

## Auditing Test Report

Lab No. : 40163-3

### Client

Saudi Vitrified Clay Pipe Co.  
P.O. Box 6415  
Riyadh 11442  
Kingdom of Saudi Arabia

Date: 13/02/2018

Job No. SA13-4043

Sampling Date:

23/01/2018

Testing Date:

12/02/2018

### Auditing Purpose:

Testing of Vitrified Clay Pipes jointed by system C according to EN 295-1:2013

### Size Description:

Nominal Size: **DN 400 \* 2500 mm**  
Jointing System: System C  
Class: 200

### Description of Sampling

Samples were collected randomly from the stock at the client's manufacturing works in Riyadh (Kingdom of Saudi Arabia) by the agent of the Suhaimi - Fugro

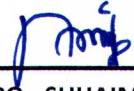
### Underlying specification /description of the tests

EN 295-1:2013	"Vitrified clay pipe systems for drains and sewers - Part 1: Requirements for pipes, fittings & joints"
GSO EN 295-1:2008	"Vitrified clay pipe systems for drains and sewers - Part 1: Requirements for pipes, fittings & joints"
EN 295-2:2013	"Vitrified clay pipe systems for drains and sewers - Part 2: Evaluation of conformity and sampling"
EN 295-3:2012	"Vitrified clay pipe systems for drains and sewers - Part 3: Test Methods"



**Test Results**

	Test Type		Unit	Sample 1	Sample 2	Sample 3	Req.	Result
	<b>Pipes</b>	Marking (visual Inspection)		-	✓	✓	✓	✓
Crushing Strength		KN/m	105	107	101	≥ 96	✓	
Internal Barrel Diameter "D1"		mm	402	401	403.5	≥ 390	✓	
Length		mm	2505	2501	2500	2500 <sup>+4%</sup> <sub>-1%</sub>	✓	
Water Tightness		L/m <sup>2</sup>	0.02	0.001	0.03	≤ 0.04	✓	
Deviation from Straightness		mm	1.5	1.3	0.9	< 3.0	✓	
Squareness of Ends		Socket	mm	4.2	4.1	3.4	< 8.0	✓
		Spigot	mm	4.8	3.8	3.5		
Airtightness		mm	17	14	12	Drops ≤ 25	✓	
Water Absorption		%	4.1	3.8	3.8	≤ 6 %	✓	
<b>Joint Assembly</b>	Joint Interchangeability		mm	515.7	515.6	515.8	515.5 ± 0.5	✓
	Watertightness under Angular Deflection		-	No leak, Deflection applied is 30 mm/m for 5 min.			No visible leakage	✓
	Watertightness under Shear		-	No leak, Shear force applied is 10.0 KN for 15 min.			No visible leakage	✓
	Continuity of Invert		mm	3.5	3.4	3.1	≤ 4	✓

  
**FUGRO - SUHAIMI LTD**

**ANIL K MATHEW**

