

## Auditing Test Report

Test Report No. 258816/20

Date: 21/07/2024

### Client

Saudi Vitrified Clay Pipe Co.

P.O. Box 6415

Riyadh 11442

Kingdom of Saudi Arabia

Sampling Date: 17/07/2024

Test Date: 18/07/2024

### Auditing Purpose:

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

### Size Description:

Nominal Size:

DN 150 \* 1500 mm

Jointing System:

System F

Class:

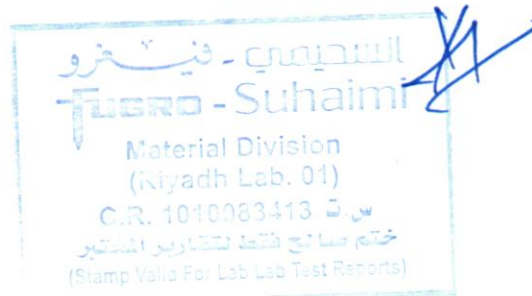
34 KN/m - Class B

### 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"
WN ZP 295:2022	'Glazed vitrified clay pipes, fittings and their accessories for drains and sewers"
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 of DN 150 mm - Class B**

Test Report No. 258816/20

Test Type		Unit	Sample 1	Sample 2	Sample 3	Req.	Result	
Pipes	Marking (visual Inspection)	-	✓	✓	✓	✓	✓	
	Crushing Strength	KN/m	43	47	49	≥ 34	✓	
	Internal Barrel Diameter "D1"	mm	153	150	151	≥ 146	✓	
	Length	mm	1510	1502	1505	1500 <sup>+4%</sup> <sub>-1%</sub>	✓	
	Water Tightness	L/m <sup>2</sup>	0.03	0.01	0.02	≤ 0.04	✓	
	Deviation from Straightness	mm	2.4	3.2	2.5	< 4.5	✓	
	Squareness of Ends	Socket	mm	1.7	1.7	2.0	< 6.0	✓
		Spigot	mm	1.8	1.8	1.9		
	Airtightness	mm	5	0	10	Drops ≤ 25	✓	
	Chemical Resistance	%	0.20	0.19	0.17	0.10-0.25%	✓	
	Water Absorption	%	2.2	2.5	2.1	≤ 6 %	✓	
	Bending Moment Resistance	KNm	10.7	11.4	10.8	≥ 5.0	✓	
Joint Assembly	Joint Interchangeability (D3)	mm	186.4	186.5	186.5	186 ± 2.0	✓	
	Watertightness under Deflection	0.5 bar	No leak, for 5 minutes under Deflection of 100 mm/m			No visible leakage	✓	
	Watertightness under shear						No leak, for 15 minutes under shear load of 3.75 KN	
	Watertightness of joint assembly	1.0 bar	No leak, for 15 minutes without shear or deflection					
		2.4 bar					✓	
Continuity of Invert	mm	N/A			N/A		✓	

FUGRO - SUHAIMI LTD

Mohammad Afaq

