

DOCUMENT TRANSMITTAL

Ref. No.	: FSL JUBAIL : SA08-3012	Date	: 13 October 2015
To	: A.H. Al Marhoon & Bros.Co Rahima, Saudi Arabia Fax: (03) 667-4721		
Attention	: Plant Manager		
Re	: Monthly Aggregate Testing – October 2015		

Please find enclosed the following documents:


Quantity	Document Reference	
1 each	3/4" Coarse Aggregate	Lab.No. 11721
-do-	3/8" Coarse Aggregate	Lab.No. 11722
-do-	Dune Sand	Lab.No. 11723
-do-	Summary Combined Aggregate	Lab No. 11721 – 11722
-do-	Chemical Analysis, Water	Lab No. 11724
	Invoice #	
Remarks:	ARAMCO & SCECO Specs.	

We request you to return a signed copy of this document transmittal form by facsimile transmission on
03 341-2701

Regards,

Receipt confirmation of document(s)

FUGRO-SUHAIMI LTD.


Muhammad Nawaz
Lab. Supervisor
050-6800943

Signature :

Name (print) :

Date :

Company Stamp:



ACCREDITED
Certificate # 3512.05

Construction Materials Testing Laboratory
Jubail Branch

P.O. Box 2165 – Tel.: (013) 341 2700
Dammam 31451 – Fax.: (013) 341 2701
Saudi Arabia – E-mail.: fsljubail@fugro-suhaimi.com



السحيمي - فيفرو

SUMMARY OF TEST REPORT

Client	A.H. Al Marhoon & Bros. Co.	Job No.	SA08-3012
Project	Concrete Batch Plant, Rahima	Lab No.	11721
Material	3/4" (20 mm) Coarse Aggregate	Date Sampled	04 Oct. 2015
Source	Al Osais, Abuhadriya (Sampled by FSL)	Date Reported	12 Oct. 2015

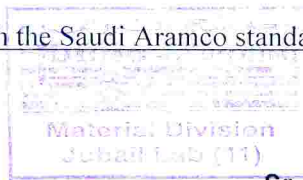
Properties:


Properties Tested	Test Method	Results	S. Aramco Specification
Sieve analysis	ASTM C-136	See Attached	--
Material finer than No. 200 sieve %	ASTM C-117	0.53	5.0 max.
Clay lumps & friable particles %	ASTM C-142	0.38	5.0 Max.
Los Angeles Abrasion	ASTM C-131		
Loss at 100 revolutions %		8.3	--
Loss at 500 revolutions %		33.2	40 max.
Ratio 100/500 rev.		0.25	--
Magnesium sulfate soundness loss (5 cycles) %	ASTM C-88	8.8	25.0 max.
Specific gravity and absorption	ASTM C-127		
Apparent		2.626	--
SSD basis		2.585	--
Dry basis		2.559	--
Absorption		1.0	2.5 max
Acid soluble chloride, (Cl), %	ASTM C 114		
		0.020	0.03 max
Acid soluble sulphate (SO ₄), %	BS-812 Part 118	0.053	0.40 Max
Flakiness index	BS-812	7.5	--
Elongation index	BS-812	9.7	--
Coal & lignite	ASTM C-123	NIL	--

Remarks: All test results indicate compliance with the Saudi Aramco standard 09-SAMSS-088.

Tested By: Thomas David
CTTA # : 0194

Reviewed By: Imran Ahmed
CTTA # : 0556




Sr. Laboratory Supervisor
Muhammad Nawaz CTTA # 0037

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Certificate # 3512.05

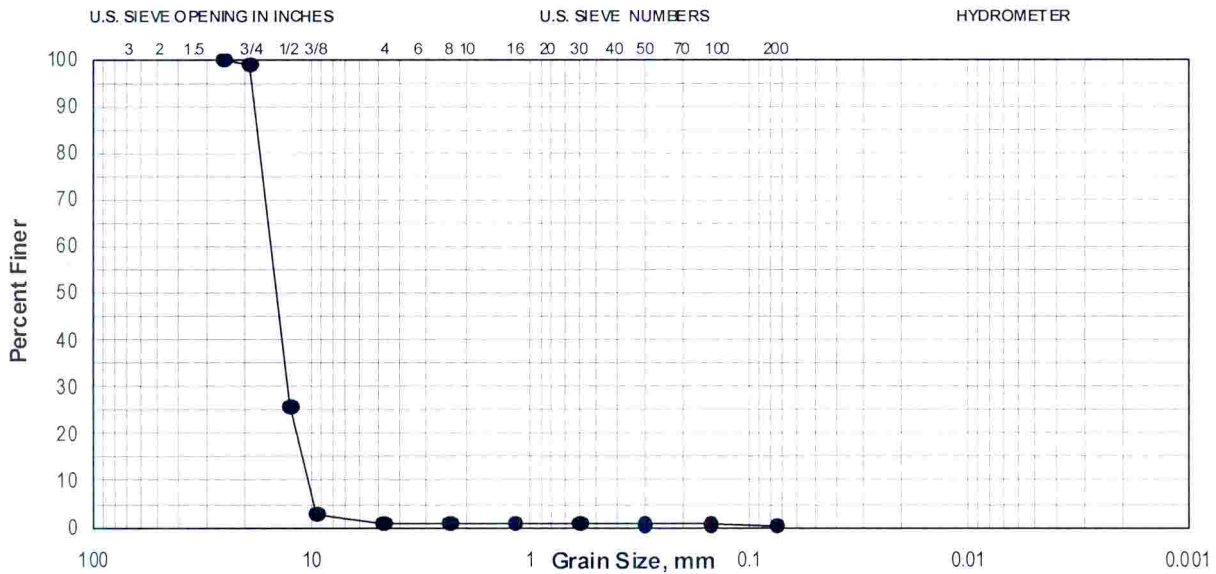
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PARTICLE SIZE ANALYSIS TEST REPORT

Client	A.H. Al Marhoon & Bros. Co.	Job No.	SA08-3012
Project	Concrete Batch Plant, Rahima	Lab No.	11721
Material	3/4" (20 mm) Coarse Aggregate	Date Sampled	04 Oct. 2015
Source	Al Osais, Abuhadriya (Sampled by FSL)	Date Tested	05-06 Oct. 2015
Method	ASTM C-136/117	Date Reported	12 Oct. 2015



Gravel		Sand			Silt or Clay
Coarse	fine	Coarse	medium	fine	

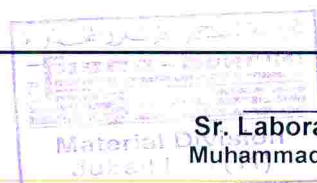
Description of Sand / Gravel Particles:

Shape	Hardness	Specific Gravity

Sieve Size Inch(mm)	Passing g %	Specification	Properties Tested		
			Item	Description	Result
1 (25.0 mm)	100				
3/4 (19 mm)	99				
1/2 (12.5 mm)	26				
3/8 (9.5 mm)	3				
#4 (4.75 mm)	1				
#8 (2.36 mm)	1				
#16 (1.18 mm)	1				
#30 (0.600 mm)	0.96				
#50 (0.300 mm)	0.90				
#100 (0.150 mm)	0.87				
#200 (0.075 mm)	0.53				

Remarks	
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Tested By: Thomas David Reviewed By: Imran Ahmed
CTTA # : 0194 CTTA # : 0556



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