

## Auditing Test Report

Date: 12/7/2017

Lab No. : 40155-5

### Client

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

### Sampling Date:

10/7/2017

### Testing Date:

11/7/2017

### Auditing Purpose:

Testing of Perforated Vitrified Clay Pipes jointed by system C according to EN 295-5:2013

### Size Description:

Nominal Size: **DN 300 \* 2000 mm Half Perforated**  
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"  
EN 295-5:2013 "Vitrified clay pipe systems for drains and sewers - Part 5: Requirements for pipes & fittings"  
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	55	56.5	54.2	≥ 48	✓
	Internal Barrel Diameter "D1"	mm	299.4	302	301	≥ 293	✓
	Length	mm	2004	2015	2009	2000 <sup>+4%</sup> <sub>-1%</sub>	✓
	Perforation Area	mm <sup>2</sup> /m	10215.2			≥ 900	✓
	Deviation from Straightness	mm	1.4	1.5	2.4	< 4.0	✓
	Water Absorption	%	3.2	3.1	2.5	≤ 6 %	✓
<b>Joint Assembly</b>	Joint Interchangeability	mm	371.5	371.3	371.4	371 ± 0.5	✓
	Continuity of Invert	mm	1.1	1.7	2	≤ 4	✓
	Chemical Resistant	% loss	0.15% & 0.19%, Two test pieces have been immersed totally in 500 ml of H <sub>2</sub> SO <sub>4</sub> & NaOH solutions for 48 h at a temperature of (20 ± 5) °C			0.1% to 0.25%	✓

FUGRO - SUHAIMI LTD

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