

			LSD: 02	2-03-052	-04W4		Date: 2	014-02-06	SAP Equi	pment ID	62049661	
					V	ESSEL STA	ATIC DAT	4				
lant:	Mor	rgan			OP Uni	it:				System:		
rov. Insp . #	: 048	7191			CRN:		P-4208.21	3		Equip Tag#: 62049661		
quipment De	scription:	GLYCO	L CONTACTO	R						Serial #:	200	01665601
1anufacturer	: Alc	0								Vessel Class:	ves	ssel
nternal Acces	ss: No				Descri	ption:				Year Built:	20	102
1AWP:	992	29	kpa		At Ten	1р	54	С		MDMT:		-20 C
Code:	U				RT:	None	!			PWHT:	No	
Diameter: 5	08 mr	n Lengtl	n: 9144	mm	(T/T):	mm	OAL:	mm		Orientation:	Ver	rtical
HEA	AD	Mat'l: SA-	516 70	-	Thickn	ess:	1	20.7 mm		Corr Allowan	ce:	2 1.6 mm
SHE	LL	Mat'l: SA-	516 70		Thickn	ess:	1	22.2 mm		Corr Allowan	ce:	2 1.6 mm
	Nozzle M	1at'l:			Thickn	ess:				Corr Allowan	ce:	
nternal Coati	ing: No)			Intern	al Clad:	No			Capacity:		m3
lanway:	No.)			Inspec	tion Port:	Ye	 S		Skirt X	Legs	Saddle
lozzle Rating	:		lb ANSI		Painte	d:	Ye	5		Insulated:	Yes	
						PROCESS	DATA					
Production De	escription:				Sweet		Sour:					
perating Pre	ssure		kpa		Operat	ting Temp:			С			
					Р	SV STATI	C DATA					
			<u> </u>	, ,	Capacity Set Press Manufacturer					Last	T	
Tag #	Serial No.	Serial No. Location		e(mm) Ou	Outlet Set Press (kPa)		Imperial (SCFM)		r	Model S		Service Company
	25415		38.10	0.	.00	9929	11527	Mercer		134251T27G2	2011/06/01	POWELL CANADA
						PSV DET	AILS					
		Type(Ti	nread/Flang	e)		AN	SI Rating			Size(In/mm)		
PRD Inle	et	Threade	ed							38.10		
DDD 04		Thread	ad						0.00			
PRD Out	iet	Tillead			<u> </u>							
				N	IDE E	quipment	Records					
Proced	ure#	Descrip	otion	Ma	anufac	turer	Мо	odel#		Serial#		Due Date
**** See Ac	sociated NDI	E Report				<u>. </u>					-	
				I	NSPE	CTION SU	JMMARY					
VESSEL IS FI	T EOR SERV	/ICE										
V LOOLL IO FI	I I ON OLKV	IOL.										
						RECOM	MENDATI	ONS		_	_	
VESSEL IS F	IT FOR SER\	/ICE.										
				NON	CON	FORMANC	ES/INSPF	CTION DEFI	CIENCES	<u> </u>		



		INSPECTION PLA	NNING			
Inspection Strategy		Availability	Ir	nspection Interval		
Inspection Date	2014/02/06	Date of Last Inspect	D	ate of Next Insp	2018/02/06	
		REPORT CERTIFIC	CATION			
	certify that inspections/tests have considered fit for service until t	ve been completed in accordance with the ne date of next inspection.	identified inspection strate	egy and that the		
Inspected by	Jamey Tan	asichuk	Cert #	000411 Date	e 2014/02/06	
Reviewed and Approve	ed by			Dat	e	
Criticality Assessment F	Rerun	Inspection Planning Re	run			
Assessed Next Inspecti	ion Date 2019					



DETAILED INSPECTION VISUAL EXTERNAL

V2	ID	Description	Condition	Location	NCR	Comments
Accept	V1	General Other (Please Explain)	Accept		No	
Vibration	V2	General Corrosion	Accept		No	
Secondar Flange Rating	V3	General Leaks	Accept		No	NO VISIBLE LEAKAGES NOTED.
VE Ladder/Sainway	V4	Vibration	N/A		No	
V7 Heads	V5	Dissimilar Flange Rating	N/A		No	
Section Sect	V6	Ladder/Stairway	N/A		No	
VI Painted Inactive Corrosion	V7	Heads	Accept		No	GOOD CONDITION.
VI	V8	Guy Wires	N/A		No	
V11 Coating/Painting	V9	Electrical Ground	N/A		No	
No	V10	Painted Inactive Corrosion	N/A		No	
No	V11	Coating/Painting	Accept		No	PAINT IN GOOD CONDITION. NO PAINT PEELING.
STANS OF LEMANES OR CONTAMINATION. STANS OR CONTAMINATION.	V12	Expansion Joint or Bellows	N/A		No	
V14 Shell	V13	Gauge/Site Glass	Accept		No	
V21 Support Other (Please explain) N/A NO	V14	Shell	Accept		No	
No	V15	Jacket	N/A		No	
V23 Anchor Bolts Accept No VESSEL IS BOLTED TO FLOOR. VESSEL IS SECURE. NO SHORT BOLTING. V24 Saddle/Skirt Accept No SADDLE IN GOOD CONDITION. VESSEL IS BOLTED TO FLOOR. V25 Davit N/A No V26 Fireproofing N/A No V31 Connections Other (Please explain) N/A No V32 Small Branches Accept No No VISIBLE LEAKAGES/WEEPS NOTED. V33 Nozzles Accept No No VISIBLE LEAKAGES NOTED. V34 Manways N/A No V35 Reinforcing Pads N/A No V36 Inadequate Thread Engagement N/A No V37 Bolting Accept No No SHORT BOLTING, FLANGES PROPERLY ALIGNED. V38 Flanges Accept No RACCEPT No No SHORT BOLTING, FLANGES PROPERLY ALIGNED. V39 Leak Clamps N/A No V41 Insulation Other (Please explain) Accept No No VESSEL SHELL/HEAD ARE EXTERNALLY WRAP INSULATED OUTSIDE OF ATTRACHED BUILDING, INSULATION IN GOOD CONDITION. V42 Damage N/A No V43 Penetrations N/A No V44 Insulation Jacket N/A No V45 Banding N/A No V46 Seals/Joints Accept No No VISIBLE LEAKAGES NOTED. V50 Relief Devices Other (Please explain) Accept No No No VISIBLE LEAKAGES NOTED. V51 Relief Devices Other (Please explain) Accept No No No VISIBLE LEAKAGES NOTED. V52 Corrosion Accept No No NO STERNAL CORROSION.	V21	Support Other (Please explain)	N/A		No	
Soluting	V22	Foundation	N/A		No	
V24 Saddle/Skirt Accept No SADDLE IN GOOD CONDITION. VESSEL IS BOLTED TO FLOOR. V25 Davit N/A No V26 Fireproofing N/A No V31 Connections Other (Please explain) N/A No V32 Small Branches Accept No No VISIBLE LEAKAGES/WEEPS NOTED. V33 Nozzles Accept No No VISIBLE LEAKAGES NOTED. V34 Manways N/A No V35 Reinforcing Pads N/A No V36 Inadequate Thread Engagement N/A No V37 Bolting Accept No No SHORT BOLTING, FLANGES PROPERLY ALIGNED. V38 Flanges Accept No FLANGES PROPERLY ALIGNED. NO SHORT BOLTING NOTED. V39 Leak Clamps N/A No V41 Insulation Other (Please explain) Accept No VESSEL SHELL/HEAD ARE EXTERNALLY WRAP INSULATED OUTSIDE OF ATTACHED BUILDING, INSULATION IN GOOD CONDITION. V42 Damage N/A No V43 Penetrations N/A No V44 Insulation Jacket N/A No V45 Banding N/A No V46 Seals/Joints <	V23	Anchor Bolts	Accept		No	
V26 Fireproofing N/A No V31 Connections Other (Please explain) N/A No V32 Small Branches Accept No No Visible Leakages/WEEPS NOTED. V33 Nozzles Accept No No Visible Leakages NOTED. V34 Manways N/A No V35 Reinforcing Pads N/A No V36 Inadequate Thread Engagement N/A No V37 Bolting Accept No No SHORT BOLTING, FLANGES PROPERLY ALIGNED. V38 Flanges Accept No FLANGES PROPERLY ALIGNED. V39 Leak Clamps N/A No V41 Insulation Other (Please explain) Accept No VESSEL SHELL/HEAD ARE EXTERNALLY WRAP INSULATED OUTSIDE OF ATTACHED BUILDING, INSULATION IN GOOD CONDITION. V42 Damage N/A No V44 Insulation Jacket N/A No V45 Banding N/A No No No VISIBLE LEAKAGES NOTED. NO NO SHORT BOLTING, FLANGES PROPERLY ALIGNED. NO PESSEL SHELL/HEAD ARE EXTERNALLY WRAP INSULATED OUTSIDE OF ATTACHED BUILDING, INSULATION IN GOOD CONDITION. NO NO NO VISIBLE LEAKAGES NOTED. NO NO EXTERNAL CORROSION.	V24	Saddle/Skirt	Accept		No	
V31 Connections Other (Please explain) N/A NO NO NO NO NO NO NO NO NO N	V25	Davit	N/A		No	
V32 Small Branches Accept No No VISIBLE LEAKAGES/WEEPS NOTED. V33 Nozzles Accept No No VISIBLE LEAKAGES NOTED. V34 Manways N/A No V35 Reinforcing Pads N/A No V36 Inadequate Thread Engagement N/A No V37 Bolting Accept No No SHORT BOLTING, FLANGES PROPERLY ALIGNED. V38 Flanges Accept No FLANGES PROPERLY ALIGNED. NO SHORT BOLTING NOTED. V39 Leak Clamps N/A No V41 Insulation Other (Please explain) Accept No VESSEL SHELL/HEAD ARE EXTERNALLY WRAP INSULATED OUTSIDE OF ATTACHED BUILDING. INSULATION IN GOOD CONDITION. V42 Damage N/A No V43 Penetrations N/A No V44 Insulation Jacket N/A No V45 Banding N/A No V46 Seals/Joints Accept No No VISIBLE LEAKAGES NOTED. V50 No VISIBLE LEAKAGES NOTED. NO NO VISIBLE LEAKAGES NOTED. NO NO VISIBLE LEAKAGES NOTED. NO NO VISIBLE LEAKAGES NOTED.	V26	Fireproofing	N/A		No	
V33 Nozzles Accept No No VISIBLE LEAKAGES NOTED. V34 Manways N/A No V35 Reinforcing Pads N/A No V36 Inadequate Thread Engagement N/A No V37 Bolting Accept No No SHORT BOLTING, FLANGES PROPERLY ALIGNED. V38 Flanges Accept No FLANGES PROPERLY ALIGNED. V39 Leak Clamps N/A No V41 Insulation Other (Please explain) Accept No VESSEL SHELL/HEAD ARE EXTERNALLY WRAP INSULATED OUTSIDE OF ATTACHED BUILDING. INSULATION IN GOOD CONDITION. V42 Damage N/A No V43 Penetrations N/A No V44 Insulation Jacket N/A No V45 Banding N/A No V46 Seals/Joints Accept No No VISIBLE LEAKAGES NOTED. V51 Relief Devices Other (Please explain) Accept No No PSV. V52 Corrosion Accept No No No EXTERNAL CORROSION.	V31	Connections Other (Please explain)	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 No SHORT BOLTING. FLANGES PROPERLY ALIGNED. V38 Flanges Accept No FLANGES PROPERLY ALIGNED. V39 Leak Clamps N/A No V41 Insulation Other (Please explain) Accept No VESSEL SHELL/HEAD ARE EXTERNALLY WRAP INSULATED OUTSIDE OF ATTACHED BUILDING. INSULATION IN GOOD CONDITION. V42 Damage N/A No V43 Penetrations N/A No V44 Insulation Jacket N/A No V45 Banding N/A No V46 Seals/Joints Accept No No VISIBLE LEAKAGES NOTED. V51 Relief Devices Other (Please explain) Accept No No EXTERNAL CORROSION.	V32	Small Branches	Accept		No	NO VISIBLE LEAKAGES/WEEPS NOTED.
V35 Reinforcing Pads N/A No V36 Inadequate Thread Engagement N/A No V37 Bolting Accept No No SHORT BOLTING. FLANGES PROPERLY ALIGNED. V38 Flanges Accept No FLANGES PROPERLY ALIGNED. NO SHORT BOLTING NOTED. V39 Leak Clamps N/A No V41 Insulation Other (Please explain) Accept No VESSEL SHELL/HEAD ARE EXTERNALLY WRAP INSULATED OUTSIDE OF ATTACHED BUILDING. INSULATION IN GOOD CONDITION. V42 Damage N/A No V43 Penetrations N/A No V44 Insulation Jacket N/A No V45 Banding N/A No V46 Seals/Joints Accept No No VISIBLE LEAKAGES NOTED. V51 Relief Devices Other (Please explain) Accept No No EXTERNAL CORROSION.	V33	Nozzles	Accept		No	NO VISIBLE LEAKAGES NOTED.
V36 Inadequate Thread Engagement N/A No No SHORT BOLTING. FLANGES PROPERLY ALIGNED. V37 Bolting Accept No No SHORT BOLTING. FLANGES PROPERLY ALIGNED. V38 Flanges Accept No FLANGES PROPERLY ALIGNED. NO SHORT BOLTING NOTED. V39 Leak Clamps N/A No VESSEL SHELL/HEAD ARE EXTERNALLY WRAP INSULATED OUTSIDE OF ATTACHED BUILDING. INSULATION IN GOOD CONDITION. V41 Insulation Other (Please explain) N/A No No No VISIBLE LEAKAGES NOTED. V42 Damage N/A No No No VISIBLE LEAKAGES NOTED. V44 Insulation Jacket N/A No No No VISIBLE LEAKAGES NOTED. V51 Relief Devices Other (Please explain) Accept No No EXTERNAL CORROSION.	V34	Manways	N/A		No	
V37 Bolting Accept No No SHORT BOLTING. FLANGES PROPERLY ALIGNED. V38 Flanges Accept No FLANGES PROPERLY ALIGNED. NO SHORT BOLTING NOTED. V39 Leak Clamps N/A No V41 Insulation Other (Please explain) Accept No Vessel Shell/HEAD ARE EXTERNALLY WRAP INSULATED OUTSIDE OF ATTACHED BUILDING. INSULATION IN GOOD CONDITION. V42 Damage N/A No V43 Penetrations N/A No V44 Insulation Jacket N/A No V45 Banding N/A No V46 Seals/Joints Accept No No VISIBLE LEAKAGES NOTED. V51 Relief Devices Other (Please explain) Accept No No EXTERNAL CORROSION.	V35	Reinforcing Pads	N/A		No	
V38 Flanges Accept No FLANGES PROPERLY ALIGNED. NO SHORT BOLTING NOTED. V39 Leak Clamps N/A No V41 Insulation Other (Please explain) Accept No VESSEL SHELL/HEAD ARE EXTERNALLY WRAP INSULATED OUTSIDE OF ATTACHED BUILDING. INSULATION IN GOOD CONDITION. V42 Damage N/A No V43 Penetrations N/A No V44 Insulation Jacket N/A No V45 Banding N/A No V46 Seals/Joints Accept No No VISIBLE LEAKAGES NOTED. V51 Relief Devices Other (Please explain) Accept No No EXTERNAL CORROSION.	V36	Inadequate Thread Engagement	N/A		No	
V39 Leak Clamps N/A No V41 Insulation Other (Please explain) Accept No V42 Damage N/A No V43 Penetrations N/A No V44 Insulation Jacket N/A No V45 Banding N/A No V46 Seals/Joints Accept No V67 Relief Devices Other (Please explain) Accept No	V37	Bolting	Accept		No	NO SHORT BOLTING. FLANGES PROPERLY ALIGNED.
V41 Insulation Other (Please explain) Accept No VESSEL SHELL/HEAD ARE EXTERNALLY WRAP INSULATED OUTSIDE OF ATTACHED BUILDING. INSULATION IN GOOD CONDITION. No V42 Damage N/A No VESSEL SHELL/HEAD ARE EXTERNALLY WRAP INSULATED OUTSIDE OF ATTACHED BUILDING. INSULATION IN GOOD CONDITION. No V43 Penetrations N/A No No V44 Insulation Jacket N/A No No V45 Banding N/A No No V46 Seals/Joints Accept No No No VISIBLE LEAKAGES NOTED. V51 Relief Devices Other (Please explain) Accept No No No EXTERNAL CORROSION.	V38	Flanges	Accept		No	FLANGES PROPERLY ALIGNED. NO SHORT BOLTING NOTED.
ATTACHED BUILDING. INSULATION IN GOOD CONDITION. V42 Damage N/A No V43 Penetrations N/A No V44 Insulation Jacket N/A No V45 Banding N/A No V46 Seals/Joints Accept No No VISIBLE LEAKAGES NOTED. V51 Relief Devices Other (Please explain) Accept No No EXTERNAL CORROSION.	V39	Leak Clamps	N/A		No	
V42DamageN/ANoV43PenetrationsN/ANoV44Insulation JacketN/ANoV45BandingN/ANoV46Seals/JointsAcceptNo No VISIBLE LEAKAGES NOTED.V51Relief Devices Other (Please explain)AcceptNo PSV.V52CorrosionAcceptNo No EXTERNAL CORROSION.	V41	Insulation Other (Please explain)	Accept		No	
V44 Insulation Jacket N/A No V45 Banding N/A No V46 Seals/Joints Accept No No VISIBLE LEAKAGES NOTED. V51 Relief Devices Other (Please explain) Accept No PSV. V52 Corrosion Accept No No EXTERNAL CORROSION.	V42	Damage	N/A		No	
V45 Banding N/A No V46 Seals/Joints Accept No NO VISIBLE LEAKAGES NOTED. V51 Relief Devices Other (Please explain) Accept No PSV. V52 Corrosion Accept No NO EXTERNAL CORROSION.	V43	Penetrations	N/A		No	
V46 Seals/Joints Accept No NO VISIBLE LEAKAGES NOTED. V51 Relief Devices Other (Please explain) Accept No PSV. V52 Corrosion Accept No NO EXTERNAL CORROSION.	V44	Insulation Jacket	N/A		No	
V51 Relief Devices Other (Please explain) Accept No PSV. V52 Corrosion Accept No No EXTERNAL CORROSION.	V45	Banding	N/A		No	
V52 Corrosion Accept No NO EXTERNAL CORROSION.	V46	Seals/Joints	Accept		No	NO VISIBLE LEAKAGES NOTED.
	V51	Relief Devices Other (Please explain)	Accept		No	PSV.
V53 Leaks Accept No No VISIBLE LEAKAGES NOTED.	V52	Corrosion	Accept		No	NO EXTERNAL CORROSION.
The state of the s	V53	Leaks	Accept		No	NO VISIBLE LEAKAGES NOTED.



		LSD:	02-03-05	2-04W4 Date	2014-02-	06 SAP Equipment ID	62049661	l
	V54	Restricted Inlet/Outlet	N/A		No			
Ī	V55	Manual Operation Lever	N/A		No			

DETAILED INSPECTION OTHER TECHNIQUES

ID	Location	Observation/Measurement	Acceptance Criteria	NCR	Comments

DETAILED INSPECTION UT THICKNESS

	CML	Nom. Thickness	CURRENT READINGS	short term corr rate	long term corr rate	remaining life	Survey Date	Comments
05	(HEAD)	20.73	22.17	0.0000	0.0000	198.0	2014/02/06	Acceptable
10	(SHELL)	22.23	22.23	0.0000	0.0000	198.0	2014/02/06	Acceptable
15	(SHELL)	22.23	22.25	0.0000	0.0000	198.0	2014/02/06	Acceptable
20	(SHELL)	22.23	22.28	0.0000	0.0000	198.0	2014/02/06	Acceptable
25	(90L 3 STD)	5.49	5.11	0.0012	0.0012	60.8	2014/02/06	within Manufacturers tolerance

Inspected By	Signature	CGSB Level	CGSB	Survey Date	UT Equip	Due Date OF Calibration
Jamey Tanasichuk	4.CM	1	11444	02/06/2014	109_81583903_EPOCH 4	06/17/2014

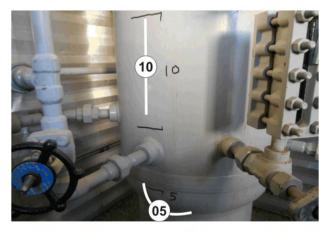


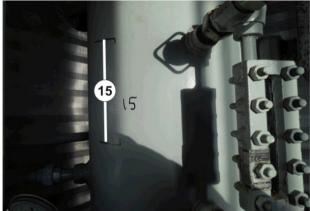
Client:

HUSKY ENERGY

EXAMINATION ILLUSTRATION

DISTRICT:	ALBERTA NORTH	FACILITY:	MORGAN	LOCATION/LSD:	02-03-052-04W4
EQUIP NAME:	GLYCOL CONTACTOR		PROV REG No.:	A#0487191	
SERIAL No.:	2001665601	Equip No.:	62049661	National Board No.:	









Notes:



Client:

HUSKY ENERGY

PHOTOGRAPHS

DISTRICT:	ALBERTA NORTH	FACILITY:	MORGAN	LOCATION/LSD:	02-03-052-04W4
EQUIP NAME:	GLYCOL CONTACTOR		PROV REG No.:	A#0487191	
SERIAL No.:	2001665601	Equip No.:	62049661	National Board No.:	



NAMEPLATE



PSV





OVERALL



PSV TAG



NOTES: