102017

GOLD FIELDS EXPLORATION PTY. LIMITED

DRILL CORE RECORD

HOLE NO.	HP22
STATE	TASMANIA

ULV. PRESS

PROJECT	TYNDALL
DESIGNED BY	A.J. CARTWRIGHT
LOGGED BY	A.J. CARTWRIGHT
COMMENCED	18.5.87
COMPLETED	12.6.87

PURPOSE

To test the Henty mineralised zone in a 50m square pattern around the HP9 intersection.

LOG SUMMARY / GENERAL COMMENTS

The hole encountered a narrow (13.3m downhole) strongly mineralised zone, well away (22.6m downhole) from the Henty Fault. However this mineralisation is weakly auriferous - assays are given below.

ASSAY SUMMARY

INTERVAL From	INTERVAL To	Width	Au	Ag	As	Cu	Pb	Zn	Bi					COMMENTS
182.0	182.8	0.8m	3.48	26.0	180	1300	6200	4600	41					
186.5	187.5	1.0m	2.03	18.0	63	22500	300	390	7					

LOCATION

NORTHING	5364361.2
EASTING	380096.4
R.L.	2597.9
GRID	AMG
LENGTH	232.7

HOLE CONDITION

SIZE Hole Size	SIZE Depth
HW	0.0- 2.5
HQ	2.5-212.0
NQ	212.0-232.7

SIGNIFICANT CORE LOSS INTERVALS From	To	% Lost

POOR GROUND CONDITION ZONES From	To	Condition
147.5	158.6	Henty Fault. Completely shattered and sheared sericite rock fragments and clays.
0.0	30.0	Weathered hanging wall rocks.

HOLE CONDITIONS AFTER COMPLETION

All rods and casing removed from hole.

Hole open with marker in collar.

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
0.0	096	59.0	0.0	15.0	15.0	12.9	2585.0	7.7	7.7
30.0	099	58.0	15.0	45.0	30.0	25.4	2559.6	15.9	23.6
60.0	097	53.5	45.0	75.0	30.0	24.1	2535.5	17.9	41.5
90.0	097	53.0	75.0	105.0	30.0	24.0	2511.5	18.1	59.6
120.0	-	52.5	105.0	135.0	30.0	23.8	2487.7	18.3	77.8
150.0	095	50.0	135.0	165.0	30.0	23.0	2464.7	19.3	97.1
180.0	096	48.0	165.0	189.0	24.0	17.8	2446.9	16.1	113.2
198.0	096	47.5	189.0	215.0	26.0	19.2	2427.7	17.6	130.7
232.0	097	47.0	215.0	232.7	17.7	12.9	2414.8	12.1	142.8

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

102018

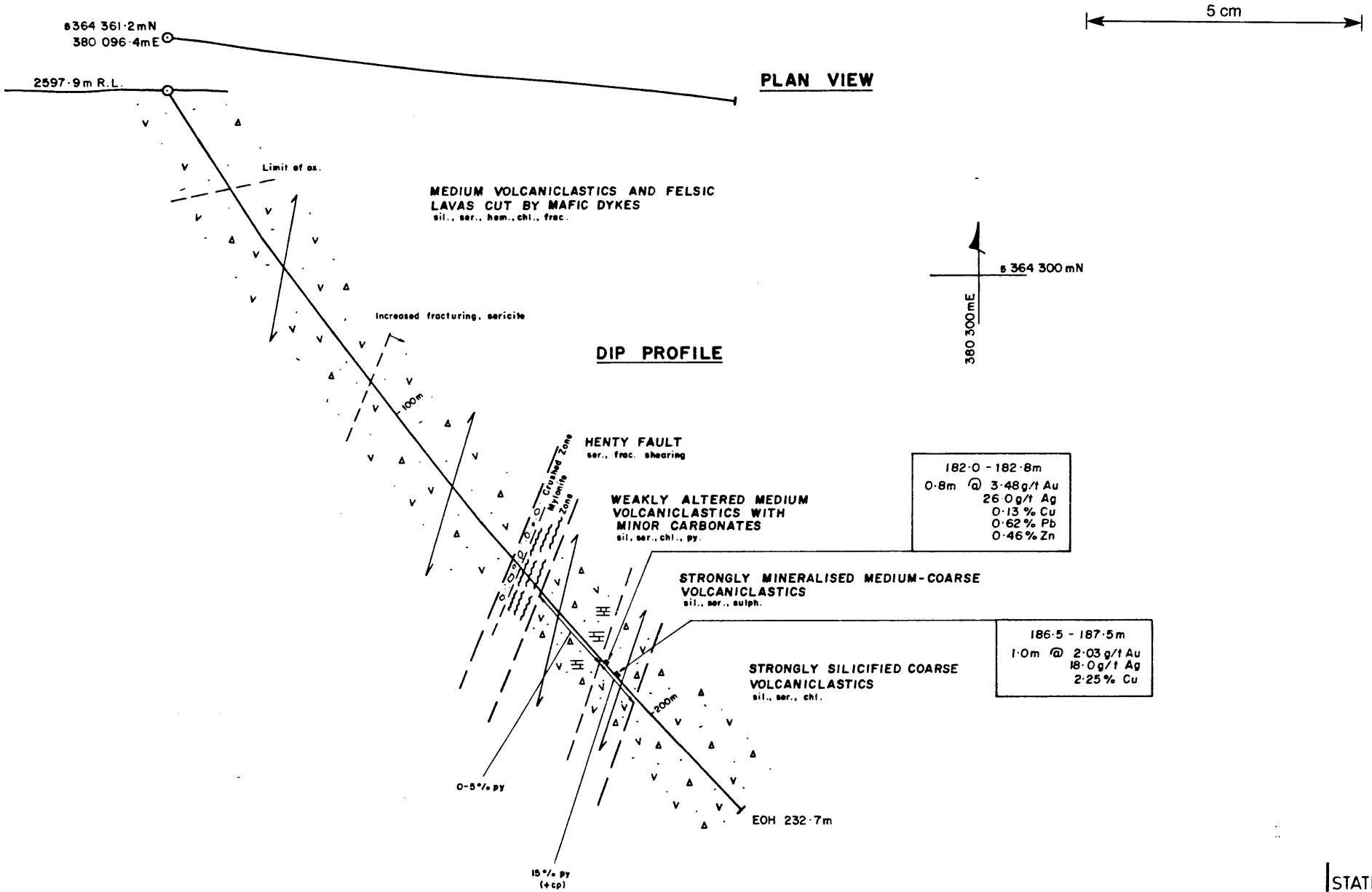
PROJECT: **TYNDALL** HOLE NO.: **HP22**

GOLD FIELDS EXPLORATION PTY. LIMITED

DRILL HOLE PLOT

SCALE 1:1000 — 80 40 0 40 80 METRES

5 cm



STATE: **TAS.**

HOLE NO: **HP22**

102019

GOLD FIELDS EXPLORATION PTY. LIMITED

PROJECT: TYNDALL

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: HP22 Page: 1

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA Sample No.	From	To	Rec. %
				SUMMARISED LOG				PG1
0.0	147.5	140.6	95	MEDIUM-COARSE GRAINED VOLCANICLASTICS AND FELSIC LAVAS CUT BY RARE, THIN MAFIC DYKES. THE TOP OF THE SEQUENCE INTERSECTED IS WEATHERED, THE BOTTOM IS STRONGLY FRACTURED.		0.0	30.0	HWM
						30.0	147.5	HWUM
147.5	158.6	10.9	100	HENTY FAULT. A STRONGLY DEVELOPED CRUSHED ZONE CONTAINING BLACK SHALES, IS UNDERLAIN BY A WEAKLY DEVELOPED MYLONITE.		147.5	150.8	FTCS
						150.8	158.6	FYMY
158.6	181.2	22.6	100	WEAKLY MINERALISED AND ALTERED MEDIUM GRAINED VOLCANICLASTICS WITH MINOR LENSES OF CARBONATE (PARTICULARLY WEAKLY MINERALISED).		158.6	181.2	FWAM
181.2	194.5	13.3	100	STRONGLY MINERALISED MEDIUM-COARSE GRAINED VOLCANICLASTICS CUT BY AN UNSULPHIDIC, SILICIFIED ZONE.		181.2	194.5	FWMZ
194.5	232.7	36.8	96	STRONGLY SILICIFIED, BUT GENERALLY WEAKLY ALTERED VOLCANICLASTICS.		194.5	232.7	FWSL
				DETAILED LOG				
				0.0-147.5 MEDIUM GRAINED VOLCANICLASTICS AND LAVAS CUT BY A FEW MAFIC DYKES. STRONGLY FRACTURED IN PLACES.				
0.0	2.5			Tricone, no core recovered.				
2.5	30.0	25.1	91	Moderately weathered pale brown-green coarse-medium grained volcaniclastics. Pinkwhite clasts occur in a green fine grained chloritic matrix. The core is foliated and fractured. Abundant limonite occurs on fracture surfaces and in narrow shattered zones.				
30.0	89.2	57.6	97	Pink-grey-green medium grained volcaniclastics and fine grained lavas. The rock is metamorphosed to a quartz-chlorite-hematite assemblage.				

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PROJECT: TYNDALL

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: HP22

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
				Numerous irregular metamorphic quartz veins cut the core which is weakly fractured and weakly foliated at 50°CA. A few, rare, thin mafic dykes cut the sequence. At 59.0, the core becomes moderately fractured, increasing at 64.0 to a strongly fractured, pale coloured, sericitic sequence. This continues down to 79.7, where a 4.0m thick very strongly, fractured, chloritic mafic dyke occurs. The core returns to the weakly fractured and altered rock below 83.7.
89.2	147.5	55.6	95	Strongly-moderately fractured, pale pink-green, sericitic volcaniclastics cut by rare, thin, mafic dykes. The rock is strongly foliated at 55°CA. Numerous, thin (0.2m) shattered zones are present. The sequence is irregularly veined and metamorphosed as above. The fracturing and sericite increase with depth below 140.0, becoming solid, soft pale green pervasively sericitised rock at 146.8.
				147.5-158.6 HENTY FAULT. STRONGLY FRACTURED AND SHATTERED SERICITIC ROCK FRAGMENTS AND CLAY, WITH A MYLONITE ZONE.
147.5	150.8	3.3	100	Pale green-black crushed zone. Highly sericitic rock and clay - all incompetent. Numerous puggy clay bands and zones, up to 20cm wide, are present. Between 149.1-149.3 and 149.7-150.8, highly shattered and fractured black shales occur.
150.8	158.6	7.6	100	Pale pink-green, sericitic, highly foliated volcaniclastics. This unit is weakly mylonitic and contains numerous sericitic crushed zones with distinct green sericite. The cleavage/foliation developed is strongly crenulated, with the softer clayey matrix wrapping around the siliceous clasts in the rock.
				158.6-181.2 WEAKLY ALTERED AND SULPHIDIC MEDIUM VOLCANICLASTICS WITH MINOR CARBONATE LENSES.
158.6	181.2	22.6	100	Weakly altered and mineralised medium grained volcanclastics. Grey and pink-green in colour, this unit is moderately to strongly sericitic and

ASSAY DATA (all ppm)

Sample No.	From	To	Rec. %	Au	Ag	As	Cu	Pb	Zn	Bi
T7341	160.6	161.4	100	<0.008	0.5	19	15	45	60	1
2		162.2	"	"	"	16	10	25	35	3
3		163.2	"	"	<0.5	8	"	20	25	1
4		164.2	"	"	"	16	60	"	65	"
5		165.2	"	"	"	36	40	25	55	3
6		166.2	"	"	0.5	30	20	35	"	<1
7		167.2	"	"	"	23	60	30	70	2

GOLD FIELDS EXPLORATION PTY. LIMITED

PROJECT: TYNDALL

DRILL CORE LOG AND ASSAY DATA

HOLE NUMBER: HP22

INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION	ASSAY DATA (all ppm) Sample No.	From	To	Rec. %	Au	Ag	As	Cu	Pb	Zn	Bi
				chloritic. It is weakly fractured overall and is well foliated at 55°CA.	T7348	167.2	168.2	100	<0.008	<0.5	15	15	30	55	<1
				The rock consists of coarse siliceous, white-grey grit sized fragments in a	9		169.2	"	"	"	19	20	"	35	2
				fine clayey, green matrix. The sulphide content (pyrite) is very weak at	50		170.2	"	"	"	15	15	25	65	"
				first (0.1% by vol.), increasing to around 5% at 170.0m. Also below this	1		171.2	"	"	0.5	12	10	30	70	<1
				depth, carbonate alteration (weak) occurs; mainly as wispy irregular veins	2		172.2	"	"	<0.5	32	"	40	95	3
				and small disseminations. The pyrite occurs as very fine grained	3		173.2	"	"	0.5	18	"	35	55	2
				disseminations. In general, the sequence is poorly veined.	4		174.2	"	"	<0.5	20	15	30	65	1
				Between 160.6 and 162.2, the core is dark grey and strongly silicified	6		176.2	"	"	0.5	12	10	25	30	2
				(pervasively). It is also strongly network-veined by quartz and sericite.	7		176.2	"	"	<0.5	10	"	30	25	3
				Sulphides are rare.	8		177.2	"	"	"	7	"	"	"	1
				At 175.4, thick (3-4cm wide) lenses and bands of pale grey-white	9		178.2	"	"	0.5	5	5	"	"	<1
				carbonate become common with a corresponding decrease in sulphide	60		179.2	"	"	"	"	"	20	20	1
				content. A sharp broken contact occurs with the unit below.	1		180.2	"	"	<0.5	3	"	15	"	"
					T7362	180.2	181.2	"	"	0.5	2	15	10	25	<1
				181.2-194.5 STRONGLY SULPHIDIC AND STRONGLY ALTERED MEDIUM-COARSE GRAINED VOLCANICLASTICS CUT BY A SILICIFIED ZONE.												
181.2	182.8	1.6	100	Strongly mineralised medium-coarse grained moderately fractured	T8930	181.2	182.0	100	0.470	4.0	33	235	1200	85	9
				volcaniclastics. This unit is foliated (at 60°CA) with silicified clasts up to	1	182.0	182.8	"	3.480	26.0	180	1300	6200	4600	41
				pebble size, angular, poorly sorted in a fine matrix of chlorite-sericite-pyrite. Overall the sulphides which are disseminated are around 15-20% by vol.											
				At 182.4, several thin (1-2cm wide) bands of massive pyrite occur. This unit grades into the one below.											
182.8	185.5	2.7	100	Strongly silicified, pink-grey volcaniclastics. The silification in this unit	T8932	182.8	183.8	100	0.010	1.0	13	10	100	450	<1
				is developed as a strong flooding and as thick, irregular veins. The rock	3		184.8	"	<0.008	0.5	8	5	20	30	"
				is unsulphidic, unfoliated and moderately fractured.	T8934	184.8	185.5	"	"	<0.5	6	"	5	"	"
185.5	194.5	9.0	100	Strongly mineralised and silicified coasrse volcaniclastics. Large to											
				medium (1-10cm wide) sized clasts - siliceous, occur in a silica-sericite-pyrite matrix. The core is weakly foliated and moderately fractured	T8935	185.5	186.5	100	0.170	2.0	42	770	110	60	7
					6		187.5	"	2.030	18.0	63	22500	300	390	7
				with several strongly developed crushed zones. Minor, irregular quartz	8		188.5	"	0.090	2.5	34	295	285	240	16
				veins are present. The overall sulphide content is around 10-15% in this	9		189.5	"	0.050	1.0	23	10	10	45	4
				unit, with disseminated pyrite well developed over the first 5.0m of this	40		190.5	"	0.060	1.5	31	25	25	30	6
					1		191.5	"	0.020	0.5	9	5	5	25	1

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PROJECT: TYNDALL

DRILL CORE LOG AND ASSAY DATA

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INTERVAL From	INTERVAL To	RECOVERY m	RECOVERY %	DESCRIPTION
				sequence. The lower 4.0m is strongly siliceous with abundant pervasive silica flooding, siliceous breccias and network veins, and minor sulphide development.
				At 186.5, a 1.0m zone of strong chalcopyrite mineralisation - as coarse irregular intergrowths with silica, occurs.
				Small (0.2-0.3m wide) sericite fractured zones - completely shattered soft rock, occur at 189.6, 191.8 and 192.7.
				At 193.7, a 0.5m wide fractured, clayey zone occurs.
				This unit grades into the one below.
				194.5-232.7 VERY STRONGLY SILICIFIED COARSE VOLCANICLASTICS
194.5	232.7	36.8	96	White-grey, very strongly silicified volcaniclastics. This unit is pervasively silica flooded, so much so that original textures have been obscured. The unit is structureless, weakly fractured and unsulphidic. A few, minor, irregular veinlets of sericite and quartz are present.
				At 196.9, a 0.5m wide strongly fractured-crushed zone occurs. This contains soft sericite, crumbly rock fragments and clays.
				At 219.0, the silicification weakens, and a coarse volcaniclastic texture can be seen in the rock, which is moderately fractured.
				END OF HOLE 232.7m

ASSAY DATA (all ppm)

Sample No	From	To	Rec. %	Au	Ag	As	Cu	Pb	Zn	Bi
T8942	191.5	192.5	100	0.050	0.5	19	10	10	20	2
3		193.5	"	0.020	<0.5	5	75	<5	35	1
T7363	193.5	194.5	"	<0.008	"	8	50	20	"	"