

# CEL Quality Services Ltd.

## VISUAL INSPECTION

Tel: (403) 845-5881 • (403) 844-3341



Pressure Equipment Inspection

### REPORT

Report#: A0618125-VE,UT-2022-03-28

Type of Inspection: <input type="checkbox"/> INSTALLATION <input checked="" type="checkbox"/> EXTERNAL <input type="checkbox"/> INTERNAL <input type="checkbox"/> IN SERVICE <input checked="" type="checkbox"/> OUT OF SERVICE <input type="checkbox"/> INVENTORY																
Date:	28/Mar/2022		Job #:		*all measurements are in inches unless otherwise stated *ns-not stated *na-not applicable											
Inspected By:	Ben Piers		CEL Job #:													
Client:	Pipestone Energy Corp.				Pre Purchase Inspection											
Owner:	Pipestone Energy Corp.				PO# E22-191-PO-01											
Region:	Alberta				Service PSV prior to returning to service											
Area:	Sunchild	Location/	Surface:	01-04-044-11w5												
Facility:	Compressor	LSD:	UWI/DH:													
Service:	Sweet	if other describe:														
Description:	<input checked="" type="checkbox"/> Vessel <input type="checkbox"/> Exchanger <input type="checkbox"/> Tank <input type="checkbox"/> Furnace <input type="checkbox"/> Boiler															
Unit #:	BU-640		Equip #:		FL-304											
Equip. Name:	Glycol Charcoal Filter		Equip. Type:		Filter											
Jurisdiction #:	0618125		CRN:		V-7195.2											
Manufacturer:	Alco Gas & Oil Production Equipment LTD.										Diameter OD (in):	16		Height/Length (in):	42	
Serial No.:	2011-8267-06		Year Built:		2012		<input type="checkbox"/> PSV on Vessel <input checked="" type="checkbox"/> Piping									
Volume:	ns		PSV Data:		<input type="checkbox"/> Isolation Valve(s) Installed <input type="checkbox"/> Car-sealed <input type="checkbox"/> CRN:											
Zones:	MAWP	Des. T	MDMT	Op.P	Op.T	Set P	Tag #	Manufacturer	Serial No.	In	Out	Capacity	Serv. Co.	Serv. Date		
Shell Side:	150	200	-20	0	ns	25	27117R	Crosby	C11-3806 0	1	2	16.1	RMV	Apr. 17, 2015		
Coil Side:	na	na	na													
Units	PSI	F	F	PSI	F	PSI						GPM				
Components:	Material	Nominal (in)	Sgl./Dbl/ Weld	Calc. Trim	Retire t	CA (in)	UT TML	Lowest t	Acc.	Ret.	Dia. (OD),(in)	RT	HT			
Shell:	SA-106-B	0.375				0.125	05	0.376	<input checked="" type="checkbox"/>	<input type="checkbox"/>	16	1	Yes			
Head:	SA-516-70MT	1.00/0.246				0.125			<input type="checkbox"/>	<input type="checkbox"/>	16					
Tube/Coil:									<input type="checkbox"/>	<input type="checkbox"/>						
Channel:									<input type="checkbox"/>	<input type="checkbox"/>						
Other									<input type="checkbox"/>	<input type="checkbox"/>						
Manway/Port:	Port Size (in): 8		<input checked="" type="checkbox"/> Davit Arm Present		<input checked="" type="checkbox"/> Davit Arm Greased		<input type="checkbox"/> Double Nitted		Condition: Acceptable							
Nozzles:	<input type="checkbox"/> Reinforcement pads used <input type="checkbox"/> Weep Holes Present Comment: None															
	<input checked="" type="checkbox"/> Piping well supported <input checked="" type="checkbox"/> Joining as per code Comment: Secure and intact															
Piping:	<input checked="" type="checkbox"/> PSV Piping <input checked="" type="checkbox"/> Drains properly <input checked="" type="checkbox"/> Well coated Comment: Secure															
	<input checked="" type="checkbox"/> Inlet Piping <input checked="" type="checkbox"/> Free from leaks <input checked="" type="checkbox"/> Well coated Comment: Secure															
	<input checked="" type="checkbox"/> Outlet Piping <input checked="" type="checkbox"/> Free from leaks <input checked="" type="checkbox"/> Well coated Comment: Secure															
	<input checked="" type="checkbox"/> Drain Piping <input checked="" type="checkbox"/> Free from leaks <input checked="" type="checkbox"/> Well coated Comment: Secure															
	<input checked="" type="checkbox"/> Instrumentation Piping <input checked="" type="checkbox"/> Free from leaks/kinks Comment: Secure and intact															
	<input checked="" type="checkbox"/> Process Fluid Identified <input checked="" type="checkbox"/> Flow direction marked Comment: Rich Glycol															
Valves:	<input checked="" type="checkbox"/> Manual Isolation Valve <input checked="" type="checkbox"/> Free from leaks Comment: Acceptable, no leaks noted															
	<input type="checkbox"/> Automated Control Valve <input type="checkbox"/> Free from leaks Comment: None															
	<input checked="" type="checkbox"/> Vents and Drains Plugged Comment: Acceptable, no leaks noted															
Gauges:	<input checked="" type="checkbox"/> Pressure Condition: Clear and intact x1															
	<input type="checkbox"/> Temperature Condition: None															
Sight Glass:	<input type="checkbox"/> Fluid Level Condition: None															
Orientation:	Vertical	Foundation:		<input type="checkbox"/> Concrete	<input type="checkbox"/> Gravel	<input type="checkbox"/> Timber	<input checked="" type="checkbox"/> Steel	<input type="checkbox"/> Other:	Condition: Skid secure and level on piles							
Support:	<input type="checkbox"/> Saddle	<input type="checkbox"/> Seal-welded	<input type="checkbox"/> Free to move		Condition:											
	<input type="checkbox"/> Skirt	<input type="checkbox"/> Free of debris	Comment:		Condition:											
	<input type="checkbox"/> Hangers	<input type="checkbox"/> Secure	Comment:		Condition:											
	<input checked="" type="checkbox"/> Other	Specify: Flat base bolted to skid floor, Secure and level		Electrical Grounding:		<input type="checkbox"/> Direct	<input checked="" type="checkbox"/> Indirect	<input type="checkbox"/> None								
Overall:	General condition:		Suitable for continued service		Condition: Acceptable											
Ext. Surface:	<input checked="" type="checkbox"/> Painted		<input type="checkbox"/> Insulated	<input type="checkbox"/> Fire-proofed	<input type="checkbox"/> Cladded	<input type="checkbox"/> Other:	Condition: Paint is acceptable, grey									
Ext. Fixtures:	<input type="checkbox"/> Ladder		<input type="checkbox"/> Platform(s)	<input type="checkbox"/> Other:		Condition: None										
Int. Surface:	<input type="checkbox"/> Coated		<input type="checkbox"/> Lined	<input type="checkbox"/> Thermal sprayed	<input type="checkbox"/> Cladded	<input type="checkbox"/> Welded overlay	Condition: External Inspection Only									
Int. Fixtures:	<input type="checkbox"/> Baffle		<input type="checkbox"/> Float	<input type="checkbox"/> Impingement	<input type="checkbox"/> Weir	<input type="checkbox"/> Vortex Breaker	Condition: External Inspection Only									
Recommended Actions:														NCR#:		
Service the PSV prior to returning to service.																
Summary Comment: Vessel found to be acceptable for service.														Inspection interval: Set by Chief Inspector		
Additional notes on continuation page: <input checked="" type="checkbox"/>														Quality Check:		
Equipment is suitable for continued service: <input checked="" type="checkbox"/>														Signature of Inspector: Ben Piers		
Inspector Certificate No: IPV #000770														Received by: (print)		
Terms and Conditions: Refer to "Scope of Services" and "Standard of Care"														Received by: (sign)		

# ULTRASONIC SURVEY REPORT

Report #: A0618125-VE,UT-2022-03-28						
<input type="checkbox"/> New Equipment UT Survey		<input checked="" type="checkbox"/> Existing Equipment UT Survey		<input type="checkbox"/> In-Service <input checked="" type="checkbox"/> Out of Service		
Client Job #:			CEL Job #:			
Client:	Pipestone Energy Corp.	Location:	Surface:	01-04-044-11w5		
Date:	28/Mar/2022		UW/DH:			
Region:	Alberta	Access Considerations:		Year-Round Access		
Area:	Sunchild	Scope of Inspection	<input type="checkbox"/> Inventory	<input checked="" type="checkbox"/> External	<input checked="" type="checkbox"/> UT	
Facility:	Compressor					
<b>Static Data</b>						
Equipment Name:	Glycol Charcoal Filter	MAWP Shell (PSI):	150	Pre/Post 1999:	Post	
Equipment #:	FL-304	MAWP Tube (PSI):	na	Diameter (in):	16	
Jurisdiction #:	0618125	MAWT Shell (F):	200	CA Head (in):	0.125	
Manufacturer:	Alco Gas & Oil Production Equipment LTD.	MAWT Tube (F):	na	CA Shell (in):	0.125	
Year Built:	2012	Shell Material:	SA-106-B	Nominal (in):	0.375	
SN #:	2011-8267-06	Head Material:	SA-516-70MT	Nominal (in):	1.00/0.246	
CRN #:	V-7195.2				RT (Joint Eff):	1
Acceptance Criteria & Specifications:		Client Evaluation				
<b>Method</b>						
Procedure:	USB-001, Rev 01	Mode:	<input checked="" type="checkbox"/> Zero Degree	<input type="checkbox"/> Shear Wave		
Equipment Type:	DMS Go	Serial No:	12105442	Last Calibration:	Jan 3, 2022	
Transducer:	0.250"	Serial No:	90849	Type/Frequency:	Duel / 5.0 MHZ	
Cable Length (in):	72"	Couplant:	Echo Mix - water based powder mix			
Surface Condition:	<input type="checkbox"/> Clean Base Metal <input type="checkbox"/> As Ground <input type="checkbox"/> Machined <input type="checkbox"/> Sand Blast <input checked="" type="checkbox"/> Painted <input type="checkbox"/> Other:					
Cal Block(s):	SN#: 17-4164	Type:	1" 4 step Block			
Notes:						
Interval:	Set by Chief Inspector after review					

\*NS=Not Stated

\*\*NA=Not Applicable



# CEL Quality Services Ltd.



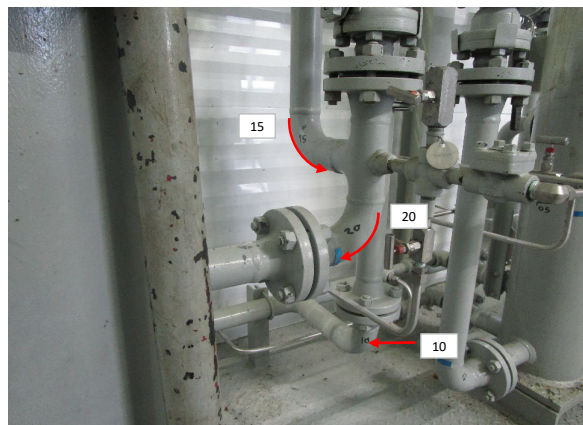
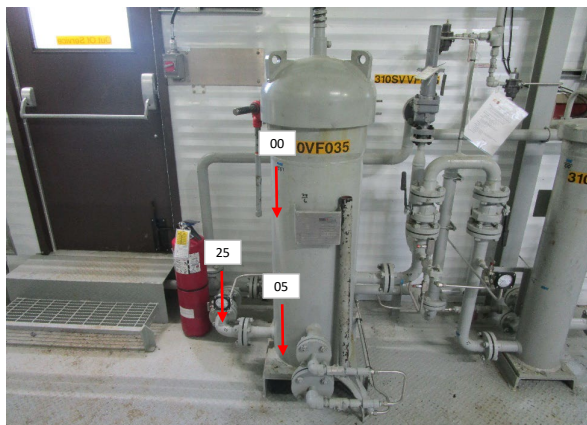
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## PHOTOS PAGE

Report#: A0618125-VE,UT-2022-03-28

A#: 0618125	S/N#: 2011-8267-06	or Other: FL-304
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Signature of Inspector:

Ben Piers

UT Corrosion Survey Readings									
Date:	28-Mar-22	Area:	Sunchild	Equipment Name:	Glycol Charcoal Filter	Equipment #:	FL-304		
Client:	Pipestone Energy Corp.	LSD:	01-04-044-11w5	Jurisdiction #:	0618125	SN #:	2011-8267-06	Job #:	

Vessel TML Readings															Comments
	Baseline	# of Years	Previous	# of Years	Actual		MAWP (PSI)		Shell OD (in)	Shell Nom	Head Nom	Shell Stress	Head Stress	Joint Efficiency	
	2012	10	2012	10	2022		150		16	0.375	1.00/0.246	17100	20000	1.00	
TML ID	Baseline		Low	High	Low	High	OD (in)	ID (in)	STCR (in/YR)	LTCR (in/YR)	T min (in)	RL (YRS)	% Loss	Component	
0	0.375		0.362	0.397	0.362	0.397	16.000	15.250	0.0000	0.0013	0.0672	50+	3.47%	Shell	
5	0.375		0.376	0.392	0.376	0.392	16.000	15.250	0.0000	0.0000	0.0672	50+	0.00%	Shell	

Vessel Attachment Piping TML Readings																		
	Baseline	# of Years	Previous	# of Years	Actual		MAWP (PSI)		Shell OD (in)			Stress		Joint Efficiency				
	2012	10	2012	10	2022		150		16			17100		1.00				
TML ID	Baseline		Low	High	Low	High	OD (in)	ID (in)	STCR (YR)	LTCR (YR)	T min (in)	RL (YRS)	% Loss	SCH	Nominal (in)	Attached Component	Type	Shape
10	0.218		0.224	0.234	0.224	0.234	2.375	1.939	0.0000	0.0000	0.0085	50+	0.00%	XS	0.218	Shell	Piping	90
15	0.218		0.206	0.229	0.206	0.229	2.375	1.939	0.0000	0.0012	0.0085	50+	5.50%	XS	0.218	Shell	Piping	90
20	0.218		0.202	0.227	0.202	0.227	2.375	1.939	0.0000	0.0016	0.0085	50+	7.34%	XS	0.218	Shell	Piping	90
25	0.218		0.216	0.236	0.216	0.236	2.375	1.939	0.0000	0.0002	0.0085	50+	0.92%	XS	0.218	Shell	Piping	90

\* All readings are in inches.

\* All readings acceptable at time of the inspection.



Inspector:	Ben Piers	Certifications:
Signature:	<b>BEN PIERS</b>	ASNT Level 2 UT(SB); CGSB UT Level 1 #18240



## **Scope of Services**

The agreement of CEL Quality Services Ltd. to perform services extends only to those services provided for in writing. Under no circumstance shall such services extend beyond the performance of the requested services. It is expressly understood that all descriptions, comments and expressions of opinion reflect the opinions or observations of CEL Quality Services Ltd. based on information and assumptions supplied by the owner/operator and are not intended nor can they be construed as representations or warranties. CEL Quality Services Ltd. is not assuming any responsibilities of the owner/operator and the owner/operator retains complete responsibility for the engineering, manufacture, repair and use decisions as a result of the data or other information provided by CEL Quality Services Ltd. In no event shall, CEL Quality Services Ltd., liability in respect of the services referred to herein exceed the amount paid for such services.

## **Standard of Care**

In performing the services provided, CEL Quality Services Ltd. uses the degree, care and skill ordinarily exercised under similar circumstances by others performing such services in the same or similar locality. No other warranty, expressed or implied, is made or intended by CEL Quality Services Ltd.