

01-18-017-18W4M
3RD STG SUCTION SCRUBBER
A0416399
REPORT # A#0416399_GRADY INSPECTION LTD VE UT INSP_31MAR2022

DATE 3/31/2022
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. Vessel is in good visual condition.
PSV due for service
UT Inspection:
No corrosion was found with the ultrasonic inspection.


PRESSURE EQUIPMENT										AB-506 INTERVAL															
DISTRICT		AB - OIL & NATURAL GAS				SHELL		TUBE		Compressor Bottles in vibrating															
FACILITY		Armada Gas Plant				MAWT		130		F		GRADE													
A#		A0416399		YR		1997		MAWP		1440				psi		YEARS		REG							
SERIAL #						PSV		870				psi		3				6		6		6		X	
CRN		N6255.2				PSV CRN		0G0449.2				INSPECTION TYPE													
EQUIP#						SERVICED		3/21/2016				VE		VI		MT		PT		ET		UT			
STATUS		IN SERVICE				UNIT		K301				X										X			
MANUFACTURER		PENFABCO LTD.								INSPECTION RESULT:															
DH LSD						L		8		Ft		OD		2		Ft		NCR-OPERATIONS							
REPAD		2		UNIQUE ID						NCR-REGULATORY/ADMIN															
																ACTION ITEM RAISED									
																REPAIR REQUIRED									
																SUITABLE FOR SERVICE				X					
																RECOMMENDATIONS:									
																VE Inspection: service PSV									

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	3/30/2022	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 # A0416399					
Serial #					
Ultrasonic Report #: A#0416399_GRADY INSPECTION LTD VE UT INSP_31MAR2022					

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 SEPARATOR										
LIMITATIONS		Previous ultrasonic inspection data not obtained by Grady Inspection Ltd.										
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 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 #		A0416399			

Fit For Service:	Fit For Service.
Inspection Summary:	Vessel is in good visual condition. PSV due for service
Recommendations:	service PSV

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 indoors. Paint is intact and well adhered to the vessel.
Insulation / Cladding:	N/A	Non insulated vessel
Nozzles, Piping and Connections:	Good	Number of nozzles repaded: 2 Number of nozzles without repad: 1 Nozzles and piping in good visual condition
Buried Vessels:	N/A	Above Ground
Ladders, Platforms and Walkways:	N/A	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	Skirt is in good visual condition and well secured.
Grounding:	Good	Ground Wire is secure Grounded through piping system
Gauges and Instrumentation:	Good	<div>Shell Gauge (0 - 600 @ 230 psi)</div> <div>Temp Gauge (- @)</div> <div>Compressor is digitally monitored for pressure and temperature. No temperature gauge found Gauge is not suitable for MAWP</div>
Pressure Protection:	Fair	The PSV Set Pressure (870 psi) is suitable for the MAWP (1440 psi) PSV Due for Service, not yet exceeding six months or 10% of Interval AB 506 2014 11.4.1 Interval Deferral Notwithstanding the above, an inspection or PRV servicing interval may be deferred by the Inspector, without other approvals, based on a satisfactory review of the equipment history, when the period of time for which the item is to be deferred does not exceed 10 % of the inspection/servicing interval or six months, whichever is less.
NDE Summary:	Good	No corrosion was found with the ultrasonic inspection.
Manway Davits/Quick Closure:	N/A	No Manway

External Inspection - (Vessel)
LSD 01-18-017-18W4M
DH-LSD
Jurisdiction # A0416399

Date	3/30/2022
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Nameplate: Good Nameplate is legible and readily accessible and securely affixed

Code Variance:

PSV Data

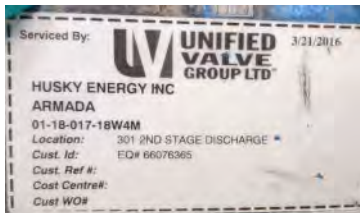
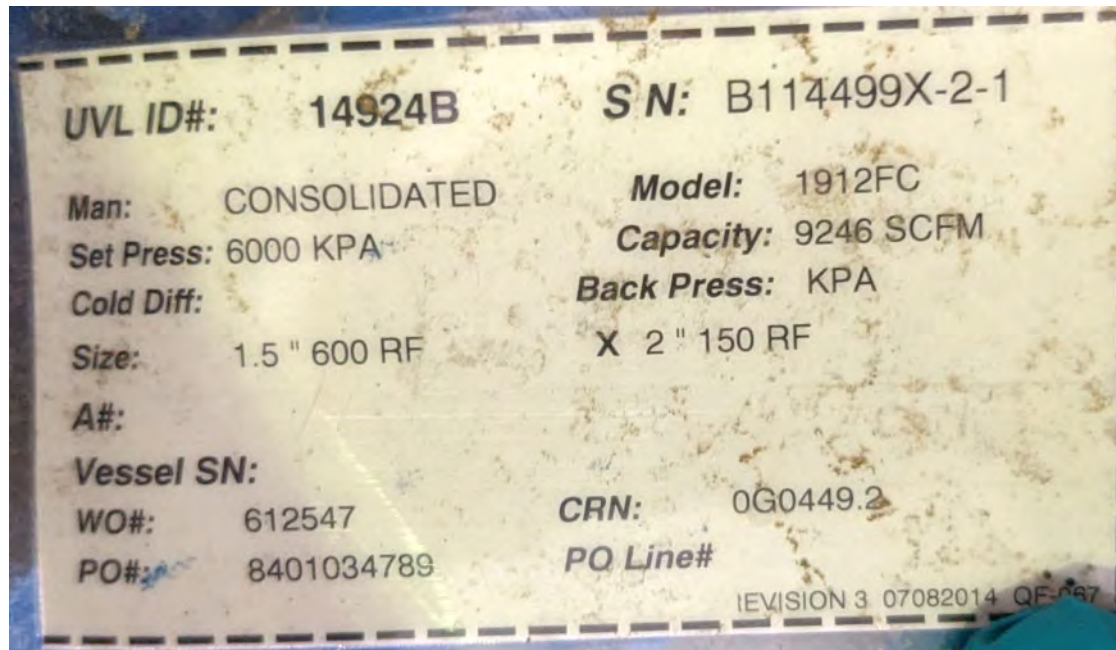
LSD

01-18-017-18W4M

FACILITY Armada Gas Plant

FIELD Red Deer District

Phone: 403-793-7697

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INSPECTION LTD

ASSOCIATED PRESSURE EQUIPMENT DATA

PV JUR/SER A0416399

SHELL

TUBE

MAWP

1440

psi

PSV FIT FOR SERVICE STATEMENT

Fit For Service.

PSV STATIC DATA

MODEL 1912FC

SERIAL B114499X-2-1

MANUFACTURER CONSOLIDATED

TAG 14924B

CRN 0G0449.2

SEAL Y

SET PRES

870

psi

CAPACITY 9246

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

OUTLET

2

N

PSV COMMENTS

PSV due for service at May TA

Overview Photo

LSD 01-18-017-18W4M
Jur # A0416399
Serial #

Date

3/31/2022

FACILITY

Armada Gas Plant

FIELD

Red Deer District

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Nameplate



Overview



Pressure Gauge



Temperature Gauge

Overview Photo

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Liquid Level

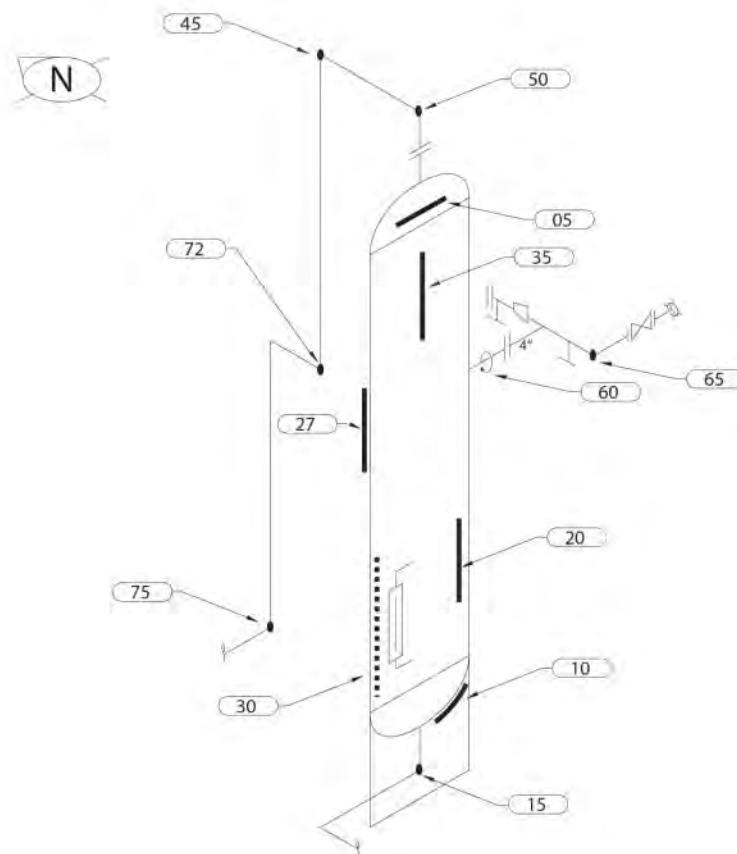
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Ser #

Ser #	Inspection Dates and Thickness Values (mm)																										
CML#	Nom	CA/Tol	SFlag	STmin	PTmin	> Tmin	Comp Type	Pipe Size	Code	MOP	Baseline		3rd Last		2nd Last		Last		% Nom Wall Loss	Corrosion Rates			Rem Life	Rem Life	Next	Insp	Inspection
											Date	Min Ave	Date	Min Ave	Date	Min Ave	Date	Min Ave	# of Insp	ST	LtN	LTI	Date	(yrs)	Insp Date	(Int)	Comments



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LSD 01-18-017-18W4M FACILITY Armada Gas Plant
DH-LSD FIELD Red Deer District
Jur # A0416399 DWG 1 Location:
Ser #

Phone: 403-793-7697

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Ser #	Inspection Dates and Thickness Values (mm)																												% Nom Wall Loss	Corrosion Rates			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		3rd Last		2nd Last		Last		# of Insp	ST	LTn	LTl	Rem Life Date												
05	27.1	27.0	22.9		22.9	22.9	Head		UG32HeadElli	1440		5/18/07	28.5	28.6			9/23/15	28.2		3/31/22	28.2	29.0	3	-4%					3/29/2028	6.0						
10	27.1	27.0	22.9		22.9	22.9	Head		UG32HeadElli	1440		5/18/07	28.7	29.2			11/28/17	28.1		3/31/22	27.5	28.5	4	-1%	0.14	0.08			3/29/2028	6.0						
15	8.7			3.4		3.4	Nozzle	2" -- 160--(8.7mm)	UG45Nozzle	1440		9/23/15	8.4	8.5					3/31/22	8.1	8.6	2	7%	0.05		12/10/2123		3/29/2028	6.0							
27	28.6	28.5	47.5		23.6	23.6	Shell		UG27ShellInt	1440		11/28/17	29.0	29.1					3/31/22	29.1	29.5	2	-2%					3/29/2028	6.0							
30	28.6	28.5	47.5		23.6	23.6	Shell		UG27ShellInt	1440		9/23/15	29.0	29.1			11/28/17	28.9		3/31/22	28.9	29.3	3	-1%					3/29/2028	6.0						
50							Elbow	4" XS 80--(8.6mm)	API570	1440																										
60	13.5			5.3		5.3	Nozzle	4" -- 160--(13.5mm)	UG45Nozzle	1440		9/23/15	13.5	13.6			11/28/17		3/31/22	12.8	13.5	3	5%					3/29/2028	6.0							
65	8.6	7.5	3.1	2.3	4.1	4.1	Elbow	4" XS 80--(8.6mm)	API570	1440		9/23/15	5.9	6.0					3/31/22	5.6	6.0	2	35%	0.05		7/8/2054		3/29/2028	6.0							
72	8.6	7.5	3.1	2.3	4.1	4.1	Elbow	4" XS 80--(8.6mm)	API570	1440		3/31/22	8.0	8.3								1	7%		0.02		9/14/2185		3/29/2028	6.0						
75	8.6	7.5	3.1	2.3	4.1	4.1	Elbow	4" XS 80--(8.6mm)	API570	1440		3/31/22	8.5	8.8								1	1%		0.00		3/23/3129		3/29/2028	6.0						