

PRESSURE VESSEL & COLUMN INSPECTION REPORT

LSD: 10-34-051-04W4 **Date:** 2017-09-08 **SAP Equipment ID** 62066381

VESSEL STATIC DATA										
Plant: Morgan				OP Unit:			System:			
Prov. Insp . #:		NB#: N/S		CRN: N/S			Equip Tag#: 62066381			
Equipment Description: FLARE KNOCKOUT						Serial #: F-1018				
Manufacturer: FLO-SKID						Vessel Class: vessel				
Internal Access: No			Description:			Year Built: 1985				
MAWP: 103 kpa		At Temp 66 C		MDMT: C						
Code: N/S			RT: RT1			PWHT: No				
Diameter: 610 mm		Length: 3048 mm		(T/T): mm		OAL: mm		Orientation: Horizontal		
SHELL		Mat'l: Unknown		Thickness: 0.00 mm		Corr Allowance: 0.00 mm				
Nozzle		Mat'l:		Thickness:		Corr Allowance:				
Internal Coating:				Internal Clad:			Capacity: m3			
Manway: No				Inspection Port: No			Skirt		Legs	Saddle X
Nozzle Rating: 150 lb ANSI		Painted: Yes			Insulated: Yes					
PROCESS DATA										
Production Description:				Sweet			Sour: Yes			
Operating Pressure kpa				Operating Temp: C			Status: Operating			
PSV STATIC DATA										
Tag #	Serial No.	Location	Size(mm)		Set Press (kPa)	Capacity Imperial (SCFM)	Manufacturer	Model	Last Service	Service Company
			Inlet	Outlet						
			0.00	0.00	0					
PSV DETAILS										
	Type(Thread/Flange)		ANSI Rating				Size(In/mm)			
PRD Inlet							0.00			
PRD Outlet							0.00			
NDE Equipment Records										
Procedure #	Description	Manufacturer	Model#	Serial#	Due Date					
**** See Associated NDE Report										

INSPECTION SUMMARY

VESSEL IS ATMOSPHERIC VENTING DIRECTLY INTO FLARE STACK, NO PSV REQUIRED.

RECOMMENDATIONS

NONCONFORMANCES/INSPECTION DEFICIENCIES



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INSPECTION PLANNING

Inspection Strategy	_____	Availability	_____	Inspection Interval	5 year
Inspection Date	2017/09/08	Date of Last Insp	_____	Date of Next Insp	2022/09/08

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 Justin Orichowski  AB Cert # 000758 SK PEI # 214 Date 2017/09/08

Reviewed and Approved by _____ Date _____

Criticality Assessment Rerun _____ Inspection Planning Rerun _____

Assessed Next Inspection Date 2022 _____

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DETAILED INSPECTION VISUAL EXTERNAL

ID	Description	Condition	Location	NCR	Comments
V1	General Other (Please Explain)	Accept		No	NO ISSUES OBSERVED.
V2	General Corrosion	Accept		No	NO CORROSION OBSERVED IN UT PORTS.
V3	General Leaks	Accept		No	NO LEAKAGE OBSERVED.
V4	Vibration	Accept		No	NO VIBRATION OBSERVED.
V5	Dissimilar Flange Rating	N/A		No	
V6	Ladder/Stairway	N/A		No	
V7	Heads	Accept		No	HEADS ARE UNDER INSULATION.
V8	Guy Wires	N/A		No	
V9	Electrical Ground	Accept		No	VESSEL IS GROUNDED.
V10	Painted Inactive Corrosion	N/A		No	
V11	Coating/Painting	Accept		No	PAINT VIEWED THROUGH UT PORTS IS IN GOOD CONDITION.
V12	Expansion Joint or Bellows	N/A		No	
V13	Gauge/Site Glass	Accept		No	LIQUID LEVEL IS IN GOOD CONDITION.
V14	Shell	Accept		No	SHELL VIEWED THROUGH UT PORTS IS IN GOOD CONDITION.
V15	Jacket	N/A		No	
V21	Support Other (Please explain)	N/A		No	
V22	Foundation	Accept		No	GROUND NO ISSUES OBSERVED..
V23	Anchor Bolts	N/A		No	
V24	Saddle/Skirt	Accept		No	SADDLE
V25	Davit	N/A		No	
V26	Fireproofing	N/A		No	
V31	Connections Other (Please explain)	N/A		No	
V32	Small Branches	N/A		No	
V33	Nozzles	N/A		No	
V34	Manways	N/A		No	
V35	Reinforcing Pads	N/A		No	
V36	Inadequate Thread Engagement	N/A		No	
V37	Bolting	Accept		No	UNDER INSULATION, NO ISSUES OBSERVED.
V38	Flanges	Accept		No	UNDER INSULATION, NO ISSUES OBSERVED.
V39	Leak Clamps	N/A		No	
V41	Insulation Other (Please explain)	N/A		No	
V42	Damage	Accept		No	MINOR DENTING ON NORTH HEAD INSULATION.
V43	Penetrations	Accept		No	NO ISSUES OBSERVED.
V44	Insulation Jacket	N/A		No	
V45	Banding	Accept		No	BAND IS TIGHT AND SECURE.
V46	Seals/Joints	Accept		No	JOINTS ARE SEALED.
V51	Relief Devices Other (Please explain)	Accept		No	VESSEL IS ATMOSPHERIC VENTING DIRECTLY INTO FLARE STACK NO PSV REQUIRED.
V52	Corrosion	N/A		No	
V53	Leaks	N/A		No	
V54	Restricted Inlet/Outlet	N/A		No	

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V55	Manual Operation Lever	N/A		No	
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DETAILED INSPECTION OTHER TECHNIQUES

ID	Location	Observation/Measurement	Acceptance Criteria	NCR	Comments

DETAILED INSPECTION UT THICKNESS

CML	Nom. Thickness (mm)	CURRENT READINGS (mm)	short term corr rate (mm/y)	long term corr rate (mm/y)	remaining life (year)	Survey Date	Comments
05 (SHELL)	0.00	6.78	0.0000	0.0000	198.0	2017/09/08	NO COMMENTS

10 (90L 8 STD)	8.18	7.26	0.0279	0.0279	257.3	2017/09/08	NO COMMENTS
15 (90L 6 STD)	7.11	6.86	0.0078	0.0078	876.2	2017/09/08	NO COMMENTS
20 (BAND 6 XS)	10.97	10.52	0.0140	0.0140	748.8	2017/09/08	NO COMMENTS

Inspected By	Signature	CGSB Level	CGSB No.	Survey Date	UT Equip	Due Date OF Calibration	NDE Procedure No.
Justin Orichowski		SNT LV 2	16325	09/08/2017	104_91638503_EPOCH4	04/30/2018	WQS UT-001



Client:
HUSKY ENERGY

EXAMINATION ILLUSTRATION

DISTRICT:	ALBERTA NORTH	FACILITY:	MORGAN	LOCATION/LSD:	10-34-051-04W4
EQUIP NAME:	FLARE KNOCKOUT			PROV REG No.:	
SERIAL No.:	F.1018	Equip No.:	62066381	National Board No.:	



NOTES:

PHOTOGRAPHS

EQUIP NAME:	FLARE KNOCKOUT	PROV REG No.:	
SERIAL No.:	F.1018	Equip No.:	62066381
		National Board No.:	



LSD



NAMEPLATE



OVERALL



OVERALL



DAMAGED INSULATION



DAMAGED INSULATION

NOTES: