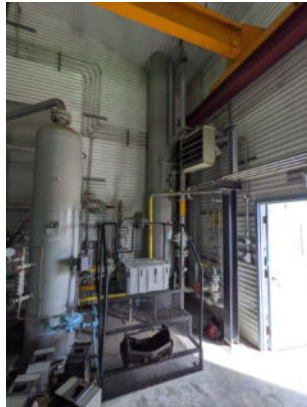
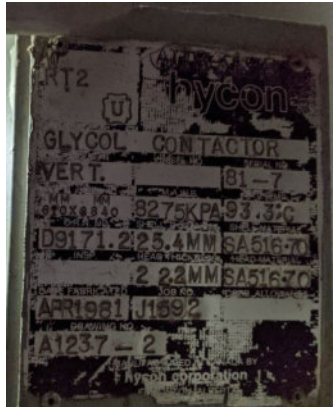


01-18-017-18W4M
GLYCOL DEHYDRATOR
A0183198
REPORT # A#0183198_GRADY INSPECTION LTD VE UT INSP_2MAY2022

DATE 5/2/2022
CLIENT CNRL

Phone:403-793-7697
PO Box 1173, Brooks,
Alberta, T1R 19B
grady.rustebakke@gmail.com




RESULTS OF INSPECTION:


VE Inspection:
Fit For Service. Vessel is in good visual condition.
No Ground Wire
No cage on ladder
UT Inspection:
No corrosion was found with the ultrasonic inspection.


PRESSURE EQUIPMENT										AB-506 INTERVAL						
DISTRICT	AB - OIL & NATURAL GAS					SHELL TUBE				Refrigeration Vessels						
FACILITY	Armada Gas Plant					MAWT	200	F		GRADE	YEARS			REG		
A#	A0183198	YR	1981	MAWP	1200			psi	Equip		PSV	UT				
SERIAL #			PSV						psi		3	10	5	10	X	
CRN	D9171.2		PSV CRN						INSPECTION TYPE							
EQUIP#			SERVICED						VE	VI	MT	PT	ET	UT		
STATUS	OUT OF SERVICE			UNIT	K301					X					X	
MANUFACTURER	HYCON CORPORATION									INSPECTION RESULT:						
DH LSD						L	Ft	OD	2	Ft	NCR-OPERATIONS					
REPAD	UNIQUE ID									NCR-REGULATORY/ADMIN						
										ACTION ITEM RAISED					X	
										REPAIR REQUIRED						
										SUITABLE FOR SERVICE					X	
										RECOMMENDATIONS:						
										VE Inspection: Confirm vessel is sufficiently grounded. Install ladder cage or add signage to prevent usage. Inspect PSV after installation to confirm suitability.						

SIGN OFF		API 510	EXP.	IPV	EXP.	INSPECTOR - PRIMARY	INSPECTOR - REVIEW	CLIENT SIGN OFF
INSPECTED BY	ToddM Mckenzie	97445	12/31/2023	001336	7/13/2026			
REVIEWED BY	Ashley Rustebakke	60285	7/31/2024	966	6/16/2026			

Ultrasonic Report		Date	3/25/2022	Phone: 403-793-7697 PO Box 1173, Brooks, Alberta, T1R 19B grady.rustebakke@gmail.com	
LSD	01-18-017-18W4M	Facility	Armada Gas Plant		
DH-LSD		Field	Red Deer District		
Jurisdiction # A0183198					
Serial #					
Ultrasonic Report #: A#0183198_GRADY INSPECTION LTD VE UT INSP_2MAY2022					

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 GLYCOL DEHYDRATOR										
LIMITATIONS		None.										
RESULTS		No corrosion was found with the ultrasonic inspection.										

Technician Name	Certification Body	Certification #	Expiry	Technician Signature			
3 ToddM	CGSB	9234	12/15/2030				
				Client Name			
				Client Signature			

External Inspection - (Vessel)		Date	3/25/2022	Phone:403-793-7697 PO Box 1173, Brooks, Alberta, T1R 19B grady.rustebakke@gmail.com	
LSD	01-18-017-18W4M	Facility	Armada Gas Plant		
DH-LSD		Field	Red Deer District		
Jurisdiction #		A0183198			

Fit For Service:	Fit For Service.
Inspection Summary:	Vessel is in good visual condition. No Ground Wire No cage on ladder
Recommendations:	Confirm vessel is sufficiently grounded. Install ladder cage or add signage to prevent usage. Inspect PSV after installation to confirm suitability.

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	Paint is intact and well adhered to the vessel.
Insulation / Cladding:	N/A	Non insulated vessel
Nozzles, Piping and Connections:	Good	Nozzles and piping in good visual condition
Buried Vessels:	N/A	Above Ground
Ladders, Platforms and Walkways:	Fair	No cage on ladder
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	Skirt is in good visual condition
Grounding:	Poor	No Ground Wire
Gauges and Instrumentation:	Good	<div>Shell Gauge (0 - 1500 @ psi)Temp Gauge (0 - 250 @ F)</div> <div>Gauges are clear, colorless and correct for the MAWP and MAWT.</div>
Pressure Protection:	N/A	Vessel is protected through K301 3rd stage Discharge. Out for service at time of inspection
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:		

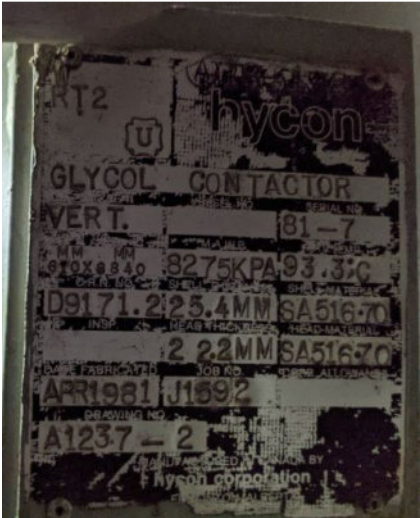
Overview Photo

LSD 01-18-017-18W4M
Jur # A0183198
Serial #

Date	5/2/2022
FACILITY	Armada Gas Plant
FIELD	Red Deer District

Phone:403-793-7697
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GRADY
INSPECTION LTD



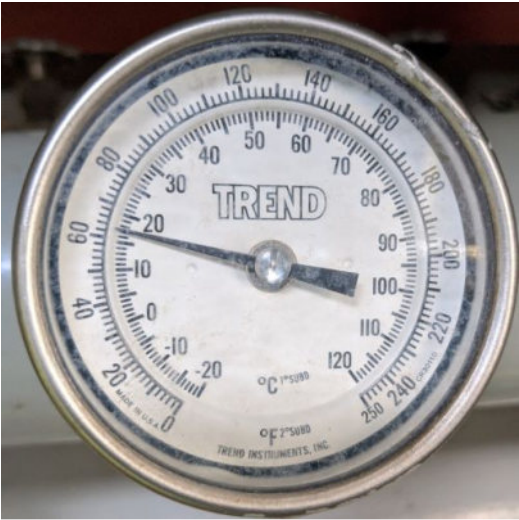
Nameplate



Overview



Pressure Gauge



Temperature Gauge

Overview Photo

LSD 01-18-017-18W4M
Jur # A0183198
Serial #

Date

5/2/2022

FACILITY

Armada Gas Plant

FIELD

Red Deer District

Phone:403-793-7697

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INSPECTION LTD



liquid level

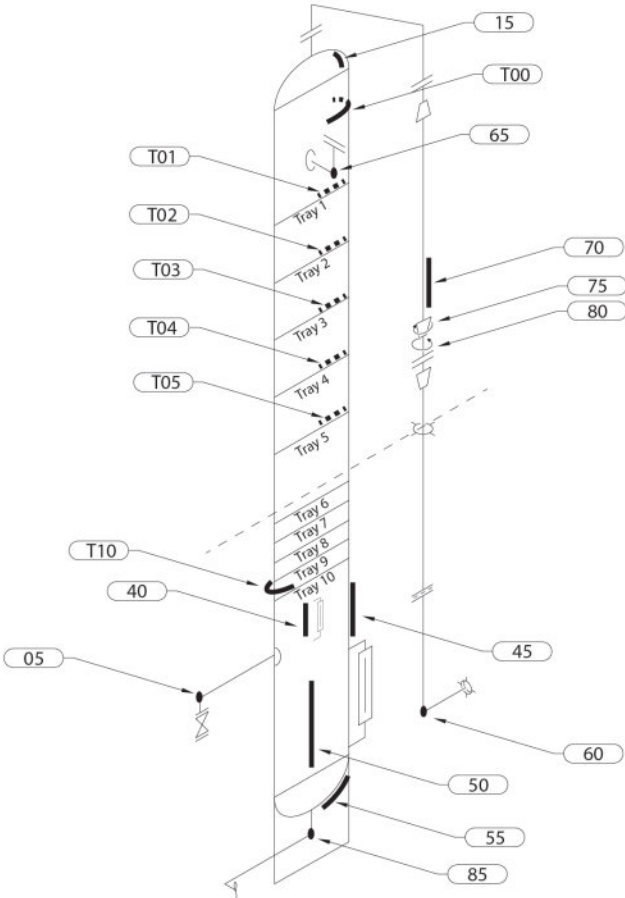
REPORT # A#0183198_GRADY INSPECTION LTD VE UT INSP_2MAY2022
LSD 01-18-017-18W4M FACILITY Armada Gas Plant
DH-LSD FIELD Red Deer District
Jur # A0183198 DWG 1 Location:
Ser #

Phone:403-793-7697

PO Box 1173, Brooks,
Alberta, T1R 19B
grady.rustebakke@gmail.com



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



CML Min Yrs Date

REPORT # A#0183198_GRADY INSPECTION LTD VE UT INSP_2MAY2022

LSD 01-18-017-18W4M

DH-LSD

Jur # A0183198

Ser #

FACILITY Armada Gas Plant

FIELD Red Deer District

DWG

1

Location:

Phone:403-793-7697

PO Box 1173, Brooks,
Alberta, T1R 19B
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Ser #	Inspection Dates and Thickness Values (mm)																				% 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 Date	Min Ave	3rd Last Date	Min Ave	2nd Last Date	Min Ave	Last Date	Min Ave	# of Insp	ST	LTn	LTi							
05	8.6	7.5	3.1	2.3	3.4	3.4	Elbow	4" XS 80--(8.6mm)	API570	1200	11/27/17	8.1	8.4				5/2/22	8.1	8.6	2	6%					4/29/2032	10.0			
15	22.2	22.2	19.5		19.5	19.5	Head		UG32HeadElli	1200	5/2/22	24.4	25.2							1	-10%					4/29/2032	10.0			
40	25.4	25.4	40.0		20.0	20.0	Shell		UG27ShellInt	1200	11/27/17	26.3	26.4				5/2/22	26.5	26.8	2	-4%					4/29/2032	10.0			
45	25.4	25.4	40.0		20.0	20.0	Shell		UG27ShellInt	1200	11/27/17	26.3	26.4				5/2/22	26.3	26.5	2	-4%					4/29/2032	10.0			
50	25.4	25.4	40.0		20.0	20.0	Shell		UG27ShellInt	1200	11/27/17	26.2	26.2				5/2/22	26.0	26.4	2	-2%	0.05				4/29/2032	10.0			
55	22.2	22.2	19.5		19.5	19.5	Head		UG32HeadElli	1200	11/27/17	24.4	25.2				5/2/22	24.3	25.0	2	-9%	0.02				4/29/2032	10.0			
60	8.6	7.5	3.1	2.3	3.4	3.4	Elbow	4" XS 80--(8.6mm)	API570	1200	11/27/17	8.8	9.1				5/2/22	8.6	9.0	2	0%	0.05				4/29/2032	10.0			
65	7.1	6.2	2.3	1.8	1.4	1.8	Elbow	1.5" -- 160--(7.1mm)	API570	1200	5/2/22	7.6	8.0							1	-7%					4/29/2032	10.0			
70	15.1	13.2	3.3	2.8	8.2	8.2	Pipe	10" -- 80--(15.1mm)	API570	1200	5/2/22	15.4	15.7							1	-2%					4/29/2032	10.0			
75	25.4	0.0			0.0	0.0	Reducer		API570	1200	5/2/22	15.3	16.0							1		0.24		12/10/2084	4/29/2032	10.0				
80	11.0	9.6	3.3	2.8	5.0	5.0	Pipe	6" XS 80--(11mm)	API570	1200	5/2/22	11.1	11.6							1	-1%					4/29/2032	10.0			
85	6.4			3.0		3.0	Nozzle	1" -- 160--(6.4mm)	UG45Nozzle	1200	5/2/22	5.5	5.8							1	14%	0.02		12/24/2138	4/29/2032	10.0				
T00	25.4	25.4	40.0		20.0	20.0	Shell		UG27ShellInt	1200	5/2/22	26.1	26.4							1	-3%					4/29/2032	10.0			
T01	25.4	25.4	40.0		20.0	20.0	Shell		UG27ShellInt	1200	5/2/22	25.7	26.1							1	-1%					4/29/2032	10.0			
T02	25.4	25.4	40.0		20.0	20.0	Shell		UG27ShellInt	1200	5/2/22	26.1	26.4							1	-3%					4/29/2032	10.0			
T03	25.4	25.4	40.0		20.0	20.0	Shell		UG27ShellInt	1200	5/2/22	26.1	26.4							1	-3%					4/29/2032	10.0			
T04	25.4	25.4	40.0		20.0	20.0	Shell		UG27ShellInt	1200	5/2/22	26.1	26.4							1	-3%					4/29/2032	10.0			
T05	25.4	25.4	40.0		20.0	20.0	Shell		UG27ShellInt	1200	5/2/22	26.4	26.7							1	-4%					4/29/2032	10.0			
T10	25.4	25.4	40.0		20.0	20.0	Shell		UG27ShellInt	1200	5/2/22	24.6	26.0							1	3%	0.02		10/21/2260	4/29/2032	10.0				