

ROCK TESTING SERVICE

The rock testing facilities and technical expertise at Rock Mechanics Technology Ltd. allow a complete in-house rock testing service to ISRM standards encompassing core logging, sample preparation and determination of a range of rock properties. The company has unrivalled experience and expertise in testing Coal Measures strata and uses a state of the art test machine.

Company geologists are available to conduct lithological and fracture logs of cores and provide interpretation relevant to rock reinforcement / support.

We can prepare core samples with diameters ranging from 25mm to 100mm; the use of a subcorer allows the flexibility to sample larger diameter cores or irregular lump samples. In all cases sample preparation can be conducted wet or dry, the latter allowing particularly weak samples to be prepared.

Rock testing is conducted in a 1000kN stiff test machine with a subsidiary load cell to allow accurate testing at low loads. Routine tests include Uniaxial Compressive Strength and Young's Modulus using Linear Variable Displacement Transducers. Strain gauged rosettes are used where the Poisson's Ratio of the sample is required.

- Complete service of logging, sampling and rock testing;
- Unrivalled experience in testing Coal Measures rocks;
- Testing to ISRM standards for strength, stiffness and Poisson's Ratio determination;
- On-going research programme to improve the quality of core drilled and preparation and testing of weak rock types.



ROOF STRATA GEOTECHNICAL ASSESSMENT									
CLIENT: RJB Mining (UK) Ltd.					SITE: A Mine A Seam A District				
DATE CORED: 29/Feb/96					DRILLING METHOD: TT56 Core Barrel + Liner				
DRILLED BY: Rock Mechanics					LOGGED BY: L Kent				
MATERIAL PROPERTIES				Thickness (m)	Height (m)	Log Fracture	Log Lithological	LITHOLOGICAL DESCRIPTION	
U.C.S. (MPa)	ELASTIC MODULUS (GPa)	STRENGTH STIFFNESS RATIO	SAMPLE POSITION						
72.21	14.0	5.12	7	1.0	5			SANDSTONE Medium grained, cross-laminated in parts. Competent.	
68.68	11.7	5.84	6	0.8	4			SAND / SILTSTONE Sandstone/Siltstone finely interlaminated. Competent.	
64.07	12.6	5.07	5		3			SILTSTONE Fine grained. Homogenous.	
63.54	12.3	5.14	4	1.7					
59.75	18.7	3.19	3		2				
46.87	11.2	4.15	2	1.1				SILT/MUDSTONE Contains occasional thin ironstone lenses.	
35.83	14.8	2.4	1	0.8		X X X X		MUDSTONE Dark grey, smooth. Weak.	
					0	X X X X		BOTTOM OF CORE	
					-1			COAL	

----- Low Friction Plane

——— Natural Bedding Parting

X X X X Fracture Oblique to Bedding

Broken Core

RMT REF. NO 1420

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Rock Testing Service, Issue 2, Last amended date 15.06.2003

