

## Auditing Test Report

Date: 05/07/2018

Lab No. : 40329-12

Jab No.: SA13-4043

### Client

Saudi Vitrified Clay Pipe Co.

P.O. Box 6415

Riyadh 11442

Kingdom of Saudi Arabia

### Sampling Date:

03/07/2018

### Testing Date:

04/07/2018

### Auditing Purpose:

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

### Size Description:

Nominal Size: **DN 300 \* 2000 mm**  
Jointing System: **System C**  
Class: **240**

### 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	84	77	81	≥ 72	✓	
Internal Barrel Diameter "D1"		mm	306	302	305	≥ 293	✓	
Length		mm	2008	2010	2005	2000 <sup>+4%</sup> <sub>-1%</sub>	✓	
Water Tightness		L/m <sup>2</sup>	0.015	0.022	0.013	≤ 0.04	✓	
Deviation from Straightness		mm	1.4	1.8	1.3	< 4.0	✓	
Squareness of Ends		Socket	mm	2.8	2.7	3.0	< 6.0	✓
		Spigot	mm	3.2	2.4	2.6		
Airtightness		mm	12	14	12	Drops ≤ 25	✓	
Water Absorption		%	2.5	3.3	3.8	≤ 6 %	✓	
<b>Joint Assembly</b>	Joint Interchangeability		mm	398.6	398.8	398.5	398.5 ± 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 7.5 KN for 15 min.			No visible leakage	✓
	Continuity of Invert		mm	2.7	3.1	2.5	≤ 4	✓

  
**FUGRO - SUHAIMI LTD**  
 Material Division  
 (Riyadh Lab. 01)  
 C. R. 2050004110  
 (Stamp Valid only for Lab Test Reports)  
 ختم صالح فقط لتقارير المختبر  
**ANIL K MATHEW**