

01-18-017-18W4M
1ST STG SUCTION BOTTLE
A0174991
REPORT # A#0174991_GRADY INSPECTION LTD VE UT INSP_30MAR2022

DATE 3/30/2022
CLIENT CNRL

Phone:403-793-7697

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

GRADY
INSPECTION LTD




RESULTS OF INSPECTION:

VE Inspection:
Fit For Service. Vessel is in good visual condition.
UT Inspection:
29% (-3.2 mm) wall loss found on Head CML 05 Nominal: (11 mm) T-Previous: (17.4 mm) T-Actual: (14.2 mm) T-Required: (8.6 mm) CR: (.63 mm/yr) RL: (8.93 years)


PRESSURE EQUIPMENT										AB-506 INTERVAL						
DISTRICT	AB - OIL & NATURAL GAS					SHELL	TUBE			Compressor Bottles in vibrating						
FACILITY	Armada Gas Plant					MAWT	300			F	GRADE	YEARS			REG	
A#	A0174991		YR	1981	MAWP	655			psi	Equip		PSV	UT			
SERIAL #					PSV	635			psi	3		6	6			
CRN	D-9134.2					PSV CRN	0G2369.5C			INSPECTION TYPE						
EQUIP#						SERVICED	3/21/2016			VE	VI	MT	PT	ET	UT	
STATUS	IN SERVICE					UNIT	K301			X					X	
MANUFACTURER	BARBER INDUSTRIES INC										INSPECTION RESULT:					
DH LSD						L	5	Ft	OD	1.33	Ft	NCR-OPERATIONS				
REPAD	UNIQUE ID										NCR-REGULATORY/ADMIN					
										ACTION ITEM RAISED						
										REPAIR REQUIRED						
										SUITABLE FOR SERVICE				X		
										RECOMMENDATIONS:						
										VE Inspection: PSV requires service at 2022 TA						

14.2 mm) T-Required: (8.6 mm) CR: (.63 mm/yr) RL: (8.93 years)

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		Date	3/25/2022	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 #	A0174991				
Serial #					
Ultrasonic Report #: A#0174991_GRADY INSPECTION LTD VE UT INSP_30MAR2022					

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 SUCTION BOTTLE										
LIMITATIONS		Previous ultrasonic inspection data not obtained by Grady Inspection Ltd.										
RESULTS		29% (-3.2 mm) wall loss found on Head CML 05 Nominal: (11 mm) T-Previous: (17.4 mm) T-Actual: (14.2 mm) T-Required: (8.6 mm) CR: (.63 mm/yr) RL: (8.93 years)										

Technician Name	Certification Body	Certification #	Expiry	Technician Signature			
3 ToddM	CGSB	9234					
				Client Name			
				Client Signature			

External Inspection - (Vessel)		Date	3/25/2022	Phone:403-793-7697 8 Sarah King Crt E Brooks, Alberta, T1R 0J8 grady.rustebakke@gmail.com	
LSD	01-18-017-18W4M	Facility	Armada Gas Plant		
DH-LSD		Field	Red Deer District		
Jurisdiction #		A0174991			

Fit For Service:	Fit For Service.
Inspection Summary:	Vessel is in good visual condition.
Recommendations:	PSV requires service at 2022 TA

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. Paint is intact and well adhered to the vessel. Vessel is indoors.
Insulation / Cladding:	N/A	Non insulated vessel
Nozzles, Piping and Connections:	Good	Number of nozzles repaded: Number of nozzles without repad: Nozzles and piping in good visual condition
Buried Vessels:	N/A	Above Ground
Ladders, Platforms and Walkways:	Good	No attached ladder or platform
Foundations and Supports:	Good	Anchor bolts fully engaged Building is secure Concrete is intact with no visible deficiencies
Shell:.	Good	No notable mechanical damage, areas of wear/fretting, distortion, misalignment or visible weld defects.
Saddles / Skirts:	Good	Vessel is mounted to compressor module by flange bolting
Grounding:	Good	Ground Wire is secure Grounded through piping system
Gauges and Instrumentation:	Good	<div>Shell Gauge (- @)</div> <div>Temp Gauge (0 - 200 @ 6 6)</div> <div>No mechanical pressure gauge found. Compressor is digitally monitored for pressure and temperature. No pressure gauges found.</div>
Pressure Protection:	Good	The PSV Set Pressure (635 psi) is suitable for the MAWP (654.990382281348233 psi)
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
Code Variance:		

PSV Data

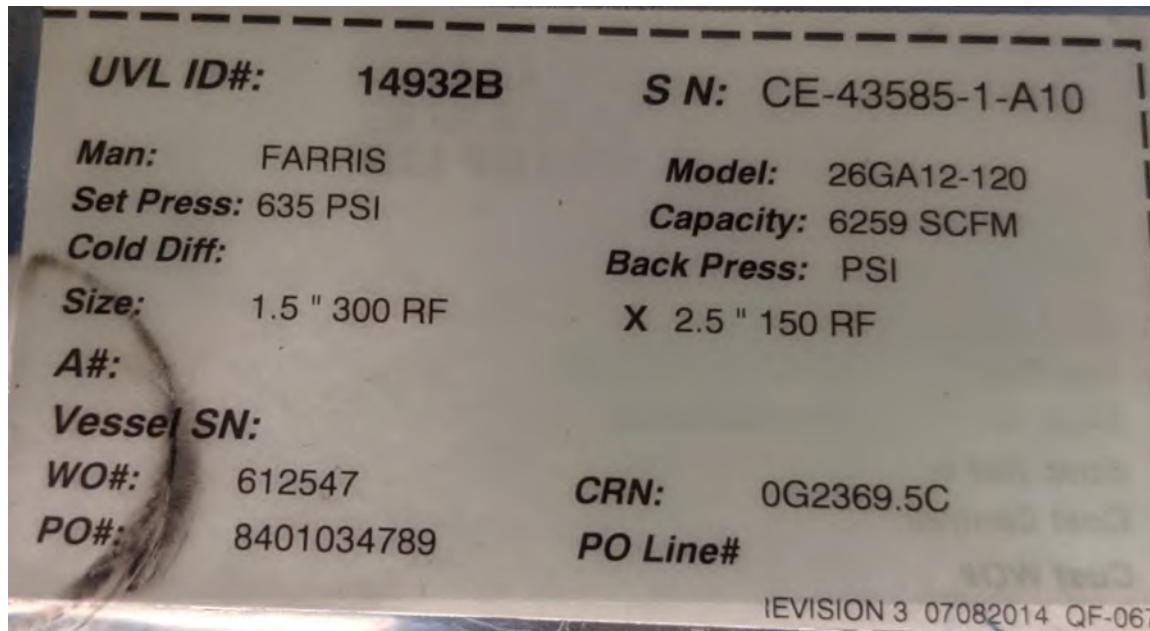
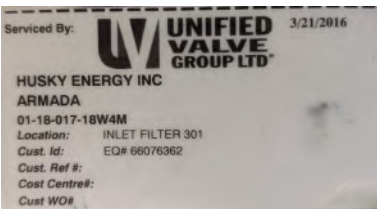
LSD

01-18-017-18W4M

FACILITY Armada Gas Plant

FIELD Red Deer District

Phone:403-793-7697

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ASSOCIATED PRESSURE EQUIPMENT DATA

PV JUR/SER A0174991

SHELL

TUBE

MAWP

655

psi

PSV FIT FOR SERVICE STATEMENT

Fit For Service.

PSV STATIC DATA

MODEL 26GA12-120

SERIAL CE-43585-1-A10

MANUFACTURER FARRIS ENGINEERING

TAG 14932B

CRN 0G2369.5C

SEAL Y

SET PRES

635

psi

CAPACITY

6259

SCFM

SERVICE DATE

3/21/2016

SERVICE COMPANY

Unified Valve Group

T/F

UV

NB

F

UV

NB

SIZE

B VALVE

CARSEAL

INLET

1.5

N

N

OUTLET

2.5

N

N

PSV COMMENTS

Overview Photo

LSD 01-18-017-18W4M
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3/30/2022

FACILITY

Armada Gas Plant

FIELD

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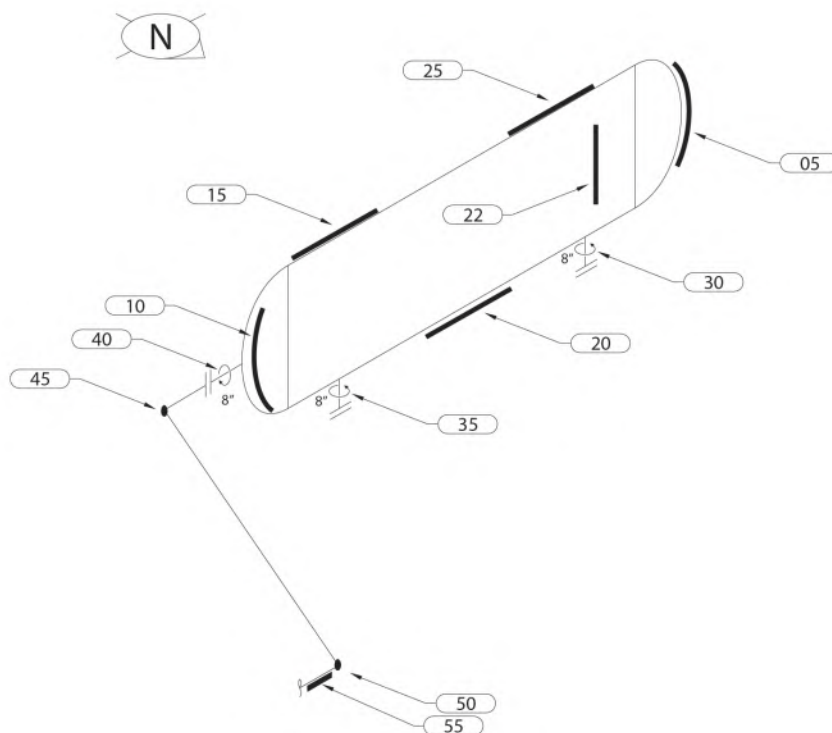
**Nameplate****Overview****Temperature Gauge**

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Jur # A0174991 **DWG** 1 **Location:**

CML#	Nom	CA/Tol	SFlag	STmin	PTmin	> Tmin	Comp Type	Pipe Size	Code	MOP	Baseline		3rd Last		2nd Last		Last		# of Insp	Nom Wall Loss	Corrosion Rates			Rem Life Date	Rem Life (yrs)	Next Insp Date	Insp Int (yrs)	Inspection Comments
											Date	Min Ave	Date	Min Ave	Date	Min Ave	Date	Min Ave			ST	LTn	LTi					



CML	Min	Yrs	Date
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DH-LSD **FIELD** Red Deer District
Jur # A0174991 **DWG** 1 **Location:**
Ser #

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CML#	Nom		CA/Tol	Inspection Dates and Thickness Values (mm)			Comp Type	Pipe Size	Code	MOP	Baseline		3rd Last		2nd Last		Last		# of Insp	% Nom Wall Loss	Corrosion Rates			Rem Life Date	Rem Life (yrs)	Next Insp Date	Insp Int (yrs)	Inspection Comments
				SFlag	STmin	PTmin					Date	Min Ave	Date	Min Ave	Date	Min Ave	Date	Min Ave			ST	LTn	LTi					
05	11.0	11.0		8.6	8.6	8.6	Head		UG32HeadEll	655	11/20/07	19.2			2/17/17	17.4	3/30/22	14.2	18.5	4	-29%	0.63	0.35		8.9	3/28/2028	6.0	
10	11.0	11.0		8.6	8.6	8.6	Head		UG32HeadEll	655	11/20/07	13.3			2/17/17	12.5	3/30/22	12.2	12.7	4	-11%	0.06	0.08			3/28/2028	6.0	
15	12.7	12.7		20.5	10.3	10.3	Shell		UG27ShellInt	655	11/20/07	13.5			2/17/17	12.5	3/30/22	12.5	12.7	4	2%					3/28/2028	6.0	
20	12.7	12.7		20.5	10.3	10.3	Shell		UG27ShellInt	655	11/20/07	13.6			2/17/17	12.8	3/30/22	12.6	12.8	4	1%	0.04	0.07	11/9/2055		3/28/2028	6.0	
22	12.7	12.7		20.5	10.3	10.3	Shell		UG27ShellInt	655	2/17/17	12.3	12.8				3/30/22	12.4	12.7	2	2%							
30	22.2			7.2	7.2		Nozzle	8" XXS ----(22.2mm)	UG45Nozzle	655	9/23/15	22.2	22.4		2/17/17	22.4	3/30/22	22.7	23.2	3	-2%					3/28/2028	6.0	Not including
40	12.7			7.2	7.2		Nozzle	8" XS 80--(12.7mm)	UG45Nozzle	655	9/23/15	13.4	13.7		2/17/17	13.1	3/30/22	13.0	13.6	3	-2%	0.02	0.06			3/28/2028	6.0	
45	8.2	7.2		3.3	2.8	3.6	Elbow	8" STD 40--(8.2mm)	API570	655	9/23/15	9.2	9.5				3/30/22	8.7	9.0	2	-6%	0.08				3/28/2028	6.0	
50	8.2	7.2		3.3	2.8	3.6	Elbow	8" STD 40--(8.2mm)	API570	655	9/23/15	7.8	7.9							1	5%	0.01		11/16/2379		9/21/2021	6.0	
55	8.2	7.2		3.3	2.8	3.6	Pipe	8" STD 40--(8.2mm)	API570	655	9/23/15	7.9	8.0							1	4%	0.01		10/31/2512		9/21/2021	6.0	