

Project: **PHE S STG 1** Hole commenced: **31 JAN 20** Completed:

Borehole location: **ROWALLAN** Supervised by: **LV** Checked by:

Drill model and mounting: **KL 800 Track Mounted** Fluid: **H<sub>2</sub>O + CRP** Company: **+DS**

Barrel type and length: **HQ 3 4.1m barrel** Bearing: **Vertical** Slope: Driller: **A. Peke**

Method/c-lift	Water	RL depth (m)	Graphic log core loss	Rock descriptions: ROCK NAME, grain size and type, colour, texture (porphyritic, amorphous, glassy) and fabric (distinct/indistinct bedding, lamination, foliation, cleavage), inclusions or minor components, moisture content, durability	Weathering	Strength	Defect spacing (mm)	RQD %	Rock mass descriptions (vertical) and significant defect descriptions (horizontal): defect type, orientation relative to core axis, shape, roughness, coating, aperture or thickness and composition
DD T HQ			Q	<b>QUARTZITE (Cont'd)</b> Micaceous zones 70 deg CA define relict bedding?	FR ↓				270.25 - 270.35 JOINTS 70 deg CA. Undulating to curved. smooth, clean.
		271	Q					76	270.60 JOINT 60 deg CA Undulating. Smooth, clean.
		272	Q					78	270.90 JOINT Subaxial to 45° CA. Stepped, smooth, clean. Defect along trace of veinlet 20.5mm
		273	Q					100	271.90 - 271.95 Veinlets, Subaxial, 20.5mm. Irregular shaped defects preferentially along veinlet bounding surface.
		274	Q						272.10 JOINT 60 deg CA Planar, smooth, coating of muscovite. Defect on 2mm mica rich band
		275	Q					4	272.35, 272.70, 272.90, 273.85 JOINTS, 70 deg CA. Planar, Smooth, Clean.
		276	Q					33	274.05 - 274.25 JOINT. 20-30 deg CA. Undulating to Curved. Smooth. Clean.
		277	Q					87	274.35 JOINT 45 Deg CA Undulating to Planar Smooth. Clean
		278	Q						274.30 - 275.00, SHEARED ZONE. Subaxial, 0.5 - 2cm width. Generally parallel banding. Commencement of quartzite clasts 1-5mm in size. Translucent, secondary, silicification apparent, 275.2 - 275.80, JOINT. Subaxial to 20 deg CA. Planar to Undulating. Rust. White powdery veneer.
		279	Q					73	276.00, 276.25, 276.50, 276.55 277.50, 278.40* 279.10, 279.90 JOINTS - 70 to 80 deg CA. Planar to Undulating. Smooth, clean. * Vuggy, granular, translucent quartz vein.

KEY	Case-lift	Graphic log/core loss	Weathering	Rock material strength
Method SO sonic drilling AD auger drilling HFA hollow RR roller/tricone W <sub>size</sub> washbore DC <sub>size</sub> diamond drilling	<p>casing used barrel withdrawn 6 May 20 water level, date shown water inflow partial drilling water loss complete drilling water loss</p>	<p>core recovered (hatching indicates material) no core recovered (NCR) Grain size (mm) fine medium coarse 0.06 to 0.2 0.2 to 0.6 0.6 to 2 mainly &lt;0.06 0.06 to 2 mainly &gt;2</p>	<p>RS Residual soil XW Extremely weathered HW Highly weathered MW Moderately weathered SW Slightly weathered Fr Fresh DW = distinctly weathered</p>	<p>Rock strength [Is(50) in MPa] VL Very low [0.3 to 0.1] L Low [0.1 to 0.3] M Medium [0.3 to 1] H High [1 to 3] VH Very high [3 to 10] EH Extremely high [10+] x Point Load Test</p>