

LABORATORY TEST REPORT

TEST : PARTICLES SIZE DISTRIBUTION OF AGGREGATE

TESTED TO BS EN 933 - 1 : 2012 CLAUSE 7

SHEET No:	25216	LAB No:	0	TLC No:	2661
CLIENT :	DESERT DIAMOND				
CONTRACTOR:	M/s. DESERT DIAMOND TRADING CO.				
PROJECT:	GABBRO AGGREGATES SUPPLY				
SAMPLE ID	12197				
SAMPLE RECEIVED DATE (LAB)	06/02/2013	TESTING DATE	09/02/2013		
MATERIAL DESCRIPTION	Agg. 20mm / Gabbro	REPORTING DATE	11/02/2013		
SOURCE OF MATERIAL	FUJAIRAH - U.A.E.	SAMPLING LOCATION	MESAIEED		
SAMPLED BY	LAB TECH	DELIVERED BY	LAB TECHNICIAN		
TEST METHOD	WET METHOD	DATE OF SAMPLING (SITE)	06/02/2013		

RESULTS OBTAINED

BS Seives,mm	Wt.Retained (g)	Passing %	Specification QCS 2010	
40	0	100	100	100
31.5	0	100	98	100
25	0	100	85	99
10	1743	9	0	20
4	162	0	0	5
Passing 0.063 mm	1			
Total	1906			

Remarks :

- Sample Procedure : Not Provided
- The test Result is related only to the sample tested.
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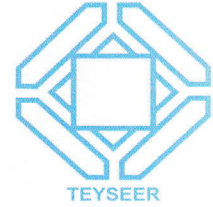
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C. R. NO.3299/023

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TEST REPORT OF FLAKINESS INDEX

TESTED TO BS EN 933 – 3 : 1997

CLIENT	DESERT DIAMOND		
CONTRACTOR	M/s. DESERT DIAMOND		
PROJECT	GABBRO SUPPLY	SHEET NO.	606
MATERIALS	AGG. 20mm / GABBRO	SAMPLE DATE	06/02/2013
SOURCE	FUJAIRA (UAE)	TESTING DATE	09/02/2013
LOCATION	MESAIEED	REPORTING DATE	11/02/2013
SAMPLE ID NO.	12197	TLC NO.	2663

SIEVE ANALYSIS TO BS EN 933 – 1

Sieves, mm	Wt. Retained, (g)	Passing (%)
25/31.5	0	0
20/25	77	0
16/20	499	23
12.5/16	767	76
10/12.5	389	59
8/10	127	11
6.3/8	23	8
5/6.3	11	1
4/5	9	1

Total Wt. Retained	1902 g	Total Weight Passing 179 g
Flakiness index	9.4 %	

➤ QCS 2010 Limits : Maximum 30% For Coarse Aggregates

➤ MATERIALS SAMPLED AND DELIVERED BY : LAB TECHNICIAN

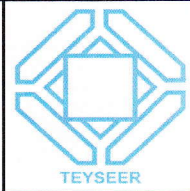
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MAHMOUD T. ALI
LABORATORY MANAGER

Page – 1 OF 1



LABORATORY TEST REPORT

TEST : ELONGATION INDEX

TESTED TO BS 812 : PART 105 SECTION 105.2 : 1990

SHEET No:	25237	LAB No:	0	TLC No:	2665
CLIENT :	DESERT DIAMOND				
CONTRACTOR:	M/s. DESERT DIAMOND TRADING CO.				
PROJECT:	GABBRO AGGREGATES SUPPLY				
SAMPLE ID	12197				
SAMPLE RECEIVED DATE (LAB)	06/02/2013	TESTING DATE	09/02/2013		
MATERIAL DESCRIPTION	Agg. 20mm / Gabbro	REPORTING DATE	11/02/2013		
SOURCE OF MATERIAL	FUJAIRAH - U.A.E.	SAMPLE LOCATION	MESAIEED		
SAMPLED BY	LAB TECH	DELIVERED BY	LAB TECHNICIAN		
CONDITIONS OF SAMPLE RECEIVED	Acceptable	DATE OF SAMPLING (SITE)	06/02/2013		

TEST RESULTS

BS Sieves, mm	Seive analysis To BS 812 : Part 103.1,1985 - Procedure 7.3			Elongation Gauge Wt.Retained (g)
	Wt.Retained (g)	Retained %	Passing %	
28.0	0	0.0	100	0
20.0	62	3.3	97	0
14.0	1015	53.6	43	213
10.0	666	35.2	8	253
6.3	151	8.0	0	110

TOTAL WT.RETAINED (M1) = 1894 g

REDUCED WT. (M2) = 1832 g

ELONGATION INDEX = 31 %

TOTAL WT.RETAINED (M3) = 576 g

QCS 2010 LIMITS : Each stockpile 30% maximum for all courses and the average of all stockpile shall not exceed 25% for Wearing course And (35% Maximum for Concrete use Coarse Agg.)

Remarks :

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Doc. No. F109, Rev 02, 28th February, 2011

TEST REPORT OF THE BULK DENSITY OF AGGREGATES (Unrodded)

Client	DESERT DIAMOND	SH. No. : 131	
Contractor	M/S. DESERT DIAMOND		
Project	GABBRO SUPPLY		
Material	AGG. 20mm / GABBRO	Sample Date	06/02/2013
Sampled by	LAB TECHNICIAN	Testing Date	10/02/2013
Source	FUJAIRA (UAE)	Reporting Date	11/02/2013
Sample ID. No.	12697	TLC NO	2667

TESTED TO ASTM C 29/C & 29M - 97 (2003)

Test No.		1	2
Wt. of aggregates + cylindrical measure	kg	19.516	19.530
Wt. of cylindrical measure	kg	8.740	8.740
Wt. of aggregates = M	kg	10.776	10.790
Volume of cylindrical measure = V	m ³	0.0063	0.0063
Bulk density of the aggregates = M/V	kg/m ³	1710	1713
Average bulk density of the aggregates	kg/m ³	1712 kg/m ³	

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TEST REPORT OF THE MATERIAL FINER THEN 75 UM SIEVE

Client	DESERT DIAMOND	SHEET NO. : 140	
Contractor	M/s. DESERT DIAMOND		
Project	GABBRO SUPPLY		
Material	Agg. 20mm / GABBRO	Sample Date	06/02/2013
Sampled by	LAB TECHNICIAN	Testing Date	09/02/2013
Source	FUJAIRA (UAE)	Reporting Date	11/02/2013
Sample ID NO.	12197	TLC NO	2669

TO ASTM C 117- 04

TEST	Result obtained (%)	Method
Material finer then 75 um	0.5%	TEST. 8 - METHOD A

QCS 2010 LIMITS : Max. 2 % for coarse & 3 % for natural uncrushed/crushed AND
2 % for coarse & 5 % for fine crushed aggregates.

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TEST REPORT OF THE SHELL CONTENT

Client	DESERT DIAMOND	SHEET NO. : 095	
Contractor	M/s. DESERT DIAMOND		
Project	GABBRO SUPPLY		
Material	AGG. 20mm / GABBRO	Sample Date	06/02/2013
Sampled by	LAB TECHNICIAN	Testing Date	10/02/2013
Source	FUJAIRA (UAE)	Reporting Date	11/02/2013
Sample ID NO.	12197	TLC NO	2671

TESTED TO BS EN 933 - 7

TEST	RESULT OBTAINED (%)
SHELL CONTENT	0.0%

QCS 2010 Limits : Maximum 3% For fine & Course Aggregates.

REMARKS :

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LABORATORY TEST REPORT

TEST : PARTICLE DENSITIES AND WATER ABSORPTION

TESTED TO BS 812 : PART 2 : 1995

SHEET No.	25286	LAB No	0	TLC No.	2731
CLIENT	DESERT DIAMOND				
CONTRACTOR	M/s. DESERT DIAMOND TRADING CO.				
PROJECT	GABBRO AGGREGATES SUPPLY				
SAMPLE ID	12197				
MATERIAL DESCRIPTION	Agg. 20mm / Gabbro	SAMPLE LOCATION	MESAIEED		
SAMPLING DATE (SITE)	06/02/2013	SAMPLE RECEIVED DATE (LAB)	06/02/2013		
SOURCE OF MATERIAL	FUJAIRAH - U.A.E.	TESTING DATE	10/02/2013		
SAMPLED BY	LAB TECH	REPORTING DATE	13/02/2013		
DELIVERED BY	LAB TECHNICIAN	CONDITION OF SAMPLE RECEIVED	SATISFACTORY		

TEST RESULTS

Test	Method
Particle Densities And Water Absorption	5.4

RESULT OBTAINED

Material	O. D Basis Mg/m ³	S. S. Dry Basis Mg/m ³	Apparent Mg/m ³	Water Absorption%
Agg. 20mm / gabbro	2.916	2.927	2.948	0.4

QCS 2010 Limits : For Asphalt use - Water Absorption : Max. 1.5% for all courses and Max. 2% for Base course. And For Concrete use 2.3% Max. for fine Agg. and 2% Max. for Coarse Agg. And Particle Density : 2.6% Min. for fine Agg. & Coarse Agg.

Remarks :

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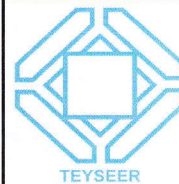
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Doc. No. F 110, Rev. 01, 10th of April, 2011



LABORATORY TEST REPORT

TEST : LOS ANGELES ABRATION

TESTED TO ASTM C131 & C535 : 1989

SHEET No:	25283	LAB No:	0	TLC No:	2729
CLIENT :	DESERT DIAMOND				
CONTRACTOR:	M/s. DESERT DIAMOND TRADING CO.				
PROJECT:	GABBRO AGGREGATES SUPPLY				
SAMPLE ID	12197				
SAMPLE RECEIVED DATE (LAB)	06/02/2013	TESTING DATE	10/02/2013		
MATERIAL DESCRIPTION	Agg. 20mm / Gabbro	REPORTING DATE	13/02/2013		
SOURCE OF MATERIAL	FUJAIRAH - U.A.E.	SAMPLE LOCATION	MESAIEED		
SAMPLED BY	LAB TECH	DELIVERED BY	LAB TECHNICIAN		
CONDITIONS OF SAMPLE RECEIVED	Acceptable	DATE OF SAMPLING (SITE)	06/02/2013		

TEST RESULTS

Test	Method	Result Obtained (%)
Los Angeles Abrasion	ASTM C131, Procedure 8	11.6

QCS 2010 Limits	For Asphalt use : Maximum 25% for wearing course & Maximum 30% for Intermediate & Base course And For Concrete use : 30% Maximum course Aggregates.
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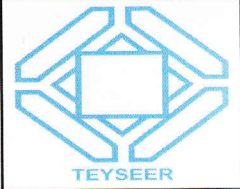
Remarks :

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LABORATORY TEST REPORT

TEST : TEN PERCENT FINES VALUE

TESTED TO BS 812 : PART 111 : 1990

SHEET No.	25376	LAB No	0	TLC No.	3001
CLIENT	DESERT DIAMOND				
CONTRACTOR	M/s. DESERT DIAMOND TRADING CO.				
PROJECT	GABBRO AGGREGATES SUPPLY				
SAMPLE ID	12197				
SOURCE OF MATERIAL	FUJAIRAH - U.A.E.	SAMPLING DATE (SITE)	06/02/2013		
SAMPLE RECIVED DATE (LAB)	06/02/2013	TESTING DATE	13/02/2013		
MATERIAL DESCRIPTION	Agg. 20mm / Gabbro	REPORTING DATE	15/02/2013		
SAMPLED BY	LAB TECH	DELIVERED BY	LAB TECHNICIAN		
SAMPLE CONDITION	Acceptable	SAMPLE LOCATION	MESAIEED		

TEST RESULTS

Test	Method	Result Obtained (kN)
Ten Percent Fine Value	Procedure - 7	360

QCS 2010 Limits : Minimum 150 kN For Concrete

Remarks :

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LB-069

Doc. No. F113, Rev. 01, 1st of April, 2011

TEST REPORT OF THE AGGREGATE IMPACT VALUE

CLIENT	DESERT DIAMOND	SHEET NO. : 140	
CONTRACTOR	M/s. DESERT DIAMOND		
PROJECT	GABBRO SUPPLY		
MATERIAL	Agg. 20mm / GABBRO	Sample Date	06/02/2013
SAMPLED BY	LAB TECHNICIAN	Testing Date	13/02/2013
SOURCE	FUJAIRA (UAE)	Reporting Date	15/02/2013
SAMPLE ID NO.	12197	TLC NO	3003

TESTED TO BS EN 1097 - 2


TEST	RESULT OBTAINED (%)
AGGREGATE IMPACT VALUE	8.7 %

QCS 2010 Limits : 25% Maximum for Coarse Aggregates

REMARKS :

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LB-069

Doc. No. F239 , Rev. 01 , 15th June, 2012

TEST REPORT OF THE CLAY LUMPS & FRIABLE PARTICLES

Client	DESERT DIAMOND	SHEET NO : 121	
Contractor	M/s. DESERT DIAMOND		
Project	GABBRO SUPPLY		
Material	Agg. 20mm / GABBRO	Sample Date	06/02/2013
Sample by	LAB TECHNICIAN	Testing Date	13/02/2013
Source	FUJAIRA (UAE)	Reporting Date	15/02/2013
Sample ID No.	12197	TLC NO	3005

TESTED TO ASTM C 142 - 78 : 1990

TEST	METHOD	RESULTS OBTAINED (%)
Clay Lumps & Friable Particles	Procedure - 6	0.2 %

QCS 2010 Limits : Maximum 2% for Fine Agg. And Max. 2% for Coarse Aggregates.

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LABORATORY TEST REPORT

TEST REPORT OF THE SOUNDNESS

TESTED TO ASTM C 88-1990

SHEET No.	25382	LAB No	0	TLC No.	3060
CLIENT	DESERT DIAMOND				
CONTRACTOR	M/s. DESERT DIAMOND TRADING CO.				
PROJECT	GABBRO AGGREGATES SUPPLY				
SAMPLE ID	12197				
DATE OF SAMPLING (SITE)	06/02/2013	SAMPLE RECEIVED DATE (LAB)	06/02/2013		
MATERIAL DESCRIPTION	Agg. 20mm / Gabbro	TESTING DATE	13/02/2013		
SOURCE OF MATERIAL	FUJAIRAH - U.A.E.	REPORTING DATE	16/02/2013		
SAMPLED BY	LAB TECH	DELIVERED BY	LAB TECHNICIAN		
NO. OF CYCLES	5	CONDITION OF SAMPLE RECEIVED	SATISFACTORY		

TEST RESULTS

Test	Method	Result Obtained (%)
SOUNDNESS	Procedure - 8	2.1

QCS 2010 Limits : For Asphalt use : Maximum 10% for Wearing & Intermediate course & Maximum 15% for Base course. And For Concrete use : 15% Maximum Fine Agg. & Course Agg.

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Doc. No. F123, Rev. 01, 10th April, 2011

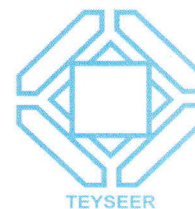
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TEST REPORT OF CHEMICAL ANALYSIS

CLIENT	DESERT DIAMOND		
CONTRACTOR	M/s. DESERT DIAMOND		
PROJECT	GABBRO SUPPLY	SHEET NO.	1550
MATERIAL	AGGREGATES 20mm / GABBRO	TLC NO.	3062
SOURCE	FUJAIRA (UAE)	SAMPLE DATE	06/02/2013
LOCATION	MESAIEED	TESTING DATE	14/02/2013
SAMPLE ID No.	112197	REPORT DATE	16/02/2013

TESTED TO BS EN 1744 –5 & 1744 – 1

TEST	RESULT OBTAINED (%)
ACID SOLUBLE SULPHATE CONTENT (SO ₃)	0.055 %
ACID SOLUBLE CHLORIDE CONTENT (Cl)	0.015 %

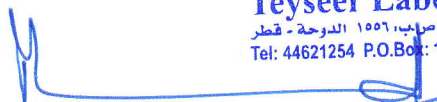
QCS 2010 Limits : So₃ - Max. 0.3% For Coarse Aggregates And Max. 0.4% For Fine Aggregates

QCS 2010 Limits : Cl - Max. 0.03% For Coarse Aggregates And Max. 0.06% For Fine Aggregates

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Page – 1 of 1

Doc. No. F254, Rev. 00 , 1st of September 2012