



TEST REPORT

Client Booth Ventures Ltd
Address Harwood Quarry Landfill Site
Brookfold Lane
Harwood
Bolton
BL2 4LT

Contract Ravenhead Quarry,
Skelmersdale

Job Number MRN 3219/2
Date of Issue 06 June 2018
Page 1 of 3

Approved Signatories

S J Hutchings, O P Davies

Notes

- 1 All remaining samples and remnants from this contract will be disposed 28 days from the date of this report unless you notify us to the contrary.
- 2 Result certificates, in this report, not bearing a UKAS mark, are not included in our UKAS accreditation schedule.
- 3 Opinions and interpretations expressed herein are outside the scope of our UKAS accreditation
- 4 Certified that the samples have been examined and tested in accordance with the terms of the contract/order and unless otherwise stated conform to the standards/specifications quoted. This does not, however, guarantee the balance of the materials from which the tested samples have been taken to be of equal quality.



MURRAY RIX

33C VAUXHALL INDUSTRIAL ESTATE
GREG STREET, REDDISH, STOCKPORT SK5 7BR
TEL 0161 475 0870 FAX 0161 475 0871



TEST CERTIFICATE

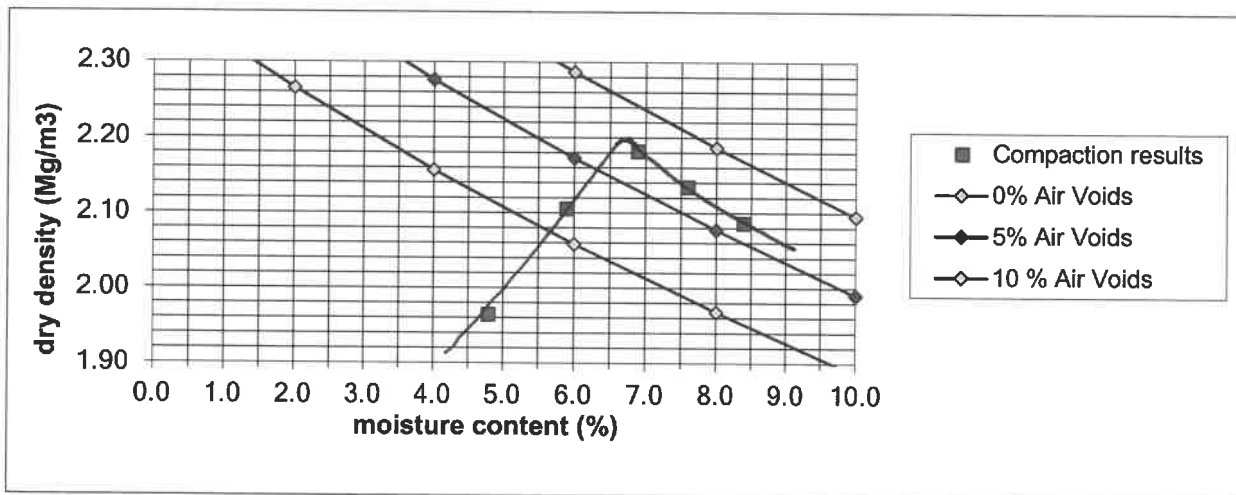
DRY DENSITY/MOISTURE CONTENT RELATIONSHIP VIBRATING HAMMER
BS EN 13286-4:2003

CLIENT	Booth Ventures Ltd
SITE	Ravenhead, Skelmersdale
JOB NUMBER	MRN 3219/3

SAMPLE LABEL	Subbase Type 1	DATE SAMPLED	Not advised
LAB SAMPLE No	76782	DATE RECEIVED	11-May-18
DATE TESTED	15-May-18	SAMPLED BY	Client

MATERIAL	Subbase, Type 1
ADVISED SOURCE	Stockpile - Ravenhead Quarry, Skelmersdale
PRE TREATMENT	Air Dried

Point Number	Moisture Content (%)	Dry Density (Mg/m ³)
1	4.8	1.964
2	5.9	2.105
3	6.9	2.181
4	7.6	2.134
5	8.4	2.086
	Optimum	
	Maximum	2.20
	Particle Density	2.65 (Assumed)



REMARKS/ABNORMALITIES

Percentage of material retained on 40mm sieve = 1%
Percentage of material retained on 20mm sieve = 41%

SIGNED

NAME O.P. Davies
(Deputy Laboratory Manager)

DATE

06-Jun-18

MURRAY RIX

33c VAUXHALL INDUSTRIAL ESTATE
GREG STREET, REDDISH, STOCKPORT SK5 7BR
TEL 0161 475 0870 FAX 0161 475 0871

TEST CERTIFICATE

FROST HEAVE of AGGREGATE
BS 812-124:2009

Client. Booth Ventures Ltd
Site Ravenhead Quarry, Skelmerdale

Job Number MRN 3219/3

Sample Number 76782

Date Sampled Not advised
Date Tested 22 May 2018

Date Received 11 May 2018
Sampled by Client

Material Subbase, Type 1
Advised Material Source As client and site above

Dry Density/Moisture Content

Maximum Dry Density		Sample was prepared at	
Dry Density	2.20 Mg/m ³	Dry Density	2.20 Mg/m ³
Optimum Water Content	6.6 %	Moisture Content	6.6 %

Particle Size Distribution

BS Test Sieve (mm)	Test Portion	Stable Test Specimen
63.0	100	100
31.5	87	87
16	53	53
8.0	39	39
4.0	29	29
1.0	17	17
0.063	6.9	6.9

Maximum Heave Observed in 96 Hours (mm)

Number	Reference Specimen	Test Specimen
1	14.5	12.7
2	14.8	12.9
3	14.7	12.6
Mean	14.7	12.7

Comment -
Sample was "Non Frost Susceptible"

Signed



NAME O.P. Davies
(Deputy Laboratory Manager)

Date 06 June 2018