

## PRESSURE VESSEL & COLUMN INSPECTION REPORT

LSD: 12-05-054-20w5m

Date: May 4, 2015

SAP Equipment ID: 66068141

VESSEL STATIC DATA									
Plant Galloway Plant				Op Unit			System		
Prov. Insp. # n/a				CRN C4262.213			Equip Tag # 052141		
Equipment Description Fuel Gas Scrubber							Serial # 2001-6549-01P		
Manufacturer Alco Gas & Oil							Vessel Class		
Internal Access: Description: none							Year Built 2001		
MAWP 150		PSI		@ 150		°F		MDMT -20 °F	
CODE : UM				RT : N/A			PWHT : No		
Diameter 10.75in		Length (S/S) 29 in		OAL mm		Vertical			
Shell Mat'l		Thickness 0.250		in		Corr Allowance nil		in	
Head Mat'l		Thickness 0.750		in		Corr Allowance nil		in	
Nozzle Mat'l		Thickness mm / in				Corr Allowance mm			
Internal Coating:				Internal Clad :			Capacity cuft		
Manway : NO				Inspection Port : NO			Legs		
Nozzle Rating threaded		lb ANSI		Painted : YES			Insulated NO		
PROCESS DATA									
Product Description Gas				Sweet					
Operating Pressure 56				PSI		Operating Temperature °F			
PSV STATIC DATA									
Serial No.	Location	Set Pressure	Capacity SCFM	Manufacturer	Model / Type	Service Date / Company			
438391-55-KE	inlet piping	150psi	361scfm	Farris	27DA33-M20	Wizard 30-May-11			
PSV DETAILS									
	Type (Thread/Flange)			ANSI Rating			Size (inches)		
PRD Inlet	Threaded						1"		
PRD Outlet	Threaded						1"		
NDE Equipment Records									
Procedure#	Description	Manufacturer	Model#	Serial#	Due Date				

### INSPECTION SUMMARY

Vessel and piping in good external condition, well supported and secure. Paint in good condition. Dataplate secure and legible. PSV service up to date, set at MAWP, vents to flare header. UT corrosion survey conducted by Streamline May 2015.

### RECOMMENDATIONS

None noted

### NONCONFORMANCES / INSPECTION DEFICIENCIES

None noted

### INSPECTION PLANNING

Inspection Strategy	Availability	Inspection Interval
Inspection Date May 4, 2015	Date of Last Inspect	Date of Next Inspect

### REPORT CERTIFICATION

The signatures below certify that inspections/tests have been completed in accordance with the identified inspection strategy and that the specified equipment is considered fit for service until the date of next inspection.

Inspected by	Ed Tymensen		Date	May 4, 2015
Company	Streamline Inspection Ltd	PESL #	000711	API #
Reviewed and Approved by			Date	
		PESL #		API #
Criticality Assessment Rerun	Inspection Planning Rerun			

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Assessed Next Inspection Date

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### DETAILED INSPECTION VISUAL EXTERNAL

ID	Description	Condition	Location	NCR	Comments
V1	General Other (Please Explain)	Good			Overall no significant concerns observed
V2	General Corrosion	N/A			No corrosion concerns noted
V3	General Leaks	N/A			No active leaks present
V4	Vibration	N/A			
V5	Dissimilar Flange Rating	N/A			
V6	Ladder/Stairway	N/A			
V7	Heads	Good			No concerns noted
V8	Guy Wires	N/A			
V9	Electrical Ground	Good			Securely grounded Ground cable securely connected to skid.
V10	Painted Inactive Corrosion	N/A			
V11	Coating/Painting	Good			No significant failures observed
V12	Expansion Joint or Bellows	N/A			
V13	Gauge/Site Glass	Good	pressure		Working within design limits clear and legible
V14	Shell	Good			No concerns noted
V15	Jacket	N/A			
V21	Support Other (Please explain)	N/A			
V22	Foundation	Good			No concerns noted steel skid on steel piles
V23	Anchor Bolts	N/A			
V24	Saddle/Skirt	Good	Stand		vessel welded to stand welded to floor
V25	Davit	N/A			
V26	Fireproofing	N/A			
V31	Connections Other (Please explain)	Good			all threaded connections appear secure
V32	Small Branches	N/A			
V33	Nozzles	N/A			
V34	Manways	N/A			
V35	Reinforcing Pads	N/A			
V36	Inadequate Thread Engagement	N/A			
V37	Bolting	N/A			
V38	Flanges	N/A			
V39	Leak Clamps	N/A			
V41	Insulation Other (Please explain)	N/A			
V42	Damage	N/A			
V43	Penetrations	N/A			
V44	Insulation Jacket	N/A			
V45	Banding	N/A			
V46	Seals/Joints	N/A			
V51	Relief Devices Other (Please explain)	Good			Serviced and seal intact
V52	Corrosion	N/A			
V53	Leaks	N/A			
V54	Restricted Inlet/Outlet	N/A			
V55	Manual Operation Lever	N/A			

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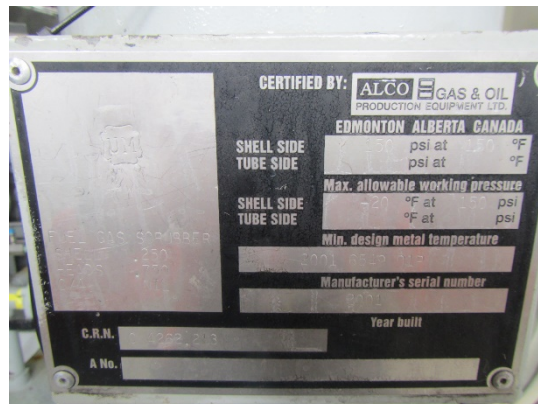
Date: May 4, 2015

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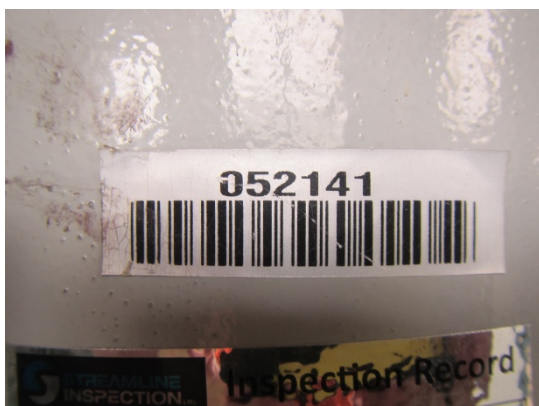
### PHOTOS



LSD SIGN



DATAPLATE



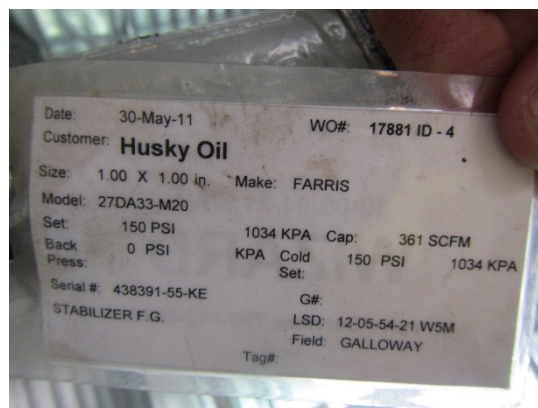
BARCODE



VESSEL OVERVIEW



PSV OVERVIEW



PSV SERVICE TAG

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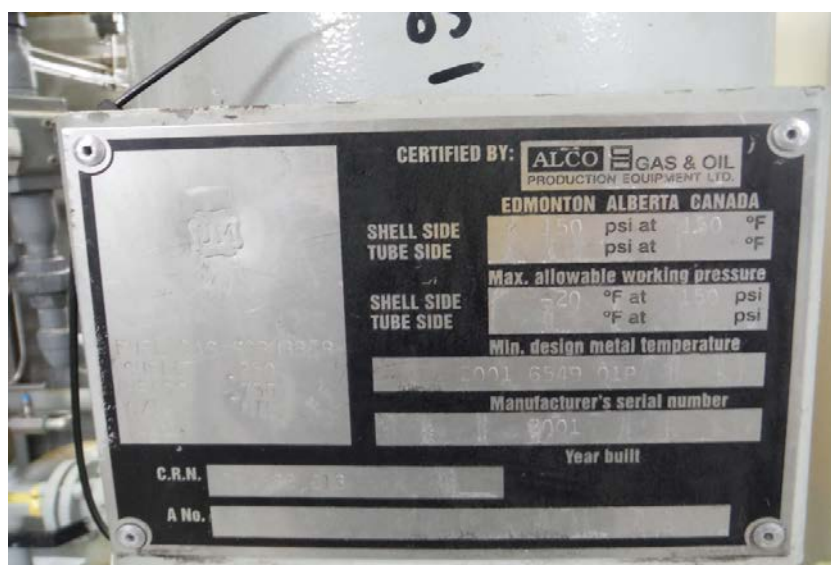
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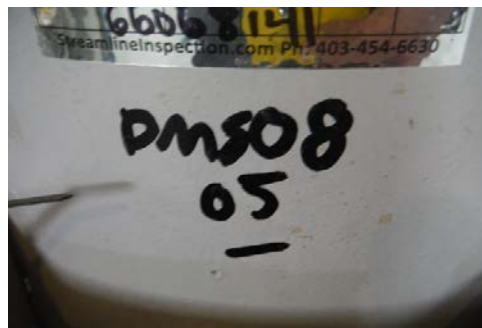
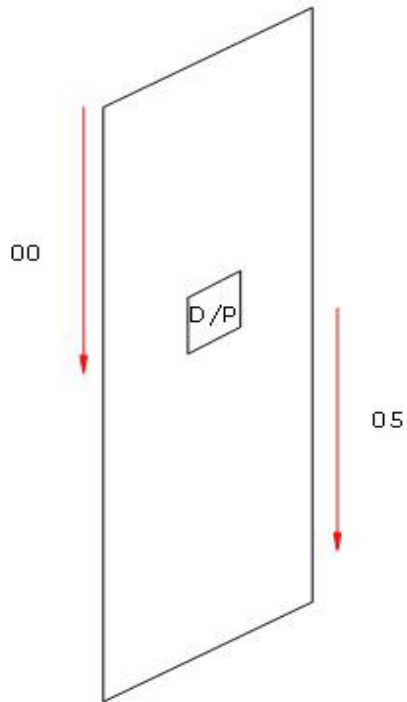
	
PSV DATAPLATE	



Location Name:	GALLOWAY	LSD:	12-05-054-20W5
A#:	Equipment/Tag No.		
Equipment Description:	FUEL GAS SCRUBBER		
Manufacturer:	ALCO GAS & OIL EQUIPMENT LTD.		
Serial Number:	2001 6549 01P	CRN:	C4262.213
Shell MAWP:	150	PSI	Shell Design Temp: 150 °F
Tube MAWP:		PSI	Tube Design Temp: °F
Shell Material:	Unknown	Head Material:	Unknown
Shell Thickness:	6.35	mm	Head Thickness: 19.05 mm
Corrosion Allowance:		mm	Date Built: 2001
Size:	304	mm	Pipe / Rolled Plate: PLATE
RT:			

NOTES:







# Ultrasonic Corrosion Survey

\*All values are in millimeters unless otherwise stated.

Survey Name: Husky Energy

Date: May 5, 2015

Inspector: D. Skeard

<b>LSD:</b> 12-05-054-20W5	<b>Area:</b> GALLOWAY	<b>Location:</b> PLANT
<b>A #:</b>	<b>Tag Number:</b>	<b>Vessel Name:</b> FUEL GAS SCRUBBER
<b>CRN:</b> C4262.213	<b>Year Built:</b> 2001	<b>Serial Number:</b> 2001 6549 01P
<b>RT:</b>	<b>Vessel CA:</b> 0.000 mm	<b>Manufacturer:</b> ALCO GAS & OIL EQUIPMENT LTD.
	<b>Shell MAWP:</b> 150 PSI	<b>Tube MAWP:</b> PSI
	<b>MAWTF:</b> 150 °F	<b>MAWTF:</b> °F
		<b>Pipe/Plate</b> PLATE

<b>TML Description</b>	Baseline	<b>Material:</b> Unknown
<b>00 SHELL</b>	<b>2015</b>	
<b>Shape:</b> Cylindrical	<b>Min</b> 7.14	<b>Flag</b> 6.350 <b>CA</b> 0.000 <b>Nominal</b> 6.350 <b>T Min</b> STCR mm/yr 0.000 <b>LTCR mm/yr</b> 0.000
<b>OD:</b> 323.85	<b>Avg</b> 7.42	<b>Remaining Life:</b>
<b>Spec:</b> ASME VIII Div.1	<b>Comments:</b>	<b>Retirement Date:</b>

<b>TML Description</b>	Baseline	<b>Material:</b> Unknown
<b>05 SHELL</b>	<b>2015</b>	
<b>Shape:</b> Cylindrical	<b>Min</b> 7.59	<b>Flag</b> 6.350 <b>CA</b> 0.000 <b>Nominal</b> 6.350 <b>T Min</b> STCR mm/yr 0.000 <b>LTCR mm/yr</b> 0.000
<b>OD:</b> 323.85	<b>Avg</b> 7.72	<b>Remaining Life:</b>
<b>Spec:</b> ASME VIII Div.1	<b>Comments:</b>	<b>Retirement Date:</b>