

GOLD FIELDS EXPLORATION PTY. LIMITED
DRILL CORE RECORD

418063

HOLE NO: LS 10
 STATE : TASMANIA

ULV. PRESS

PROJECT	TYNDAL	PURPOSE
DESIGNED BY	J.G. PURVIS	To test an I.P. anomaly in the Eastern Pyrite Zone on Line 144N of the Selina Grid.
LOGGED BY	A.J. CARTWRIGHT	
COMMENCED	2-2-84	
COMPLETED	24-2-84	

LOG SUMMARY	0.0-34.4 JUKES FORMATION. 34.4-127.2 RHYOLITE LAVAS 127.2-202.4 WELDED IGNIMBRITE	} SELINA VOLCANICS
GENERAL COMMENTS	202.4-224.5 VOLCANICLASTICS (SUB-AQUEOUS). PYRITIC 224.5-302.5 SHALES, CHERTS AND VOLCANICLASTICS. STRONGLY PYRITIC.	

SSAY SUMMARY

INTERVAL		From	To	Au	Cu	Zn	Ag									COMMENTS
From	To															
223.4	246.4	23.0m		0.01 g/t	0.13%	0.26%	2.1 g/t									
including																
240.4	246.4	6.0m		0.04 g/t	0.44%	0.22%	3.5 g/t									

LOCATION

NORTHING	5363260
EASTING	386152
R.L.	722.2
GRID	A.M.G.
LENGTH	302.5

HOLE CONDITION

SIZE	
Hole Size	Depth
HQ	0.0-2.0
NQ	2.0-15.0
BQ	15.0-302.5

SIGNIFICANT CORE LOSS INTERVALS

From	To	% Lost

POOR GROUND CONDITION ZONES

From	To	Condition

HOLE CONDITIONS AFTER COMPLETION

2.0m of HQ left in the top of the hole.

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

SURVEY			INTERVAL			VERTICAL			HORIZONTAL			SURVEY			INTERVAL			VERTICAL			HORIZONTAL			
Depth	Bearing	Dip	From	To	Distance	D.Sin.Dip	R.L.	D.Cos.Dip	Prog.Total	Depth	Bearing	Dip	From	To	Distance	D.Sin.Dip	R.L.	D.Cos.Dip	Prog.Total					
0.0	077	68.0	0.0	28.0	28.0	26.0	696.2	10.5	10.5															
56.0	091*	64.5	28.0	83.0	55.0	49.6	646.6	23.7	34.2															
110.0	087	62.0	83.0	135.5	52.5	46.4	600.2	24.7	58.9															
161.0	092	60.0	135.5	186.5	51.0	44.2	556.0	25.5	84.4															
212.0	093	57.0	186.5	255.5	69.0	57.9	498.1	37.6	122.0															
299.0	095	50.0	255.5	302.5	47.0	36.0	462.1	30.2	152.2															

* inaccurate due to magnetic rock.

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DRILL CORE LOG AND ASSAY DATA

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INTERVAL		RECOVERY		DESCRIPTION	ASSAY DATA (p.p.m)															
From	To	m	%		Sample No.	From	To	Rec. %	Au	Cu	Pb	Zn	Ag							
				in size down to a coarse grit size. The larger fragments are often veined and broken by a limonitic material. Overall the unit is slightly weathered with a weak to moderate fracture system often coated with brown-black limonite. In places the hematite is specular. Fine-grained magnetite is also present. Clasts of sub-angular, grit sized and smaller, quartz are also present. The clasts are set in a pale green, sericitic fine grained tuffaceous matrix. The elongation of some of the clasts is due to a pronounced schistosity in the rock, which varies in intensity from being highly sheared to being entirely absent. Within the unit, grittier, coarser grained beds are separated from the finer grained sequences by bedding planes which parallel the schistosity (at 20° CA). Quartz-albite? veins, often 1-2cm wide cut the core at approx. 90°. Overall the unit is very weakly altered. The weathered depth limit is 16.8m.																
16.8	34.4	17.6	100	Predominantly as above but unweathered, i.e. outside the limonitic development. Small (approx. 1cm across) white quartzite fragments, pink and purple hematitic, strongly sheared tuffaceous fragments, purple thin fine grained tuffaceous lenses all in a weakly altered green fine grained matrix. Weakly fractured with an incipiently developed limonitic coating. The quartz-pink albite metamorphic veins are also quite common, often also containing minor green chlorite. Some of the larger purple fragments appear to be porphyritic lavas (intermediate) with clay altered feldspar/mafic and quartz phenocrysts. A few of the larger joints are moderately limonitised and are also strongly fractured and open (water lost during drilling). This unit appears to have a gradational contact with the one below. Strongly hematitic.																
				34.4 - 127.2 STRONGLY SHEARED AND HEMATITIC RHYOLITE LAVA WITH BRECCIATED ZONES. MODERATELY ALTERED.	12715	34.4	36.4	100	<0.01	25	30	70	21							
					12716	40.4	42.4	100	.	25	40	50	1							
34.4	127.2	92.8	100	Purple rhyolite lavas. This unit is moderately altered with abundant red-purple hematite as a stockwork replacement vein replace-	12717	46.4	48.4	100	"	15	<10	60	1							

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INTERVAL		RECOVERY		DESCRIPTION	ASSAY DATA (p.p.m)															
From	To	m	%		Sample No.	From	To	Rec. %	Au	Cu	Pb	Zn	Ag							
				ment and as a massive replacement. The rest of the rock is pale green soft sericite to 41.0. A few relict quartz phenocrysts (1-2 mm across) exist. The rock has a moderately developed schistosity at 30° CA. Specular hematite occurs in the more massive replacement zones (usually 10-20 across) and the limonitic fractures that exist in conglomerate above, also occur here, as do the quartz-pink albite metamorphic veins (vuggy). Quartz-massive hematite veining occurs together with small brecciated zones in the lava. e.g. at 43.4. After 41.0, the pale green sericitic alteration is replaced by a dark green chloritic alteration, also, a pink albitisation? occurs in patches. The albitisation? appears to be associated with small scale (5-10cm wide zones) brecciation, as pink albitised angular fragments occur in a dark chloritic matrix. Below 41.0, the rock is weakly altered overall.	12718	52.4	54.5	100	<0.01	16	<10	170	1							
					12719	58.4	60.4	100	"	25	70	60	1							
					12720	64.4	66.4	100	"	10	10	30	<1							
					12721	70.4	72.4	100	"	<10	<10	40	<1							
					12722	76.4	78.4	100	"	10	30	30	1							
					12723	82.4	84.4	100	"	5	20	20	<1							
					12724	88.4	90.4	100	"	<10	<10	40	<1							
					12725	94.4	96.4	100	"	<10	<10	40	<1							
				At 57.3, a 0.6m wide fracture zone occurs, consisting of blocky fractured, limonite coated rock fragments.	12726	100.4	102.4	100	"	<10	<10	30	1							
				After 65.8, the paler green sericitic alteration replaces the darker chloritic style. Also the zones of massive hematitic alteration are rare and overall the core is less fractured. The quartz-albite veins still occur, with vuggy, comb-like fractures and openings-some fractures with a brown limonitic coating. Minor magnetite occurs with many of the hematitic-quartz veins.	12727	106.4	108.4	100	"	5	20	20	<1							
					12728	112.4	114.4	100	"	15	<10	50	<1							
					12729	118.4	120.4	100	"	20	<10	60	<1							
				At 75.8, a 1 cm wide fault infilled with elongate quartz in a dark green chloritic matrix, offsets a thick (10cm) quartz-albite vein approx. 5 cm. The vein runs at 80° CA, the small fault at 20° CA.	12730	124.4	126.4	100	"	20	20	90	1							
					12731	202.3	203.4	100	"	70	80	770	1							
				At 87.4, another fractured-limonitic zone occurs over approx. 1.6m.	12732	203.4	204.4	100	"	10	120	120	1							
					12733	204.4	205.4	100	"	30	120	950	<1							
				After 95.0, both the metamorphic veins and the limonitic fractures become very rare. Overall the core is incipiently fractured.	12734	205.4	206.4	100	"	30	240	950	1							
					12735	206.4	207.4	100	"	30	110	1080	1							
					12736	207.4	208.4	100	"	20	90	380	1							
					12737	208.4	209.4	100	"	145	90	1030	2							
				127.2-202.4 WEAKLY ALTERED WELDED IGIMBRITE CONTAINING LITHIC, PUMICEOUS AND CRYSTAL FRAGMENTS.	12738	209.4	210.4	100	"	70	120	480	<1							
					12739	210.4	211.4	100	"	40	140	820	1							
					12740	211.4	212.4	100	"	195	150	1920	2							

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INTERVAL		RECOVERY		DESCRIPTION	ASSAY DATA (p.p.m)													
From	To	m	%		Sample No.	From	To	Rec. %	Au	Cu	Pb	Zn	Ag					
02.4	224.5	22.1	100	Medium green crudely bedded tuffaceous units. A variety of interbedded lithologies occur, with fine grained pumiceous deposits through to coarse grained, gritty, crystal-lithic rich deposits. All units are moderately altered to chlorite-sericite-quartz, with very weakly developed pyrite and hematite. The rock is weakly foliated and unfractured. With increasing depth, the bedding contacts and bedding in general becomes more distinct. Below 213.0, the finer grained more foliated beds are moderately pyrite (approx. 2-3% vol.). Also the fine grained units are medium to pale green in colour. Pyrite rather than hematite becomes the iron-bearing phases at this point. After 219.0, minor chalcopryite occurs with the pyrite. The last 5.0m of this unit is dominated by the finer grained tuffs. This unit appears to span the shallow aqueous to sub-aerial environments-possibly coinciding with the hematite-pyrite boundary.	12741	212.4	213.4	100	<0.01	160	110	2170	1					
					12742	213.4	214.4	100	0.21	3160	180	870	2					
					12743	214.4	215.4	100	<0.01	170	180	1230	2					
					12744	215.4	216.4	100	"	170	110	1860	1					
					12745	216.4	217.4	100	"	45	100	1790	1					
					12746	217.4	218.4	100	"	60	110	450	1					
					12747	218.4	219.4	100	"	200	120	4620	2					
					12748	219.4	220.4	100	"	840	180	2930	3					
					12749	220.4	221.4	100	"	105	60	470	1					
					12750	221.4	222.4	100	"	180	130	1110	1					
					12751	222.4	223.4	100	"	200	50	500	1					
					12752	223.4	224.4	100	"	150	100	2070	2					
					12753	224.4	225.4	100	"	245	240	2010	3					
					12754	225.4	226.4	100	"	150	130	1160	1					
					12755	226.4	227.4	100	"	120	100	1160	1					
					12756	227.4	228.4	100	"	40	140	2360	1					
					12757	228.4	229.4	100	"	115	830	4530	1					
				224.5-302.5 MODERATELY ALTERED, PYRITIC, SHALES, SUB-AQUEOUS VOLCANICLASTICS AND CHERTS.	12758	229.4	230.4	100	"	355	190	1380	1					
					12759	230.4	231.4	100	"	250	180	1060	1					
					12760	231.4	232.4	100	"	130	310	2500	1					
24.5	231.5	7.0	100	Dark grey-green pyritic shales. Moderately to strongly fractured slightly graphitic? shales with bedding - foliation at 30° CA. The rock is moderately altered with abundant chlorite. The pyrite occurs as veinlets along bedding plan fractures. The contact with the tuffaceous sediments above is sharp, whereas the lower contact is entirely gradational. Pyrite is approx. 2% vol. Metamorphic veining is absent.	12761	232.4	233.4	100	"	75	240	2320	1					
					12762	233.4	234.4	100	"	270	980	0,600	1					
					12763	234.4	235.4	100	"	165	670	4720	2					
					12764	235.4	236.4	100	"	255	470	3,950	2					
					12765	236.4	237.4	100	"	255	190	2060	3					
					12766	237.4	238.4	100	"	255	90	4390	2					
					12767	238.4	239.4	100	"	140	70	1,040	3					
					12768	239.4	240.4	100	"	720	80	1,250	2					
31.5	245.9	14.4	100	Medium grey-green very fine-grained pyritic tuffaceous sediment. Moderately altered to chlorite-sericite with a weak foliation-bedding cleavage developed. Pyrite and brown (pale) sericite occur in these fractures and pyrite also occurs in large (5cm across) semi-massive patches. This unit is still quite shale-like. Pyrite is 2-3% vol. Minor chalcopryite is present. Thin (less than 1.0 cm thick) graded beds run at 30° CA. The quartz-	12769	240.4	241.4	100	0.02	4,780	50	1,660	4					
					12770	241.4	242.4	100	<0.01	5,260	60	1,340	4					
					12771	242.4	243.4	100	<0.01	4910	100	1,370	2					
					12772	243.4	244.4	100	0.07	7,200	260	4,760	5					
					12773	244.4	245.4	100	0.09	2,150	210	2,750	4					
					12774	245.4	246.4	100	0.06	1,810	50	1,100	2					

