

DOCUMENT TRANSMITTAL

Ref. No.	: FSL JUBAIL : SA08-3012	Date	: 18 May 2015
To	: A.H. Al Marhoon & Bros.Co Rahima, Saudi Arabia Fax: (03) 667-4721		
Attention	: Plant Manager		
Re	: Monthly Aggregate Testing – May 2015		

Please find enclosed the following documents:


Quantity	Document Reference	
1 each	3/4" Coarse Aggregate	Lab.No. 10670
-do-	3/8" Coarse Aggregate	Lab.No. 10671
-do-	Dune Sand	Lab.No. 10672
-do-	Summary Combined Aggregate	Lab No. 10670 – 10671
-do-	Chemical Analysis, Water	Lab No. 10673
	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:

### SUMMARY OF TEST REPORT

Client	A.H. Al Marhoon & Bros. Co.	Job No.	SA08-3012
Project	Concrete Batch Plant, Rahima	Lab No.	10670
Material	3/4" (20 mm) Coarse Aggregate	Date Sampled	30 Apr. 2015
Source	Al Osais, Abuhadriya (Sampled by FSL)	Date Reported	17 May 2015

Properties:

Properties Tested	Test Method	Results	SCECO Specs.
Sieve analysis	ASTM C-136	See Attached	--
Material finer than No. 200 sieve %	ASTM C-117	0.4	5.0 Max.
Clay lumps & friable particles %	ASTM C-142	0.22	1.0 Max.
Los Angeles Abrasion	ASTM C-131		
Loss at 100 revolutions %		7.3	--
Loss at 500 revolutions %		31.9	35 Max.
Ratio 100/500 rev.		0.23	0.25 max
Magnesium sulfate soundness loss (5 cycles) %	ASTM C-88	14	18 Max.
Specific gravity and absorption	ASTM C-127		
Apparent		2.658	--
SSD basis		2.611	--
Dry basis		2.582	--
Absorption		1.1	2.5 max
Acid soluble chloride, (Cl), %	ASTM C 114		
(NaCl), %		0.004	0.03 max
		0.005	
Acid soluble sulphate (SO <sub>3</sub> ), %	BS-812 Part 118		
(SO <sub>4</sub> ), %		0.121	0.5 max
Flakiness index	BS-812	9.5	30 Max.
Elongation index	BS-812	12	45 Max.
Coal & lignite	ASTM C-123	NIL	0.5 Max.

Remarks:

Tested By: Jose Daniel  
CTTA # : 0195

Reviewed By: Imran Ahmed  
CTTA # : 0556

شركة السحيمي - فيفرو المحدودة  
FUGRO - SUHAIMI  
Material Director  
Jubail  
Sr. Laboratory Supervisor  
Muhammad Nawaz CTTA # 0037

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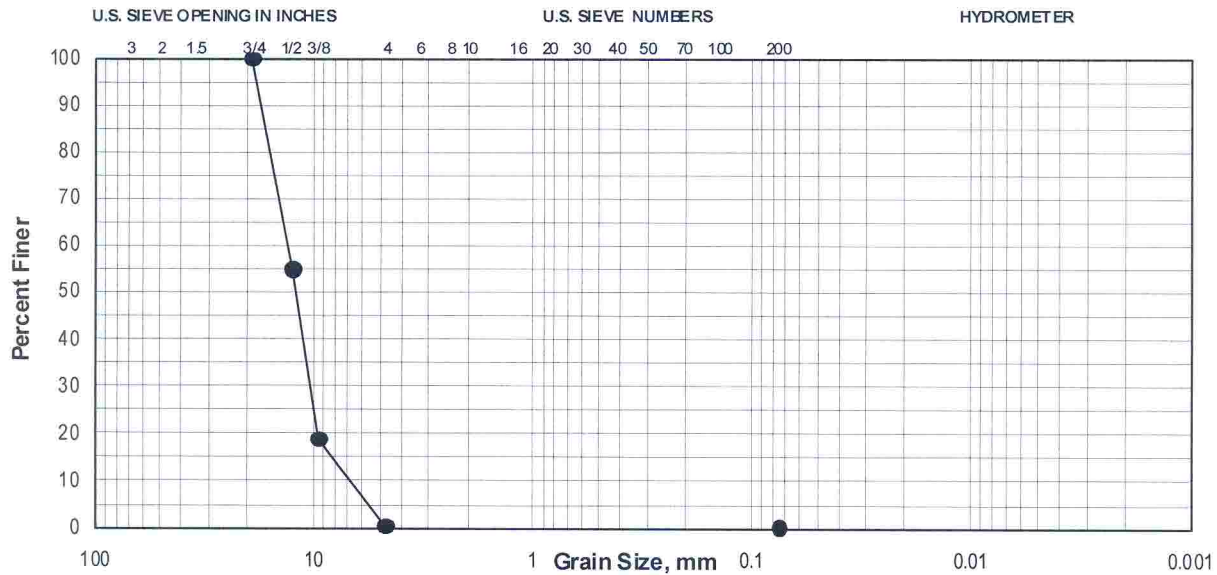
## Construction Materials Testing Laboratory Jubail Branch

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### PARTICLE SIZE ANALYSIS TEST REPORT

<b>Client</b>	A.H. Al Marhoon & Bros. Co.	<b>Job No.</b>	SA08-3012
<b>Project</b>	Concrete Batch Plant, Rahima	<b>Lab No.</b>	10670
<b>Material</b>	3/4" (20 mm) Coarse Aggregate	<b>Date Sampled</b>	30 Apr. 2015
<b>Source</b>	Al Osais, Abuhadriya (Sampled by FSL)	<b>Date Tested</b>	02 May 2015
<b>Method</b>	ASTM C-136/117	<b>Date Reported</b>	17 May 2015



<b>Gravel</b>		<b>Sand</b>			<b>Silt or Clay</b>
Coarse	fine	Coarse	medium	fine	

#### Description of Sand / Gravel Particles:

<b>Shape</b>	<b>Hardness</b>	<b>Specific Gravity</b>

Sieve Size Inch(mm)	Passing g %	Specification	Properties Tested		
			Item	Description	Result
1 (25.0 mm)					
3/4 (19 mm)	100				
1/2 (12.5 mm)	55				
3/8 (9.5 mm)	19				
#4 (4.75 mm)	0.5				
#8 (2.36 mm)	-				
#16 (1.18 mm)	-				
#30(600)	-				
#50(300)	-				
#100 (0.15 mm)	-				
#200 (75 mm)	0.4				

<b>Remarks</b>	
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Tested By: Jose Daniel  
CTTA # : 0195

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CTTA # : 0556



[Signature]

**Sr. Laboratory Supervisor**  
Muhammad Nawaz CTTA # 0037

