

Revision 3

Rev Date: Sept. 26/2012

**Pressure Equipment Integrity** 

		GENER	AL INSF	ECTION FO	)RM					
Field:				Skid No.	6126					
Facility: Goodfare Gas Gathering					(LSD) Surface:	06-21-72-11	-W6M			
Vessel Name & Equipment Number: 3 Phase Separator					PSV Only-Installed on piping:					
Orientation: Horizontal ☐ or Vertical ☒					(LSD) Down ho					
		vice (blinded / fully isolated				on 🗌 Reg. Inspec	tion 🗵			
		PRESSURE								
"A" or "G" or "S" (Sask	c.) or BC Registratio	n Number.	CRN Nun	nber: L 7115.2						
A0455071			Size (diameter x length- estimate if necessary): 20 in x 90 in							
Vessel serial number:	C9390.VS		Shell material: SA 106 B							
Shell thickness: 26.2			Head material: SA 516 70 N							
Head thickness: 22.2	mm		Tube material:							
Tube wall thickness:			Tube leng							
Tube diameter: Channel thickness:			Channel material: X-ray: RT 2							
GHATHEL WILCKIESS.	Shell: 1440 PS	I		ameters: ASME	VIII. Div 1					
MAWP Tubes:					tment? yes		_X			
Design Temp.	Shell: 130 deg	F		A STATE OF THE STA	iency (if on nam					
_ 50.g., . 5mp.	Tubes:					opiato).				
and the second s	980300000000000000000000000000000000000		Manufacturer: Rushton							
Man Way: 🗌 Y	⊠N		Year built: 2000							
		PRESSUR	RE SAFE	TY VALVE	DATA					
PSV set pressure from	n P&ID	_KPAPSI 🗌 N/A	Piping PSV P & ID. # N/A							
PSV set pressure as per P&ID : ☐Y ☐ N ☐ NA					PSV set pressure is ≤ than MAWP of vessel or piping : ⊠ Y ☐ N No PSV attached because vessel is vented to atmosphere ☐ Y					
Tag Number(s)	Set Pressure	Manufacturer/ Mc	odel / Ser	rial#	Capacity (ie:SCFM/ GPM,etc)	Size (Inlet x Outlet)	Service Co & Serv Co ID# or WO#	Set Date (mm/dd/yyyy)		
G709851	1100 PSI	Mercer / 8117151T5G1	1 / 3312	12	3797 scfm	1 in x 1	King's - WO# 53769	06/18/2013		
And the second section of the	_	SERVICE CONDTI	ONS-IND	DICATE ALL	THAT APPLY					
Sweet 🛛	Sour		Oil			Gas	Gas ⊠ Wa			
Amine	LPG 🗆		ensate 🛛		Air	Air Glyco				
Other (Describe):										
PV Inspection Interv PSV Service Interval	ral/ <u>} Ø</u> month <b>PCM</b> enth	s ABSA Grade 1 ☐ 2 s ABSA Grade 1 ☐ 2	2 3 3 2 2 3 3 5	similar serv similar serv	ice criteria applicice criteria applic	ed to interval ed to interval	: Yes ☐ : Yes ☐ <b>Equipme</b>	Generic ITP 🗹 nt specific ITP 🗌		
Shop Inspector	Dri	nt and Initial					Date	<u> </u>		
Construction/ /E Inspector : Dellas		nt and miliar					Date: Apr 0	1, 2015		
	Pri	nt and Initial					15			
Contractor SuperintendantDate										
nspection reports reviewed/accepted by: ConocoPhillips A&OI Specialist No.   Johnson 15901 # 680   MM Date 7/13/00 15										
ill out all forms as compl	etely as possible. <u>Al</u>	I information is important!	Use bac	k of sheets to	record additions	al information	or sketch if requir	red.		
CPC-WCG-MEC-FR	M-2054	This document cor	ntaine :	proprietar	v information	helongin	n to	Page 1		

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G=Good Y=Yes F=Fair N=No P=Poor N/A=Not Applicable

A0455071

External Inspection Items	G	F	Р	N/A	Comments
Insulation Verify sealed around man ways, nozzles, valves, etc., no damage present, and there is no ingress/egress of moisture. Are straps secured?				X	No insulation.
External Condition Assess paint condition, areas peeling, record any corrosion, (check roof interface for corrosion), damage, distortion, etc. (record location, size and depth of corrosion or damage)		Х			Paint is in fair condition — oxidized with some surface corrosion to 30% of vessel — no pitting.
Leakage Record any leakage at flanges, threaded joints, weep holes on repads, etc.		Х			Product is seeping from PSV to vessel connection.
Skirt/ Saddle Assess condition of paint, fire protection, concrete. Look for corrosion, buckling, dents, etc. Look at vessel surface area near supports. Verify no signs of leakage at attachment to vessel and attachment welds are acceptable. Is ground wire attached? Adequate access for UT inspection? Note: For horizontal vessels mounted on saddles ensure anchor bolting loose on one end to allow for expansion/contraction after installation.	X		*		Skirt: No distortion, no corrosion at skirt to head welds – no leaks. Ground cable attached to skid.
Anchor Bolts Hammer tap to ensure secure.  Look for corrosion, cracking in threads or signs of deformation.	Х				Firmly bolted to skid deck.
Concrete foundation Check for cracks, spalling, etc.				X	No concrete – skid is mounted on pilings.
Ladder / Platform Describe general condition, ensure support is secure to vessel, describe any hazards.				Х	No ladder or platform.
Nozzle Assess paint, look for leakage, and ensure stud threads are fully engaged. Record any damage, deflection, etc. Are nozzles gusseted? Inspect gussets for cracking.	Х				Threaded and flanged fittings – fully engaged. No deflection – no leaks. No gussets.
Gauges Ensure gauges/gauge glass(es) are visible, working, no leakage, and suitable for range of MAWP/ Temp.	Х				Pressure gauge: 0 to 1500 PSI. Temp gauge: 0 to 250 deg F.
External Piping Ensure pipe is well supported. All clamps, supports, shoes, etc. in place. Look for evidence of structural overload, deflection, etc., paint condition, external corrosion?	Х				Well supported, no deflection, all clamps in place. Piping is painted inside building – no exposed metal.
Valving Ensure no leaks are visible. Valves are properly supported and chained if necessary.	Х				Well supported – no leaks.
NDE methods Was UT/ MPI done on vessel	Х				Ultrasonic thickness survey carried out – no metal thickness detected below nominal minus corrosion allowance.
Piping Installation Items	Y	N	N/A	Comi	ments
Are all flange connections free from tape/wrap which may have been used for leak testing?	Х				
Is the soil-air interface for the piping wrapped properly?	X			Yes	
Is there potential to create future mechanical damage from contact with grating, loose tubing etc.?		Х			
Note: refer to piping inspection form for in-service					

PESL 275

Construction/ 1. - S-

VE Inspector: Dellas Wiedman

(Please Print)

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PSV Configuration Items	Y	N	N/A	Comments
Is PSV Inlet/Discharge free of obstruction? Check for contaminants (if possible) and verify full pipe diameter from PSV inlet/discharge to point of connection. Not leaking?			X	
Flexible hoses present on inlet/outlet piping?		X		
If yes, flexible hose size > diameter than piping by 1 nominal pipe size (ie: 1" piping, 1 ½" flexible hose). Flexible hose free of misalignment?			Х	If hose same diameter as piping follow up with Engineering to ensure adequate capacity.
Are all block valves in PSV relief path full port and locked/car sealed in the open position?			Х	No block valves present.
Is the PSV inlet/discharge braced/supported by piping, brackets etc?	Х			
Are threaded PSV's, mounted to prevent turning to the left or right if PSV opened (i.e. if an elbow is used below PSV, PSV should point in line with the inlet piping to the elbow)?	X			
Are the PSV's mounted vertically?	Х			
For PSV's vented to atmosphere, do PSV's have a tail pipe that is braced and protected from rain/snow ingress (ie: rain cap)? Low point drain if pointed upwards? Shipping plugs removed?	X			
Does PSV discharge orient away from areas that may be occupied by personnel (minimum 7' above ground/walkway), and away from other units, especially air intakes, non-classified buildings, and burner inlets/exhaust stacks?	X			
Does discharge line have pocketed sections? If yes, are pocketed sections protected from freezing? Are these sections drained periodically?		Х		Ensure PM in place for periodic draining if pocketed.
Do pop lines terminate into upper third of pop tank and are lines secured and self draining?			Х	
Is there a rupture disc and if so is it at the proper pressure rating?			Х	
Does the rupture Disc have a pressure bleed off point?			Х	
Are all PSV <u>seal</u> wires intact?	Х			
Have all transit wires been removed from lift lever?			Х	
If this is a bellows style PSV, is the bonnet vented to a safe location?			Х	

Observations:

Product seeping from PSV to vessel connection – requires re sealing.

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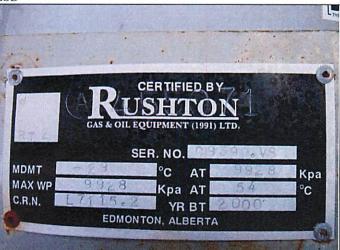
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Photo Table





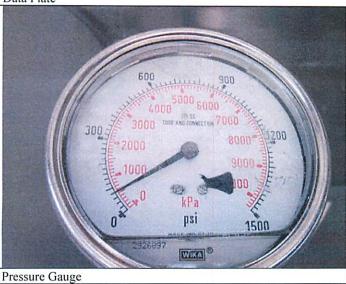
LSD



Vessel Overview



Data Plate



Skirt



Temperature Gauge

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Upper Liquid Level



Lower Liquid Level



Lower liquid level leaking gas. Audible (loud), Abundant LEL's



**PSV** Overview



Product weeping from PSV fitting

PSV Service Tag