J.S. Cummings Inc.

C. Mattson

LITHOLOGIC LOG

Project Spectacle Grid Hole no. SPL-12 Dip -45° Started 10/8/80 Elev. _____

Job no. 264.5 Township T10-R8 Coord. 89850N 14725E Direction 171° Mag Completed 10/11/80

Lithotype

0'

8' Overburden

Spectacle Mtn. Agglomerate -
Same as SPL-11, 180'-281'.
From 90'-150', many short black shale sections, layering varies in angle to core axis from ≈ 90° to ≈0° indicating they might all be just fragments. Some over 12" in size. Some calcareous sections in matrix and some calcareous fragments that could be fossiliferous?. (Good example: fragment at 98'.)

50'

100'

149'

150' Calcareous Fragmental - fine grained clear quartz fragments and some rhyolite and other volc.frags. in a highly calcareous grey matrix. *

167' Altered Tuff -
Fine to medium grained fragments of quartz and other fragments, most fuzzy due to alteration. Matrix is cream-green colored and soft, possibly a mixture of chlorite and sericite. Wavy layering is faintly visible in section. **

200'

211' Rhyolite Porphry - grey-green rhyolite with white phenocrysts

222' Altered Tuff - same as 167'-211' but darker green matrix.

237' Rhyolite-Dacite Porphry -
Fine grained, grey-green colored, rhyolite and dacite. Phenocrysts or amygdules are present throughout.

250'

282' Bottom of Hole

300'

* Sample at 151' shows calcite grains and lesser qtz. and rock fragments.

** Three samples indicate unit is a massive rhyo-dacite tuff or flow with grains of qtz. and feldspar, weakly sericitic (TCW).

350'

Acid Test

Depth	Apparent ∢	Actual ∢
265'	48°	42°

400'

J.S. Cummings Inc.

C. Mattson

SULPHIDE LOG

Project Spectacle Grid Hole no. SPL-12 Dip -45° Started 10/8/80 Elev. _____

Job no. 264.5 Township T10-R8 Coord. 89850N 14725E Direction 171° Mag Completed 10/11/80

FROM	TO	INTERVAL	EST. % SULPHIDES	EST. METAL (Cu, Pb, Zn)	ALTERATION
8'	9'	1'(.5' recovered)	1%		
9'	10'	1'(.5' recovered)	3%-5%	M.S. clasts	
10'	13'	3'	?	?	?
13'	18'	5'	2%-3%	M.S. clasts	
18'	42'	24'	1%		
42'	44'	2'	2%-3%	M.S. clasts	
44'	149'	105'	1%		
149'	167'	18'	1%-2%		
167'	180'	13'	3%		
180'	282'	102'	1%		
	Bottom of Hole				

J. S. Cummings, Inc.

DDH SPL-12 - (Assays for Portion of Hole)

DEPTH (FEET) FROM COLLAR	LENGTH	% Zn	% Cu	% Pb	Oz/Ag	Oz/Au	Approx. % Sulphide
8 - 15	7'		None		0.1	None	3.8
15 - 16	1'		0.006		None	None	28.4
16 - 19	3'		0.006		0.2	None	1.0
41.5 - 43.5	2'		None		0.3	None	3.2
43.5 - 44	0.5'		None		0.2	None	23.8
44 - 46	2'		None		0.1	None	3.3
120 - 122	2'		None		None	None	1.8

Bottom of Hole: 282'