

PRESSURE VESSEL & COLUMN INSPECTION REPORT

VESSEL STATIC DATA			
Plant: ANSELL OP Unit: System:			
Prov. Insp . #: 0584781 CRN: P7217.2 Equip Tag	Equip Tag#: 66145389		
quipment Description: SEPARATOR Serial #:	11392		
lanufacturer: RJV Gas Field Services Vessel Cla	ss: vessel		
nternal Access: No Description: Year Built	2008		
IAWP: 10204 kpa At Temp 38 C MDMT:	-29 C		
ode: RT: RT2 PWHT:	No		
Diameter: 406 mm Length: 2286 mm (T/T): mm OAL: mm Orientation	n: Vertical		
SHELL Mat'l: SA-106 B Thickness: 21.41 mm Corr Allow	ance: 1.59 n		
HEAD Mat'l: SA-516 70 Thickness: 20.60 mm Corr Allow	ance: 1.59 n		
Nozzle Mat'l: Thickness: Corr Allow	ance:		
nternal Coating: Internal Clad: Capacity:	m3		
	X Legs Saddle		
ozzle Rating: Ib ANSI Painted: Yes Insulated	No		
PROCESS DATA			
roduction Description: Sweet Sour:			
perating Pressure kpa Operating Temp: C			
PSV STATIC DATA			
Size(mm) Set Press Capacity Manufacturer	Last Sami		
Tag # Serial No. Location Size(mm) Set Press Imperial (kPa) (SCFM) Manufacturer Mode	Last Servi Service Comp		
Innet Outlet 1 (SCPM)			
37979-527 Shell 25.40 25.40 9929 5180 TAYLOR 82E8351	1 2012/05/18 WIZA		
PSV DETAILS			
	ize(In/mm)		
	25.40		
PRD Inlet Threaded N/A			
PRD Outlet Threaded N/A	25.40		
NDE Equipment Records			
Procedure # Description Manufacturer Model# Serial#	Due Date		
**** See Associated NDE Report			
INSPECTION SUMMARY			
JT SURVEY PERFORMED - NO NOTABLE CORROSION			
RECOMMENDATIONS			
VESSEL IS FIT FOR SERVICE.			
NONCONFORMANCES/INSPECTION DEFICIENCES			



Assessed Next Inspection Date

PRESSURE VESSEL & COLUMN INSPECTION REPORT

		INSPECTION P	LANNING				
Inspection Strategy		Availability	Insp	ection Interval			
Inspection Date	2014/03/12	Date of Last Inspect	Date	e of Next Insp	2018/03/12		
		REPORT CERTI	FICATION				
_	rtify that inspections/tests have be onsidered fit for service until the da	•	the identified inspection strategy	and that the			
Inspected by	Duncan Kendi	rick O k	Cert #	Date	2014/03/12		
Reviewed and Approved	by			Date			
Criticality Assessment Re	erun	Inspection Planning	յ Rerun				



PRESSURE VESSEL & COLUMN INSPECTION REPORT

DETAILED INSPECTION VISUAL EXTERNAL

Variety Vari	ID	Description	Condition	Location	NCR	Comments
Mathematical Content Losis	V1	General Other (Please Explain)	Accept			GOOD CONDITION OVERALL.
Vision	V2	General Corrosion	Accept			NO NOTABLE CORROSION.
V5 Dissimilar Flange Reting N/A Image: Control of the Control of t	V3	General Leaks	Accept			NO VISIBLE LEAKS.
Victor V	V4	Vibration	N/A			
V7 Needs	V5	Dissimilar Flange Rating	N/A			
Sign Wires	V6	Ladder/Stairway	N/A			
V9 Electrical Ground Accept ©000 CONDITION. V10 Painted Inactive Corrosion N/A Image: Control of March 1 or March 1 or March 2 or March	V7	Heads	Accept			GOOD CONDITION.
VII	V8	Guy Wires	N/A			
V11 Coating/Painting Accept PAINT IN GOOD CONDITION. V12 Expansion Joint or Bellows N/A 6000 CONDITION. V13 Gauge/Site Class Accept 6000 CONDITION. V14 Shell Accept 6000 CONDITION. V15 Subcet N/A 7000 CONDITION. V12 Support Other (Mease explain) N/A 7000 CONDITION. V22 Foundation Accept METAL FLOOR. V23 Anchor Botts N/A WELDED SECURE. V24 Saddle/Skidt Accept SKIRT IN GOOD CONDITION. V25 Davit N/A 7000 CONDITION. V26 Fireproofing N/A 7000 CONDITION. V27 Small Panches N/A 7000 CONDITION. V33 Nozzies Accept GOOD CONDITION. V33 Reinforcing Pads N/A 7000 CONDITION. V37 Robiting Accept GOOD CONDITION. V38 Fanges Accept GOOD CONDITION.	V9	Electrical Ground	Accept			GOOD CONDITION.
17.12 Expansion Joint or Bellows Ni/A	V10	Painted Inactive Corrosion	N/A			
V13 Gauge/Site Glass Accept GOOD CONDITION. V14 Shell Accept GOOD CONDITION. V15 Jacket N/A MA V21 Support Other (Please explain) N/A METAL FLOOR. V22 Foundation Accept METAL FLOOR. V23 Anchor Bolts N/A WELDED SECURE. V24 Saddle/Skirt Accept SKIRT IN GOOD CONDITION. V25 Davit N/A MA V30 Connections Other (Please explain) N/A MA V31 Connections Other (Please explain) N/A MA V32 Small Branches N/A MA V33 Nozzles Accept GOOD CONDITION. V34 Manways N/A MA V35 Reinforcing Pads N/A MA V36 Inadequate Thread Engagement N/A GOOD CONDITION. V37 Botting Accept GOOD CONDITION. V41 Insulation Darket N/A	V11	Coating/Painting	Accept			PAINT IN GOOD CONDITION.
V14 Shell Accept GOOD CONDITION. V15 Jacket NVA METAL FLOOR. V21 Support Other (Please explain) NVA METAL FLOOR. V22 Foundation Accept METAL FLOOR. V23 Anchor Bolts NVA WELDED SECURE. V24 Saddle/Skirt Accept SKIRT IN GOOD CONDITION. V25 Davit NVA Incomposition of the Condition	V12	Expansion Joint or Bellows	N/A			
VI Support Other (Please explain)	V13	Gauge/Site Glass	Accept			GOOD CONDITION.
V21 Support Other (Please explain) N/A METAL FLOOR. V22 Foundation Accept METAL FLOOR. V23 Anchor Bolts N/A WELDED SECURE. V24 Saddle/Skirt Accept SKIRT IN GOOD CONDITION. V25 Davit N/A Independence of the plane of plane of the plane	V14	Shell	Accept			GOOD CONDITION.
V22 Foundation Accept METAL FLOOR. V23 Anchor Bolts N/A WELDED SECURE. V24 Saddle/Skirt Accept SKIRT IN GOOD CONDITION. V25 Davit N/A SKIRT IN GOOD CONDITION. V26 Fireproofing N/A SKIRT IN GOOD CONDITION. V31 Connections Other (Please explain) N/A SKIRT IN GOOD CONDITION. V32 Small Branches N/A Small Branches V33 Nozzles Accept GOOD CONDITION. V34 Manways N/A SCOOD CONDITION. V35 Reinforcing Pads N/A SCOOD CONDITION. V35 Reinforcing Pads N/A SCOOD CONDITION. V37 Bolting Accept GOOD CONDITION. V38 Flanges Accept GOOD CONDITION. V39 Leak Clamps N/A SCOOD CONDITION. V41 Insulation Other (Please explain) N/A SCOOD CONDITION. V42 Damage N/A SCOOD CONDITION.	V15	Jacket	N/A			
V23 Anchor Bolts N/A WELDED SECURE. V24 Saddle/Skirt Accept SKIRT IN GOOD CONDITION. V25 Davit N/A Image: Connections of Control of Contr	V21	Support Other (Please explain)	N/A			
V24 Saddle/Skirt Accept SKIRT IN GOOD CONDITION. V25 Davit N/A V26 Fireproofing N/A V31 Connections Other (Please explain) N/A V32 Small Branches N/A V33 Nozzles Accept GOOD CONDITION. V34 Manways N/A V35 Reinforcing Pads N/A V36 Inadequate Thread Engagement N/A V37 Bolting Accept GOOD CONDITION. V38 Flanges Accept GOOD CONDITION. 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 <t< td=""><td>V22</td><td>Foundation</td><td>Accept</td><td></td><td></td><td>METAL FLOOR.</td></t<>	V22	Foundation	Accept			METAL FLOOR.
V25 Davit N/A V26 Fireproofing N/A V31 Connections Other (Please explain) N/A V32 Small Branches N/A V33 Nozzles Accept V34 Manways N/A V35 Reinforcing Pads N/A V36 Inadequate Thread Engagement N/A V37 Bolting Accept GOOD CONDITION. V38 Flanges Accept GOOD CONDITION. 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 V46 Seals/Joints N/A<	V23	Anchor Bolts	N/A			WELDED SECURE.
V26 Fireproofing N/A V31 Connections Other (Please explain) N/A V32 Small Branches N/A V33 Nozzles Accept V34 Manways N/A V35 Reinforcing Pads N/A V36 Inadequate Thread Engagement N/A V37 Bolting Accept GOOD CONDITION. V38 Flanges Accept GOOD CONDITION. V39 Leak Clamps N/A V41 Insulation Other (Please explain) N/A V42 Damage N/A V44 Insulation Jacket N/A V44 Insulation Jacket N/A V44 Seals/Joints N/A V45 Banding N/A V51 Reilef Devices Other (Please explain) Accept PSV In GOOD CONDITION.	V24	Saddle/Skirt	Accept			SKIRT IN GOOD CONDITION.
V31 Connections Other (Please explain) N/A V32 Small Branches N/A V33 Nozzles Accept V34 Manways N/A V35 Reinforcing Pads N/A V36 Inadequate Thread Engagement N/A V37 Bolting Accept V38 Flanges Accept 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 V44 Insulation Jacket N/A V44 Seals/Joints N/A V46 Seals/Joints N/A V51 Relief Devices Other (Please explain) Accept V52 Corrosion <td>V25</td> <td>Davit</td> <td>N/A</td> <td></td> <td></td> <td></td>	V25	Davit	N/A			
V32 Small Branches N/A GOOD CONDITION. V33 Nozzles Accept GOOD CONDITION. V34 Manways N/A Image of the provided of the	V26	Fireproofing	N/A			
V33 Nozzles Accept GOOD CONDITION. V34 Manways N/A	V31	Connections Other (Please explain)	N/A			
V34 Manways N/A	V32	Small Branches	N/A			
V35 Reinforcing Pads N/A	V33	Nozzles	Accept			GOOD CONDITION.
V36 Inadequate Thread Engagement N/A GOOD CONDITION. V37 Bolting Accept GOOD CONDITION. V38 Flanges Accept GOOD CONDITION. V39 Leak Clamps N/A Insulation Other (Please explain) V41 Insulation Other (Please explain) N/A Insulation Jacket V43 Penetrations N/A Insulation Jacket N/A V44 Insulation Jacket N/A Insulation Jacket N/A V45 Banding N/A Insulation Jacket N/A V46 Seals/Joints N/A Insulation Jacket N/A V51 Relief Devices Other (Please explain) Accept PSV IN GOOD CONDITION. V52 Corrosion Accept NO CORROSION VISIBLE. V53 Leaks Accept NO VISIBLE LEAKS.	V34	Manways	N/A			
V37 Bolting Accept GOOD CONDITION. V38 Flanges Accept GOOD CONDITION. V39 Leak Clamps N/A Insulation Other (Please explain) V41 Insulation Other (Please explain) N/A Insulation Jacket V43 Penetrations N/A Insulation Jacket V44 Insulation Jacket N/A Insulation Jacket V45 Banding N/A Insulation Jacket V46 Seals/Joints N/A Insulation Jacket V51 Relief Devices Other (Please explain) Accept PSV IN GOOD CONDITION. V52 Corrosion Accept NO CORROSION VISIBLE. V53 Leaks Accept NO VISIBLE LEAKS.	V35	Reinforcing Pads	N/A			
V38 Flanges Accept GOOD CONDITION. 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) Accept PSV IN GOOD CONDITION. V52 Corrosion Accept NO CORROSION VISIBLE. V53 Leaks Accept NO VISIBLE LEAKS.	V36	Inadequate Thread Engagement	N/A			
V39 Leak Clamps N/A	V37	Bolting	Accept			GOOD CONDITION.
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) Accept V52 Corrosion Accept V53 Leaks Accept NO VISIBLE LEAKS.	V38	Flanges	Accept			GOOD CONDITION.
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) Accept V52 Corrosion Accept V53 Leaks Accept NO VISIBLE LEAKS.	V39	Leak Clamps	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) Accept V52 Corrosion Accept V53 Leaks Accept NO VISIBLE LEAKS.	V41	Insulation Other (Please explain)	N/A			
V44 Insulation Jacket N/A Insulation Jacket N/A V45 Banding N/A Insulation Jacket N/A V46 Seals/Joints N/A Insulation Jacket PSV Insulation Jacket V51 Relief Devices Other (Please explain) Accept PSV IN GOOD CONDITION. V52 Corrosion Accept NO CORROSION VISIBLE. V53 Leaks Accept NO VISIBLE LEAKS.	V42	Damage	N/A			
V45 Banding N/A V46 Seals/Joints N/A V51 Relief Devices Other (Please explain) Accept PSV IN GOOD CONDITION. V52 Corrosion Accept NO CORROSION VISIBLE. V53 Leaks Accept NO VISIBLE LEAKS.	V43	Penetrations	N/A			
V46 Seals/Joints N/A PSV IN GOOD CONDITION. V51 Relief Devices Other (Please explain) Accept PSV IN GOOD CONDITION. V52 Corrosion Accept NO CORROSION VISIBLE. V53 Leaks Accept NO VISIBLE LEAKS.	V44	Insulation Jacket	N/A			
V51 Relief Devices Other (Please explain) Accept PSV IN GOOD CONDITION. V52 Corrosion Accept NO CORROSION VISIBLE. V53 Leaks Accept NO VISIBLE LEAKS.	V45	Banding	N/A			
V52 Corrosion Accept NO CORROSION VISIBLE. V53 Leaks Accept NO VISIBLE LEAKS.	V46	Seals/Joints	N/A			
V53 Leaks Accept NO VISIBLE LEAKS.	V51	Relief Devices Other (Please explain)	Accept			PSV IN GOOD CONDITION.
	V52	Corrosion	Accept			NO CORROSION VISIBLE.
V54 Restricted Inlet/Outlet N/A	V53	Leaks	Accept			NO VISIBLE LEAKS.
	V54	Restricted Inlet/Outlet	N/A			



PRESSURE VESSEL & COLUMN INSPECTION REPORT

		LSD:	10-09-05	1-19W5	Date:	2014-03-1	SAP Equipment ID	66145389	
V55	Manual Operation Lever		N/A						

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	(HEAD)	20.60	21.77	0.0000	0.0000	198.0	2014/03/12	
10	(SHELL)	21.41	23.55	0.0000	0.0000	198.0	2014/03/12	
15	(SHELL)	21.41	22.10	0.0000	0.0000	198.0	2014/03/12	
20	(SHELL)	21.41	21.54	0.0000	0.0000	198.0	2014/03/12	
25	(SHELL)	21.41	21.69	0.0000	0.0000	198.0	2014/03/12	
30	(HEAD)	20.60	21.41	0.0000	0.0000	198.0	2014/03/12	
35	(90L 3 STD)	5.49	5.03	0.0713	0.0713	24.4	2014/03/12	
40	(90L 2 160)	8.74	8.13	0.0950	0.0950	62.1	2014/03/12	
45	(90L 2 160)	8.74	7.75	0.1544	0.1544	35.7	2014/03/12	
50	(90L 3 XS)	7.62	7.01	0.0950	0.0950	39.2	2014/03/12	

Inspected By	Signature	CGSB Level	CGSB No.	Survey Date	UT Equip	Due Date OF Calibration	NDE Procedure No.
Gordon Derewianko	line	1	13896	03/12/2014	101_91637903_EPOCH4+	06/27/2014	WQS UT-001



Client:

HUSKY ENERGY

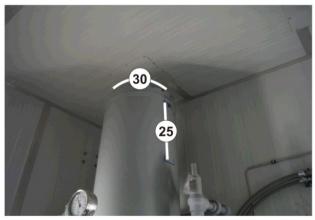
EXAMINATION ILLUSTRATION

DISTRICT:	FOOTHILLS ANSELL	FACILITY:	ANSELL	LOCATION/LSD:	10-09-051-19W5
EQUIP NAME:	SEPARATOR		PROV REG No.:	A#0584781	
SERIAL No.:	11392	Equip No.:	66145389	National Board No.:	













NOTES:



Client:

HUSKY ENERGY

PHOTOGRAPHS

EQUIP NAME:	SEPARATOR			PROV REG No.:	0584781	
SERIAL No.:	11392	Equip No.:	66145389	National Board No.:		



NAMEPLATE





PSV TAG



OVERAL



PSV TAG



LSD SIGN