

## Auditing Test Report

Date: 05/07/2018

Lab No. : 40329-7

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 200 SS \* 2000 mm**  
Jointing System: System C  
Class: 160

### 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	
Pipes	Marking (visual Inspection)	-	✓	✓	✓	✓	✓	
	Crushing Strength	KN/m	56	63	59	≥ 45	✓	
	Internal Barrel Diameter "D1"	mm	199	202	201	≥ 195	✓	
	Length	mm	2010	2005	2005	2000 <sup>+4%</sup> <sub>-1%</sub>	✓	
	Water Tightness	L/m <sup>2</sup>	0.015	0.01	0.019	≤ 0.04	✓	
	Deviation from Straightness	mm	2.1	1.5	2.6	< 4.0	✓	
	Squareness of Ends	Socket	mm	2.8	3.2	2.3	< 6.0	✓
		Spigot	mm	1.6	2.5	2.2		
	Airtightness	mm	8	10	10	Drops ≤ 25	✓	
	Water Absorption	%	3.3	3.1	3.7	≤ 6 %	✓	
	Bending Moment Resistance	KNm	11.2	10.5	10.9	≥ 6.2	✓	
Joint Assembly	Joint Interchangeability	mm	260.1	260.3	260.4	260 ± 0.5	✓	
	Watertightness under Angular Deflection	-	No leak, Deflection applied is 80 mm/m for 5 min.			No visible leakage	✓	
	Watertightness under Shear	-	No leak, Shear force applied is 5.0 KN for 15 min.			No visible leakage	✓	
	Continuity of Invert	mm	1.7	2.9	2.5	≤ 4	✓	

