

01-18-017-18W4M

PROCESS FUEL GAS SCRUBBER

84C-3202-01AC65695

REPORT # 84C-3202-01A\_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 line, causing restriction of flow.  
No drain piping  
UT Inspection:  
No corrosion was found with the ultrasonic inspection.

PRESSURE EQUIPMENT

DISTRICT	AB - OIL & NATURAL GAS		SHELL	TUBE
FACILITY	Armada Gas Plant		MAWT	100 F
A#	YR 1984	MAWP	150	psi
SERIAL #	84C-3202-01A	PSV	150	psi
CRN	C4262.213	PSV CRN	0G8841.5C	
EQUIP#		SERVICED	6/7/2017	
STATUS	IN SERVICE		UNIT	Refridge
MANUFACTURER	ALCO GAS & OIL PRODUCTION EQUIPMENT LTD.			
DH LSD	L 2.5 Ft		OD	.9 Ft
REPAD	UNIQUE ID C65695			

AB-506 INTERVAL

Fuel gas scrubbers

GRADE	YEARS			REG
	Equip	PSV	UT	
3	10	6	10	X

INSPECTION TYPE

VE	VI	MT	PT	ET	UT
X					X

INSPECTION RESULT:

NCR-OPERATIONS X

NCR-REGULATORY/ADMIN

ACTION ITEM RAISED

REPAIR REQUIRED

SUITABLE FOR SERVICE X

RECOMMENDATIONS:

VE Inspection:  
Remove Check valve from PSV discharge line.  
Install drain piping and drain vessel periodically

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

<b>Ultrasonic Report</b>		<b>Date</b>	3/30/2022	Phone: 403-793-7697  8 Sarah King Crt E Brooks, Alberta, T1R 0J8 grady.rustebakke@gmail.com	
<b>LSD</b>	01-18-017-18W4M	<b>Facility</b>	Armada Gas Plant		
<b>DH-LSD</b>		<b>Field</b>	Red Deer District		
<b>Jurisdiction #</b>					
<b>Serial #</b>	84C-3202-01A	<b>Ultrasonic Report #:</b> 84C-3202-01A_GRADY INSPECTION LTD VE UT INSP_1APR2022			

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 SEPARATOR										
LIMITATIONS		Previous ultrasonic inspection data not obtained by Grady Inspection Ltd.										
RESULTS		No corrosion was found with the ultrasonic inspection.										

<b>Technician Name</b>	<b>Certification Body</b>	<b>Certification #</b>	<b>Expiry</b>	<b>Technician Signature</b>			
3    ToddM	CGSB	9234					
				<b>Client Name</b>			
				<b>Client Signature</b>			

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

<b>Fit For Service:</b>	Fit For Service.
<b>Inspection Summary:</b>	NCR. Check valve located on PSV discharge line, causing restriction of flow. No drain piping
<b>Recommendations:</b>	Remove Check valve from PSV discharge line. Install drain piping and drain vessel periodically

External Inspection Items	G/F/P	Comments
General Condition:	Good	No notable external corrosion, mechanical damage, areas of wear/fretting, distortion, misalignment, current leaks, or visible weld defects.
External Coating:	Good	Vessel is in good visual condition. Vessel is painted. Vessel is indoors.
Insulation / Cladding:	Good	Non insulated vessel
Nozzles, Piping and Connections:	Good	Nozzles and piping in good visual condition There is no zero nozzles. No attached drain piping
Buried Vessels:	N/A	Above Ground
Ladders, Platforms and Walkways:	N/A	No attached ladder or platform
Foundations and Supports:	Good	Building is secure Concrete pilings are intact with no visible deficiencies
Shell:.	Good	No notable external corrosion, mechanical damage, areas of wear/fretting, distortion, misalignment, current leaks, or visible weld defects.
Saddles / Skirts:	Good	Saddle is in good visual condition
Grounding:	Good	Grounded through piping system Ground Wire is secure
Gauges and Instrumentation:	N/A	<div>Shell Gauge ( - @ )      Temp Gauge ( - @ )</div> <div>No gauges found.</div>
Pressure Protection:	Poor	The PSV Set Pressure ( 150 psi) is suitable for the MAWP ( 150 psi) PSV discharge piping has restriction caused by check valve.
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

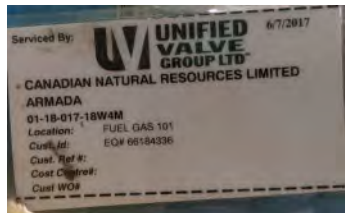
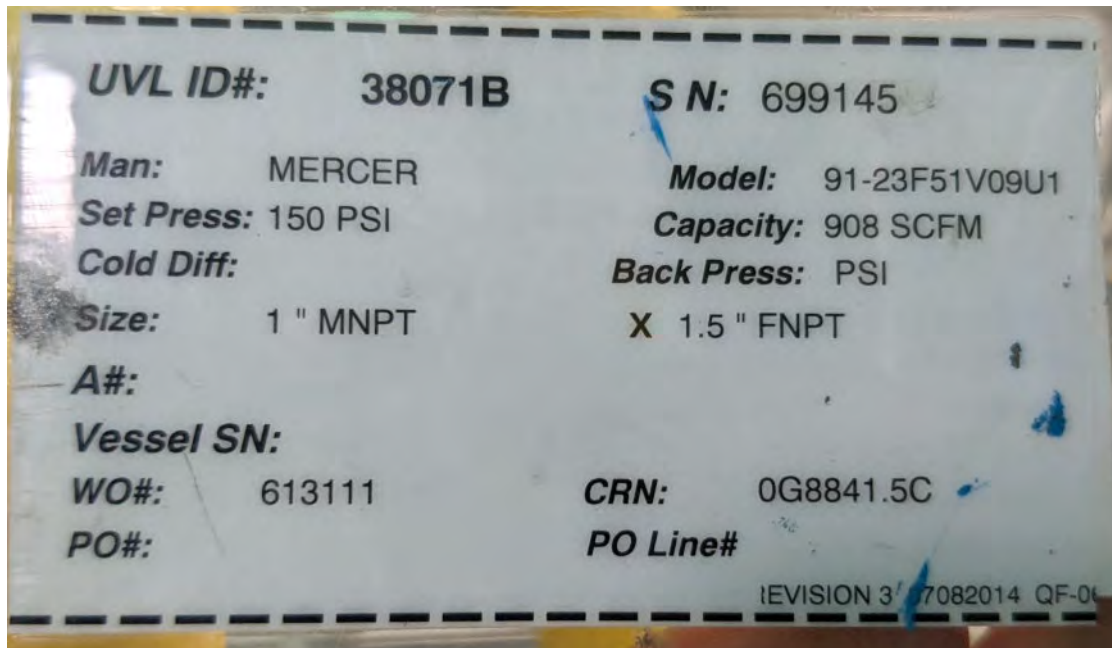
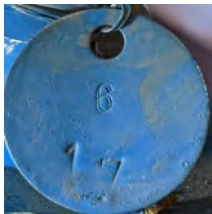
LSD

01-18-017-18W4M

FACILITY Armada Gas Plant

FIELD Red Deer District

Phone: 403-793-7697

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INSPECTION LTD

## ASSOCIATED PRESSURE EQUIPMENT DATA

PV JUR/SER 84C-3202-01A

SHELL TUBE

MAWP 150 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 line PSV located in Ajax / K101 compressor.



Overview Photo

LSD 01-18-017-18W4M  
Jur #  
Serial # 84C-3202-01A

Date

4/1/2022

FACILITY

Armada Gas Plant

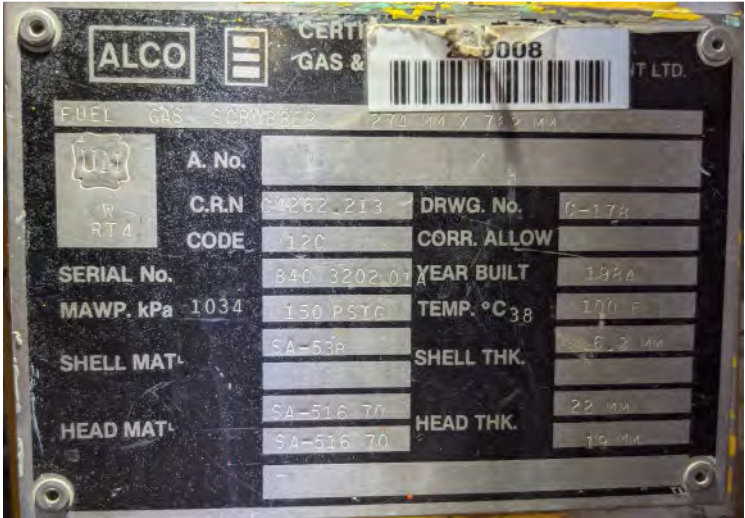
FIELD

Red Deer District

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**GRADY**  
INSPECTION LTD



Nameplate



Overview



CNRL C Number



Vessel Support

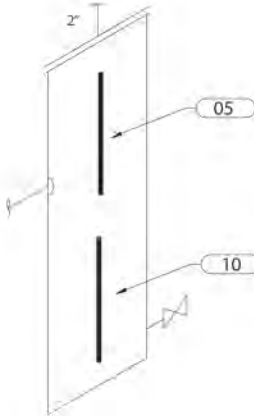
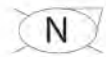
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**GRADY**  
INSPECTION LTD

**Ser #** 84C-3202-01A

Ser # 84C-3202-01A										Inspection Dates and Thickness Values (mm)																		
CML#	Nom	CA/ToI	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 (yrs)	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					



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**GRADY**  
INSPECTION LTD

**DWG** 1

**Location:**

Ser #		84C-3202-01A		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		# 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			ST	LTn	LTi					
05	6.3	6.3	3.8	1.9	1.9		Shell		UG27ShellInt	150	4/3/14	6.4	6.7			11/28/17	6.6	4/1/22	6.6	6.8	3	-5%					3/29/2032	10.0	
10	6.3	6.3	3.8	1.9	1.9		Shell		UG27ShellInt	150	4/3/14	6.4	6.6			11/28/17	6.6	4/1/22	6.5	6.7	3	-3%					3/29/2032	10.0	