (AVE WIDTH 1mm)							
				CROSS CUT BANDING IN ROCK AND CONTACTS BETWEEN ROCK AND FRAGMENTS							
				=> BANDING WARPED AND FRACTURES							
				MOVEMENT IS SINISTRAL							
											
				=> CONTACTS IRREGULAR WITH MINOR BIFURCATION ASSOCIATED WITH CUT BY FRACTURES							
				- UPPER CONTACT FROGS UNDETERMINABLE							
				- LOWER CONTACT GRADATIONAL 040° SERPENTINE / SERICITE AND CHLORITE LAYERS BECOME SPATIALLY INTERLAYERED IN ALTERED ANDESITE							

Interval		Recy %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Au (PPB)	Ag (PPM)	Cu (PPM)
83.17	186.14			Androsteite (cont)							
				147.11 - 149.96	206290	148.49	149.96	1.52	<5	<0.1	2750
				HIGHLY SILICIFIED K-FELDSPAR ALTERED / SERICITIZED W TOURMALINE STOCKWORK - AS 124.38 - 125.92	206291	149.96	151.49	1.53	22	<0.1	2173
				151.74 - 152.74	206292	151.79	153.01	1.52	29	<0.1	4075
				HIGHLY K-FELDSPAR ALTERED / SILICIFIED - SERICITIZED W TOURMALINE STOCKWORK - ZONE ALTERNATES FROM GREEN TO PINK WITH INCREASE IN RELATIVE AMOUNT OF K-FELDSPAR - ROCK HARD / BRITTLE - K-FELDSPAR ALTERATION MOST INTENSE IN HALOS ADJACENT TOURMALINE STOCKWORK - K-FELDSPAR 65% OF ZONE - TOURMALINE STOCKWORK 30% - 1.5% CHALCOPRITE AS BUBBLES CONCENTRATED IN TOURMALINE 15% AS ISOLATED BUBBLES AND INCLUSIONS IN 4mm wide <1cm long DISCONTINUOUS FRACTURES ASSOCIATED W STOCKWORK 152.14 2cm TOURMALINE ZONE (WITH 15% CHALCOPRITE) AT 045° CROSS CUT BY 1cm BRECCIA ZONE 010° (NOTE: ANGLES BETWEEN 055°) - BRECCIA CONSISTS OF 2mm FRAGMENTS OF K-FELDSPAR CEMENTED BY QZ / SERICITE / POSSIBLY MINOR CHLORITE. MATRIX HARD / MEDIUM GREEN => DISPLACEMENT OF TOURMALINE 8cm SINISTRAL => EDGE OF TOURMALINE ZONE SMOTHERED ALONG FAULT - 2% CALCITE / QZ AS CEMENT							

Interval		Rec'y %	ROD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Ag (PPB)	Ag (PPM)	Cu (PPM)
83.17	186.14			Andesite (cont)							
				152.74 - 154.19	206293	153.01	154.53	1.52	32	<0.1	3452
				BRACIA ZONE							
				MATRIX 40% FINE ORAINED LIGHT GREEN							
				SPINELITE / QTZ MODERATELY HARD TO HARDLY							
				SCATCHABLE WITH KNIFE							
				- MINORANTS 55% SILICIFIED / SERICITIZED (90/10)							
				MEDIUM GREEN ANDESITE							
				⇒ ANGULAR AVG DIAMETER 4mm							
				- 2% TOURMALINE FILLED FRACTURE <1mm							
				WITH TRACE CHALCOPRITE (<.1% OF ROCK) 045°							
				- 2% FRACTURES CROSSCUTTING ABOVE 010°							
				< 1mm - E MINOR CALCITE AND TRACE							
				CHALCOPRITE (<.1% OF ROCK)							
				- MINOR FRESH / PINK K-FELDSPAR AS HALOS							
				TO TOURMALINE FILLED FRACTURES (5% OF ROCK)							
				154.19 - 154.28							
				HIGHLY K-FELDSPAR ALTERED							
				FRESH / PINK K-FELDSPAR 80% OF ROCK							
				⇒ CONCENTRATED AS HALOS AND FRACTURES							
				- CHALCOPRITE FILLED FRACTURES 2% AS							
				POORLY DEVELOPED STOCKWORK							
				⇒ AVG WIDTH 1mm							
				⇒ MINOR TOURMALINE ASSOC. W CHALCOPRITE							
				IN FRACTURES							
				155.40							
				1cm CALCITE / QTZ VEINLET							
				025°							
				NO VISIBLE CHALCOPRITE ASSOCIATED							

Interval		Recy %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Au (PPB)	Ag (PPM)	Cu (PPM)
83.17	186.14			ANDESITE (CONT)							
				155.86 - 156.08	206294	154.53	156.06	1.53	11	<0.1	4255
				80% FINE GRAINED / BLANK TOURMALINE CRISTALS							
				10% CHALCO PYRIDE AS ELONGATED BLENDS							
				10% CALCIUM ION VEINLETS							
				< 1mm							
				< 7 MINOR AGGREGATION OF TOURMALINE BY FRACTURE .5cm ANGULAR FRAGMENT OF TOURMALINE CEMENTED BY < 1mm VEINLETS							
				156.08 - 158.60	206295	156.06	157.58	1.52	28	<0.1	2557
				HIGHLY K-FELDSPAR ALTERED / SILICIFIED-SERICITIZED							
				W TOURMALINE STROMWOLFE							
				AS 151.74 - 152.74							
				NOTE: CHALCO PYRIDE LESS ABUNDANT							
				AT < 1.0%							
				158.60 - 161.58	206296	157.58	159.11	1.53	41	0.2	3500
				HIGHLY SILICIFIED / K-FELDSPAR ALTERED / SERICITIZED	206297	157.11	160.63	1.52	6	<0.1	2031
				ROCK HARD / BRITTLE ALTERNATING IN COLOR	206298	160.63	162.15	1.52	33	0.2	5923
				FROM LIGHT GREEN TO PINK WITH INCREASE							
				IN RELATIVE AMOUNT OF FELDSPAR.							
				- NOT HIGHLY FRACTURED							
				- TRACE (< .2%) CHALCO PYRIDE AS FRACTURE FILLINGS							
				- ONLY MINOR SERICITIZED							
				- K-FELDSPAR 10-30%							

Interval		Recy %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Au (PPB)	Ag (PPM)	Cu (PPM)
83.7	186.14			ANDESITE (cont)							
				161.58 - 164.77	206299	162.15	163.68	1.53	112	0.3	6492
				HIGHLY SILICIFIED / K-FELDSPAR ALTERED / SERICITIZED - 15% TOURMALINE FILLED FRACTURES ⇒ 15% - 20% OF FRACTURE FILLING	206300	163.68	165.70	1.52	102	0.3	8213
				CHALCOPYRITE OCCURRING UP TO 1.5cm BLANKS	206301	165.20	166.73	1.53	6	<0.1	2431
				TRACE CHALCOPYRITE AS ISOLATED MASS IN HOST RR ESPECIALLY APT TOURMALINE LENSES	206302	166.73	168.25	1.52	24	<0.1	1970
				- 3% CHALCOPYRITE AS ISOLATED MASS IN - K-FELDSPAR ALTERATION CONCENTRATED AS NODULES TO FINGERING 167.85 - 170.95 - AS 161.58 - 164.77	206303	168.25	169.77	1.52	43	<0.1	3809
				170.95 - 171.30	206304	169.77	171.30	1.53	208	<0.1	6943
				80% FINE GRAINED / BLACK CRYSTALLINE TOURMALINE 10% CHALCOPYRITE AS ALONGATED MASS < 1mm TO 1cm DIAMETER REMAINDER FRAGMENTS OF HIGHLY ALTERED ANDESITE 1mm TO 1cm LONG CEMENTED IN TOURMALINE TRACE CALCITE / QTZ AS VORLETS < 1% OF ROCK < 1mm WIDE							
				171.30 - 171.56	206305	171.30	172.82	1.52	31	<0.1	1961
				HIGHT K-FELDSPAR / CLAY ALTERED	206306	172.82	174.35	1.53	34	0.2	3593
				80% K-FELDSPAR M.DLY CLAY ALTERED TO GIVE FAINT / BRICE COLORED APPEARANCE 15% CALCITE / QTZ VORLETS 1/2" - 1.5cm WIDE 010-040° TRACE TOURMALINE AS FRACTURE FILLING	206301	174.35	175.87	1.52	17	<0.1	2083

Interval		Recy %	RCD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		A _u (PPB)	A _u (PPM)	C _u (PPM)
186.78	187.46			ANDESITE AS 83.17 TO 186.14 MINERALIZATION + ALTERATION AS FOLLOWS HIGHLY SILICIFIED / K-FELDSPAR ALTERED - ROCK FINE GRAINED / DARK GREEN - PINK (MANG) - 20% STOICHIOCR OF 1mm CALCITE / QTZ VEINLETS IN ASSOCIATED K-FELDSPAR HALOS FAN. 5mm BITTAN SPAG K-FELDSPAR 30% OF ROCK - 2% TOURMALINE FILLED FRACTURES CROCKOUT BY CALCITE / QTZ - 1% CHALCOPIRITE AS ELONGATED BLISS OCCURRING IN BOTH SETS OF FRACTURES	206315	186.54	188.06	1.52	6	<0.1	885
187.46	188.09			<u>PORPHYRITIC ANDESITE</u> - AS 186.14 - 186.78	206316	188.06	189.59	1.53	12	<0.1	3736
188.09	217.93			<u>ANDESITE</u> - AS 83.17 - 186.14 MINERALIZATION AND ALTERATION AS FOLLOWS: 190.26 - 192.29 HIGHLY SILICIFIED / K-FELDSPAR ALTERED - AS 186.78 TO 187.46 ⇒ WITH .5% CHALCOPIRITE 191.08 2cm TOURMALINE FILLED FRACTURE 040° - 85% TOURMALINE 10% CHALCOPIRITE 5% QTZ - PHYRROXITE AS 5mm FRACTURE FILLINGS 30% OF ROCK PER 2cm ANDES ZONE (040°) - TRACE CHALCOPIRITE IN PHYRROXITE	206317	189.59	191.11	1.52	19	<0.1	3547
					206318	191.11	192.84	1.53	26	0.4	4250

Interval		Rec'y %	ROD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Au (PPB)	Ag (PPM)	Cu (PPM)
188.29	217.73			ANDREITE (cont)							
				192.29 - 194.85	206319	192.84	194.16	1.52	41	0.4	5186
				HIGHLY K-FELDSPAR ALTERED / SILICIFIED							
				186.78 to 187.46							
				⇒ WITH K-FELDSPAR 50% OR MORE							
				194.85 - 195.35							
				195.05 - 195.20	206320	194.16	195.89	1.53	9	0.2	6250
				70% TOURMALINE							
				- BLACK / FINELY CRYSTALLINE							
				10% MAGNETITE DARK GREY 1mm - .5mm							
				BANDS (050°)							
				10% CHALCOPYRITE AS STOCKWORK OF < 1mm							
				VEINLETS							
				⇒ DOMINANT ANGLE 042°							
				⇒ TRACE PYRRHOTITE CONCENTRATED WITH							
				CHALCOPYRITE < 1% OF ZONE							
				5% PYRITE AS GRAY FINE STRAINED BANDS							
				// TO MAGNETITE 1mm TO .5mm IN WIDTH							
				5% QTZ AS SILICIOUS ZONES IN TOURMALINE							
				- REST OF ZONE ⇒ 65% TOURMALINE FILLED							
				CHALCOPYRITE AS STOCKWORK IN SILICIFIED							
				K-FELDSPAR ALTERED ANDREITE							
				⇒ 5% CHALCOPYRITE CONCENTRATED							
				IN TOURMALINE							
				⇒ VERY TRACE AMOUNT OF PYRRHOTITE							
				OCCLUDING WITH CHALCOPYRITE							
					206321	195.89	197.21	1.52	< 5	< 0.1	249
					206322	197.21	198.73	1.52	< 5	< 0.1	202

Interval		Rec'y %	ROD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		As (PPB)	Ag (PPM)	Cu (PPM)
188.21	217.93			ANDESITE (cont)							
				199.82 - 200.86	206323	198.73	200.26	1.53	<5	<0.1	366
				DIFFERENTIATED CRACKLE CEMENT 40% OF ZONE OCCURRING AS VERY FINE GRAINED EARLY TEXTURED CRYSTALS TO SUBMEDIAL .5cm DOGTOOTH CRYSTALS IN VUGS 60% ANGULAR FRAGMENTS OF HIGHLY SERICITIZED ANDESITE ⇒ 1mm TO 2cm IN DIAMETER ⇒ LIGHT GREEN / SOFT NO VISIBLE SULFIDE MINERALIZATION 200.75 2cm DYME SILICIOUS MATRIX LIGHT GREEN WITH GRAINY TEXTURE 60% 40% HIGHLY CLAY ALTERED FELDSPAR PHASE CRYSTS <1mm - .5cm DIAMETER α 040°?							
				200.86 - 217.93	206324	200.26	201.78	1.52	<5	0.3	1987
				FINE GRAINED LIGHT GREEN / SOFT HARD	206325	201.78	203.30	1.52	7	0.3	3349
				- HIGHLY SERICITIZED / SILICIFIED 80%	206326	203.30	204.83	1.53	20	0.3	4010
				- 10% TOURMALINE AS FRAGMENT FILLINGS	206327	204.83	206.35	1.53	6	<0.1	1445
				⇒ LOCALLY CHLORITIZED	206328	206.35	207.87	1.53	6	0.2	4750
				⇒ 1mm - 3cm	206329	207.88	209.40	1.52	<5	<0.1	1084
				ZONE ALTERNATES FROM NOW PORPHYRIC TO	206330	209.40	210.93	1.53	<5	0.2	2462
				CONTAINING 5% PHOSPHORITES SOFT MARC	206331	210.93	212.45	1.52	17	0.9	7538
				AND CONTACTS GRANODIORITE AND ANGRITE	206332	212.45	213.97	1.52	20	0.9	9069
				WIDTH BEFORE CHANGE 30cm	206333	213.97	215.50	1.53	<5	<0.1	1357
				- 5% CALCITE / MINOR Qtz AS VEINLETS 4mm TO .5cm WIDE 010-050°	206334	215.50	217.93	2.43	<5	<0.1	2225
				- 20% WHITE POWDERY CLAY CONCENTRATED ON FRACTURE SURFACES							

Interval		Rec'y %	ROD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Au (PPB)	Ag (PPM)	Cu (PPM)
188.79	217.93			ANDESITE (cont)							
				200.86 - 217.93 (cont)							
				TOURMALINE FRACTURE FILLED LOCALLY INTENSE ENOUGH TO FORM MATRIX OF DRUSELIA							
				>> 1mm - 1.5cm FRAGMENTS OF ALTERED ANDESITE							
				CHALCOPIRITE .3% CONCENTRATED IN FRACTURES							
				212.13 - 212.25							
				90% TOURMALINE							
				5% CHALCOPIRITE							
				5% FINE QTZ							
				207.50							
				.3cm CHALCOPIRITE VEINETS 010°							
				EOH 217.93							

AURUM GEOLOGICAL CONSULTANTS INC.

DIAMOND DRILL LOG

HOLE No. G-87-5

Page 1 of 1

Property <u>GNAT PASS</u>	NTS <u>104 I SW</u>	Claim <u>T10-1</u>	Elevation <u>1280m</u>	Azimuth	Length <u>26.52m</u>	Dip <u>090</u>
Coordinates	Dip Tests <u>none</u>	Advance	Depth	Date Collared <u>SEPT 25TH 1989</u>	Date Completed <u>SEPT 27TH 89</u>	
Purposes		Drilled by <u>Indian</u>		Assays by	Logged by <u>G. SMITH</u>	

Interval		Rec'y %	ROD	DESCRIPTION	Interval		Core Width	Sample No.
From	To				From	To		
0.00	24.99			OVERBURDEN 0.00 - 15.24 - NO RECOVERY 15.24 - 24.99 MONOCLINIC GRANODIORITE (Basaltic)				
24.99	26.52			<u>GRAPHITIC SLISTONE</u> BLACK / FINE GRAINE HIGHLY FRACTURED				

AURUM GEOLOGICAL CONSULTANTS INC.

CORE QUALITY LOG

Property: *GNAT PASS* Core Size: *NO* Date: *00 19* Hole No. *G-89-6*
 Coords: Az/Dip: *250°/45°* Logger: *G. SMITH* Page 1 of 2

From To	Int. (m)	Core Rec'd	% Rec'y	RQD Rec'y	RQD	Struc.	Lith'y Unit	1 - 10 SOFT HARDNESS	HAPO	FRACTURES/mm
0.00										
9.14	9.14	0	0	0	0					
11.28	2.14	0.73	34	0.29	0.14	Fine-grained 040°	Andesite	7		0
14.33	3.05	2.10	69	0.16	0.05	" 045°	"	7-4		0
17.37	3.04	0.81	27	0	0	" 045°	"	6		0
18.31	0.94	0.55	59	0	0	" 040°	"	6		0
20.42	2.11	1.24	59	0.74	0.35	Banding 010°	"	6		20-20
23.47	3.05	2.48	81	0.29	0.10	" 020°	"	5-7		0
26.52	3.05	2.33	76	0.54	0.18	Calcrete veinlets 040°	"	5-7		0
28.90	2.38	2.20	92	1.63	0.68	" 045°	"	5-7		15
29.57	1.48	0.62	42	0.09	0.06	" 040°	"	7		0
32.61	3.04	2.67	88	1.48	0.49	" 045°	"	7		20
33.88	1.27	1.16	91	0.21	0.17	" 010°	"	7		15
35.66	1.78	1.63	92	0.28	0.16	Calcrete zone 040°	"	3		15
38.71	3.05	2.85	93	1.10	0.36	" 040°	"	3-7		20-15
41.76	3.05	2.72	89	0.78	0.26	Calcrete veinlets 030°	"	7		0
42.72	1.96	1.75	89	0	0	" 035°	"	7-5		0
44.81	2.09	0.96	47	0.09	0.04	Fine-grained 045°	"	7		0
47.85	3.04	2.83	93	0.52	0.17	Calcrete filled fracture 040°	"	5-7		0
49.29	1.44	1.30	90	0.28	0.19	" 040°	"	7		0
50.90	1.61	1.45	90	0.49	0.30	" 040°	"	7		0
53.95	3.05	2.77	91	1.53	0.50	Fine-grained 045°	"	5-7		0
55.17	1.22	1.00	82	0.33	0.27	" 045°	"	5		0
57.00	1.83	1.50	82	0.24	0.13	Calcrete veinlets 010°	"	5		0
60.05	3.05	1.80	59	0.30	0.10	Calcrete filled fracture 035°	"	5-7		0
61.45	1.40	1.10	79	0.22	0.16	Calcrete filled fracture 040°	"	5		0
63.09	1.64	1.29	79	0.55	0.34	Fine-grained 045°	"	5		0
66.14	3.05	2.85	93	2.32	0.76	Thin bedded 040°	"	5-8		15
67.12	0.98	0.81	83	0.74	0.76	" 040°	"	8		5
69.19	2.07	1.70	82	0.32	0.15	Calcrete filled fracture 040°	"	8-4		0
72.24	3.05	2.00	66	0.24	0.08	" 010°	"	4		0
73.72	1.48	0.92	62	0	0	" 040°	"	6-4		0
75.29	1.57	0.98	62	0	0	" 010°	"	6-4		0
78.33	3.04	2.40	79	0.15	0.05	" 040°	"	5		0
79.90	1.57	0.96	61	0.38	0.24	" 010°	"	5		0
81.38	1.48	0.91	61	0.30	0.20	" 010°	"	5		0
84.43	3.05	0.80	26	0.16	0.05	Fine-grained 040°	"	5		0
87.48	3.05	1.25	41	0.10	0.03	" 045°	"	5		0
90.53	3.05	1.00	33	0.11	0.04	" 045°	"	5		0
91.57	1.04	0.47	45	0	0	" 010°	"	5		0

AURUM GEOLOGICAL CONSULTANTS INC.

CORE QUALITY LOG

Property: Core Size: ~ 9 Date: Oct 2nd 89 Hole No. G-89-6
 Coords: Az/Dip: 250/45° Logger: G. Smith Page 2 of 2

From To	Int. (m)	Core Rec'd	% Rec'y	RQD Rec'y	RQD	Struc.	Lith'y Unit	SOFT HARD 1 - 10 Hardness	FRACTURES/m
93.57	2.00	0.90	45	0.12	0.06	TOURNAMENT FILLAS FRAC 040'	ANDESITE	5	0
94.62	3.05	1.92	63	0.53	0.17	" 040'	"	5-6	0
98.36	1.74	1.53	88	0.49	0.28	" 040'	"	5-6	0
99.67	1.31	1.15	88	0.25	0.19	FRATTING 040'	"	6	0
102.72	3.05	2.16	71	0.67	0.22	TOURNAMENT FILLAS FRAC 040'	"	5	20-30
104.41	1.69	1.36	80	1.05	0.62	CALCITE VEINLET 040'	"	6	10
105.77	1.36	1.10	81	0.44	0.32	" 040'	"	6	10
108.31	3.04	2.10	69	0.60	0.20	TOURNAMENT FILLAS FRAC 040'	"	6	0
110.78	1.97	1.55	79	0.20	0.10	FRATTING 040'	"	6	0
111.86	1.08	0.85	79	0.11	0.10	" 045'	"	5	0
114.91	3.05	2.73	90	0.21	0.07	" 010'	"	5	0
117.96	3.05	1.65	54	0.13	0.04	" 040'	"	5	0

EOH 117.96m

AURUM GEOLOGICAL CONSULTANTS INC.

DIAMOND DRILL LOG

HOLE No. G-89-6

Page 1 of 11

Interval		Rec'y %	RQD	DESCRIPTION	Interval		Core Width	Sample No.	ANALYTICAL RESULTS		
From	To				From	To			Au	Ag	Cu
0.00	9.14			OVERBURDEN							
9.14	12.85			<p><u>ANDESITE</u></p> <p>- GREY TO LIGHT GREEN IN COLOR</p> <p>- FINE GRAINED</p> <p>- SILICIFIED / SERICITIZED</p> <p>⇒ FINE GRAINED Qtz AND SERICITE COMPRISE 80% OF ROCK IN Qtz/SERICITE RATIO RANGING FROM 8/10 TO 40/60 AVERAGING 70/30</p> <p>5-10% OF ROCK CALCITE / MINOR Qtz VEINLETS</p> <p>⇒ AVG WIDTH 1mm</p> <p>⇒ TWO PREDOMINANT ANGLES 010° AND 040°</p> <p>⇒ LOCALLY INTENSE ENOUGH TO FORM STREAK WORK AND/OR MINOR BRECCIATION OF ALTERED ANDESITE</p> <p><1% TOURMALINE INFILLING FRACTURES</p> <p>⇒ AVG WIDTH <1mm</p> <p>⇒ AVG ANGLE TO C.A. 040°</p> <p><1% CLAY</p> <p>⇒ OCCURS AS COATINGS OF FRACTURE SURFACES</p> <p>⇒ 010 - 050°</p> <p>⇒ GREY / FINEST TO WHITE / POWERY</p> <p><.1% CHALCOPRITE</p> <p>⇒ OCCURS AS ISOLATED BLENDS</p> <p>⇒ AVG LENGTH <1mm</p> <p>MINERALIZATION AND ALTERATION AS FOLLOWS:</p> <p>9.14 - 16.50</p> <p>- RUST ON FRACTURE SURFACES (WEATHERED)</p>	9.14	11.28	2.14	206351			
					11.28	12.85	1.52	206352			

Interval		Rec'y %	ROD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Au	Ag	Cu
9.14	12.85			Amphibole mineralization and alteration (cont): 9.14 - 25.00 - ROCK HIGHLY FRACTURED AND BROKEN - POOR REGULARITY							
12.85	15.85			RTZ - FELDSPAR PORPHYRY LIGHT GREEN / REFINED MAMM 60% - SCRATCHES TO KNIFE - HIGHLY CRYSTALLINE 30% FELDSPAR PHENOCRYSTS - COMPLETELY ALTERED TO WHITE / POWERY CLAY - ELONGATED ALONG WELL DEVELOPED SHEAR FABRIC 020° - AVE WIDTH < .5mm 5% QTZ PHENOCRYSTS - AVE DIMENSION .5mm - FRACTURED / CUT BY SHEAR FABRIC 25% LIMONITE STAINED CLAY ON FRACTURE SURFACES 040°? 2% CALCITE VEINLETS CROSS CUTTING SHEAR FABRIC AT 040° - 1mm AVE WIDTH < 1% WHITE => OCCURS AS < 1mm ISOLATED WELL FORMED BRASSY CLUSTERS < 1% MISC FILLED FRACTURES => < .1mm WIDE => 040° WITH MINOR 010° => CROSS CUT SHEAR FABRIC	206353 206354	12.80 14.33	14.33 15.85	1.53 1.52			

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		As	Ag	Cu
12.85	15.85			QZ - FELDSPAR PORPHYRY (CONT)							
				13.05							
				710 cm CLAY / FAULT ZONE							
				- COMPLETELY BROKEN / VERY POOR RECOVERY							
				90% DARK GRAY / MOIST CLAY							
				10% 1mm TO 1cm FRAGMENTS OF ALTERED QZ							
				FELDSPAR PORPHYRY (AS 12.85 TO 15.85)							
15.85	51.87			<u>ANDSITITE</u>							
				- AS 9.14 - 12.85							
				MINERALIZATION AND ALTERATION AS FOLLOWS:							
				15.85 - 18.22	206355	15.85	17.37	1.52			
				LIGHT GREEN / FINE GRAINED	206356	17.37	18.90	1.53			
				- 1.5% PYRITE							
				⇒ OCCURS AS MASS OF MASSY MALL	206357	18.90	20.42	1.52			
				FORMED FIBRES CONCENTRATED IN	206358	20.42	21.95	1.53			
				FRACTURE 040°	206357	21.95	23.47	1.52			
				- 2% CLAY ON FRACTURE SURFACES	206360	23.47	25.00	1.53			
				⇒ WHITE / POWDERY	206361	25.00	26.52	1.52			
				⇒ ASSOCIATED WITH INCREASE IN PYRITE	206362	26.52	28.04	1.52			
					206363	28.04	29.57	1.53			
				31.30 - 32.05	206364	29.57	32.61	1.53			
				LIGHT GREEN TO LIGHT GRAY							
				- 80% FINE GRAINED SERICITE / QZ 80-20	206365	31.10	32.61	1.51			
				- 10% QZ / CALITE VEINLETS							
				⇒ 040°							
				⇒ UP TO 1.5cm WIDE							
				⇒ QZ 80% OCCURS AT CONTACTS OF VEINLETS							
				AS LIGHT GRAY BAND OF NON-CRYSTALLINE QZ							
				AND AS WHITE CRYSTALLINE QZ WITHIN VEINLETS							
				- 10% STICK WORK OF CALCITE / CLAY COATED							

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Au	Ag	Cu
15.85	51.57			ANDESITE (cont)							
				31.30 - 32.05 (cont)							
				- CALCITE CLAY STOCKWORK							
				⇒ FRACTURES < .1mm							
				⇒ CROSS CUT BY CALCITE VEINLETS							
				⇒ SLICKEN SLIDES NOTED IN CLAY							
				ON FRACTURE PLANE (040) OBS°							
				- < 1% MAFIC FILLED FRACTURES 040°							
				⇒ CROSS CUT BY CALCITE / CLAY STOCKWORK							
				- < .1% CHALCOPYRITE AS ISOLATED BLEBS							
				CONCENTRATED IN MAFIC FILLED FRACTURES							
				33.88 - 37.06	206366	32.61	34.13	1.52			
				OFF WHITE TO LIGHT GREEN / SOFT	206367	34.13	35.66	1.53			
				- 80% SERPENTINE / KING GRANAD 10% FINE MINERAL	206368	35.66	37.18	1.52			
				- 10% SERPENTINE / MAFIC ZONES							
				⇒ ZONE AVG 5cm WIDE	206369	37.18	38.71	1.53			
				80% LIGHT GREEN SERPENTINE							
				= 20% CALCIFIED MAFIC							
				< 1% PYRITE OCCURRING AS BRASSY CUBES CONCENTRATED							
				IN MAFIC							
				2% CHALCOPYRITE OCCURRING AS BLEBS ASSOCIATED							
				W PYRITE IN MAFICS							
				- 15% CLAY							
				- WHITE / POWDERY							
				- SLICKENSLIDES OF FRACTURE SURFACE 075°							
				37.45 - 39.55	206370	38.71	40.23	1.52			
				10% PYRITE AS NEARLY DEVELOPED STOCKWORK IN							
				FRACTURES AVERAGE .1mm / DISCONTINUOUS / BRASSY CUBES	206371	40.23	41.76	1.53			
					206372	41.76	43.29	1.53			
				40.13 - 40.18							
				AS 39.45 TO 39.55							

Interval		Rec'y %	ROD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Au	Ag	Cu
15.85	51.57			ANDESITE (CONT)							
				43.29 - 45.00	206313	43.29	44.81	1.52			
				5% MAFIC PHENOCRYSTS							
				- HIGHLY CHLORITIZED	206314	44.81	46.33	1.52			
				- EDGES IRREGULAR	206315	46.33	47.85	1.52			
				- AVG. 5mm DIAMETER	206316	47.85	49.37	1.52			
					206317	49.37	50.90	1.53			
51.57	51.82			<u>PORPHYRITIC ANDESITE</u>	206318	50.90	52.42	1.52			
				DARK GRAY / FINE GRAINED							
				95% FINE GRAINED QTZ							
				3% BIOTITE PHENOCRYSTS							
				- MIDLY CHLORITE ALTERED							
				- AVG LENGTH .5mm							
				2% CALCITE VEINLETS							
				- 0.30 - 0.50"							
				- 2.5mm WIDE							
				CALCITE VEINLET 1/2mm WIDE							
				=> 0.80"							
				=> WITH SLICENSIDE 045°							
				NOTE: 20cm ABOVE AND BELOW 90% FINE GRAINED SERICITE (ALTERED ANDESITE)							
				MINOR BRACILIATION TO FINE GRAINED							
				SERICITE CEMENTING (mm ANGULAR FRAGMENT OF SILICIFIED (SERICITIZED) ANDESITE							

Interval		Rec'y %	ROD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Au	Ag	Cu
51.82	67.63			<u>ANDRESITE</u>							
				<u>AS 9.14-12.85</u>	206379	52.42	53.95	1.53			
				MINERALIZATION AND ALTERATION AS FOLLOWS:							
				54.57 - 57.90	206380	53.95	55.47	1.52			
				LIGHT GREEN / FINE GRAINED	206381	55.47	57.00	1.52			
				HIGHLY FRACTURED AND BROKEN							
				85% FINE GRAINED QUARTZ / SERICITE							
				5% CALCITE VESICLES 010-040°							
				Avg width 1mm							
				30% MAFIC FILLED FRACTURES							
				=> 040°							
				=> CONTROLLED BY CALCITE VESICLES							
				20% PYRITE							
				=> 4mm BRASSY CLARS							
				=> CONCENTRATED IN MAFICS							
				10% MAFIC PHENOCRYSTS							
				=> HIGHLY CHALCITIZED							
				=> CONTACT IRREGULAR							
				57.76							
				2cm ORGOLIA DYKE							
				- NON-CRYSTALLINE GRAY QTZ 75%							
				- 25% CLAY ALTERED FELDSPAR GRAINS							
				=> ANGULAR							
				=> SUPPORTED BY QTZ							
				=> Avg width .5cm							
				=> WHITE / POWERY							
				- 035°							

Interval		Rec'y %	ROD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Au	Ag	Cu
67.63	70.71			PORPHYRY	206389	67.61	67.19	1.52			
				LIGHT LIME GREEN TO OFF WHITE	206390	69.19	70.71	1.52			
				- SOFT / FINE GRAINED MATRIX SEMI-CRYST (CLAY							
				40% K-FELDSPAR? PHENACRYTES							
				⇒ COMPLETELY CLAY ALTERED							
				⇒ WHITE POWDERY							
				ROCK EXTREMELY BROKEN							
				10% FRACTURES							
				⇒ 010-050°							
				⇒ WHITE / POWDERY CLAY ON FRACTURE SURFACES							
				20% MAFIC FILLED FRACTURES							
				⇒ 010-050°							
				⇒ HIGHLY CHLORITIZED							
70.71	95.81			ANDESITE							
				AS 9.14 - 12.85							
				MINERALIZATION AND ALTERATION AS FOLLOWS:							
				67.63 - 75.19	206391	70.71	72.24	1.53			
				ROCK HIGHLY FRACTURED AND BROKEN	206392	72.24	73.76	1.52			
				5% CLAY	206393	73.76	75.29	1.53			
				⇒ AS FRACTURE COATINGS							
				⇒ WHITE POWDERY							
				75.19 - 77.50	206394	75.29	76.81	1.52			
				ROCK HIGHLY FRACTURED AND BROKEN	206395	76.81	78.33	1.52			
					206396	78.33	79.86	1.53			
				84.10 - 84.43	206397	79.86	81.38	1.52			
				VERY LIGHT GREEN / FINE GRAINED / SOFT							
				95% SEMI-CRYST / MINOR CLAY	206398	81.38	84.43	2.05			
				3% PYRITE							
				⇒ VERY FINELY DISSEMINATED							
				⇒ < .1mm. CRYSTALS	206399	84.43	87.48	2.05			
				2% MAFIC FILLED FRACTURES	206400	87.48	90.53	2.05			
				⇒ WITH CONCENTRATED PYRITE							

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Au	Ag	Cu
70.71	95.81			ANDESITE (CONT)							
				81.00 - 92.25 ROCK HIGHLY FRACTURED AND BROKEN => EXTREMELY POOR RECOVERY							
				92.25 - 95.81	206401	90.53	93.57	3.04			
				SILICIFIED / SERICITIZED / K-FELDSPAR ALTERED 70% FINE GRAINED QZ / SERICITE 20% K-FELDSPAR => CONCENTRATED AS ALTERATION HALOS TO FRACTURES 5% TOURMALINE FILLED FRACTURE => AVG WIDTH 1mm => 040 - 045° 3% CALCITE / QZ VENEETS => AVG WIDTH .5cm => 010° - 040° => CROSS CUT TOURMALINE 2% FINE GRAINED PYRITE => CONCENTRATED IN TOURMALINE FILLED FRACTURES AND CALCITE / QZ VENEETS 2% CHALCOPYRITE => < 1mm BLISS => CONCENTRATED IN TOURMALINE FILLED FRACTURES	206402	93.51	96.62	1.53			
				94.60 2mm TOURMALINE FILLED FRACTURE 045° 2% CHALCOPYRITE AS ELONGATED BLISS < .5cm LONG							

Interval		Rec'y %	ROD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Au	Ag	Cu
95.81	97.26			HYPOPHYRY LIGHT NINE BROWN TO WHITE AS 67.63 - 70.71	206403 206404	95.10 96.62	96.62 98.15	1.52 1.53			
97.26	117.96			ANDESITE AS 9.14 - 12.85 MINERALIZATION AND ALTERATION AS FOLLOWS 97.26 - 102.65 SILICIFIED (SERICITIZED) (K-FELDSPAR ALTERED) AS 92.25 - 95.81 100.20 CHALCOPYRITE FILLED FRACTURE - 1mm WIDE - 010° - WITH MINOR CALCITE 15% 105.20 - AS 100.20 105.30 TOURMALINE FILLED FRACTURE - 5cm WIDE 040° 15% CHALCOPYRITE 15% COPRITE ← 1mm CROSS CUTTING CALCITE FILLED FRACTURE ⇒ WITH NATIVE COPPER COATING FRACTURE SURFACE ⇒ PLATY (FLAKE) GREEN / VIOLET COLOR	206405 206406 206407 206408 206409 206410	78.15 99.67 101.19 102.72 104.27 105.77	99.67 101.19 102.72 104.27 105.77 107.27	1.52 1.52 1.53 1.52 1.53 1.52			

AURUM GEOLOGICAL CONSULTANTS INC.

CORE QUALITY LOG

Property: GNAT PASS Core Size: ~2 Date: OCT 3RD Hole No. G-89-7
 Coords: Az/Dip: 180° / -55° Logger: G SMITH Page 1 of 2

From To	Int. (m)	Core Rec'd	% Rec'y	RQD Rec'y	RQD	Struc.	Lith'y Unit	SOFT - 10 HARD Hardness	FRACTURES/m
0.00									
9.14	9.14	0	0	0	0	—	—	—	—
11.28	2.14	1.27	59	0.89	0.42	CALCITE / QZ FILL'D FRAC 040°	ANDESITE	7	5
14.33	3.05	2.44	80	2.14	0.70	FRAC 045°	"	7	5
15.94	1.61	1.56	97	1.40	0.87	CALCITE / QZ FILL'D FRAC 040°	"	7	5
17.37	1.43	1.39	97	1.15	0.80	QZ / CALCITE FILL'D FRAC 040°	"	6	10
20.42	3.05	2.79	91	1.82	0.60	" 040°	"	6	15
21.37	1.95	0.95	100	0.85	0.89	CALCITE / QZ FILL'D FRAC 010°	"	6	5
23.47	2.10	2.10	100	1.18	0.56	QZ / CALCITE FILL'D FRAC 050°	"	5	15
26.52	3.05	2.88	94	1.62	0.53	" 040°	BRACIA	5	15
26.97	0.45	0.45	100	0.45	1.00	CONTACT 045°	BRACIA	5	5
29.57	2.60	2.60	100	1.41	0.54	FRAC 040°	"	5	15
32.61	3.04	2.89	95	2.12	0.70	CALCITE / QZ VENEUS 010°	GRANITIC ANDROSE	5	15
35.66	3.05	2.60	85	1.71	0.56	" 045°	"	5	10
38.71	3.05	2.92	96	1.61	0.53	" 030°	"	5	10
41.76	3.05	2.65	87	0.90	0.30	" 030°	GRANITIC GILSONITE	3	20
43.81	2.05	2.05	100	0.89	0.43	FRAC 045°	"	3	20
44.81	1.00	1.00	100	0.10	0.10	" 010°	"	3	0
47.85	3.04	2.80	92	0.97	0.32	" 040°	"	3	0
50.02	2.17	0.94	43	0	0	" 010°	"	3	0
50.90	0.88	0.38	43	0	0	" 045°	"	3	0
53.95	3.05	0.92	30	0	0	" 010°	"	3	0
57.00	3.05	1.20	39	0.14	0.05	" 010°	"	3	0
59.45	2.45	1.82	74	0	0	"	"	3	0
60.05	0.60	0.45	75	0	0	"	"	3	0
63.09	3.04	1.55	51	0	0	FRAC 040°	"	3	0
66.14	3.05	2.55	84	0.63	0.21	"	ANDROSE	4	0
67.06	0.92	0.65	71	0	0	"	"	4	0
69.19	2.13	1.50	70	0.26	0.12	BANDING 065°	SILTSTONE	3	20
72.24	3.05	3.05	100	0.77	0.25	" 080°	"	3	20
73.04	0.80	0.50	63	0.20	0.25	" 055°	"	3	20
75.29	2.25	1.40	62	0	0	FRAC 045°	"	3	0
78.33	3.04	1.92	63	0.28	0.09	" 045°	"	3	0
80.30	1.95	1.95	100	0.79	0.41	" 010°	ANDROSE	4	20
81.38	1.10	1.10	100	0.52	0.47	" 040°	SILTSTONE	3	20
84.43	3.05	3.05	100	1.07	0.35	" 010°	"	3	0
86.24	1.81	1.45	80	0.81	0.45	" 030°	"	3	0
87.48	1.24	1.00	81	0.16	0.13	" 045°	ANDROSE	4	20
90.53	3.05	2.80	92	1.20	0.39	BANDING 050°	"	4	20
92.25	1.72	1.69	98	0.90	0.52	CALCITE 010°	"	4	15

AURUM GEOLOGICAL CONSULTANTS INC.

CORE QUALITY LOG

Property: *GNAT PASS* Core Size: *NQ* Date: *OCT 5 89* Hole No. *6-89-7*
 Coords: Az/Dip: *180° / -55°* Logger: *G SMITH* Page *2* of *2*

Box 14
Box 15
Box 16
Box 17
Box 18
Box 19
Box 20
Box 21
Box 22
Box 23
Box 24
Box 25

From To	Int. (m)	Core Rec'd	% Rec'y	RQD Rec'y	RQD	Struc.	Lith'y Unit	1 - 10 SOFT HARD	HAPO	FRACTURES/m
93.57	1.32	1.30	99	0.09	0.07	Fracture 030°	Androse	4		∞
96.62	3.05	2.98	98	1.10	0.36	" 045°	"	4		∞
98.05	1.43	1.16	81	0.63	0.44	" 010°	"	4		10
99.67	1.62	1.32	81	0.58	0.36	" 030°	"	4		15
102.72	3.05	3.05	100	1.00	0.33	Calcite veinlet 080°	"	4		20
103.73	1.01	0.97	96	0.60	0.60	Fracture 030°	"	4		5
105.77	2.04	1.96	96	1.14	0.56	" 065°	"	4		20
108.81	3.04	3.04	100	1.74	0.57	BEDDING 065°	"	4		10
109.03	0.22	0.22	100	0.22	1.00	Calcite veinlet 020°	"	4		-
111.86	2.83	2.78	98	1.95	0.69	Fracture 045°	"	4		5
114.69	2.83	2.83	100	1.91	0.67	" 040°	"	4		7
114.91	0.22	0.22	100	0.14	0.64	Calcite veinlet 010°	"	4		-
117.96	3.05	2.78	91	1.85	0.61	Fracture 040°	"	4		10
120.26	2.30	2.30	100	1.64	0.71	" 045°	"	4		10
121.01	0.75	0.75	100	0.41	0.55	Calcite veinlets 010°	"	4		∞
124.05	3.04	3.04	100	1.84	0.61	" 010°	"	4		20
127.10	3.05	1.65	54	0.35		Fracture 040°	"	4-2		∞
130.15	3.05	2.88	94	2.77	0.11	Fracture 040°	Dacite	3		3
132.97	2.82	2.82	100	2.82	1.00	Pyrite band 045°	Androse	4		2
133.20	0.23	0.23	100	0.23	1.00	Fracture 050°	"	4		2
136.25	3.05	2.99	98	2.85	0.93	Pyrite band 040°	"	4		4
138.65	2.40	2.36	98	2.28	0.95	" 045°	"	4		3
139.29	0.64	0.63	98	0.63	0.98	Fracture 050°	"	4		4
142.34	3.05	3.05	100	2.93	0.96	" 045°	"	4		3
144.50	2.16	2.14	99	1.88	0.87	" 050°	"	4		5
145.39	0.89	0.88	99	0.77	0.87	" 050°	"	4		3
148.44	3.05	3.05	100	2.32	0.76	Contact 065°	conglomerate	4		15
149.97	1.53	1.52	99	1.09	0.71	Fracture 010°	"	4		15
151.49	1.52	1.51	99	0.94	0.62	" 050°	"	4		15
154.53	3.04	3.02	99	2.17	0.71	Calcite veinlet 010°	"	4		15
155.46	0.93	0.93	100	0.47	0.51	Fracture 010°	"	4		15
157.58	2.12	2.12	100	1.60	0.75	Calcite veinlet 010°	"	4		5
160.63	3.05	3.05	100	2.66	0.87	" 020°	"	4		7

EOH 160.63 m (527 ft)

Interval		Recy %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		As	Ag	Cu
9.14	22.62			ANDESITE (cont) MARGINALIZATION AND ALTERATION:							
				13.50	206428	12.80	14.33	1.53			
				2cm CHALCOPIRITE FILLED FRACTURE => 015° MINOR CHLORITIZED MASSES & QPZ IN FRACTURE 5%							
				15.25-17.00	206429	14.33	15.85	1.52			
				- SILICIFIED / SERICITIZED ANDESITE => 10% CALCITE (MINOR QPZ VEINLETS	206430	15.85	17.37	1.52			
				17.00 -17.05 5cm FAULT ZONE 70% LIMONITE STAINED CLAY 20% HIGHLY SHEARED FRAGMENTS OF SILICIFIED / SERICITIZED ANDESITE 5% MAFIC FILLED FRACTURES <1mm 5% CALCITE / QPZ VEINLETS <1mm 050° NO SILLINGS VISIBLE							
				18.75	206431	17.37	18.90	1.53			
				2cm CALCITE VEIN 005° - CROSS CUTTING FRACTURE 050° <1mm wide => WITH LIMONITE STAINED CLAY ON FRACTURE SURFACE => SLICKENSLIDE 080°	206432	18.90	20.42	1.52			

Interval		Recy %	ROD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		A ₁	A ₂	C ₁
9.14	20.62			ANDESITE (cont)							
				21.37 - 22.60	206433	20.42	21.95	1.53			
				- ROCK HIGHLY FRACTURED							
				- SERICITE LOTZ INCLUDING $\approx 045^\circ$							
				⇒ HIGHLY IRREGULAR ATTITUDES TO FRACTURES							
				⇒ FRACTURES WARPED AND FOLDED WITH NO APPARENT PROMINANT DIRECTION							
				22.60 - 22.62							
				BRACCIATED							
				- HIGHLY CHLORITIZED MAFIC CEMENT 70%							
				- 30% ANGULAR FRAGMENTS OF SILICIFIED / SERICITIZED ANDESITE							
				- 045°							
				- TRACE LIMONITE STAINED CLAY ON FRACTURE SURFACES							
22.62	23.37			Hornblende (AND DIOXITE)	206434	21.95	23.47	1.52			
				MEDIUM GRAINED							
				⇒ AND GRAIN SIZE 2mm							
				45% Qtz							
				35% PLAGIOCLASE 10% K-FELDSPAR							
				10% MICROCLINE							
				< 1% Biotite							
				< 1% fine grained Pyrite							
				CONTAINS HIGHLY FRACTURED AND IRREGULAR							
				≈ 040° ?							

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Au	Ag	Cu
23.37	23.57			BRECCIA 30% GRAPHITIC MATRIX - BLACK / FINE GRAINED / SOFT 70% ANGULAR FRAGMENTS 80% CLAY ALIGNED AROUND - WHITE 20% SILICIFIED / SERICITIZED ANDESITE AVG. FRAGMENT 1.5cm WIDE FRAGMENT EDGES HIGHLY IRREGULAR							
23.57	23.95			Tonalite - MEDIUM GRAINED / LIGHT GREEN TO GREY MATRIX QTZ / PLAGIOCLASE 50/50 MINOR SERICITE 65% - 30% PLAGIOCLASE PHENOCRYSTS - AVG LENGTH .2cm - 5% SERICITE FILLED FRACTURES AVG WIDTH < .1mm 030 - 045°	206435	23.47	25.00	1.53			
23.95	24.50			BRECCIA - AS 23.37 TO 23.57							
24.50	24.60			Hornblende Gneiss - AS 22.62 - 23.37							
24.60	24.67			BRECCIA - AS 23.37 - 23.57							
24.67	24.82			Tonalite - AS 23.57 - 23.95							

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		A ₁	A ₂	C ₁
39.30	39.37			<u>ARKOSE</u>							
				LIGHT GREY / MEDIUM GRAINED	206440	31.10	32.61	1.51			
				25% FELDSPAR GRAINS ⇒ AVE DIAMETER 1mm	206441	32.61	34.13	1.52			
				1-2% DISSEMINATED PYRITE OCCURRING AS BRASSY CLUSTERS	206442	34.13	35.64	1.53			
				⇒ WELL FORMED (EHLIEDRAL) < 5mm AVE DIAMETER	206443	35.66	37.18	1.52			
				SLIGHTLY CALCAREOUS W/ CALCITE FILLED FRACTURES	206444	37.18	38.71	1.53			
				AVE 1% OF ROCK .5cm IN WIDTH 010-045°	206445	38.71	40.23	1.52			
				CLAY RICH AND CLAY FILLED FRACTURES 2%							
				⇒ CLAY DARK GRAY TO BLACK / GREASY							
				⇒ .5cm AVE WIDTH							
				< 5% INTERBEDDED SILTSTONE AND MINOR GRAPHITIC SILTSTONE							
				< 5% CONGLOMERATE							
				⇒ 50% SUBROUNDED CLASTS OF FELDSPATHIC SANDSTONE / SILTSTONE 50/50							
				⇒ AVE CLAST 1cm ⇒ BLACK / FINE GRAINED / GRAPHITIC MATRIX							
				⇒ 10% FELDSPAR GRAINS AVE DIAMETER .5cm							
39.37	60.50			<u>GRAPHITIC SILTSTONE</u>	206446	40.23	41.76	1.53			
				DARK GRAY TO BLACK	206447	41.76	43.29	1.53			
				FINE TO VERY FINE GRAINED							
				AVE > 50% BLACK / MOST GRAPHITE							
				WITH MINOR QTZ < 15%							
				TRACE DISSEMINATED PYRITE 1%							
				- CONCENTRATED IN BANDS (5% PYRITE)							
				⇒ AVE WIDTH 1cm							
				⇒ 010-045°							
				TRACE FELDSPAR GRAINS 2%							
				1% GRAPHITIC CLAY COATED FRACTURES							
				BLACK / GREASY < 1mm - 1cm WIDTH 010-045°							
				2% QTZ / CALCITE (50/50) VENULETS							
				WHITE / FINELY CRYSTALLINE < 1mm - .5cm WIDTH 010-005°							
				5% INTERBEDDED ARKOSE							
				ROCK HIGHLY FRACTURED AND BEDDING							

Interval		Recy %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		A ₁	A ₂	C ₁
39.37	60.50			GRAPHITIC SILTSTONE (cont)							
				57.10 - 60.50	206448	57.10	60.05	2.95			
				FAULT ZONE							
				50% BLACK CLAY							
				- BRASSY							
				50% ANGRAL FRAGMENTS OF GRAPHITIC SILTSTONE							
				- SUSPENDED IN CLAY							
				- AVG WIDTH .5cm							
				HIGHLY FRACTURED							
				- SLICKEN SLIDES 080 on 045° FRACTURES							
				040 on 010° FRACTURES							
60.50	67.40			INTERBEDDED ANGRAL AND GRAPHITIC SILTSTONE							
				- 70% ANGRAL AS 30.90 - 39.37							
				- 30% GRAPHITIC SILTSTONE AS 39.37, 60.50							
				AVG WIDTH OF SILTSTONE BEDS 10cm							
				CONTACTS GRADATIONAL = 060°							
67.40	78.78			GRAPHITIC SILTSTONE							
				AS 39.37 - 60.50							
				67.90							
				BEDDING 065°							
				THIN FELDSPHATIC LAYERS							
				- AVG WIDTH 1mm							
				- 50% FELDSPAR GRAINS (WHITE)							
				ALTERNATING W GRAPHITIC SILTSTONE							
				CONTACTS GRADATIONAL							

Interval		Rec'y %	ROD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		A _u	A _s	C _u
67.40	78.78			GRAPHITIC SILTSTONE (cont)							
				69.50							
				BEDDING 060°							
				-AS 67.90							
				72.25							
				BEDDING 055°							
				-AS 67.90							
78.78	80.80			ANKOSE	20649	80.05	81.57	1.52			
				-AS 30.90 to 39.37							
80.80	81.81			GRAPHITIC SILTSTONE							
				-AS 39.37 to 60.50							
81.81	82.82			ANKOSE							
				-AS 30.90 to 39.37							
82.82	83.42			GRAPHITIC SILTSTONE							
				-AS 39.37 to 60.50							
				2cm ^{83.00} BRN/GRN CLAY FILLED FRACTURE 010°							
83.42	85.40			ANKOSE							
				-AS 30.90 to 39.37							
				=> HIGHLY CONTAMINATED CH 5°							
				- SLICKEN SLIDES 080°							
				=> 20% CLAY							
				- FELD SPAR GRAINS CLAY ALTERNATE							
				=> 50% GRAPHITE							
				=> FAULT ZONE							

Interval		Rec'y %	ROD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Au	As	Cu
85.40	86.24			GRAPHITIC SILTSTONE -AS 39.37% 60.50							
86.24	95.80			ARKOSE 86.24 - 90.03 -AS 30.70 TO 39.37 => HIGHLY FRACTURED -> FELDSPAR CLAY ALYENRA WHITE / SOFT => MATRIX SOID SOFT LOOSEY CLAY => 10% GRAPHITIC ARKOSE => 10% FINE GRAINED GRAPHITE IN ROCK -> DARK GRAY 90.03 - 95.80 -AS 20.10 TO 39.37 => 5% CALCITE VEINLETS AVE WIDTH 1mm AVE ANGLE TO CA. 010° => 10% GRAPHITIC ARKOSE => 10% FINE GRAINED GRAPHITE IN ROCK => DARK GRAY							
95.80	96.47			GRAPHITIC SILTSTONE BLACK FINE GRAINED / SOFT HIGHLY FRACTURES 20% => SILTY GRAPHITE (BLACK) ON FRACTURE SURFACES 15% CALCITE VEINLETS -> 010° - 045° => AVE WIDTH 1mm SLICKENSIDES IN GRAPHITE ON FRACTURE 050° 080°							

Interval		Recy %	ROD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Au	Ag	Cu
96.47	127.10			Annose As 30.90 to 39.37 ALTERATION AS FOLLOWS							
				97.09 - 97.19 FAULT ZONE ROCK 20% FRACTURES → 70 40° → HIGHLY SHEARED → CLITACN SLIPS 080° 30% CLAY → LIGHT GRAY → SOFT 5% PYRITE → FINELY DISSEMINATED → CONCENTRATED ALONG FRACTURES → VERY FINE GRAINED	206450	100.05	101.57	1.52			
				120.72 - 125.60 15% CALCITE / QTZ VEINETS → AS AVG. 5cm VEINETS IN WEAKLY DEVELOPED STOCKWORK → 005° - 080° AVG 010° → < 5% QTZ → AS ISOLATED GRAINS IN CALCITE	206451	120.05	121.57	1.52			
				125.60 - 127.10 HIGHLY CLAY ALTERED LIGHT GRAY ^{POWERY} CLAY 20% OF ROCK MATRIX FELDSPAR GRAINS COMPLETELY ALTERED TO WHITE / POWERY CLAY	206452	125.58	127.10	1.52			

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Au	Ag	Cu
127.10	129.58			<u>SANDSTONE</u>	206453	127.10	128.44	1.34			
				LIGHT GREEN FINE GRAINED / POLYHEDRAL SOFT 90% FINE GRAINED SERICITE / QTZ 60 / 40 5% FELDSPAR GRAINS < 1mm AVG LENGTH NOT SCRATCHABLE TO KNIFE 30% PYRITE ⇒ EXTREMELY FINELY DISSEMINATED ⇒ < 1mm WELL FORMED BRASSY CUBES CONCENTRATED ADJACENT CALCITE VEINLETS 20% CALCITE VEINLETS < 1mm AVG WIDTH 010° CONTACTS HIGHLY FRACTURED AND UNDETERMINABLE	206454	128.44	129.78	1.34			
129.58	146.00			<u>Amphibole</u>							
				AS 30.90 - 37.37 ⇒ WITH < 1% GRAPHITIC ZONES ALTERATION AS FOLLOWS:							
				129.58 - 129.78	206455	129.78	131.30	1.52			
				HIGHLY SILICIFIED 90% FINE GRAINED LIGHT GREEN QTZ 5% PYRITE ⇒ EQUEDRAL BRASSY CUBES, AVE LENGTH < 1mm 3% WGS ⇒ WITH PYRITE CUBES ON EDGES							

Interval		Recy %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Ag	Ag	Cu
129.58	146.00			ARKOSE (CONT) MINERALIZATION AND ALTERATION (CONT):							
				129.78 - 146.00	206456	131.30	132.83	1.53			
				5% PYRITE	206457	137.01	138.53	1.52			
				2% AS FINELY DISSEMINATED CRYSTALS	206458	138.53	140.05	1.52			
				3% AS BANDS	206459	140.05	141.57	1.52			
				- AVG WIDTH .5cm							
				- 75% PYRITE							
				- 045°							
				- WELL FORMED DRACY CLASS 50%							
				- EARTHY FINE GRAINED 50%							
				CONTACT 065° SLIGHTLY IRREGULAR							
				- NOT WELL DEFINED							
				- APPROX ALMOST GRADATIONAL							
146.00	160.63			CONGLOMERATE							
				35% ANHOSIC MATRIX	206460	151.49	153.01	1.52			
				⇒ LOCALLY WITH UP TO 20% SERPENTINE							
				- FINE GRAINED / LIGHT GRAIN / SOFT							
				- FINE DISSEMINATED AND CONCENTRATED							
				AS BANDS ALONG FRACTURES 065°							
				60% CLASTS							
				- ROUNDED TO SUB-ROUNDED							
				- <1mm TO 20cm DIAMETER							
				AVG 2cm							
				- 95% HORNBLAND SYENITE							
				- 5% QTZ							
				5% CALCITE VESICULITE							
				AVG WIDTH .5cm							
				010-020°							
				EOH 160.63m (527')							

AURUM GEOLOGICAL CONSULTANTS INC.

CORE QUALITY LOG

Property: *GNAT Pass* Core Size: *NQ* Date: *066th 87* Hole No. *G49-3*
 Coords: Az/Dip: */090°* Logger: *G. SMITH* Page 1 of

From To	Int. (m)	Core Rec'd	% Rec'y	RQD Rec'y	RQD	Struc.	Lith'y Unit	SOFT HARD Hardness	FRACURES/m
0.00									
3.05	3.05	0	0	0	0				
5.18	2.13	1.70	80	0.48	0.23	CHALCOPHITIC FILLER FRAC 040°	Q12 / KEOUSPAT	6	0
8.23	3.05	2.70	89	1.48	0.49	" 045°	POREPHANITE	6	20
9.07	0.84	0.72	86	0.65	0.77	" 045°	"	6	10
11.28	2.21	1.90	86	0.82	0.37	CHALCITE FILLER FRAC 010°	"	6	0
14.33	3.05	2.82	92	0.40	0.13	MINERALIZED FRACONS 015°	"	6	0
17.37	3.04	2.70	89	1.28	0.42	" 040°	"	6	0
19.36	1.99	1.99	100	1.45	0.73	" 040°	"	6-5	20
20.42	1.06	1.06	100	0.52	0.49	MARBLE FILLER FRAC 045°	"	5-4	0
23.47	3.05	3.05	100	1.42	0.47	" 045°	"	4-6	15
24.67	1.20	1.15	96	0.59	0.49	FRACONS 040°	"	6	15
26.52	1.85	1.77	96	1.10	0.60	MARBLE FILLER FRAC 040°	"	6	20
29.57	3.05	2.96	97	1.91	0.63	" 045°	"	6	20
32.61	3.04	3.04	100	1.60	0.53	" 050°	"	6	15
34.36	1.75	1.68	96	0.85	0.49	" 045°	"	6	20
35.66	1.30	1.24	95	0.65	0.50	CHALCITE FILLER FRAC 010°	"	6	15
38.71	3.05	2.79	91	2.03	0.67	" 010°	"	6	10
39.65	0.94	0.92	98	0.45	0.48	CHALCOPHITIC FILLER FRAC 030°	"	6	10
41.76	2.11	2.07	98	2.00	0.95	CHALCITE VENEILS 010°	"	6	5
44.81	3.05	3.00	98	1.95	0.64	" 015°	"	6	10
45.01	0.20	0.20	100	0.09	0.45	" 010°	"	6	15
47.85	2.84	2.84	100	2.55	0.90	MARBLE FILLER FRAC 065°	"	6	3
50.74	2.89	2.63	91	2.02	0.70	CHALCITE FILLER FRAC 040°	"	6	5
50.90	0.16	0.15	94	0	0	FRACONS 045°	"	6	-
52.93	3.05	2.60	85	1.35	0.44	" 010°	"	6	15
56.38	2.48	2.17	89	1.45	0.60	" 010°	"	6	10
57.00	0.62	0.55	89	0.44	0.71	" 040°	"	6	18
60.05	3.05	3.05	100	2.54	0.83	CHALCITE FILLER FRAC 020°	"	6	6
61.57	1.52	1.52	100	1.22	0.80	FRACONS 010°	"	6	6
63.09	1.52	1.52	100	1.03	0.68	" 045°	"	6	5
65.14	3.05	3.05	100	2.25	0.74	CHALCITE VENEILS 040°	"	6	12
66.57	0.43	0.35	81	0.29	0.67	FRACONS 010°	"	6	18
69.19	2.62	2.15	82	1.46	0.56	" 042	"	6	15
71.78	2.59	2.55	98	1.45	0.56	TRONCOPHITIC FILLER FRAC 040°	"	6	15
72.24	0.46	0.45	98	0.30	0.65	MINERALIZED FRAC FINAL 050°	"	6	15
73.29	3.05	2.52	83	1.80	0.59	MARBLE FILLER FRAC 010°	"	6	7
77.24	1.75	1.85	95	1.54	0.74	CHALCOPHITIC FILLER FRAC 045°	"	6	5

AURUM GEOLOGICAL CONSULTANTS INC.

CORE QUALITY LOG

Property: *GRAB PASS* Core Size: *NQ* Date: *06-27-89* Hole No. *6-89-8*
 Coords: Az/Dip: *1090* Logger: *G. SMITH* Page 2 of

From To	Int. (m)	Core Rec'd	% Rec'y	RQD Rec'y	RQD	Struc.	Lith'y Unit	SOFT HARD Hardness	FRAC. LFS/m
78.33	1.09	1.04	95	0.60	0.55	CALCITE / CLAY FILLED FRACT 015°	QTZ / MUSCOVIT	6	20
81.38	3.05	2.36	77	1.01	0.43	CHARACT. FRACTURE FILLED FRACT 040°	"	6	17
82.50	1.12	1.11	99	0.83	0.75	" 045°	"	6	15
84.43	1.93	1.90	98	1.14	0.60	CALCITE / CLAY FILLED FRACTURE 010°	"	5-7	∞
87.48	3.05	2.50	82	0.75	0.30	FRACTURE 045°	"	5-7	∞
90.53	3.05	3.05	100	2.91	0.95	TORNALINE FILLED FRACT 040°	"	5-7	5
92.75	2.22	2.16	97	1.72	0.77	FRACTURE 010°	"	7	8
93.57	0.82	0.80	98	0.48	0.59	" 010°	"	7	15
96.62	3.05	2.90	95	1.37	0.45	CALCITE / WEWLET 035°	"	5-7	∞-20
97.87	1.25	1.20	96	0.87	0.66	CALCITE FILLED FRACT 010°	"	5-7	∞-20
						SLICENADINES 080°			
99.67	1.80	1.73	96	1.51	0.84	CALCITE FILLED FRACT 005°	"	5-7	7
102.72	3.05	3.05	100	2.18	0.71	" 045°	"	5	12
103.16	0.44	0.44	100	0.43	0.98	" 040°	"	5	6
105.77	2.61	2.61	100	1.86	0.71	CALCITE WEWLET 040°	"	5	20
108.59	2.82	2.82	100	2.23	0.79	TORNALINE FILLED FRACTURE 040°	"	7	14
108.81	0.22	0.22	100	0.69	0.41	FRACTURE 040°	"	5	15
111.86	3.05	2.95	97	1.58	0.52	" 045°	"	7	20
113.65	1.79	1.75	98	0.97	0.54	TORNALINE FILLED FRACT 040°	"	7	15
114.91	1.26	1.23	98	0.70	0.56	" 040°	"	7	17
117.96	3.05	2.95	97	1.59	0.52	CALCITE FILLED FRACT 010°	"	5-7	∞
118.90	0.94	0.94	100	0.66	0.70	TORNALINE FILLED FRACT 030°	"	5-7	10
121.01	2.11	2.11	100	1.54	0.73	CALCITE FILLED FRACT 030°	"	5-7	10-20
124.05	3.04	2.89	95	1.71	0.56	" 040°	"	5	10-20
127.10	3.05	3.05	100	2.57	0.84	" 045°	"	7	8
129.29	2.19	2.19	100	1.88	0.86	CALCITE WEWLET 010°	"	7	7
130.15	0.86	0.86	100	0.56	0.65	" 010°	"	7	17
133.20	3.05	2.70	89	1.09	0.36	" 010°	"	7	∞
133.58	0.38	0.32	84	0	0	FRACTURE 045°	"	7-5	8
136.25	2.67	2.27	85	0.99	0.37	CALCITE FILLED FRACT 040°	"	7-5	∞
138.59	2.34	1.91	82	1.10	0.47	TORNALINE FRACTURE 035°	"	5	8
139.29	0.70	0.57	81	0.57	0.81	FRACTURE 050°	"	5	8
142.34	3.05	3.00	98	0.98	0.32	" 040°	"	5	20
143.81	1.47	1.44	98	0.79	0.54	TORNALINE FILLED FRACT 020°	"	5	10
145.39	1.58	1.54	97	0.79	0.50	" 045°	"	5	∞
148.44	3.05	2.67	88	1.57	0.51	" 020°	"	5-7	20
148.80	0.36	0.35	97	0.27	0.75	FRACTURE 010°	"	7	1
151.49	2.69	2.65	99	0.66	0.25	FRACTURE 020°	"	5	9
154.08	2.59	2.35	91	1.30	0.50	CALCITE FILLED FRACT 010°	"	5	20

AURUM GEOLOGICAL CONSULTANTS INC.

CORE QUALITY LOG

Property: Core Size: Date: Hole No.
 Coords: Az/Dip: Logger: Page of

From To	Int. (m)	Core Rec'd	% Rec'y	RQD Rec'y	RQD	Struc.	Lith'y Unit	1 - 10 SOFT HARD Hardness	FRACTURES/m
Box 30 154.53	0.45	0.41	91	0.36	0.80	FRAC. FILLAD FILLAD 045°	Breakup	5	4
157.58	3.05	2.80	92	1.85	0.61	" 045°	"	5-7	8
159.69	2.11	2.10	100	1.47	0.70	" 00°	Amphibole	5-7	10
Box 31 160.63	0.94	0.93	99	0.53	0.56	FRAC. 000°	"	7	14
163.68	3.05	3.05	100	1.01	0.33	" 000°	"	7	14
164.47	0.79	0.79	100	0.74	0.94	TOURNALIS FILLAD FILLAD 045°	"	7	7
Box 32 166.73	2.26	2.26	100	1.73	0.77	" 040°	"	7	6
169.77	3.04	2.80	92	1.67	0.55	" 020°	"	7	10-15
170.07	0.30	0.30	100	0.30	1.00	" 045°	"	6-7	4
Box 33 172.82	2.75	2.75	100	2.40	0.87	" 040°	"	5	5
175.58	2.76	2.76	100	2.13	0.77	CALCITE VITROLIT 020°	"	5	5
Box 34 175.87	0.29	0.29	100	0.20	0.69	FRAC. 010°	"	7-5	—
178.92	3.05	3.05	100	2.45	0.80	TOURNALIS FILLAD FILLAD 040°	"	7	7
181.33	2.41	2.41	100	1.92	0.80	" 010°	"	7	6
Box 35 181.97	0.64	0.64	100	0.56	0.88	CALCITE FILLAD FILLAD 040°	"	7-5	7
185.01	3.04	3.04	100	2.27	0.75	" 045°	"	7	5

EOH 185.0/m (607')

AURUM GEOLOGICAL CONSULTANTS INC. — DIAMOND DRILL LOG

HOLE No. G-89-B

Page 3 of 23

Interval		Rec'y %	ROD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		As	Ag	Cu
3.05	17.50			QTZ / FELDSPAR PORPHYRY (CONT)							
				ALTERATION AND MINERALIZATION (CONT)							
				3.05 - 19.30	206476	3.05	5.18	2.13			
				SILICIFIED / SERICITIZED	206477	5.18	6.71	1.53			
				MEDIUM GRAIN	206478	6.71	8.23	1.52			
				MEDIUM GRAY TO GRAY/GREEN IN COLOR	206479	8.23	9.75	1.52			
				NOT SEPARABLE WITH KNIFE	206480	9.75	11.28	1.53			
				40% MATRIX	206481	11.28	12.80	1.52			
				- FINE GRAINED QTZ 70%	206482	12.80	14.33	1.53			
				- FINE GRAINED SERICITE 30%	206483	14.33	15.85	1.52			
				40% FELDSPAR PHENOCRYSTS	206484	15.85	17.37	1.52			
				- GRAY LONGER	206485	17.37	18.90	1.53			
				- SILICIFIED / SERICITIZED							
				- AVG WIDTH 1 mm							
				- EDGES IRREGULAR / CONTACTS WITH MATRIX							
				NOT SHARP							
				15% QTZ PHENOCRYSTS							
				- AVG WIDTH 1 mm							
				3% CALCITE / MINOR QTZ VEINLETS							
				- < 1mm TO 2mm WIDTH							
				- 005 - 050°							
				TWO DOMINANT ANGLES 010 + 045°							
				2% PYRITE							
				- FINELY DISSEMINATED BLENDS							
				AVG WIDTH < 1 mm							
				< 1% FINELY DISSEMINATED MAFICS							
				- SOFT / CHORTLEIGH							
				- NORMALIZED ? BIOTITE ???							
				.1% CHALCOPYRITE							
				- FINELY DISSEMINATED							
				- 1 mm BLEND							
				- RICHLY CONCENTRATED AND FRACTURED							

Interval		Recy %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Au	Ag	Cu
3.05	142.50			QZ / FELDSPAR PORPHYRY (CONT) MINERALIZATION AND ALTERATION (CONT)							
				3.05 - 10.00 .3% CHALCOPRITE => OCCURS AS DISSEMINATED BLENDS => AVG WIDTH .1mm							
				7.30 .5cm CHALCOPRITE FILLING FRACTURES => 045°							
				19.30 - 23.31 LIGHT GRAY TO WHITE 50% FELDSPAR PHENOCRYSTS - CLAY ALTERED / SOFT - WHITE TO OFF-WHITE - EDGES INDISTINCT 40% SILICIFIED / SERICITIZED MATRIX - LIGHT GRAY 5% MAFIC / CLAY FILLED FRACTURES - MATRIX HIGHLY CHALCITIZED / SOFT - 50 / 50 - CLAY OFF WHITE / GLASSY - MINOR CLAY ALTERED H-FELDSPAR ? ALTERATION AS HALOS TO FRACTURES (<1%) - 040°	206486 206487 206488	18.90 20.42 21.95	20.42 21.95 23.47	1.52 1.53 1.52			
				2% PYRITE => ISOLATED BLENDS => AVG WIDTH <.5mm							
				30% CALCITE VEINETS AVG WIDTH .2cm 010° WHITE FINELY CRYSTALLINE CALCITE TO 1mm PORPHYRY CRYSTALS							

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Au	Ag	Cu
3.05	142.50			07% / FELD SPAN PORPHYRY (CONT) MINERALIZATION AND ALTERATION (CONT)							
				23.31 - 27.84	206489	23.47	25.00	1.53			
				AS 3.05 to 19.30	206490	25.00	26.52	1.52			
				27.84 - 30.36	206491	26.52	28.04	1.52			
				SILICIFIED / SERICITIZED	206492	28.04	29.57	1.53			
				AS 3.05 to 19.30	206493	29.57	31.09	1.52			
				⇒ .4% CHALCOPYRITE AS DISSEMINATED BLAGS 50% - AVE WIDTH < 1mm CONCENTRATED IN FRACTURES 50% - 040° - AVE WIDTH 1mm							
				30.36 - 39.20	206494	31.09	32.61	1.52			
				SILICIFIED / SERICITIZED	206495	32.61	34.14	1.53			
				AS 3.05 to 19.30	206496	34.14	35.66	1.52			
				36.30	206497	35.66	37.18	1.52			
				1cm PYRITE VENTIL - 1mm MASSIVE WALL FORMED CLUSTERS - 040°	206498	37.18	38.71	1.53			
				39.20 - 40.50	206499	38.71	40.23	1.52			
				SILICIFIED / SERICITIZED ⇒ .4% CHALCOPYRITE AS 27.84 to 30.36							

Interval		Recy %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		A ₁	A ₂	C _a
305	47.50			Quartz - Feldspar Porphyry (cm)							
				40.50 - 47.38	206500	40.23	41.76	1.53			
				SILICIFIED / CHALCOPHYRITIC							
				AS 305 - 19.30							
				⇒ WITH ~25% CHALCOPHYRITIC	206501	41.76	43.28	1.52			
				44.50	206502	43.28	44.81	1.53			
				.5 cm CHALCOPHYRITIC FILLED FRACTURE							
				025°							
				46.22 - 46.24	206503	44.81	46.33	1.52			
				DRIFTER ZONE							
				70% MONTMORILLONITE MATRIX							
				- DARK GREEN / CHLORITIZED (WGT)							
				- FINE GRAINED							
				30% ANGULAR FRAGMENTS							
				- SILICIFIED / SERICITIZED QTZ / FELDSPAR							
				- AVG WIDTH .2cm							
				NO VISIBLE CHALCOPHYRITIC	206504	46.33	47.85	1.52			
				48.50	206505	47.85	49.37	1.52			
				.3cm CHALCOPHYRITIC / CALCITE FILLED FRACTURE							
				- 045°							
				- 50% CPY 50% CALCITE							
				- MINERALIZATION WITHIN FRACTURE ALTERATION							
				FROM CPY TO CALCITE DOMINANT							
				- TRACE CPY REMOVED ON CROSS CUTTING							
				FRACTURE SURFACE 010° ADT ZONE							

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		A _u	A _g	C _u
305	172.50			QTZ - FELDSPAR PORPHYRY (cont) MINERALIZATION AND ALTERATION (cont)							
				49.38 - 53.90	206506	49.37	50.90	1.53			
				CLAY ALTERED	206507	50.90	52.42	1.52			
				AS 19.30 TO 23.31	206508	52.42	53.95	1.53			
				53.90 - 58.35	206509	53.95	55.47	1.52			
				SILICIFIED / SERICITIZED	206510	55.47	57.00	1.53			
				AS 305 TO 19.30							
				58.35 - 58.67	206511	57.00	58.52	1.52			
				SILICIFIED / SERICITIZED							
				AS 305 TO 19.30							
				→ WITH .75% CHALCOPRITE							
				- DISSEMINATED AS < 1mm BLESS							
				- CONCENTRATED IN FRACTURES 040°							
				58.67 - 59.75	206512	58.52	60.05	1.53			
				SILICIFIED / SERICITIZED							
				AS 305 TO 19.30							
				59.75 - 62.39	206513	60.05	61.57	1.52			
				BRECCIA							
				40% MATRIX							
				- FINE GRAINED / MEDIUM - DARK GREEN / OLIVINE							
				- QTZ / CHALCOPRITE BU/20							
				45% FRAGMENTS							
				SILICIFIED / SERICITIZED QTZ / FELDSPAR PORPHYRY?							
				- LIGHT GREEN / FINE GRAINED							
				10% CALITE VEINLETS							
				- AVE WIDTH 1mm							
				005 - 090° DOMINANT ANGLES 010°, 040°							
				- CROSS CUT MATRIX AND FRAGMENTS							
				- 5% PYRITE							

Interval		Rec'y %	ROD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		A ₄	A ₅	C _a
3.05	142.50			QUARTZ - FELDSPAR PORPHYRY (CONT)							
				62.39 - 62.79	206514	61.57	63.09	1.52			
				SILICIFIED / SERICITIZED - AS 3.05 TO 17.30							
				62.79 - 62.92							
				PRECIPITATED Qtz / CHALCITE MATRIX - AS 59.75 - 62.39							
				62.92 - 67.78	206515	63.09	64.62	1.53			
				SILICIFIED / SERICITIZED - AS 3.05 TO 17.30	206516	64.62	66.14	1.52			
					206517	66.14	67.67	1.53			
				68.30	206518	67.67	69.19	1.52			
				1.5cm TOURMALINE / CHALCITIZED FILLD FRACTURES 90% TOURMALINE - CHALCITIZED / SOAT / DARK GREEN 10% CHALCITIZED - FLOW BATHED BLISS - AVG LENGTH 2mm							
				69.78 - 70.38	206519	69.19	70.71	1.52			
				PRECIPITATED 20% TOURMALINE FILLD FRACTURES 040:045° - HIGHLY CHALCITIZED / SOAT / DARK GREEN - CEMENTS FRAGMENTS 80% FRAGMENTS - SILICIFIED / SERICITIZED PORPHYRY? - ANGULAR AVG WIDTH .5cm 10% CALCITE VEGETALS 010-020° - AVG WIDTH 1mm - FLOW CUT TOURMALINE - LOCALLY MATRIX TO ANGULAR FRAGMENTS AS ABOVE							
				50% CLAY FILLD FRACTURES 010°							

Interval		Recy %	ROD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Au	Ag	Cu
3.05	14.50			QUARTZ - FELDSPAR PLATINUM (CONT)							
				69.78 - 70.38 (CONT)							
				5% PYRITE - FINELY DISSEMINATED - CONCENTRATED IN TOURMALINE 4% CHALCOPYRITE - ELONGATED BLEBS IN TOURMALINE - AVG LENGTH < .5mm							
				70.38 - 77.84	206520	70.71	72.24	1.53			
				SILICIFIED / SERICIFIED w/ CLAY ALTERED FELDSPAR PREVALENT	206521	72.24	73.76	1.52			
				AS 19.30 - 23.31 PYROCLASTICS 30% 3% CHALCOPYRITE - AS DISSEMINATED BLEBS - OBTAIN CONCENTRATIONS AS ELONGATED BLEBS IN FRACTURES	206522	73.76	75.29	1.53			
				76.30 - 76.70	206523	75.29	76.81	1.52			
				2% CHALCOPYRITE AS COARSE CRYSTALS FILLING FRACTURES - AVG WIDTH 2mm (MINIMUM) - 010° - 050°							
				77.84 - 82.54	206524	76.81	78.33	1.52			
				SILICIFIED / SERICIFIED	206525	78.33	79.86	1.53			
				AS 3.05 TO 19.30	206526	79.86	81.38	1.52			
				w/ 4% CHALCOPYRITE - DISSEMINATED BLEBS - CONCENTRATED IN FRACTURES	206527	81.38	82.91	1.53			

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		As	Ag	Ca
3.05	142.50			QZ - FELDSPAR PORPHYRY (CONT)							
				82.54 - 84.00	206528	82.91	87.43	1.52			
				BRACIATED ZONE							
				15% CALCITE							
				- AS VEINLETS 010 AVE WIDTH .5cm							
				- FINELY CRYSTALLINE GARDIN LOOKING CALCITE TO							
				1mm EQUEDIAL DUG TOOTH CRYSTALS IN VEGE							
				- FORMS MATRIX COMPARING ANGULAR FRAGMENTS							
				OF ALTERED PORPHYRY AND ANGULAR FRAGMENTS							
				OF FINE GRAINED TOURMALINE							
				TOURMALINE - 2% OF ZONE							
				- HIGHLY CHLORITIZED							
				2% QZ / CLAY FILLED FRACTURES							
				- BLACK QZ							
				- GREN / POWDER CLAY							
				- AVE WIDTH < 1mm							
				040°							
				SLICKEN SLIDES 070°							
				ROCK HIGHLY FRACTURED AND BROKEN							
				.4% CHALCOPIRITE							
				- DISSEMINATED							
				- CONCENTRATED AS ELONGATED BLKYS							
				IN FRACTURES							
				84.00 - 87.01	206529	87.43	85.95	1.52			
				SILICIFIED / CARBONATED							
				CLAY ALTERED FELDSPAR PHENOCRYSTS							
				AS 19.30 - 23.31							
				.2% CHALCOPIRITE							
				85.00							
				.2cm CHALCOPIRITE FILLED FRACTURE							
				010							
				- TRACE CHLORITIZED TOURMALINE W CPY	206530	85.95	87.48	1.53			

Interval		Rec'y %	ROD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Au	Ag	Cu
305	42.50			QTZ - FELDSPAR PORPHYRY (cont)							
				87.81 - 92.00	206531	87.48	89.00	1.52			
				HIGHLY SILICIFIED / SERICITIZED LIGHT GREEN TO LIGHT GREEN							
				35% FELDSPAR PHENOCRYSTS - WHITE / HARD - SILICIFIED - AVG WIDTH 1mm							
				45% FINE GRAINED QTZ / SERICITE - QTZ / SERICITE 80-20 TO 70-30							
				15% SERICITE FILLAD FRACTURE - MODERATELY DEVELOPED STOCKWORK OF 0.1mm FILLAD FRACTURES - DOMINANT ANGLE 040° - FRACTURES OFTEN DISCONTINUOUS - 2cm LONG							
				5% CALCITE VENEERS - AVG WIDTH .5cm - 010° - CROSS CUT SERICITE FILLAD FRACTURES - MINOR WHITE / POWDERY CLAY ON CONTACT SURFACES							
				10% CHALCOPYRITE - DISSEMINATED AS .5mm BLENDS - CONCENTRATED AS ELONGATED BLENDS IN FRACTURES							
				< 1% PHITE - DISSEMINATED							

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		A _u	A _g	C _a
305	142.50			QTZ - FELDSPAR PORPHYRY (CONT)							
				90.05	206532	89.00	90.53	1.53			
				2cm DIAGNOSE ZONE 010°							
				- ANEULAR ENTAILMENTS 85%							
				- SILICIFIED / SERICITIZED PORPHYRY AVERAGE 2mm							
				CALCITE 10%							
				- CRAMPY							
				- WHITE							
				- FINELY CRYSTALLINE							
				CHALCOPYRITE 5%							
				- ELONGATED BLEBS IN FRACTURES							
				- OCCURS WITHIN CALCITE AND AT EDGES OF CALCITE VENTILS							
				91.80	206533	90.53	92.05	1.52			
				2cm BLEB OF PYRITE							
				- ELONGATED ALONG FRACTURE 010°							
				- TRACE CALCITE ON FRACTURE PLANE							
				NOTE: NO VIS CHALCOPYRITE ASSOCIATED							
				92.00 - 96.00	206534	92.05	93.57	1.52			
				SILICIFIED / SERICITIZED	206535	93.57	95.10	1.53			
				AS 87.81 - 92.00							
				WITH .2% CHALCOPYRITE							
				96.00 - 96.15	206536	95.10	96.62	1.52			
				SILICIFIED / SERICITIZED							
				AS 87.81 - 92.00							
				WITH 1% CHALCOPYRITE							

Interval		Rec'y %	ROD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Au	Ag	Cu
3.05	142.50			QUARTZ - FELDSPAR POLYPHONY (cont)							
				96.15 - 97.18	206537	96.62	98.15	1.53			
				SILICIFIED / SEMI-SOLIDIFIED TO CLAY ALTHOUGH FELDSPAR PHENOCRYSTS AS 19.30 TO 23.31 WITH .30% CHALCOPYRITE - DISSEMINATED - CONCENTRATED AS FLOCCATED MASSES IN FRACTURES .010" AND 0.40"							
				97.18 - 97.38							
				SILICIFIED / SEMI-SOLIDIFIED AS 87.81 TO 92.00 WITH 1% CHALCOPYRITE							
				97.38 - 101.19	206538	98.15	99.67	1.52			
				SILICIFIED / SEMI-SOLIDIFIED AS 3.05 TO 19.30 < .1% CHALCOPYRITE	206539	99.67	101.19	1.52			
				101.19 - 102.55	206540	101.19	102.72	1.53			
				SILICIFIED / SEMI-SOLIDIFIED AS 87.81 TO 92.00 WITH .5% MINOR .2% CHALCOPYRITE							
				102.55 - 103.45	206541	102.72	104.25	1.52			
				SILICIFIED / SEMI-SOLIDIFIED TO CLAY ALTHOUGH FELDSPAR PHENOCRYSTS AS 19.30 TO 23.31							

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		As	Ag	Ca
305	142.50			QUARTZ - FELDSPAR PORPHYRY (CONT)							
				103.45 - 103.93 BRECCIATED 80% LIGHT GREEN FINE GRAINED QZ / SERICITE 80 / 20 10% ANGULAR FRAGMENTS OF SILICIFIED / SERICIFIED PORPHYRY W 20% CLAY ALTERED FELDSPAR FRAGMENTS FRAGMENTS AVG WIDTH .2cm 5% ANGULAR FRAGMENTAL CALCITE 2% ANGULAR FRAGMENTAL CHLORITIZED MAFICS 3% CLAY ON FRACTURE SURFACES - LIGHT GREEN TO WHITE - POWDERY							
				103.93 - 111.70 SILICIFIED / SERICIFIED ET AS 87.81 - 92.00 WITH <.1% CHALCOPYRITE 105.20 .2cm TOURMALINE FILLED FRACTURE 040° 5% CHALCOPYRITE	206542	104.24	105.77	1.53			
				106.50 .2cm CHALCOPYRITE FILLED FRACTURE 010° TRACE TOURMALINE ASSOCIATED TO CPV	206543	105.77	107.29	1.52			
				108.04 1cm TOURMALINE FILLED FRACTURE 030° 10% CHALCOPYRITE	206544	107.29	108.81	1.52			
					206545	108.81	110.34	1.53			
					206546	110.34	111.86	1.52			

Interval		Rec'y %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		A _u	A _g	Cu
3.05	142.50			QUARTZ - FLOWING PORPHYRY (CONT)							
				111.70 - 114.40	206547	111.86	113.38	1.52			
				HIGHLY SILICIFIED / SERICIFIED AS 87.81 - 92.00 NO SERICITE FILLED FRACTURES 15% TOURMALINE FILLED FRACTURES - AS STOCKWORK - LOCALLY BIFURCATED E TOURMALINE FORMING CEMENT AROUND ANGRY FRAGMENTS OF ALTERED PORPHYRY 75% CHALCOPYRITE - DISSEMINATED - CONCENTRATED IN TOURMALINE							
				114.40 - 114.62	206548	113.38	114.91	1.53			
				TOURMALINE FILLED FRACTURE 050°? 5% MAGNETITE - BLACK / FEATHY - AS BANDS IN TOURMALINE 10% CHALCOPYRITE - AS DISSEMINATED FRAGMENTS IN TOURMALINE - STOCKWORK 010 - 080° 10% PHENOTITE ??							

Interval		Recy %	RQD	DESCRIPTION	Sample No.	Interval		Core Width	ANALYTICAL RESULTS		
From	To					From	To		Au	Ag	Cu
305	142.50			QUARTZ FELDSPAR PORPHYRY (CONT)							
				114.62 - 116.90	206549	114.91	116.43	1.52			
				HIGHLY SILICIFIED / SERICITIZED AS 87.81 TO 92.00 WITH .2% CHALCOPHYITE							
				116.90 - 119.10	206550	116.43	117.96	1.53			
				SILICIFIED / SERICITIZED & CLAY ALTERED FELDSPAR PHANOCRYSTS AS 19.30 - 23.31							
				118.30	206551	117.96	119.48	1.52			
				2cm TOURMALINE FILLED FRACTURE 045° .1% CHALCOPHYITE							
				119.10 - 123.85	206552	119.48	121.01	1.53			
				HIGHLY SILICIFIED / SERICITIZED AS 87.81 TO 92.00 WITH .2% CHALCOPHYITE	206553	121.01	122.53	1.52			
					206554	122.53	124.05	1.52			
				123.85 - 123.95							
				BRECCIA ANGULAR (AVE WTH .3cm) FRAGMENTS (50%) OF ALTERED PORPHYRY IN TOURMALINE (50%) 030° 20% CHALCOPHYITE - AS RECENTLY BLAS AVE LENGTH 1mm							

Interval		Rec'y %	RQD	DESCRIPTION	Interval		Core Width	Sample No.	ANALYTICAL RESULTS		
From	To				From	To			Au	Ag	Cu
305	142.50			QUARTZ - FELDSPAR PORPHYRY (CONT) MINERALIZATION AND ALTERATION (CONT)							
				123.95 - 126.75	124.05	125.58	1.53	206555			
				HIGHLY SILICIFIED / SERICITIZED AS 87.81 - 92.00 WITH .5% CHALCOPRITE	125.58	127.10	1.52	206556			
				126.75 - 137.40	127.10	128.63	1.53	206557			
				SILICIFIED / SERICITIZED AS 3.05 TO 19.30 ⇒ WITH 10% CALCINE VEINLETS	128.63	130.15	1.52	206558			
					130.15	131.67	1.52	206559			
					131.67	133.20	1.53	206560			
					133.20	134.72	1.52	206561			
					134.72	136.25	1.53	206562			
				137.40 - 139.35	136.25	137.77	1.52	206563			
				SILICIFIED / SERICITIZED AS 3.05 TO 19.30 ⇒ WITH 3% TOURMALINE FILLED FRACTURE - AVG WIDTH 1mm - 040-045° .3% CHALCOPRITE - DISSEMINATED - CONCENTRATED IN TOURMALINE AS ELONGATED BEHNS AVERAGE 2mm	137.77	139.29	1.52	206564			
				139.35 - 142.50	139.29	140.82	1.53	206565			
				SILICIFIED / SERICITIZED AS 3.05 TO 19.30	140.82	142.34	1.52	206566			

Interval		Recy %	ROD	DESCRIPTION	Interval		Core Width	Sample No.	ANALYTICAL RESULTS		
From	To				From	To			As	Ag	Ca
142.50	152.05			<p><u>BRACIA ZONE</u></p> <p>50% LIGHT GRAY/GREEN FINE GRAINED QTZ / SERPENTINE 90/10 CEMENTING ANGULAR FRAGMENTS 30% - SILICIFIED / GRANITIC ANDESITE - AVG WIDTH .2cm</p> <p>10% CALCITE - VEIN LAYS AVG WIDTH .5cm - 010° - LOCALLY CEMENTING ANGULAR FRAGMENTS OF ALT. ANDESITE</p> <p>2% TOURMALINE - AS FRACTURE FILLING 040-045° - LOCALLY CEMENTING ANGULAR FRAGMENTS OF ALT. ANDESITE</p> <p>5% CLAY - AS COATING ON FRACTURE SURFACES - WHITE / POWDRI - ASSOCIATED WITH CALCITE</p> <p>ROCK HIGHLY FRACTURED AND BROKEN</p> <p>.2% CHALCOPRITE - DISSEMINATED - CONCENTRATED IN TOURMALINE</p>							

Interval		Rec'y %	RQD	DESCRIPTION	Interval		Core Width	Sample No.	ANALYTICAL RESULTS		
From	To				From	To			Au	Ag	Cu
142.50	152.05			Bitumen zone (Correct)							
				145.10 - 145.87	143.87	145.39	1.52	206568			
				90% CHLORITIZED MAFIC BLACK / GREEN TO BROWN	145.39	146.91	1.52	206569			
				5% FRAGMENTS OF SILICIFIED / SERICITIZED ANDASITE							
				5% CALCITE							
				- VEINLETS							
				- AVG WIDTH 1mm							
				O10 - O45							
				SLICKENSLIDE ON O10 FRACTURE SURFACE							
				O45°							
				147.57 - 147.83	146.91	148.44	1.53	206570			
				as 145.10 to 145.87							
				150.30 - 150.60	148.44	149.96	1.52	206571			
				BANDS O20°	149.96	151.49	1.53	206572			
				90% GREEN FINE GRAINED QUARTZ / minor SERICITE							
				- AVG WIDTH 1cm							
				5% CHALCOPYRITE / PYRITE O10							
				- AVG WIDTH 1mm							
				5% CALCITE VEINLETS							
				O10 - O45							
				AVG WIDTH < 1mm							
				CONCENT BANDING							
				SLICKENSLIDE ON O10 ⇒ O45°							

Interval		Rec'y %	ROD	DESCRIPTION	Interval		Core Width	Sample No.	ANALYTICAL RESULTS		
From	To				From	To			Au	Ag	Cu
152.05	158.60			<p style="text-align: center;">ANDESITE</p> <p>DARK GRAY 99% QUARTZ - 80% FINE GRAINED 15% MEDIUM GRAINED 11% MATRIX PHENOCRYSTS - HARD / BLACK - HOHNWALD?</p> <p>MINERALIZATION AND ALTERATION AS FOLLOWS:</p> <p>152.05 - 158.60</p> <p>5% CALCITE VEINLETS AND CALCITE FILLED FRACTURES TWO PROMINANT ANGLE 010° + 045° AVG WIDTH 2mm</p> <p>.2% CHALCOPRITE - FINELY DISSEMINATED - CONCENTRATED IN CALCITE FILLED FRACTURES NOTE: LOCALLY CHALCOPRITE DOMINANT MINERAL FILLING FRACTURES</p> <p><.1% PYRITE - FINELY DISSEMINATED - OCCURS IN CHALCOPRITE</p>							
					156.49	152.01	1.52	206573			
					153.01	154.53	1.52	206574			
					154.53	156.06	1.53	206575			
					156.06	157.58	1.52	206576			
					157.58	159.11	1.53	206577			

Interval		Rec'y %	RQD	DESCRIPTION	Interval		Core Width	Sample No.	ANALYTICAL RESULTS		
From	To				From	To			Au	Ag	Cu
158.60	159.11			QUARTZ FELDSPAR PORPHYRY - HIGHLY SILICIFIED / SERICITIZED AS 305 to 19.30							
159.11	185.01			<u>ANDRESITE</u> AS 152.05 to 158.60 ALTERATION AND MINERALIZATION AS FOLLOWS 159.11 - 159.30 ROCK BROWN AND HIGHLY FRACTURED BLACK 80% FINE GRAINED QUARTZ 10% WHITE QUARTZ? PHENOCRYSTS? - AVG WIDTH < 1mm 50% CALCITE FILLED FRACTURES AVG WIDTH 1mm - 040-045° SILICAN SLIDES 080° - 010 SILICAN SLIDES 045° NO VISIBLE CHALCOPYRITE 159.30 - 162.58 SILICIFIED / SERICITIZED LIGHT GREY TO LIGHT GREEN 95% FINE GRAINED QUARTZ / SERICITE 90/10 3% SERICITE FILLED FRACTURES - LIGHT GREEN - AVG WIDTH 1mm 040° TO 045° DOMINANTLY 2% CALCITE FILLED FRACTURES - AVG WIDTH 1mm 010° - 050° • 2% CHALCOPYRITE - FINELY DISSEMINATED	159.11	160.63	1.52	206578			
					160.63	162.15	1.52	206579			

Interval		Recy %	RQD	DESCRIPTION	Interval		Core Width	Sample No.	ANALYTICAL RESULTS		
From	To				From	To			As	Ag	Cu
187.11	187.01			ANDESITE (cont) MINERALIZATION AND ALTERATION (cont)							
				162.58 - 163.04	162.15	163.68	1.53	206580			
				LIGHT TO DARK GREEN BANDS 0.40" SOFT / FINE GRAINED 80% SERICITE / TRACED QTZ? LIGHT GREEN SOFT BANDS AVG WIDTH 2cm 10% CHLORITE / TRACED QTZ? DARK GREEN BANDS AVG WIDTH .5cm 5% CALICINE VEINLETS 010-050" AVG WIDTH .5cm CROSS CUT BANDS 3% PYRITE - VERY FINELY DISSEMINATED 1 - CONCENTRATED IN CHLORITE RICH BANDS .3% CHALCOPHINE - FINELY DISSEMINATED - CONCENTRATED AS ELONGATED ALBS (1mm) IN FRACTURES							
				163.04 - 168.79	163.68	165.20	1.52	206581			
				HIGHLY SILICIFIED / SERICITIZED 85% FINE GRAINED QTZ / SERICITE RATIO BANDS FROM 95/5 TO 70/30 WITH AVERAGE 90/10 5% FINE GRAINED SERICITE ENLARGED FRACTURES 010-020" MINOR AT 040-045" AVG WIDTH < 1mm 5% TUBICULAR FINE ENACTING < 1mm TO 3cm WIDTH AVG 1mm 040-045"	165.20	166.73	1.53	206582			
					166.73	168.25	1.52	206583			

Interval		Rec'y %	RQD	DESCRIPTION	Interval		Core Width	Sample No.	ANALYTICAL RESULTS		
From	To				From	To			Au	Ag	Cu
159.11	185.01			<p><u>ANDESITE</u> (cont)</p> <p>MINERALIZATION AND ALTERATION (cont)</p>							
				<p>163.04 - 168.79 (cont)</p> <p>HIGHLY SILICIFIED / SARCINIFORM</p> <p>50% CALCITE VEINLETS AND CALCITE FILLED FRACTURES</p> <p>AVG WIDTH 1mm</p> <p>010-020° DUMMAY</p> <p>50% CHALCOPYRITE</p> <p>- FINELY DISSEMINATED</p> <p>- CONCENTRATED IN FRACTURES</p>							
				<p>167.00 - 167.10</p> <p>QUARTZ / CALCITE VEIN</p> <p>045°</p> <p>COARSELY CRYSTALLINE QTZ</p> <p>VEIN BANDO WITH 1mm QTZ BANDS SEPARATED BY 1mm CALCITE BANDS</p> <p>QTZ</p> <p>- BIRHEDRAL CRYSTALS</p> <p>- CLEAR TO MILKY</p> <p>CALCITE</p> <p>- FINE GRAINED</p> <p>- WHITE</p>							
				<p>167.12</p> <p>1cm BAND OF BLUE GREY QTZ</p> <p>010°</p> <p>INTERBANDD WITH SARCINIFORM FILLED FRACTURES</p> <p>- LIGHT GREEN</p> <p>TRACE VERY FINELY DISSEMINATED PYRITE</p>							

Interval		Rec'y %	RQD	DESCRIPTION	Interval		Core Width	Sample No.	ANALYTICAL RESULTS		
From	To				From	To			Au	Ag	Cu
159.11	185.01			ANDESITE (com)							
				MINERALIZATION AND ALTERATION (com)							
				168.79 - 173.45	168.25	169.77	1.52	206584			
				5% CALSINE VEILINGS	169.77	171.30	1.53	206585			
				010 - 050°							
				AVE WIDTH 1mm							
				• 3% CHALCOPYRITE							
				- DISSEMINATED							
				- CONCENTRATED AS COATING ON FRAGMENTS							
				AVE WIDTH .1mm							
				045°							
				171.90 - 171.96	171.30	172.82	1.52	206586			
				TOURMALINE FILLED FRAGMENTS							
				045°							
				10% CHALCOPYRITE AS ELONGATED BLASTS							
				AVE LENGTH 2mm							
				2% MAGNETITE DARK GREY LEADY							
				CONCENTRATED AS BLASTS IN TOURMALINE							
				AVE WIDTH 1mm							
				173.45 - 181.00	172.82	174.35	1.53	206587			
				SILICIFIED / SILICIFIED	174.35	175.87	1.52	206588			
				AS 163.04 - 168.79	175.87	177.39	1.52	206589			
				179.05	177.39	178.92	1.53	206590			
				3cm TOURMALINE FILLED FRAGMENTS	178.92	180.44	1.52	206591			
				15% CHALCOPYRITE AS ELONGATED BLASTS							
				181.00 - 185.01	180.44	181.97	1.53	206592			
				SILICIFIED / SILICIFIED	181.97	183.49	1.52	206593			
				98% FINE GRAINED Qtz / calcite 90% LIGHT GREY	183.49	185.01	1.52	206594			
				2% CALSINE FILLED FRAGMENTS							
				AVE WIDTH .1mm							
				2-1% CHALCOPYRITE							
				- FINELY DISSEMINATED							
				TAU 10501							

Appendix C



Vancouver Petrographics Ltd.

JAMES VINNELL, Manager
JOHN G. PAYNE, Ph.D. Geologist
CRAIG LEITCH, Ph.D. Geologist
JEFF HARRIS, Ph.D. Geologist
KEN E. NORTHCOTE, Ph.D. Geologist

P.O. BOX 39
8080 GLOVER ROAD,
FORT LANGLEY, B.C.
VOX 1J0
PHONE (604) 888-1323
FAX. (604) 888-3642

PETROGRAPHIC REPORT ON SIX POLISHED THIN SECTIONS

Report for: Gregory Smith
Aurum Geological Consultants Inc.
P.O. Box 5179
Whitehorse, Yukon
Y1A 4S3.

Invoice 8575

Nov. 5, 1989

Samples submitted: G89-4-18.04, 8-89.50, 4-195.10, 4-181.00,
6-105.30, 4-88.24.

Your reference: Project #51.

SUMMARY:

This is a suite of intensely altered and well mineralized rocks that all appear to be derived from a crowded porphyritic dacite or fine quartz diorite, although in some samples (G89-4-195.10, 88.24) there is really no texture left to go by.

Alteration is high-grade, mainly potassic (quartz-K-feldspar) facies in a porphyry copper model. It is distributed along vein envelopes and pervasively. Other important alteration minerals are carbonate that is probably dolomite, ferroan dolomite (ankerite) and possibly even siderite, chlorite, and epidote. Quartz veins are rare, while carbonate veins are common. Sericite is virtually absent.

Tourmaline forms veins, intense breccia networks and massive replacements completely obscuring the rock. Magnetite occurs with the latter, and in veins, where it may be oxidized to specular hematite. Chalcopyrite is associated with tourmaline, magnetite and hematite; it occasionally contains some minor bornite, and tennantite-tetrahedrite is suspected in one sample.

Craig H.B. Leitch, Ph.D., P.Eng.

(604) 921-8780 or 228-2646

G89-4-18.04: INTENSELY SODIC ALKALI FELDSPAR-QUARTZ-CARBONATE
ALTERED ?PORPHYRY CUT BY TOURMALINE-CHALCOPYRITE MATRIX

Light buff to cream, intensely altered rock, cut by a strong network of black fractures, some with modest amounts of chalcopyrite along them. The rock does not react to cold dilute HCl, but is cut by later white carbonate gash fractures which do react slowly. The rock is not magnetic. In polished thin section, the mineralogy is as follows:

Secondary alkali feldspar (sodic)	40%
Carbonate (?ankerite)	20%
(calcite)	5%
Tourmaline (schorl)	15%
Quartz	12%
Chalcopyrite	5%
Apatite	1%
Sphene	1%
Rutile	1%
Molybdenite	tr

The bulk of this rock is made up of buff fragments (fine-grained alkali feldspar, quartz, carbonate) cut by a black tourmaline-chalcopyrite breccia matrix, with later reopenings by white calcite-quartz. There is a suggestion of a former porphyritic texture to the rock, with vague remnant ?plagioclase phenocrysts in a finer groundmass.

The former phenocrysts are up to 1 mm across and replaced by interlocking anhedral secondary alkali feldspar grains up to 0.5 mm across, carbonate and minor opaques and apatite. The secondary feldspar does not stain yellow for K-feldspar, and lacks twinning; it is probably sodic, "irregular albite". Apatite forms subhedral grains up to 0.1 mm across.

The groundmass is made up of mosaic-textured 0.05 mm or less diameter secondary alkali feldspar (albite, showing rare twinning), quartz, and carbonate, with widely scattered grains of sphene up to 0.07 mm diameter.

The black matrix is composed of finely interlocking subhedral tourmaline up to 0.5 mm long, with lesser carbonate, quartz, and chalcopyrite. The carbonate is similar to that found in the body of the rock and in veinlets crossing the rock; it has high relief, is partly opaque compared to clear calcite in the re-openings of the veins and is likely ankerite (Fe-dolomite). The tourmaline has strong blue-grey to tan pleochroism and is likely schorl (Fe-tourmaline). Quartz forms subhedral to anhedral grains up to 0.2 mm across, closely associated with chalcopyrite that forms irregular patches up to 1 mm across. Chalcopyrite also forms fine grains of 0.01-0.1 mm diameter. One grain of molybdenite (0.1 mm long) was observed in chalcopyrite. There is no iron sulfide visible, but traces of rutile are found as minute grains rimming sphene grains.

G89-8-89.50: INTENSELY K-SPAR ALTERED, QUARTZ-CHALCOPYRITE VEINED, FELDSPAR PORPHYRITIC DACITE

Grey-buff, strongly altered feldspar porphyritic rock cut by quartz-chalcopyrite stringers that have extensive secondary K-feldspar envelopes. In polished thin section, the mineralogy is as follows:

Secondary K-feldspar	45%
Plagioclase (albitized)	25%
Carbonate (dolomite or ankerite)	10%
Quartz	10%
Chalcopyrite	5%
Sericite	2%
Sphene	1%
Rutile	1%
Apatite	<1%
Pyrite	tr

Plagioclase forms subhedral to euhedral crystals up to 3 mm across that are heavily replaced by albite (finely flecked by fine clay-sericite) in areas removed from the veins, and progressively replaced by secondary K-feldspar as the veins are approached. The alteration would be classed as strong potassic in character.

K-feldspar forms pseudomorphs up to 2 mm long after plagioclase, as well as smaller anhedral interlocking grains of 0.1-0.5 mm diameter replacing the plagioclase phenocrysts and former groundmass grains.

This is not really a porphyry, since the phenocrysts are so crowded (groundmass originally formed only 15% of the rock; the rock may have been a porphyritic dacite. The groundmass is quite coarse, indicating a high-level intrusive origin (almost a fine-grained quartz diorite).

There is also extensive alteration of ?former mafic grains, and moderate alteration of the feldspars, to fairly fine-grained (0.05 mm or less) carbonate. The carbonate does not react to cold dilute HCl, and is probably dolomite or ferroan dolomite (ankerite).

The veins are composed of coarse, anhedral quartz grains up to 1 mm across, with textures typical of deformation (undulose extinction), carbonate, K-feldspar, sericite (muscovite), and chalcopyrite. The alteration envelopes, which are up to 1 cm thick, include the same minerals plus rare apatite grains up to 0.3 mm long and sphene up to 0.1 mm long.

Chalcopyrite forms anhedral grains up to 2 mm across, mainly in the quartz veins. It is also rarely found disseminated as fine (0.01-0.05 mm) grains associated with rutile. Rutile forms minute grains up to 0.05 mm diameter with pale brownish white internal reflections, in former mafic sites. Rare pyrite is found in this section, as cubic grains up to 0.05 mm across.

G89-4-195.10: TOURMALINE-MAGNETITE-CHALCOPYRITE REPLACEMENT

Massive black tourmaline-magnetite replacement, with areas and layers of lighter-coloured, less replaced rock. There are also bands of magnetite, and the rock is cut by a network of chalcopyrite stringers. In polished thin section, the modal mineralogy is as follows:

Tourmaline (schorl)	60%
Magnetite	20%
Chalcopyrite	10%
Hematite (after magnetite)	5%
Carbonate (?dolomite or ankerite)	5%
Quartz	<1%

Tourmaline makes up the bulk of this rock, forming euhedral to subhedral crystals averaging about 0.1 mm long, but ranging up to 0.5 mm. The tourmaline is strongly pleochroic in deep blue-green to pale tan, and is probably schorl (Fe-rich tourmaline). It is very similar to the tourmaline seen in other samples of this suite. From the vague remnants of paler-coloured rock seen in the hand specimen, it seems likely that this sample represents stronger, more massive replacement (?of a former igneous rock) than seen in G89-4-118.04.

Magnetite forms disseminated subhedral to anhedral grains of about 0.01 to 0.2 mm diameter accompanying the tourmaline, as well as massive bands up to 0.5 cm thick. These are parallel to the lighter-coloured layers in the rock, suggesting they represent former layers of different composition. The magnetite is partly replaced by minor amounts of hematite as very fine, generally elongated grains up to 0.05 mm long. This does not look like exsolution hematite; it is probably due to oxidation after the magnetite was formed, although the rock does not look weathered.

Chalcopyrite forms a network of fractures and veins up to 3 mm thick cutting the massive tourmaline-magnetite replacement body. No other sulfides are visible. Magnetite, tourmaline and chalcopyrite are occasionally intergrown, suggesting that the introduction of the chalcopyrite was not entirely a separate event later than tourmalinization.

Carbonate, which does not react to cold dilute HCl, and is likely to be ferroan dolomite (ankerite), forms thin irregular veins cutting the massive tourmaline-magnetite rock. The anhedral carbonate grains are up to 0.3 mm across, and are occasionally mixed with subhedral grains of quartz up to 0.5 mm in diameter. An anhedral, metamict-looking mineral also found as interstitial grains up to 0.3 mm across in the veins is interpreted as carbonate, although this identification is not certain.

G89-4-181.00: MASSIVE DOLOMITE-ANKERITE-QUARTZ-TOURMALINE-
CHALCOPYRITE REPLACEMENT

Similar rock to the specimens from G89-4-118.04 and 195.10, with a black matrix of tourmaline replacing a buff-coloured rock. As in 4-118.04, the tourmaline is accompanied by coarse patches of chalcopyrite. The rock does not react to cold dilute HCl even after powdering. In polished thin section, the mineralogy is as follows:

Carbonate (dolomite and ankerite)	45%
Quartz (secondary)	20%
Tourmaline (schorl)	15%
Chalcopyrite	15%
Muscovite	5%
Magnetite, hematite	<1%
Bornite	tr

This rock is so thoroughly replaced that it is not possible to guess what the protolith might have been. It is now composed of coarse carbonate (?dolomite), with patches of fine carbonate of higher relief (?ankerite), darker areas of fine-grained tourmaline and blebs of chalcopyrite.

The coarse carbonate forms clear subhedral grains up to 2 mm in diameter, in a vague vein network replacing the rock. Coarse quartz, in subhedral to anhedral grains up to 1 mm long, accompanies the ?dolomite, and there are occasional flakey patches of muscovite as subhedral grains up to 0.1 mm diameter.

Finer-grained areas, that look like highly replaced wallrock to the veins, are composed of quartz, two varieties of carbonate, and variable amounts of tourmaline in anhedral grains of about 0.05-0.1 mm diameter. The lower relief, clearer carbonate is similar to that in the vein network and may be dolomite; the other is cloudy almost to the point of being semi-opaque, and may be ankerite or even siderite. There is also a possibility that it could be sphene; microchemical Tourmaline is anhedral to subhedral, and shows the same deep blue-green to pale tan pleochroism of the other samples in this suite. If I had to guess, I would suggest that these finer-grained patches are the remnants of a former igneous rock like that seen in G89-4-118.04 or G89-8-89.50, but this is supposition without seeing the relations in the field; there is certainly nothing conclusive in thin section.

In reflected light, chalcopyrite forms coarse subhedral grains of about 0.5 mm average diameter that would liberate easily from the gangues. There are minor inclusions of 20-50 micron diameter grains of hematite and ?magnetite, and bornite up to 0.2 mm, particularly around the margins of some grains. The sulfide assemblage is notably Fe-poor, though (no pyrite).

G89-6-105.30: STRONGLY POTASSIC ALTERED PORPHYRITIC DACITE

Dark grey-green fine-grained igneous rock, probably similar to the porphyritic dacite or quartz diorite of G89-8-89.50, cut by black stringers of magnetite-specular hematite-chalcopyrite, with intense development of K-feldspar alteration envelopes. In polished thin section, the mineralogy is as follows:

Plagioclase (albitized)	30%
Secondary K-feldspar	25%
Quartz (partly secondary)	15%
Carbonate (ankerite)	10%
Chlorite	5%
Hematite (specularite)	5%
Tourmaline	3%
Chalcopyrite	2%
Magnetite	2%
Clay-sericite	2%
Bornite, tennantite-tetrahedrite	1%

Both the rock type and the alteration in this sample are similar to G89-8-89.50. As the etched and stained slab shows, and as textures in thin section confirm, this rock is strongly altered to secondary alkali feldspar, including intense envelopes of K-spar near the veins and fractures and albite after former more calcic plagioclase farther away.

Plagioclase crystals are subhedral to euhedral and up to about 1 mm long. In areas removed from vein envelopes, they show the vague twinning characteristic of "irregular albite" or else patchwork albite. Near the veins, they are completely replaced by smaller sub-domains of K-feldspar. The feldspars all show weak flecking by clay-sericite as fine particles (5-10 microns in diameter).

There is no evidence of primary quartz phenocrysts in this rock, but the groundmass (which forms about 15% of the rock, between the crowded plagioclase phenocrysts) contains abundant fine-grained quartz as anhedral grains in two modes: about 0.02 mm and about 0.2 mm. It is mixed with abundant small microphenocrysts of plagioclase, variably replaced by alkali feldspar, and lesser amounts of chlorite.

Chlorite is very difficult to see in the thin section, having absolutely no colour or pleochroism, but it clearly colours the hand specimen. It is found as fine shreddy masses up to 0.05 mm across, mainly interstitial to the plagioclase crystals. Carbonate, which does not react to cold dilute HCl even after powdering, is probably ferroan dolomite. It is found as small anhedral grains replacing feldspars and the groundmass, and as thin veinlets up to 0.5 mm thick. The black veinlets, up to 4 mm thick, contain minor magnetite as anhedral grains up to 0.2 mm diameter, chalcopyrite up to 1 mm across and minor green tourmaline grains up to 0.1 mm across, but are mainly specular hematite in flaky masses up to 0.2 mm long. The hematite apparently replaces the magnetite, which contains anhedral bornite up to 0.5 mm across. There is rare tennantite-tetrahedrite, as anhedral grains up to 0.1 mm across, with bornite.

GB9-4-88.24: INTENSELY POTASSIC (QUARTZ-K-SPAR-CHLORITE-DOLOMITE-EPIDOTE-CHALCOPYRITE) ALTERED PORPHYRITIC DACITE

Similar fine, crowded dacite porphyry as in the previous sample, with quartz-chalcopyrite+tourmaline veins. These veins are reopened and cut by thinner (<1 mm) carbonate veins that react to cold dilute HCl only after powdering. The rock is not magnetic. There is strong yellow stain for pervasive secondary K-feldspar. In polished thin section, the mineralogy is as follows:

Quartz (mainly secondary)	30%
Secondary K-feldspar	20%
Chlorite	15%
Carbonate (dolomite)	10%
Chalcopyrite	10%
Epidote	5%
Relict plagioclase (albite)	5%
Sericite	3%
Tourmaline	2%
Rutile	<1%
Pyrite	tr
Bornite	tr

The texture of this rock in thin section is virtually unrecognizable, with intense replacement by quartz, K-feldspar, chlorite, epidote, and minor sericite. A few remnant plagioclase phenocrysts are still recognizable (up to 1 mm long), replaced by albite. There are also remnant mafic grains up to 1 mm across, pseudomorphed by fine-grained aggregates of chlorite, carbonate, epidote and minor quartz and opaques. Epidote has lemon yellow pleochroism, forming subhedral grains up to 0.1 mm across.

Mostly, however, the rock is completely replaced by a fine-grained mosaic (average grain size 0.05 mm or less) of tightly interlocking quartz, K-feldspar, carbonate, and minor chlorite and sericite. The carbonate also is found in veins up to 2 mm thick, where it forms clear anhedral grains up to 1 mm across, often containing perfectly euhedral prisms of quartz up to 0.5 mm long. The veins are bordered by chlorite as flakey masses up to 0.25 mm across.

There are also occasional thin veinlets of tourmaline up to 0.2 mm thick, in variable states of replacement by chlorite and epidote. The pleochroism of the tourmaline is in shades of green only (different from schorl in other samples of this suite).

Chalcopyrite is found mainly in the major quartz veins but also spreads out from them into altered envelopes in places. It forms anhedral to subhedral grains and aggregates up to several millimeters across, occasionally with minor bornite inclusions up to 0.05 mm across. Small masses of extremely fine-grained rutile (0.02 mm or less diameter) are found adjacent to the chalcopyrite, and disseminated through the rock. In one quartz vein, a few euhedral 1 mm cube of pyrite are also found. Note that there is no hematite or magnetite in this rock, as in the other copper mineralized specimens.

Appendix D

STATEMENT OF QUALIFICATIONS

I, GREGORY F. SMITH, hereby certify that:

1. I am a geologist with AURUM GEOLOGICAL CONSULTANTS INC. of 412 675 West Hastings Street, Vancouver, British Columbia
2. I am a graduate of Saint Francis Xavier University, with a degree in geology (B.Sc., 1987) and have been involved in geology and mineral exploration for the last 4 years.
3. I have no direct or indirect interest in the properties or securities of Integrated Resources Ltd.
4. I am a co-author of this report on the Gnat Pass property which is based on my personal involvement and supervision of exploration work carried out during the period September 10 to October 10, 1989; and on referenced sources.
5. I consent to the use of this report in a company report or statement, provided that no portion is used out of context in such a manner as to convey a meaning differing materially from that set out in the whole.

DATED at Vancouver, B.C., this 12th day of July 1990.


Gregory Smith, B.Sc.

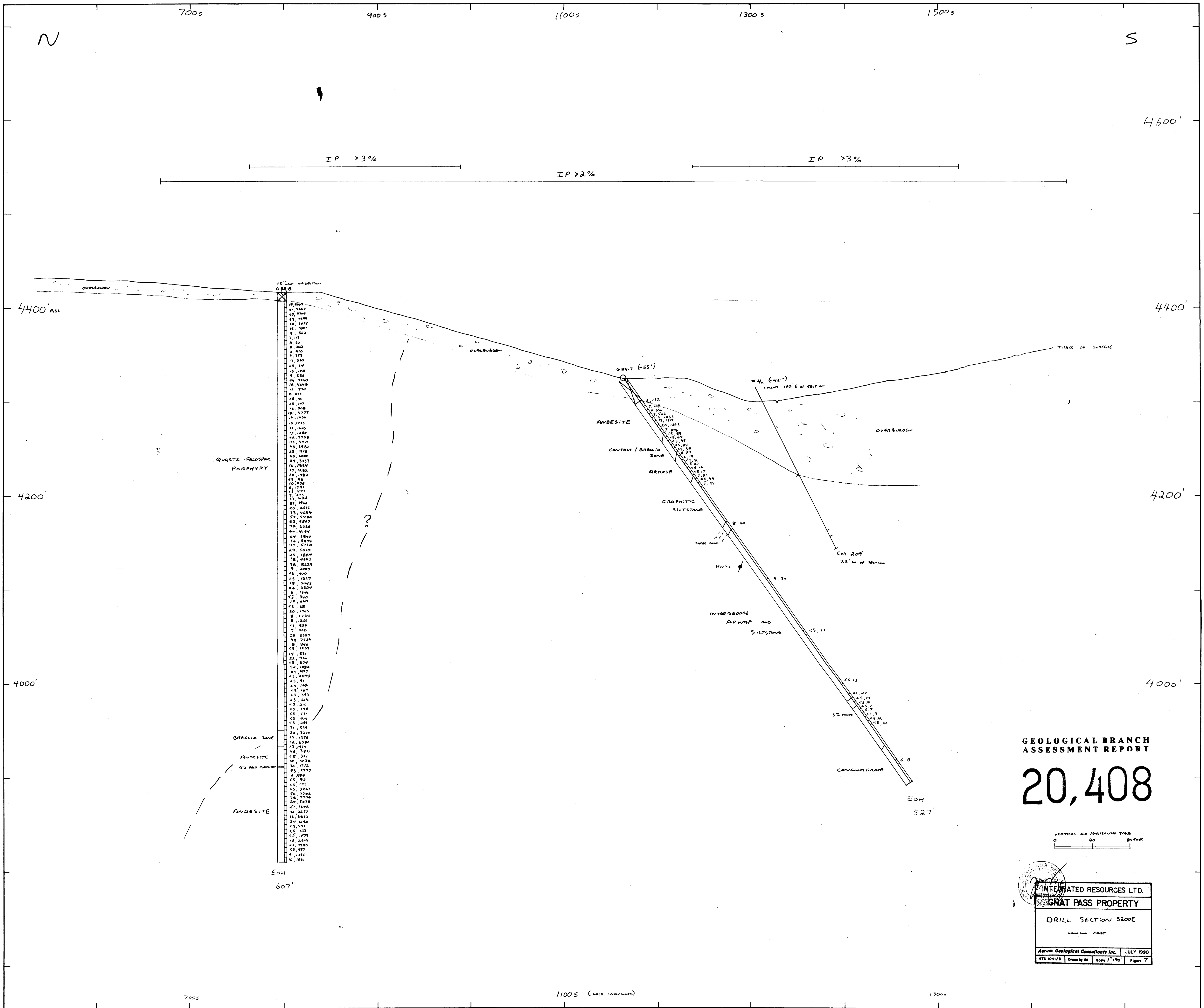
STATEMENT OF QUALIFICATIONS

I, THOMAS GARAGAN, hereby certify that:

1. I am a geologist with AURUM GEOLOGICAL CONSULTANTS INC. of 412 675 West Hastings Street, Vancouver, British Columbia and I co-authored 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 professional member of the Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA).
4. I am a Fellow of the Geological Association of Canada (F3819) and a member of the Mineralogical Association of Canada and the Yukon Professional Geoscientists Society.
5. I have been engaged in mineral exploration and geological survey mapping on a full and part time basis for 12 years, of which eight have been spent on mineral exploration programs in the Northern Cordillera.
6. I have no interest in the claims or securities of Integrated Resources Ltd.
7. I consent to the use of this report in a company report or statement, provided that no portion is used out of context in such a manner as to convey a meaning differing materially from that set out in the whole.

DATED at Calgary, Alta., this 17th day of July 1990.

Thomas Garagan, B.Sc., FGAC, P.Geol.

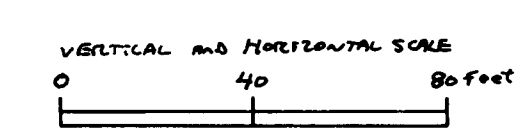


15' DIA. OF SECTION
G 88.8

14.209	41.4657
15.259	41.4657
16.259	41.4657
17.259	41.4657
18.259	41.4657
19.259	41.4657
20.259	41.4657
21.259	41.4657
22.259	41.4657
23.259	41.4657
24.259	41.4657
25.259	41.4657
26.259	41.4657
27.259	41.4657
28.259	41.4657
29.259	41.4657
30.259	41.4657
31.259	41.4657
32.259	41.4657
33.259	41.4657
34.259	41.4657
35.259	41.4657
36.259	41.4657
37.259	41.4657
38.259	41.4657
39.259	41.4657
40.259	41.4657
41.259	41.4657
42.259	41.4657
43.259	41.4657
44.259	41.4657
45.259	41.4657
46.259	41.4657
47.259	41.4657
48.259	41.4657
49.259	41.4657
50.259	41.4657
51.259	41.4657
52.259	41.4657
53.259	41.4657
54.259	41.4657
55.259	41.4657
56.259	41.4657
57.259	41.4657
58.259	41.4657
59.259	41.4657
60.259	41.4657
61.259	41.4657
62.259	41.4657
63.259	41.4657
64.259	41.4657
65.259	41.4657
66.259	41.4657
67.259	41.4657
68.259	41.4657
69.259	41.4657
70.259	41.4657
71.259	41.4657
72.259	41.4657
73.259	41.4657
74.259	41.4657
75.259	41.4657
76.259	41.4657
77.259	41.4657
78.259	41.4657
79.259	41.4657
80.259	41.4657
81.259	41.4657
82.259	41.4657
83.259	41.4657
84.259	41.4657
85.259	41.4657
86.259	41.4657
87.259	41.4657
88.259	41.4657
89.259	41.4657
90.259	41.4657
91.259	41.4657
92.259	41.4657
93.259	41.4657
94.259	41.4657
95.259	41.4657
96.259	41.4657
97.259	41.4657
98.259	41.4657
99.259	41.4657
100.259	41.4657

GEOLOGICAL BRANCH
ASSESSMENT REPORT

20,408

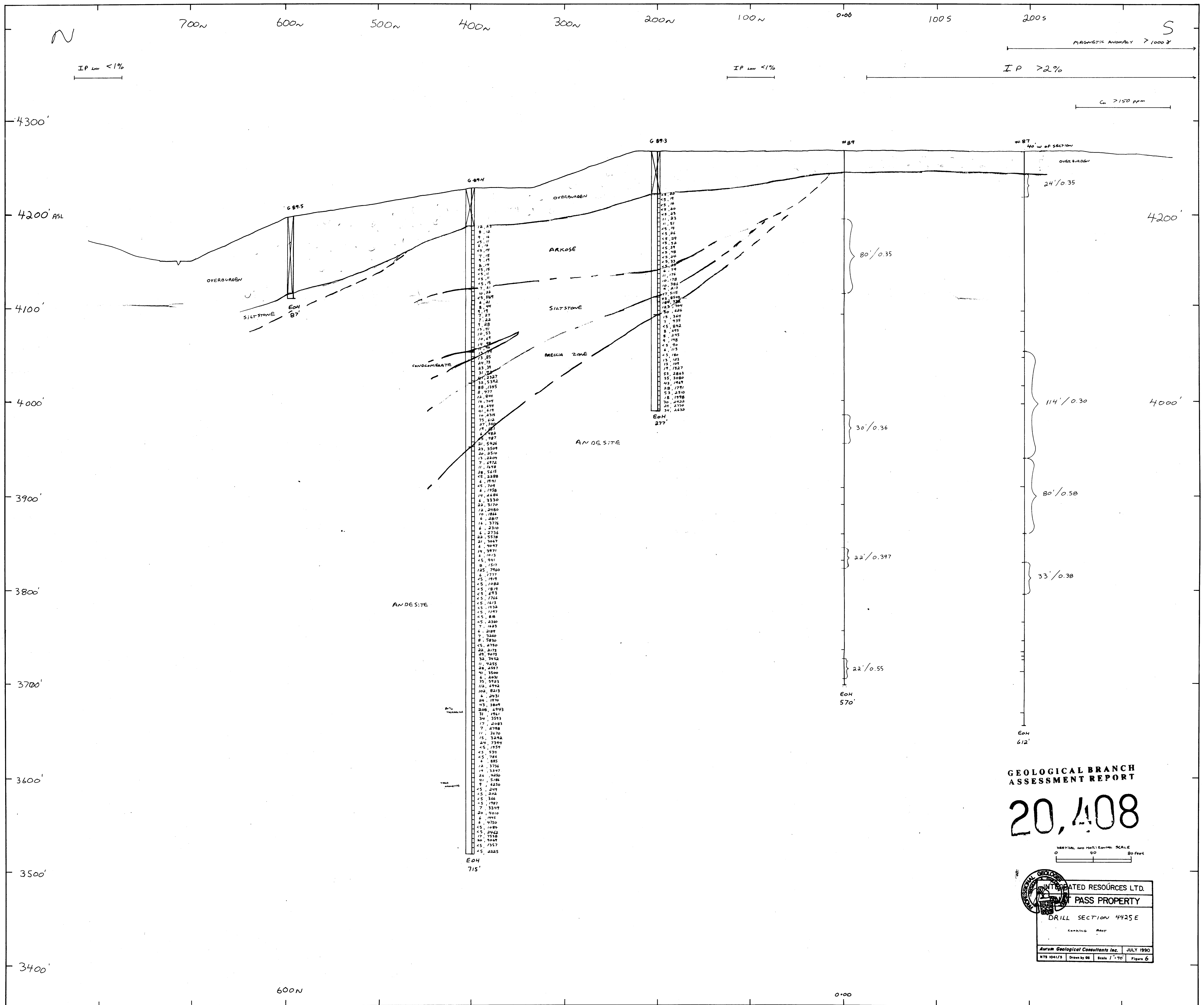


INTEGRATED RESOURCES LTD.
GRAT PASS PROPERTY
DRILL SECTION 5200
LOOKING EAST

Aurum Geological Consultants Inc. JULY 1990
NTE 1041/3 Drawn by 88 Scale 1"=40' Figure 7

E04
607'

E04
527'



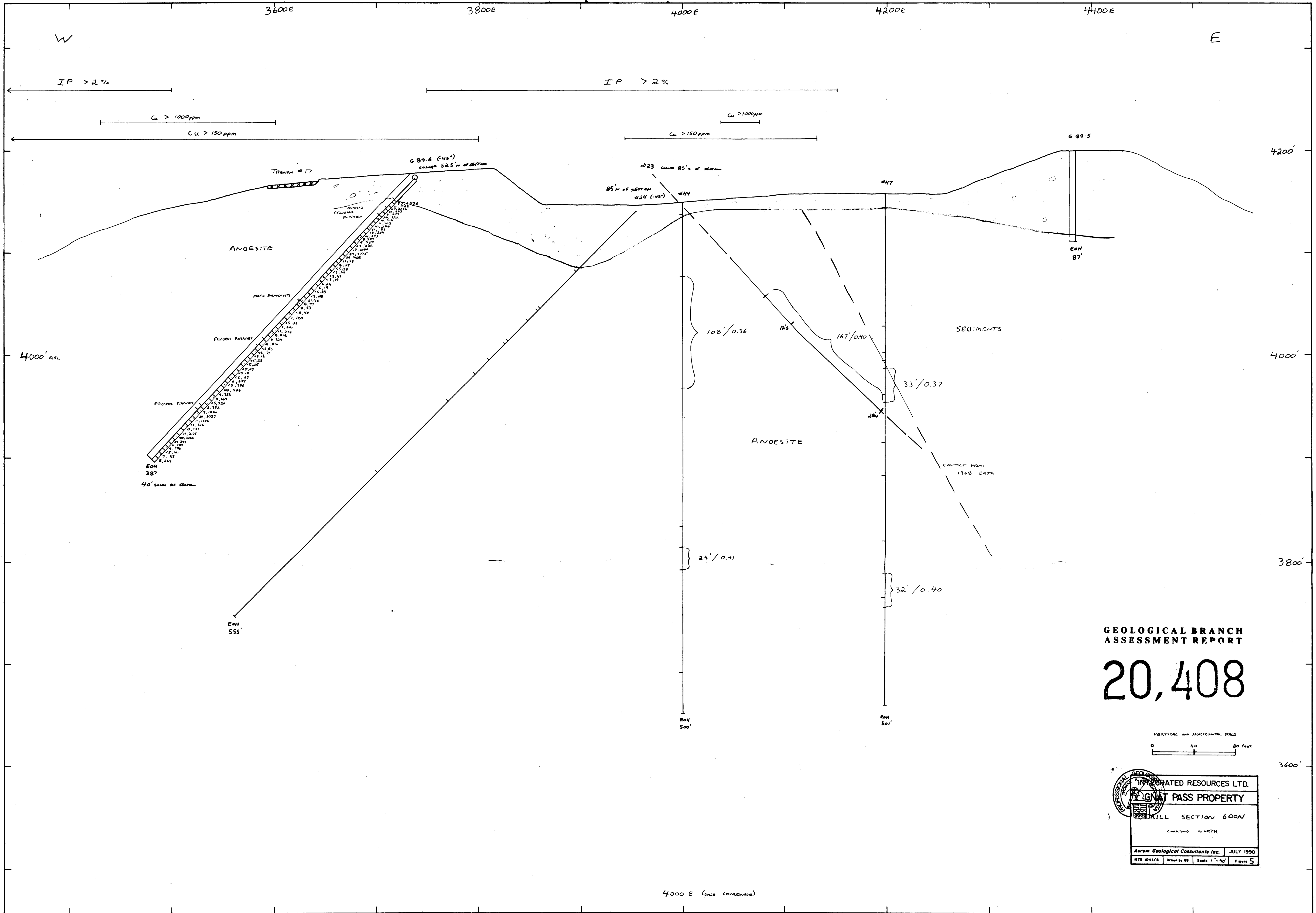
**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

20,408

VERTICAL AND HORIZONTAL SCALE
0 40 80 feet

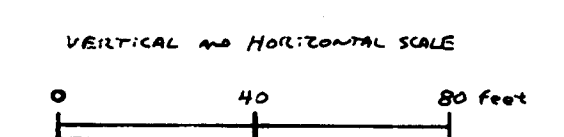
INTEGRATED RESOURCES LTD.
PASS PROPERTY
DRILL SECTION 4425E
Geology Map

Aurum Geological Consultants Inc. JULY 1990
 NTS 104173 Drawn by DS Scale 1"=100' Figure 6



GEOLOGICAL BRANCH
ASSESSMENT REPORT

20,408

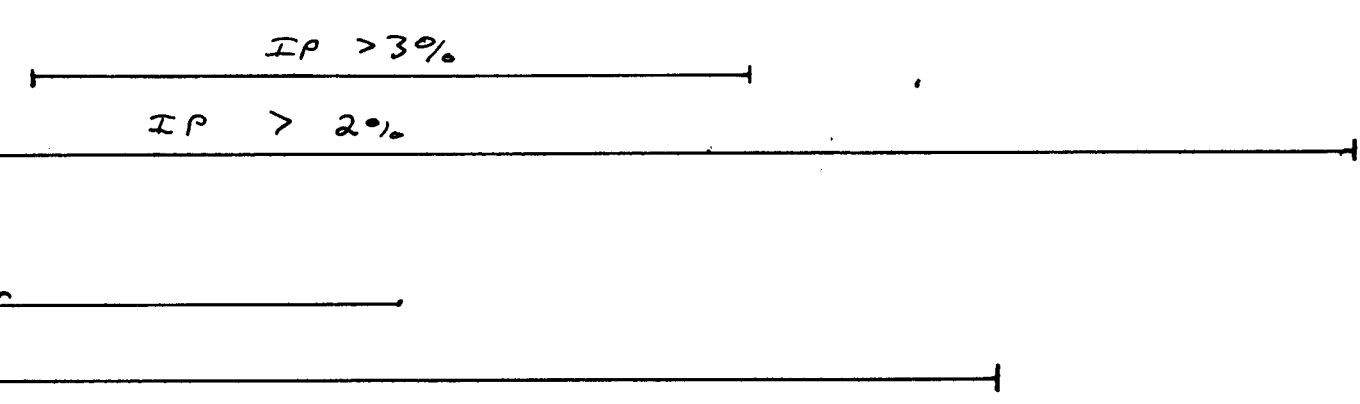


INTEGRATED RESOURCES LTD.
LIGNIT PASS PROPERTY
DRILL SECTION 600W
LOOKING NORTH

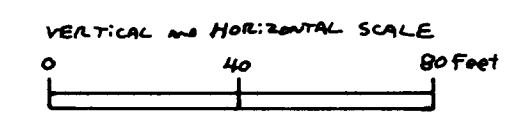
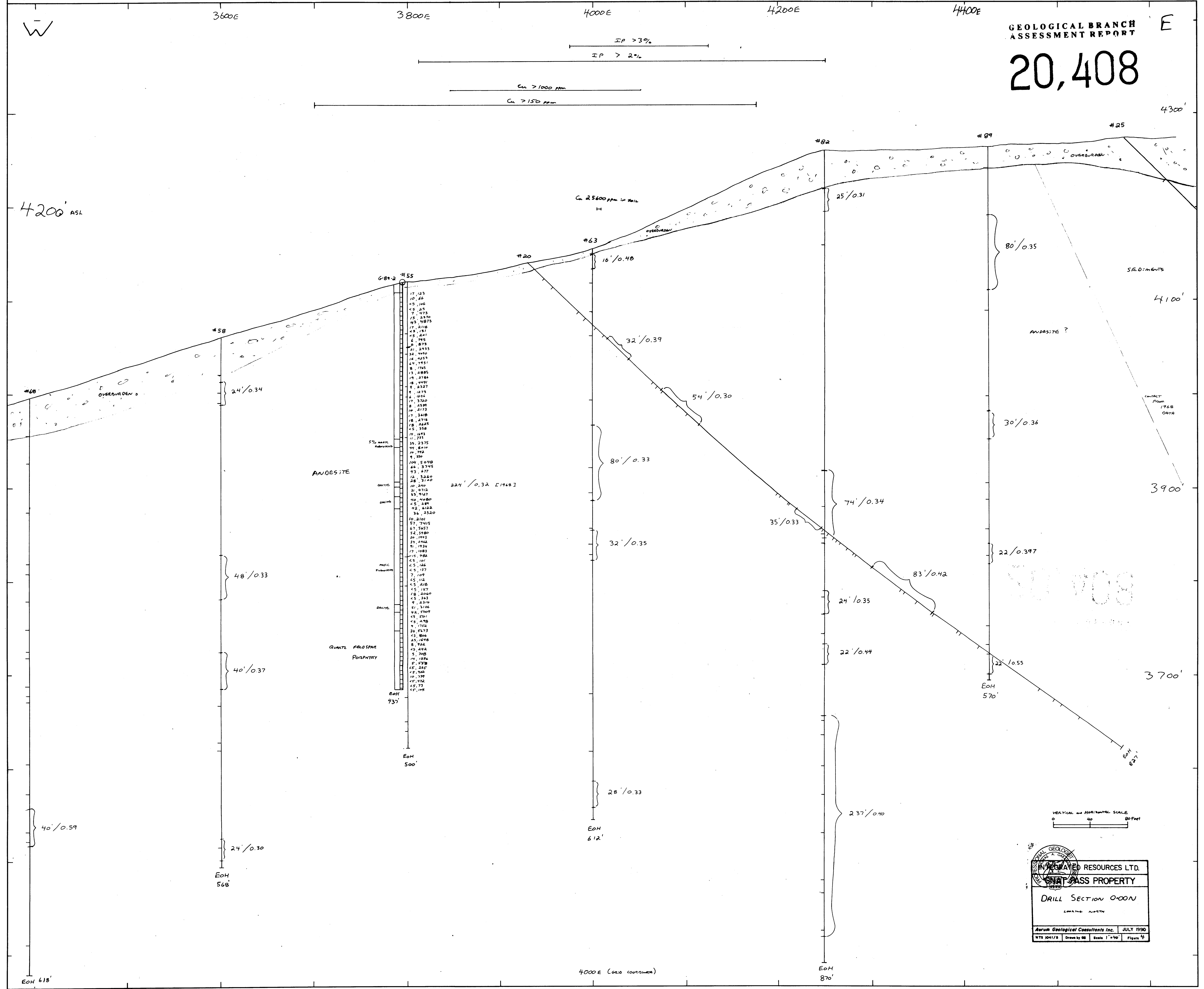
Avrum Geological Consultants Inc. JULY 1990
NTS 1041/S Drawn by 08 Scale 1"=40' Figure 5


4000 E (grid coordinate)

3600E 3800E 4000E 4200E 4400E



4200' ASL




AURUM RESOURCES LTD.
 GREAT PASS PROPERTY
 DRILL SECTION 0-00N
 Aurum Geological Consultants Inc. JULY 1990
 NTS 1041/8 Drawn by GB Scale 1"=40' Figure 4

4000E (GRID COORDINATE)

EOH 618

EOH 870