

**DRILL LOG COVER SHEET****Project:** Cape Sorell**Exploration Licence:** EL09/98**Prospect:** Hill 99**Hole Number:** H99-2**Co-ordinates:** E 370225

N5306150

**Logged by:** Sean Westbrook**RL Collar:** 035ASL**Azimuth:** 90m/77g**Inclination:** -60deg**Depth:** 255.5m**Hole Size:**

	<b>FROM</b>	<b>TO</b>
<b>HQ</b>	0	52.8
<b>NQ</b>	52.8	255.5

**Commenced:****Completed:** 3 July 1999**Drillers:** DDT - Matt Semmens**Drill Type:** DT500**Comments:**

## GEOLOGICAL LOG

<b>Project:</b> Cape Sorell <b>Prospect:</b> Hill 99 <b>Logged By:</b> Sean Westbrook	<b>Exploration Licence:</b> EL09/98 <b>Hole Number:</b> H99-2
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DEPTH (m)	RECOVERY			CORE DESCRIPTION	C.B/CV.A C.V.A	MAGNETIC SUSCEPTIBILITY	COMMENTS
	From	To	%				
0	0	3.0	45	0-28.5m: OXIDISED ZONE. (Gabbro?/Mafic Volcaniclastics?): Dark green-blue, strongly chloritic, medium grained rock of probable mafic precursor or equivalent epiclastic sediment.		30	
1						61	
2						18	
3	3.0	6.5	51			22	
4						45	
5						16	
6	6.5	9.5	100			15	~6.0 to 9.5m: epidote veining.
7						0	
8						2	
9	9.5	12.1	100			2	
10						2	General lack of any veining between 9.5-28.5m.
11						33	
12	12.1	13.0	67			187	
13	13.0	15.5	73			78	
14						11	
15	15.5	18.5	81			4	
16						15	
17						2	
18	18.5	21.5	57			36	
19						46	
20						33	
21	21.5	24.5	53			5	
22						4	
23						22	
24	24.5	27.2	100			33	
25						77	
26						36	
27	27.2	30.5	100			28	

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## GEOLOGICAL LOG

DEPTH (m)	RECOVERY			CORE DESCRIPTION	C.B/CV.A C.V.A	MAGNETIC SUSCEPTIBILITY	COMMENTS
	From	To	%				
28				28.5-124.6m: MAFIC VOLCANICLASTICS. Chloritic-phyllitic, green to green-grey, thickly bedded, massive medium to coarse grain volcanic-lithicwacke & volcanic-lithic breccia. Stockwork quartz-carbonate veining throughout (weak-strong intensities).		65	28.5-85.4m: Fine to medium grained volcanic lithicwacke.
29						67	
30	30.5	32.8	100			67	NOTE: Pink-red carbonate veining occurs throughout the core, predominantly before ~204.4m (start of highest fuchsite-carbonate zone).
31						56	
32	32.8	33.7	89			100	
33	33.7	35.8	100			92	
34						84	
35	35.8	38.8	93			101	
36						97	
37						111	
38	38.8	41.0	100			105	
39						187	
40						84	
41	41.0	44.1	100			108	
42						105	
43						152	
44	44.1	47.2	100		CV-45deg	109	
45						85	
46						121	
47	47.7	48.5	87			169	
48	48.5	51.5	100			176	
49						142	
50						104	
51	51.5	54.5	100			238	
52						145	
53						332	
54	54.5	57.5	100			122	
55						98	
56						128	Camera orientation (@56m): Azimuth=096, Dip=-56.
57	57.5	60.5	100			47	

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## GEOLOGICAL LOG

DEPTH (m)	RECOVERY			CORE DESCRIPTION	C.B/CV.A C.V.A	MAGNETIC SUSCEPTIBILITY	COMMENTS
	From	To	%				
58						105	
59						100	
60	60.5	63.5	100			94	
61						116	
62						108	
63	63.5	66.5	100			97	
64						95	
65						83	
66	66.5	69.5	100			114	
67						116	
68						82	
69	69.5	72.5	100			133	
70						102	
71						108	
72	72.5	75.5	100			120	
73						119	
74						108	
75	75.5	78.5	100			113	
76						114	
77					CV-45deg	115	
78	78.5	81.5	100			119	
79						107	
80						70	
81	81.5	84.5	100			114	
82					V-45deg CV-65deg	88	Carbonate-quartz vein C.V.A. measured.
83						118	
84	84.5	87.5	100			118	
85						109	85.4-87.35: Mafic epiclastic breccia.
86						87	
87	87.5	90.5	100			77	87.35-88.65: Lithicwacke.
88						43	88.65-90.60: Mafic epiclastic breccia.
89						55	
90	90.5	93.5	100			54	90.60-95.4: Lithicwacke.
91						41	
92						40	
93	93.5	96.5	100		cv-55deg	42	
94						63	

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## GEOLOGICAL LOG

DEPTH (m)	RECOVERY			CORE DESCRIPTION	C.B/CV.A C.V.A	MAGNETIC SUSCEPTIBILITY	COMMENTS
	From	To	%				
95						60	
96	96.5	99.5	100			64	
97						49	
98						40	
99	99.5	102.5	100			52	
100						85	
101						51	
102	102.5	105.5	100			83	
103						92	
104						73	
105	105.5	108.5	100			66	
106						56	
107						57	
108	108.5	111.5	100			80	
109						52	
110						35	
111	111.5	114.5	100			38	
112						62	
113						43	
114	114.5	117.5	100			118	
115						60	
116						51	
117	117.5	120.5	100			90	
118						30	
119						53	
120	120.5	123.5	100			45	Camera orientation (@120m): Azimuth=100, Dip=-57.
121						5	
122						8	
123	123.5	125.7	73			32	
124				124.60-128.20m: FAULT. Broken and missing core.	CV-40deg	NO CORE	
125	125.7	126.5	100			9	
126	126.5	129.5	83			32	
127						16	
128						60	
129	129.5	132.5	100	128.20-185.6m: BASALT?. Dark green, massive, fine to medium grained, chloritic rock with subordinate disseminated magnetite.	CV-51deg	22	129.7-157.5: Frequent epidote veining.

## GEOLOGICAL LOG

DEPTH (m)	RECOVERY			CORE DESCRIPTION	C.B/CV.A C.V.A	MAGNETIC SUSCEPTIBILITY	COMMENTS
	From	To	%				
130						67	129.0-185.6: Spotted cream-brown rutile.
131						19	
132	132.5	135.5	100			28	
133						42	
134						32	
135	135.5	138.5	100			25	
136						1750	
137						74	
138	138.5	141.5	100			202	
139						186	
140						1548	
141	141.5	144.5	100			205	
142						43	
143						23	
144	144.5	147.5	100			1562	
145						42	
146						2150	
147	147.5	150.5	100			57	Camera orientation (@147m): Azimuth=099, Dip=-57.
148						50	
149						956	
150	150.5	153.5	100			47	
151						1035	
152					CV-60deg CV-40deg	2492	
153	153.5	156.5	100			2790	
154						1927	
155						2600	Sample for petrographic analysis @154.97 - d green basalt?, magnetic rock with eoidote vng.
156	156.5	159.5	100			364	
157						38	
158						23	
159	159.5	162.5	100			88	
160						25	
161						22	
162	162.5	165.0	100			56	
163						23	

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## GEOLOGICAL LOG

DEPTH (m)	RECOVERY			CORE DESCRIPTION	C.B/CV.A C.V.A	MAGNETIC SUSCEPTIBILITY	COMMENTS
	From	To	%				
164					CV-38deg	32	
165	165.0	168.1	100			7	
166						20	
167						5	
168	168.1	171.2	100			40	@168.2m: Specular hematite +/- magnetite with carbonate vein.
169						53	
170						73	
171	171.2	174.2	100			18	
172						39	Sample for petrographic analysis @172.52 - spotted rutile altn.
173						18	
174	174.2	177.3	100			5	
175						45	
176						45	
177	177.3	180.4	100			36	
178					CV-35deg	30	
179					CV-65deg CV-45deg	32	
180	180.4	183.5	100			18	
181						59	
182						7	
183	183.5	186.5	100		CV-60deg CV-40deg	47	
184						11	
185						11	
186	186.5	189.5	100	<b>185.6-204.4m: MAFIC VOLCANICLASTICS.</b> Chloritic mafic derived volcanic lithic epiclastic sediment. Weak to moderate qtz-carbonate veining. Hematitic silicified clasts.		28	
187						12	
188						11	
189	189.5	192.5	100			5	
190						28	
191						42	
192	192.5	195.5	100			43	
193					CV-35deg	35	
194						42	

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## GEOLOGICAL LOG

DEPTH (m)	RECOVERY			CORE DESCRIPTION	C.B/CV.A C.V.A	MAGNETIC SUSCEPTIBILITY	COMMENTS
	From	To	%				
195	195.5	198.5	100			30	
196						60	
197						76	
198	198.5	201.5	100			43	
199						102	
200						92	Camera orientation (@200m): Azimuth: 099, Dip=-55.
201	201.5	203.5	90			36	
202						66	
203	203.5	204.3	100			60	
204	204.3	205.7	93	<b>204.4-210.5m: FUCHSITE-CARBONATE ALTERATION ZONE.</b> Moderate-intense fuchsite - carbonate - pyrite alteration zone.		25	
205	205.7	208.8	100			9	
206						36	
207						2	
208	208.8	211.9	100		CV-68deg	0	
209						0	
210				<b>210.5-226.8m: MAFIC VOLCANICLASTICS.</b> Chloritic mafic derived volcanic lithic epiclastic sediment. Weak to moderate qtz-carbonate veining. Hematitic silicified clasts.	CV-40deg	92	@210.5 to approx 227.2m: Generally increased silicic alteration of core with localised (selective?) hematite-qtz altn. Selective qtz-hem replacement is indicated by pink-purple qtz-hem haloes around dark green clasts + also pervasive altn of other clasts. minor pyrite is associated with the qtz-hem altn.
211	211.9	214.3	92			66	
212						23	
213						30	
214	214.3	216.3	100			29	
215						18	
216	216.3	218.5	95			50	
217						45	@218.4-218.8m: Quartz veining with up to 10% pyrite-chalcopyrite?
218	218.5	219.8	100			45	Sample for petrographic analysis @218.72 - qtz-carbonate-pyrite-cpy vein.
219	219.8	222.5	96			26	
220						39	

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## GEOLOGICAL LOG

DEPTH (m)	RECOVERY			CORE DESCRIPTION	C.B/CV.A C.V.A	MAGNETIC SUSCEPTIBILITY	COMMENTS
	From	To	%				
221						28	
222	222.5	225.5	100			38	Sample for petrographic analysis @ 221.1 - qtz-hem altn.
223						26	
224						30	
225	225.5	228.5	90			8	
226				<b>226.8-227.15m:</b> Silicified hematite-magnetite-pyrite horizon/vein.		1227	Sample for petrographic analysis @226.96 - siliceous hem-magnetite band.
227				<b>227.15-236.15m:</b> RHYOLITIC VOLCANICLASTICS. Laminated pale green siltstone with thin interbeds of green-grey rhyolitic-lithicwacke .	V-47deg CV-47deg	30	
228	228.5	231.5	97		B-56deg	15	
229						1	
230						223	
231	231.5	234.5	100		B-55deg	32	
232						12	
233						1266	
234	234.5	237.5	100			1520	
235						2	
236				<b>236.15-239.0m:</b> AUGEN SCHIST. Moderately schistose med-coarse grain lithicwacke containing feldspar and qtz augens.		5	
237	237.5	239.6	90		CV-67deg	2	
238						19	
239	239.6	240.7	100	<b>239.0-246.3m:</b> RHYOLITIC VOLCANICLASTICS. Medium grain, massive volcanic (rhyolitic)-lithicwacke.		18	
240	240.7	243.5	100			2	
241						0	
242						0	
243	243.5	246.2	100			0	
244						0	
245						1	
246	246.2	248.2	100	<b>246.3-247.5m:</b> FUCHSITE-CARBONATE ALTERATION. Intense and pervasive fuchsite- carbonate-pyrite alteration.		0	
247				<b>247.5-255.50m:</b> Volcanic-Lithic BX and wacke with interbeds of black shale.		0	NOTE: Variably weak to moderate fuchsite alteration present in core between 244.5 and 252.2m

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## GEOLOGICAL LOG

DEPTH (m)	RECOVERY			CORE DESCRIPTION	C.B/CV.A C.V.A	MAGNETIC SUSCEPTIBILITY	COMMENTS
	From	To	%				
248	248.2	251.3	100			0	
249					CV-40deg	0	
250						21	Camera orientation (@250m): Azimuth: 106, Dip=-51.
251	251.3	252.4	100		CV-50deg CV-79deg	28	
252	252.4	255.5	100			5	
253						21	
254						12	
255				<b>255.50m: END OF HOLE</b>			

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