

DDH MS002 SUMMARY LOG

Hole ID : MS002
 Location : High Point
 Azimuth : °
 Dip : -90°
 Easting : 388627
 Northing : 5392675
 Elevation : 685
 Collared : 14 July 2008
 Completed : 9 August 2008

Hole MS002	From (m)	To (m)	Lithology
SOUTHWELL SUBGROUP	0	65.8	VOLCANICLASTIC POLYMICT MASS FLOW BRECCIA underlain by thin (1.2m thick) AMYGDALOIDAL BASALT unit then a basal finely PYRITIC /minor CHALCOPYRITIC (<5% of rock) VUGGY SILICA BOULDER BED 7m thick (derived from a lithocap?)
QUE RIVER SHALE	65.8	145.3	BLACK SHALE – laminated, finely pyritic. Occasional normally graded thin bedded feldspathic sandstone intervals
	145.3	210.3	BASALT – calcite filled amygdales, doleritic medial portion, top 15cm of underlying black shale hornfelsed
QUE RIVER SHALE	210.3	406	BLACK SHALE - black, laminated, finely pyritic
HANGING WALL BASALT	406	463	HYALOCLASTIC BASALT LAVA – top half is hyaloclastite with calcite/minor qtz matrix then amygdaloidal basalt bottom half. Ubiquitous disseminated PYRITE (1% to 3%). Pyritic black shale rip-up clasts at basal contact.
	463	528	BLACK SHALE – laminated, finely pyritic with amygdaloidal BASALT (thin hyaloclastic top and peperitic base) 480.8m – 515.7m
	528	529.1	FAULT – tectonic breccia
	529.1	535	LITHIC QUARTZ GRIT/SANDSTONE – normal graded bedding
	535	537.3	HYALOCLASTIC AMYGDALOIDAL BASALT
	537.3	539.2	FAULT – tectonic breccia
	539.2	544.7	BLACK SHALE – finely pyritic, fine sandy laminations
	544.7	550.8	FAULT – tectonic breccia
HANGING WALL BASALT	550.8	726.65	HYALOCLASTIC PEPERITIC AMYGDALOIDAL BASALT with three wide spaced 10m to 20m wide massive BLACK SHALE interbeds containing fine sandy laminations
	726.65	759.7	BASALT – amygdaloidal. SPHALERITE with intergrown

			CHALCOPYRITE (and rarely GALENA) in amygdaloids increases to trace to 1% (locally 3%) of rock from 747.2m - 759.7m. Minor SPHALERITE stringers.
	759.7	767.8	BLACK SHALE – massive, finely pyritic, fine sandy laminations. Red-brown SPHALERITE veinlets and stringers 765.4m - 765.8m (5% - 10% of rock).
	767.8	781.8	BASALT – amygdaloidal. Red-brown SPHALERITE filled amygdaloids and flecks (15%) 778.4m - 778.6m. Basal 60cm peperitic.
	781.8	783.8	BLACK SHALE – massive, finely pyritic. Red-brown SPHALERITE stringers (1% of rock) in top half and rare PYRITE stringers and laminae in bottom half.
HANGING WALL BASALT	783.8	997.7	HYALOCLASTIC/PEPERITIC BASALT LAVA FLOWS – 26 flows 1m – 31m wide (usually 10 m –12m) with hyaloclastic tops, peperitic middles, massive amygdaloidal bases and scoured basal contacts. Trace to 3% disseminated PYRRHOTITE/minor PYRITE patches in hyaloclastite matrices. Rare red-brown SPHALERITE filled amygdaloids and stringers. One rounded scour fragment 2cm across from underlying andesite just above the contact.
FOOTWALL ANDESITE	997.7	1070	ANDESITE LAVA FLOWS - six flows, 5m to 15m wide. Feldspar phyric with abundant white euhedral to anhedral plagioclase phenocrysts 1mm - 2mm across and ubiquitous black chlorite flecks 1mm - 2mm across (?after ferromagnesian minerals) in an amorphous groundmass. Very rare ARSENOPYRITE grains <1mm across.
FOOTWALL ANDESITE	1070.3	1156.0 (EOH)	SILICEOUS ALTERED ANDESITE - very hard, silica-chlorite-sericite and locally silica-albite-hematite altered. Feldspar phyric with moderate density (less abundant than overlying andesite) white euhedral to anhedral plagioclase phenocrysts 1mm - 3mm across and ubiquitous black chlorite/sericite flecks 2mm - 5mm across (?after ferromagnesian minerals) in an amorphous groundmass. Three hyaloclastite ?flow tops, one with disseminated PYRITE.