

**Auditing Test Report**

Date: 06/07/2018

Lab No. : 40329-19

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:**

05/07/2018

**Auditing Purpose:**

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

**Size Description:**

Nominal Size:	DN 500 * 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	94	89	97	≥ 80	✓	
Internal Barrel Diameter "D1"		mm	502	505	504	≥ 487	✓	
Length		mm	2005	2009	2010	2000 <sup>+4%</sup> <sub>-1%</sub>	✓	
Water Tightness		L/m <sup>2</sup>	0.028	0.034	0.025	≤ 0.04	✓	
Deviation from Straightness		mm	0.7	1.5	1.1	< 3.0	✓	
Squareness of Ends		Socket	mm	4.2	3.9	4.5	< 10.0	✓
		Spigot	mm	5.0	5.8	5.5		
Airtightness		mm	10	16	10	Drops ≤ 25	✓	
Water Absorption		%	4.5	5.2	4.9	≤ 6 %	✓	
Joint Assembly	Joint Interchangeability		mm	637.3	637.3	637.4	637 ± 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 12.5 KN for 15 min.			No visible leakage	✓
	Continuity of Invert		mm	3.8	3.1	3.5	≤ 5.0	✓



FUGRO - SUHAIMI LTD

ANIL K MATHEW