

**ISO 15848-1:2015**  
**Methane Fugitive Emission Test Report**

*Performed for*

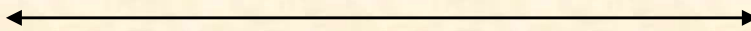
**Clarke Valve**

[www.clarkevalve.com/](http://www.clarkevalve.com/)



1 inch Shutter Valve  
with a 1 inch NPT Connection  
Product Code: SV1-NPT-D-316L-CV71-01

Project Number: 219160  
Test Start Date: April 9, 2019



*Performed by*

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**YARMOUTH RESEARCH AND TECHNOLOGY, LLC**

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# Yarmouth Research and Technology, LLC

## Fugitive Emission Test Data Sheet

Customer: Clarke Valve

Date: 4/9/2019

Project #: 219160

Valve Description: 1 inch Shutter Valve with a 1 inch NPT connection

Product Code: SV1-NPT-D-316L-CV71-01

Sample Supplied by: Customer

Stem Diameter: 15.9 mm

Packing Nut Torque: Not applicable, no packing studs and nuts

### Test Conditions

Test Standard: ISO/FDIS 15848-1:2015

Test Stand: Yarmouth Stand 1

Tightness Class: AM

Allowable: 50 PPMv

Test Media: 99% Methane

Endurance Class: CC3 100000 Mechanical Cycles

Temperature Class: RT

Pressure Class: 300

Rating: 600 psig @ambient

Testing Method: Suck Through Method

Mounting Position: Stem and Bore Horizontal

Max. Allowable Bonnet Gasket Leakage: 50 PPMv by sniffing method

Leakage Device: Baseline

Cycling Rate: 1 cycle per 15 seconds

### Test Data Summary - Stem Seal

Cycle Number	Nom.Temp (C)	Static Stem Seal Leakage (PPMv)		Packing Retorque See Notes
		Avg.	Max.	
0	20	1	1	
5,000	20	1	1	
10,000	20	1	1	
15,000	20	0	1	
20,000	20	1	1	
40,000	20	1	1	
60,000	20	0	1	
80,000	20	1	2	
100,000	20	1	2	
Maximum Leakage:		1	2	
Maximum Allowable:		50	50	

# Yarmouth Research and Technology, LLC

## *Test Data Summary - Body Seal*

<i>Cycle Number</i>	<i>Nom.Temp (C)</i>	<i>Leakage - PPMv</i>	
		<i>Avg.</i>	<i>Max.</i>
0	20	1	1
20,000	20	1	1
60,000	20	0	1
100,000	20	1	1
Maximum Leakage:		1	1
Maximum Allowable:		50	50

## *Test Data Summary - Operating Actuator Pressure*

<i>Cycle Number</i>	<i>Nom.Temp (C)</i>	<i>Operating Actuator Pressure (psig)</i>
0	20	70
100,000	20	69

## *Packing Retorque Notes:*

<i>Adjustment Number</i>	<i>Static Leakage Readings before Tightening (PPMv)</i>		<i>Before Adjustment Nut Torque (ft-lb)</i>	<i>After Adjustment Nut Torque (ft-lb)</i>	<i>Operating Actuator Pressure (psig)</i>	
					<i>Before Adjustment</i>	<i>After Adjustment</i>
	<i>Avg.</i>	<i>Max.</i>				
1						
2						
3						
	50	50	<- Maximum Allowable Leakage			

<b>Nut Torque at End of Test: (ft-lb)</b>	N/A	<i>Top</i>	N/A	<i>Bottom</i>
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## *Performance Class:*

ISO FE AM - CC3 - SSA 0 - tRT - Class 300 - ISO 15848-1
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## *Results*

The valve met the requirements of the performance class stated above.

*Certified By*



Matthew J. Wasielewski, PE  
 President and Manager  
 Yarmouth Research and Technology, LLC

