

01-18-017-18W4M
1ST STAGE COOLER
A0421860
REPORT # A#0421860_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. Bolt Missing on SW corner of Head
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	200		F		GRADE				
A#	A0421860		YR	1997	MAWP	1350		psi		YEARS		REG		
SERIAL #				PSV	655		psi		Equip	PSV	UT			
CRN	N6257.2				PSV CRN	01832.568		INSPECTION TYPE						
EQUIP#					SERVICED	9/9/2020		VE	VI	MT	PT	ET	UT	
STATUS	IN SERVICE			UNIT	3303 (301)			X					X	
MANUFACTURER	PROCESS ENERGY TECHNOLOGIES							INSPECTION RESULT:						
DH LSD					L	Ft	OD	Ft	NCR-OPERATIONS					
REPAD	UNIQUE ID							NCR-REGULATORY/ADMIN						
								ACTION ITEM RAISED					X	
								REPAIR REQUIRED						
								SUITABLE FOR SERVICE					X	
								RECOMMENDATIONS:						
								VE Inspection: Replace Bolt						

SIGN OFF		API 510	EXP.	IPV	EXP.	INSPECTOR - PRIMARY	INSPECTOR - REVIEW	CLIENT SIGN OFF
INSPECTED BY	ToddM Mckenzie	97445	12/31/202	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 #	A0421860				
Serial #					
Ultrasonic Report #: A#0421860_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 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	
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 #		A0421860			

Fit For Service:	Fit For Service.
Inspection Summary:	Bolt Missing on SW corner of Head
Recommendations:	Replace Bolt

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.
Insulation / Cladding:	N/A	Non insulated vessel
Nozzles, Piping and Connections:	Fair	Bolt Missing on SW corner of Head
Buried Vessels:	N/A	Above Ground
Ladders, Platforms and Walkways:	Good	Building secure on pilings
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	Saddles are bolted
Grounding:	Good	Ground Wire is secure Grounding is achieved through the skid.
Gauges and Instrumentation:	Good	Shell Gauge (- @) Temp Gauge (- @) Vessel is digitally monitored
Pressure Protection:	Good	The PSV Set Pressure (655 psi) is suitable for the MAWP (1350 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

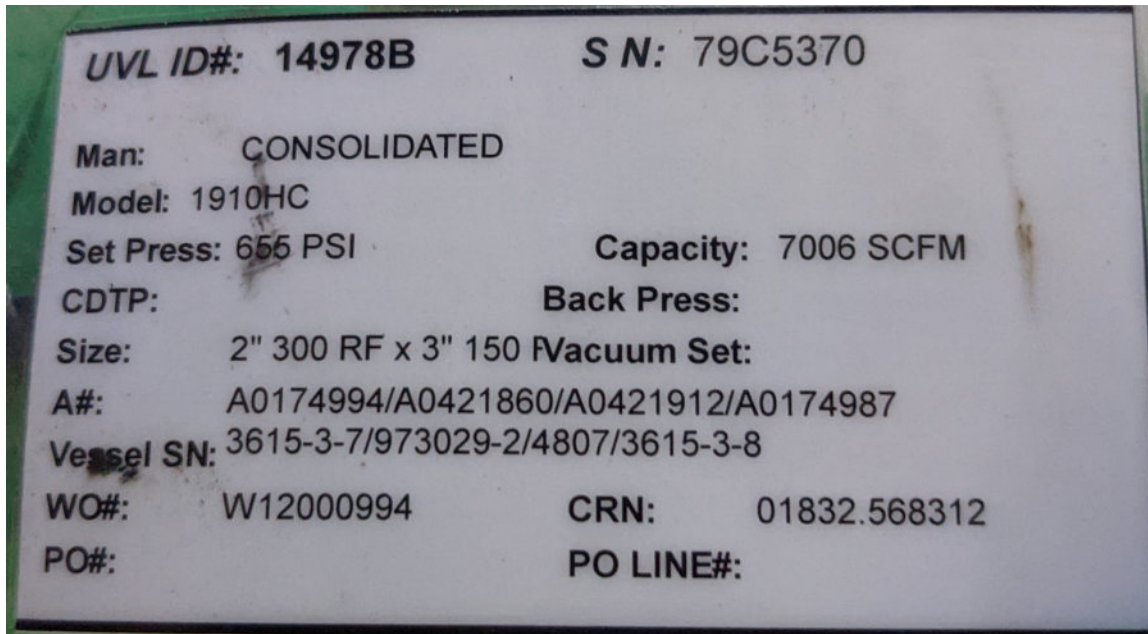
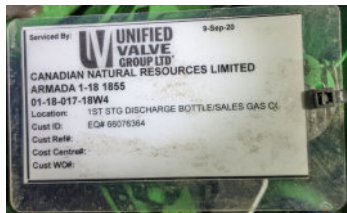
LSD

01-18-017-18W4M

FACILITY Armada Gas Plant

FIELD Red Deer District

Phone:403-793-7697

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

ASSOCIATED PRESSURE EQUIPMENT DATA

PV JUR/SER A0421860

SHELL

TUBE

MAWP

1350

psi

PSV FIT FOR SERVICE STATEMENT

Fit For Service.

PSV STATIC DATA

MODEL 1910HC

SERIAL 79C5370

MANUFACTURER CONSOLIDATED

TAG 14978B

CRN 01832.568312

SEAL Y

SET PRES

655

psi

CAPACITY

7006

SCFM

SERVICE DATE

9/9/2020

SERVICE COMPANY

Unified Valve Group

T/F

UV

NB

F

UV

NB

SIZE

B VALVE

CARSEAL

INLET

2

N

OUTLET

3

N

PSV COMMENTS

Overview Photo

LSD 01-18-017-18W4M
Jur # A0421860
Serial #

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



Nameplate



Overview



Alternate Overview



Missing Bolt

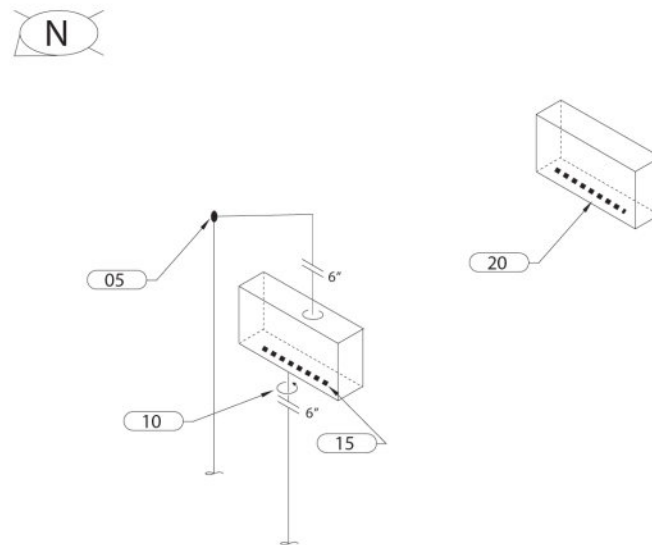
Phone:403-793-7697

GRADY
INSPECTION LTD

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

Ser #

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



REPORT # A#0421860_GRADY INSPECTION LTD VE UT INSP_30MAR2022
LSD 01-18-017-18W4M FACILITY Armada Gas Plant
DH-LSD FIELD Red Deer District
Jur # A0421860 DWG 1 Location:
Ser #

Phone:403-793-7697

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



Inspection Dates and Thickness Values (mm)																				% 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	# of Insp		ST	LTn	LTi					
05	0.0			0.0	0.0		Elbow	66" XS 80--(11mm)	API570	1350	11/28/17	11.9					3/30/22	11.0	11.5	2		0.21				3/27/2032	10.0	
10							Nozzle	66" XS 80--(11mm)	UG45Nozzle	1350	11/28/17	11.8					3/30/22	10.7	11.1	2		0.25				3/27/2032	10.0	
15	0.0	0.0	0.0		0.0	0.0	Shell		UG27ShellInt	1350	11/28/17	32.5					3/30/22	32.0	32.3	2		0.12				3/27/2032	10.0	
20	0.0	0.0	0.0		0.0	0.0	Shell		UG27ShellInt	1350	11/28/17	32.6					3/30/22	32.0	32.3	2		0.14				3/27/2032	10.0	