

01-18-017-18W4M
3RD STG COOLER
808006.4BC65691
REPORT # 808006.4B_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

GRADY
INSPECTION LTD




RESULTS OF INSPECTION:


VE Inspection:
Fit For Service. Vessel is in good visual condition.
PSV service seal is broken
UT Inspection:
No corrosion was found with the ultrasonic inspection.


PRESSURE EQUIPMENT										AB-506 INTERVAL							
DISTRICT	AB - OIL & NATURAL GAS					SHELL	TUBE			Air cooled heat exchangers							
FACILITY	Armada Gas Plant					MAWT	300	F		GRADE	YEARS			REG			
A#	YR 1980					MAWP	1315				Equip	PSV	UT				
SERIAL #	808006.4B					PSV	1100		psi		3	10	6	10	X		
CRN	D6028.23						PSV CRN 01832.568				INSPECTION TYPE						
EQUIP#							SERVICED 9/9/2020			VE	VI	MT	PT	ET	UT		
STATUS	IN SERVICE					UNIT	K301			X					X		
MANUFACTURER	AIR-X-CHANGERS					INSPECTION RESULT:											
DH LSD						L	Ft	OD	.33	Ft	NCR-OPERATIONS						
REPAD	0	UNIQUE ID C65691										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 #					
Serial #	808006.4B	Ultrasonic Report #: 808006.4B_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 AERIAL COOLER										
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			
				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 #					

Fit For Service:	Fit For Service.
Inspection Summary:	Vessel is in good visual condition. PSV service seal is broken
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. Areas of loose and flaking paint.
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
Buried Vessels:	N/A	Above Ground
Ladders, Platforms and Walkways:	Good	Building secure
Foundations and Supports:	Good	Anchor bolts fully engaged
Shell:.	Good	No notable mechanical damage, areas of wear/fretting, distortion, misalignment or visible weld defects.
Saddles / Skirts:	Good	Saddle is in good visual condition
Grounding:	Good	Ground Wire is secure
Gauges and Instrumentation:	N/A	<div>Shell Gauge (- @)Temp Gauge (- @)</div> <div>Compressor is digitally monitored for pressure and temperature.</div>
Pressure Protection:	Fair	The PSV Set Pressure (1100 psi) is suitable for the MAWP (1315 psi) PSV service seal broken
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

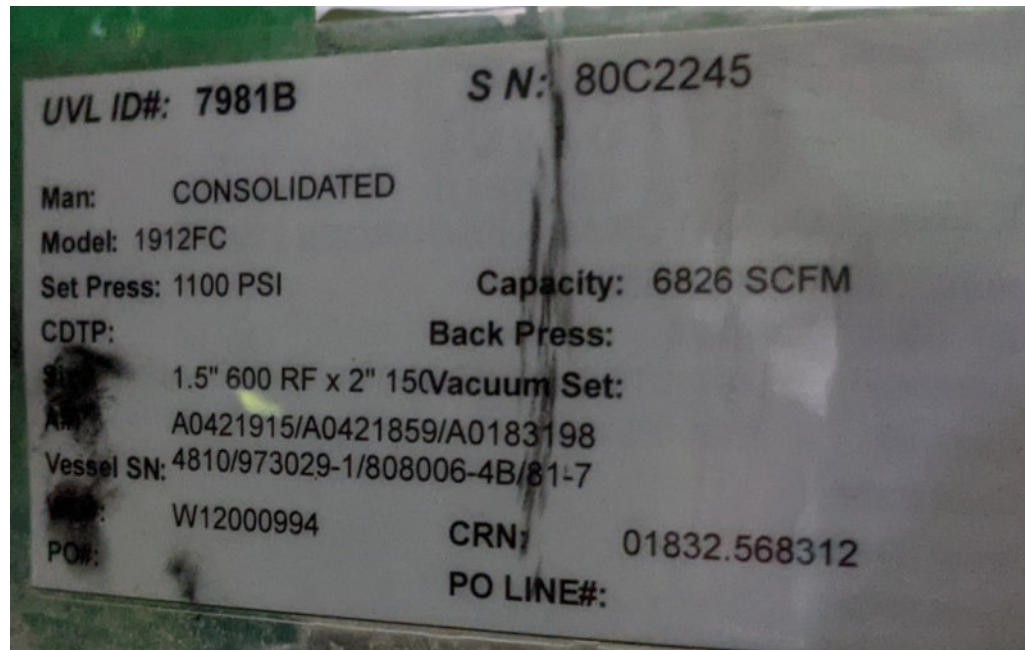
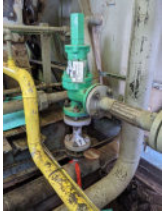
LSD

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 808006.4B

SHELL TUBE

MAWP 1315 psi

PSV FIT FOR SERVICE STATEMENT

Not Fit For Service.

PSV STATIC DATA

MODEL 1912FC

SERIAL 80C2245

MANUFACTURER CONSOLIDATED

TAG 7981B

CRN 01832.568312

SEAL N

SET PRES 1100 psi

CAPACITY 6826 SCFM

SERVICE DATE 9/9/2020

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

Broken Service Seal

Overview Photo

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FIELD

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Red Deer District

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Nameplate



Overview



Alternate Overview



CNRL C Number

Overview Photo

LSD

Jur #

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Pipe to building interface

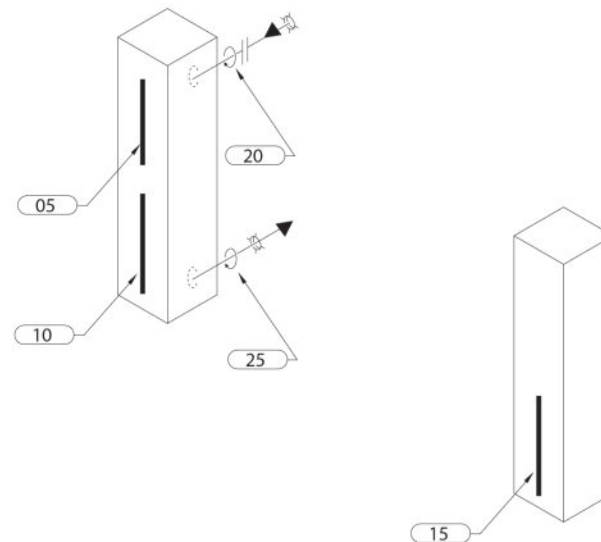
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Ser # 808006.4B

CML#	Nom	CA/Tol	Sflag				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	Inspt (yrs)	Inspection Comments
			STmin	PTmin	> Tmin	Date						Min Ave	Date	Min Ave	Date	Min Ave	Date	Min Ave	ST			LTn	LTi						



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LSD 01-18-017-18W4M FACILITY Armada Gas Plant
DH-LSD FIELD Red Deer District
Jur # DWG 1 Location:
Ser # 808006.4B

Phone:403-793-7697

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Ser #	808006.4B		Inspection Dates and Thickness Values (mm)																		# of Insp	% Norm 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		3rd Last		2nd Last		Last			ST	LTn	LTi					
												Date	Min Ave		Date	Min Ave		Date	Min Ave											
05	3.2	3.2	10.8	5.4	5.4	Shell		UG27ShellInt	1315			3/31/22	23.5	23.7						1	-640%						3/28/2032	10.0		
10	3.2	3.2	10.8	5.4	5.4	Shell		UG27ShellInt	1315			3/31/22	23.2	23.3						1	-631%						3/28/2032	10.0		
15	3.2	3.2	10.8	5.4	5.4	Shell		UG27ShellInt	1315			11/28/17	23.2	24.2				3/31/22	22.9	23.1	2	-621%	0.07				3/28/2032	10.0		
20	8.6			5.3	5.3	Nozzle	4" XS 80--(8.6mm)	UG45Nozzle	1315			3/31/22	8.5	8.8						1	1%	0.00		10/15/3386		3/28/2032	10.0			
25	8.6			5.3	5.3	Nozzle	4" XS 80--(8.6mm)	UG45Nozzle	1315			3/31/22	8.0	8.6						1	7%	0.01		6/19/2214		3/28/2032	10.0			