614130

DRILL LOG COVER SHEET

Project: Cape Sorell **Exploration Licence:** EL09/98

Prospect: Hill 99 **Hole Number:** H99-1

Co-ordinates: **E** 370225 **N** 5306150 **Logged by:** Sean Westbrook

RL Collar: 035ASL

Azimuth: 077m/090g

Inclination: -45deg

Depth: 296.0m

Hole Size:

	FROM	TO
HQ	0	85
NQ	85	296

Commenced: 10 May 1999

Completed: 09 June 1999

Drillers: DDT - Matt Semmens

Drill Type: DT500

Comments:

GEOLOGICAL LOG

Project:	**Cape Sorell**	**Exploration Licence:**	**EL09/98**
Prospect:	**Hill 99**	**Hole Number:**	**H99-1**
Logged By:	**Sean Westbrook**		

DEPTH (m)	RECOVERY From	To	%	CORE DESCRIPTION	C.B/CV.A C.V.A	MAGNETIC SUSCEPTIBILITY	COMMENTS
1	0	8.4	62.5	**0-27.8m:** OXIDISED ZONE. Weathered dark green chloritic, quartz - carbonate veined clay. Mafic precursor or equivalent epiclastic sediment.		1	
2						1	
3						8	
4						12	
5						39	
6						36	
7						35	
8	8.4	9.5	36.3			43	
9	9.5	12.5	30.0			29	
10						22	
11						29	
12	12.5	15.5	71.6			40	
13						18	
14						139	
15	15.5	18.5	68.3			66	
16						8	
17						25	
18	18.5	21.5	100			35	
19						49	
20						73	
21	21.5	27.5	66.6			33	
22						49	
23						47	
24						92	
25						78	
26						35	

GEOLOGICAL LOG

DEPTH (m)	RECOVERY From	To	%	CORE DESCRIPTION	C.B/CV.A C.V.A	MAGNETIC SUSCEPTIBILITY	COMMENTS
27	27.5	30.5	100	**27.8-151.1m:** MAFIC VOLCANICLASTICS. Strongly chlorite altered lithic - volcanic siltstone, sandstone and breccia. Primary textures obliterated. Stockwork carbonate-quartz +/- pyrite veining throughout. - Alteration predominantly chloritic-pyllic with trace to 5% pyrite. Talcose alteration is sporadic. Hematitic silicic alteration present as "spotting", clast replacement and minor pervasive zones.	V 55deg (q-carb)	19	
28						11	
29						8	
30	30.5	33.5	100			18	Camera oreintation (@30m): Azimuth=093, Dip=-44
31						4	
32						21	
33	33.5	36.5	100		CV 60deg	60	
34						33	
35						46	
36	36.5	39.5	100			23	
37						21	
38						36	
39	39.5	42.5	100		CV 55deg	29	
40						19	
41						29	
42	42.5	48.5	100			28	
43					CV 48deg	30	
44						15	
45						88	
46					CV 50deg	14	46.5 to 48.0 - light to moderate pale green rock with disseminated rutile clots.
47						12	
48	48.5	51.5	100			32	
49						36	
50						57	
51	51.5	54.5	100			49	
52						36	
53					V 55deg (c-py) CV 55deg	25	

GEOLOGICAL LOG

DEPTH (m)	RECOVERY From	RECOVERY To	RECOVERY %	CORE DESCRIPTION	C.B/CV.A C.V.A	MAGNETIC SUSCEPTIBILITY	COMMENTS
54	54.5	57.5	100		CV 45deg	26	
55					V 30deg (c-q+/-py)	29	
56						21	
57	57.5	60.5	98.3		CV 73deg	38	
58						43	
59					CV 65deg	40	
60	60.5	63.5	100			52	
61						52	
62						53	
63	63.5	66.5	100		CV 60deg	46	
64						36	
65						38	
66	66.5	69.5	100			35	
67						39	
68						42	
69	69.5	72.5	100			23	
70						16	
71					V 45deg (c-hem) CV 45deg	16	
72	72.5	75.5	100			52	
73						25	
74						43	
75	75.5	78.5	100		CV 58deg	1473	
76						39	
77						49	
78	78.5	81.5	100			47	
79					CV+BX - 55deg	21	@ 79.25 - 79.6m - Carbonate-flooded breccia with fuggy fracture-fill pyrite.
80						32	Camera orienation (@80m): Azimuth=096, Dip=-43
81	81.5	85.3	97			74	
82					V 45deg (c-py)	102	4cm wide carbonate vein with pyrite selvage.
83						90	@ 82.7 - 84.1 - Hematitic quartz spotting and clast replacement.
84						60	

GEOLOGICAL LOG

DEPTH (m)	RECOVERY From	To	%	CORE DESCRIPTION	C.B/CV.A C.V.A	MAGNETIC SUSCEPTIBILITY	COMMENTS
85	85.3	87.5	95			54	85.4 - 87.0 - Hematitic quartz spotting.
86					CV 58deg	39	
87	87.5	90.5	97			47	
88						70	
89						50	
90	90.5	93.5	100			40	
91						36	
92						40	
93	93.5	96.5	100			45	@ 93.2 - 93.5 - Pyrite +/- Chalcopyrite *stringers and irregular veinlets (to 10%)*
94						50	
95						38	Disseminated pyrite (+/- Chalcopyrite?) to 5%
96	96.5	99.5	100			43	
97						49	
98						40	
99	99.5	102.5	100			50	
100						35	99.7 - 101.2m - Intense carbonate (+/-talc-hem) alteration.
101						26	
102	102.5	105.5	97			42	
103						36	103.3 - Leached pale green rock leaching probably related to fault in 109.4.
104						49	
105	105.5	108.5	100			52	
106						39	
107						39	
108	108.5	111.5	57			42	
109						40	109.4 - 113.4 - Broken core + 2.7m core loss FAULT.
110						16	
111	111.5	114.5	43			-	@111m - CAVITY, NO CORE.
112						-	@112M - CAVITY, NO CORE.
113						8	
114	114.5	117.5	100			50	
115						30	
116						33	
117	117.5	120.5	100			29	

GEOLOGICAL LOG

DEPTH (m)	RECOVERY From	To	%	CORE DESCRIPTION	C.B/CV.A C.V.A	MAGNETIC SUSCEPTIBILITY	COMMENTS
118						28	
119						38	
120	120.5	123.4	100			35	
121						46	121.5 - 122.7 - Schistose quartz-chlorite-ser altered rock
122						32	122.7 - 123.0 - Carbonate - quartz filled breccia zone, host rock clasts angular.
123	123.4	126.5	100			49	
124						42	
125					CV 60deg	56	
126	126.5	129.5	97			28	
127						30	
128						39	
129						35	
130						50	130-131.15 - Chlorite-quartz altered host with brecciated carbonate-quartz clasts. FAULT. Camera Orientaion (@ 130m): Azimuth=096, Dip=-42.
131					V 47deg	35	
132	132.5	135.4	100		CV 45deg	-	LOST CORE.
133						40	
134						33	
135	135.4	138.5	100			66	
136						45	
137						46	
138	138.5	141.5	93			35	
139						40	139 - 140.3 - Broken core and puggy fault breccia. FAULT.
140						53	@139.0 - 147.5 - Irregular pyrite up to 10% @ 145.75. Pyrite predominantly with carbonate-quartz veins and also disseminated.
141	141.5	144.5	100			52	
142						60	
143						69	
144	144.5	147.5	100			59	

GEOLOGICAL LOG

DEPTH (m)	RECOVERY From	RECOVERY To	RECOVERY %	CORE DESCRIPTION	C.B/CV.A C.V.A	MAGNETIC SUSCEPTIBILITY	COMMENTS
145						91	@ 145.3 - 151.1m - Increase in silicification - spotted hematitic quartz texture. Irregular c;y?? (to 1%), trace pyrite.
146						123	
147	147.5	150.5	100			73	
148						64	
149						42	
150	150.5	153.5	98			28	
151				**151.1 to 154.1m:** CARBONATE ALTERATION. Strong carbonate alteration, angular host rock fragments, trace pyrite.		26	
152						40	
153	153.5	156.5	100			40	
154				**154.1-156.4m:** FUCHSITE-CARBONATE ALTERATION. Pervasive fuchsite - carbonate - pyrite alteration.	CV 60deg	45	@ 154.1 - Fuchsite alteration first appears. Intense, pervasive to 156.4. *Fuchsite - carbonate +/- pyrite alteration assemblage.*
155						49	Sample for petrographic analysis @155.4 (GD1) and @155.6 (GD2).
156	156.5	159.5	100	**156.4-166.5m:** MAFIC VOLCANICLASTICS. Strongly chlorite altered lithic - volcanic siltstone, sandstone and breccia. Trace fuchsite alteration.		70	
157						53	
158						69	
159	159.5	162.5	100			50	
160						46	
161						59	
162	162.5	164.7	77		CV 61deg	11	
163						19	
164	164.7	165.5	12			16	
165	165.5	168.5	98			16	
166				**166.5 - 168.7m:** CARBONATE ALTERATION. Pervasive carbonate - quartz alteration, trace fg pyrite throughout.		29	
167						39	
168				**168.7-174.0m:** MAFIC VOLCANICLASTICS. Strongly chlorite altered lithic - volcanic siltstone, sandstone and breccia. Trace fuchsite alteration.		26	@ 168.7 - 175.0 - Fuchsite - carbonate alteration patchy.
169						21	

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DEPTH (m)	RECOVERY From	To	%	CORE DESCRIPTION	C.B/CV.A C.V.A	MAGNETIC SUSCEPTIBILITY	COMMENTS
170						33	
171	171.5	174.5	100		CV 55deg	18	
172						22	
173						32	
174	174.5	177.3	93			23	@ 174 - 175.1 - Broken core - FAULT.
175				**174.0-202.0m:** AUGEN SCHIST. Chloritic-sericitic feldspar-quartz augen schist.		30	Core commonly fragmented along cleavage planes.
176						26	
177	177.3	180.4	100			28	@ 177.0 - 177.3: Crushed core - FAULT.
178						43	
179						43	
180	180.4	183.5	95			36	Camera orientation (@180m): Azimuth=095, Dip=-41.
181						5	
182						36	
183	183.5	185.8	100			43	
184						64	
185	185.8	188.9	100			56	@ 185.3 - 185.8 - Broken core - FAULT.
186						25	
187						42	Sample for petrographic analysis @187.2 (GD 3).
188	188.9	192.0	100			28	
189						25	
190					CV 65deg	28	
191						33	
192	192.0	195.1	95			32	
193						30	
194						45	
195	195.1	197.9	100			38	
196						42	
197	197.9	199.5	100			36	
198					CV 50deg	45	
199	199.5	201.5	97		V 58deg (q-py)	35	@ 199.80m - Quartz vein with 5% pyrite-chalcopyrite? (199.8 - 200.0m sampled).
200						30	
201	201.5	204.5	100			25	

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GEOLOGICAL LOG

DEPTH (m)	RECOVERY From	To	%	CORE DESCRIPTION	C.B/CV.A C.V.A	MAGNETIC SUSCEPTIBILITY	COMMENTS
202				**202.0-296m:** RHYOLITIC VOLCANICLASTICS. Thickly bedded, poorly sorted volcanic (rhyolitic) lithic breccia. Interbeds of laminated black mudstone and fine grey sandstone. Carbonate-sericite-chlorite-pyrite altered.		8	
203				202.0-203.5m: Laminate black shale.		53	
204	204.5	207.5	100		B 80deg	33	
205						28	
206						23	
207	207.5	210.5	100			23	
208						43	
209						38	
210	210.5	213.5	100	210.4-213.45m: laminated black shale with thin pale grey-green fg grey sandstone interbeds.		12	
211						4	
212					B 65deg	11	
213	213.5	216.5	100	213.45-219.0m: Volcaniclastic (epiclastic) breccia (predominantly rhyolitic).		14	
214						39	
215						15	
216	216.5	219.5	100			5	
217						11	
218						8	@ 218.9m - Fuchsite altered clast in volcanic bx flow.
219	219.5	222.5	100	219.0-220.5m: Laminated black shale and fg grey sandstone.	CV-62deg	21	@ 218.9 - 219.0 - Fuchsite rock matrix.
220				220.5-222.4m: Epiclastic rhyolitic breccia.	B-74deg CV-74	22	
221						32	
222	222.5	225.5	100	222.4-223.2m: Laminated black shale and fg grey sandstone.		21	Sample for petrographic analysis @222.15 (GD 4).
223				223.2-230.7m: Epiclastic rhyolitic breccia.		29	
224						9	
225	225.5	228.5	100			28	
226						25	
227						26	
228	228.5	231.5	100			21	
229						18	

GEOLOGICAL LOG

DEPTH (m)	RECOVERY From	To	%	CORE DESCRIPTION	C.B/CV.A C.V.A	MAGNETIC SUSCEPTIBILITY	COMMENTS
230				230.7-253.6m: Green volcanic (predominantly rhyolitic?) lithicwacke/coarse sandstone to epiclastic breccia. Carbonate-sericite-chlorite-pyrite altered.		17	Camera orientation (@230m): Azimuth=097, Dip=-39.
231	231.5	234.5	100			28	
232						19	
233						16	
234	234.5	237.5	100			14	
235						24	
236						12	
237	237.5	240.5	100			29	
238						7	
239						14	
240	240.5	243.5	100			18	
241						26	
242						16	
243	243.5	246.5	100			35	
244						7	
245						30	
246	246.5	249.5	100			25	
247						21	
248						30	
249	249.5	252.5	100			38	
250						19	
251						22	
252	252.5	255.5	100			28	
253				253.6-255.0m: Laminated black shale, trace diagenetic pyrite.		21	
254						28	
255	255.5	258.5	100	255.0-296.0m: Polymict (predominantly rhyolitic) volcanic lithic epiclastic breccia. Carbonate-sericite-pyrite altered.		16	
256						11	
257						16	
258	258.5	261.5	100			19	
259						29	
260						4	
261	261.5	264.5	100			8	

GEOLOGICAL LOG

DEPTH (m)	RECOVERY From	To	%	CORE DESCRIPTION	C.B/CV.A C.V.A	MAGNETIC SUSCEPTIBILITY	COMMENTS
262						8	
263						7	
264	264.5	267.5	100			8	
265						4	
266						12	
267	267.5	270.5	100			0	
268						2	
269						12	
270	270.5	273.5	100			0	
271						14	
272						21	
273	273.5	275.6	100			11	
274						19	
275	275.6	277.7	95.2			29	
276						21	
277	277.7	283.7	100			9	
278						7	
279						25	
280						19	
281						6	
282						6	
283	283.7	286.8	100			21	
284						14	
285						12	
286	286.8	289.8	100			9	
287						4	
288						9	
289	289.8	293	100			8	
290						8	
291						7	
292						4	
293	293	296	100			1	
294						9	
295						36	
296				***296.0m: END OF HOLE.***		2	Camera orientation (@296m): Azimuth=103, Dip=-38.

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