

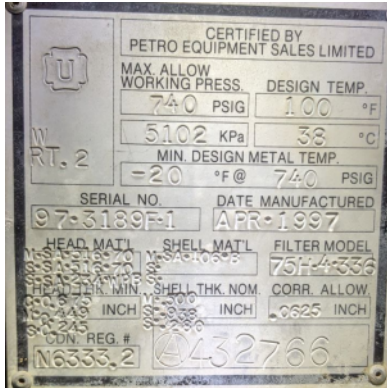
01-18-017-18W4M
1ST STG INLET FILTER
A0432766 97-3189F-1
REPORT # A#0432766_GRADY INSPECTION LTD VE UT INSP_30MAR2022

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




PRESSURE EQUIPMENT										AB-506 INTERVAL								
DISTRICT	AB - OIL & NATURAL GAS					SHELL		TUBE			Upstream pressure vessels not							
FACILITY	Armada Gas Plant					MAWT		100		F			GRADE <div>YEARS</div> <div>EquipPSVUT</div> REG <div>3106X</div>					
A#	A0432766		YR	1997	MAWP		740					psi						
SERIAL #	97-3189F-1				PSV		635					psi						
CRN	N6333.2					PSV CRN		0G2369.5C					INSPECTION TYPE					
EQUIP#						SERVICED		3/3/2016										
STATUS	IN SERVICE					UNIT		K301					VE	VI	MT	PT	ET	UT
MANUFACTURER	PETRO EQUIP. SALES LTD.										INSPECTION RESULT:							
DH LSD						L	8	Ft	OD	1.23	Ft	NCR-OPERATIONS						
REPAD	UNIQUE ID					NCR-REGULATORY/ADMIN												
ACTION ITEM RAISED																		
REPAIR REQUIRED																		
SUITABLE FOR SERVICE																	X	
RECOMMENDATIONS:																		
VE Inspection: No Recommendations from the External Inspection.																		


RESULTS OF INSPECTION:


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

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	
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 #	A0432766				
Serial #	97-3189F-1				
Ultrasonic Report #: A#0432766_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 FILTER										
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 #		A0432766			

Fit For Service:	Fit For Service.
Inspection Summary:	Vessel is in good visual condition.
Recommendations:	No Recommendations from the External Inspection.

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. Paint is intact and well adhered to the vessel.
Insulation / Cladding:	N/A	Non insulated vessel Building to vessel shell interface is broken with no visual signs of corrosion present.
Nozzles, Piping and Connections:	Good	Number of nozzles repaded: Number of nozzles without repad: Nozzles and piping in good visual condition
Buried Vessels:	N/A	Above Ground
Ladders, Platforms and Walkways:	N/A	No attached ladder or platform
Foundations and Supports:	Good	Anchor bolts fully engaged Building is secure Concrete is intact with no visible deficiencies
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, all anchors are secure.
Grounding:	Good	Ground Wire is secure Grounded through piping system
Gauges and Instrumentation:	N/A	<div>Shell Gauge (- @)Temp Gauge (- @)</div> Compressor is digitally monitored for pressure and temperature. No mechanical gauges found other than differential gauge.
Pressure Protection:	Good	The PSV Set Pressure (635 psi) is suitable for the MAWP (740 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:		

ASSOCIATED PRESSURE EQUIPMENT DATA			
PV JUR/SER		A0432766	97-3189F-1
SHELL		TUBE	
MAWP	740		psi
PSV FIT FOR SERVICE STATEMENT			
Fit For Service.			
PSV STATIC DATA			
MODEL	26GA12-120		
SERIAL	CE-43585-1-A10		
MANUFACTURER	Farris		
TAG	14392B		
CRN	0G2369.5C		
SEAL	Y		
SET PRES	635		psi
CAPACITY	6529	SCFM	
SERVICE DATE	3/3/2016		
SERVICE COMPANY	Unified Valve Group		
T/F	UV	NB	
F	UV	NB	
SIZE	B VALVE	CARSEAL	
INLET	1.5	N	
OUTLET	2.5	N	
PSV COMMENTS			
No PSV photos			

Overview Photo

LSD 01-18-017-18W4M
Jur # A0432766
Serial # 97-3189F-1

Date	3/30/2022
FACILITY	Armada Gas Plant
FIELD	Red Deer District

Phone:403-793-7697

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GRADY
INSPECTION LTD



Nameplate



Overview



Overview



Differential Pressure Gauge

Overview Photo

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Date

3/30/2022

FACILITY

Armada Gas Plant

FIELD

Red Deer District

Phone:403-793-7697

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GRADY
INSPECTION LTD

**Pressure Gauge****Liquid Level**

Phone:403-793-7697

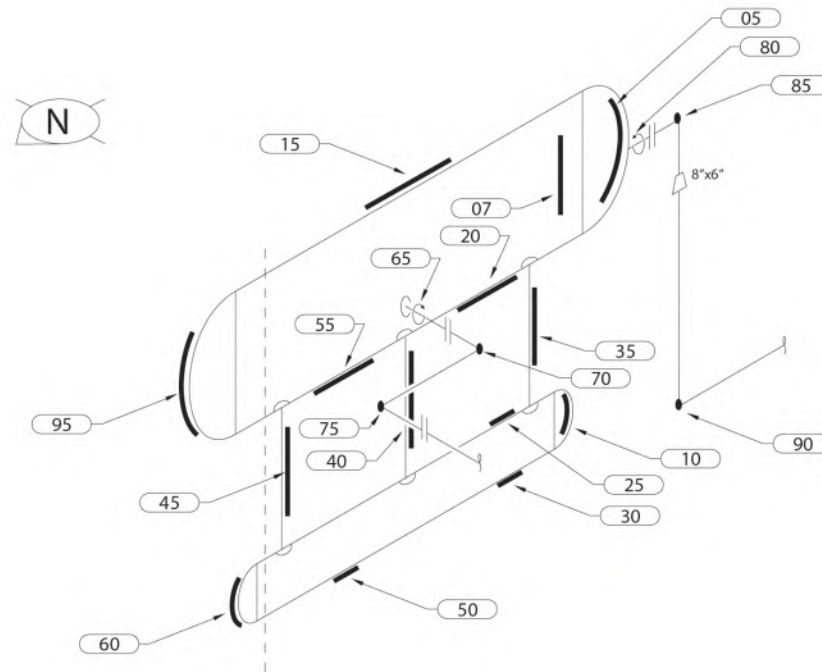
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Ser # 97-3189F-1

CML #	Nom	CA/Tol	SElag	STmin	PTmin	> Tmin	Comp Type	Pipe Size	Code	MOR	Dates
-------	-----	--------	-------	-------	-------	--------	-----------	-----------	------	-----	-------

CML#	Non	CA/TA	SP/AG	ST/Min	PT/Min	> 7 Min	Comp Type	Pipe Size	Code	MOP	Date	Min Ave	Date	Min Ave	Date	Min Ave	Date	Min Ave	Insp	Loss	ST	LTn	LTi	Date	(yrs)	Insp Date	(yrs)	Comments
------	-----	-------	-------	--------	--------	---------	-----------	-----------	------	-----	------	---------	------	---------	------	---------	------	---------	------	------	----	-----	-----	------	-------	-----------	-------	----------



CML	Min	Yrs	Date
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LSD 01-18-017-18W4M FACILITY Armada Gas Plant
DH-LSD FIELD Red Deer District
Jur # A0432766 DWG 1 Location:
Ser # 97-3189F-1

Phone:403-793-7697

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Ser #		97-3189F-1		Inspection Dates and Thickness Values (mm)															% Norm Wall Loss		Corrosion Rates			Rem Life (yrs)		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		# of Insp	ST	LTn	LTi	Rem Life Date	Next Insp Date						
05	11.4	11.3	7.4		7.4	7.4	Head		UG32HeadElli	740	5/18/07	12.4	13.1			11/28/17	12.2	3/30/22	11.9	12.2	4	-4%	0.07	0.03			3/27/2032	10.0		
07	12.7	12.6	17.7		8.8	8.8	Shell		UG27ShellInt	740	3/30/22	12.1	12.4							1	5%	0.02		12/20/2159		3/27/2032	10.0			
10	6.2	6.2	3.8		3.8	3.8	Head		UG32HeadElli	740	9/23/15	6.4	6.6			11/28/17	6.6	3/30/22	6.3	6.8	3	-1%	0.07	0.02			3/27/2032	10.0		
15	12.7	12.6	17.7		8.8	8.8	Shell		UG27ShellInt	740	5/18/07	13.2	13.4			11/28/17	12.7	3/30/22	12.5	12.7	4	2%	0.05	0.05	4/8/2100		3/27/2032	10.0		
20	12.7	12.6	17.7		8.8	8.8	Shell		UG27ShellInt	740	5/18/07	12.8	12.9			9/23/15	11.9	3/30/22	11.8	12.0	3	7%	0.02	0.07	6/15/2066		3/27/2032	10.0		
25	7.1	7.0	7.8		3.8	3.8	Shell		UG27ShellInt	740	9/23/15	7.0	7.1			11/28/17	6.9	3/30/22	6.6	7.0	3	7%	0.07	0.06	1/15/2062		3/27/2032	10.0		
30	7.1	7.0	7.8		3.8	3.8	Shell		UG27ShellInt	740	9/23/15	7.3	7.4					3/30/22	6.8	7.0	2	4%	0.08				3/27/2032	10.0		
35	15.2			4.8		4.8	Nozzle	3" XXS ----(15.2mm)	UG45Nozzle	740	9/23/15		14.9	15.0		11/28/17	15.3	3/30/22		14.8	15.0	3	3%	0.12	0.02	12/3/2108		3/27/2032	10.0	
40	8.7			3.4		3.4	Nozzle	2" -- 160--(8.7mm)	UG45Nozzle	740	9/23/15			8.2	8.3			3/30/22		7.7	8.2	2	11%	0.08		1/7/2078		3/27/2032	10.0	Component thought to
45	7.6			4.8		4.8	Nozzle	3" XS 80--(7.6mm)	UG45Nozzle	740	9/23/15	15.6	16.0							1	-105%					9/20/2025	10.0			
50	7.1	7.0	7.8		3.8	3.8	Shell		UG27ShellInt	740	9/23/15	7.0	7.1					11/28/17	7.0	7.1	2	2%					11/26/2027	10.0		
55	12.7	12.6	17.7		8.8	8.8	Shell		UG27ShellInt	740	9/23/15	12.2	12.3					11/28/17	12.4	12.7	2	2%								
60	7.1	7.0	3.8		3.8	3.8	Head	6" STD 40--(7.1mm)	UG32HeadElli	740	9/23/15		6.4	6.6		11/28/17	6.5	3/30/22		6.2	7.0	3	13%	0.07	0.03	1/24/2057		3/27/2032	10.0	End cap
65	11.0			6.2		6.2	Nozzle	6" XS 80--(11mm)	UG45Nozzle	740	9/23/15		10.9	11.2		11/28/17	11.3	3/30/22		10.6	11.1	3	4%	0.16	0.05	5/12/2049		3/27/2032	10.0	
70	7.1	6.2	3.3	2.8	3.1	3.1	Elbow	6" STD 40--(7.1mm)	API570	740	9/23/15	7.8	8.0			11/28/17	7.6	3/30/22	7.4	7.8	3	-4%	0.05	0.06			3/27/2032	10.0		
75	7.1	6.2	3.3	2.8	3.1	3.1	Elbow	6" STD 40--(7.1mm)	API570	740	9/23/15		6.6	6.8				3/30/22		6.4	6.8	2	10%	0.03		5/2/2129		3/27/2032	10.0	
80							Nozzle	6" STD 40--(7.1mm)	UG45Nozzle	740																				
85	7.1	6.2	3.3	2.8	3.1	3.1	Elbow	6" STD 40--(7.1mm)	API570	740	9/23/15	8.1	8.3			11/28/17	7.9	3/30/22	7.6	8.0	3	-7%	0.07	0.08			3/27/2032	10.0		
90							Elbow	8" STD 40--(8.2mm)	API570	740																				
95	7.1	7.0	8.9		8.9	8.9	Head		UG32HeadElli	740	9/23/15	18.1	18.3					3/30/22	16.8	18.5	2	-136%	0.20				3/27/2032	10.0		