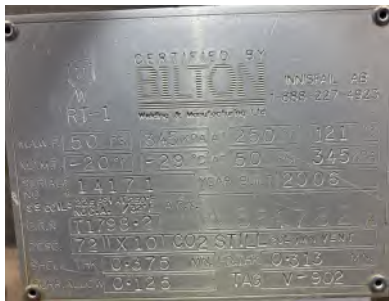


16-14-020-12W4M  
Co2 STILL COLUMN VENT  
A0551782 14171  
REPORT # A0551782\_\_27OCT2025\_UT\_VE\_VI\_GRADYINSPECTIONLTD

DATE 2025-10-27  
CLIENT

403-793-7697  
Po Box 1173 Brooks Alberta T1R 1B9  
grady.rustebakke@gmail.com



PRESSURE EQUIPMENT										AB-506 INTERVAL																	
DISTRICT					SHELL					TUBE					Upstream pressure vessels not												
FACILITY		Princess			MAWT		250			F		GRADE		YEARS			REG										
A#		A0551782			YR		2000			MAWP		50				psi		1		Equip		PSV		UT		X	
SERIAL #		14171					PSV					psi					INSPECTION TYPE										
CRN		T1798.2					PSV CRN																				
EQUIP#							SERVICED																				
STATUS					UNIT					X		X						ET		UT							
MANUFACTURER					BILTON WELDING & MANUFACTURING LTD <td colspan="6">INSPECTION RESULT:</td>					INSPECTION RESULT:																	
DH LSD					L 10 Ft					OD 6 Ft					NCR-OPERATIONS												
REPAD					UNIQUE ID					SWEET/SOUR					NCR-REGULATORY/ADMIN												
(18.1 yrs) Int (3 yrs) Min @ Top Elbow										ACTION ITEM RAISED																	
										DEFERRED REPAIR																	
										REPAIR REQUIRED																	
										SUITABLE FOR SERVICE						X											

16-14-020-12W4M  
Co2 STILL COLUMN VENT  
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RECOMMENDATIONS:

VE Inspection:  
No recommendations.  
VI Inspection:  
Blast clean and coat vessel.

SIGN OFF		API 510	EXP.	IPV	EXP.	INSPECTOR - PRIMARY	INSPECTOR - REVIEW	CLIENT SIGN OFF
INSPECTED BY	Grady Rustebakke	28850	2027-07-31	A-64882	2026-11-22	GRADY RUSTEBAKKE	Rustebakke	
REVIEWED BY	Ashley Rustebakke	60285	2027-07-31	966	2026-06-16			

Ultrasonic Report

LSD16-14-020-12W4M

DH-LSD

Juristiction #A0551782

Serial #14171

Ultrasonic Report #:A0551782\_\_27OCT2025\_UT\_VE\_VI\_GRADYINSPECTIONLTD

Date

2025-10-27

Facility

Field

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ULTRASONIC SET			COMPONENT DETAILS				CODE					
EQUIPMENT	CALIBRATION DUE	SERIAL NUMBER	MATERIAL GRADE	SURFACE PREP		TEMP	THICKNESS	CALIBRATION	EVALUATION			
Danatronics FD	2026-02-05	0566860	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
5 Step Metric	13-5295	66	66	7.5 Mhz	0.25 "	0	15B00DU4	Dual	UT-X	6' BNC to Micro	LW Dual	UT03T1R2
SCOPE		As requested by Fuel an ultrasonic inspection was completed on the Co2 STILL COLUMN VENT										
LIMITATIONS		CML 20 Sch not verified. Assumed SCH 80										
RESULTS		35% (1.9mm) loss on SNozz CML 20 DWG 1 Nom: (5.5mm) Act: (3.6mm) Req: (2.3mm) CR: .07 Yrs: (18.1 yrs) Int (3 yrs) Min @ Top Elbow										

Technician Name		Certification Body	Certification #	Expiry	Technician Signature				
09	Grady Rustebakke	CGSB UT 2	9640	2026-09-15			GRADY RUSTEBAKKE		
		SNT-TC-1A UT 2		2029-03-06	Client Name		Fuel	Company Name	
					Client Signature				

External Inspection - (Vessel)

LSD16-14-020-12W4M

DH-LSD

Jurisdiction #A0551782

Date2025-10-27

Facility

Field

403-793-7697

Po Box 1173 Brooks Alberta T1R 1B9

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Fit For Service:

Fit For Service.


Inspection Summary:

Vessel is in good visual condition. Pre-purchase inspection prior to moving unit.


Recommendations:

No recommendations.

External Inspection Items	G/F/P	Comments
General Condition:	N/A	Fully insulated
External Coating:	N/A	Fully insulated.
Insulation / Cladding:	Good	Insulation is in good visual condition.
Nozzles, Piping and Connections:	Good	Piping not included with unit. Nozzles were exposed for inspection. No visual access to bridle nozzle. Nozzle full of fluid. Verify if bridle elbow is SCH 40 or SCH 80. UT (3.6/4.8 mm)
Buried Vessels:	N/A	Above Ground
Ladders, Platforms and Walkways:	N/A	No platform.
Foundations and Supports:	N/A	Vessel moved from site.
Shell:.	Fair	No UT ports found or created on insulation.
Saddles / Skirts:	Good	
Grounding:	N/A	Ground wire removed for vessel moving.
Gauges and Instrumentation:	Good	<div>Shell Gauge ( - @ )Temp Gauge ( 0 - 250 @ 40 F )</div> <div>Gauge is not suitable for MAWT</div>
Pressure Protection:	N/A	NO PSV. Vented to atmosphere
NDE Summary:	Fair	35% (1.9mm) loss on SNozz CML 20 DWG 1 Nom: (5.5mm) Act: (3.6mm) Req: (2.3mm) CR: .07 Yrs: (18.1 yrs) Int (3 yrs) Min @ Top Elbow
Manway Davits/Quick Closure:	Fair	Corrosion found on manway throat to a maximum measured depth of 0.7 mm. Corrosion is within the corrosion allowance of 3.2 mm.
Nameplate:	Good	Nameplate is legible and readily accessible and securely affixed
Code Variance:		

<b>Internal Inspection - (Vessel</b>		<b>Date</b>	2025-10-27	Phone:403-793-7697 PO Box 1173, Brooks, Alberta, T1R 19B grady.rustebakke@gmail.com	
<b>LSD</b>	16-14-020-12W4M	<b>FACILITY</b>			
<b>Jur #</b>	A0551782	<b>FIELD</b>			
<b>Serial #</b>	14171				

<b>Fit For Service:</b>		Fit For Service.	
<b>Inspection Summary:</b> Overview of Inspection Findings		Minor corrosion found on nozzle throat to a measured depth of 0.7 mm Minor corrosion measured in vapor phase at 12:00 to a measured depth of 0.5 mm,  Coating has failed on the nozzles and vapour space.	
<b>Internal Inspection Items</b>	<b>G/F/P</b>	<b>Comments</b>	
<b>Inlet Area:</b>	Fair	The coating has failed around the nozzle on the shell and on the deflection plate.	
<b>Internal Piping:</b>	Good	Internal stainless steel heating loop in good visual condition.	
<b>Baffles, Deflector Plates, Weir, etc:</b>	N/A		
<b>Trays:</b>	N/A		
<b>Demister Pad:</b>	N/A		
<b>Head (1):</b>	Good	Head in good visual condition.	
<b>Head (2):</b>	Good	Head in good visual condition.	
<b>Shell:</b>	Fair	Coating in vapor space has failed. Minor general corrosion to a maximum measured depth of 0.5 mm was found on the shell at 12:00. Corrosion found in the failed coating section is within the 3.2 mm corrosion allowance.	
<b>Tubesheet:</b>	N/A		
<b>Channel Section:</b>	N/A		
<b>Bundle / Tubes:</b>	N/A		
<b>Nozzles / Manways:</b>	Fair	Corrosion found on the manway throat to a maximum measured depth of 0.7 mm. Corrosion is within the corrosion allowance of 3.2 mm.	
<b>Welds:</b>	Good		
<b>Vortex Breakers, Drains, etc:</b>	Good	Bolted vortex breaker on 3" nozzle projection. Vortex not removed for inspection.	
<b>Internal Coating:</b>	Fair	<div><input type="checkbox"/> NotCoated <input checked="" type="checkbox"/> Coated</div>	The coating has failed on the manway, nozzles and on the 12:00 portion of the shell. The coating has chipped and flaked, general corrosion visible where the coating has failed on the shell and manway. No visual access to the nozzle coating failures.

<b>Internal Inspection - (Vessel)</b>		<b>Date</b>	2025-10-27	Phone:403-793-7697 PO Box 1173, Brooks, Alberta, T1R 19B grady.rustebakke@gmail.com	
<b>LSD</b>	16-14-020-12W4M	<b>FACILITY</b>			
<b>Jur #</b>	A0551782	<b>FIELD</b>			
<b>Serial #</b>	14171				

- ☒ CoatingFailure
- ☒ Blisters
- ☒ Cracks/Flake
- ☐ Repaired
- ☐ Replaced

**Weld Repairs:** ☐ Weld Repairs Required  
☒ None Required

**Internal Anodes:** ☐ Internal Anodes ☒ None

**Non-Conformances and Corrective Actions:**

**Preparatory Work Required for Next Inspection:**

**Recommendations for Next Inspection:** Blast clean and coat vessel.

Overview Photo

LSD

Jur #

Serial #

16-14-020-12W4M

A0551782

14171

Date

2025-10-27

FACILITY

FIELD

403-793-7697

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Nameplate



Overview



Nameplate



Overview



**Overview Photo**

**LSD** 16-14-020-12W4M  
**Jur #** A0551782  
**Serial #** 14171

**Date**

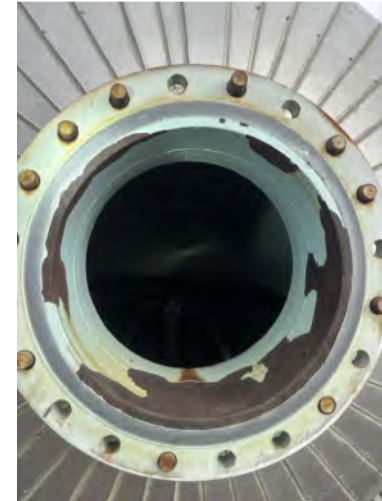
2025-10-27

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**Temperature Gauge****Coating failure on manway throat****Corrosion on throat measured to a depth of 0.7 mm****Internal Overview**



**Overview Photo**

**LSD** 16-14-020-12W4M  
**Jur #** A0551782  
**Serial #** 14171

**Date**

2025-10-27

**FACILITY****FIELD**

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Internal Overview stainless 2" piping



Typical nozzle cleanliness



12:00 coating failure



12:00 coating failure

**Overview Photo**

**LSD** 16-14-020-12W4M  
**Jur #** A0551782  
**Serial #** 14171

**Date**

2025-10-27

**FACILITY****FIELD**

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12:00 coating failure



Head overview



12:00 coating failure



Typical nozzle coating failure





REPORT # A0551782\_27OCT2025\_UT\_VE\_VI\_GRADYINSPECTIONLTD  
LSD 16-14-020-12W4M FACILITY  
DH-LSD FIELD  
Jur # A0551782 DWG 1  
Ser # 14171

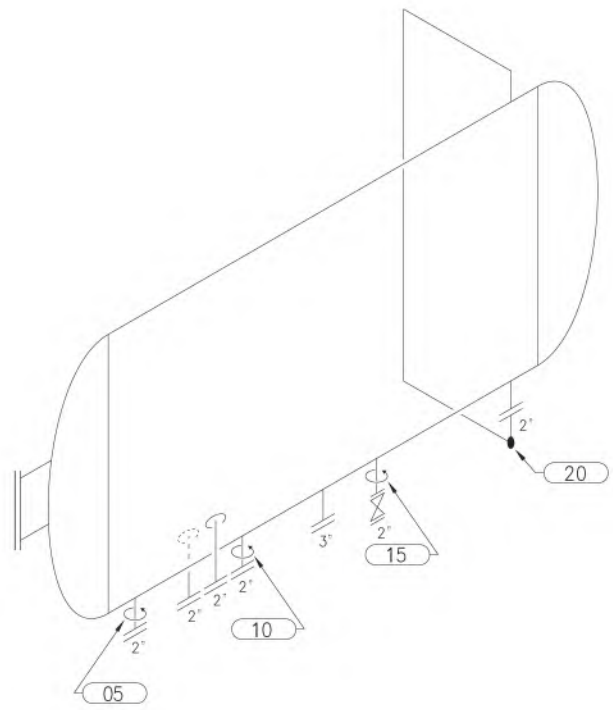
403-793-7697



Po Box 1173 Brooks Alberta T1R 1B9  
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Location: Still Column

Ser # 14171		Inspection Dates and Thickness Values (mm)															%																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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LSD	16-14-020-12W4M										FACILITY																			
DH-LSD											FIELD																			
Jur #	A0551782										DWG	1					Location: Still Column													
Ser #	14171																													
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	8.7			3.4	2.3	2.3	SNozz	2"	-- 160--(8.7mm)	UG45Nozzle	50	25/10/27	8.7	9.1						1	0%					2028-10-26	3.0			
10	8.7			3.4	2.3	2.3	SNozz	2"	-- 160--(8.7mm)	UG45Nozzle	50	25/10/27	9.1	9.3						1	-5%					2028-10-26	3.0	Inc @ 4.6 North Side		
15	8.7			3.4	2.3	2.3	SNozz	2"	-- 160--(8.7mm)	UG45Nozzle	50	25/10/27	9.2	9.6						1	-6%					2028-10-26	3.0			
20	5.5			3.4	2.3	2.3	SNozz	2"	XS 80--(5.5mm)	UG45Nozzle	50	25/10/27	3.6	4.8						1	35%		0.07	2043-12-15	18.1	2028-10-26	3.0	Min @ Top Elbow		