

Sam Goosley Drilling Report on the  
T-93, T-102, SG-17 & SG-35 Mineral Claims  
 $54^{\circ}11'N.$ ,  $126^{\circ}15'E.$   
N.T.S. 93-L-1  
Omineca Mining Division

Owned by:  
Equity Mining Corporation

Operated by:  
Placer Development Limited

By: E.S. Holt, P. Eng. (B.C.)

November 1978

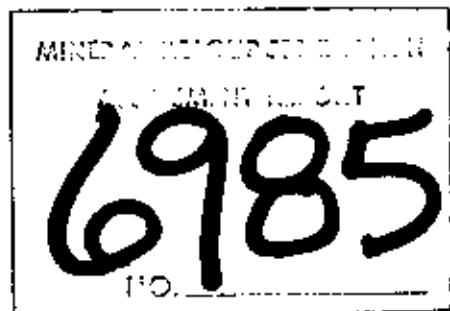


TABLE OF CONTENTS

	<u>Page</u>
Introduction	
Drilling Report	1-3
General Location Map	4
1:250,000 Location Map	5
General Operating Map	6
Statement of Drilling Cost (Appendix A)	1-2
Statement of Qualifications (Appendix B)	1

Bound in Report

Drill Hole Geological Logs for DDH-209;213;221 & 222.  
Drill Hole Assay Sheets for DDH-209;213;221 & 222.

In Pocket

General Operating Plan (scale 1"= 400') showing the drill hole locations (colored red) in relationship to the claim boundaries.

## INTRODUCTION

The Sam Goosly property is located within the Omineca Mining Division in the central interior of British Columbia, approximately 20 miles southeast of the town of Houston. The geodetic coordinates are 54° 11'N, 126° 15'E.

The property is accessible from Houston via a 34 mile logging road which follows the Buck Creek valley south from Houston. A shorter 23 mile access road is currently under construction via the Dungate Creek valley.

To date two significant concentrations of silver-copper-gold-antimony mineralization have been located on the property. The principal minerals of economic importance are tetrahedrite and chalcopyrite. The Main Zone deposit was discovered in 1968 by Kennco Explorations, (Western) Limited. They carried out a substantial exploration program including approximately 30,000 feet of diamond drilling in 62 holes. With other priorities, Kennco terminated most of their activity at Sam Goosly in 1971 and in late 1972 optioned the property to the partnership of Equity Mining Capital Limited of Vancouver and Congdon and Carey of Denver, Colorado. The partnership's interest was subsequently reorganized into a new company, Equity Mining Corporation.

The new operators pursued a vigorous development program including 60,000 feet of definition drilling, underground bulk sampling, metallurgical research and pilot plant milling operations, together with the related engineering and environmental work necessary to complete a feasibility study.

During 1978, Placer Development Limited entered an agreement with the owners for onward development of the project. The drilling described in this report is part of their program to prepare the property for production.

DRILLING REPORT

During the period September 25 to October 25, 1978, an 18-hole diamond drilling program was completed on the Sam Goosly property. Four of these holes, 209, 213, 221 and 222 are located outside of Mining Lease number 1 and are being submitted for assessment credit. The drill collar survey data is as follows:

Hole	<u>Northing</u>	<u>Easting</u>	<u>Elev.</u>	<u>Dip</u>	<u>Bearing</u>	<u>Length</u>
209	8,503.3	11,740.3	4,186.5	-45°	090°	535 ft.
213	10,420.5	11,068.4	4,143.8	-45°	090°	501 ft.
221	16,827.3	11,596.4	4,144.6	-45°	090°	875 ft.
222	16,818.8	13,046.3	4,128.6	-45°	090°	795 ft.

Dip tests were not taken. It has been our experience that the drill holes have run very true in the massive rocks at Sam Goosly. This is enhanced by the Large diameter NQ size equipment used.

The purpose and general results of the holes are described as follows:

Hole 209

This hole was drilled to intersect the host horizon below the presently planned Southern Tail pit. Its purpose was to provide additional information in an area of erratic mineralization in order to guide long term pit planning.

The hole intersected the host horizon between 390 and 510 feet and assayed .47% Cu, 25 grams Ag per metric ton and .072 grams of Au per metric ton over that 120 foot interval. As will be noted in the drill hole assay logs, the better grade silver was concentrated near the hanging wall while the bulk of the copper values were concentrated in the last three 10 foot intervals.

The mineralization and host rocks were typical of the Southern Tail deposit; coarse erratic blebs and patches of chalcopyrite and tetrahedrite in a massive, fine dust tuff. Pyrite content generally ranges between 3 and 8% and is concentrated primarily in stringers. Its abundance picks up slightly within the host horizon and drops off noticeably in the more chloritic footwall rocks.

With the exception of a few narrow intersections of andesite and feldspar porphyry dyke, the entire hole was within the massive buff to grey dust tuff division of the pyroclastic unit. This unit forms part of the Early to Middle Mesozoic rocks which are exposed in a window, surrounded by Tertiary volcanic rocks and intruded by two stocks as shown on the accompanying plan.

(?)

DRILLING REPORT (Cont'd)

The andesite and feldspar porphyry dykes are post mineral and are similar to those found throughout the pyroclastic unit.

The dust tuff encountered in hole 109 is very similar to most of the rock encountered in the drilling to the south on the Gaul claims as well as to the north-northeast where it interfingers with coarser pyroclastics.

Hole 213

This hole was drilled to confirm that the planned waste dump area did not overlay rocks with open pit potential. Rock outcrops were scarce in this general area and the location of the contact between the quartz monzonite stock and the pyroclastics was in question.

The hole confirmed that area was underlain by fine pyroclastics which proved to be typically barren of economic sulphides in this hanging wall portion of the unit. The hole was stopped well short of the host horizon. Like hole 209, it encountered a number of narrow post mineral dykes and contained 3 to 5% coarse pyrite over most of its length.

One isolated ten foot interval assayed .47% Cu, 15 grams per metric ton Ag and 0.58 grams per ton Au from 410 to 420 feet. All other assays were essentially trace amounts of Cu, Ag and Au.

This hole, together with hole 214A and the earlier holes defining the north end of the Southern Tail deposit essentially provide an additional E-W section through the hanging wall pyroclastics.

Hole 221

Drill hole 221 was drilled as part of a program planned to ensure that the tailing impoundment area at Sam Goosly does not overlay an area of economic potential. This hole together with hole 222 and hole 54 drilled previously by Kennco Explorations (Western) Ltd. were designed primarily to test a broad I.P. anomaly which extended into the tailing impoundment basin.

The hole encountered wide intervals of dacite flow rocks, with minor interbedded dust tuff and a number of younger dyke rocks. The dacite flows appear to correlate in age with the broad pyroclastic unit to the south, which hosts the known Ag-Cu deposits.

(3)

DRILLING REPORT (Cont'd)

The interfingering of dust tuff, the lack of any unconformities, the presence of the same common dyke rocks and the local concentrations of pyrite and tourmaline which are common in the pyroclastics but lacking in the younger rocks all support this concept.

Pyrite was common as stringers and patches and constituted more than 10% of the rock mass over several significant intervals. Local sections carried abundant tourmaline while economic sulphides were limited to narrow stringers of what appeared to be late Pb-Zn mineralization. As detailed in the "Drill Hole Assay Logs" no intersections of economic significance were encountered.

Hole 222

As mentioned above, hole 222 formed part of a program testing the proposed tailing impoundment area at Sam Goosly. It encountered rocks similar to hole 221 above, with a greater proportion of mixed pyroclastics and consequently a closer correlation with Early Cretaceous (?) rocks to the south.

Pyrite and tourmaline alteration were common, particularly in the upper portion of the hole. In this hole the only visual economic sulphide noted was chalcopyrite which occurred as stringers with pyrite from 299 to 303 feet and at 752 feet. Minor amounts were also noted as disseminations in the Rhyolite flow from 774 to 795 ft.

A seventeen foot interval between 298 and 315 feet assayed .40% Cu and 7 grams per metric ton Ag while a 10 foot section between 755 and 765 feet assayed .01% Cu and 110 grams per metric ton Ag. All other assay results were essentially trace.

Detail rock descriptions for each hole are provided in the appended "Drill Hole Geologic Log", while assay results for the intervals assayed are shown in the "Drill Hole Assay Log". Hole 209 contained the only intersections of economic significance.

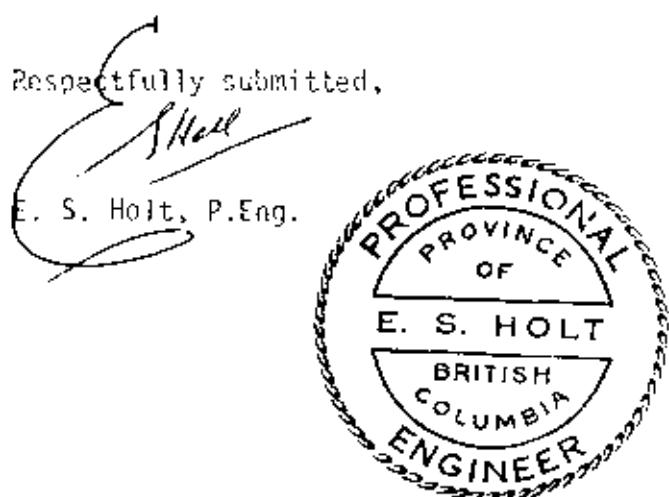
The core is in storage at the camp site on the property.

Respectfully submitted,

E. S. Holt, P.Eng.

ESH/kb

November 24, 1978

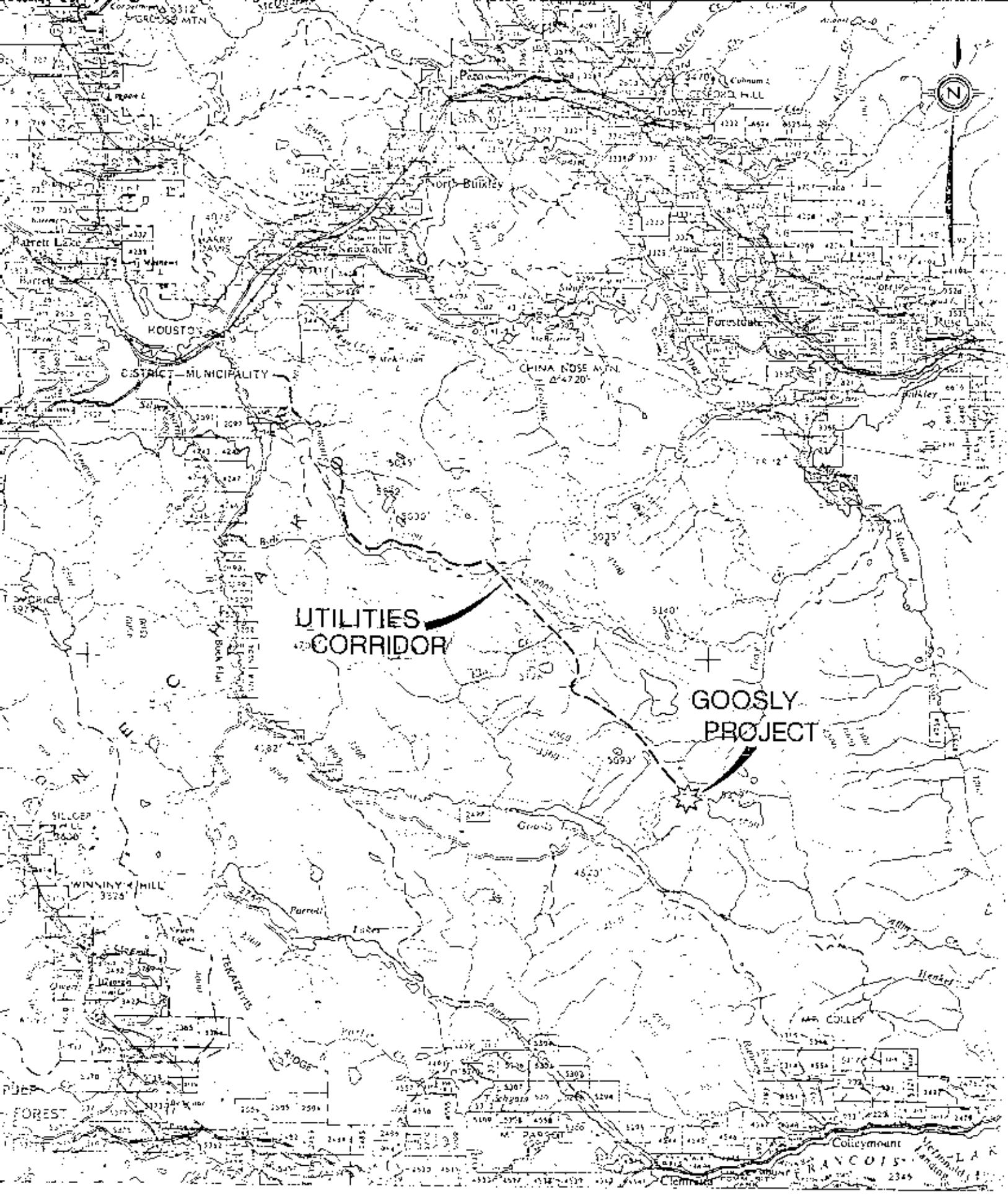




LOCATION OF SAM GOOSLY DEPOSIT

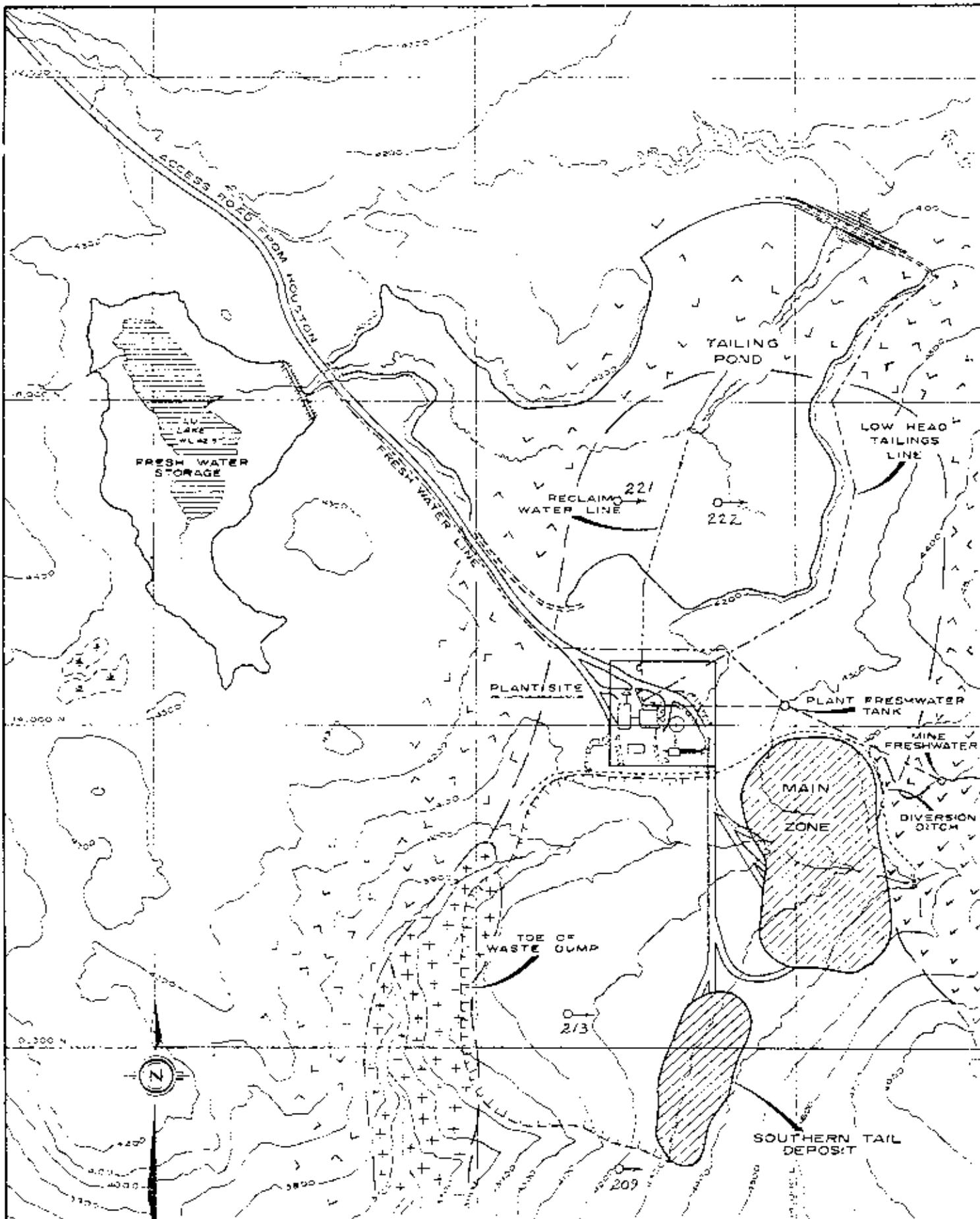
SCALE

MILES 50 0 100 200 300 MILES



Scale 1:250,000 or approximately 1 Inch to 4 Miles

Scale of Kilometres



#### SAM GOOSLY PROJECT

##### GENERAL OPERATING PLAN

SCALE IN FEET  
100 200 300 400

---

---

APPENDIX "A"

## Drilling Cost Statement

Sam Goosley Venture

19 - 22 October

DDH 221 located on Mineral Claim T-93  
Total Footage = 875 feet

Straight Drilling Cost as per J.T. Thomas Invoice	\$11,005.00
Tractor time (set up & pulldown rig) 14 hrs @ \$16.50/hr	231.00
Tractor operator hrs charged = 7 hrs @ \$19.00/hr	133.00

### Camp Operations:

4 drillers (T. Holland, S. Leduc, L. Shaw, P. Wolnowski) 4 days @ \$20.00/manday	320.00
3 company personnel (E. Holt, D. Ball & L. Kiss) 4 days @ \$20.00/manday	240.00
company's wages 4 days	
E. Holt (supervisor) @ \$130.00/day	520.00
L. Kiss (field technician) \$80.00/day	320.00
D. Ball (assistant) \$45.00/day	184.00
Assay cost: (cost include pulverising)	
25 core samples for Cu @ \$6.25/sample	156.25
25 " " " ag @ \$5.00/sample	125.00
<hr/>	
	\$13,234.25

23 - 24 October

DDH 222 located on Mineral Claim T-102

Total footage = 795 feet

Straight Drilling Cost as per J.T. Thomas Invoice \$ 9,835.00  
Tractor time (moving rig) 6 hrs @ \$16.50/hr 99.00

#### Camp Operations:

4 drillers (T. Holland, S. Leduc, L. Shaw, P. Wolnowski) 2 days @ \$20.00/day	160.00
3 company personnel (E. Holt, D. Ball, L. Kiss) 2 days @ \$20.00/day	120.00
<b>Company wages</b>	
E. Holt (Supervisor) 2 days @ \$130.00/day	260.00
L. Kiss (Field Technician) 2 days @ \$80.00/day	160.00
D. Ball (Assistant) 2 days @ \$45.00/day	90.00



12

2 - 4 October

DDH 213 located on Mineral Claim SG-35 ML-2  
Total footage = 501 feet  
Straight Drilling Cost as per J.T. Thomas Invoice \$6,013.00  
Tractor time (setup & pulldown) 3 hrs @ \$16.50/hr 49.50

### Camp Operations:

4 drillers (J. Turpin, S. Leduc, L. Shaw, P. Molnowski) 3 days		
	@ \$20.00/manday	240.00
3 company personnel (S. Tennant, L. Kiss & D. Ball) 3 days		
	@ \$20.00/manday	180.00
<b>Company's Wages</b>		
S. Tennant (Supervisor) 3 days @ \$130.00/day		390.00
L. Kiss (Field Technician) 3 days @ \$80.00/day		240.00
D. Ball (Assistant) 3 days @ \$45.00/day		135.00
<b>Assay Cost (cost includes pulverising)</b>		
19 core samples for Cu @ \$6.25/sample		118.75
" " " " Ag @ \$5.00/sample		95.00
		<hr/>
		\$7,461.25

27 - 29 September

DDH 209 located on Mineral Claim SG-17 ML-2  
Total footage = 535  
Straight drilling cost as per J.T. Thomas Invoice 6,455.00  
Tractor time (setup & pulldown) 5 hrs @ \$16.50/hr 82.50

### Camp Operations:

4 drillers (J. Turpin, S. Leduc, J. Holland, P. Wolnowski) 3 days	@ \$20.00/manday	240.00
3 company personnel (S. Tennant, L. Kiss & D. Ball) 3 days	@ \$20.00/manday	135.00
<b>Company's Wages</b>		
S. Tennant (Supervisor) 3 days @ \$130.00/day		390.00
L. Kiss (Field Technician) 3 days @ \$80.00/day		240.00
D. Ball (Assistant) 3 days @ \$45.00/day		135.00
<b>Assay Costs: (cost includes pulverising)</b>		
49 core samples for Cu @ \$6.25/sample		306.25
" " " " Ag @ \$5.00/sample		245.00
		<hr/>
		\$8,228.75

APPENDIX "B"

STATEMENT OF QUALIFICATIONS

I, Edward S. Holt of North Vancouver, British Columbia, do hereby certify:

1. That I am a geologist residing at 4091 St. Albans Avenue, North Vancouver, British Columbia.
2. That I am a Professional Engineer registered in the Province of British Columbia.
3. That I am employed by Equity Mining Corporation, 908 - 1111 West Hastings Street, Vancouver, British Columbia.
4. That I have practiced my profession for twenty years.
5. That I have personal knowledge of the Sam Goosly deposits being developed by Placer Development Limited in the Omineca Mining Division, British Columbia, having personally spent extensive time on the property during the past six years. I have examined the core and familiarized myself with the surface trenches, underground workings and local rock exposures.



E. S. Holt  
Edward S. Holt, P.Eng.

November 28, 1978  
Vancouver, B.C.

SAM GOOSLY PROPERTY  
 Drill hole number 209  
 Core type AQ  
 Date 30<sup>th</sup> Sept 1978  
 Logged by SJ Tenant  
 Page 1 of 6

DRILL HOLE GEOLOGIC LOG

Northing	<u>6679.8</u>	UTM
Easting	<u>7857.8</u>	
Elevation	<u>1276.1</u>	
Dip	<u>-45</u>	
Bearing	<u>90°</u>	
Total Length	<u>535'</u>	

Alteration Scale  
 5 - Extreme Alteration  
 4 - High Alteration  
 3 - Moderate Alteration  
 2 - Some Alteration  
 1 - Weak Alteration  
 0 - No Alteration

Footage From	To	Description	Graphic Log		Alteration					
			Sketch	Remarks	Sil.	Clay	Chl.	Carb.	Seri.	Ep.
0	24	Set Casing								
24	30	50% Core Recovery Very Broken up  Dust Tuff - Limonite stain on fract.								
30	40	80% Core Recovery Very Broken up.  Same as above - Some pyrite stringers up to 3cm	/		2		2		2	
40	50	80% Core Recovery - Very Broken up  Dust Tuff Some pyrite and sericite on fractures	/							
50	60	88% Core Recovery Very Blocky  50-57 Very rusty fractures  58-60 Much more chlorite  Random pyrite stringers up to 2cm  Core slightly greenish	/		2	3		2		
60	70	92% Core Recovery No limonite on fr.  Dust Tuff -- buff colored Some  Pyrite stringers up to 3cm	/		2	1		2		
70	80	92% Core Recovery - Some very broken sections  Same as above Pyrite stringers very thin with a little chlorite.	/							
80	90	92% Core Recovery Fairly Broken up	/							

EW

## DRILL HOLE GEOLOGIC LOG

SAM GOOSLY PROPERTY

Hole Number 209  
Page 2 of 6

Footage		Description	Graphic Log		Alteration					
From	To		Sketch	Remarks	Sil.	Clay	Chl.	Carb.	Seri.	Ed.
		Dust Tuff very mottled - chlorite on fractures and throughout core. Random Pyrite fr. up to 2cm.	/		2	3	3		1	
90	100	98% Core Recovery	/	C						
		Dust Tuff as above - appears crushed zone with random stringers of chlorite Less pyrite than above.	/							
100	110	99% Core Recovery	/							
		Same as above slightly more py - (sample of veins 3cm)	/	Py.	2	3			1	
110	120	99% Core Recovery	/		114					
		@ 114 Andesite Dyke Contact 35°	/	35°						
120	130	99% Core Recovery	/		129					
		- to 129 Andesite Dyke Contact 35°	/							
		129-130 F.Porphyry Dyke	/							
130	140	99% Core Recovery - F.Porphyry Dyke	Cream Colored with white phenocrysts		155					
140	150	99% Core Recovery F.Porphyry Dyke								
150	160	99% Core Recovery to 155 F.P.Dyke Contact 45°	/		155					
		155 - Dust Tuff very crushed with much chlorite and random py stringers Core very competent but has been crushed.				2	3		1	
160	170	99% Core Recovery								
		Dust tuff as above - Few chlorite-pyrite stringers.								

EJA

## DRILL HOLE GEOLOGIC LOG

SAM GOOSLY PROPERTY

Hole Number 209  
Page 3 of 6

Footage From	To	Description	Graphic Log		Alteration			
			Sketch	Remarks	Sil.	Clay	Chl.	Carb.
170	180	97% Core Recovery			2		3	1
170-173		Same as above						
173-174		Gradational even looking						
174-176		Andesite Dyke Contacts 60°						
176-180		Gradational change to Dust Tuff						
180	190	95% Core Recovery (Plot of movement in Rock)						
		Several short sections of Breccia. Some heavy pyrite sections plus py-chl. veins		50°, 10°				
		Maybe Tr. tetrahedrite on some fractures						
190	200	95% Core Recovery. Much chlorite - core appears greenish. Slight Buff sections here and there. Few strong py veins.					4	
200	210	95% Core Recovery. Same as above.						
210	220	95% Core Recovery. Same as above		Py-chl				
	216-218	½' Py-chl vein						
220	230	98% Core Recovery						
	220-224	Same as above						
	224-226	Strong pyrite (15%) Veins pyrite up to 5cm. (@ 25-30°)		25-30°				
	226-230	Gradational change to very mottled spotty rock. A lot of chlorite spots with fine pyrite throughout. Very hard.		rugged Gneiss				
230	240	99% core recovery. Core appear to grade into Andesite dyke						

ESN

DRILL HOLE GEOLOGIC LOG

SAM GOOSLY PROPERTY

Hole Number 209  
Page 4 of 4

Footage From	To	Description	Graphic Log		Alteration				
			Sketch	Remarks	Si.	Clay (Ch.)	Carb.	Seri.	Ep.
240	250	96% Core Recovery (Last 3.5' very broken up)					4		
		240-244 As above Very dk. green							
		Contact 15°							
		244-250 Buff colored Dust Tuff well broken - Little py. scattered							
250	260	97% Core Recovery			2	3		1	
		Dust Tuff - Buff colored but chlorite getting greater. Few massive py. sections							
260	290	97% Core Recovery Generally same as above. Some thin veins and a few massive pyrite sections No other visible sulphides							
290	300	96% Core Recovery			2	2		1	
		Dust Tuff - buff colored. Numerous veins parallel along core. Various widths chlorite and pyrite.							
300	330	95% Core Recovery Same as above							
		308-310 Massive Rj. vein. Contacts 45° Most veins 60°							
330	340	97% Core Recovery							
		Dust Tuff generally same. Total pyrite content increasing 5-6%. Few veins with little tetrahedrite - (Sulphides increasing)							
340	370	96 % Core Recovery							
		Dust Tuff Buff colored - random stringers							

EGL

## DRILL HOLE GEOLOGIC LOG

SAM GOOSLY PROPERTY

Hole Number 209  
Page 5 of 6

Footage From	To	Description	Graphic Log		Alteration					
			Sketch	Remarks	Sil.	Clay	Chi.	Carb.	Seri.	Ep.
		fairly well fractured - heated with pyrite few small sections appeared crushed			2		2		1	
370	410	98% Core Recovery Generally fairly competent. @ 376 1' breccia G 378 6" breccia								
		379 - 386 fold Porphyry Dyke (cream colored-white glass)								
		386 - 410 Very massive pyrite throughout. (xp. 50%)								
		Several short sections very crushed up heated with pyrite								
410	430	98% Core Recovery Core appears much darker. - increase in chlorite.						4		
		Generally heavy pyrite throughout with maybe some tetrahedrite. Maybe traces of chalco as well. Core well fractured and heated with pyrite and chlorite. No major trends with fracturing								
430	460	97% Core Recovery Generally similar to above. Rock appears more crushed. Fairly heavy pyrite with the odd small small grain. At times very tough but very well crushed. Heated with chlorite and pyrite. Erratic boulders of tetrahedrite.			2		4		1	

*ESM*

## DRILL HOLE GEOLOGIC LOG

SAM GOOSLY PROPERTY

Hole Number 209  
Page 6. of 10

Footage		Description	Graphic Log		Alteration					
From	To		Sketch	Remarks	Sil.	Clay	Chl.	Carb.	Seri.	Ep.
460	470	98% Core Recovery.  467 Contact 35° gradational change to Andesite Dyke. Fractures generally at random but a few at 60° to core.	467'							
470	480	98% Core Recovery.  467-473 - Gradational change out of Andesite Dyke. @ 478' Chalcopyrite strong in major fractures plus random veinlets throughout core.	473		2	2		1		
480	500	98% Core Recovery.  From 479-497 - Rock very siliceous Appears like a breccia - shot through with fine veinlets of CHALCOPYRITE > 1% From 497-500 grades back to DUST TUFF with continuing chalcopyrite mineralization Chalcopyrite fairly heavy in places.			4	1	3			
500	535	98% Core Recovery.  Dust Tuff generally darker at times with chlorite, random fracturing @ 507-509 Good Chalcopyrite vein parallel to core From 520 chalcopyrite drops off. Random pyrite-chlorite veins.			2		3	1		

*JGJ*

SAM GOOSLY PROPERTY  
 Drill hole number 213  
 Core type NQ  
 Date 3 October 1978  
 Logged by S.I.T.  
 Page 1 of \_\_\_\_\_

### DRILL HOLE GEOLOGIC LOG

Northing	<u>10,420.5</u>	Linear.
Easting	<u>11,068.4</u>	
Elevation	<u>4,143.8</u>	
Dip	<u>-45</u>	
Bearing	<u>90°</u>	
Total Length		

Alteration Scale  
 5 - Extreme Alteration  
 4 - High Alteration  
 3 - Moderate Alteration  
 2 - Some Alteration  
 1 - Weak Alteration  
 0 - No Alteration

Footage		Description	Graphic Log		Alteration					
From	To		Sketch	Remarks	Sil.	Clay	Chl.	Carb.	Seri.	Ep.
0	60	Casing								
60	100	88% Core Recovery. Very Blocky & broken up.  Dust Tuff fragments with gouge here and there, soft, Much chlorite and a little epidote. A little scattered pyrite.  Slightly coarser in places - Ash Tuff.				1	3	1	1	
100	140	92% Core Recovery. Very blocky - broken up  Couple of fault breccia sections very chloritic								
109 - 112		fault breccia with gouge.								
112 - 114		Andesite Dyke.								
114 - 117		fault breccia with gouge								
121.5 - 123		- Andesite Dyke.								
123 - 140		- Very grey-greenish  Dust Tuff - randomly fractured, Trace pyrite.								
140	180	96% Core Recovery. Not so broken up.  Grey to dark green Dust Tuff with some slightly coarser section - Ash Tuff.  Very mottled - much chlorite - random veins and fractures healed with chlorite A little epidote here & there.			1	3	1	1		

EJH

## DRILL HOLE GEOLOGIC LOG

SAM GOOSLY PROPERTY

Hole Number 213  
Page 2 of \_\_\_\_\_

Footage		Description	Graphic Log		Alteration					
From	To		Sketch	Remarks	Sil.	Clay	Chl.	Carb.	Seri.	Ep.
180	190	96% Core Recovery Generally same as above.								
	187	Fine fault breccia - soft								
	188-190	- Gradational change to Andesite Dyke - No sharp contacts.								
190	205	98% Core Recovery Andesite Dyke.			1	4			1	1
205	265	98% Core Recovery Mixed Dust & Ash Tuff Very chloritic. Finely laminated at times. $\approx 40^\circ$ to core. Few pyrite veins up to 2cm. - occasional Andesite Dykes for 2' with gradational contacts. Short sections (3') of random fracturing, otherwise competent whole core.								
265	300	98% Core Recovery Generally same as above. Chloritic Dust Tuff. Short sections (18") Andesite with gradational contacts. Little pyrite on some fractures			1	4				
300	340	98% Core Recovery. Same as above 317-327 Andesite Dyke								
	327-338	Randomly fractured little epidote.								
	338-339.5	Feld. Porphyry Dyke.								
	From 339.5	- Andesite Dyke								

*SAK*

## DRILL HOLE GEOLOGIC LOG

SAM GOOSLY PROPERTY

Hole Number 213  
Page 3 of 3

Footage		Description	Graphic Log		Alteration					
From	To		Sketch	Remarks	Sil.	Clay	Chl.	Carb.	Seri.	Ep.
340	370	97% Core Recovery.  344 - 366.5 Feld. Porphyry Dyke. (Contacts not sharp)			1					
		366.5 - 370 Mashed up for 18° then Andesite Dyke.								
370	410	97% Core Recovery.  Back to very chloritic Dust & Ash Tuff.			2	4			1	
		381 - 389 Andesite Dyke.  Slightly laminated in some sections. Few pyrite fractures up to 1cm with occasional massive blebs of pyrite.								
410	430	98 % Core Recovery.  411 - 412 very massive pyrite and chalcopyrite.			2	4				
		412 Andesite Dyke Sharp Contact 70°								
		412 - 432.5 Andesite Dyke Contact 25°								
432	501	97 % Core Recovery.  Very chloritic - greenish Dust Tuff.  Some regular fractures. - Generally randomly fractured. Couple of sections fine laminated. Little epidote here & there.								

*ESW*

SAM GOOSLY PROPERTY  
Drill hole number 221  
Core type NO  
Date Oct 20, 1978  
Logged by E. S. Holt  
Page 1 of 5

DRILL HOLE GEOLOGIC LOG

Northing	16,827.3
Easting	11,596.4
Elevation	4,144.6
Dip	-45°
Bearing	090°
Total Length	875 ft

Alteration Scale

5 - Extreme Alteration  
4 - High Alteration  
3 - Moderate Alteration  
2 - Some Alteration  
1 - Weak Alteration  
0 - No Alteration

Footage		Description	Graphic Log		Alteration					
From	To		Sketch	Remarks	Sil.	Clay	Chl.	Carb.	Seri.	Ep.
0	40	Overburden								
40	138	Dacite Flow (?) a fine grained grey-green rock with poorly developed feldspar phenocrysts locally pyrite disseminated, and minor hemimite breaking tight fract. wars, weakly schlieric				1	2			
		113'-2" Pb-Zn-Py stringer								
138	150	Hedostole Dyke typical grained dark green with sharp chilled contacts					1			
		146'-15" inclusion of dacite								
150	273	Dacite Flow (?), similar to above with increasing size dances of anhedral fiber crystals, local sections with greenish tint, in addition to pale grey feldspars? sparse pyrite breaking fractures, moderately altered, real good drilling?				1	2	1		

## DRILL HOLE GEOLOGIC LOG

SAM GOOSLY PROPERTY

Hole Number 221  
Page 2 of 5

Footage		Description	Graphic Log		Alteration					
From	To		Sketch	Remarks	Sil.	Clay	Chl.	Carb.	Seri.	Ep.
		258-265 rock becomes brownish gradational contact	↓							
278	288	Andesite Porphyry, visually rock looks very much like Goosly Lake volcanics, white lathes in a brownish-maroon matrix, sharp contacts	↓↓↓					1		
288	375	Dacite Flow (?) same as above, fine grained grey-green rock with poorly developed pale green phenocrysts, minor py heating fractures 315-onward - local reddish sections and increasing clay alteration	↓↓↓			1	1	2		2
		335' - 2" Fault gauge	↓							
		345' - 1" py stringer	↓↓							
		365 to 375 sub " to fault zone	↓↓↓							
375	385	Andesite Porphyry same as 278 to 288 white lathes in a dark fine grained matrix, fault contact	↓↓↓					1		
385	388	Dacite Flow, highly altered and moderately mineralized with py hematite and other grey minerals	↓↓↓	Py & hematite stringers		3			2	
388	397	Feldspar Porphyry Dyke, pale white to yellow, soft, fault contacts, vague anhedral phenocrysts	↓↓↓			3				E/S 11

## DRILL HOLE GEOLOGIC LOG

SAM GOOSLY PROPERTY

Hole Number 221  
Page 3 of 5

Footage		Description	Graphic Log		Alteration					
From	To		Sketch	Remarks	Sil.	Clay	Chl.	Carb.	Seri.	Ep.
397	401	Mineralized Fault Zone, fault gauge and rock fragment with pyrite brunitite and minor galena + sp.	hatched			5			3	
401	406	Rhodesite Porphyry, same as 375 to 385, white kaths up to 7 cm in a dark andesitic matrix	hatched	Ph - 7 m				1		
406	441	Dacite Flow (?) grey-green fine grained rock with local sections have subhedral phenocrysts that are white to pale green 406 - 420 strong alteration and 10% pyrite with quartz	hatched	fault	1	2	1		1	
		433' - 2" fault gauge	hatched	Stringer						
		436' - 4" Qtz pyrite stringer	hatched							
441	463	Dust Tuff with some fine clast or inclusions, very fine dense rock similar to S. Tail host, indication of bedding at 45° to core, included clasts appear relatively fresh, a few pyrite stringers, fault contact	hatched	unnnnnn	2				2	
463	560	Dacite Flow, fine grained grey-green ground mass with up to 5% near white anhedral phenocrysts, scattered pyrite stringers	hatched		2	1	1	2	EHH	O

## DRILL HOLE GEOLOGIC LOG

SAM GOOSLY PROPERTY

Hole Number 221  
Page 4 of 4

Footage		Description	Graphic Log		Alteration					
From	To		Sketch	Remarks	Sil.	Clay	Chl.	Carb.	Seri.	Ep.
		481' - possible pillow rim	1029							
		471' - 8" mineralized breccia	1029							
		498' - 5" fault gruze	1029							
550	554	Andesite Porphyry, white laths in a fine grained green matrix, sharp irregular contacts	1029	Py-Zn						
554	559	Dacite (inclusion?) similar to above and below but with 6" massive py and Sp. section at 558'	1029		2.					3
559	582	Andesite Porphyry, pale green to white laths up to 2 cm in a dark green fine grained matrix	1029							
582	613	Dacite Flw(?) vague subhedral whitish phenocrysts in a fine grained grey to green matrix, local reddish sections, up to 15% pyrite as patches and stringers, some possible inclusions	1029	good py	3					3
		594 - 6" dust tuff	1029							
613	636	Andesite Porphyry, some well developed white to pale green laths in a brownish green fine grained matrix, scattering of amygdalites filled with pale green material, sharp contact	1029							2.

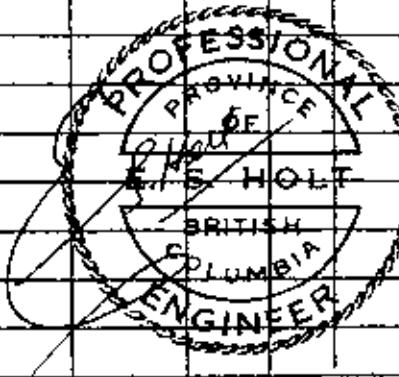
ESN

## DRILL HOLE GEOLOGIC LOG

Hole Number 221  
Page 5 of 5

SAM GOOSLY PROPERTY

Footage From	To	Description	Graphic Log		Alteration				
			Sketch	Remarks	Sil.	Clay	Chl.	Carb.	Seri.
636	875	Dacite Flow(?) fine grained grey green rock with local sections having poorly deve- loped Feldspar laths, pyrite disseminated and as stringers with quartz, local reddish sec- tions			1		1		2
665	675	4° fault gauge	1/1	shear					
697	712	pyrite stringers with coarse sphalerite	1/1						
730	765	moderate shearing sub parallel to core	1/1						
779	788	core 1-11 hard shearing sub 11 to core	1/1	fault					
851	864	soft sheared core zone at 10° to core	1/1	1 to					
864	875	typical dacite similar to most of this hole with minor increase in fayaline content which is primarily with pyrite stringers	1/1	core					
	875	ft - End of Hole							



SAM GOOSLY PROPERTY  
Drill hole number 222.  
Core type NO  
Date Oct 23, 78  
Logged by E. S. Hall  
Page 1 of 5

DRILL HOLE GEOLOGIC LOG

Northing	16,818.8
Easting	13,046.3
Elevation	4,128.6
Dip	-45°
Bearing	090°
Total Length	795

Alteration Scale

5 - Extreme Alteration
4 - High Alteration
3 - Moderate Alteration
2 - Some Alteration
1 - Weak Alteration
0 - No Alteration

Footage		Description	Graphic Log		Alteration						
From	To		Sketch	Remarks	Sil.	Clay	Chl.	Carb.	Seri.	Ep.	Fauna
0	20	Tricomed									
20	67	Ash Tuff, mottled light gray with black patches of tourmaline and pyrite, a few coarse clasts up to 2 cm in size (very similar to hole 137 in plant site) number of pi stringers are 11 to core	100%		2.				2.	4	
67	79	Andesite Pyrocl., fine grained brownish-yellow matrix with coarse creamy lathes	100%						2.	1	
79	151	Ash Tuff, similar to above, with some decrease in tour- maline content, rare coarse frag. 25 to 130' weakly schistose less tourmaline, sparse py 103'-8' dust tuff	100% weakly schistose		2.	1			3	2.	
151	159	Dust tuff with some coarse ash frags. grey & black banding and lenses, fault contact with ash below minor coarse pyrite	100% fault		1	3			2.	EGL	

## DRILL HOLE GEOLOGIC LOG

SAM GOOSLY PROPERTY

Hole Number 721  
Page 2 of 4

Footage		Description	Graphic Log		Alteration						
From	To		Sketch	Remarks	Sil.	Clay	Chl.	Carb.	Seri.	Ep.	Tarn
159	256	Intermixed Pyroclastics, inter- mittent intervals of coarse breccia, lapilli ash and dust tuff, some sharp and some gradational contacts, increasing to ash + P. 159 to 172 Coarse breccia	7-10-1 10-15-1 15-20-1 20-25-1 25-30-1 30-35-1 35-40-1 40-45-1 45-50-1 50-55-1 55-60-1 60-65-1 65-70-1 70-75-1 75-80-1 80-85-1 85-90-1 90-95-1 95-100-1 100-105-1 105-110-1 110-115-1 115-120-1 120-125-1 125-130-1 130-135-1 135-140-1 140-145-1 145-150-1 150-155-1 155-160-1 160-165-1 165-170-1 170-175-1 175-180-1 180-185-1 185-190-1 190-195-1 195-200-1 200-205-1 205-210-1 210-215-1 215-220-1 220-225-1 225-230-1 230-235-1 235-240-1 240-245-1 245-250-1 250-255-1 255-260-1 260-265-1 265-270-1 270-275-1 275-280-1 280-285-1 285-290-1 290-295-1 295-300-1			2	1			2	1
256	275	Ardesite Dyke, medium grey, fine grained, sharp chilled contact 58 - 12" ash inclusion	7-10-1 10-15-1 15-20-1 20-25-1 25-30-1 30-35-1 35-40-1 40-45-1 45-50-1 50-55-1 55-60-1 60-65-1 65-70-1 70-75-1 75-80-1 80-85-1 85-90-1 90-95-1 95-100-1 100-105-1 105-110-1 110-115-1 115-120-1 120-125-1 125-130-1 130-135-1 135-140-1 140-145-1 145-150-1 150-155-1 155-160-1 160-165-1 165-170-1 170-175-1 175-180-1 180-185-1 185-190-1 190-195-1 195-200-1 200-205-1 205-210-1 210-215-1 215-220-1 220-225-1 225-230-1 230-235-1 235-240-1 240-245-1 245-250-1 250-255-1 255-260-1 260-265-1 265-270-1 270-275-1 275-280-1 280-285-1 285-290-1 290-295-1 295-300-1			2	2		2	EPA	
275	292	Dust Tuff, with some ash inter- vals, some scattered pyrite stringers, increasing fumaline, gradational contact with ash below 285 - 30" felsite dyke ?	7-10-1 10-15-1 15-20-1 20-25-1 25-30-1 30-35-1 35-40-1 40-45-1 45-50-1 50-55-1 55-60-1 60-65-1 65-70-1 70-75-1 75-80-1 80-85-1 85-90-1 90-95-1 95-100-1 100-105-1 105-110-1 110-115-1 115-120-1 120-125-1 125-130-1 130-135-1 135-140-1 140-145-1 145-150-1 150-155-1 155-160-1 160-165-1 165-170-1 170-175-1 175-180-1 180-185-1 185-190-1 190-195-1 195-200-1 200-205-1 205-210-1 210-215-1 215-220-1 220-225-1 225-230-1 230-235-1 235-240-1 240-245-1 245-250-1 250-255-1 255-260-1 260-265-1 265-270-1 270-275-1 275-280-1 280-285-1 285-290-1 290-295-1 295-300-1			2	2		2	EPA	

**DRILL HOLE GEOLOGIC LOG**

Hole Number 201  
Page 3 of 4

SAM GOOSLY PROPERTY

Footage		Description	Graphic Log		Alteration						
From	To		Sketch	Remarks	Si1.	Clay	Chl.	Carb.	Seri.	Ep.	Tan.
292	347	1st Tuff, mottled grey rock with abundant tourmaline, particularly with pyrite concentrations pyrite as stringers and disseminations this is a highly altered section			1	3			3		4
290	323	2nd tuff - with py in stringers									
313	327	strong tourmaline and clay alteration with 30% calc. pyrite as stringers & patches									
327	340	as above, with much reduced pyrite + tourmaline a few coarse phenocrysts									
340	382	Andesite Porphyry, fine grained brownish maroon matrix with creamy or pale green veins, sharp chilled contact, Calc. breccia							2	1	
387	396	Breccia (?) a highly altered section with some coarse frag. molds, some patchy tourmaline and minor disseminated pyrite			1	3					2
391	412	Andesite Porphyry, as above but older in color and poorly developed phenocrysts, barren.							2	1	E811

## DRILL HOLE GEOLOGIC LOG

SAM GOOSLY PROPERTY

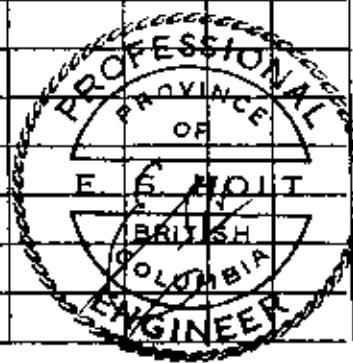
Hole Number 221  
Page 4 of 5

Footage From	To	Description	Graphic Log		Alteration				
			Sketch	Remarks	Sil.	Clay	Chl.	Carb.	Seri. Ep.
408	460	Dacite Flow (?) generally a grey-green fine grained rock with local sections having cubedal whitish or pale green phenocrysts, some clast inclusions, major felsic matrix as scattered stringers or patches fillings, becoming much more siliceous and less altered toward end of section			2	2			3
460	489	Andesite Porphyry, same as that above with sharp chilled out 116 - C fault zone				✓	✓		
469	774	Dacite Flow, dense, medium grain, fine grained groundmass with local cubedal phenocrysts, competent siliceous rock, rare gts pyrite stringers, fresh looking rock 504- 36" flow brecia			4				
	507	medium-peppered with brown sand							
660	737	phenocrysts strongly altered to clay or polydite							
675	685	15% quartz, pyrite tourmaline stringers							

DRILL HOLE GEOLOGIC LOG

SAM GOOSLY PROPERTY

Hole Number 227  
Page 5 of 5



Assay Cut 8th  
Jib  
KEYDRILLING

DRILL HOLE ASSAY LOG

SAM GOOSLY PROPERTY

Hole Number 209  
Page 1 of 2

Sample Number	Core		Recovery		Geologic Notes	Estimates %			Assay Results					
	From	To	Length	Wt.	%	Py	Cp	Tet.	% Cu	% Zn	% Pb	% Sb	Oz. Ag	Oz. Au
57744	25	40	15						0.07	-1.0	Korey		34	0.04
745	40	50							0.01			0.004	5	0.01
746	50	60							0.03		Korey		8	0.13
747	60	70							Korey			0.004	2	0.04
748	70	80							0.01		0.004		4	0.04
749	80	90							0.01		Korey		1	0.04
750	90	100							0.01		0.004		2	0.04
57501	100	110							0.01		Korey		1	0.04
502	110	120							Korey		0.012		3	0.04
503	120	130							0.01		0.008		2	0.04
504	130	140							0.01		Korey		3	0.04
57505	140	150							0.01		Korey		2	0.04
506	150	160							0.01		0.006		2	0.04
507	160	170							0.01		0.008		2	0.04
508	170	180							0.02		0.004		2	0.02
509	180	190							Korey		Korey		2	0.04
57510	190	200							Korey		0.003		2	0.01
511	200	210							0.01		0.004		3	0.12
512	210	220							Korey		0.004		2	0.07
513	220	230							Korey		0.003		5	0.12
514	230	240							Korey		0.012		2	0.01
57515	240	250							Korey		0.003		2	0.01
516	250	260							Korey		0.006		1	0.01
517	260	270							Korey		0.00?		1	0.02
518	270	280							Korey	▼	0.006		1	0.02

DRILL HOLE ASSAY LOG

SAM GOOSLY PROPERTY

Hole Number 209  
Page 2 of 2

Check against  
Assay Cont. JH  
KEYPUNCHED

DRILL HOLE ASSAY LOG

SAM GOOSLY PROPERTY

Hole Number 213  
Page 1 of 2

Sample Number	Core		Recovery		Geologic Notes	Estimates %			Assay Results					
	From	To	Length	Wt.		Py	Cp	Tet.	% Cu	% Zn	% Pb	% Sb	Oz.Ag	Oz.Au
57580	60	70							0.17	-1.0		-1.0	<1	-1.0
581	70	80							0.12				<1	
582	80	90							0.08				<1	
583	90	100							0.08				1	
584	100	110							0.16				3	
57585	110	120							0.01				1	
586	120	130							<0.01				2	
587	130	140							0.01				1	
588	140	150							0.01				2	
589	150	160							<0.01				1	
57590	160	170							0.01				<1	
591	170	180							0.01				<1	
592	180	190							0.02				3	
593	190	200							<0.01				1	
594	200	210							<0.01				1	
57595	210	220							0.01				2	
596	220	230							<0.01				<1	
597	230	240							<0.01				<1	
598	240	250							<0.01				5	
599	250	260							<0.01				1	
57600	260	270							<0.01				1	
601	270	280							<0.01				1	
602	280	290							0.01				3	
603	290	300							<0.01				2	
57604	300	310							0.02				<1	

DRILL HOLE ASSAY LOG

SAM GOOSLY PROPERTY

Hole Number 2/3  
Page 2 of 2

Sample Number	Core		Recovery		Geologic Notes	Estimates %			Assay Results					
	From	To	Length	Wt.		Py	Cp	Tet.	% Cu	% Zn	% Pb	% Sb	Oz. Ag	Oz. Au
57605	310	320							0.02	-10	-10		<1	-1.0
606	320	330							<0.01					3
607	330	340							<0.01					1
608	340	350							<0.01					<1
609	350	360							<0.01					<1
57610	360	370							<0.01					<1
611	370	380							<0.01					<1
612	380	390							<0.01					<1
613	390	400							<0.01					<1
614	400	410							<0.01					<1
57615	410	420							0.47		0.004		15	0.58
616	420	430							<0.01		-10		2	-1.0
617	430	440							0.01					2
618	440	450							0.01					1
619	450	460							0.01					5
57620	460	470							0.01					1
621	470	480							<0.01					<1
622	480	490							0.01					<1
57623	490	501							0.01		8		2	

## DRILL HOLE ASSAY LOG

SAM GOOSLY PROPERTY

Hole Number 211  
Page 1 of 3

Sample Number	Core		Recovery		Geologic Notes	Estimates %			Assay Results				G/T Ag (g/t Au)
	From	To	Length	Wt.		Py	Cp	Tet.	% Cu	% Zn	% Pb	% Sb	
0	40				Overburden								
111	45	75	30	90	Dacite Flow	3	-	-	Not Assayed				
57824	65	75	10	97	Dacite Flow	3	-	-	.02				1
	75	105	30	98	Dacite Flow	11	-	-	Not Assayed				
	75	105	10	100	Dacite Flow	9	-	-	.21				1
	115	133	23	100	Dacite Flow	5	-	-	Not Assayed				
	138	150	12	100	Andesite Dyke		-	-	Not Assayed				
	150	175	25	98	Dacite Flow	3	-	-	Not Assayed				
	175	185	10	100	Dacite Flow	2	-	-	.01				1
	185	215	30	100	Dacite Flow	2	-	-	Not Assayed				
	215	225	10	100	Dacite Flow	2	-	-	.01				1
	225	255	30	100	Dacite Flow	2	-	-	Not Assayed				
73	255	265	10	98	Dacite Flow	3	-	-	.31				1
	265	275	13	97	Dacite Flow	2	-	-	Not Assayed				
	275	288	13	100	Andesite Porphyry		-	-	Not Assayed				
	288	310	12	98	Dacite Flow	1	-	-	Not Assayed				
79	300	313	13	100	Dacite Flow	3	-	-	.01				1
	310	335	25	98	Dacite Flow	3	-	-	Not Assayed				
80	335	347	12	100	Dacite Flow	5	-	-	.01				48
	347	365	18	100	Dacite Flow	5	-	-	Not Assayed				
81	365	375	10	92	Dacite Flow	5	-	-	.01				41
	375	395	10	90	Andesite Porphyry		-	-	Not Assayed				
82	385	388	3	95	Dacite Flow	8	-	-	.01				680 10
	388	397	9	100	Feldspar Porphyry		-	-	Not Assayed				
83	397	411	14	97	Mica-schist	1	-	-	.71				

## DRILL HOLE ASSAY LOG

SAN GOOSLY PROPERTY

Hole Number 20  
Page 2 of 3

Sample Number	Core		Recovery		Geologic Notes	Estimates %			Assay Results					
	From	To	Length	Wt.	%	Py	Cp	Tet.	% Cu	% Zn	% Pb	% Sb	G/T Ag	G/T Au
	400	436	36		98	Anodesite Porphyry	-	-	N/A	15	-	-		
5183	496	496	10		95	Dacite Flow	10	-	-	.01				1
	411	431	20		96	Dacite Flow	6	-	-	N/A	Geoyard			
85	431	441	10		98	Dacite Flow	7	-	-	.02				111
86	441	453	12		92	Dacite Tuff	6	-	-	.01				1
	453	463	10		100	Dacite Tuff	7	-	-	N/A	Wescon			
	463	478	15		100	Dacite Flow	3	-	-	N/A	Geoyard			
57	478	495	17		100	Dacite Flow	6	-	-	.01				1
	495	515	20		98	Dacite Flow	7	-	-	N/A	Geoyard			
88	515	525	10		100	Dacite Flow	2	-	-	.01				1
	525	540	15		98	Dacite Flow	2	-	-	N/A	Geoyard			
89	540	550	10		100	Dacite Flow	5	-	-	.01				1
	550	554	4		95	Anodesite Porphyry	-	-	-	N/A	Geoyard			
*	90	554	559	5	100	Dacite Flow	20	-	.5P	.01				16
	559	582	23		98	Anodesite Porphyry	-	-	-	N/A	Geoyard			
91	582	595	13		97	Dacite Flow	7	-	-	.01				1
92	595	605	10		100	Dacite Flow	10	-	-	.01				1
	613	613	3		100	Dacite Flow	4	-	-	N/A	Geoyard			
	613	636	23		93	Anodesite Porphyry	-	-	-	N/A	Geoyard			
	636	665	29		100	Dacite Flow	11	-	-	N/A	Geoyard			
*	665	683	15		98	Dacite Flow	6	-	-	.01				1
	683	690	7		98	Dacite Flow	4	-	-	N/A	Geoyard			
*	690	705	15		100	Dacite Flow	10	-	.5P	.01				16
	705	745	40		96	Dacite Flow	3	-	-	N/A	Geoyard			
25	745	755	10		92	Dacite Flow	2	-	-	.01				

DRILL HOLE ASSAY LOG

SAM GOOSLY PROPERTY

Hole Number 15  
Page 1 of 1

DRILL HOLE ASSAY LOG

SAN GOOSLY PROPERTY

Hole Number 222  
Page 1 of 1

Sample Number	Core			Recovery		Geologic Notes	Estimates %			Assay Results					
	From	To	Length	Wt.	%		Py	Cp	Tet.	% Cu	% Zn	% Pb	% Sb	G/T Ag	G/T Au
	0	20				Tricornerd									
	20	35	15			Ash Tuff	6	-	-	No	Samp 1				
57899	35	45	10	80	85	Ash Tuff	7	-	-	.03				20	
	45	67	22			Ash Tuff	5	-	-	Not	Samp 1				
	67	79	12			Andesite Pyroclastic				1.1	Samp 1				
	79	85	6	90	98	Ash Tuff	3	-	-	Not	Samp 1				
800	85	95	10	92	92	Ash Tuff	3	-	-	.01				1	
	95	135	40	96	96	Ash Tuff	2	-	-	Not	Samp 1				
1	135	145	10	98	98	Ash Tuff	3	-	-	.01				1	
	145	151	6	100	100	Ash Tuff	3	-	-	1.1	Samp 1				
	151	159	8	75	75	Dust Tuff	4	-	-	Not	Samp 1				
	159	175	16	95	95	Intermediate Pyroclastic	5	-	-	1.1	Samp 1				
2	175	185	10	97	97	Intermediate Pyroclastic	6	-	-	.02				1	
	185	215	30	98	98	Intermediate Pyroclastic	8	-	-	Not	Samp 1				
3	205	215	10	99	99	Intermediate Pyroclastic	5	-	-	.01				1	
	215	240	25	95	95	Intermediate Pyroclastic	5	-	-	Not	Samp 1				
4	240	256	16	94	94	Intermediate Pyroclastic	10	-	-	.01				1	
	256	275	19	98	98	Andesite Dyke	-	-	-	Not	Samp 1				
	275	292	17	98	98	Dust Tuff	3	-	-	1.1	Samp 1				
5	292	325	6	85	85	Ash Tuff	7	-	-	.03				4	
6	292	325	11	93	93	Ash Tuff	10	3	-	.38				2	
7	325	345	10	88	88	Ash Tuff	12	7x	-	.41				12	
8	345	377	12	90	90	Ash Tuff	12	-	-	.02				2	
9	377	340	13	93	93	Ash Tuff	6	-	-	.01				1	
	340	382	42	95	95	Andesite Dyke				1.1					

DRILL HOLE ASSAY LOG

SAM GOOSLY PROPERTY

Hole Number 21-2  
Page 2 of 2

