I. Carlson

J.S. Cummings Inc.

LITHOLOGIC LOG

Project SPECTACLE Hole no. SPL-2 Dip 45° Started 8/25/80 Elev.

Job no. 264.5 Township T10-R8 Coord. 81200N 16100E Direction 291°W Completed 8/28/80

Lithotype

0'

Overburden

15'

Calcareous Basalt Frag. & Graphitic Chert*

23'

Basalt Andesite**

34'

Calcareous Basalt ***

50'

62'

Black Siliceous Graphitic Chert****

70'

Calcareous Basalt

As before, grades into basalt in short sections. Intermittent fragmental sections with calcite and rockhash matrix. 70'-73' curious black rims penetrating the large dacite chunks. Py & Po 5-7%+. Moderately to strongly calcareous throughout. Some wide milky white quartz veins with surrounding alteration. Sericite veins with quartz and calcite

100'

142'

Calcareous Basalt Fragmental *****

164'

Tuffaceous Sediment

Alternating layers of fine sand size rock and crystal fragments, moderately well sorted, calcareous dirty sandstone/greywacke and superfine grained to cryptocrystalline black siliceous shale/chert. Layers dip 30° to 45° to core axis. Layered pyrite disseminated throughout in coarse section 2-4%, 1-3% in cherty section

Angular fragments in some sections indicate gritty tuff.

200'

232'

250'

BOTTOM OF HOLE

300'

350'

400'

Lithotype

Calcareous Basalt Fragmen
and Graphitic Siliceous C
As in the bottom of SPL-
tions of large rounded a
tured chunks of very fin
grey dacite with black s
matrix. Short sections
iceous graphitic materia
dacite fragments. Good
layered blebs in black s
disseminated in fragment

Basalt-Andesite **

Grey, very fine grained.
phaneritic texture, very
chlorite. Good pyrite i
especially with calcite

Calcareous Basalt ***
Gradational transition,
grained to cryptocrystal
Light to medium grey.
mental sections with bl
iceous matrix. Very ca
pyrite concentration be
areas

Black Siliceous Graphitic
Chert ****

Super fine grained. Fi
layering visible in som
Graphite in thin seams.
disseminated throughout
layering up to 1" wide.
ately calcareous

Calcareous Basalt Fragmen

Basalt as before in la
chunks (up to 18") goo
disseminated up to 10%
ments. Matrix is fine
poorly sorted, rock ha
calcareous, angular to
felsic fragments, mica
ments. Pyrite blebs u

J.S. Cummings Inc.

C. Mattson

SULPHIDE LOG

Project SPECTACLE GRID Hole no. SPL-2 Dip -45° Started 8/25/80 Elev. _____

Job no. 264.5 Township T10-R8 Coord. 81200N 16100E Direction West 291°mag Completed 8/28/80

FROM	TO	INTERVAL	EST. % SULPHIDES	EST. METAL (Cu, Pb, Zn)	ALTERATION
13'	20'	7'	2% - 3%		
20'	24'	4'	3% - 5%		
24'	29'	5'	1% - 2%		Minor chlorite
29'	30'	1'	>5%		
30'	58'	28'	±2%		Minor chlorite
58'	62'	4'	3% - 5%		
62'	70'	8'	3% - 5%		
70'	72'	2'	5% - 7%		
72'	90'	18'	1% - 2%		
90'	93'	3'	3% - 5%		
93'	97'	4'	1% - 2%		
97'	97.4'	0.4'	10% - 15%		
97.4'	160.0'	62.6'	1% - 2%		Sericite
160.0'	172.0'	12.0'	2% - 3%		
172.0'	232.0'	60.0'	1% - 2%		
	Bottom of Hole				

J. S. Cummings, Inc.

DDH SPL-2 - (Assays for Portion of Hole)

DEPTH (FEET) FROM COLLAR	LENGTH	% Zn	% Cu	% Pb	Oz/Ag	Oz/Au	% Py	% Aspy
15 - 25	10'						4.7	
25 - 35	10'						3.0	3%
35 - 45	10'						2.7	
45 - 58	13'						2.1	
58 - 68	10'	None	None	None	None	Trace	7.7	
68 - 72	4'	None	0.006	None	None	Trace	8.1	
72 - 82	10'						1.5	
82 - 92	10'						2.5	
92 - 102	10'						2.7	
102 - 112	10'						1.2	
112 - 122	10'						1.3	
122 - 132	10'						1.4	
132 - 142	10'						1.3	
142 - 152	10'						3.3	
152 - 162	10'						2.4	
162 - 172	10'						5.0	
172 - 182	10'						5.6	
182 - 192	10'						3.3	
192 - 202	10'						3.1	
202 - 212	10'						6.4	
212 - 222	10'						3.3	
222 - 232	10'						3.9	

Bottom of Hole: 232'