

01-18-017-18W4M
FUEL GAS SCRUBBER #1
FV-6-7-1006-2C65696
REPORT # FV-6-7-1006-2_GRADY INSPECTION LTD VE UT INSP_1APR2022

DATE 4/1/2022
CLIENT CNRL

Phone:403-793-7697
8 Sarah King Crt E Brooks, Alberta, T1R 0J8
grady.rustebakke@gmail.com



RESULTS OF INSPECTION:

VE Inspection:
Fit For Service. NCR. Check valve located on PSV discharge piping causing restriction.
Vessel is not secured to foundation
UT Inspection:
No corrosion was found with the ultrasonic inspection.

PRESSURE EQUIPMENT										AB-506 INTERVAL																																	
DISTRICT					SHELL					TUBE					Fuel gas scrubbers																												
FACILITY					MAWT					100					F					GRADE		YEARS			REG																		
A#					YR					1984 <th colspan="5">MAWP</th> <td colspan="2">720</td> <td colspan="2"></td> <td colspan="5">psi</td> <td colspan="2">Equip</td> <td colspan="2">PSV</td> <td colspan="2">UT</td>					MAWP							720					psi					Equip		PSV		UT							
SERIAL #					FV-6-7-1006-2										PSV							150					psi					3		10		6		10		X			
CRN					E1345.2 <th colspan="5">PSV CRN</th> <td colspan="5">0G8841.5C</td> <th colspan="10">INSPECTION TYPE</th>					PSV CRN					0G8841.5C					INSPECTION TYPE																							
EQUIP#					<th colspan="5">SERVICED</th> <td colspan="5">6/7/2017</td> <th colspan="2">VE</th> <th colspan="2">VI</th> <th colspan="2">MT</th> <th colspan="2">PT</th> <th colspan="2">ET</th> <th colspan="2">UT</th>					SERVICED					6/7/2017					VE		VI		MT		PT		ET		UT													
STATUS					IN SERVICE <th colspan="5">UNIT</th> <td colspan="5">Refridge</td> <td colspan="2">X</td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2"></td> <td colspan="2">X</td>					UNIT					Refridge					X										X													
MANUFACTURER										OPSCO '92 INDUSTRIES LTD.										INSPECTION RESULT:																							
DH LSD										L										4.2		Ft		NCR-OPERATIONS										X									
REPAD										0		UNIQUE ID										C65696										NCR-REGULATORY/ADMIN											
																														ACTION ITEM RAISED													
																														REPAIR REQUIRED													
																														SUITABLE FOR SERVICE										X			
																														RECOMMENDATIONS:													
																														VE Inspection: Remove check valve from PSV discharge piping Ensure vessel is secured to foundation													

SIGN OFF		API 510	EXP.	IPV	EXP.	INSPECTOR - PRIMARY	INSPECTOR - REVIEW	CLIENT SIGN OFF
INSPECTED BY	ToddM Mckenzie	97445	12/31/2022	00133	7/13/2026			
REVIEWED BY	Ashley Rustebakke	60285	7/31/2024	966	6/16/2026			

Ultrasonic Report

LSD 01-18-017-18W4M

DH-LSD

Jurisdiction #

Serial # FV-6-7-1006-2

Ultrasonic Report #: FV-6-7-1006-2_GRADY INSPECTION LTD VE UT INSP_1APR2022

Date

3/30/2022

Facility

Armada Gas Plant

Field


Red Deer District

Phone:403-793-7697

8 Sarah King Crt E Brooks, Alberta, T1R 0J8
grady.rustebakke@gmail.com**GRADY**
INSPECTION LTD

ULTRASONIC SET			COMPONENT DETAILS				CODE					
EQUIPMENT	CALIBRATION DUE	SERIAL NUMBER	MATERIAL GRADE	SURFACE PREP	TEMP	THICKNESS	CALIBRATION	EVALUATION				
EPOCH 600	2/25/2023	120388107	Carbon Steel	Painted	0C		ASME V	ASME VIII Div 1				
CALIBRATION BLOCK		PROBE							COUPLING		METHOD	
TYPE	SERIAL#	REF dB	SCAN dB	FREQ.	SIZE.	ANGLE	SERIAL #	TYPE	COUPLANT	CABLE	TECHNIQUE	PROCEDURE
10 Step Metric	14-2065	60	66	5 Mhz	0.25 "	0	15B00DU3	Dual	UT-X	6' BNC to Micro	LW Dual	UT01T1R4
SCOPE		As requested by Dustin Rumohr an ultrasonic inspection was completed on the fuel gas scrubber										
LIMITATIONS		None.										
RESULTS		No corrosion was found with the ultrasonic inspection.										

Technician Name	Certification Body	Certification #	Expiry	Technician Signature			
3 ToddM	CGSB	9234					
				Client Name	Dustin Rumohr	Company Name	CNRL
				Client Signature			

External Inspection - (Vessel)		Date	3/30/2022	Phone:403-793-7697	
LSD	01-18-017-18W4M	Facility	Armada Gas Plant	8 Sarah King Crt E Brooks, Alberta, T1R 0J8 grady.rustebakke@gmail.com	
DH-LSD		Field	Red Deer District		
Jurisdiction #					

Fit For Service:	Fit For Service.
Inspection Summary:	NCR. Check valve located on PSV discharge piping causing restriction. Vessel is not secured to foundation
Recommendations:	Remove check valve from PSV discharge piping Ensure vessel is secured to foundation

External Inspection Items	G/F/P	Comments
General Condition:	Good	No notable mechanical damage, areas of wear/fretting, distortion, misalignment, or visible weld defects.
External Coating:	Good	Vessel is in good visual condition. Vessel is painted. Vessel is indoors.
Insulation / Cladding:	N/A	Non insulated vessel
Nozzles, Piping and Connections:	Good	Number of nozzles repaded: 0 Number of nozzles without repad: 2 Nozzles and piping in good visual condition No attached drain pipping
Buried Vessels:	N/A	Above Ground
Ladders, Platforms and Walkways:	N/A	No attached ladder or platform
Foundations and Supports:	Fair	Building is secure on concrete pilings Vessel is not secured to foundation Concrete pilings are intact with no visible deficiencies
Shell:.	Good	No notable mechanical damage, areas of wear/fretting, distortion, misalignment or visible weld defects.
Saddles / Skirts:	Good	Skirt is in good visual condition.
Grounding:	Good	Ground Wire is secure Grounded through piping system
Gauges and Instrumentation:	Good	<div>Shell Gauge (- @) Temp Gauge (- @)</div> Pressure gauge is not suitable for MAWP, is suitable for PSV set pressure.
Pressure Protection:	Poor	The PSV Set Pressure (150 psi) is suitable for the MAWP (720 psi) Check valve located on PSV discharge piping causing restriction.
NDE Summary:	Good	No corrosion was found with the ultrasonic inspection.
Manway Davits/Quick Closure:	N/A	No Manway
Nameplate:	Good	Nameplate is legible and readily accessible and securely affixed

PSV Data

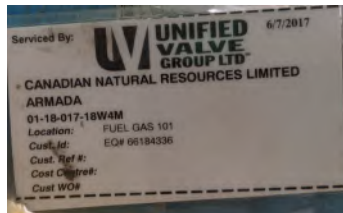
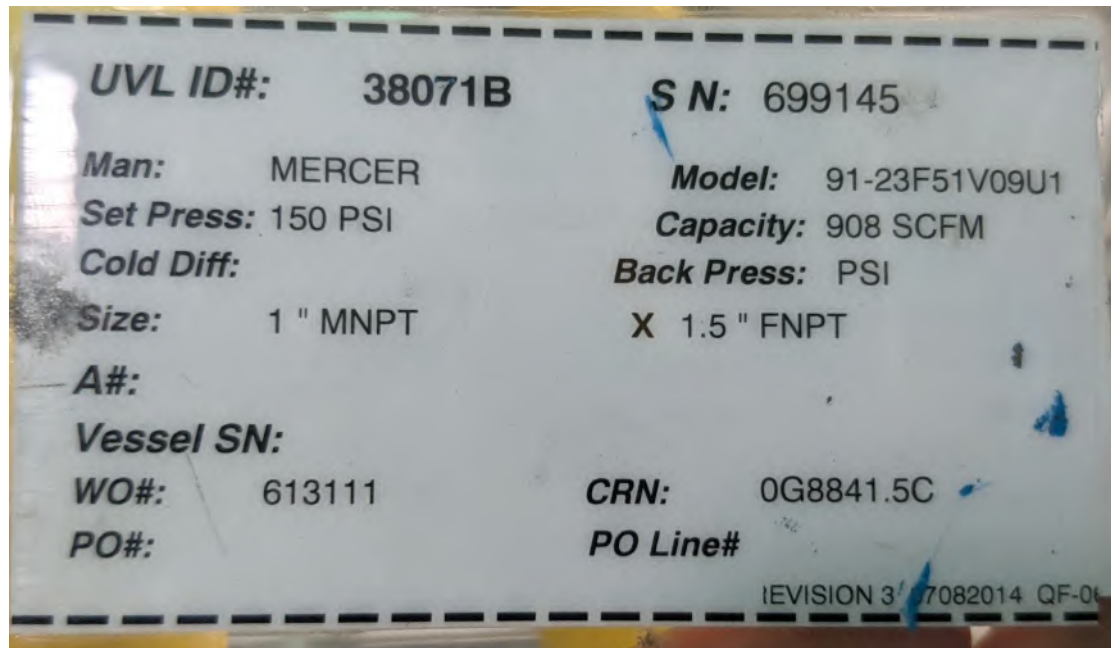
LSD

01-18-017-18W4M

FACILITY Armada Gas Plant

FIELD Red Deer District

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INSPECTION LTD

ASSOCIATED PRESSURE EQUIPMENT DATA

PV JUR/SER FV-6-7-1006-2

SHELL TUBE

MAWP 720 psi

PSV FIT FOR SERVICE STATEMENT

Not Fit For Service.

PSV STATIC DATA

MODEL 91-23F51V09U1

SERIAL 699145

MANUFACTURER MERCER

TAG 38071B

CRN 0G8841.5C

SEAL Y

SET PRES 150 psi

CAPACITY 908 Scfm

SERVICE DATE 6/7/2017

SERVICE COMPANY Unified Valve Group

T/F UV NB

T UV NB

SIZE B VALVE CARSEAL

INLET 1 N

OUTLET 1.5 N

PSV COMMENTS

Check valve on PSV discharge piping. Located in Ajax / K101 compressor building.

Overview Photo

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FACILITY	Armada Gas Plant
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Nameplate



Overview



C Number



Drain Elbow

Overview Photo

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4/1/2022

FACILITY

Armada Gas Plant

FIELD

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GRADY
INSPECTION LTD



Pressure Gauge



Temperature Gauge

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LSD 01-18-017-18W4M **FACILITY** Armada Gas Plant
DH-LSD **FIELD** Red Deer District
Jur # **DWG** 1 **Location:**
Ser # FV-6-7-1006-2

Phone:403-793-7697

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Ser #	Inspection Dates and Thickness Values (mm)										# of Insp	% Nom Wall Loss	Corrosion Rates			Rem Life Date	Rem Life (yrs)	Next Insp Date	Insp Int (yrs)	Inspection Comments									
	CML#	Nom	CA/Tol	SFlag	STmin	PTmin	> Tmin	Comp Type	Pipe Size	Code			MOP	Baseline Date	Min Ave						3rd Last Date	Min Ave	2nd Last Date	Min Ave	Last Date	Min Ave	ST	LTn	LTi
00	11.0	11.0		4.5	4.5	4.5	Head		UG32HeadElli	720	3/1/12	9.1	9.7					4/1/22	9.1	10.0	2	17%					3/29/2032	10.0	
05	11.0	11.0		9.4	4.7	4.7	Shell		UG27ShellInt	720	3/1/12	10.7	11.4					4/1/22	10.6	11.0	2	4%	0.01		9/16/2619		3/29/2032	10.0	
10	11.0	11.0		9.4	4.7	4.7	Shell		UG27ShellInt	720	3/1/12	11.7	12.1					4/1/22	11.3	12.0	2	-3%	0.04				3/29/2032	10.0	
15	11.0	11.0		9.4	4.7	4.7	Shell		UG27ShellInt	720	3/1/12	10.4	11.0					4/1/22	10.4	10.8	2	5%					3/29/2032	10.0	
20	11.0	11.0		4.5	4.5	4.5	Head		UG32HeadElli	720	3/1/12	9.2	10.3					4/1/22	9.0	10.0	2	18%	0.02		6/19/2248		3/29/2032	10.0	
25	4.5	3.9		2.0	1.8	0.6	1.8	Pipe	1" XS 80--(4.5mm)	API570	720	4/1/22	4.9	5.3							1	-9%					3/29/2032	10.0	
30	3.9			3.4		3.4	Nozzle	2" STD 40--(3.9mm)	UG45Nozzle	720	3/1/12	5.6	5.9							1	-44%					2/27/2022	10.0		
35	3.9			3.4		3.4	Nozzle	2" STD 40--(3.9mm)	UG45Nozzle	720	3/1/12	5.7	5.9							1	-46%					2/27/2022	10.0		