102137

GOLD FIELDS EXPLORATION PTY. LIMITED

DRILL CORE RECORD

HOLE NO.	HP 43
STATE	TAS

PROJECT	5510
DESIGNED BY	A.J. Cartwright
LOGGED BY	R.H. Roberts
COMMENCED	24-2-88
COMPLETED	17-3-88

PURPOSE

Geotechnical hole to test ground conditions along proposed decline.

LOG SUMMARY / GENERAL COMMENTS

The hole commenced in broken silicified volcaniclastics and intersected a puggy fault zone between 22 and 25 metres. The remainder of the hole drilled through predominantly Upper Tyndall units consisting of a mixture of volcaniclastics ranging in grainsize from blocky conglomerates to fine-grained silts. A lens of Newton Creek sandstone was intersected from 54.3 to 78.9 metres with gradational contacts to the volcaniclastics on both sides. A limonitic fracture (? fault) occurs at 103.3 metres.

ASSAY SUMMARY

INTERVAL From	INTERVAL To													COMMENTS

LOCATION

NORTHING	5364045.44
EASTING	380203.495
R.L.	2606.790
GRID	AMG
LENGTH	171.8

HOLE CONDITION

SIZE Hole Size	SIZE Depth
HQ	0-171.8

SIGNIFICANT CORE LOSS INTERVALS From	To	% Lost

POOR GROUND CONDITION ZONES From	To	Condition
0	22	Strongly broken core
22	25	Pug Clay
54.3	78.9	Strongly fractured Newton Creek SS
100.3	111.1	Broken and limonitic core

HOLE CONDITIONS AFTER COMPLETION

All rods and casing removed from hole.

Hole making water at 103.3

SURVEY DATA (Note: Bearing type must be same as Project Grid Type)

SURVEY Depth	SURVEY Bearing	SURVEY Dip	INTERVAL From	INTERVAL To	INTERVAL Distance	VERTICAL D.Sin.Dip	VERTICAL R.L.	HORIZONTAL D.Cos.Dip	HORIZONTAL Prog. Total
0.00	90	43	0	23	23	15.7		16.8	
45.0	89	40.5	23	68	45	29.2		34.2	
90.0	88	34.5	68	110	42	23.8		34.6	
130.0	87	29.0	110	151	41	19.9		35.9	
171.0	86	25.0	151	171	20	8.5		18.1	

SURVEY Depth	SURVEY Bearing	SURVEY Dip	INTERVAL From	INTERVAL To	INTERVAL Distance	VERTICAL D.Sin.Dip	VERTICAL R.L.	HORIZONTAL D.Cos.Dip	HORIZONTAL Prog. Total

102138

GOLD FIELDS EXPLORATION PTY. LIMITED

PROJECT:

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER:

Page:

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA Sample No.	From	To	Rec. %
				SUMMARY LOG				
				0-22 QUARTZ-PHYRIC VOLCANICLASTICS				
				22-25 FAULT ZONE				
				25.0-54.3 VOLCANICLASTIC CONGLOMERATES AND SILTS				
				UPPER TYNDALL				
				54.3-78.9 NEWTON CREEK SANDSTONE				
				78.9-103.3 FINE-TO COARSE-GRAINED VOLCANICLASTICS				
				UPPER TYNDALL				
				103.3 LIMONITIC (? FAULT) FRACTURE				
				103.3-111.1 VOLCANICLASTIC CONGLOMERATES				
				UPPER TYNDALL				
				111.1-135.9 MIXED VOLCANICLASTICS OF VARIABLE GRAINSIZE				
				UPPER TYNDALL				
				135.9-161.9 VOLCANICLASTIC CONGLOMERATES				
				UPPER TYNDALL				

GOLD FIELDS EXPLORATION PTY. LIMITED

102139

PROJECT: HENTY

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: HP43

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
8.0	8.9	0.45	50	0-22 QUARTZ-PHYRIC VOLCANICLASTICS
8.9	13.4	0.90	60	A mixture of silicified quartz-phyric volcaniclastics and
13.4	16.0	0.50	31	gritty volcaniclastics. Strongly broken core.
16.0	17.0	0.30	30	0-13.4: White silicified quartz-phyric volcaniclastic
17.0	17.6	0.30	50	7-7.3: Pebbly volcaniclastic
17.6	17.7	0.10	100	13.4-17.2: Quartz-feldspar phyric volcaniclastic. Shattered core.
17.7	19.4	0.50	30	17.2-18.0: Grey altered volcaniclastic with minor veined and disseminated
19.4	20.5	0.30	27	sulphides (Py: 1-2%).
20.5	22.3	0.65	81	18.0-22.0: Weathered sandy volcaniclastic.
22.3	25.4	0.80	38	
25.4	27.3	0.90	47	22.0-25.0 FAULT
27.3	28.4	0.60	55	Pug clay and milled fragments.
28.4	31.4	2.50	83	
31.4	33.9	2.10	84	25.0-54.3 VOLCANICLASTIC CONGLOMERATES AND SILTS
33.9	37.4	3.35	96	- UPPER TYNDALL UNITS
37.4	40.2	2.00	71	Mixture of volcaniclastic conglomerates/breccias with
40.2	41.1	0.40	44	finer-grained greenish silts and shales.
41.1	43.0	1.70	89	25.0-46.8: Volcaniclastic conglomerate with predominantly lapilli-sized
43.0	46.1	3.0	97	fragments. Hematitic fragments are common. Minor patchy
46.1	48.4	1.90	83	sericite alteration with pyrite cubes.
48.4	50.3	1.85	97	30.0: Jasper vein with open-space growth.
50.3	53.1	2.25	80	38.4-41.5: Broken core.
53.1	53.7	0.50	83	44.4: Coarse lapilli quartz-porphyry fragments
53.7	57.2	2.40	69	increase in number.
57.2	59.5	2.10	91	46.8-54.3: Interbedded mixture of pebbly conglomerates and fine-grained
59.5	60.7	0.70	58	silts. Generally pale grey-greenish colour. Lacks hematitic
60.7	63.2	2.00	80	fragments and quartz-porphyry fragments of above unit.
63.2	67.4	2.50	66	Some blocky fragments in coarser units. Sub-rounded fragments.
67.4	69.3	1.40	74	Gradational contact to Newton Creek Sandstone below. Quartz pebbles
69.3	72.0	2.70	100	typical of Newton Creek Sandstone occur within volcaniclastic material.
72.0	74.4	2.15	90	54.3-78.9 NEWTON CREEK SANDSTONE
74.4	76.1	1.70	100	Distinctive siliclastic conglomerate and black shales.
76.1	78.3	2.15	98	Very broken core in shaley units.
78.3	81.4	2.85	92	54.3-57.1: Predominantly siliclastic conglomerate with minor shale
				57.1-78.9: Black graphitic shale.

ASSAY DATA Sample No.	From	To	Rec. %

102140

GOLD FIELDS EXPLORATION PTY. LIMITED

PROJECT: HENTY

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: HP43

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA Sample No.	From	To	Rec. %
				57.5: Bedding/CA = 40°				
				61.1: Bedding/CA = 54°				
				66.4: Bedding/CA = 52°				
				77.5: Bedding/CA = 56°				
				Gradational contact from black shales to volcaniclastic silts and shales				
				below.				
81.4	84.5	2.90	94	78.9-103.3 MIXED FINE TO COARSE VOLCANICLASTICS				
84.5	87.6	2.70	87	UPPER TYNDALL UNITS				
87.6	90.6	2.95	98	Bedded sequence of varying grainsized volcaniclastic units.				
90.6	93.7	2.95	95	78.9-83: Grey-green fine-grained volcaniclastics with coarser-grained				
93.7	95.9	1.90	86	pebbly layers - minor specks of pyrite 79.1? Sedimentary				
95.9	98.1	1.85	84	flames-facing up hole.				
98.1	100.4	2.15	93	82.5: Bedding/CA = 50°				
100.4	102.5	1.90	90	83.0-86.0: Volcaniclastic conglomerate with bands of finer-grained				
102.5	105.1	2.20	85	volcaniclastics. Sapilli-sized fragments common with some				
				quartz-porphyry fragments ranging up to block size.				
				Rounded to sub-rounded fragments.				
				85.6-86: Open space quartz.				
				86.0-94.8: Mixed volcaniclastics of varying grainsize.				
				89.7-89.8: Disseminated Py, up to 5% in parts.				
				91.2: Bedding/CA = 63°				
				92.1: Bedding/CA = 55°				
				93.1: Bedding/CA = 51°				
				94.8-103.3: Pebbly volcaniclastic conglomerate with patchy alteration.				
				Predominantly lapilli-sized fragments. Abundant pink quartz-				
				porphyry fragments.				
				ALT: Varying degrees of silica-sericite alteration.				
				94.8-100.3: Patchy silica-sericite alteration.				
				97.3-97.4: Broken clay zone.				
				100.3-100.9: Strong silicification.				
				100.9-103.3: Patchy silica-sericite alteration.				
				100.3-103.3: Limonitic-filled fractures sub-parallel and across				
				the core axis.				

GOLD FIELDS EXPLORATION PTY. LIMITED

PROJECT: HENTY

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: HP43

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
				103.3: Possible fault contact. Hole making water, and fractured
				limonitic core occurs on both sides from 100.3-111.1.
105.1	106.9	1.60	89	103.3-111.1 VOLCANICLASTIC CONGLOMERATE
106.9	109.8	2.60	90	UPPER TYNDALL UNITS
109.8	111.9	2.00	95	Poorly sorted blocky volcaniclastic conglomerate.
111.9	113.4	1.10	73	Sub-rounded fragments.
113.4	116.7	2.90	88	Limonite on fractures. Minor sericitic alteration.
116.7	118.7	1.50	75	106.7: Late quartz-CO_3 vein.
118.7	120.2	1.40	93	108-108.1: (Py: 1-2%)
120.2	121.6	0.80	57	110.3-111.1: Finer-grained conglomerate
121.6	122.5	0.50	56	Py < 1%
122.5	125.9	3.00	88	110.6 : Late quartz-CO_3 vein.
125.9	129.0	2.40	77	
129.0	131.1	1.80	86	111.1-135.9 VOLCANICLASTICS OF MIXED GRAINSIZE
131.1	132.8	1.10	65	UPPER TYNDALL UNITS
132.8	135.9	2.75	89	111.1-131.3: Patchy weak silica-sericite alteration.
				131.3-135.9: Strong silica-sericite alteration with
				patchy pyrite.
				Broken core in finer-grained units and in more altered
				sections.
				111.1-114.3: Fine-to medium-grained volcaniclastic.
				112.9 : Bedding/CA = 62°
				113.7 : Bedding/CA = 71°
				114.3-117.2: Medium-to coarse-grained pebbly conglomerate.
				116.6: Late quartz vein.
				117.2-124.0: Mixture of silty and sandy volcaniclastics.
				119.7: Foliation/CA = 44°
				124.0-131.3: Pebbly volcaniclastic conglomerates with pink quartz
				porphyry fragments. Bands of sandy volcaniclastics.
				126.7: Bedding/CA = 43°
				131.3-133: Silica-sericite-pyrite altered volcaniclastic.
				Patchy pyrite (Py: up to 5%)
				133-135.1: Silicified and strongly sericitised volcaniclastic.
				Siliceous nodules in a greenish sericitic matrix.
				Partially broken core.

ASSAY DATA

Sample No.	From	To	Rec. %

102142

GOLD FIELDS EXPLORATION PTY. LIMITED

PROJECT: HENTY

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: HP43 Page: 4 of 4

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
				135.1-135.9: Patchy silica-sericite-pyrite alteration of pebbly
				volcaniclastic conglomerate (Py: <1%)
				Broken core.
135.9	139.1	2.90	91	135.9-161.6 VOLCANICLASTIC CONGLOMERATES
139.1	142.2	3.00	97	UPPER TYNDALL
142.2	145.1	2.60	90	
45.1	148.3	3.20	100	135.9-149.2: Pebbly volcaniclastic conglomerate with pink quartz-
148.3	151.4	2.90	94	porphyry fragments. Bands of volcaniclastic sandstone.
151.4	154.4	2.90	97	Patchy development of silica-sericite-pyrite alteration
54.4	157.4	3.00	100	(Py: <1%)
157.4	159.4	1.70	85	140.6-140.7: Quartz vein.
159.4	162.5	2.70	87	142.2-142.6: Late shearing parallel to CA. Sinistral shear.
				149.2-161.6: Coarse-grained volcaniclastic sandstone to conglomerate
				149.2-150.6: Blebs of chalcopyrite on fractures.
				150.2-157.9: Minor sericite alteration.
				157.9-161.6: Increased sericite/chlorite alteration with
				minor pyrite on fractures.
				161.6 Sharp contact with 1cm of sheared pug.
62.5	165.6	2.60	84	161.6-171.8 BLOCKY VOLCANICLASTIC CONGLOMERATE
165.6	168.7	3.00	97	UPPER TYNDALL
168.7	171.8	2.90	94	161.6-163.3: Continued sericite/chlorite alteration
			EOH	163.3-171.8: Patchy sericite alteration.
				Blebs of chalcopyrite and pyrite along
				healed fractures, along fragment boundaries
				and in the matrix (Sulphides: <1%).

ASSAY DATA Sample No.	From	To	Rec. %