



TEST CERTIFICATE

SGS Australia Pty Ltd
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Bassendean WA 6054

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Client:	Ammtec Ltd	Client Job No:	
Order No:	103986	Project:	Submitted Sample
Tested Date:	2/07/2012	Location:	
SGS Job Number:	12-01-1182	Sample No:	12-MT-5490
Lab:	Bassendean	Sample ID:	A14307 JMET #1 (19.80 - 21.19m)

UNIAXIAL COMPRESSIVE STRENGTH OF ROCK

AS4133.4.2.1

Failure Diagram not to scale:

Indicative Only

Sample Type: PQ Core

INITIAL SPECIMEN DETAILS

Core Diameter (mm): 85.3

Length/Diameter Ratio: 2.4

Bulk Dry Density (t/m3): 2.866

Moisture Content (%): 0.0

UNIAXIAL

COMPRESSIVE

STRENGTH (MPa): 8.14



Moisture Condition: Specimen prepared at the moisture condition as received. Polished wet

Deviation from Standard: Less than required minimum

Mode of Failure: Axial failure

Duration of Tests 5.5 mins

Note: Sample supplied by client.

Bulk Density value was determined by the Calliper method

Dimensions & Mass for bulk density calculation were determined on the specimen immediately before loading. Dry mass was calculated from the moisture content (AS 4133.1.1.1) taken from the UCS specimen

Bulk Density was not immersed hence Porosity has not been reported. Bulk Dry Density has been reported. Full immersion would have affected the pre-test condition.

Tested on a hydraulic compression machine

Approved Signatory:

(Chris.Howard)

Date: 3/07/2012



Accredited for compliance with ISO/IEC 17025

Accreditation No.: 2418 Form No. PF-(AU)-[IND(MTE)]-TE-R300.LCER/A/01.01.2009
Client Address: 6 MacAdam Place Balcatta 6021

Site No.: 2411
Cert No.: 12-MT-5490-R300
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Client:	Ammtec Ltd	Client Job No:	
Order No:	103986	Project:	Submitted Sample
Tested Date:	29/06/2012	Location:	
SGS Job Number:	12-01-1182	Sample No:	12-MT-5491
Lab:	Bassendean	Sample ID:	A14307 JMET #4 (14.86 - 15.0m)

UNIAXIAL COMPRESSIVE STRENGTH OF ROCK

AS4133.4.2.1

Failure Diagram not to scale:
Indicative Only

Sample Type: HQ3 Core

INITIAL SPECIMEN DETAILS

Core Diameter (mm): 60.6
Length/Diameter Ratio: 2.5

Bulk Dry Density (t/m3): 3.284

Moisture Content (%): 0.2

**UNIAXIAL
COMPRESSIVE
STRENGTH (MPa): 21.9**



Accreditation No. 2418

Moisture Condition: Specimen prepared at the
moisture condition as
received. Polished wet
Mode of Failure: Shattered failure
Duration of Tests: 6.4 mins

Note: Sample supplied by client.

Bulk Density value was determined by the Calliper method

Dimensions & Mass for bulk density calculation were determined on the specimen immediately before loading. Dry mass was calculated from the moisture content (AS 4133.1.1.1) taken from the UCS specimen

Bulk Density was not immersed hence Porosity has not been reported. Bulk Dry Density has been reported. Full immersion would have affected the pre-test condition.

Tested on a hydraulic compression machine

Approved Signatory:



(Chris.Howard)

Date: 3/07/2012



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Client:	Ammtec Ltd	Client Job No:	
Order No:	103986	Project:	Submitted Sample
Tested Date:	29/06/2012	Location:	
SGS Job Number:	12-01-1182	Sample No:	12-MT-5492
Lab:	Bassendean	Sample ID:	A14307 JMET #4 (23.90 - 24.15m)

UNIAXIAL COMPRESSIVE STRENGTH OF ROCK

AS4133.4.2.1

Failure Diagram not to scale:
Indicative Only

Sample Type: HQ3 Core

INITIAL SPECIMEN DETAILS

Core Diameter (mm): 60.9

Length/Diameter Ratio: 2.5

Bulk Dry Density (t/m³): 3.121

Moisture Content (%): 0.2

**UNIAXIAL
COMPRESSIVE
STRENGTH (MPa): 54.6**



Moisture Condition:	Specimen prepared at the moisture condition as received. Polished wet
Deviation from Standard:	Non-uniformity of sides exceeds limits of test method
Mode of Failure:	Irregular failure
Duration of Tests	13.1 mins

Note: Sample supplied by client.

Bulk Density value was determined by the Calliper method

Dimensions & Mass for bulk density calculation were determined on the specimen immediately before loading. Dry mass was calculated from the moisture content (AS 4133.1.1.1) taken from the UCS specimen

Bulk Density was not immersed hence Porosity has not been reported. Bulk Dry Density has been reported. Full immersion would have affected the pre-test condition.

Tested on a hydraulic compression machine

Approved Signatory:

(Chris.Howard)

Date: 3/07/2012



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Client:	Ammtec Ltd	Client Job No:	
Order No:	103986	Project:	Submitted Sample
Tested Date:	29/06/2012	Location:	
SGS Job Number:	12-01-1182	Sample No:	12-MT-5493
Lab:	Bassendean	Sample ID:	A14307 JMET #4 (30.09 - 30.30m)

UNIAXIAL COMPRESSIVE STRENGTH OF ROCK

AS4133.4.2.1

Failure Diagram not to scale:

Indicative Only

Sample Type: HQ3 Core

INITIAL SPECIMEN DETAILS

Core Diameter (mm): 61.0

Length/Diameter Ratio: 2.4

Bulk Dry Density (t/m3): 2.890

Moisture Content (%): 0.0

**UNIAXIAL
COMPRESSIVE
STRENGTH (MPa): 19.8**



Moisture Condition: Specimen prepared at the moisture condition as received. Polished wet

Deviation from Standard: Less than required minimum

Mode of Failure: L/D Ratio of 2.5

Mode of Failure: Shear failure

Duration of Tests 6.3 mins

Note: Sample supplied by client.

Bulk Density value was determined by the Calliper method

Dimensions & Mass for bulk density calculation were determined on the specimen immediately before loading. Dry mass was calculated from the moisture content (AS 4133.1.1.1) taken from the UCS specimen

Bulk Density was not immersed hence Porosity has not been reported. Bulk Dry Density has been reported. Full immersion would have affected the pre-test condition.

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Order No:	103986	Project:	Submitted Sample
Tested Date:	29/06/2012	Location:	
SGS Job Number:	12-01-1182	Sample No:	12-MT-5494
Lab:	Bassendean	Sample ID:	A14307 JMET #4 (48.60 - 48.87m)

UNIAXIAL COMPRESSIVE STRENGTH OF ROCK

AS4133.4.2.1

Failure Diagram not to scale:

Indicative Only

Sample Type: HQ3 Core

INITIAL SPECIMEN DETAILS

Core Diameter (mm): 61.0

Length/Diameter Ratio: 2.4

Bulk Dry Density (t/m3): 3.089

Moisture Content (%): 0.0

UNIAXIAL

COMPRESSIVE

STRENGTH (MPa): 28.3



Moisture Condition: Specimen prepared at the moisture condition as received.

Deviation from Standard: Less than required minimum
L/D Ratio of 2.5

Mode of Failure: Shear failure

Duration of Tests 10.1 mins

Note: Sample supplied by client.

Bulk Density value was determined by the Calliper method

Dimensions & Mass for bulk density calculation were determined on the specimen immediately before loading. Dry mass was calculated from the moisture content (AS 4133.1.1.1) taken from the UCS specimen

Bulk Density was not immersed hence Porosity has not been reported. Bulk Dry Density has been reported. Full immersion would have affected the pre-test condition.

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