

UNITY MINING LTD

REGIONAL EXPLORATION TASMANIA

DRILL HOLE COVER SHEET

Hole No.:	FTD038	Drilling Contractor:	EDrill Australia
Location:	Firetower West	Drill Rig:	UDR 200 LS Track Mounted
ML/EL:	EL 26-2004 Firetower	Drill Method:	Diamond (PQ/HQ/NQ core)
Geologist:	D. A Evans	Drilling Commenced:	14 Jul 2012
End of Hole (m):	512.4	Drilling Completed:	03 Aug 2012

Drill Hole Collar

Surveyed By:	PDA Surveyors
Survey Date:	01 Nov 2012
Survey Datum:	Zone 55 GDA1994
Survey Reference:	Trig Mark 232/171
Hole Collar Easting (m):	442685.9
Hole Collar Northing (m):	5406990.4
Hole Collar Height (m):	418.5
Hole Collar Azimuth (GDA1994):	172.0
Hole Collar Declination (deg):	70.0

Comments

Surveyed by GNSS differential GPS co-ordinate fixing
Reported 20 Nov 2012
Australian Height Datum (Tas) 1983
Gog Hill (Class B Second Order)

Drill Hole Surveys

Surveyed By:	EDrill Australia		
Surveyed Data:	Depth (m)	Azimuth*	Decl.
PQ to 23.9 metres	30.0	171.1	70.9
	60.0	172.3	71.0
	90.0	170.6	70.8
HQ to 95.2 metres	120.0	171.8	70.1
	150.0	171.7	69.3
	180.0	171.9	68.5
	210.0	171.5	67.6
	240.0	171.7	67.1
	270.0	171.8	66.0
	300.0	168.9	65.4
	330.0	173.2	64.6
	360.0	173.3	64.3
	390.0	173.5	63.3
	420.0	169.8	62.5
	450.0	171.0	61.7
	480.0	172.2	60.6
NQ to 512.4 metres EOH	512.4	171.4	59.9

Comments

Ranger Discoverer electronic magnetic survey tool
*Raw magnetic azimuth +13.647 degrees
*Magnetics affected; azimuth smoothed.
*Magnetics affected; azimuth smoothed.
*Instrument error; azimuth smoothed to spin trend.
*Magnetics affected; azimuth smoothed.
End of hole survey.

UNITY MINING LTD
REGIONAL EXPLORATION TASMANIA
DRILL HOLE COVER SHEET

Hole No.:	FTD038	Drilling Contractor:	EDrill Australia
Location:	Firetower West	Drill Rig:	UDR 200 LS Track Mounted
ML/EL:	EL 26-2004 Firetower	Drill Method:	Diamond (PQ/HQ/NQ core)
Geologist:	D. A Evans	Drilling Commenced:	14 Jul 2012
End of Hole (m):	512.4	Drilling Completed:	03 Aug 2012

Hole Completion

Groundwater Intersected:	Yes (pressurised)
Groundwater Controlled:	Yes
Material Left In Hole:	Steel collar pipe
Collar Condition:	Capped

Comments
2 NQ plus 1 HQ Van Ruth plugs installed, cemented off
3 metres HWT cemented in at surface
UPVC casing not installed in completed hole
Threaded steel cap spot welded onto collar pipe

Drill Hole Logging

Logged By:	D. A. Evans
Base of Complete Oxidation (m):	0.9
Base of Partial Oxidation (m):	38.35
Summary:	
	Collar - 38.35 m
	38.35 - 211.1 m
	211.1 - 285.5 m
	285.5 - 339.3 m
	339.3 - 401.55 m
	401.55 - 512.4 m

Comments
Logged in hard copy graphical format
Oxidised felsic volcanoclastic or lava breccia
Fresh rhyolitic to dacitic volcanics (lava breccia, polymictic volcanoclastics); rare andesitic lava
Porphyritic dacitic to andesitic lava and lava breccia
Altered magnetic lithic-rich dacitic lava breccia and volcanoclastics (?Lynchford Member similarities)
Veined altered dacitic lava breccia and volcanoclastics
Magnetite+hematite altered feldspar+quartz-phyric lithic-rich dacitic lava breccia; cpy.+py. veins

Drill Hole Assays

Sample Type:	Half core
Assayed By:	ALS
Peak Gold Assays:	0.64 g/t gold
	0.61 g/t gold +
	3.72% copper
Other Significant Assays:	0.45% copper
	0.23% copper

Comments
Sawn half HQ and NQ core samples
Burnie Research Laboratory (Wivenhoe, Tasmania)
Master pulp samples stored at Deloraine core shed
1.0 m apparent width from 60.0-61.0 m
0.5 m apparent width from 312.9-313.4 m
Average for 5.1 m apparent width from 417.9-423.0 m
Average for 3.4 m apparent width from 448.0-451.4 m

Hole No. FTD038	Collar Location	Graphical Drill Hole Log		Logged by DAE	Massive
Project : EL 28-2004	East : 442688.00	Azimuth : 117.7 degrees (MGA94)	Drilled by EDrill	EDrill	Pervasive
Prospect : Firetower West	North : 5406993.00	Declination : 55.1 degrees	Drill type UDR200	/07/2012	Disseminated
Grid : MGA94	RL : 423.00	Total Depth : 348.9m (confirmed)	Drill Date	/ /2012	Narrow vein
	Proj. MGA94 co-ords	Colar surveyed by:	(reported / 2012)		

From	To	Colour/Weathering	Structure type 1	Structure type 2	Angle CA	Graphic structure	Log grainsize	Description	Alteration					Mineralization					
									Silica	Serpentine	Albite	Carbonate	Chlorite	Hematite	Vein Qtz %	Mineralisation Assemblage	%	Veining	Disseminated
0	1	CO						RUBBLE/CLAY : COMPLETELY OXIDISED, TOTALY 0.9m WEATHERED, DARK BROWN + ROCK FRAGMENTS.											
1	2	PO						WEATHERED VOLCANICLASTIC BRECCIA/LAVA BRECCIA: PARTIALLY OXIDISED STRONGLY WEATHERED SOFT CLAYEY MID CREAM-GREY COARSE-GRAINED, LITHIC 2.5m RICH RHYOLITIC BRECCIA.										MINOR Fe OXIDE + CLAY IN FRACTURES.	
2	3	PO						CLAY AFTER WEATHERED RHYOLITIC LAVA OR INTRUSIVE, WITH CORE LOSS ZONES : PARTIALLY TO COMPLETELY OXIDISED, VERY STRONGLY WEATHERED, SOFT TO VERY SOFT, FREQUENTLY BROKEN, MID CREAM, LIGHT BROWN-CREAM, STRUCTURELESS KAOLINITIC CLAY TO PORPHYRITIC FINE-GRAINED, FELDSPAR + QUARTZ - PHYRIC RHYOLITE.											SPARSE BROWN Fe/Mn OXIDES IN IRREGULAR VEINS AND ON FRACTURES.
3	4	CO			3.7			CORE LOSS											
4	5	BROKEN CLAYEY			5.1														
5	6	PO																	
6	7	REMNANT PORPHYRITIC TEXTURES.																	
7	8																		
8	9	PO			8.9														
9	10	FR			9.35			TENDING COARSE-GRAINED WITH REMNANT INTRACLASTS; POSSIBLY INTERMIXED WITH RHYOLITIC LAVA BRECCIA OR VOLCANICLASTIC.											
10	11	PO						VERY STRONGLY KAOLINITIC THROUGHOUT.											
11	12	CO																	
12	13																		
13	14	CO						12.4m CONTACT NOT RECOVERED; DEPTH UNCERTAIN. CORE LOSS, MINOR CLAY; NEAR TOTAL CORE LOSS.											
14	15							RECORDED BY DRILLER. FEW FRAGMENTS OF COMPLETELY OXIDISED VERY STRONGLY WEATHERED, SOFT, LIGHT CREAM, GREY-CREAM, KAOLINITIC CLAY, WITH SOME REMNANT PORPHYRITIC TEXTURES PRESERVED.											
15	16																		
16	17																		
17	18																		
18	19							19.2m CONTACT NOT RECOVERED; APPROXIMATE DEPTH (CORE BLACK)											
19	20	CO						CLAY AFTER WEATHERED RHYOLITIC LAVA OR INTRUSIVE : COMPLETELY TO PARTIALLY OXIDISED, VERY STRONGLY WEATHERED, VERY SOFT, CLAYEY TO LOCALLY FRAGMENTAL TEXTURED, BROWN, CREAM TO 21.7m GREY, COMMONLY VERY BROKEN.											
20	21	PO						RHYOLITIC/DACITIC PUMICEOUS + LITHIC VOLCANICLASTIC BRECCIA : PARTIALLY OXIDISED, LOCALLY RELATIVELY FRESH, WEAKLY WEATHERED, REDUCED TO HQ AT 23.7m											
21	22	PO						HARD/MODERATELY HARD FRAGMENTAL TEXTURED, VERY WEAKLY FOLIATED, MID TO LIGHT CREAM, MOTTLED LIGHT GREEN, VERY COARSE-GRAINED, LITHIC-RICH, IN PLACES PUMICEOUS, VOLCANICLASTIC BRECCIA; ABUNDANT DEVITRIFIED GLASSY TO CRYSTAL RICH SERICITIZED MATRIX; LARGE SUB-ANGULAR VOLCANIC CLASTS UP TO 25mm IN LENGTH.											
22	23	PO						28-28.45m VEIN/FRACTURE WITH BROWN-YELLOW Fe OXIDES.											
23	24	PO						BECOMING FINER SEMI-PERVAZEMELY SERICITISED, LOCALLY LITHIC RICH, QUARTZ + FELDSPAR - PHYRIC, DEVITRIFIED COARSE-GRAINED VOLCANICLASTIC SANDSTONE.											
24	25	PO																	
25	26	MASSIVE, No PREFERRED FABRIC																	
26	27																		
27	28																		
28	29	VEIN AT 45° TO CA - SPARSE VUGHY QUARTZ VEINS/VEINLETS.																	
29	30																		

Boco = 0.9m

Eofs =

Hole No. **FDD038**
 Project: EL 26-2004
 Prospect: Firetower West
 Grid: MGA94
 Collar Location
 East: 442688.00
 North: 5408993.00
 RL: 423.00
 Proj. MGA94 co-ords

Graphical Drill Hole Log
 Azimuth: 117.7 degrees (MGA94)
 Declination: 56.4 degrees
 Total Depth: 348.9m (confirmed)
 Collar surveyed by: (reported / /2012)

Logged by DAE
 Drilled by EDrill
 Drill type UDR200
 Drill Date 14/07/2012
 / /2012
 Massive
 Pervasive
 Disseminated
 Narrow vein

0.062 14 1 4 16 64 mm

From	To	Colour/ Weathering	Structure type 1	Structure type 2	Angle CA	Graphic structure	Log grainsize	Description	Alteration					Mineralization				
									Silica	Sericite	Albite	Carbonate	Chlorite	Hematite	Vein Qtz %	Mineralisation Assemblage	% veining	Dissemination
30	31	PO						CONTINUED FROM 21.7m										
31	32	1cm Qtz. vein			53°			RHYOLITIC/DACITIC PUMICEOUS + LITHIC VOLCANICLASTIC BRECCIA: PARTIALLY OXIDISED TO RELATIVELY FRESH, HARD, FRACTURED FRAGMENTAL TEXTURED, MID CREAM, GREY-CREAM, COARSE SANDY TO VERY COARSE - GRAINED DEVITRIFIED, MATRIX-SUPPORTED, LITHIC-RICH, VOLCANICLASTIC BRECCIA. LIGHT CREAM, SERICITISED, ASHY GROUNDMASS WITH ABUNDANT RHYOLITE CLASTS SUB-ROUNDED TO SUB-ANGULAR SOME WITH ALTERED RIMS UP TO 20mm DIAMETER RAPIDLY LARGER UP TO 60-70mm. INCREASING STRETCHED, RAGGED CLASTS OF SERICITE + CHLORITE ALTERED PORPHYRITIC RHYOLITE, POSSIBLY FIAMME.									1cm THICK VUGHY QTZ VEIN & FE OXIDE STAINING	
32	33																	
33	34	33.6-33.75m FAULT/SHEAR BROKEN ZONE.																
34	35																	
35	36	INCREASINGLY COARSE FRAGMENTAL TEXTURES.																
36	37																	
37	38	NO PREFERRED ORIENTATION.																
38	39	FR																
39	40	COARSE FRAGMENTAL/BRECCIA TEXTURES.																
40	41	PROBABLY ALTERATION OF FELDSPARS AND VOLCANIC CLASTS.																
41	42																	
42	43																	
43	44																	
44	45	PO																
45	46	FR																
46	47	FINE TO COARSE PORPHYRITIC TEXTURE;																
47	48	VERY COARSE FRAGMENTAL TEXTURES IN PLACES (ALTERATION OVERPRINT)																
48	49																	
49	50																	
50	51	PO																
51	52	VUGHY FE OXIDE VEINS.			35°													
52	53	PO																
53	54	INITIALLY BROKEN																
54	55	FR																
55	56																	
56	57	PO																
57	58	PO																
58	59	FR																
59	60																	

SILICEDUS, STRONGLY ALTERED,

CPY. IN VEINLETS

BOPO = 38.35m

38.35m

Hole No. FTD038	Collar Location	Graphical Drill Hole Log	Logged by DAE	Massive
Project: EL 28-2004	East: 442688.00	Altitude: 172.0 degrees (MGA94)	Drilled by EDI	Pervasive
Prospect: Firstower West	North: 5406993.00	Declination: 70.0 degrees	Drill type UDR200	Disseminated
Grid: MGA94	RL: 423.00	Total Depth: 512.4m (to be confirmed)	Drill Date 14/07/2012	Narrow vein
	Proj. MGA94 co-ords	Collar surveyed by:	03/08/2012	

From	To	Colour/Weathering	Structure type 1	Structure type 2	Angle CA	Graphic structure	Log grain size	Description	Alteration					Mineralization				
									Silica	Sericite	Albite	Carbonate	Chlorite	Hematite	Vein Qtz %	Mineralization Assemblage	at	Vein/Disseminated
CONTINUED FROM 265.65m																		
270	271							LITHIC-RICH FELDSPAR + QUARTZ-PHYRIC DACITIC LAVA BRECCIA: EXTREMELY HARD, TOUGH, STRONGLY SILICEOUS, VERY COARSE FRAGMENTAL TEXTURED, DARK BROWN, GREY-BROWN, RHYOLITE CLAST										TRACE PY, AS BLES IN FELDSPAR ALTERATION PATCHES.
271	272							RICH COARSE-GRAINED RHYOLITE TO DACITIC LAVA BRECCIA.										
272	273	272.5m						*CORE BROKEN, ?DROPPED AND RE-DRILLED FROM 273.5m.										
273	274	0.6m DROPPED CORE RECORDED IN RUN.						3-5mm SUBHEDRAL GREY QUARTZ PHENOCRYSTS.										
274	275	275.5m						FINE-GRAINED FELDSPAR + QUARTZ PHYRIC RHYOLITE GROUNDMASS SUPPORTING LARGE (UP TO 50mm) ALTERED RHYOLITE LAVA CLASTS.										
275	276							INTERMIXED RHYOLITE/DACITIC PORPHYRIC LAVA OR INTRUSIVE - 278-3m VEINED CONTACT.										
276	277	VEIN CONTACT 45°						ALTERED ANDESITIC/BASALTIC LAVA?: HARD, FREQUENTLY BROKEN MICRO-FRACTURED, VEINED, WEAKLY MAGNETIC, FINE-GRAINED, MID GREEN, DARK GREEN, GREY, APHYRIC TO LOCALLY PORPHYRIC, ANDESITE OR BASALT, WEAKLY CHLORITISED AND SERICITISED THROUGHOUT. PATCHY FELDSPAR ALTERATION IN TECTONIC BRECCIA ZONE AND GRADUALLY INCREASING IN VEIN FORM.										SPARSE TO MINGR PY. IN FELDSPAR VEINS.
277	278	BROKEN CORE IN PLACES - MISLATCH PROBLEMS.						HEMATITE STAINED K-FELDSPAR ALTERATION AS SELVEDGES AROUND CREAM CARBONATE VEINLETS. BECOMING PORPHYRIC, WITH ALTERED FELDSPAR PHENOCRYSTS.										SPARSE PYRITE IN CARBONATE VEINLETS.
278	279							285-5m ?DIFFUSE HYALOCLASTITE CONTACT.										
279	280							ALTERED LITHIC-RICH FELDSPAR + QUARTZ-PHYRIC DACITIC LAVA BRECCIA: EXTREMELY HARD, TOUGH, SILICEOUS, LOCALLY VEINED, VERY COARSE-GRAINED, LIGHT TO MID GREEN, CREAM, BECOMING DARK PURPLE-GREY, RHYOLITE AND GLASSY LAVA CLAST										286-85m PY + TRACE CPY ADJACENT TO FRACTURE.
280	281							RICH FELDSPAR CRYSTAL AND QUARTZ PHYRIC LAVA BRECCIA. STRONG SILICA + VARIABLE SERICITE ALTERATION, INCREASING PATCHY HEMATITE STAINING.										
281	282	TECTONIC BRECCIA																
282	283	CORE BLOCKS																
283	284	UNRELIABLE!																
284	285	284.5m ERROR IN CORE BLOCK (?1.5m)																
285	286																	
286	287	COARSE TO VERY COARSE FRAGMENTAL TEXTURES.																
287	288																	
288	289																	
289	290																	
290	291	LOCALLY STRONG VEIN OVERPRINT.																
291	292																	
292	293	293.0m																
293	294	0.5m CORE LOSS IN RUN																
294	295	?MISLATCH																
295	296	295.0m																
296	297																	
297	298	VEINING																TRACE PY. + CPT. GENERALLY IN STZ + FELDSPAR VEINS.
298	299																	
299	300																	

Hole No. FTD038	Collar Location	Graphical Drill Hole Log		Logged by DAE	Massive
Project: EL 28-2004	East: 442688.00	Azimuth: 172.0 degrees (MGA94)	Drilled by EDrill	Pervasive	
Prospect: Firetower West	North: 5406993.00	Declination: 70.0 degrees	Drill type UDR200	Disseminated	
Grid: MGA94	RL: 423.00	Total Depth: 512.4m (to be confirmed)	Drill Date 14/07/2012	Narrow vein	
	Prof. MGA94 co-ords	Collar surveyed by:	(reported / 2012)	03/08/2012	

From	To	Colour/Weathering	Structure type 1	Structure type 2	Angle CA	Graphic structure	Log grain size	Description	Alteration					Mineralization			
									Silica	Sericite	Albite	Carbonate	Chlorite	Hematite	Vein Qtz %	Mineralisation Assemblage	#
CONTINUED FROM 285.5m																	
300	301							ALTERED LITHIC-RICH FELDSPAR + QUARTZ - PHYRIC DACTIC LAVA BRECCIA: EXTREMELY HARD, HIGHLY SILICEOUS, VEINED, COARSE FRAGMENTAL TEXTURED TO PORPHYRITIC, MID GREEN, GREY-GREEN, COARSE-GRAINED ALTERED RHYOLITE CLAST RICH QUARTZ EYE AND FELDSPAR PHYRIC LAVA BRECCIA + MINOR FINE-GRAINED PORPHYRITIC LAVA. STRONG PERVASIVE SILICA + HEMATITE STAINED FELDSPAR ALTERATION. PATCHY TEXTURE DESTRUCTIVE K-FELDSPAR ALTERATION, INCREASING WHITE, CREAM FELDSPAR + CARBONATE AS VENS AND VEINLETS, SCATTERED LARGE GREEN ALTERED GLASSY LAVA FRAGMENTS, UP TO 50mm DIAMETER. ABUNDANT LIGHT CREAM, GREEN, SUBHEDRAL ALTERED FELDSPAR PHENOCRYSTS IN PORPHYRITIC DACITE GROUNDMASS.							TRACE - SPARSE PY. ± CPY. BLEBS.		
301	302	302.1m		4cm													
302	303	FELDSPAR MX. BRECCIA VEIN			55°												
303	304																
304	305																
305	306																
306	307	QUARTZ EYE AND COARSE FRAGMENTAL TEXTURES, STRONG VEIN OVERPRINT															
307	308																
308	309																
309	310																
310	311	WEAKLY MAGNETIC															
311	312																
312	313	CPY VEIN IN BROKEN ZONE			10°												
313	314																
314	315	314.5m															
315	316	0.7m OF CORE LOST? MISLATCH															
316	317	317.5m															
317	318	BIT MATRIX															
318	319	1.0m OF CORE LOST? MISLATCH															
319	320	320.5m															
320	321	MASSIVE, NO PREFERRED ORIENTATION.															
321	322																
322	323	23.5m ROD COUNT															
323	324																
324	325	COARSE FRAGMENTAL TEXTURES, THIN CREAM CARBONATE VEIN OVERPRINT															
325	326																
326	327																
327	328																
328	329	BROKEN CORE FROM 329.5m															
329	330																

* 320.04 - 320.11m HALF NO CORE FILET FOR PETROLOGY

Hole No. FTD038	Collar Location	Graphical Drill Hole Log		Logged by DAE	Massive
Project : EL 26-2004	East : 442656.00	Azimuth: 172.0 degrees (MGA94)	Drilled by EDrill	Drilled by EDrill	Pervasive
Prospect : Firetower West	North : 5406993.00	Declination : 70.0 degrees	Drill type UDR200	Drill Date 14/07/2012	Disseminated
Grid : MGA94	RL : 423.00	Total Depth : 512.4m (confirmed)	Drill Date 03/08/2012		Narrow vein
Proj. MGA94 co-ords		Collar surveyed by:	(reported / /2012)		

0.082 1/4 1 4 16 64 mm

From	To	Colour/Weathering	Structure type 1	Structure type 2	Angle CA	Graphic structure	Log grainsize	Description	Alteration					Mineralization				
									Silica	Sericite	Albite	Carbonate	Chlorite	Hematite	Vein Qtz %	Mineralisation Assemblage	%	Veining
390	391	BROKEN CORE IN PATCHES.						CONTINUED FROM 370-2m										
391	392							FELDSPAR CRYSTAL-RICH, LITHIC RICH RHYOLITE/DACTIC LAVA BRECCIA: EXTREMELY HARD, TOUGH, SILICEOUS, COARSE FRAGMENTAL TEXTURED, QUARTZ-EYE + FELDSPAR-CRYSTAL PHYRIC, RHYOLITE VOLCANIC CLAST RICH BRECCIA. ALTERED, GREY-BLACK SILICA + SERICITE + MAGNETITE GROUNDMASS.										391.2m CPY + PY, VEIN
392	393																	
393	394																	
394	395	MODERATELY MAGNETIC						MASSIVE TO VENED LIGHT GREEN, CREAM-GREY FINE TO MEDIUM-GRAINED FELDSPAR CRYSTAL RICH, QUARTZ PHYRIC, RHYOLITE LAVA OR VOLCANICLASTIC.										
395	396																	
396	397							ABUNDANT LARGE RAGGED ANGULAR TO SUB-ANGULAR RHYOLITE LAVA CLASTS, UP TO 50-60mm IN LENGTH. WEAK HEMATITE ALTERATION + MAGNETITE INTERSTITIAL. PATCHY FELDSPAR ALTERATION.										
397	398	BRECCIA VEIN/ BRITTLE FAULT			65°			397.5-397.7m CARBONATE MATRIX BRECCIA/FAULT. 398-25m SHARP PLANAR CONTACT.										
398	399	INITIALLY PORPHYRITIC WITH CHLORITISED PHENOCRYSTS.						ALTERED RHYOLITIC LAVA GRADATIONAL INTO FELDSPAR CRYSTAL RICH VOLCANICLASTIC: HARD TO VERY HARD										
399	400							BECOMING SILICEOUS, PORPHYRITIC, INITIALLY MID GREEN, MOTTLED BUFF, FINE-GRAINED, CHLORITISED LAVA, GRADING THROUGH FELDSPAR ALTERED RHYOLITE TO GREEN CRYSTAL-RICH MARC VOLCANICLASTIC SANDSTONE										
400	401	INTERMIXED SILTSTONE MATRIX.			400-5m			401-55m "TUFF".										TRACE CPY IN CREAM FELDSPAR VEIN
401	402							ALTERED FELDSPAR CRYSTAL AND QUARTZ EYE PHYRIC, LITHIC-RICH, DACTIC LAVA BRECCIA:										
402	403	VERY COARSE FRAGMENTAL TEXTURES						EXTREMELY HARD, TOUGH, SILICEOUS, VERY COARSE FRAGMENTAL TEXTURED, LOCALLY VENED, DARK GREY, BLACK-BROWN, MOTTLED GREEN, BUFF, VERY COARSE-GRAINED, RHYOLITE LAVA CLAST RICH, LAVA BRECCIA.										
403	404																	
404	405	MODERATELY MAGNETIC						ABUNDANT LARGE, UP TO 50-60mm, RAGGED, SUB-ANGULAR CLASTS OF RHYOLITE AND ALTERED, SERICITISED GLASSY LAVA. ALTERED SILICA + SERICITE + MAGNETITE/HEMATITE GROUNDMASS, WITH ABUNDANT FELDSPAR CRYSTAL LATHES AND QUARTZ EYES.										
405	406																	
406	407																	
407	408	408-0m VEIN			25°			408-0-408-1m BROKEN ORE, WHITE FELDSPAR + CARBONATE VEIN.										
408	409																	
409	410																	
410	411							PATCHY EPIDOTE/FELDSPAR ALTERATION.										RARE TRACE PY + CPY IN ALTERATION PATCHES.
411	412	VERY COARSE FRAGMENTAL TEXTURES,																
412	413	BECOMING OVERPRINTED BY						INCREASING PERSVASIVE FELDSPAR + HEMATITE ALTERATION OF GROUNDMASS AND PARTIAL ALTERATION OF LITHIC CLASTS.										
413	414																	
414	415	FELDSPAR TEXTURE DESTRUCTIVE ALTERATION,						ABUNDANT GREY-WHITE QUARTZ EYE CLASTS, SUB-ANGULAR, UP TO 5-6mm IN DIAMETER.										
415	416																	
416	417																	
417	418	418-0m VEIN INCREASING			38°			417-9m START OF 3-5cm HEMATITE + PYRITE + MINOR CPY. VENS.										
418	419	VEIN OVERPRINT.																COMMON HEMATITE + PYRITE + MINOR CPY. VEIN MINOR ALTERATION
419	420																	

417.9-422.0m
 5.1m @ 0.11 ppm Au
 2.5 ppm Ag
 0.45% Cu

Hole No. **FTD038**
 Project : EL 26-2004
 Prospect : Firatower West
 Grid : MGA94
 East : **442688.00**
 North : **5406993.00**
 RL : **423.00**
 Proj. **MGA94 co-ords**

Graphical Drill Hole Log
 Azimuth : 172.0 degrees (MGA94)
 Declination : 70.0 degrees
 Total Depth : 512.4m (confirmed)
 Collar surveyed by:
 (reported / 2012)

Logged by **DAE**
 Drilled by **EDrill**
 Drill type **UDR200**
 Drill Date **14/07/2012**
03/08/2012

Massive
 Pervasive
 Disseminated
 Narrow vein

From		To		Colour/Weathering	Structure Type 1	Structure Type 2	Angle CA	Graphitic structure	Log grain size	Description	Alteration						Mineralization													
											Silica	Sericite	Albite	Carbonate	Chlorite	Hematite	Vein Qtz %	Mineralisation Assemblage	%	Veinlets Disseminated Percentage										
CONTINUED FROM 401.55m																														
420	421	LOCALLY STRONG		CARBONATE VEIN AND						ALTERED FELDSPAR CRYSTAL AND QUARTZ EYE																				
421	422	PATCHY PERVASIVE							PHYRIC LITHIC-RICH DACITIC LAVA BRECCIA:																					
422	423	ALTERATION OVERPRINT.							EXTREMELY HARD, TOUGH, VERY SILICEOUS, VEINED, COARSE FRAGMENTAL TEXTURED, GREY-BLACK, DARK BROWN, MOTTLED CREAM, VERY COARSE-GRAINED, QUARTZ-PHYRIC RHYOLITE LAVA CLAST RICH LAVA BRECCIA. ABUNDANT LARGE, UP TO 30-40mm, SUB-ANGULAR CLASTS OF BROWN RHYOLITE IN AN ALTERED, SILICA + SERICITE + MAGNETITE + HEMATITE GROUNDMASS. ABUNDANT SERICITISED FELDSPAR CRYSTAL LATHES AND 4-5mm GREY QUARTZ EYES. VARIABLE LOCALLY STRONG PATCHY TO TEXTURE TEXTURE FLOODING ALTERATION WITH HEMATITE PIGMENTED FELDSPAR.																					
423	424	VERY COARSE																												
424	425	RANDOM ORIENTATION																												
425	426	FRAGMENTAL TEXTURES.																												
426	427																													
427	428																													
428	429																													
429	430								COMMON SERICITE ALTERATION OF LAVA CLASTE.																					
430	431	STRONGLY																												
431	432	MAGNETIC CORE.																												
432	433																													
433	434																													
434	435								INCREASING PATCHY PERVASIVE TEXTURE																					
435	436								DESTRUCTIVE FELDSPAR + HEMATITE ALTERATION.																					
436	437																													
437	438																													
438	439																													
439	440																													
440	441																													
441	442	442.15	-						LOCALLY TENDING LESS COARSE-GRAINED WITH																					
442	443	442.53m	→ 45°						INCREASE IN ABUNDANCE OF SERICITISED FELDSPAR																					
443	444	CARBONATE VEIN.							CRYSTAL FRAGMENTS RELATIVE TO LARGE RHYOLITE LAVA VOLCANOCLASTS. GREY QUARTZ EYES ABUNDANT THROUGHOUT.																					
444	445	WEAKLY TO																												
445	446	MODERATELY																												
446	447	MAGNETIC CORE.							MINOR TO INCREASINGLY COMMON CREAM CARBONATE VEINS AND VEINLETS, WITH SPARSE TO MINOR PYRITE + SPARSE CPY. INCLUSIONS AND THIN VEINLETS.																					
447	448	VERY STRONG																												
448	449	CARBONATE VEIN AND BRECCIA							448.3m - 450.0m SEVERAL BRECCIA VEINS WITH CREAM CARBONATE MATRIX, HOSTING MINOR TO COMMON PYRITE AND SPARSE CPY. NEEDLE-LIKE CRYSTALS OF HEMATITE INTERGROWN WITH CARBONATE.																					
449	450	OVERPRINT																												

* 426.18 - 426.25m HALF NQ CORE FILET FOR PETROLOGY.

448.0 - 451.4m
 3.4m @ 0.02 ppm Au
 0.4 ppm Ag
 0.23% Cu

Hole No. FTD038	Collar Location	Graphical Drill Hole Log		Logged by DAE	Massive
Project: EL 28-2004	East: 442688.00	Azimuth: 172.0 degrees (MGA84)	Drilled by EDRI	Pervasive	
Prospect: Firetower West	North: 5406993.00	Declination: 70.0 degrees	Drill type UDR200	Disseminated	
Grid: MGA84	RL: 423.00	Total Depth: 512.4m (confirmed)	Drill Date 14/07/2012	Narrow vein	
	Proj. MGA84 co-ords	Collar surveyed by:	(reported / 2012)		
	0.052 1/4 1 4 18 84 mm				

From	To	Colour Weathering	Structure type 1	Structure type 2	Angle CA	Graphic structures	Log grainsize	Description	Alteration					Mineralization									
									Silica	Sericite	Albite	Carbonate	Chlorite	Hematite	Vein Qtz %	Mineralisation Assemblage	%	Veining	Disseminated	Pervasive			
450	451	MODERATELY MAGNETIC						CONTINUED FROM 401.55m ALTERED FELDSPAR CRYSTAL AND QUARTZ EYE RHYOLIC LITHIC-RICH DACTIC LAVA BRECCIA:															
451	452	DCM CARBONATE MATRIX BRECCIA						451.4m EXTREMELY HARD, TOUGH, VERY SILICEOUS, INITIALLY STRONGLY VEINED, LOCALLY BRECCIATED, COARSE FRAGMENTAL TEXTURED, DARKEST GREY, MID BROWN, GREEN, ALTERED RHYOLITE CLAST RICH LAVA BRECCIA. STRONG SILICA + FELDSPAR + HEMATITE ALTERATION, GRADUALLY WEAKENING.															
452	453																						
453	454																						
454	455																						
455	456	BRECCIA VEIN OVERPRINT																					
456	457	456.7m + 456.8m 5-10mm CARBONATE VEIN SET ->			30°			INCREASING RAGGED, ANGULAR, LIGHT GREEN CREAM SERICITISED RHYOLITE CLASTS. WEAK TO MODERATE SERICITE ALTERATION MARKED DECREASE IN FELDSPAR + HEMATITE ALTERATION FROM 457.6m.															
457	458																						
458	459																						
459	460																						
460	461																						
461	462																						
462	463																						
463	464																						
464	465	464.9m ROD COUNT																					
465	466	465.7m CREAM CARBONATE BRECCIA VEINS																					
466	467																						
467	468																						
468	469																						
469	470																						
470	471																						
471	472																						
472	473	VERY COARSE FRAGMENTAL TEXTURES;																					
473	474																						
474	475	NO OBVIOUS PREFERRED ORIENTATION/FABRIC.																					
475	476																						
476	477																						
477	478	WEAK VEIN/VEINLET OVERPRINT.																					
478	479																						
479	480																						

* 479.3-479.4m FULL NQ CORE FOR PETROLOGY.

UNITY MINING LTD
REGIONAL EXPLORATION TASMANIA
DRILL HOLE COVER SHEET

Hole No.: **FTD039** Drilling Contractor: **EDrill Australia**
 Location: **Firetower Deposit** Drill Rig: **UDR 200 LS Track Mounted**
 ML/EL: **EL 262004 Firetower** Drill Method: **Diamond (PQ/HQ/NQ core)**
 Geologist: **D. A Evans** Drilling Commenced: **07 Aug 2012**
 End of Hole (m): **472.0** Drilling Completed: **22 Aug 2012**

Hole Completion

Groundwater Intersected:	No
Groundwater Controlled:	N/A
Material Left In Hole:	Steel collar pipe
Collar Condition:	Capped

Comments	
3.0 metres HWT pipe cemented in at surface	
UPVC casing installed in completed hole	
Threaded steel cap spot welded onto collar pipe	

Drill Hole Logging

Logged By:	A. Warren
Base of Complete Oxidation (m):	1.0
Base of Partial Oxidation (m):	16.8
Summary:	
Collar - 95.5 m	
95.5 - 182.2 m	
182.2 - 209.7 m	
209.7 - 243.9 m	
243.9 - 356.2 m	
356.2 - 385.15 m	
385.15 - 451.2 m	
451.2 - 472.0 m	

Comments	
Logged in hard copy graphical format	
Hole collared on excavated pad with rock fill	
Oxidised to fresh qtz-phyric rhyolitic lava or intrusive	
Lithic and pumice-rich rhyolitic breccia; minor shale	
Laminated black shale; minor rhyolite lava	
Interbedded rhyolitic breccia, volcanoclastic sst, shale	
Pumiceous lithic-rich volcanoclastic breccia, shale	
Fine-grained volcanoclastic sandstone; minor shale	
Quartz crystal and lithic-rich volcanoclastic breccia	
Black shale; minor volcanoclastic sandstone	

Drill Hole Assays

Sample Type:	Half core
Assayed By:	ALS
Peak Gold Assays:	0.49 g/t gold
	0.99 g/t gold
	0.56 g/t gold
Other Significant Assays:	

Comments	
Sawn half HQ and NQ core samples	
Burnie Research Laboratory (Wivenhoe, Tasmania)	
Master pulp samples stored at Deloraine core shed	
Average for 2.0 m apparent width from 140.0 - 142.0 m	
1.0 m apparent width from 160.0 - 161.0 m	
1.0 m apparent width from 189.0 - 190.0 m	

Hole No. FTD039	Collar Location (GPS)	Graphical Drill Hole Log		Logged by J. Doster	Massive
Project : EL 26-2004	East : 445975.00	Azimuth : 20.0 degrees (MGA94)	Drilled by ED Drill	Pervasive	
Prospect : Firetower	North : 5405148.00	Declination : 60.0 degrees	Drill type UDR200	Disseminated	
Grid : MGA94	RL : 537.00	Total Depth : 480m (planned)	Drill Date 07/08/2012	Narrow vein	
	Proj. MGA94 co-ords	Collar surveyed by:	(reported / /2012)		

0.002 1/4 1 + 16 84 mm

From	To	Colour/Weathering	Structure Type 1	Structure Type 2	Angle CA	Graphic structure	Log grain size	Description	Alteration					Mineralization				
									Silica	Sericite	Albite	Carbonate	Chlorite	Hematite	Vein Qtz %	Mineralisation Assemblage	%	Veining Disseminated Pervasive
0	1	CO						RUBBLE/CLAY: DARK BROWN CLAY + ROCK FRAGMENTS. 1.0m CONTACT NOT RECOVERED/DEPTH UNCERTAIN.									UNCONSOLIDATED SURFICIAL ZONE.	
1	2	PO						fine pink surface, some rock comprising occasional quartz phenocrysts abundant grey rounded tabular phenocrysts, abundant d. grain black wavy flattened plagioclase fragments, biotite crystals or in fine grained matrix. Very packed with various grains.										
2	3							Abundant d. brown + brown f.e. matrix veining + jointing. Occasional quartz veins - occasional barwork										
3	4																	
4	5																	
5	6																	
6	7																	
7	8																	
8	9																	
9	10																	
10	11							RHYOLITE (or intrusion) with quartz phenocrysts + abundant tabular green grey altered feldspar or ferroan phenocrysts abundant in ground feldspar rich matrix.									ugs	
11	12							2mm qt carbonate veins @ 13.2m.										
12	13							RHYOLITE (lava or intrusion) phenocrysts + abundant fine acicular (to tabular) cream altered xls. matrix etc.										
13	14																	
14	15																	
15	16																	
16	17	Soft																
17	18	END PC																
17	18	START HQ																
18	19																	
19	20							20.35 - 1cm irregular brecciated qt vein sub// to LCA + occasional qt/cb veins.									1cm dark brecciated ground qt	
20	21							qt carbonate veining 20-21										
21	22							dark vein sulphide										
22	23							Interval 21.8-22.2										
22	23							abt micro of carbonate veining # pattern @ 23m										
23	24							23.6 dark veins sulphide 1/35 + mm										
24	25																	
25	26																	
26	27																	
27	28																	
28	29																	
29	30																	

B0C0 = 1.0m
B0P0 = 16.8m

Hole No. FTD039	Collar Location (GPS)	Graphical Drill Hole Log		Logged by H. Warr	Massive
Project : EL 26-2004	East : 445975.00	Azimuth : 20.0 degrees (MGA94)	Drilled by EDrill	Pervasive	
Prospect : Firetower	North : 5405148.00	Declination : 60.0 degrees	Drill type UDR200	Disseminated	
Grid : MGA94	RL : 537.00	Total Depth : 480m (planned)	Drill Date 07/08/2012	Narrow vein	
Proj. MGA94 co-ords	Collar surveyed by:		(reported / /2012)		
0.002 1/4 1 4 16 64 mm					

From	To	Colour/Weathering	Structure type 1	Structure type 2	Angle CA	Graphic structure	Log grain size	Description	Alteration						Mineralization				
									Silica	Sericite	Albite	Carbonate	Chlorite	Hemimite	Vein Qtz %	Mineralization Assemblage	%	Vein Disseminated	Pervasive
30	31							Rhyolite lava a.a. (or intrusion) ie granular matrix		/		/							
31	32									/		/							
32	33									/		/							
33	34									/		/							
34	35									/		/							
35	36									/		/							
36	37									/		/							
37	38									/		/							
38	39									/		/							
39	40									/		/							
40	41									/		/							
41	42									/		/							Py 0.1 ✓
42	43									/		/							
43	44									/		/							
44	45									/		/							Py 0.1 ✓
45	46									/		/							
46	47							CORE LOSS Rhyolite lava sample		/		/							
47	48							CORE LOSS		/		/							
48	49							CORE LOSS		/		/							Py 0.1 ✓
49	50							Rhyolite lava (or intrusion) quartz phenocrysts, dark grey and lites, in a granular to groundmass		/		/							
50	51									/		/							
51	52									/		/							
52	53									/		/							
53	54									/		/							
54	55									/		/							
55	56									/		/							
56	57									/		/							
57	58									/		/							
58	59							3cm 70		/		/							Py 0.1 ✓
59	60									/		/							

BG Broken ground.

Hole No. **FTD039** Collar Location (GPS) **Graphical Drill Hole Log** Logged by **A. Warren** Massive
 Project : **EL 28-2004** East : **445975.00** Azimuth : **20.0 degrees (MGA94)** Drilled by **EDrill** Pervasive
 Prospect : **Firetower** North : **5405146.00** Declination : **60.0 degrees** Drill type **UDR200** Disseminated
 Grid : **MGA94** RL : **537.00** Total Depth : **480m (planned)** Drill Date **07/08/2012** Narrow vein
 Proj. **MGA94 co-ords** Collar surveyed by: (reported / /2012) xx/08/2012

From	To	Colour/ Weathering	Structure type 1	Structure type 2	Angle CA	Graphic structure	Log grain/size	Description	Alteration					Mineralization				
									Silica	Sericite	Albite	Carbonate	Chlorite	Henafite	Vein Qtz %	Mineralisation Assemblage	%	Veining Disseminated
90	91							Phyolite lava	/									
91	92								/									
92	93								/									
93	94								/									
94	95								/									
95	96							Black shale CORE LOSS	/									
96	97	95-5 SO						Pumice breccia - big rock with abundant pumice pieces of green-black lithics to 2cm. Vfg matrix										
97	98																	
98	99																	
99	100																	
100	101							Litic Pumice breccia - beige rock with green grey weathered pumice flow aligned/welded, lithics, strongly foliated.										
101	102																	
102	103																	
103	104																	
104	105																	
105	106																	
106	107																	
107	108																	
108	109																	
109	110																	
110	111																	
111	112																	
112	113																	
113	114																	
114	115																	
115	116																	
116	117	116-5 →						pink amygdalite lava breccia rock vfg - ground matrix siliceous?	/									
117	118																	
118	119	118-7-118-8						X Fault? (or drilling breccia) 10 cm dr pumice breccia pumice lava breccia	/									
119	120	HA						pink siliceous, abundant white mpy Fe in air vs occasional grey lithics, vfg ground matrix - composition cannot be determined.	/									



Hole No. FTD039	Collar Location (GPS)	Graphical Drill Hole Log		Logged by A. Warren	Massive
Project : EL 26-2004	East : 445975.00	Azimuth : 20.0 degrees (MGA94)	Drilled by EDRII	Pervasive	
Prospect : Firetower	North : 5405146.00	Declination : 60.0 degrees	Drill type UDR200	Disseminated	
Grid : MGA94	RL : 537.00	Total Depth : 480m (planned)	Drill Date 07/08/2012	Narrow vein	
Proj. MGA94 co-ords	Collar surveyed by:		(reported / 2012)		

0.082 1/4 1 4 16 64 mm

From	To	Colour/Weathering	Structure Type 1	Structure Type 2	Angle CA	Graphic structure	Log grain size	Description	Alteration					Mineralization			
									Silica	Sericite	Albite	Carbonate	Chlorite	Hematite	Vein Qtz %	Mineralisation Assemblage	%
120	121							Phyolite lava pink rock v. fine grained cracked fg groundmass matrix which cannot be determined. No phenocrysts	/	/	/	/	/				
121	122								/	/	/	/					
122	123								/	/	/	/					
123	124	Black shale						hyaloclasts - interbedded with black shale - chlorite interbedded with clay valued as black banded volcanic ash. Vfg rock	/	/	/	/					
124	125	Black shale						fg no phenocrysts not cracked cracked piece of pink phyolite in it	/	/	/	/					
125	126							phyolite lava breccia pink cracked lava intermixed with vfg brown breccia	/	/	/	/					
126	127							Phyolite lava breccia pink rock cracked, v. fine grained groundmass - composition cannot be determined. occasional phenocrysts abundant small lithics	/	/	/	/					
127	128								/	/	/	/					
128	129								/	/	/	/					
129	130								/	/	/	/					
130	131								/	/	/	/					
131	132	qt vein 16° to CA							/	/	/	/					
132	133								/	/	/	/					
133	134								/	/	/	/					
134	135								/	/	/	/					
135	136								/	/	/	/					
136	137								/	/	/	/					
137	138								/	/	/	/					
138	139							CORE LOSS	/	/	/	/					
139	140								/	/	/	/					
140	141								/	/	/	/					
141	142								/	/	/	/					
142	143								/	/	/	/					
143	144								/	/	/	/					
144	145							stone sub // to CA at low angle to CA	/	/	/	/					
145	146								/	/	/	/					
146	147								/	/	/	/					
147	148								/	/	/	/					
148	149								/	/	/	/					
149	150								/	/	/	/					

Hole No. FTD039	Collar Location (GPS)	Graphical Drill Hole Log		Logged by	Massive
Project : EL 26-2004	East : 445975.00	Azimuth : 20.0 degrees (MGA94)	Drilled by EDrill	Perseive	
Prospect : Firetower	North : 5405146.00	Declination : 60.0 degrees	Drill type UDR200	Disseminated	
Grid : MGA94	RL : 537.00	Total Depth : 480m (planned)	Drill Date 07/08/2012	Narrow vein	
Proj. MGA94 co-ords	Collar surveyed by:		xx/08/2012		

0.062 1/4 1 4 16 64 mm

From	To	Colour Weathering	Structure type 1	Structure type 2	Angle CA	Graphic structure	Log grain size	Description	Alteration					Mineralization					
									Silica	Sericite	Albite	Carbonate	Chlorite	Hemattite	Vein Qtz %	Mineralisation Assemblage	%	Veining Disseminated Perseive	
150	151							crystaline lava breccia pink rock cracked w/fg grain groundmass							150.7-151 11 vein - PJ shale/CA				
151	152														52.2 pyrite exhalites				
152	153														154.0 pyrite 153.0 pyrite				
154	155														154.9 pyrite				
155	156														155.8 pyrite				
156	157																		
157	158							hyaloclastite textures at base											
158	159							hyaloclastite lava breccia, pale rock, V fine grained white felsic phenocrysts, Vfg matrix/groundmass								158.4 pyrite at joints			
159	160							hyaloclastite textures at base											
160	161							Black shale/Black shale breccia											
161	162							hyaloclastite texture at base of shale. hyaloclastite lava breccia with interbeds of black shale/ phydite breccia											
162	163																		
163	164																		
164	165																		
165	166							Black shale Black shale											
166	167																		
167	168							Black shale / crystaline breccia								167.6 pyrite 167.7 pyrite			
168	169															168.7 pyrite 168.8 pyrite			
169	170																		
170	171															170.3 pyrite on joints			
171	172							Black shale / crystaline breccia								171.8 pyrite			
172	173															172.0 pyrite			
173	174							Black shale - crudely banded in part - being volcanic hyaloclastite at base											
174	175							Black shale banded area.											
175	176							hyaloclastite lava breccia or lava honey coloured volcanic 1st volcanic rock Vfg matrix/groundmass											
176	177							min white felsic Vfg brecciated groundmass of broken pieces of sample composition. Carbonate phenocrysts											
177	178															177.9 pyrite at joints			
178	179																		
179	180															179.3 pyrite			

SW Stockwork

Hole No.	FTD039	Collar Location (GPS)	Graphical Drill Hole Log		Logged by	Messive		
Project :	EL 28-2004	East :	445975.00	Azimuth :	20.0 degrees (MGA94)	Drilled by	EDrill	Pervasive
Prospect :	Firetower	North :	5405146.00	Declination :	60.0 degrees	Drill type	UDR200	Disseminated
Grid :	MGA94	RL :	537.00	Total Depth :	480m (planned)	Drill Date	07/08/2012	Narrow vein
		Proj.	MGA94 co-ords	Collar surveyed by:	(reported / /2012)		xx/08/2012	

From	To	Colour/Weathering	Structure Type 1	Structure Type 2	Angle CA	Graphic structure	Log grain/size	Description	Alteration					Mineralization			
									Silica	Sericite	Albite	Carbonates	Chlorite	Hemimellit	Vein Qtz %	Mineralisation Assemblage	%
180	181							Honey-colored siliceous rhyolite lava									
181	182							Black shale - massive									
182	183							Black shale/rhyolite breccia - pink clasts									
183	184							pumice texture, hydrochlorite in black shale									
184	185							Black shale with many interbeds									
185	186							w-p green volcaniclastic sandstone									
186	187							Black shale, banded									
187	188							w-p green volcaniclastic sandstone									
188	189							Black shale									
189	190																
190	191																
191	192																
192	193																
193	194																
194	195																
195	196																
196	197																
197	198																
198	199																
199	200																
200	201																
201	202																
202	203																
203	204																
204	205																
205	206																
206	207																
207	208																
208	209																
209	210																

207-208 massive pyrite zones // to So.

Hole No. FTD039	Collar Location (GPS)	Graphical Drill Hole Log		Logged by A. Warren	Massive
Project: EL 26-2004	East: 445975.00	Azimuth: 20.0 degrees (MGA94)	Drilled by EDrill	Drill type UDR200	Pervasive
Prospect: Firetower	North: 5405146.00	Declination: 80.0 degrees	Total Depth: 480m (planned)	Drill Date 07/08/2012	Disseminated
Grid: MGA94	RL: 537.00	Collar surveyed by:	(reported / /2012)	xx/08/2012	Narrow vein
	Proj. MGA94 co-ords				

From	To	Colour Weathering	Structure type 1	Structure type 2	Angle CA	Graphic structure	Log grainsize	Description	Alteration						Mineralization							
									Silica	Sericite	Albite	Carbonate	Chlorite	Hematite	Vein Qtz %	Mineralisation Assemblage	%	Vein/Disseminated	Pervasive			
240	241	Light claystone						Black shale massive - laminated Crystal/pumice/lithic breccia (or volcaniclastic ss) po pumice lenses of feldspar, & occasional pumice tightly packed - grainy, qtz, grey/cream lithics.														
241	242	broken ground						Black shale - massive / not consolidated so shallow angle - CA.														
242	243							Black shale														
243	244							so abundant small qt veins @ 243.1 - 243.2. // pyrite vein 0.5mm wide 3-10% CA														
244	245							feldspar / lithic breccia (or volcaniclastic ss) feldspar: qtz pumice lithics, abundant pumice wisps - flattened														
245	246							black shale inter laminated with feldspar X lithic pumice breccia or volcaniclastic ss feldspar: qtz pumice lithics, qtz xls flattened pumice wisps - strong foliation and highly packed vfg grey lithics														
246	247							Black shale / X lithic breccia or volcaniclastic ss Bedding // to CA														
247	248							X lithic pumice breccia or volcaniclastic ss of crystal lithics, dark flattened pumice, vague foliation @ 247.3 to CA. vfg grey lithic														
248	249							coarsens upwards? of lithic breccia breccia or volcaniclastic ss feldspar? of lithics, quite even grained ↓ becoming more clastic downhole														
249	250																					
250	251																					
251	252																					
252	253																					
253	254																					
254	255																					
255	256							Black shale Black shale - 30 cm 256.3 - 256.6 interbedded volcaniclastic ss of X lithic pumice breccia (or volcaniclastic ss) with abundant clasts of black shale (not in earlier intervals) of f grey, d grey lithics no quartz, feldspar, foliation moderate (clast supported).														
256	257																					
257	258																					
258	259																					
259	260																					
260	261																					
261	262																					
262	263																					
263	264																					
264	265																					
265	266																					
266	267																					
267	268																					
268	269																					
269	270							Black shale														

11/50
11/50
11/50

pyrite
mm
at
in
the
shale
at
256.3-256.6

qtz vein with alteration
hole

Hole No.	FTD039	Collar Location (GPS)	Graphical Drill Hole Log		Logged by	Massive
Project :	EL 26-2004	East :	445975.00	Azimuth :	20.0 degrees (MGA94)	Pervasive
Prospect :	Firetower	North :	5405146.00	Declination :	60.0 degrees	Disseminated
Grid :	MGA94	RL :	537.00	Total Depth :	480m (planned)	Narrow vein
		Proj.	MGA94 co-ords	Collar surveyed by:	(reported / /2012)	

From	To	Colour/Weathering	Structure Type 1	Structure Type 2	Angle CA	Graphitic structure	Log grain size	Description	Alteration					Mineralization				
									Silica	Sericite	Albite	Carbonate	Chlorite	Hemimorphite	Vein Qtz %	Mineralisation Assemblage	%	Veining
360	361				360.15			Grey siltstone top pale brown volcanoclastic ss (vsl to grey shale top d/h)										
361	362				361.2			Black shale pale brown volcanoclastic ss Black shale with interlam of p. brown volcanoclastic shale						361.5 py				
362	363				362.0			pale brown fg volcanoclastic ss massive shale top										
363	364				363.8			pale brown fg volcanoclastic ss - qca pebbles shale top - p brown / ash										
364	365				365			pale brown fg volcanoclastic ss pale brown shale / ash										
365	366				366.4			pale brown fg volcanoclastic ss										
366	367				367.8			grey siltstone interlam p brown shale/ash top										
367	368				368.45			pale brown fg volcanoclastic ss										
368	369				369.6			grey siltstone / shale top pale brown fg volcanoclastic ss (+ grey mottled p brown)										
369	370				370.8			interbedded grey + p. grey vlg ss										
370	371				371.3			grey shale top ala but grey shale + p. brown band at top (a.p.?) ala grey shale top										
371	372				371.55			grey siltstone / grey shale top (d/h) laminated ss grey siltstone / grey shale top (d/h) laminated ss										
372	373				372.5			ala - but with p. brown ash band a ss interval grey vlg ss → grey shale top (d/h)										
373	374				373.55			ala laminated ss grey ss → grey shale top (d/h) lam shale + ss ala										
374	375				374.6			grey ss → grey shale top (d/h) laminated										
375	376				375.4			laminated ss + interbedded shale										
376	377				376.5			multiple cycles grey ss → grey shale top (d/h) grey laminated ss → shale top (d/h) some p. brown ash material p. brown volcanoclastic ss → shale top (d/h)										
377	378				377.0			p. brown volcanoclastic ss → shale top (d/h) p. brown volcanoclastic ss → grey shale top (d/h)										
378	379				378.5			grey laminated ss → shale top (d/h) ala										
379	380				379.6			p. brown volcanoclastic sandstone → grey shale top (d/h) p. brown volcanoclastic sandstone → grey shale top (d/h) ala										
380	381				380.1													
381	382				381.0			grey volcanoclastic sandstone - laminated / bedded (p. brown ash) → grey shale top										
382	383				382.0			grey volcanoclastic sandstone to grey shale top (d/h) ala										
383	384				383.5			ala banded / laminated ala										
384	385				384.1			ala ala										
385	386				385.15			textured pumice breccia of cristalline polymeric lithics, pumice and glass with black clasts with reddish is. finer lithics fg grey, p. grey top tan polyte lava clasts pumice clasts have jagged edges Distinctive key of black porphyritic clasts/pumice										
386	387																	
387	388																	
388	389				388.2													
389	390																	

ala alteration 1/2m up from here
+ a couple of cm d/h.

Hole No. FTD039	Collar Location (GPS)	Graphical Drill Hole Log		Logged by A. Warren	Massive
Project : EL 28-2004	East : 445975.00	Azimuth : 20.0 degrees (MGA94)	Drilled by EDrill	Pervasive	
Prospect : Firetower	North : 5405146.00	Declination : 60.0 degrees	Drill type UDR200	Disseminated	
Grid : MGA94	RL : 537.00	Total Depth : 472.0m (to be confirmed)	Drill Date 07/08/2012	Narrow vein	
Proj. MGA94 co-ords	Collar surveyed by:	(reported / /2012)	22/08/2012		

0.082 1/4 1 4 16 64 mm

From	To	Colour/Weathering	Structure type 1	Structure type 2	Angle CA	Graphic structure	Log grain size	Description	Alteration					Mineralization				
									Silica	Sericite	Albite	Carbonate	Chlorite	Hematite	Vein Qtz %	Mineralisation Assemblage	%	Vein/Disseminated/Pervasive
390	391																	
391	392																	
392	393																	
393	394	Broken ground																
394	395																	
395	396																	
396	397	1cm of 397.5 @ 43° CA																
397	398	397.5 @ 37° CA																
398	399																	
399	400	Rich in 399.8 CA																
400	401																	
401	402																	
402	403																	
403	404																	
404	405																	
405	406																	
406	407																	
407	408																	
408	409	Rich in 408.5 @ 55° CA																
409	410																	
410	411																	
411	412																	
412	413																	
413	414																	
414	415																	
415	416	Broken ground																
416	417																	
417	418																	
418	419																	
419	420																	

391-392 magnetite vein @ 55° CA
 396-397 disseminated 200m WIP
 1cm of 397.5
 397.5 @ 37° CA
 402.6
 Rich in pyrite (rich in)
 Rich
 411.0 Disseminated magnetite
 419.3-420 of veins
 80-90% WIP

Hole No. FTD039	Collar Location (GPS)	Graphical Drill Hole Log		Logged by A Warren	Massive
Project: EL 26-2004	East: 445975.00	Azimuth: 20.0 degrees (MGA94)	Drilled by EDrill	Pervasive	
Prospect: Firetower	North: 5405148.00	Declination: 60.0 degrees	Drill type UDR200	Disseminated	
Grid: MGA94	RL: 537.00	Total Depth: 472.0m (to be confirmed)	Drill Date 07/08/2012	Narrow vein	
Proj. MGA94 co-ords	Collar surveyed by: (reported / 2012)		22/08/2012		

0.082 1/4 1 4 16 64 mm

From	To	Colour/Weathering	Structure type 1	Structure type 2	Angle CA	Graphic structure	Log grain size	Description	Alteration					Mineralization				
									Silica	Serpentine	Albite	Carbonate	Chlorite	Hematite	Vein Qtz %	Mineralisation Assemblage	Vein	Disseminated
450	451				85° CA			Black shale - generally massive	graphitic						qt with pyrite/graphite at base of vein			
451	452				85° CA													
452	453				25° CA													
453	454																	
454	455																	
455	456							- occasional 1-2cm volcanoclastic ss										
456	457																	
457	458							1-2cm rippled bedded? volcanoclastic ss - green										
458	459							5cm volcanoclastic ss - green/brown.										
458	459							CORE LOSS 0.9m										
459	460																	
460	461							at vein - 10cm wide Banded rock - brown grey Vg ss + shale										
461	462							shale-shale laminations volcanoclastic sediment or clastic sediment.										
462	463																	
463	464							CORE LOSS 0.3m Banded rock - brown grey Vg ss + shale + grey volcanoclastic or clastic sediment.										
464	465																	
465	466																	
466	467							at vein 15 of 15cm wide grey clastic or volcanoclastic Vg sandstone - occasional coarse grains?										
467	468																	
468	469																	
469	470																	
470	471							at vein 10 to 15 of 15cm wide polymictic lithics occasional flattened pumice at V/S										
471	472							ECH = 472.0m (to be confirmed) Lithics include greyish pink, cream with green phenocrysts, pink, black phytic lava etc										
472	473																	
473	474																	
474	475																	
475	476																	
476	477																	
477	478																	
478	479																	
479	480																	

Sunday vein
Broken ground up hole
min

UNITY MINING LTD
REGIONAL EXPLORATION TASMANIA
DRILL HOLE COVER SHEET

Hole No.:	FTD040	Drilling Contractor:	EDrill Australia
Location:	Firetower Deposit	Drill Rig:	UDR 200 LS Track Mounted
ML/EL:	EL 26-2004 Firetower	Drill Method:	Diamond (PQ/HQ/NQ core)
Geologist:	D. A Evans	Drilling Commenced:	24 Aug 2012
End of Hole (m):	339.5	Drilling Completed:	13 Sep 2012

Drill Hole Collar

Surveyed By:	PDA Surveyors
Survey Date:	01 Nov 2012
Survey Datum:	Zone 55 GDA1994
Survey Reference:	Trig Mark 232/171
Hole Collar Easting (m):	445980.5
Hole Collar Northing (m):	5405144.6
Hole Collar Height (m):	541.5
Hole Collar Azimuth (GDA1994):	358.0
Hole Collar Declination (deg):	62.0

Comments

Surveyed by GNSS differential GPS co-ordinate fixing
Reported 20 Nov 2012
Australian Height Datum (Tas) 1983
Gog Hill (Class B Second Order)

Drill Hole Surveys

Surveyed By:	EDrill Australia		
Surveyed Data:	Depth (m)	Azimuth*	Decl.
PQ to 20.6 metres	30.0	357.2	61.7
	60.0	355.6	61.0
	90.0	356.5	60.2
HQ to 92.9 metres	120.0	358.6	59.7
	150.0	0.7	59.1
	180.0	357.4	58.8
	210.0	1.3	58.1
	240.0	359.0	57.0
	270.0	3.8	56.6
	300.0	2.5	55.6
NQ to 339.5 metres EOH	330.0	3.7	54.2

Comments

Ranger Discoverer electronic magnetic survey tool
*Raw magnetic azimuth +13.647 degrees
*No survey report sheet.
End of hole survey.

UNITY MINING LTD
REGIONAL EXPLORATION TASMANIA
DRILL HOLE COVER SHEET

Hole No.: **FTD040** Drilling Contractor: **EDrill Australia**
 Location: **Firetower Deposit** Drill Rig: **UDR 200 LS Track Mounted**
 ML/EL: **EL 26-2004 Firetower** Drill Method: **Diamond (PQ/HQ/NQ core)**
 Geologist: **D. A Evans** Drilling Commenced: **24 Aug 2012**
 End of Hole (m): **339.5** Drilling Completed: **13 Sep 2012**

Hole Completion

Groundwater Intersected: **No**
 Groundwater Controlled: **N/A**
 Material Left In Hole: **Steel collar pipe**
 Collar Condition: **Capped**

Comments

1.5 metres HWT pipe cemented in at surface
UPVC casing installed in completed hole
Threaded steel cap spot welded onto collar pipe

Drill Hole Logging

Logged By: **A. Warren/D. Evans**
 Base of Complete Oxidation (m): **1.9**
 Base of Partial Oxidation (m): **18.3**
 Summary:
Collar - 149.25 m
149.25 - 254.35 m
254.35 - 303.4 m
303.4 - 339.5 m

Comments

Logged in hard copy graphical format
Hole collared on excavated pad with rock fill
Oxidised to fresh coherent rhyolitic lava or intrusive
Interbedded volcanoclastic sandstone & black shale
Pumiceous lithic-rich volcanoclastic breccia
Mixed sequence quartz crystal-rich volcanoclastic
sandstone, conglomerate, black shale

Drill Hole Assays

Sample Type: **Half core**
 Assayed By: **ALS**
 Peak Gold Assays:
4.09 g/t gold
2.64 g/t gold
1.06 g/t gold
 Other Significant Assays:
0.51 g/t gold
0.53 g/t gold

Comments

Sawn half HQ and NQ core samples
Burnie Research Laboratory (Wivenhoe, Tasmania)
Master pulp samples stored at Deloraine core shed
1.0 m apparent width from 143.0 - 144.0 m
Average for 3.0 m apparent width from 137.0-140.0 m
Average for 20.0 m apparent width from 135.0-155.0 m
0.65 m apparent width from 157.35 - 158.0 m
1.15 m apparent width from 168.85 - 170.0 m

Hole No.: FTD040	Collar Location (GPS):	Graphical Drill Hole Log	Logged by: P. Evans	Messive:
Project: EL 28-2004	East: 445975.00	Azimuth: 344.8 degrees (MGA94)	Drilled by: EDH	Pervasive:
Prospect: Firetower	North: 5405148.00	Declination: 62.0 degrees	Drill type: UDR200	Disseminated:
Grid: MGA94	RL: 537.00	Total Depth: 480.0m (planned)	Drill Date: 24/08/2012	Narrow vein:
	Proj.: MGA94 co-ords	Collar surveyed by:	(reported /) 2012	

0.052 1/4 1 4 16 64 mm

From	To	Colour/Weathering	Structure Type 1	Structure Type 2	Angle CA	Graphic structure	Log grainsize	Description	Alteration					Mineralization				
									Silica	Serpentine	Albite	Carbonate	Chlorite	Hemitite	Vein Qtz %	Mineralisation Assemblage	%	Vein Calcite
0	1	CO						RUBBLE/CLAY WITH CORE LOSS: COMPLETELY OXIDISED EXTREMELY WEATHERED DARK BROWN, YELLOW-BROWN, FERRUGINOUS CLAY AND RUBBLE. PROBABLY ROCK FILL 1.9m CONTACT NOT RECOVERED FROM DRILL PAD.										
1	2	DEPTH LIMIT UNCERTAIN																
2	3	PO						RHYOLITE LAVA OR INTRUSIVE: PARTIALLY OXIDISED STRONGLY WEATHERED MODERATELY HARD, VERY BROKEN, MID YELLOW-BROWN, CLAYEY, COARSE-GRAINED QUARTZ-PHYRIC RHYOLITE. SCATTERED FINER 1-2mm PHENOCRYSTS (?) OF DARK GREEN CHLORITE PARTIALLY TO COMPLETELY ALTERED TO Fe OXIDES, AFTER FERRO-MAGNESIAN MINERAL. GRADUALLY BECOMING MORE SOLID, LESS BLOCKY.									COMMON BLACK-BROWN	
3	4																Fe/Mn OXIDES	
4	5																COATING	
5	6	COARSE PORPHYRITIC TEXTURE															FRACTURES AND JOINTS	
6	7																	
7	8	PO																
8	9																	
9	10							TENDING TO LESS OXIDISED, PINK-GRAY, WITH 5-6mm QUARTZ PHENOCRYSTS AND PINK FELDSPAR GRAINLIASS.										
10	11																	
11	12	COARSE																
12	13	PORPHYRITIC TEXTURE;																
13	14	QUARTZ PHENOCRYSTS.																
14	15	PO						PATCHY GREEN CHLORITE ALTERATION.										
15	16							GRADATIONAL INTO NEAR FRESH ROCK. HARD TO VERY HARD, BROKEN TO VERY BROKEN.										
16	17	PO																
17	18	17.5m SLICKENSIDED																
18	19	FRACURE/ JOINT			70°			DOMINANTLY FRESH ROCK FROM 18-3m. COMMON GREEN-BLACK ? BIOTITE PHENOCRYSTS; ABUNDANT LARGE 5-6mm QUARTZ EYE PHENOCRYSTS.										
19	20	FR																
20	21																	
21	22							WHITE-CREAM ? SPHENE REPLACING 1-2mm ELONGATE FELDSPAR PHENOCRYSTS.									OCCASIONAL FERRUGINOUS CLAY COATED	
22	23							TRACE WHITE ? CHALCEDONIC SILICA AS MINUTE VEINLETS.									FRACTURES.	
23	24	VERY WEAK FOLIATION/FLOW ALIGNMENT																
24	25							THIN DISCONTINUOUS VEINLETS AND STRINGERS OF WHITE CARBONATE.										
25	26	OF PHENOCRYSTS IN PLACES						25.35m 15mm DIAMETER SUB-ROUNDED INTRACLAST/XENOLITH OF GREY-GREEN PORPHYRITIC QUARTZ-PHYRIC RHYOLITE.									SPARSE CHLORITE VEINLETS.	
26	27																	
27	28	27.4m 2-6mm CARBONATE VEIN + VEINLETS																
28	29				16°			MID TO DARK GREEN CHLORITE ALTERATION OF GROUNDMASS.									NO VISIBLE SULPHIDE MINERALIZATION	
29	30																	

Boco = 1.9m

BoPo = 18.3m

MB fine ^{min} carbonate spw throughout volcanics throughout the hole to at least 205m.

Hole No. : FTD040	Collar Location (GPS)	Graphical Drill Hole Log		Logged by : [Signature]	Massive
Project : EL 28-2004	East : 445675.00	Azimuth : 344.6 degrees (MGA94)	Drilled by : EDrill	Pervasive	
Prospect : Firetower	North : 5405146.00	Declination : 62.0 degrees	Drill type : UDR200	Disseminated	
Grid : MGA94	RL : 537.00	Total Depth : 480.0m (planned)	Drill Date : 24/08/2012	Narrow vein	
Proj. : MGA94 co-ords	Collar surveyed by:		(reported / 2012)		

0.052 1/4 1 4 18 64 mm

From	To	Colour/ Weathering	Structure Type 1	Structure Type 2	Angle CA	Grapho structure	Log grainsize	Description	Alteration					Mineralization					
									Silica	Serpentine	Albite	Carbonate	Chlorite	Hemimorphite	Vein Qtz %	Mineralisation Assemblage	%	Vein Disseminated Pervasive	
		FR						CONTINUED FROM 1.9m.											
30	31							RHYOLITE LAVA OR INTRUSIVE : VERY HARD TOUGH, SILICEOUS, IN PLACES VARNED PORPHYRITIC, MID PINK-BROWN, GREEN- GREY, COARSE- GRAINED, QUARTZ-PHYRIC RHYOLITE-			/	/	/						
31	32																		
32	33																		
33	34																		
34	35																		
35	36																		
36	37																		
37	38																		
38	39																		
39	40																		
40	41																		
41	42																		
42	43																		
43	44																		
44	45																		
45	46																		
46	47																		
47	48																		
48	49																		
49	50																		
50	51																		
51	52																		
52	53																		
53	54																		
54	55																		
55	56																		
56	57																		
57	58																		
58	59																		
59	60																		

59-58-56
-5993

qt vein 5cm, anastomosing, pink tinge

55-56
↑
reddish brown
be dx
on joints

370

Hole No. FTD040	Collar Location (GPS)	Graphical Drill Hole Log		Logged by A. Warren	Massive
Project: EL 26-2004	East: 445975.00	Azimuth: 344.6 degrees (MGA84)	Drilled by EDrill	Pervasive	
Prospect: Firetower	North: 5405146.00	Declination: 62.0 degrees	Drill type UDR200	Disseminated	
Grid: MGA84	RL: 537.00	Total Depth: 480.0m (planned)	Drill Date 24/08/2012	Narrow vein	
	Proj. MGA84 co-ords	Collar surveyed by:	(reported / /2012)		
	0.082 1/4 1 4 16 64 mm				

From	To	Colour/Weathering	Structure type 1	Structure type 2	Angle CA	Graphic structure	Log grain size	Description	Alteration					Mineralization				
									Silica	Sulphate	Albite	Carbonate	Chlorite	Hematis	Vein Qtz %	Mineralisation Assemblage	%	Vein/Disseminated/Pervasive
60	61																	
61	62																	
62	63	5.2 mm d/6b	irregular	tabular	20°													
63	64																	
64	65	5 vein o/a = 20°																
65	66	2.5 mm d/6b	irregular	tabular	35°													
66	67																	
67	68	67.5																
68	69	68.7																
69	70	69.5																
70	71																	
71	72																	
72	73																	
73	74																	
74	75																	
75	76																	
76	77																	
77	78																	
78	79																	
79	80																	
80	81	80.5			0-15°													
81	82																	
82	83	82.5																
83	84	83.2																
84	85	83.8																
85	86	84.5																
86	87																	
87	88																	
88	89																	
89	90																	

6 broken contact

Younging in this hole is variable

*Cb as textures after carbonate

Hole No.	FTD040	Collar Location (GPS)	Graphical Drill Hole Log	Logged by	Messive
Project :	EL 26-2004	East :	Azimuth : 344.6 degrees (MGA94)	Drilled by	Pervasive
Prospect :	Firetower	North :	Declination : 62.0 degrees	Drill type	Disseminated
Grid :	MGA94	RL :	Total Depth :	Drill Date	Narrow vein
		Proj. : MGA94 co-ords	Collar surveyed by:	24/08/2012	
		0.082 1/4 1 4 16 8 mm	(reported 1 /2012)	10/09/2012	

From	To	Com'n of Vein/veining	Structure type 1	Structure type 2	Angle CA	Graphic structure	Log grain size	Description	Alteration						Mineralization			
									Silica	Sericitic	Albite	Calcite	Chlorite	Hercynite	Vein Qtz %	Mineralization Assemblage	%	Vein/veining
90	91						90.2	RHYOLITE LAVA honey brown, cracked siliceous of phenocrysts & wavy ribs in NW of groundmass.										
91	92						91.3	disrupted of honey brown lava with grey ribbon / sediment ribbons.										
92	93	So 92.3			35°		92.3	RHYOLITE LAVA BRECCIA cracked siliceous Honey brown rock with occasional qt phenocrysts in NW groundmass. Occ darker bands / nodules.										
93	94						93.3	RHYOLITE PUMICE BRECCIA fluted of phenocrysts flat and green grey clasts, pumice.										
94	95						94.3	RHYOLITE LAVA BRECCIA										
95	96						95.3	RHYOLITE LAVA BRECCIA										
96	97						96.3	RHYOLITE LAVA BRECCIA										
97	98						97.3	phenocrysts brown rock, pale brown.										
98	99						98.3											
99	100						99.3											
100	101						100.3	RHYOLITE LAVA BRECCIA										
101	102						101.3	of phenocrysts brown rock pale brown, lithics, pumice fragments.										
102	103						102.3											
103	104						103.3											
104	105						104.3											
105	106						105.3											
106	107						106.3											
107	108						107.3											
108	109						108.3											
109	110	1cm					109.3											
110	111						110.3											
111	112						111.3											
112	113						112.3	at/cb veining RHYOLITE LAVA BRECCIA pale brown rock - siliceous, qt phenocrysts.										
113	114						113.3											
114	115						114.3	volcaniclastic SANDSTONE - P grey, friable RHYOLITE LAVA BRECCIA pale brown - yellow rock, siliceous, qt phenocrysts, dark lithics matrix.										
115	116						115.3											
116	117						116.3											
117	118						117.3											
118	119						118.3	RHYOLITE LAVA BRECCIA brown but on or 120m+ description.										
119	120						119.3											

98.3-98.5 1 ✓
 99.3-99.5 1 ✓
 99.8-100 1 ✓
 100.3-100.5 1 ✓
 100.5-101 1 ✓

qt/c/s

qt/c/s

py

95 ✓
 dmt ✓
 JUNE ✓
 31th ✓
 Voco ✓
 1 ✓

UNITY MINING LTD

A. Warren

Hole No. FTD040	Coflar Location (GPS)	Graphical Drill Hole Log		Logged by	Massive
Project: EL 26-2004	East:	Azimuth: 344.6 degrees (MGA94)	Drilled by	EC:lll	Parasive
Prospect: Firetower	North:	Declination: 62.0 degrees	Drill type	UDR200	Disseminated
Grid: MGA94	RL:	Total Depth:	Drill Date	24/08/2012	Narrow vein
	Proj. MGA94 co-ords	Coflar surveyed by:	(reported / 2012)		

From	To	Coflar weathering	Structure type 1	Structure type 2	Angle CA	Graphic structure	Log grain size	Description	Alteration					Mineralization					
									Silica	Sulfate	Ferrous	Carbonate	Chloride	Hamatite	Vein Qtz %	Mineralisation Assemblage	%	Visible Dissemination	Parasive
180	181																		
181	182																		
182	183																		
183	184																		
184	185																		
185	186																		
186	187																		
187	188																		
188	189																		
189	190																		
190	191																		
191	192																		
192	193																		
193	194																		
194	195																		
195	196																		
196	197																		
197	198																		
198	199																		
199	200																		
200	201																		
201	202																		
202	203																		
203	204																		
204	205																		
205	206																		
206	207																		
207	208																		
208	209																		
209	210																		

206.0 Qt/Cb vein sub // to CA - 205.7 to 206.01
 205.7
 Broken at Cb vein d/h. 195.3-196.5 Cb alteration of volcanoclastic intervals within the black shale
 209.35-210 - with 12 slioffs 30 to CA
 X2 thin interval

Hole No. FTD040	Collar Location (GPS)	Graphical Drill Hole Log		Logged by	Massive
Project: EL 26-2004	East: 445975.00	Azimuth: 344.6 degrees (MGA94)	Drilled by	EDrill	Pervasive
Prospect: Firetower	North: 5405146.00	Declination: 62.0 degrees	Drill type	UDR200	Disseminated
Grid: MGA94	RL: 537.00	Total Depth: 339.5m (confirmed)	Drill Date	24/08/2012	Narrow vein
	Proj. MGA94 co-ords	Collar surveyed by:	(reported / 2012)	09/2012	

From	To	Colour/Weathering	Structure type 1	Structure type 2	Angle CA	Graphic structure	Log grainsize	Description	Alteration					Mineralization					
									Silica	Sericite	Albite	Carbonate	Chlorite	Pyrite	Vein Qtz %	Mineralization Assemblage	%	Vein Dissemination	Pervasive
240	241	Qtz/b vein			50°	//		feldspar, pyrite, phylite foliated abundant pyrite qtz feldspar, sec with st											
241	242	Qtz/b vein			38°	//													
242	243																		
243	244																		
244	245	Qtz/b vein			62°	//													
245	246	Qtz/b vein			70°	//													
246	247	Qtz/b vein			56°	//													
247	248	Qtz/b vein			70°	//													
248	249	Qtz/b vein			70°	//													
249	250	Qtz/b vein			53°	//													
250	251				73°	//													
251	252				65°	//		sandstone - brown-grey fmg over greenish											
252	253				75°	//		fault @ 251.75 - bump up d. grey sandstone - pale green shale (qz) mg d/h volcaniclastic											
253	254				45°	//		Black shale - grey volcaniclastic Volcaniclastic sandstone (foliate dot base)											
254	255				30°	//		Black shale 253.6-253.8 - graphitic pyrite rich volcaniclastic carbonate cement in part. Rock is grey overall.											
255	256				25°	//		lithic & foliated polymictic litic & grey (shale), black shale lg dark grey (shale), qz crystal lithic carbonate cement in part. Rock is grey overall.											
256	257				25°	//		This interval may represent more than one event											
257	258				41°	//													
258	259																		
259	260																		
260	261																		
261	262							shale - dark grey, mm at s/w.											
262	263							pyrite, lithic rich volcaniclastic breccia. foliated.											
263	264							Polymictic - dark grey volcanic with phenocrysts, vlg grey (shale), black shale pale brown vlg (shale), pale brown volcanic with phenocrysts. Very poorly sorted - to 10cm clasts.											
264	265																		
265	266																		
266	267																		
267	268																		
268	269																		
269	270							black shale 2cm wide puggy contact with shale d/h											

269.8 - 270.00 - on large clast out of hole to 270.00
 as for 270+ on page 10
 2cm block shale // foliation @ 263.35 & at 264.8

** 30 252.3 - black shale with inter bedded p green volcaniclastic ss
 30 - 20° to CA

Qtz/b vein disrupted 251-251.6 & qtz veins - vein orientation 35° to CA

251-253 - sed are clastic - volcaniclastic

Hole No. FTD040	Collar Location (GPS)	Graphical Drill Hole Log		Logged by	Massive
Project : EL 26-2004	East : 445975.00	Azimuth : 344.6 degrees (MGA84)	Drilled by EDRI	Pervasive	
Prospect : Firetower	North : 5405146.00	Declination : 62.0 degrees	Drill type UDR200	Disseminated	
Grid : MGA84	RL : 537.00	Total Depth : 339.5m (confirmed)	Drill Date 24/06/2012	Narrow vein	
Proj. MGA84 co-ords		Collar surveyed by:	(reported /) 09/2012		

0.062 U4 1 4 16 64 mm

From	To	Colour Weathering	Structure Type 1	Structure Type 2	Angle CA	Graphic structure	Log grainsize	Description	Alteration					Mineralization			
									Silica	Sericite	Albite	Carbonate	Chlorite	Hematite	Vein Qtz %	Mineralisation Assemblage	%
								CONTINUED FROM									
240	241							ALTERED QUARTZ - PHYRIC RHYOLITE LAVA LAVA BRECCIA :									
241	242																
242	243																
243	244																
244	245																
245	246																
246	247																
247	248																
248	249																
249	250																
250	251																
251	252							251.75m									
252	253																
253	254																
254	255	COARSE TO VERY						PUMICEOUS, LITHIC - RICH VOLCANICLASTIC BRECCIA :									
255	256	COARSE FRAGMENTAL						HARD IN PATCHES VERY HARD FREQUENTLY SOLID, VERY									
256	257	TEXTURES,						COARSE FRAGMENTAL TEXTURED, RARELY FOLIATED,									
257	258	GENERALLY WITH						MID CREAM - GREY, LIGHT GREY, MATRIX - SUPPORTED,									
258	259	RANDOM FABRIC						VERY COARSE - GRAINED, POLYMINISTIC, QUARTZ									
259	260	ORIENTATION.						CRYSTAL PHYRIC, LITHIC - RICH VOLCANICLASTIC BRECCIA.									
260	261							WEAK SERICITE ALTERATION OF ASHY, SANDY MATRIX.									
261	262							LOCALLY WEAKLY FOLIATED ? WELDED TEXTURES.									
262	263																
263	264	261-25m															
264	265	SLICKENSIDED															
265	266	FRACTURE WITH															
266	267	CARBONATE FIBRE															
267	268	GRAIN															
268	269	263-3m															
269	270	WEAK															
270	271	FOLIATION															
271	272	→ 40°															
272	273																
273	274	LENTICULAR STRETCHED															
274	275	CLASTS															
275	276																
276	277																
277	278																
278	279	269-85m															
279	280	CLAY															
280	281	DUCTILE SHEAR															
281	282	2-3cm															
282	283	→ 48°															
283	284																

255.9-256.2m
MINOR PY. AS
STRINGERS AND
AGGREGATES.

260.9m TRACE
PY. AGGREGATES.

262-7m
SPARSE PY.
AGGREGATES.

Hole No. : FTD040	Collar Location (GPS)	Graphical Drill Hole Log		Logged by	Massive
Project : EL 28-2004	East : 445975.00	Azimuth : 344.8 degrees (MGA94)	EDrill	Drilled by	Pervasive
Prospect : Firetower	North : 5405148.00	Declination : 62.0 degrees	UDR200	Drill type	Disseminated
Grid : MGA94	RL : 537.00	Total Depth : 339.5m (confirmed)	24/08/2012	Drill Date	Narrow vein
	Proj. : MGA94 co-ords	Collar surveyed by:	09/2012		
	0.082 1/4 1 4 16 64 mm	(reported / 2012)			

From	To	Colour/Weathering	Structure Type 1	Structure Type 2	Angle CA	Graphic structure	Log grain size	Description	Alteration					Mineralization				
									Silica	Sericite	Albite	Carbonate	Chlorite	Hematite	Vein Qtz %	Mineralisation Assemblage	%	Visible Disseminated Pervasive
CONTINUED FROM 254-35m																		
270	271	VERY WEAK FOLIATION,						PUMICEOUS LITHIC-RICH VOLCANICLASTIC BRECCIA: HARD VERY SOLID UNBROKEN, VERY COARSE FRAGMENTAL TEXTURED, IRREGULARLY VEINED, MID GREY, VERY COARSE GRAINED MATRIX-SUPPORTED POLYHICTIC, QUARTZ-PHYRIC, DOMINANTLY VOLCANOMICT BRECCIA.										NO VISIBLE SULPHIDE MINERALISATION
271	272	BECOMING MASSIVE						NO DEVICES ALTERATION. SOME REACTION RIMS ON CLASTS. ABUNDANT RHYOLITE CLASTS, LESSER ALTERED GLASSY GREEN VOLCANIC CLASTS IN PLACES UP TO 40-50mm IN DIAMETER, SUB ANGULAR TO SUB ROUNDED, FREQUENTLY STRETCHED, LENTICULAR.										
272	273	VERY COARSE FRAGMENTAL TEXTURED WITH						IRREGULARLY ORIENTED WHITE TO CREAM QUARTZ + FELDSPAR VEINS, 2-5 CM THICK.										
273	274	NO PREFERRED FABRIC.						OCCASIONAL PUMICEOUS FRAGMENTS, STRETCHED OUT, ELONGATE TO LENTICULAR.										
274	275							DEVITRIFIED ASHY SANDY TO CONGLOMERATIC GROUNDMASS WITH SUBMEDIAL QUARTZ PHENOCRYSTS.										278-65m PYRITE + ? MELNIKOVIK AGGREGATES IN CREAM CARBONATE VEIN (3-4 cm thick)
275	276							MINOR BLACK-GRY SILTSTONE CLASTS.										
276	277																	
277	278	278-65m → 35°																
278	279	3-4 cm VEIN																
279	280																	
280	281																	
281	282	VERY COARSE																
282	283	FRAGMENTAL TEXTURES																
283	284	THROUGHOUT;																
284	285	RANDOM FABRIC.																
285	286							MASSIVE, EXTREMELY COARSE FRAGMENTAL TEXTURED, MATRIX SUPPORTED, STRONGLY POLYHICTIC, WITH LARGE (50-60mm) SUB-ROUNDED CLASTS OF RHYOLITE AND BLACK SILTSTONE, OCCASIONAL DEFORMED, STRETCHED CLASTS OF DEVITRIFIED PUMICE/GLASSY VOLCANIC. GENERALLY RANDOM FABRIC, LOCALLY WEAK FOLIATION.										NO VISIBLE SULPHIDE MINERALISATION
286	287							SOME CLASTS WITH THIN BLEACHED REACTION RIMS										
287	288																	
288	289																	
289	290																	
290	291																	
291	292							TRACE TO SPARSE WHITE CARBONATE AS IRREGULAR STRINGERS.										
292	293																	
293	294																	
294	295																	
295	296																	
296	297	296.9m SHEAR → 40°						296.9-297.15m BROKEN, CRUMBLY CORE; THIN DUCTILE SHEAR. INCREASED FRACTURING, VEINING										QUARTZ + FELDSPAR VEINING
297	298	297.4m BROKEN, POSSIBLE						TENDING TO FINER GRAINED, WITH INCREASED SANDY DEVITRIFIED GLASSY OR ASHY MATRIX.										
298	299	DUCTILE SHEAR																
299	300																	

UNITY MINING LTD
REGIONAL EXPLORATION TASMANIA
DRILL HOLE COVER SHEET

Hole No.:	FTD041	Drilling Contractor:	EDrill Australia
Location:	Firetower Deposit	Drill Rig:	UDR 200 LS Track Mounted
ML/EL:	EL 26-2004 Firetower	Drill Method:	Diamond (PQ/HQ/NQ core)
Geologist:	D. A Evans	Drilling Commenced:	20 Sep 2012
End of Hole (m):	409.1	Drilling Completed:	17 Oct 2012

Hole Completion

Groundwater Intersected:
 Groundwater Controlled:
 Material Left In Hole:

No
N/A
Steel collar pipe
Capped

Comments

3.0 metres HWT pipe cemented in at surface
UPVC casing installed in completed hole
Threaded steel cap spot welded onto collar pipe

Collar Condition:

Drill Hole Logging

Logged By:
 Base of Complete Oxidation (m):
 Base of Partial Oxidation (m):
 Summary:

A. Warren/D. Evans
0
18.4
Collar - 111.7 m
111.7 - 146.1 m
146.1 - 186.55 m
186.55 - 202.3 m
202.3 - 257.55 m
257.55 - 339.1 m
339.1 - 372.4 m
372.4 - 409.1 m

Comments

Logged in hard copy graphical format
Not obvious; collared on excavated pad with rock fill
Oxidised to fresh pumiceous lithic-rich volcanoclastic
Interbedded lithic-rich sst, pumice breccia, black shale
Carbonate altered pumiceous volcanoclastic breccia
Interbedded black shale & volcanoclastic sandstone
Rhyolitic volcanoclastic breccia, black shale interbeds
Laminated black shale with ashy sandstone interbeds
Rhyolitic lava breccia, minor siltstone-shale
Variably altered porphyritic quartz-phyric rhyolite (FW)

Drill Hole Assays

Sample Type:
 Assayed By:
 Peak Gold Assays:
 Other Significant Assays:

Half core
ALS
0.99 g/t gold
0.73% zinc/ 0.21% lead

Comments

Sawn half HQ and NQ core samples
Burnie Research Laboratory (Wivenhoe, Tasmania)
Master pulp samples stored at Deloraine core shed
Average for 2.0 m apparent width from 180.0-182.0 m
Average for 18.0 m apparent width from 238.0-256.0 m

Hole No. FTD041	Collar Location (GPS)	Graphical Drill Hole Log	Logged by A Warren	Massive
Project : EL 26-2004	East : 448230.00	Azimuth : 223.0 degrees (MGA94)	Drilled by EDHill	Pervasive
Prospect : Firetower	North : 5405359.00	Declination : 61.0 degrees	Drill type UDR200	Disseminated
Grid : MGA94	RL : 847.00	Total Depth : 450.0m (planned)	Drill Date 20/09/2012	Narrow vein
	Proj. MGA94 co-ords	Collar surveyed by:	/10/2012	

From	To	Colour/ Weathering	Structure Type 1	Structure Type 2	Angle CA	Graphic structure	Log grainsize	Description	Alteration						Mineralization				
									Silica	Sericite	Albite	Carbonate	Chlorite	Hematite	Vein Qtz %	Mineralisation Assemblage	%	Vein Qtz % Proportion	
								60.0 f.g. lithic d grey VC 60-60.11											
60	61	60.8						60.35 coarse sandstone VC-SS - qtz feld lithics (60.1-60.35) d grey volcaniclastic ss-fmg											
61	62							61.0 coarse gr sharp basal contact (61-61.3) m-g d grey VC SS (61.3-61.6) m-cg d grey VC SS (61.6-62)											
62	63							62.0 VCG - conglom lithic volcaniclastic ss (62-62.5) f-mg d grey volcaniclastic ss (62.5-63.85) some cast ss narrow within it.											
63	64							63.85 - 64.15 VC coarse SS grades d/fh conglomeratic											
64	65							64.2 - 64.9 m coarse grained ss coarsening d/fh generally f.g. d grey siltstone - Vfg VC sandstone occ bedded laminated, occ dyshale, occ p shale/ash beds											
65	66	So 65.8			68°														
66	67	So 66.2			38°														
67	68																		
68	69																		
69	70	So 69.9			45°														
70	71																		
71	72																		
72	73																		
73	74																		
74	75																		
75	76																		
76	77																		
77	78																		
78	79																		
79	80																		
80	81																		
81	82																		
82	83																		
83	84																		
84	85																		
85	86																		
86	87																		
87	88																		
88	89																		
89	90																		

*d/fh after mylonite @ 54.5m - - ss lithics do not contain the stock feldspar pyroclastic volcanic/pumiceous rock until 134.0m

Hole No. **FTD041** Collar Location (GPS) **Graphical Drill Hole Log** Logged by **F. Warren** Massive
 Project : **EL 26-2004** East : **446230.00** Azimuth : **223.0 degrees (MGA94)** Drilled by **EDrill** Pervasive
 Prospect : **Firetower** North : **5405359.00** Declination : **61.0 degrees** Drill type **UDR200** Disseminated
 Grid : **MGA94** RL : **647.00** Total Depth : **450.0m (planned)** Drill Date **20/09/2012** Narrow vein
 Proj. **MGA94 co-ords** Collar surveyed by: (reported / /2012) **10/2012**

From	To	Colour/Weathering	Structure type 1	Structure type 2	Angle CA	Graphic structure	Log grain size	Description	Alteration						Mineralization			
									Silica	Sericite	Albite	Carbonate	Chlorite	Hematisb	Vein Qtz %	Mineralisation Assemblage	%	Vein type
90	91																	
91	92																	
92	93																	
93	94																	
94	95	So 95-3			10°		94.7 95.3	siltstone/shale - dark grey laminated in part. qt/feldspar oolitic volcaniclastic ss m-cg.										
95	96																	
96	97																	
97	98						98.0 98.5	very fg sandstone - siltstone - grey qt/feldspar oolitic volcaniclastic ss m-cg.										
98	99																	
99	100						100.0 100.5	very fg sandstone - siltstone - dark grey qt/feldspar oolitic volcaniclastic ss										
100	101						101.0 101.7	dark grey siltstone - vfg ss. light feldspar lithic volcaniclastic sandstone grain size variation mg > cg throughout.										
101	102																	
102	103																	
103	104																	
104	105																	
105	106																	
106	107																	
107	108																	
108	109	broken ground																
109	110						110.0	grey shale/siltstone. vc ss area for 101.7-110.0										
110	111																	
111	112							CORE LOSS (111.7-112.5)										
112	113	grey vfg ss					112.5 112.8	grey pug (112.7-112.8) CORE LOSS (112.8-113.5)										
113	114	volcaniclastic sandstone coarse					113.5 114.0	grey pug (113.9-114.0) CORE LOSS (114.0-115.7)										
114	115																	
115	116	volcaniclastic					115.7											
116	117						116.2 116.7	3 dg grey mottled shale - volcaniclastic Jaspers										
117	118							grey qtz-feldspar lithic volcaniclastic sandstone										
118	119						118.9 119.5	CORE LOSS (118.9-119.5)										
119	120							volcaniclastic xl lithic sandstone -cg.										

NB not well logged 50-109 in vc areas.

Summary 0 - 50m pumiceous cg vc.
 50 - 109m volcaniclastic lithic ss - conglom varying grain size

Cementation replacement + filling
 in matrix - thin grey veins

magnetic

Hole No. FTD041	Collar Location (GPS)	Graphical Drill Hole Log		Logged by <i>J. Warren</i>	Massive
Project : EL 26-2004	East : 446230.00	Azimuth : 223.0 degrees (MGA94)	Drilled by <i>J. Warren</i>	EDrill	Pervasive
Prospect : Firetower	North : 5405359.00	Declination : 61.0 degrees	Drill type UDR200	UDR200	Disseminated
Grid : MGA94	RL : 647.00	Total Depth : 450.0m (planned)	Drill Date 20/09/2012	20/09/2012	Narrow vein
Proj. MGA94 co-ords	Collar surveyed by:	(reported / 2012)			

From	To	Colour/Weathering	Structure type 1	Structure type 2	Angle CA	Graphic structure	Log grainsize	Description	Alteration					Mineralization				
									Silica	Sericite	Albite	Carbonate	Chlorite	Hemitite	Vein Qtz %	Mineralisation Assemblage	%	Veining
150	151							porphyritic, lithic volcaniclastic breccia - pale grey foliated										
151	152							poly-mictic textures - pale grey shale grey, grey block volcanic / porphyritic phenocrysts of 2 parts of, clast supported, white matrix? carbonate										
152	153																	
153	154																	
154	155																	
155	156	mod. bluish			54°													
156	157																	
157	158						157.8	Broadly banded rock grey porphyritic lithic breccia										
158	159							old grey, porphyritic lithic breccia 40% banded in 20cm scale										
159	160																	
160	161																	
161	162						160.9	porphyritic, lithic volcaniclastic breccia, foliated										
162	163							pale brown, pale cream brown										
163	164																	
164	165																	
165	166																	
166	167																	
167	168																	
168	169																	
169	170																	
170	171																	
171	172						171.2	BLACK SHALE -										
172	173						172.3	Grey m-cg volcaniclastic sandstone										
173	174						173.1	BLACK SHALE - laminated.										
174	175						174.5	pale green m-cg volcaniclastic interbedded with black shale										
175	176						175.7	pale green-grey volcaniclastic sandstone										
176	177						176.4	BLACK SHALE interbedded 3cm wide										
177	178						177.5	pale green-grey m-g volcaniclastic sandstone										
178	179						178.5	CORE LOSS										
179	180						179.5	177.4-177.5 10cm black shale / with red stain										

172.3-173 - disseminated pyrite (photo) (grey-banded vein)
 Qtz/Cb/py 172.95-173.1 -
 py* massive at contact bet vk ss & black shale + with Qtz/Cb veining.

get magnetic

Hole No. F10041	Collar Location (GPS)	Graphical Drill Hole Log		Logged by A. Weyren	Massive
Project: EL 26-2004	East: 446230.00	Azimuth: 223.0 degrees (MGA94)	Drilled by EDrill	Pervasive	
Prospect: Firetower	North: 5405359.00	Declination: 61.0 degrees	Drill type UDR200	Disseminated	
Grid: MGA94	RL: 647.00	Total Depth: 450.0m (planned)	Drill Date 20/09/2012	Narrow vein	
Proj. MGA94 co-ords		CoFar surveyed by:	1/10/2012		
		(reported / /2012)			

From	To	Colour/Wash	Structure Type 1	Structure Type 2	Angle CA	Graphic structure	Log grade/size	Description	Alteration					Mineralization			
									Silica	Sulphide	Albite	Carbonate	Chlorite	Haematite	Vein Qtz %	Mineralisation Asser/blage	%
210	211							Volcaniclastic breccia - plumbic lithic pate brown, green, gray, mid grey	/	/	/	/	/	Qtz vein	py	2	W
211	212								/	/	/	/	/	py			W
212	213							probably more than one event	/	/	/	/	/	py			W
213	214							213-213 vuggy + vein with pyrite	/	/	/	/	/	py			W
214	215								/	/	/	/	/	py			W
215	216								/	/	/	/	/	py			W
216	217							217.5 vuggy vein of/b with pyrite	/	/	/	/	/	py			W
217	218							218.0 qtz/b vein with masses of pyrite	/	/	/	/	/	py			W
218	219							219.3-219.4 black mm vein	/	/	/	/	/	py			W
219	220							219.5-219.6 black mm pyrite vein	/	/	/	/	/	py			W
220	221							qt x5 lithics mid grey, haematite	/	/	/	/	/	py			W
221	222							221.7 pyrite veining	/	/	/	/	/	py			W
222	223							222.0 brown muddy fill	/	/	/	/	/	py			W
223	224							223.0 Rhyolite Volcaniclastic Breccia	/	/	/	/	/	py			W
224	225							grey mid grey, heavily carbonaceous altered in part - veining - pyrite glass	/	/	/	/	/	py			W
225	226							224.0 selective haematite alteration	/	/	/	/	/	py			W
226	227							226.3 vuggy qtz/b/pyrite vein 1/2 cm wide	/	/	/	/	/	py			W
227	228								/	/	/	/	/	py			W
228	229							228.6 pyrite in vein + patches	/	/	/	/	/	py			W
229	230								/	/	/	/	/	py			W
230	231							probably pyrite	/	/	/	/	/	py			W
231	232							231.0 pyrite	/	/	/	/	/	py			W
232	233							232.0 pyrite	/	/	/	/	/	py			W
233	234							very yellow carbon ate 233.0-233.5 col 1 yellow 2 grey	/	/	/	/	/	py			W
234	235							234.0 haematite veining	/	/	/	/	/	py			W
235	236							235.0 quartzite	/	/	/	/	/	py			W
236	237							236.0 shale-grey (vlg silver at top) 2 sulphide - 236.0-236.5	/	/	/	/	/	py			W
237	238							237.0 Brown v. fgy yellowed rock? lithic pyrite breccia	/	/	/	/	/	py			W
238	239							238.0 also sulphide blob at 236.6	/	/	/	/	/	py			W
239	240								/	/	/	/	/	py			W

NDF magnetic

py 50%

py 50%

py 50%

Hole No. FTD041	Collar Location (GPS)	Graphical Drill Hole Log		Logged by A Warren	Massive
Project: EL 26-2004	East: 446230.00	Azimuth: 223.0 degrees (MGA94)	Drilled by EDRill	Pervasive	
Prospect: Firetower	North: 5405359.00	Declination: 61.0 degrees	Drill type UDR200	Disseminated	
Grid: MGA94	RL: 647.00	Total Depth: 450.0m (planned)	Drill Date 20/09/2012	Narrow vein	
Proj. MGA94 co-ords	Collar surveyed by:	(reported / /2012)	11/0/2012		

From	To	Colour/Weathering	Structure type 1	Structure type 2	Angle CA	Graphic structure	Log grainsize	Description	Alteration					Mineralization						
									Silica	Sericite	Albite	Carbonate	Chlorite	Hematite	Vein Qtz %	Mineralisation Assemblage	%	Vein	Disseminated	Pervasive
240	241						240.5 240.5	2. Pumice breccia - altered Black shale - minor altered lam 60/20 vfg sw with some pyrite in 2. Pumice breccia - altered - minor pumice												
241	242	upper contact			40°		241.75	Black shale - lam - sharp lower contact												
242	243	So 243.0			38°		243.2	2. Pumice breccia - v altered - minor pumice												
243	244				20°		243.4	Black shale - lam - contact faulted												
244	245	So 244.1			35° 25°		245.2	Black shale - lam - contact faulted Black shale - lam - contact faulted v fg grey ss with laminations. Basal contact broken												
245	246						245.2-245.3	CORE LOSS 245.2-245.3												
246	247						245.3-245.7	Black shale laminated 90° ss (245.3-7) Black shale / grey vfg ss inter lam (245.7-246.2)												
247	248	sharp					247.8	Black shale - weakly lam												
248	249	sharp					248.8	Rhyolite breccia? cracked pink Black shale (248.9-249.1) Volcaniclastic sandstone generally vfg pale brown - some pervasively altered, brown carbonates even gravel broadly laminated/bedded with grain size variation vfg mm grade w/ generally v altered rock could be a lavabreccia blotchy in part.												
249	250						249.2													
250	251						249.3													
251	252	So 252.0			40°		252.0													
252	253	sharp					252.7	Rhyolite breccia - shoudy of or vfg ss altered pyrite pale brown - pink red Black shale (253.2-253.4) - lam (5cm thick bed of vfg ss or an - lam/banded 258.6-259.7 volcaniclastic ss (253.4-253.65) Pumice volcaniclastic sandstone Black shale with inter laminated grey vfg ss. ss composition increases with Black shale - massive v. veined Pumice - lithic breccia breccia												
253	254	sharp					253.2													
254	255	gradational			33°		254.1													
255	256	sharp					255.2													
256	257	sharp					257.0													
257	258	So 258.0			30°		258.0	Volcaniclastic - lam Black shale - (258-258.2) Black shale - pbrown vfg ss (40/60%) lam vfg ss or an - lam/banded 258.6-259.7 Black shale (259.1-259.3) - lam grey ss - block shale 3 cycles (259.3-259.50). 70-90% clay shale v ss increasing d/a sandstone (grey) vfg, laminated 90°, Black shale inter lam Black shale - laminated												
258	259	gradational			26°		258.6													
259	260	sharp					259.1													
260	261	gradational					259.7													
261	262						260.4													
262	263						260.4													
263	264						260.4													
264	266	So 265.0			20°		265.0													
265	266						266.0													
266	267						267.0													
267	268	So 267.5			22°		267.5													
268	269	broken					268.5	Ash or vfg volcaniclastic ss - cream with 5cm black shale band Black shale - laminated												
269	270						268.9													

239.4
* = 240.5
242.9 Sphalerite xls
243-243.1 galena xls

239.4
vfg sulphide
black mm sulphide veins
grey sulphide veins
minor chalcocite
zeolite massive alteration
pyrite veins

Hole No. FTD041	Collar Location (GPS)	Graphical Drill Hole Log		Logged by A. Warren	Massive
Project : EL 26-2004	East : 446230.00	Azimuth : 223.0 degrees (MGA94)	Drilled by EDrill	Pervasive	
Prospect : Firetower	North : 5405359.00	Declination : 61.0 degrees	Drill type UDR200	Disseminated	
Grid : MGA94	RL : 647.00	Total Depth : 450.0m (planned)	Drill Date 20/09/2012	Narrow vein	
	Proj. MGA94 co-ords	Collar surveyed by:	(reported / 2012)	11/02/2012	

From	To	Colour/Weathering	Structure Type 1	Structure Type 2	Angle CA	Graphic structure	Log grainsize	Description	Alteration					Mineralization				
									Silica	Serpentine	Albite	Carbonate	Chlorite	Hematite	Vein Qtz %	Mineralisation Assemblage	Vein Disseminated	Fracture
270	271	vein						BLACK SHALE - laminated										
271	272	vein						270-271 5 qt veins concentration										
272	273																	
273	274																	
274	275																	
275	276				27°													
276	277																	
277	278	grad sharp						volcaniclastic sandstone or ash-p brown - laminated, black shale lam, grades up.										
278	279							BLACK SHALE										
279	280	sharp sharp			18°			sandstone - cream, grey up-up clast - py mica										
280	281							280.5 - 280.8 Intense veining to 2cm veins. 100% vein (see darker micaceous thin l. @ 280.5/280.6)										
281	282																	
282	283																	
283	284																	
284	285							volcaniclastic sandstone - pale brown vfg.										
285	286							BLACK SHALE										
286	287							sandstone - volcaniclastic, green, friable, micritic.										
287	288	sharp			24°			BLACK SHALE mylonite - 287.6 - 287.75 or green vss BLACK SHALE - laminated.										
288	289																	
289	290																	
290	291							grey sandstone vfg (290.3-290.4)										
291	292	Black shale fault zone						BLACK SHALE grey vfg (290.0-290.1) BLACK SHALE (290.0-290.14) grey vfg (290.4-290.55) BLACK SHALE										
292	293							grey vfg (292.55-292.7)										
293	294							BLACK SHALE grey vfg (293.2-293.3) BLACK SHALE (293.2-293.5) CORE LOSS 293.5-293.6. BLACK SHALE 293.7										
294	295	1 Ecker ground																
295	296							CORE LOSS 296-297.0										
296	297							BLACK SHALE										
297	298																	
298	299							CORE LOSS 297.9-298.3										
299	300																	

270-271 5 qt veins concentration
 273-274 2m
 275-276 3m
 277-278 2m
 279-280 2m
 281-282 2m
 283-284 2m
 285-286 2m
 287-288 2m
 289-290 2m
 291-292 2m
 293-294 2m
 295-296 2m
 297-298 2m
 299-300 2m
 270-271 5 qt veins concentration
 273-274 2m
 275-276 3m
 277-278 2m
 279-280 2m
 281-282 2m
 283-284 2m
 285-286 2m
 287-288 2m
 289-290 2m
 291-292 2m
 293-294 2m
 295-296 2m
 297-298 2m
 299-300 2m

292-293 - graphic

Hole No. FTD041	Collar Location (GPS)	Graphical Drill Hole Log		Logged by W. Womersley	Massive
Project: EL 28-2004	East: 446230.00	Azimuth: 223.0 degrees (MGA94)	Drilled by EDRII	Pervasive	
Prospect: Firetower	North: 5405359.00	Declination: 61.0 degrees	Drill type UDR200	Disseminated	
Grid: MGA94	RL: 647.00	Total Depth: 450.0m (planned)	Drill Date 20/09/2012	Narrow vein	
Proj. MGA94 co-ords	Collar surveyed by:		(reported / 2012)		

From	To	Colour/Weathering	Structure type 1	Structure type 2	Angle CA	Graphic structure	Log grain size	Description	Alteration					Mineralization				
									Silica	Sericite	Albite	Carbonate	Chlorite	Hematite	Vein Qtz %	Mineralisation Assemblage	%	Vein/Disseminated
300	301	S ₀ 300-0 Fault 300-0			10°			BLACK SHALE							py	1	✓	
301	302																	
302	303	S ₀ 302-0 or less			5°													
303	304	S ₀ 304-0			7°			BLACK SHALE										
304	305							BLACK SHALE										
305	306	S ₀ 306-0			5°													
306	307	S ₀ 307-5			20°													
307	308																	
308	309																	
309	310																	
310	311																	
311	312							BLACK SHALE										
312	313	S ₀ 313-7			14°													
313	314																	
314	315																	
315	316	S ₀ 316-7			12°			py zone region at shallow angle to CA										
316	317																	
317	318																	
318	319	S ₀ 319-8			12°													
319	320																	
320	321	S ₀ 321-5			3°													
321	322																	
322	323	S ₀ 322-0 Broken			45°			VO-CANCRATIC SANDSTONE p grey, p green, gold mica rich, graded d/h. BLACK SHALE										
323	324																	
324	325																	
325	326	S ₀ 326-2			4°													
326	327																	
327	328																	
328	329																	
329	330																	

OCE mineralogy py veins

Hole No. FTD041	Collar Location (GPS)	Graphical Drill Hole Log		Logged by <i>Warren</i>	Massive
Project: EL 26-2004	East: 446230.00	Azimuth: 223.0 degrees (MGA94)	Drilled by: EDRI	Drill type: UDR200	Pervasive
Prospect: Firetower	North: 5405359.00	Declination: 61.0 degrees	Drill Date: 20/09/2012	Drill Date: 20/09/2012	Disseminated
Grid: MGA94	RL: 647.00	Total Depth: 460.0m (planned)	Collar surveyed by:	(reported / 12/2012)	Narrow vein

From	To	Colour/Weathering	Structure type 1	Structure type 2	Angle C.A	Graphic structure	Log grainsize	Description	Alteration						Mineralization				
									Silica	Sulphate	Albite	Carbonate	Chlorite	Hematite	Vein Qtz %	Mineralisation Assemblage	%	Veinlog Disseminated	Pervasive
330	331							BLACK SHALE								9/63py	py	1	✓
331	332							CORE LOSS 331.7-332.7 BLACK SHALE											✓
332	333							CORE LOSS 332.7-333.3											✓
333	334							CORE LOSS 333.3-334.6											✓
334	335							BLACK SHALE											✓
335	336				43°														✓
336	337				50°														✓
337	338							CORE LOSS 337.1-337.4 BLACK SHALE											✓
338	339							RHYOLITE LAVA BRECCIA - Vfg of phenocrysts, pink cream cracked, occasional sparse shale lithics, carbonate mino veins.	/	/	/					338.9-339.5	black mudstone pyrite dark sulphate	5	✓
339	340																		✓
340	341																		✓
341	342																		✓
342	343																		✓
343	344																		✓
344	345																		✓
345	346																		✓
346	347																		✓
347	348																		✓
348	349																		✓
349	350																		✓
350	351																		✓
351	352							SAVING FROM 351.2-351.3 blades shale plumice											✓
352	353							Volcaniclastic sediment or ash dark vfg (siltstone), brown porcellanous block massive sulphide network & pyrite veins											✓
353	354																		✓
354	355							354.5m INTERNAL CONTACT AT 32° WITH BUFF ? RHYOLITE AS MINOR FLOW OR INTRUSION.											✓
355	356							355.5. - Qtz/cb vein 3 1/2 cm wide											✓
356	357							INTENSELY MICRO-FRACTURED AND VEINED, WITH CONSPICUOUS 5-7% PYRITE + TRACE CPY.											✓
357	358																		✓
358	359							ALTERED, STRONGLY PYRITIC, MID CREAM, VERY FINE-GRAINED, RHYOLITIC SILTSTONE OR FELSIC											✓
359	360							TUFF. POSSIBLE INTERMIXED RHYOLITE AS DISMEMBERED MINOR FLOWS OR INTRUSIONS.											✓

FRAGMENTS
(CAVED MATERIAL)

TUFF. POSSIBLE INTERMIXED RHYOLITE AS
DISMEMBERED MINOR FLOWS OR INTRUSIONS.

Hole No. FTD041	Collar Location (GPS)	Graphical Drill Hole Log		Logged by	Massive
Project: EL 26-2004	East: 446230.00	Azimuth: 223.0 degrees (MGA94)	Drilled by	E Drill	Pervasive
Prospect: Firetower	North: 5405359.00	Declination: 81.0 degrees	Drill type	UDR200	Disseminated
Grid: MGA94	RL: 647.00	Total Depth: 450.0m (planned)	Drill Date	20/09/2012	Narrow vein
Proj. MGA94 co-ords		Collar surveyed by:		1/10/2012	
	0.082 1/4 1 4 18 84 mm	(reported 1/2012)			

From	To	Colour/Weathering	Structure type 1	Structure type 2	Angle CA	Graphic structure	Log grain size	Description	Alteration					Mineralization					
									Silica	Sericite	Albite	Carbonate	Chlorite	Hematite	Vein Qtz %	Mineralisation Assemblage	%	Veins Discrete	Porphyry
CONTINUED FROM 351.8m																			
360	361	MICRO-FRACTURE						ALTERED PYRITIC RHYOLITIC VOLCANICLASTIC SILTSTONE MINOR RHYOLITE LAVA OR INTREUSIVE:											
361	362	OVERPRINT.						HARD TO VERY HARD, VARIABLY SILICIFIED, MICRO-FRACTURED, VEINED, LIGHT TO MID BROWN-CREAM.											
362	363							GREY, GREEN, VERY FINE-GRAINED, ALTERED RHYOLITIC SILTSTONE OR FELSIC TUFF. INTERMIXED											
363	364	THIN ALTERED SHALE INTERBED			362.9			ZONES OF MORE SILICEOUS, BUFF, VERY FINE-GRAINED RHYOLITIC, POSSIBLY FLOWS OR MINOR											
364	365							INTRUSIONS. MODERATE PELVASINE SERICITE + SILICA ALTERATION. STRONG MICRO-FRACTURING OVERPRINT,											
365	366							SOME FRACTURES FILLED WITH PY + TRACE CPY + POSSIBLY APY.											
366	367																		
367	368	INTERNAL CONTACT																	
368	369	DISRUPTED BEDDING LAMINAE; MICRO-FRACTURE			368.35			DISRUPTED VOLCANICLASTIC SHALE + SILTSTONE SUB-UNIT; MICRO-FRACTURED, VARIABLY PYRITIC.											
369	370							BECOMING QUARTZ-PHYRIC, TENDING TO WEAKLY FOLIATED, DEFORMED.											
370	371	OVERPRINT			370.1														
371	372																		
372	373							372.4m SHEARED, BROKEN, FAULTED CONTACT ZONE.											
373	374	373.9- CAVED MATERIAL AT START OF RUN.						372.5m FOLIATED TO PORPHYRITIC QUARTZ-PHYRIC RHYOLITE LAVA OR INTREUSIVE: HARD BECOMING VERY											
374	375							HARD, INITIALLY ALTERED, TENDING TO CLAYEY, VEINED, MID CREAM, FINE TO MEDIUM-GRAINED,											
375	376							? PUMICEOUS RHYOLITE TO 373.9m. BECOMING LIGHT BUFF, IN PLACES GREY, COARSE-GRAINED,											
376	377							QUARTZ-PHYRIC, NON-FOLIATED, PORPHYRITIC RHYOLITE FROM 373.9m. BLEACHED, PERVASIVELY											
377	378	COARSE QUARTZ EYES, UP TO 5-6mm, IN PORPHYRITIC TEXTURED ZONES.						SERICITISED AT START OF INTERVAL, BECOMING VARIABLY FELDSPAR ALTERED. SMALL WISPS/STREAKS OF GREEN SERICITE ALTERED ? PUMICE OR GLASS AT START.											
378	379							MINOR QUARTZ + FELDSPAR VEINS AND STRINGERS, SOME WITH CHLORITE AT CONTACTS.											
379	380							COMMON 2-3mm SUBHEDRAL FLECKS OF HEMATITE PIGMENTED FELDSPAR, PROBABLY											
380	381	VEIN OVERPRINT						ALTERED PHENOCRYSTS. ALTERATION TENDING TO OBSCURE PRIMARY TEXTURAL VARIATION.											
381	382																		
382	383																		
383	384																		
384	385																		
385	386							SCATTERED ? EILITE FLAKES.											
386	387	FINER GRANNED, NICE MASSIVE.						386.3m FINE-GRAINED MASSIVE TO VEINED ANHYRIC RHYOLITE SILICEOUS, VERY HARD, TOUGH											
387	388							387.7m											
388	389	BECOMING BROKEN						389.1m BECOMING SHEARED, BROKEN AT CONTACT											
389	390	LOSS						CORE LOSS: 2.0m CORE LOSS RECORDED BY DRILLER.											

UNITY MINING LTD
REGIONAL EXPLORATION TASMANIA
DRILL HOLE COVER SHEET

Hole No.:	FTD042	Drilling Contractor:	EDrill Australia
Location:	Firetower Deposit	Drill Rig:	UDR 200 LS Track Mounted
ML/EL:	EL 26-2004 Firetower	Drill Method:	Diamond (PQ/HQ/NQ core)
Geologist:	D. A Evans	Drilling Commenced:	17 Oct 2012
End of Hole (m):	425.8	Drilling Completed:	06 Nov 2012

Hole Completion

Groundwater Intersected:
 Groundwater Controlled:
 Material Left In Hole:

No
N/A
Steel collar pipe
Capped

Comments

1.5 metres HWT pipe cemented in at surface
67 HQ rods (3 m rods) + HQ casing shoe bit lost in hole
UPVC casing only partially installed in completed hole
Threaded steel cap spot welded onto collar pipe

Collar Condition:

Drill Hole Logging

Logged By:
 Base of Complete Oxidation (m):
 Base of Partial Oxidation (m):
 Summary:

A. Warren
0
17.6
Collar - 78.5 m
78.5 - 142.95 m
142.95 - 231.6 m
231.6 - 327.9 m
327.9 - 354.0 m
354.0 - 425.8 m

Comments

Logged in hard copy graphical format
Not obvious; collared on excavated pad with rock fill
Oxidised to fresh pumiceous lithic-rich volcanoclastic
Interbedded lithic-rich sandstone & siltstone-shale
Carbonate altered pumiceous rhyolitic breccia
Interbedded black shale, volcanoclastic sst, breccia
Mixed rhyolitic breccia, volcanoclastic sst, black shale
Rhyolite lava breccia; porphyritic rhyolite (FW)

Drill Hole Assays

Sample Type:
 Assayed By:
 Peak Gold Assays:
 Other Significant Assays:

Half core
ALS
1.05 g/t gold
0.86 g/t gold
2.26 g/t gold
0.59% zinc/
0.15% lead

Comments

Sawn half HQ and NQ core samples
Burnie Research Laboratory (Wivenhoe, Tasmania)
Master pulp samples stored at Deloraine core shed
1.0 m apparent width from 186.0-187.0 m
Average for 2.0 m apparent width from 340.0-342.0 m
1.0 m apparent width from 361.0-362.0 m
Average for 13.0 m apparent width from 254.0-267.0 m

Hole No. **FTD042** Collar Location (GPS) **Graphical Drill Hole Log** Logged by **A. Warren** Massive
 Project : EL 26-2004 East : 446230.00 Azimuth : 203.0 degrees (MGA94) Drilled by EDRII Pervasive
 Prospect : Firetower North : 5405359.00 Declination : 65.0 degrees (provisional) Drill type UDR200 Disseminated
 Grid : MGA84 Proj. MGA94 co-ords Total Depth : 380.0m (planned) Drill Date 17/10/2012 Narrow vein
 Collar surveyed by: (reported / /2012) /10/2012

From	To	Colour/Weathering	Structure type 1	Structure type 2	Angle CA	Graphic structure	Log grain: size	Description	Alteration					Mineralization				
									Silica	Sericite	Albite	Carbonate	Chlorite	Hematite	Vein Qtz %	Mineralisation Assemblage	%	Vein Qtz
0	1	orange						Sandstone volcanoclastic yellow mottled grey feldspars lithics of pieces, matrix is yellow clayey material.										
1	2	yellow mottled grey																
2	3																	
3	4							9-10m brown & dark brown (7 black) stained joint										
4	5																	
5	6																	
6	7																	
7	8	grey mottled yellow						7.90m red surfaces on joints on ~ FTD 041										
8	9																	
9	10																	
10	11																	
11	12																	
12	13	Intermittent sand ground																
13	14																	
14	15							14.7 3m - 15.3										
15	16							16.00										
16	17							on for 18.9										
17	18							porphyritic volcaniclastic sandstone										
18	19																	
19	20																	
20	21							2. porphyritic crystal lithic volcaniclastic sandstone. tightly packed rock mid grey polyhedral - dark grey, brown grey lithics, feldspars, no matrix										
21	22	PQ						variable matrix. Distinctive lithics, dark brown, black volcanic with abundant feldspar phenocrysts. It has often wispy edges - spumice v. distinctive rock										
22	23	HQ																
23	24																	
24	25																	
25	26																	
26	27																	
27	28																	
28	29																	
29	30																	

B0C0 = not obvious
 B0P0 = 17.60m

Hole No. FTD042	Collar Location (GPS)	Graphical Drill Hole Log	Logged by A. Warren	Massive
Project : EL 28-2004	East : 446230.00	Azimuth : 203.0 degrees (MGA94)	Drilled by EDRill	Pervasive
Prospect : Firetower	North : 5405359.00	Declination : 65.0 degrees (provisional)	Drill type UDR200	Disseminated
Grid : MGA94	RL : 647.00	Total Depth : 390.0m (planned)	Drill Date 17/10/2012	Narrow vein
	Proj. MGA94 co-ords	Collar surveyed by:	(reported / /2012)	110/2012

From	To	Colour/Weathering	Structure type 1	Structure type 2	Angle CA	Graphic structure	Log grain size	Description	Alteration					Mineralization				
									Silica	Sericite	Albite	Carbonate	Chlorite	Hematite	Vein Qtz %	Mineralisation Assemblage	%	Vein Observations
30	31							31.1 lignite staining assoc with qt/cb vein										
31	32																	
32	33							occasional 'pumice' pieces only & smaller in size										
33	34																	
34	35	200/10			58°													
35	36																	
36	37																	
37	38																	
38	39	1/2 mm			38.3°													
39	40																	
40	41																	
41	42																	
42	43							Banded & laminated shale/silt/vfg sandstone - d grey pbrown-grey										
43	44	50			43.6°													
44	45																	
45	46	45.7 mm fault																
46	47	50			46.3°			sharp basal contact - grey volcaniclastic sandstone										
47	48							grey siltstone with bands of fg volcaniclastic grey ss										
48	49	48.15 10cm			48°			Volcaniclastic breccia or conglom. Vcg. lithic, xl, rare pumice										
49	50							occasional massive? large clasts intervals feldspar later chunk at										
50	51							qt - brown ss - varies esp basal d grey. Lithics - dark grey, red-brown iron oxide stained										
51	52	Broken ground																
52	53																	
53	54							53.3 Volcaniclastic sandstone m-cg even grained d grey feldspar, qt, lithics, limited matrix										
54	55																	
55	56							Volcaniclastic conglomerate - ca ss - m-c ss - shale. xl lithic dark grey, not foliated, no iron pumice multiple ring upwash pediment										
56	57							qt, feldspar, qt chunk, esp at base of ring upwash										
57	58	ITG // to 50						qt lithics in clasts d grey pale grey pink to fg hematite all clasts. weak pale red-brown iron staining in some interstices										
58	59																	
59	60	qt vein 59.05			66°													

Alteration: Silica, Sericite, Albite, Carbonate, Chlorite, Hematite
 Mineralization: Vein Qtz %, Mineralisation Assemblage, %
 Vein Observations, Permeable

59-102m
 intermitted py
 - disseminated
 on qt/cb veins

Hole No. FTD042	Collar Location (GPS)	Graphical Drill Hole Log		Logged by A. Warren	Massive
Project: EL 28-2004	East: 446230.00	Azimuth: 203.0 degrees (MGA94)	Drilled by EDrill	Pervasive	
Prospect: Firetower	North: 5405359.00	Declination: 65.0 degrees (provisional)	Drill type UDR200	Disseminated	
Grid: MGA94	RL: 647.00	Total Depth: 380.0m (planned)	Drill Date 17/10/2012	Narrow vein	
	Proj. MGA94 co-ords	Collar surveyed by:	(reported / 2012)		

0.062 1/4 1 4 16 64 mm

From	To	Colour/Weathering	Structure type 1	Structure type 2	Angle CA	Graphic structure	Log grain size	Description	Alteration					Mineralization				
									Silica	Serpicite	Albite	Carbonate	Chlorite	Homotite	Vein Qtz %	Mineralisation Assemblage	Vein Dissemination	Pervasive
90	91							Banded Sandstone/shale										
91	92				24°			Some thicker ss intervals throughout										
92	93																	
93	94																	
94	95																	
95	96																	
96	97																	
97	98																	
98	99																	
99	100						99.4	pug @ 99.8 - ground grey - sublt to volcaniclastic sandstone & grey										
100	101							CORE LOSS 100 - 100.5 added markup										
101	102							Volcaniclastic sandstone										
102	103							CORE LOSS 101.4 - 102.6										
103	104							Volcaniclastic sandstone										
104	105																	
105	106																	
106	107																	
107	108																	
108	109							CORE LOSS 108.8 - 109.8										
109	110							Volcaniclastic sandstone										
110	111							CORE LOSS 110.5 - 110.9										
111	112							Volcaniclastic sandstone										
112	113							CORE LOSS 111.4 - 111.9										
113	114							Volcaniclastic sandstone in grey, lithic										
114	115							CORE LOSS 112 - 113.3										
115	116							Volcaniclastic sandstone										
116	117							CORE LOSS 114.9 - 115.1 removed in markup										
117	118							Volcaniclastic sandstone										
118	119							115.1 - 115 - Volcaniclastic mylonitic										
119	120							115.9 - 116.0 Banded sandstone/shale										

Broken ground (about 3m)

3m in situ
3m with
up significant

Hole No. FTD042	Collar Location (GPS)	Graphical Drill Hole Log		Logged by F. Warren	Massive
Project : EL 26-2004	East : 446230.00	Azimuth : 203.0 degrees (MGA94)	Drilled by EDrill	Pervasive	
Prospect : Firetower	North : 5405359.00	Declination : 65.0 degrees (provisional)	Drill type UDR200	Disseminated	
Grid : MGA94	RL : 647.00	Total Depth : 380.0m (planned)	Drill Date 17/10/2012	Narrow vein	
Proj. MGA94 co-ords	Collar surveyed by:	(reported / 12012)	17/10/2012		
	0.062 1/4 1 4 16 64 mm				

From	To	Colour/Weathering	Structure type 1	Structure type 2	Angle CA	Graphic structure	Log grain size	Description	Alteration					Mineralization				
									Silica	Sericite	Albite	Carbonate	Chlorite	Hematite	Vein Qtz %	Mineralisation Assemblage	%	Veining Disseminated Pervasive
120	121							Banded sandstone/shale aka										
121	122				30			Hole cemented @ 120.2. Next couple of runs have too much rock - may be caving. Filled with drilled material. Volcaniclastic ss, laminated, d grey, occ. brown shale bands.										
122	123																	
123	124																	
124	125																	
125	126																	
126	127							Volcaniclastic ss to thin blocky grey shale top. BLACK SHALE - quite shattered but mostly still in situ.										
127	128							SANDSTONE - grey clastic/volcaniclastic. f.g. feldspar, qtz, thinies, d grey blocky. matrix calcite feldspar matrix. qtz vein 128.7-128.8.										
128	129							CORE LOSS 128.8-129.8										
129	130							SANDSTONE - grey as for 127.2-128.7										
130	131							CORE LOSS 130.3-131.3										
131	132							131.3-131.4 grey VC sandstone → block shale. SANDSTONE - d grey VC v sheared, matrix calcite feldspar. matrix finer grained, coarse d.h. SANDSTONE - pale grey sheared - melanocratic at top of interval for 20 cm. calcite feldspar, veins + matrix. qtz feldspar thinies. Coarser d.h. to veg. pumice overlies with phenocr.										
132	133																	
133	134																	
134	135							134.6 SANDSTONE → BLACK SHALE										
135	136				36			135.8 Pumiceous foliated xl breccia - qtz, feldspar, pumice, calcite, calcite over feldspar.										
136	137							SANDSTONE SHALE - clastic shale matrix + pumice, d grey, d grey - f.g.										
137	138				61			v broken ground intermittently.										
138	139																	
139	140																	
140	141							40.9 grey sandstone grey // banding small calcite on banding.										
141	142				43			CORE LOSS 141.6-141.8										
142	143							141.8-141.98 pumiceous sandstone with xl calcite banded. SILTSTONE - m grey, massive, occasional bands.										
143	144							142.85 Pumiceous Rhysolite breccia cream, pale grey, occ d grey bands.										
144	145							foliated, qtz feldspar, a bit pumice. carbonate altered, interval except for minor d grey bands. thinies.										
145	146							Some calcite matrix veining but major alteration is probably another carbonate.										
146	147																	
147	148																	
148	149																	
149	150																	

100% pumice + calcite mineral

Hole No. FTD042	Collar Location (GPS)	Graphical Drill Hole Log	Logged by A. Warren	Massive
Project: EL 26-2004	East: 446230.00	Azimuth: 203.0 degrees (MGA84)	Drilled by EDrill	Pervasive
Prospect: Firetower	North: 5405359.00	Declination: 65.0 degrees (provisional)	Drill type UDR200	Disseminated
Grid: MGA84	RL: 647.00	Total Depth: 380.0m (planned)	Drill Date 17/10/2012	Narrow vein
Proj. MGA84 co-ords	Collar surveyed by:	(reported / 2012)	1/10/2012	

From	To	Colour/Weathering	Structure type 1	Structure type 2	Angle CA	Graphic structure	Log grain size	Description	Alteration					Mineralization					
									Silica	Sericite	Albite	Carbonate	Chlorite	Hematite	Vein Qtz %	Mineralisation Assemblage	%	Veining Disseminated Pervasive	
150	151	150.8			32														
151	152	151.4			35														
152	153																		
153	154																		
154	155																		
155	156																		
156	157																		
157	158																		
158	159				56														
159	160																		
160	161																		
161	162																		
162	163																		
163	164																		
164	165																		
165	166																		
166	167																		
167	168																		
168	169																		
169	170																		
170	171																		
171	172																		
172	173																		
173	174	sharp st faulted																	
174	175	50 73			30														
175	176	50 175.9 (75.85) cm LGS			50														
176	177	176.20-1cm LGS																	
177	178																		
178	179	50 179.8			38														
179	180																		

154-262 intermittent

Hole No. FTD042	Collar Location (GPS)	Graphical Drill Hole Log		Logged by A. Warren	Massive
Project : EL 26-2004	East : 446230.00	Azimuth : 203.0 degrees (MGA84)	Drilled by E. Drill	Pervasive	
Prospect : Firetower	North : 5405369.00	Declination : 65.0 degrees (provisional)	Drill type UDR200	Disseminated	
Grid : MGA84	RL : 647.00	Total Depth : 380.0m (planned)	Drill Date 17/10/2012	Narrow vein	
Proj. MGA84 co-ords	Collar surveyed by:	(reported / 2012)	1/10/2012		
0.062 1/4 1 4 16 64 mm					

From	To	Colour/Weathering	Structure type 1	Structure type 2	Angle CA	Graphic structure	Log grainsize	Description	Alteration					Mineralization							
									Silica	Sericite	Albite	Carbonate	Chlorite	Homelite	Vein Qtz %	Mineralization Assemblage	%	Veining	Disseminated	Pervasive	
180	181				180.95			BLACK SHALE Banded porcellanous cream shale + Vg sandstone 15cm interval @ 190.3m X lithic st pumiceous breccia cream roughly lam. Black shale 5m interval so fr 180.95-181.40													
181	182	same unit						Volcaniclastic sandstone (or ash) fr banded cream, cracked, pinkish grey Black shale 15cm 183.5-183.65 - purple beds bc ss - ash bands 183.65-183.85 pumiceous beds Black shale 183.85-184.0 BLACK SHALE / GREY SILTSTONE - banded pumiceous lg rhyolitic breccia matrix - cream													
182	183				183.50			Rhyolite breccia or rhyolitic sandstone Sanded massive, laminated up sp qt feldspar phenocrysts, occ lithics, generally very coarse altered cream, pale brown, dark grey grain size variation may be several horizons													
183	184	So 183.2			184.0																
184	185				56°																
185	186																				
186	187																				
187	188																				
188	189																				
189	190																				
190	191																				
191	192																				
192	193																				
193	194	So 184.0			47°																
194	195																				
195	196																				
196	197																				
197	198																				
198	199																				
199	200																				
200	201																				
201	202																				
202	203																				
203	204																				
204	205																				
205	206																				
206	207																				
207	208																				
208	209																				
209	210																				

2010
at 20m
flattens out
to 100m wide
orientation uncertain

Hole No. FTD042	Collar Location (GPS)	Graphical Drill Hole Log	Logged by A. Warren	Massive
Project : EL 26-2004	East : 446230.00	Azimuth : 203.0 degrees (MGA94)	Drilled by EDrill	Pervasive
Prospect : Firetower	North : 5405359.00	Declination : 65.0 degrees (provisional)	Drill type UDR200	Disseminated
Grid : MGA94	RL : 647.00	Total Depth : 380.0m (planned)	Drill Date 17/10/2012	Narrow vein
Proj. MGA94 co-ords	Collar surveyed by:	(reported / 2012)	11/10/2012	

0.082 1/4 1 4 16 64 mm

From	To	Colour/Weathering	Structure type 1	Structure type 2	Angle CA	Graphic structure	Log grainsize	Description	Alteration						Mineralization						
									Silica	Sericite	Albite	Carbonate	Chlorite	Hematite	Vein Qtz %	Mineralisation Assemblage	%	Veining	Disseminated	Pervasive	
210	211							RHYOLITE BRECCIA													
211	212	9.0			14°			thinly bedded grey py													
212	213							211-213 abt vugs - the rock is py min													
213	214																				
214	215																				
215	216																				
216	217																				
217	218							variably carbonate altered & varied													
218	219	disintegration						variably lithic													
219	220																				
220	221																				
221	222							occ pyrite.													
222	223																				
223	224																				
224	225							RHYOLITIC LITHIC BRECCIA													
225	226							Abt of xls feldspar dark grey grey dark lithic, mp wk lithic, carbonate veining, cement matrix													
226	227																				
227	228																				
228	229																				
229	230																				
230	231																				
231	232	So 231.9			46°			Black shale - banded with P green-grey & carbonaceous ss & shale layers, 2cm, cm & 1.5cm intervals, siderite concretions - grades up?													
232	233							RHYOLITE BRECCIA - subvolcanic, cloudy at phenocrysts, feldspar, glassy groundmass.													
233	234																				
234	235	So 235.2			14°			Black shale - banded laminated with P green-grey VC ss intervals.													
235	236	So fault angle			24°			RHYOLITE BRECCIA - brown abt of amorphous feldspar, vfg matrix.													
236	237							Laminated - massive brown ffg VC sandstone large black shale clasts - grades with													
237	238	So 237.0			37°			Rhyolite breccia brown, cloudy at feldspar VC sandstone & grey, laminated at ss, matrix													
238	239							RHYOLITE BRECCIA -													
239	240																				

So 235.6 34°

Hole No.	FTD042	Collar Location (GPS)	Graphical Drill Hole Log		Logged by	Warren	Massive
Project :	EL 26-2004	East :	446230.00	Azimuth :	203.0 degrees (MGA94)	EDrill	Pervasive
Prospect :	Firetower	North :	5405359.00	Declination :	65.0 degrees (provisional)	UDR200	Disseminated
Grid :	MGA84	RL :	647.00	Total Depth :	380.0m (planned)	Drill Date	Narrow vein
		Proj.	MGA94 co-ords	Collar surveyed by:	(reported / 2012)	17/10/2012	10/2012

From	To	Colour/ Weathering	Structure Type 1	Structure Type 2	Angle CA	Graphic structure	Log grainize	Description	Alteration						Mineralization			
									Silica	Sericite	Albite	Carbonate	Chlorite	Hematite	Vein Qtz %	Mineralisation Assemblage	%	Veining Disseminated
300	301				0		301.5	Volcaniclastic sandstone grey mg 300.3 - 301.5 - brecciated by fault										
301	302	S0301-8			33			Volcaniclastic sandstone - 1/8" brown inter laminated grey. 10cm stock strat top 302.25-302.35										
302	303						302.35	Volcaniclastic ss - mg grey 301.5-306 - elongated thin shreds										
303	304	S0303.5			27		303.35	Volcaniclastic ss - 1/8" brown d. grey inter laminations										
304	305				0		304.4	SANDSTONE - grey, mg										
305	306	S0304.6			21			BLACK SHALE laminated banded, occ ss interlams -> occ ss bench.										
306	307																	
307	308																	
308	309																	
309	310	S0307.9			28													
310	311						310.5											
311	312																	
312	313	S12.5-312.7			36			312.5-312.7 shear zone BLACK SHALE										
313	314						313.7	Sandstone Volcaniclastic - ? purple mg, ss										
314	315						314.7	sandstone fine, grey										
315	316																	
316	317						316.6	Sandstone, cream, mg, m-cg										
317	318						317.6	Black shale Sandstone black shale so on a base										
318	319	S19.3			36		319.3	Volcaniclastic Sandstone - grey, mg at fault of either side of the all lam. no detrital or carbonaceous										
319	320	S0320.7			35			Sandstone fine grey near black shale horizons.										
320	321	S0321.6			19		321.6	Black shale banded.										
321	322						321.7	321.7 - 322 grey ss fg BLACK SHALE / Volcaniclastic ss fg banded, lam 50% not rhythmic										
322	323																	
323	324	S0324.8			10													
324	325																	
325	326	S0326.5			4													
326	327																	
327	328						327.9	Volcaniclastic ss - brown breccia ss / black shale ss massive										
328	329							at a pink massive rock Fault Black shale - heavily altered										
329	330	S0329.8			0													

- 329.8
Fault
to fault varied.

FTD042

UNITY MINING LTD

Hole No. FTD041	Collar Location (GPS)	Graphical Drill Hole Log		Logged by AW	Massive
Project: EL 28-2004	East: 446230.00	Azimuth: 223.0 degrees (MGA94)	Drilled by EDrill	Pervasive	
Prospect: Firetower	North: 5405359.00	Declination: 81.0 degrees	Drill type UDR200	Disseminated	
Grid: MGA94	RL: 647.00	Total Depth: 450.0m (planned)	Drill Date 20/09/2012	Narrow vein	
	Proj. MGA94 co-ords	Collar surveyed by:	(reported / /2012)	10/2012	

0.082 1/4 1 4 18 84 mm

From	To	Colour/Weathering	Structure Type 1	Structure Type 2	Angle CA	Graphic structure	Log grain size	Description	Alteration						Mineralization					
									Silica	Sericite	Albite	Carbonate	Chlorite	Hematite	Vein Qtz %	Mineralisation Assemblage	%	Vein	Disseminated	Pervasive
360	361							Andesite lava breccia												
150	151							pink rock area												
361	362																			
151	152																			
362	363																			
152	153																			
362	364																			
153	154																			
364	365																			
154	155																			
365	366																			
155	156																			
366	367																			
156	157																			
367	368																			
157	158																			
368	369																			
158	159																			
369	370																			
159	160																			
370	371																			
160	161																			
371	372																			
161	162																			
372	373																			
162	163																			
373	374																			
163	164																			
374	375																			
164	165																			
375	376																			
165	166																			
376	377																			
166	167																			
377	378																			
167	168																			
378	379																			
168	169																			
379	380																			
169	170																			
380	381																			
170	171																			
381	382																			
171	172																			
382	383																			
172	173																			
383	384																			
173	174																			
384	385																			
174	175																			
385	386																			
175	176																			
386	387																			
176	177																			
387	388																			
177	178																			
388	389																			
178	179																			
389	390																			
179	180																			

Broken ground

365-8
Pumiceous rhyolite breccia (or intrusion) grainy texture at phreatic level
block debris - pumice - solution

CORE LOSS

375.7m on 1/1

378-5
379-1
RHYOLITE LAVA OR INTRUSION at feldspar xls, grainy texture

FTD042

UNITY MINING LTD

Hole No. FTD042	Collar Location (GPS)	Graphical Drill Hole Log		Logged by A. Newman	Massive
Project: EL 26-2004	East: 446230.00	Azimuth: 223.0 degrees (MGA94)	Drilled by EDrill	Pervasive	
Prospect: Firetower	North: 5405359.00	Declination: 61.0 degrees	Drill type UDR200	Disseminated	
Grid: MGA94	RL: 647.00	Total Depth: 450.0m (planned)	Drill Date 20/09/2012	Narrow vein	
Proj. MGA94 co-ords	Collar surveyed by:		(reported / /2012)	10/2012	

0.082 14 1 4 18 64 mm

From	To	Colour/Weathering	Structure type 1	Structure type 2	Angle CA	Graphic structure	Log grain size	Description	Alteration					Mineralization						
									Silica	Sericite	Albite	Carbonate	Chlorite	Hematite	Vein Qtz %	Mineralisation Assemblage	%	Veining Disseminated	Pervasive	
390	391							RYOLITE LAVA (OR INTRUSION)												
150	151							grainy texture of phenocrysts												
391	392							etch par, blocky, jasper coloured												
151	152							blocks.												
392	393																			
152	153																			
393	394																			
153	154								intermittent & selectively											
394	395								fine grained / intermittent											
154	155																			
395	396																			
155	156																			
396	397																			
156	157																			
397	398																			
157	158																			
398	399																			
158	159																			
399	400								399.9 - 401.1 - broken core											
159	160								with grey pug.											
400	401																			
160	161																			
401	402																			
161	162																			
402	403																			
162	163																			
403	404																			
163	164																			
404	405																			
164	165																			
405	406																			
165	166																			
406	407																			
166	167																			
407	408																			
167	168																			
408	409																			
168	169																			
409	410																			
169	170																			
410	411																			
170	171																			
411	412																			
171	172																			
412	413																			
172	173																			
413	414																			
173	174																			
414	415																			
174	175																			
415	416																			
175	176																			
416	417																			
176	177																			
417	418																			
177	178																			
418	419																			
178	179																			
419	420																			
179	180																			

420 421
421 422
422 423
423 424
424 425
425 425.8

EOH 425.8.

424.9 rock becomes siliceous, & very red. silica marks texture but of phenocrysts still visible.

able to see