

August 11th, 1969.

Mr. W.F. Knox, President, Ajax Mercury Mines Ltd., 685 - #2 Bentall Centre, Vancouver, 1, B.C.

Dear Mr. Knox:

We submit herewith a report concerning the exploration work completed during 1969 to date at your Beaverdell group of claims.

SUMMARY

Surface diamond drilling, overburden trenching and general reconnaissance has been carried out over your company's optioned claim group near Beaverdell during June-July 1969.

Sampling of old trenches and adits located on the Gold Drop Fraction, Gold Drop mineral claim, Alaska mineral claim, Standard and Rambler mineral claims, has indicated quartz zones with low-grade silver values in the range of 0.1 - 3 oz./ton.

Exceptions have been intersections in DDH's S-17, S20 and S25, as detailed later, and a patch of high-grade galena with tetrahedrite occurring in a shaft on the Gold Drop claim. Diamond drilling has been completed on this latter showing with disappointing results. No economic mineralization worthy of further work has been outlined, however, on your group of claims.

INVESTIGATION OF GEOCHEMICAL ANOMALIES

Tractor trenching carried out on geochemical anomalies resulting from last year's work returned generally negative results, as described hereunder:

(a) Anomaly at coordinates 16+00N and 41+00W was trenched to expose a narrow zone of rusty alteration on a small shear zone. Possible upgrading of value of sample due to drainage conditions in immediate area was indicated.

(b) Anomaly at coordinates 16N and 34W disclosed minor rust condition of the bedrock but no significant mineralization.

(c) The anomalies at coordinates 20N and 24W, at 28N and 26W and at 56N and 12W were found to be due to sample location in a small draw with enrichment due to drainage conditions.

(d) Investigation of the anomaly at coordinates 24N and 2W disclosed one high sample value had been obtained on a barren rocky knoll with little or no overburden. No explanation can be given for this high assay value.

(e) The anomaly at coordinates 38N and 14W was stripped to expose a scattered rusty condition of the bedrock and a 3" quartz vein with slight pyrite and galena at coordinates 37+50N and 14+00W. A sample taken across the quartz vein assayed a trace of silver.

(f) Anomaly #3 at coordinates 64-66N and 23-24W was found to be due to drainage conditions on the hillside on line 64N and the proximity of the swamp on line 66N.

(g) Anomaly #2 (long anomaly below and on strike of Buster workings) was stripped at several locations, i.e. (56+00N¢ 8+00W, 57+00N and 9+50W, 62+00N and 13+00W) to expose a narrow (2") zone of rust along a shear zone. A higher sample value within the anomaly at 58N and 10W was due to sample location in a swamp condition.

(h) Isolated anomalies at coordinates 58N and 7W, and 62N and 9W were due to swamp conditions at the sample location.

(i) Anomaly at coordinates 62N and 4W was due to proximity of an old cut, with possible contamination due to blasting.

(j) Anomaly #1 at coordinates 70N and 5W was stripped to expose a 2" rusty shear zone lying flat on the bedrock surface. Two diamond drill holes in the area indicated coarse unaltered quartz diorite. There is a good possibility that the values resulted from contamination due to blasting at the nearby Rambler workings.

(k) The anomaly at coordinates 66N and 1E was due to rusty shear zones and narrow patchy quartz stringers exposed by stripping. Five inclined surface diamond drill holes disclosed no mineralization of economic significance.

(1) An old shaft in the vicinity of 22N on the baseline was sampled to yield Au Tr., Ag 1.0, Cu Tr., Pb 0.2 and Zn 0.2 over 0.6'. Slight malachite staining was evident in the quartz vein showing in the shaft and several small nearby cuts.

In general, the low silver values returned from the geochemistry do not lend themselves to favourable consideration for further exploration by trenching or diamond drilling of the remaining geochemical anomalies.

DIAMOND DRILL RESULTS

The results of the diamond drilling conducted during and subsequent to the tractor trenching follow:

				Inter-	Assay Values				
DDH No.	Co- ordinates	Magnetic Bearing		section Width - ft.	Au Ozs/ton	Ag Ozs/ton	<u>% Pb</u>	7 Zn	
S-14	65∻55N 2÷35₩	S 20° E	-450		-	-		_	
S-15	65+25N 1+85W	S 10° E	-450				-		
S-16	65+30N 1+80W	N 10° W	-400	-	-		-	-	
S=17	64+85N 2+25W	N 20° W	-45°	0.7"	-	10.5	-	-	
S=18	64+85N 2+25W	N 20° W	-73°				-		
S-19	65+85N 1+50W	N 87° E	-45°	-	~			-	
S=20	65+85N 1+50W	S 75° E	-12°	1.6'	.03	0.3	1.15	1.22	
5-21	63+40N 3+20W	N 10° W	-85°		80	-	40	**	
S=22	63+40N 3+20W	N 10° W	-70°	4.3"		0.2	-	-	
S=23	63+38N 3+20W	N 10° W	-90°		-			-	
S=24	64+30N 4+00W	S 20° E	-72°	4.0"	40	0.1	-	-	
S~25	64+17N 4+10W	N 20° W	-90°	1.1')	53.41	(36.4			
				0.61)	1.7)84.6	3.35	8.95	
				1.8*		3.3			

			Inter-	Assay Values				
DDH No.	Co- ordinates	Magnetic <u>Bearing</u>	section <u>Dip</u> <u>Width - ft.</u>	Au Ozs/ton	Ag Ozs/ton %	<u>Pb % 2n</u>		
S-26	64+17N 4+10W	N 20° W	-80° -	68.		** **		
S=27	63+85N 4+10W	N 20° W	-50° -	-		87 NO		
S-28	63+85N 4+10W	N 20° W	-70° 1,4'	400	2.2	400 EM		
S=29	63+85N 4+10W	N 20° W	-90° 2,0°	-	0.6	dis 100		
S=30	70+05N 4+85W	S 35° E	-45° -	-	-			
S=31	70+05N 4+85₩	S 35° E	•90° •					
S= 32	19+75N 29W	N 57° E*	-50° -	-	-	dan war		
S=33	11	N 57° E*	-70° -			ese 435		
S-34	20+15N 29+40W	S 35° E*	•55° •	100	-			
S=35	20+40N 29+90W	S 10° W*	∞60° ∾		-	a x ee		

* Bearings for these holes are true N.

Detailed logs for these holes are attached to this report

On the Standard claim in the Buster area, several small old open cuts and trenches exposed a quartz vein similar in appearance to that in the main Buster workings. Sampling of these zones indicated values in the range of 0.2 to 1.5 oz.Ag/ton.

On the Gold Drop Fraction, a series of adits and pits on a 6" - 1' quartz vein were sampled, with values indicated in the range of 0.16 to 7.40 oz. Ag and from.008 to 0.28 oz. Au/ton.

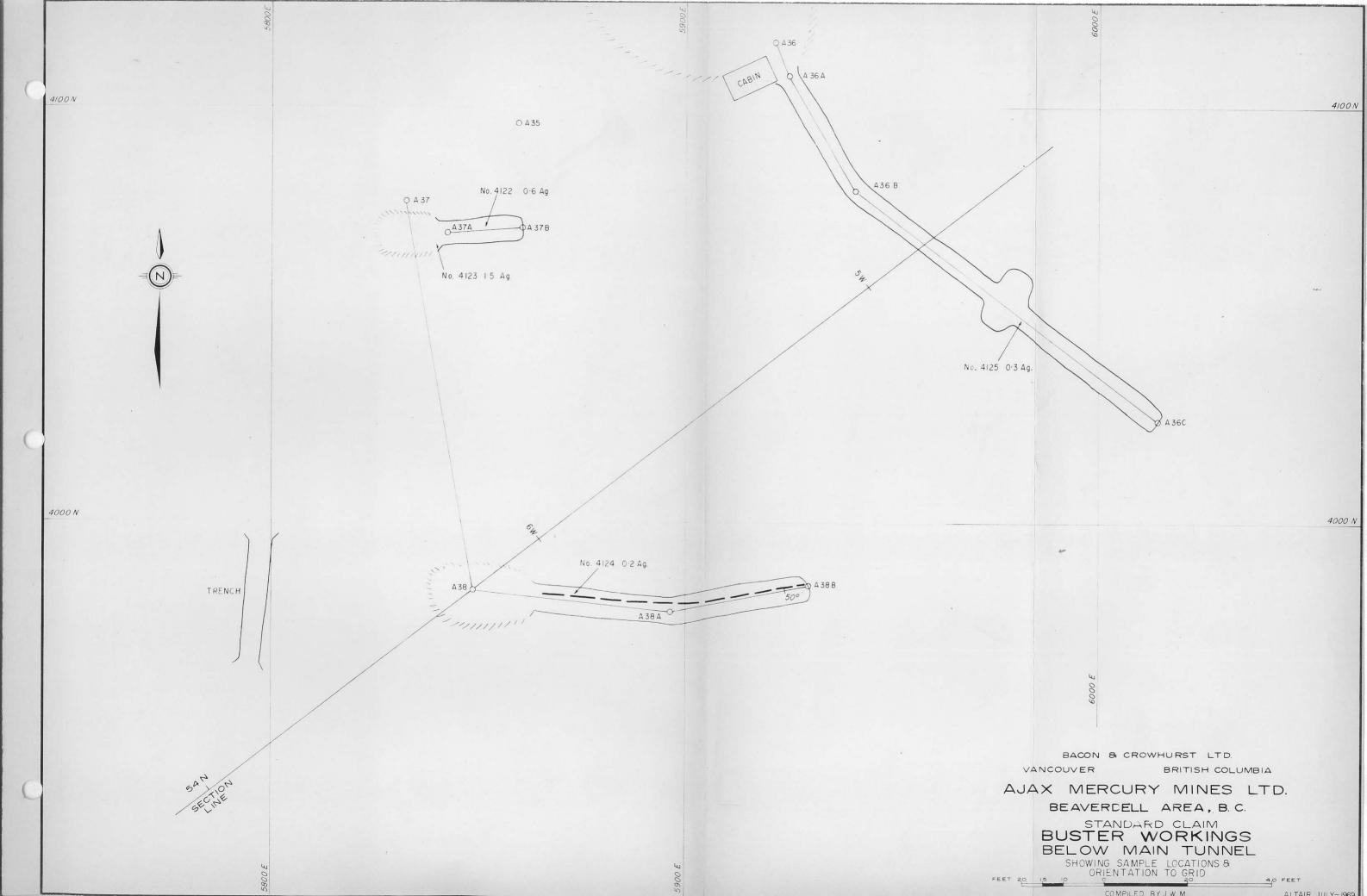
The Gold Drop claim represents an area of previous work in which a mineralized shear zone has been opened by a series of cuts, a shaft, and a lower adit. Sampling results as shown on the attached map were disappointing. One erratic high-grade silver assay, #4121, resulted from an isolated patch of sulphide mineralization, two to three feet long and six inches wide, within an otherwise near barren quartz vein.

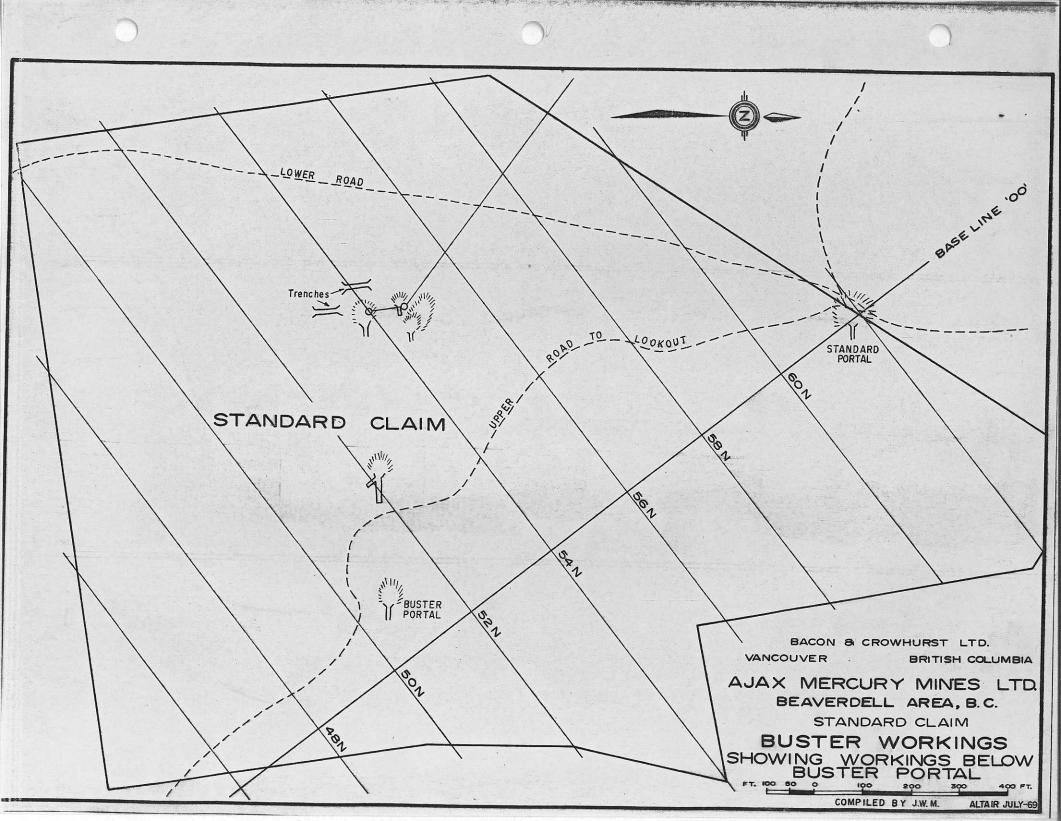
A series of cuts were sampled in the area of 68N-70N with low silver results as indicated on the attached map. Further stripping and trenching has not indicated any mineralization of interest.

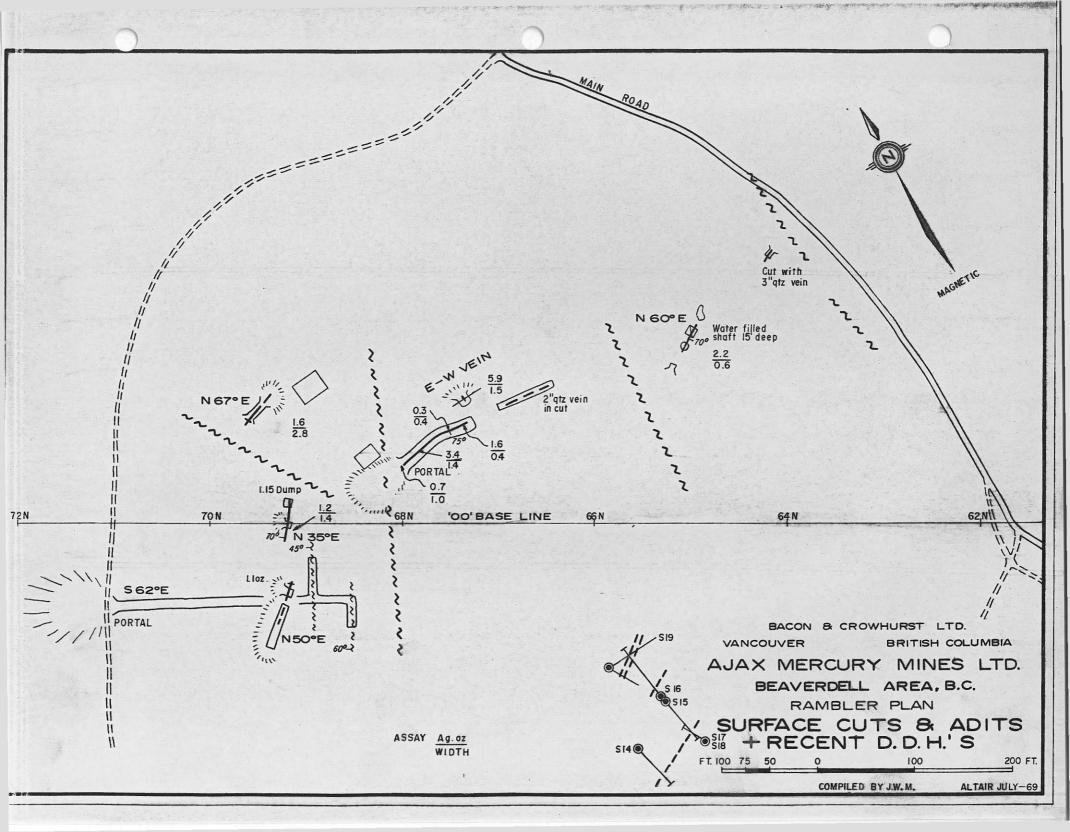
Respectfully submitted,

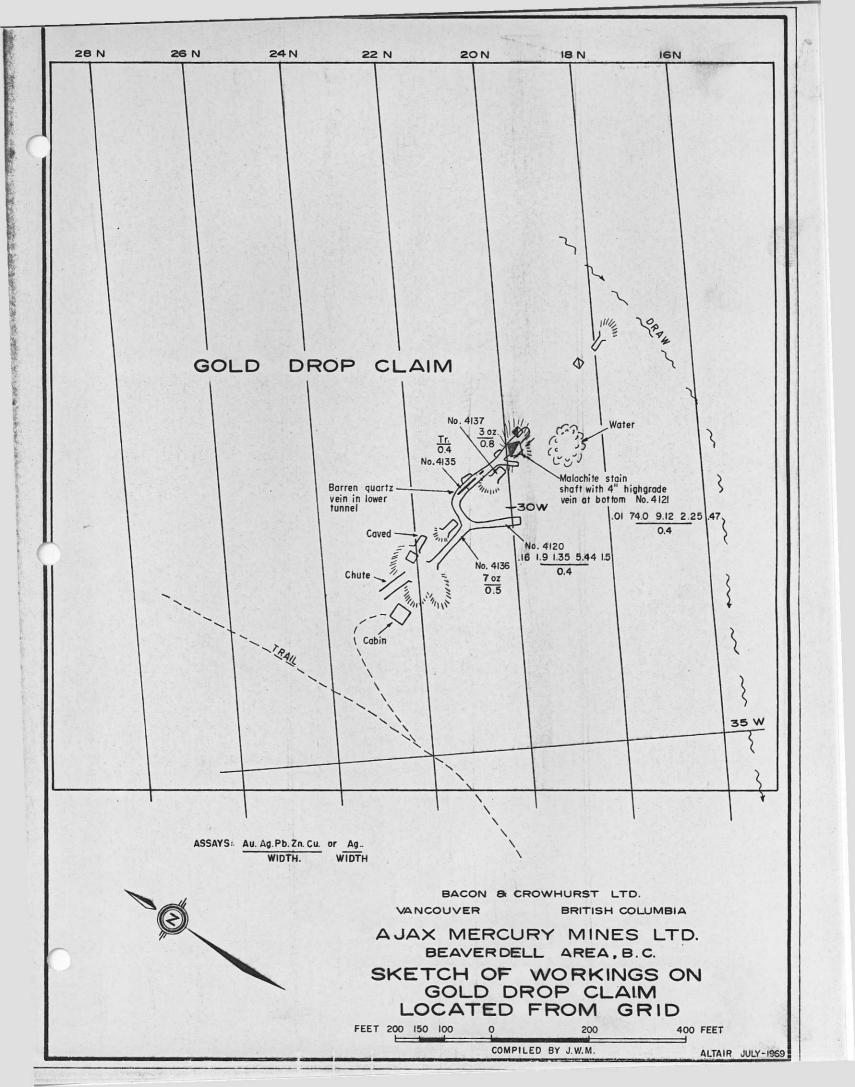
BACON & CROWHURST LTD.

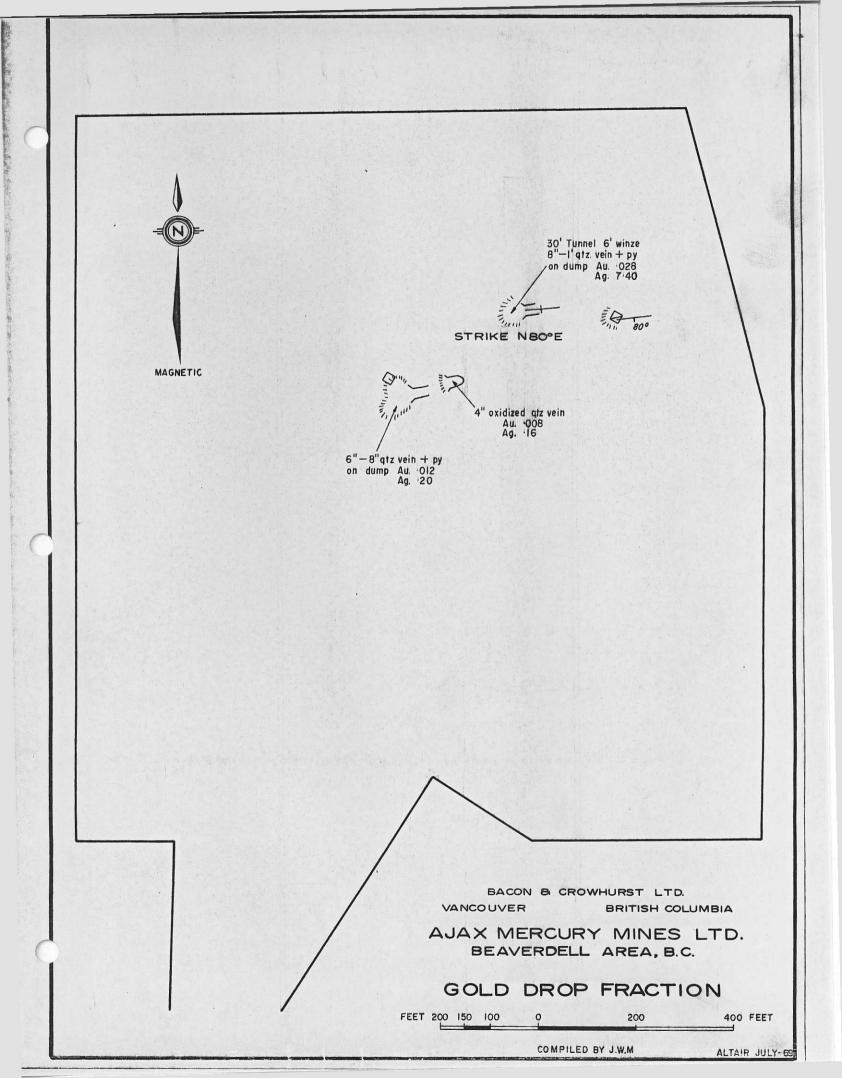
J.W. Murton, B.Sc.

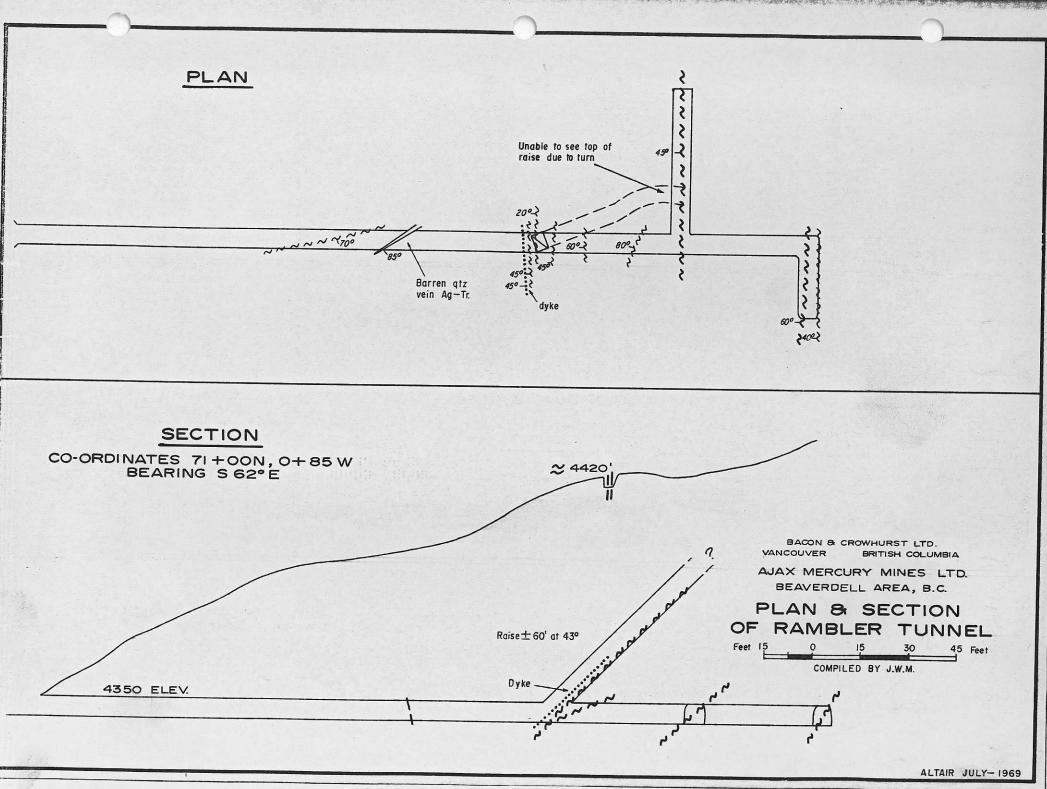












DDH LOGS - JULY, 1969

65 + 55N

DDH S - 14 Dip - 45°, BRG S20°E, Co-ords 2 + 35W

- 0 5 Casing
- 5 41.5 Very slightly altered quartz diorite. Broken up to 15'. Fault 6 42.5' (80° to core)
- 41.5 46 Chloritic green alteration of quartz diorite. Fault @ 44 (60° to com) Specks pyrite with hematite @45'
- 46 72 Very slightly altered quartz diorite. Faulting 49 51, 63, 67.5 - 69.

End of hole.

DDH S - 15 Dip - 45°, BRG S10°E, Co-ords 1 + 85W

o = 4 Casing

4 - 71 Very slightly altered quartz diorite. Broken up to 5.0°. Minor alteration 6 - 7, 13 - 13.5. 1" quartzy material with very slight pyrite @ 25.0. Lost core 20 - 24. 4" chloritic alteration with very slight pyrite @ 28.5, 29.6 and 66.7. Fault @ 47".

End of hole.

						65	stige	30N
DDH S - 16	Dip -	40°,	BRG	N10°W,	Co-ords	2	4	801/

0 - 5 Casing

- 5 17 Chloritized quartz diorite. Rusty and oxidized on shears. Badly broken up. Faults @ 4, 6, 11, 13, 16.
- 17 81 Very slightly altered quartz diorite. Slight chloritic alteration 33.5 - 37, 38 - 40. Faults 48.5' and 53'

End of hole.

DDH LOGS - JULY, 1969

* 2 *

64 + 85N Dip - 45°, BRG N20°W, Co-ords 2 + 25W DDH S - 17 0 - 4 Casing 4 - 8.2 Altered and chloritized quartz diorite. Sections rusty and broken. 8.2 - 8.9 Quartzy altered quartz diorite. Mineralized with slight pyrite and trace native silver. #4116 10.5 oz./ton Ag. 8.9 - 14 Chloritized quartz diorite. Very slight quartz @ 10* (k" stringer) 14 - 42 Unaltered quartz diorite. Chloritic alteration 25 - 28. End of hole.

	64 + 85N
DDH S - 18	Dip - 73°, BRG N 20°W, Co-ords 2 + 25W
0 - 2	Casing
2 - 5	Very slightly altered quartz diorite.
5 - 14	Chloritized quartz diorite. Fault @ 12.5'
14 - 20	Very slightly altered quartz diorite.
20 - 22.5	Chloritized quartz diorite. Very slight quartz and pyrite @ 20.5 - 20.7.
22.5 - 33	Very slightly altered quartz diorite.
End of hole.	

DDH LOGS - JULY, 1969

	100	-
156	16	1666
	169	1.46

DDM S - 19	Dip - 45°	BRG N87°E	Co-ords	65 + 85N 1 + 50W
0 • 4	Casing			
4 = 7	Altered quart	tz diorite. Rust	y and broke	21.
7 - 43	Very slightly	y altered quartz	diorite.	
End of Hole.				
	e e e e e e e e e e e e e e e e			

	65 + 85N
DDH S - 20	Dip - 12° BRG S75°E Co-ords 1 + 50W
0 - 17	Slightly altered quartz diorite. Sections chloritic, broken and rusty.
17 - 18.6	Quartzy chloritic diorite with very slight pyrite and sphalerite #4118. Au.03 Ag 0.3 Pb 1.15 Zn 1.22
18.6 - 21	Slightly chloritic quartz diorite.
21 * 68	Very slightly altered quartz diorite. Chloritic alteration from 31 - 33 and 64.5 - 68 (very slight pyrite).
End of Hole.	

<u>DDH S + 21</u>	Dip = 85° BRG NIO ^{\circ} W Co-ords 3 + 20W	
0 * 2	Casing	
2 * 91	Slightly altered quartz diorita. Chloritic altera from 6 = 10, 16 = 18.5, 21 = 27, 49 = 52, 74 = 86 (very slight pyrite). Low angle (20° to core) 2" quartz stringer 22 = 24, with very slight pyrite and hematite. Fault @ 40.5	tion

End of Hole.

DDH LOGS - JULY, 1969

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	63 + 40N
DDH S - 22	Dip - 70° BRG N10°W Co-ords 3 + 20W
0 - 4	Casing
4 - 6	Very slightly altered quartz diorite.
6 - 19	Chloritized quartz diorite. 13 - 17.3 quartzy chloritic diorite with slight pyrite and hematite. #4128 0.2 Ag
19 - 26	Very slightly altered quartz diorite 22.7 - 23.4, green andesitic dyke.
26 * 52	Chloritic quartz diorite. Very slight pyrite. 2" slightly mineralized quartz stringers @ 36 and 51. Fault 41 - 43. Sections slightly altered quartz diorite 37 - 40, and 43 - 49.
52 - 59	Very slightly altered quartz diorite.
End of hole.	
	63 + 38N
DDH 5-23	Dip - 90° BRG N10°W Co-ords 3 + 20W
0 = 2	Casing
2 - 24	Very slightly altered quartz diorite. Chloritic alteration from 5 - 6.
24 - 29	Chloritic quartz diorite. Barren ½" quartz stringer @ 24.5 (low angle to core).
29 - 52	Very slightly altered quartz diorite. Chloritic alteration 39.5 - 42.5.
52 - 65	Chloritic quartz diorite.

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65 - 66 Very slightly altered quartz diorite.

End of hole.

DDH LOGS - JULY, 1969

- 5 -

<u>DDH S - 24</u> Dip - 72° BRG S20°E Co-ords 4 + 00W

 0 - 19 Rusty chloritic quartz diorite. Scattered slight pyrite 18.5 - 19 quartzy chloritic diorite. Vay slight pyrite, galena and sphalerite specks. #4129 15'- 19' (0.1 Ag) Broke through into tunnel connecting shafts.

End of hole.

	64 + 17N
DDH S - 25	Dip = 90° BRG N20°W Co-ords 4 + 10W
0 - 2	Casing
2 - 26	Very slightly altered quartz diorite. 2" andesite dyke @17.5. Fault @ 26.
26 - 27.6	Chloritic quartz diorite. Native silver in low angle seam 27 - 27.6 #4130 26.5' - 27.6' (36.4 oz. Ag.)
27.6 - 29.0	Quartzy ore. 2" solid sulphides pyrite, sphalerite, slight galena and pyrargyrite @28. Heavy native silver around 28. 60° to core. #4131 27.6' - 28.2 (Ag 84.6 Pb 3.35 Zn 8.96)
	# 4132 28.2"- 30.0" (Ag 3.3)
29 - 45	Chloritic quartz diorite. Sections slightly altered.
45 - 68	Very slightly altered quartz diorite.

End of hole.

DDH LOGS - JULY, 1969

- 6 -

DI	H	<u>s - 26</u>	Dip - 80°	BRG	N20%	W	Co-ords		17N 10W	
0	-	2	Casing							
2	•	70	Very slightly 41. 57.	ali	tered	quartz	diorite.	Faults	@24,	

End of Hole.

D	DH S = 27	Dip = 50° BRG N20°W	Co-ords		85N 10W	
0	- 7	Casing				
7	- 43	Very slightly altered quartz Lost water © 40.	diorite.			

End of hole.

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	63 + 85N
DDH S - 28	Dip - 70° BRG N20°W Co-ords 4 + 10W
0 - 7	Casing
7 - 9	Very slightly altered quartz diorite.
9 - 16	Chloritic quartz diorite. Faults 12, 13, 14
16 - 38	Slightly altered quartz diorite. Sections very slight chloritic alteration.
38 - 42.2	Chloritized quartz diorite.
42.2 - 43.6	Low grade quartz zone. Slight pyrite #4133 Ag 2.2 oz/ton
43.6 - 49	Slightly chloritized quartz diorite. Faults 47, 47.5
	DDH S = 28 continued

0.03.1

DDA LOGS - JULY, 1969

- 7 -

<u>DDA 5 - 28</u>	(continued)
49 - 62.3	Very slightly altered quartz diorite.
62.3 - 69	Chloritized quartz diorite
69 - 73	Very slightly altered quartz diorite.
End of Hole.	

	63 + 85N
<u>DDN 5 - 29</u>	Dip - 90° ERG N20°W Co-ords 4 + 10W
0 - 5	Casing
5 • 53	Very slightly altered quartz diorite. Fault 022
53 * 53.8	Chloritized quartz diorite.
53.8 - 55.8	Quartzy chloritic quartz diorite. Short sections quartz with slight pyrite, hematite and very slight sphalerite. #4134 0.6 oz./ton Ag.
55.8 - 56.5	Chloritized quartz diorite.
56.5 - 62	Very slightly altered quartz diorite.
End of Hole.	

D	M	<u>s - 30</u>	D1p - 45°	BRG S35°E	Co-ords		05N 85%	
0	nga.	3	Casing					
3	-107	68	Very slightly	altered quartz	diorite.			

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End of Hole.

DDH LOGS - JULY, 1969

- 8 -

DDH S - 31	Dip - 90° BRC S35°E	Co-ords	70 + 05N 4 + 85W
0 = 2	Casing		
2 - 65	Very slightly altered to coard	se quartz	diorite.

End of Hole.

WM/gp

DDH LOGS - July 1969

S=32	Dip -50°, Bearing N57°E True, Coordinates 19+75N 29+00W
0-6	Casing
6-24.5	Slightly altered quartz diorite. Rusty & broken to 21'. 3" barren quartz @ 16.8.
24.5-33.5	Chloritic alteration of quartz diorite.
33.5-41.0	Slightly altered quartz diorite.
End of Hole	
<u>S=33</u>	Dip -70°, Bearing N57°E True, Coordinates 19+75N 29+00W
0=4	Casing
4-17	Very slightly altered quartz diorite.
17-23	Chloritized quartz diorite. Faults 17.5 & 19.
23-31	Very slightly altered quartz diorite. Fault @ 28.
31-39	Chloritized quartz diorite. Slightly quartzy@ 34. Faults 33 & 37.
39-68	Slightly altered quartz diorite,
End of Hole	
S= 34	Dip -55°, Bearing S35°E True, Coordinates 20+15N 29+40W
0-4	Casing
4-46	Very slightly altered quartz diorite. Faults 25 &44.
46-46.8	Rusty quartzy chloritized quartz diorite.
46.8-49.0	Quartz zone. Very slight pyrite & galena. 30° to core.
49.0-55	Chloritized, bleached quartz diorite. Sections slightly quartzy.
55-66	Slightly altered quartz diorite. Sections slightly chloritic.
End of Hole	

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<u>S=35</u>	Dip -60°, Bearing S10°W True, Coordinates 20+40N 29+90W
0=2	Casing
2=43	Very slightly altered quartz diorite. Slightly chloritic sections from 36-38, 39.5-40.5.
43-53	Bleached chloritic quartz diorite. Scattered very slight pyrite.
53-59	Slightly altered quartz diorite.

End of Hole

1968 DD Core - Logged July 1969

<u>M-1</u>	
0-29	Slightly altered quartz diorite. Sections chloritic alteration.
29-31	Chloritic quartz diorite. Quartzy with slight pyrite, galena & sphalerite from 29.7-30.4 (sample saved).
31+55	Very slightly altered quartz diorite.
55-105	Chloritic quartz diorite. Very slight pyrite 58-59. Slightly quartzy with very slight pyrite 65.6-67.0 & 73-78. Very slight pyrite 83-84 & 85.5-87.0. Fault @ 93.
End of Hole	
<u>M-2</u>	
0.51.5	Slightly altered quartz diorite. Sections slightly chloritic. Faults @ 11 & 13. 17.5-18.5 Very slight pyrite in quartz (sample saved). 22.5-25.0 Very slight pyrite in slightly chloritic quartz diorite (sample saved).
51,5~78	Chloritic quartz diorite. 2" quartz, sphalerite & pyrite © 53, 45° to core. 1" quartz, pyrite, sphalerite and galena © 62 & © 76.5 (box saved - no sampling).
78-101	Slightly altered quartz diorite. 24 mud @ 83-85. Fault @ 92.
End of Hole	
1 400	
0-18	Slightly altered quartz diorite.
18-22	Chloritic quartz diorite. Very slight quartz & pyrite 19-21.
22-41	Slightly altered quartz diorite. Sections chloritic.
41-45	Chloritic quartz diorite. Very slight quartz.
45-54	Slightly altered quartz diorite.

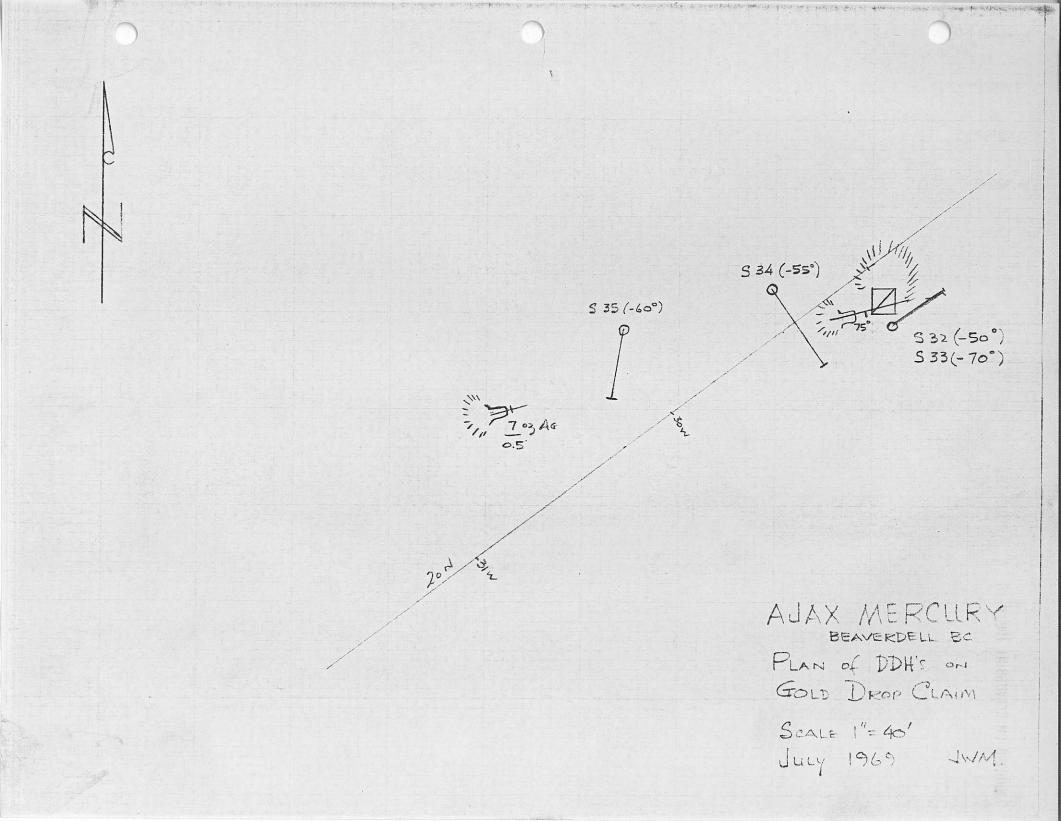
<u>M-3</u> (cont'd.)	
54-57	Chloritic quartz diorite, l" higrade stringer pyrite, galena & sphalerite 0 56.
57-77	Very slightly altered quartz diorite 76-79 (sample saved).
77-79	Andesite dyke.
79-82	Slightly altered quartz diorite.
End of Hole	
Mark	
0+26	Chloritic quartz diorite. 1" pyrite, galena & sphalerite @ 11 (sample saved 10.5-11.5). Slight pyrite 20.6-22.4 (sample saved).
26-73.6	Slightly altered quartz diorite, 54-55 chloritic.
73.6+75.6	Slightly chloritic quartz diorite. 1" quartz & pyrite @ 74.5 (sample saved 73.6-75.6).
75.6-130	Slightly altered quartz diorite. 108.6-109.8 (sample saved).
130-134,5	Slightly chloritic quartz diorite. Very slight pyrite.
134.5-160	Slightly altered quartz diorite. Sections chloritic.
End of Hole	
0-43	Slightly altered quartz diorite. Sections very slightly chloritic.15-21 (sample saved) very very slight pyrite.
End of Hole	
<u>M-6</u>	
0-15	Very slightly altered quartz diorite.
15-18	Chloritic quartz diorite. 1" pyrite, galena & sphalerite @ 16. 15-17 (sample saved).
18-55	Slightly altered quartz diorite. Sections chloritic. Very slight pyrite 32-33 (sample saved). 49-52 (sample saved).

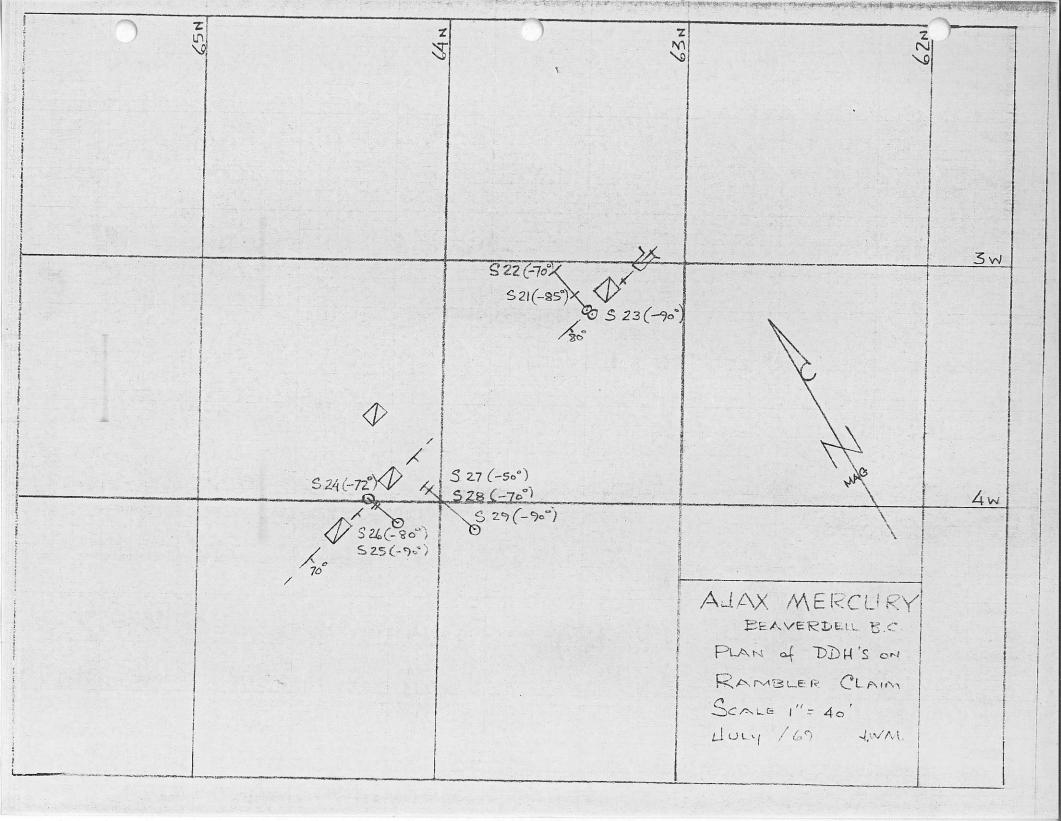
M-6 (cont*d)	
55-135.5	Chlorite quartz diorite. Sections slightly altered. Very slight pyrite 76-77 (sample saved). Quartz sections from 83-84 & 89.6-91, very slight pyrite. 1/4" pyrite, galena & sphalerite @ 116. Slight pyrite 115.5-119 (sample saved). Faults 83 & 111. Slight pyrite 134.5-135.5.
135.5-186	Very slightly altered quartz diorite. Fault zone 138.5-143. 1/4" quartz & slight pyrite @ 147. (Sample saved 146-147.5)
End of Hole	
<u>M=7</u>	
0-26	Slightly altered quartz diorite, 20-23 chloritic alteration.
26-41	Slightly chloritic quartz diorite with very slight quartzy sections. 39-41 slight pyrite (sample saved).
41=79	Slightly altered quartz diorite. Chloritic 49-51. 1" quartz, pyrite & slight sphalerite @ 50.5.
End of Hole	
M* 8	
0-80	Very slightly altered quartz diorite. Slight pyrite 16-16.5 (sample saved 16-18.5). Chloritic & quartzy @ 20, 31-36 & 60-62. Faults 70 & 72.
End of Hole	
M-9	
0-22	Slightly altered quartz diorite.
22-24	Chloritic alteration. 23.1-23.7 quartzy with slight pyrite, galena & sphalerite (sample saved).
24=35	Slightly altered quartz diorite.
35-39	Chloritic quartz diorite.
39-57.5	Slightly altered quartz diorite. Sections chloritic.
57.5-62	Chloritic quartz diorite. 58.2-60.2 quartzy with slight pyrite (sample saved).
62-71	Broken rusty pebbles. Appears to have broken through to old stope, or surface.

End of Hole

<u>M-10</u>	
0-31	Chioritic quartz diorite. Sections slightly quartzy. 8.5-12 (sample saved).
31-55	Slightly altered quartz diorite.
55-60	Slightly chloritic quartz diorite. Slight pyrite 58-60 (sample saved).
End of Hole	
Mar 11	
0-34	Chloritic quartz diorite. Scattered very slight pyrite (sample saved 6-8). Fault @ 15.
34-59	Slightly altered quartz diorite.
59-78	Chloritic quartz diorite. Scattered barren quartz stringers 2"-3".
78-81	Slightly altered quartz diorite.
End of Hole	
M+12	
0-39	Chloritic quartz diorite. Short sections slightly altered. Fault @ 14.
39+54	Slightly altered quartz diorite.
54-58	Andesite dyke.
58-64	Slightly altered quartz diorite.
64-67.6	Chloritic quartz diorite. 65.6-67.6 (sample saved - 8" quartz vein with pyrite).
67.6-74	Andesite dyke.
74-76	Coarse diorite. (split core).
End of Hole	

<u>M-13</u>	
O=76	Slightly altered quartz diorite.
76-80	Andesite,
80-100	Chloritic quartz diorite. Faulting 80-93.
100-132	Slightly altered quartz diorite.
132-137	" chloritic " "
137-145	" altered " "
145-147	Chloritic quartz diorite. Very slight pyrite (sample saved).
147-154	Slightly altered quartz diorite. Fault @ 154.
154-159	Chloritic " "
159-193	Slightly altered " " (188-189.5 sample saved-barren).
193-211	Chloritic " (204-209 slight pyrite - sample saved).
211-217	Slightly altered quartz diorite.
End of Hole	





'4w GEOCHEM ANOMALY S-30 (-45°) 3 31 (-90) 11 0 5w Th. 11 11 AJAX MERCURY BEAVERDELL BC 700 PLAN of DDH'S ON RAMBLER CLAIM SCALE 1"=40' July 1969 JulM.

