



Hole No. LSUD01		Collar Location		Summary Drill Hole Log		Logged by BP	
Project : EL 34-2010	East : 384444.00	Azimuth : 107.0 degrees (MGA94)	Drilled by EDH		Drill type UDR300		
Prospect : Lakeside deposit	North : 5375810.00	Declination : 75.5 degrees	Total Depth : 515.4m (confirmed)		Drill Date 29/11/2011		
Grid : MGA94	Proj. : MGA94 co-ords	Collar surveyed by Tritech Professional Services (30/11/2011)		16/12/2011			
Depth	0.00	10	20	30	40	50	60
0.00m - 32.62m - Fluvio-glacial Sediments	<p>0.00m - 30.00m - Fluvio-glacial sediments. 30.00 - 32.62m - Brown clay.</p>						
32.62m - 353.00m - Feldspar Porphyritic Andesitic Lavas and Basalts	<p>33.10 - 220.30m - Andesite typically, dark-grey, massive, feldspar porphyritic intermediate lava. Euhedral to anhedral feldspar phenocrysts 2-4mm diameter. Strongly Chloritised, aphanitic groundmass and common x-cutting quartz-carbonate veining/veinlets. Basalt, typically dark-grey, fine grained, massive with occasional fine feldspar phenocrysts(1-2mm). Common patchy light green chlorite/epidote alteration and silicic-carbonate alteration developed around fractures parallel to foliation.</p>						
116.50m - 133.10m - Basalt							
133.10m - 155.80 - Andesite							
155.00m - 210.80m - Basalt							
210.80m - 226.30m - Andesite							
226.30m - 243.00m - Basalt							
243.00m - 292.91m - Andesite							
292.91m - 373.00m - Silicified Andesitic Volcaniclastics	<p>353.00m - 373.00m - Dark-grey, poorly sorted, strongly silicified, andesite derived feldspar phryic volcaniclastic conglomerate with chloritized matrix and brecciated andesitic clasts; highly brecciated with patchy intense silicification and common x-cutting quartz veining/stockwork.</p>						
373.00m - 374.20m - Henty Fault Zone	<p>316.88m - 319.20m - Brittle deformed andesitic volcaniclastics. 319.20m - 319.90m - Puggy clays and brecciated quartz veining with 3% pyrite</p>						
374.20m - 399.00m - Interbedded Sandstones and Siltstones with Black Shale Bands	<p>374.20m - 399.00m - Dark-grey to black, strongly cleaved/foliated, chloritically altered, laminated thinly bedded sandstone. Sandstone contain thin beds/clasts of shale; fractured with puggy clay bands along bedding shears throughout.</p>						
399.00m - 424.60m - Black Shale and Interbedded Siltstones.	<p>399.00m - 424.60m - Dark-grey to black, strongly cleaved/foliated black shale and interbedded sandstone/siltstone. Graphitic content increasing with depth as well as ductile deformation. py/pyrr +/- aspy veining throughout.</p>						
424.60m - 463.60m - Black Shale	<p>424.60m - 447.12m - Laminated black shale with common x-cutting carbonate alteration and carbonate-pyrite alteration typically as fine veinlets along cleavage planes. 447.12m - 452.10m - Disrupted foliation, quartz-veining and increased pyrrhotite/pyrite/arsenopyrite veining/blebs. 452.10m - 463.60m - Black shale; brecciated with carbonate fracture fill. Strong pyrr/aspy/pyrrh mineralisation from 454-455m, associated with strong brecciation and shearing.</p>						
463.60m - 515.40m(E.O.H.) - Sandstones and Siltstones	<p>Light-grey, quartzose sandstone/siltstone with minor interbedded lenses/clasts of graphitic shales and rare, fine blebs of pyrite, becoming increasingly siliceous with depth. E.O.H @ 515.40m.</p>						



Hole No. LSUD02	Collar Location	Summary Drill Hole Log		Logged by BP
Project : EL 34-2010	East : 384442.00	Azimuth : 126.1 degrees (MSA94)	Drilled by EDH	
Fracture : Lakeside deposit	North : 5375016.30	Declination : 00.0 degrees	Drill type UDR200	
Grid : MGA94	RL : 100.90	Total Depth : 480.0m (planned)	Drill Date 19/12/2011	
	Proj.: MGA94 co-ords	Collar surveyed by Tritech Professional Services (22/12/2011)		

Depth	0	0.002	0.4	1	4	16	64	mm	Description
0.00									<p>0.00m - 33.10m - Fluvio-glacial Sediments</p> <p>0.00m - 30.00m - Fluvio-glacial sediments. 30.00 - 33.10m - Brown clay.</p>
25									
50									
75									
100									<p>33.10m - 220.30m - Feldspar Porphyritic Andesitic Lavas</p> <p>33.10 - 220.30m - Dark-grey, massive, feldspar porphyritic intermediate lava. Euhedral to anhedral feldspar phenocrysts 2-4mm diameter. Strongly Chloritised, aphanitic groundmass and common x-cutting quartz-carbonate veining/veinlets.</p>
125									
150									
175									
200									
225									
250									<p>220.30m - 316.88m - Silicified Andesitic Volcaniclastics</p> <p>220.30m-316.88m - Dark-grey, poorly sorted, strongly silicified, andesite derived feldspar phytic volcaniclastic conglomerate with chloritized matrix and brecciated andesitic clasts; highly brecciated with patchy intense silicification and common x-cutting quartz veining/stockwork.</p>
275									
300									<p>316.88m - 319.20m - Henty Fault Zone</p> <p>316.88m - 319.20m - Brittle deformed andesitic volcaniclastics. 319.20m - 319.90m - Puggy clays and brecciated quartz veining with 3% pyrite</p>
325									
350									<p>319.20m - 480.60m(E.O.H.) - Interbedded Silstones and Black Shale</p> <p>319.90 - 335.00m - Grey, moderate to well sorted, foliated, monomictic siltstone with lesser interbedded graphitic black shale bands. Mineralized with frequent, mostly pyrite veining/blebs +/- pyrrhotite, arsenopyrite. (Main mineralised zone) Sulphide mineralisation decreasing with depth after 335.00m with only rare, mostly pyrite/pyrrhotite veinlets from 340.00m.</p> <p>328.2-328.90m - Semi-massive pyrite/arsenopyrite +/-chalcopyrite, pyrrhotite.</p>
375									
400									<p>362.20m - 389.60m - Zone of moderate sericitizaion/silicification of interbedded silstones and shale. Sharp contact on upper margin.</p>
425									
450									<p>428.00m - 441.00m - Highly brecciated with extensive x-cutting quartz(+/-carb)veining with chloritic alteration. Py/asp/pyrh veining.</p>
475									
500									
525									

Hole No. LSUD03		Collar Location		Summary Drill Hole Log		Logged by BP	
Project : EL 34-2010	East : 384442.80	Azimuth : 128.1 degrees (MGAG4)		Drilled by	EDRill		
Prospect : Lakeside deposit	North : 5375616.30	Declination : 60.0 degrees		Drill type	UDR200		
Grid : MGAG4	RL : 166.90	Total Depth : 480.0m (planned)		Drill Date	21/01/2012		
	Proj. MGAG4 co-ords	Collar surveyed by Tritoch Professional Services (22/12/2011)			2/02/2012		

Depth	0.00	14	1	4	16	64	mm	Description
								
								0.00m-15.50m - Fluvio-glacial sediments.
								15.50m-30.50m - Brown clays with relict, limonitic clasts.
								Central Volcanics Complex
								30.50m-48.25m - Massive, feldspar porphyritic intermediate lavas.
								48.35m-51.95m - Basalt.
								51.95m-119.45m - Massive, feldspar porphyritic intermediate lavas and thin basalt dykes.
								119.45m-120.10m - Quartz veining and basalt breccia.
								123.40m-125.10m - Quartz vein; sulphides 8% - pyrrhotite+pyrite with intergrown arsenopyrite blebs. Strongest from 124.70m-125.10m.
								131.80m-137.00m - Feldspar porphyritic intermediate lavas/breccia with strong quartz veining.
								139.80m-159.80m - Feldspar porphyritic intermediate lavas.
								159.80m-238.33m - Massive Basalt. Sharp contact @ 45 degrees C.A. to underlying feldspar porphyritic intermediate lavas.
								237.70m-238.33m - Quartz vein + semi-massive sulphides; 15-20% Aspy, 10% Pyrrh +/- pyrite+chalcopyrite.
								238.33m-240.45m - Quartz veining + 5-7% sulphides; pyr/pyrrh/asp/veining.
								238.33m-299.25m - Feldspar porphyritic intermediate lavas with occasional thin basalt dykes.
								299.25m-376.70m - Strongly silicic altered andesite derived volcanoclastic sediments/breccia.
								360.10m-360.20m - Brecciated quartz vein with strong sulphide mineralisation; pyrite/arsenopyrite/chalcopyrite. Sample# 15445.
								370.80m-380.70m - Chalcopyrite/pyrite vein +/- arsenopyrite. Sample# 15452.
								376.70m-383.40m - Henty Fault Zone - Broken ground, fractured volcanoclastics, puggy clay bands and occasional x-cutting quartz veins. Core Loss - 1.7m
								Henty Fault
								383.4m-384.30m - Henty Fault - Puggy fault clays and gravel.
								Farrell States
								384.30m-401.75m - Dark-grey, thinly bedded, foliated, monomictic silty sandstone with fine interbedded black shale lenses. Common x-cutting quartz veining with associated pyr/asp/pyrrh mineralisation. Localised brecciation and disrupted foliation.
								401.75m-462.10 - Black shale.
								403.80m-403.90m - Small fault.
								401.75m-462.10 - Laminated black shale with occasional interbedded sandstones lenses. Common fine carbonate alteration parallel to foliation/bedding plane and as fracture fill in brecciated intersections. Sporadic pyr/asp/pyrrh veining from 401.0m-420.0m. Finely disseminated pyrite throughout.
								462.10m-462.60m - Faulted contact with underlying quartzose sandstones.
								462.60m-482.40m - Light-grey, thinly bedded, foliated quartzose sandstones. (End of Hole).

Hole No. LSUD04		Collar Location		Summary Drill Hole Log		Logged by BP	
Project : EL 34-2010		East : 384449.70		Azimuth : 116.4 degrees (MGA94)		Drilled by EDrill	
Prospect : Lakeside deposit		North : 5375351.70		Declination : 72.8 degrees		Drill type UDR200	
Grid : MGA94		RL : 171.40		Total Depth : 400.0m (planned)		Drill Date 21/01/2012	
		Proj. : MGA94 co-ords		Collar surveyed by Tritech Professional Services (22/12/2011)		2/02/2012	
Depth		mm		Description			
0.003 1/4 1 4 16 64							
25				0.00m-14.40m - Fluvio-glacial sediments.			
50							
75				<p>Central Volcanics Complex</p> 14.40m-101.10m - Massive, feldspar porphyritic intermediate lavas and thin basalt dykes.			
100				1101.10m-1118.60m - Basalt. 118.60m-120.00m - Fault; brecciated basalt/cataclasite and 200mm of powdered/ground calcite crystals, minor puggy clay.			
125				120.00m-127.35m - Basalt and basalt derived breccia. 127.35m-128.00m - Fault; puggy clay bands and silicified, brecciated buff coloured volcanics with mostly framboidal pyrite blebs and lesser accessory sphalerite/arsenopyrite/pyrrhotite. Strong silicic alteration and quartz veining patchy pyr/pyrrh/asy and haematite alteration. Cataclasite band with green to pink (fluorite?) alteration mineral with 1% aspy veining.			
150							
175				128.00m-283.60m - Strongly silicic altered, andesite derived volcanoclastic breccia.			
200							
225				283.60m-287.70m - Henty Fault Zone - Broken ground, fractured volcanoclastics, puggy clay bands and occasional x-cutting quartz veins. Core Loss - 1.4m Henty Fault 283.60m-287.70m - Henty Fault - Puggy fault clays, fractured silicified volcanoclastics and cataclasite. Pyrite +/- pyrrhotite/arsenopyrite in silicified volcanoclastic breccias. Mostly pyrite (minor chalco) in puggy clay with associated green oxidation mineral.			
250							
275				<p>Farrell Slates</p> 300.80m-301.25m - Fault; grey puggy clays and fractured sandstone. 301.25m-304.80m - Dark-grey, thinly bedded, foliated, monomictic sandstone with increased graphitic component from 304.2m-304.80m + increased qtz/pyr/pyrrh/asy veining and sparse chalcopryrite blebs. 300.80m-301.25m - Fault; grey puggy clays and fractured sandstone. 301.25m-304.80m - Dark-grey, thinly bedded, foliated, monomictic sandstone with increased graphitic component from 304.2m-304.80m + increased qtz/pyr/pyrrh/asy veining and sparse chalcopryrite blebs. 304.80m-305.10m - Fault; puggy dark clays. 305.10m-307.10m - Sandstone with interbedded black shale bands. Sulphide mineralisation focussed within shales, kinked foliation with aspy/pyr/pyrrh/quartz veining, strongest from 306.0m-306.50m. 307.10m-307.18m - Small fault. 307.10m-330.00m - Silicified/baked siltstone.; thinly bedded, grey siltstones becoming increasingly silicified with depth. Weak sericitisation from 316.0m-330.00m. 342.90m-345.10m - x-cutting quartz veining and pyr/asy/pyrrh veining focussed around joint plane.			
300							
325							
350							
375							
400				307.10m-374.00m - Silty Quartzose Sandstone (End of Hole).			

Hole No. LSUD05	Collar Location	Summary Drill Hole Log		Logged by BP
Project: EL 34-2010	East: 384451.80	Azimuth: 117.7 degrees (MGA94)	Drilled by EDrill	
Prospect: Lakeside deposit	North: 5375350.70	Declination: 55.1 degrees	Drill type UDR200	
Grid: MGA94	RL: 171.40	Total Depth: 348.90m	Drill Date 21/01/2012	
	Proj. MGA94 co-ords	Collar surveyed by Trittech Professional Services (22/12/2011)		2/02/2012

Depth	0.062	1/4	1	4	16	64	mm	Description	
									0.00m-14.80m - Fluvio-glacial sediments.
25									
50									
75									Central Volcanics Complex 14.80m-91.45m - Massive, feldspar porphyritic intermediate lavas and thin basalt dykes.
100									91.45m-91.82m - Semi-heated fault; sulphide veining. 91.82m-221.30m - Strongly silicic altered, andesite derived volcanoclastic breccia
125									
150									91.82m-221.30m - Strongly silicic altered, andesite derived volcanoclastic breccia
175									
200									
225									Henty Fault 221.30m-222.00m - Henty Fault - Puggy fault clays, fractured silicified volcanoclastics and cataclasite. (HFLT)
250									222.00m-224.85m - Silicified volcanoclastic breccia. Farrell Slates 224.85m-230.20m - Sandstone with minor black shale bands.
275									235.10m-236.60m - Black shale with siltstone bands.
300									
325									236.60m-296.00m - Grey sandstone/siltstone. 296.00m-302.20m - Black Shales with thin sandstone lenses. 302.20m-348.90m - Black shale with occasional thin siltstone bands. (E.O.H)
350									348.90 (E.O.H)
375									