Husky Oil

Form: QR-19.7a
Rev: 0, Date 12/13

PRESSURE VESSEL & COLUMN INSPECTION REPORT

LSD: 14-21-050-19w5m surf
10-21-050-19w5m D.H.

Date: May 7, 2015

SAP Equipment ID: 66181514

VESSEL STATIC DATA

Plant Ansell / Minehead Field	**Op Unit**	**System**
Prov. Insp. # A0612542	**CRN** P7217.231	**Equip Tag #** n/a
Equipment Description Separator		**Serial #** 12342
Manufacturer RJV Gasfield Services		**Vessel Class**
Internal Access: Description: none		**Year Built** 2011
MAWP 10205 kPa @ 38 ºC		**MDMT** -29 ºC
CODE :	**RT :** 2	**PWHT : No**
Diameter 406mm **Length** (S/S) 2285 mm **OAL** mm		Vertical
Shell Mat'l SA-106-B	**Thickness** 21.44 mm	**Corr Allowance** 1.6 mm
Head Mat'l SA-516-70	**Thickness** 20.63 mm	**Corr Allowance** 1.6 mm
Nozzle Mat'l	**Thickness** mm / in	**Corr Allowance** mm
Internal Coating:	**Internal Clad :**	**Capacity** m3
Manway : NO	**Inspection Port :** NO	Skirt
Nozzle Rating 600 lb ANSI	**Painted :** YES	**Insulated** NO

PROCESS DATA

Product Description	Gas, condensate, water	**Sweet**	
Operating Pressure	960 **PSI**	**Operating Temperature**	34 ºF

PSV STATIC DATA

Serial No.	Location	Set Pressure	Capacity SCFM	Manufacturer	Model / Type	Service Date / Company
013664-62	shell	1440psi	5180	Taylor	82E8351311	Wizard 08-Mar-12

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 below MAWP, vents to atmosphere. It sounds like there is a slight gas leak from PSV inlet threaded connection. There is product buildup indicating a leak from fisher control to shell threaded connection. UT corrosion survey conducted by Streamline May 2015.

RECOMMENDATIONS

Replace fisher control to shell connection components to eliminate leak.
Tighten PSV inlet threaded connection to eliminate leak, or inspect PSV inlet for potential damage / corrosion which could cause leak.

NONCONFORMANCES / INSPECTION DEFICIENCIES

It sounds like there is a slight gas leak from PSV inlet threaded connection.
There is product buildup indicating a leak from fisher control to shell threaded connection.

INSPECTION PLANNING

Inspection Strategy		**Availability**		**Inspection Interval**	
Inspection Date	May 7, 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 7, 2015
Company	Streamline Inspection Ltd	**PESL #**	000711	**API #**	27479
Reviewed and Approved by				**Date**	

PRESSURE VESSEL & COLUMN INSPECTION REPORT

10-21-050-19w5m D.H. Date: May 7, 2015 SAP Equipment ID: 66181514

		PESL #		**API #**	
Criticality Assessment Rerun		**Inspection Planning Rerun**			
Assessed Next Inspection Date					

PRESSURE VESSEL & COLUMN INSPECTION REPORT

10-21-050-19w5m D.H. Date: May 7, 2015 SAP Equipment ID: 66181514

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	Poor	PSV inlet threaded connection. Fisher control to shell threaded connection.		Leaks identified
V4	Vibration	N/A			
V5	Dissimilar Flange Rating	N/A			None noted
V6	Ladder/Stairway	N/A			
V7	Heads	Good			No concerns noted
V8	Guy Wires	N/A			
V9	Electrical Ground	Good			Securely grounded Ground cable attached 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, temp, level		Working within design limits clear and legible
V14	Shell	Good			No concerns noted
V15	Jacket	N/A			
V21	Support Other (Please explain)	Good	piping		well supported
V22	Foundation	Good			No concerns noted steel skid on steel piles
V23	Anchor Bolts	N/A			
V24	Saddle/Skirt	Good	skirt		Securely in place Welded to floor, inspection port present and accessible
V25	Davit	N/A			
V26	Fireproofing	N/A			
V31	Connections Other (Please explain)	Poor	PSV inlet threaded connection. Fisher control to shell threaded connection.		leaks identified at threaded connections
V32	Small Branches	Good	tubing		No significant sign of strain or concerns
V33	Nozzles	Good			No stresses, corrosion or misalignment
V34	Manways	N/A			
V35	Reinforcing Pads	N/A			
V36	Inadequate Thread Engagement	Good			No concerns noted
V37	Bolting	Good			Intact with no missing bolts or short bolting
V38	Flanges	Good			No active leaks
V39	Leak Clamps	N/A			
V41	Insulation Other (Please explain)	Good	piping outside building		insulated and clad
V42	Damage	N/A	piping outside building		None noted
V43	Penetrations	N/A			
V44	Insulation Jacket	Good	piping outside building		tin clad
V45	Banding	Good	piping outside building		No concerns
V46	Seals/Joints	N/A			
V51	Relief Devices Other (Please explain)	Good			Serviced and seal intact
V52	Corrosion	N/A			
V53	Leaks	Poor	PSV inlet threaded connection		slight gas leak can be heard
V54	Restricted Inlet/Outlet	N/A			
V55	Manual Operation Lever	N/A			

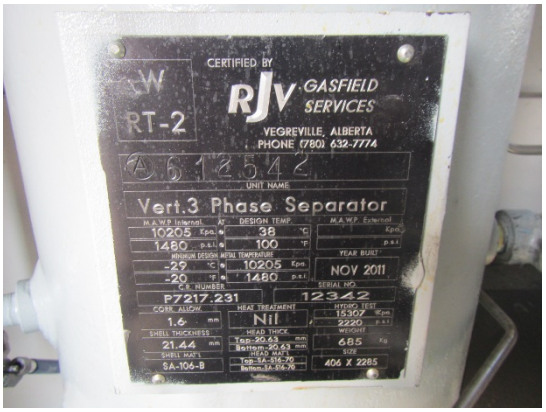
PRESSURE VESSEL & COLUMN INSPECTION REPORT

10-21-050-19w5m D.H. Date: May 7, 2015 SAP Equipment ID: 66181514

PHOTOS

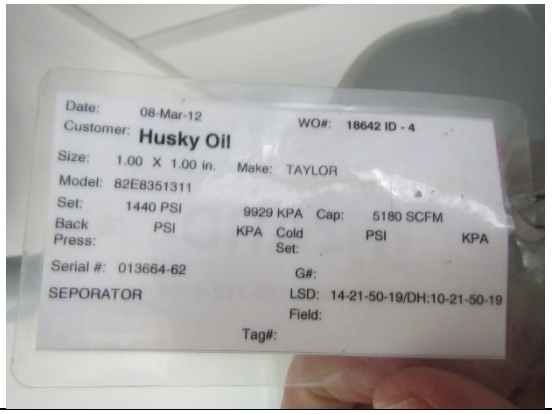
LSD SIGN

DOWNHOLE LOCATION

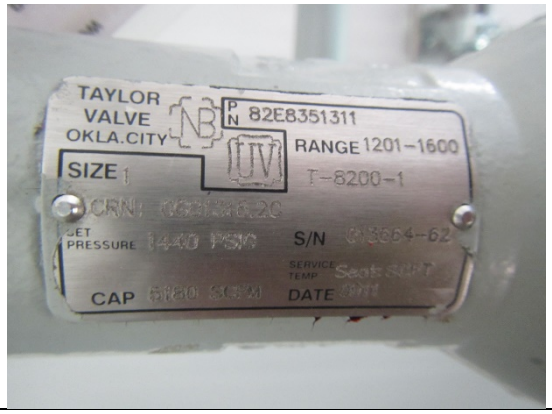


DATAPLATE

VESSEL AND PSV OVERVIEW - A LEAK CAN BE HEARD FROM PSV, SEEMS TO BE FROM INLET THREADED CONNECTION



PSV SERVICE TAG



PSV DATAPLATE

PRESSURE VESSEL & COLUMN INSPECTION REPORT

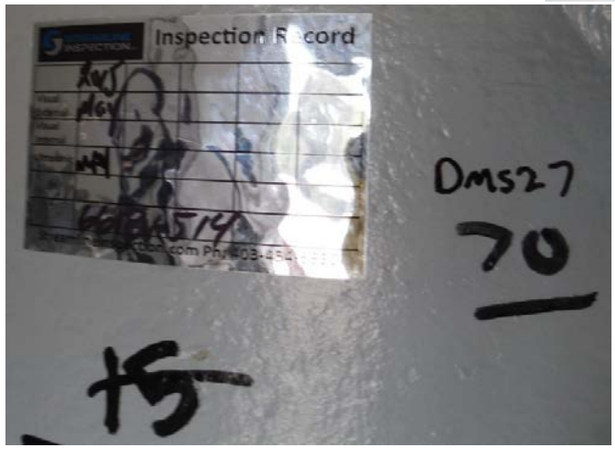
10-21-050-19w5m D.H. Date: May 7, 2015 SAP Equipment ID: 66181514

	
There is product buildup indicating a leak from fisher control to shell threaded connection.	There is product buildup indicating a leak from fisher control to shell threaded connection.

Husky Energy

Location Name:	ANSELL/MINEHEAD		**LSD:**	14-21-50-19W5 SUR 10-21 DH	
A#:	A0612542		**Equipment/Tag No.**		
Equipment Description:	SEPARATOR				
Manufacturer:	RJV GASFIELD SERVICES				
Serial Number:	12342		**CRN:**	P7217.231	
Shell MAWP:	1480	PSI	**Shell Design Temp:**	100	°F
Tube MAWP:		PSI	**Tube Design Temp:**		°F
Shell Material:	SA-106-B		**Head Material:**	SA-516-70	
Shell Thickness:	21.44	mm	**Head Thickness:**	20.63	mm
Corrosion Allowance:	1.6000	mm	**Date Built:**	2011	
Size:	406	in	**Pipe / Rolled Plate:**	PIPE	
RT:	2				

NOTES: SAP66181514



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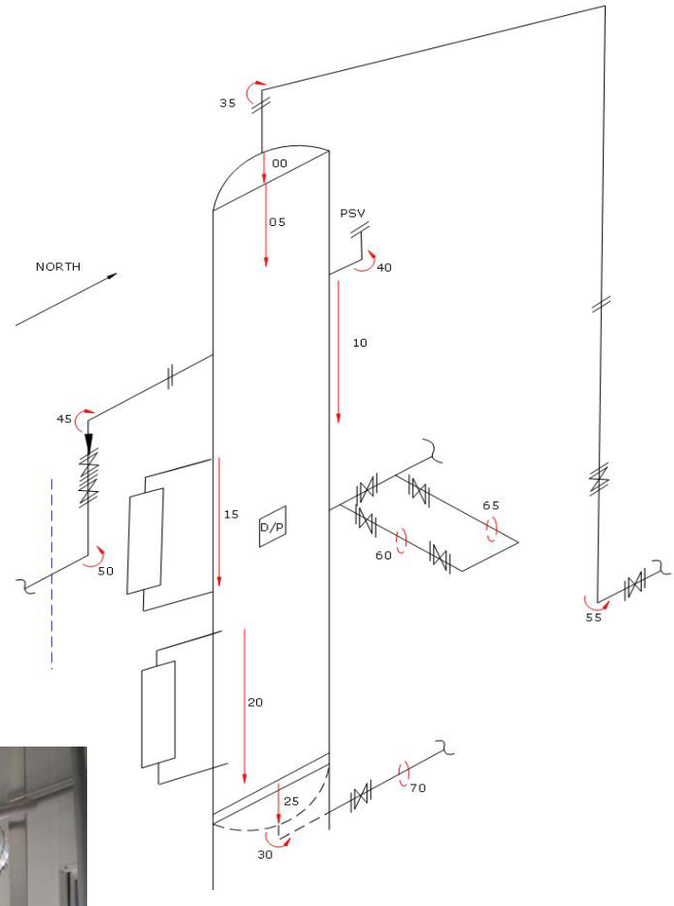

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Ultrasonic Corrosion Survey

*All values are in millimeters unless otherwise stated.

Survey Name: Husky Energy **Date:** May 12, 2015

Inspector: D. Skeard

LSD:	14-21-50-19W5 SUR 10-21 DH	**Area:**	ANSELL/MINEHEAD		**Location:**	FIELD			
A #:	A0612542	**Tag Number:**			**Vessel Name:**	SEPARATOR			
CRN:	P7217.231	**Year Built:**	2011		**Serial Number:**	12342			
RT:	2	**Vessel CA:**	1.600	mm	**Manufacturer:**	RJV GASFIELD SERVICES			
		Shell MAWP:	1480 PSI	**MAWTF:** 100 °F	**Tube MAWP:**	PSI	**MAWTF:**	°F	**Pipe/Plate** PIPE

TML Description			Baseline					**Material:** SA-516-70	
00	HEAD		**2015**	**Flag**	**CA**	**Nominal**	**T Min**	**STCR mm/yr**	**LTCR mm/yr**
Shape:	Ellipsoidal	**Min**	21.29	19.030	1.600	20.630		0.000	0.000
OD:	406.4	**Avg**	21.44					**Remaining Life:**	
Spec:	ASME VIII Div.1	**Comments:**						**Retirement Date:**	

TML Description			Baseline					**Material:** SA-106-B	
05	SHELL		**2015**	**Flag**	**CA**	**Nominal**	**T Min**	**STCR mm/yr**	**LTCR mm/yr**
Shape:	Cylindrical	**Min**	22.78	19.840	1.600	21.440		0.000	0.000
OD:	406.4	**Avg**	22.99					**Remaining Life:**	
Spec:	ASME VIII Div.1	**Comments:**						**Retirement Date:**	

TML Description			Baseline					**Material:** SA-106-B	
10	SHELL		**2015**	**Flag**	**CA**	**Nominal**	**T Min**	**STCR mm/yr**	**LTCR mm/yr**
Shape:	Cylindrical	**Min**	22.40	19.840	1.600	21.440		0.000	0.000
OD:	406.4	**Avg**	22.89					**Remaining Life:**	
Spec:	ASME VIII Div.1	**Comments:**						**Retirement Date:**	

TML Description			Baseline					**Material:** SA-106-B	
15	SHELL		**2015**	**Flag**	**CA**	**Nominal**	**T Min**	**STCR mm/yr**	**LTCR mm/yr**
Shape:	Cylindrical	**Min**	22.30	19.840	1.600	21.440		0.000	0.000
OD:	406.4	**Avg**	22.89					**Remaining Life:**	
Spec:	ASME VIII Div.1	**Comments:**						**Retirement Date:**	

Ultrasonic Corrosion Survey

*All values are in millimeters unless otherwise stated.

Survey Name: Husky Energy **Date:** May 12, 2015

Inspector: D. Skeard

LSD:	14-21-50-19W5 SUR 10-21 DH	**Area:**	ANSELL/MINEHEAD		**Location:**	FIELD		
A #:	A0612542	**Tag Number:**			**Vessel Name:**	SEPARATOR		
CRN:	P7217.231	**Year Built:**	2011		**Serial Number:**	12342		
RT:	2	**Vessel CA:**	1.600	mm	**Manufacturer:**	RJV GASFIELD SERVICES		
		Shell MAWP:	1480 PSI	**MAWTF:** 100 °F	**Tube MAWP:**	PSI	**MAWTF:** °F	**Pipe/Plate** PIPE

TML Description			Baseline					**Material:**	SA-106-B	
20	SHELL		**2015**	**Flag**	**CA**	**Nominal**	**T Min**	**STCR mm/yr**	**LTCR mm/yr**
Shape:	Cylindrical	**Min**	22.20	19.840	1.600	21.440		0.000	0.000
OD:	406.4	**Avg**	22.81					**Remaining Life:**	
Spec:	ASME VIII Div.1	**Comments:**						**Retirement Date:**	

TML Description			Baseline					**Material:**	SA-516-70	
25	HEAD		**2015**	**Flag**	**CA**	**Nominal**	**T Min**	**STCR mm/yr**	**LTCR mm/yr**
Shape:	Ellipsoidal	**Min**	21.31	19.030	1.600	20.630		0.000	0.000
OD:	406.4	**Avg**	21.41					**Remaining Life:**	
Spec:	ASME VIII Div.1	**Comments:**						**Retirement Date:**	

TML Description			Baseline					**Material:**	A-234-WPB	
30	NOZZLE		**2015**	**Flag**	**CA**	**Nominal**	**T Min**	**STCR mm/yr**	**LTCR mm/yr**
Shape:	90° Elbow	**Min**	9.70	9.690	1.384	11.074		0.000	0.343
OD:	60.325	**Avg**	10.64					**Remaining Life:**	
Spec:	ASME VIII Div.1	**Comments:**	ASSUMED NOMINAL, CORROSION NOTED					**Retirement Date:**	

TML Description			Baseline					**Material:**	A-234-WPB	
35	PIPING		**2015**	**Flag**	**CA**	**Nominal**	**T Min**	**STCR mm/yr**	**LTCR mm/yr**
Shape:	90° Elbow	**Min**	5.41	4.845	0.692	5.537		0.000	0.032
OD:	60.325	**Avg**	5.49					**Remaining Life:**	
Spec:	ASME B31.3	**Comments:**	ASSUMED NOMINAL					**Retirement Date:**	

STREAMLINE INSPECTION LTD.

Ultrasonic Corrosion Survey

*All values are in millimeters unless otherwise stated.

Survey Name: Husky Energy **Date:** May 12, 2015

Inspector: D. Skeard

LSD:	14-21-50-19W5 SUR 10-21 DH	**Area:**	ANSELL/MINEHEAD		**Location:**	FIELD		
A #:	A0612542	**Tag Number:**			**Vessel Name:**	SEPARATOR		
CRN:	P7217.231	**Year Built:**	2011		**Serial Number:**	12342		
RT:	2	**Vessel CA:**	1.600	mm	**Manufacturer:**	RJV GASFIELD SERVICES		
		Shell MAWP:	1480 PSI	**MAWTF:** 100 °F	**Tube MAWP:**	PSI	**MAWTF:** °F	**Pipe/Plate** PIPE

TML Description			Baseline					**Material:** A-234-WPB	
40	NOZZLE		**2015**	**Flag**	**CA**	**Nominal**	**T Min**	**STCR mm/yr**	**LTCR mm/yr**
Shape:	90° Elbow	**Min**	10.95	9.690	1.384	11.074		0.000	0.032
OD:	60.325	**Avg**	11.07					**Remaining Life:**	
Spec:	ASME VIII Div.1	**Comments:**	ASSUMED NOMINAL					**Retirement Date:**	

TML Description			Baseline					**Material:** A-234-WPB	
45	PIPING		**2015**	**Flag**	**CA**	**Nominal**	**T Min**	**STCR mm/yr**	**LTCR mm/yr**
Shape:	90° Elbow	**Min**	4.80	4.845	0.692	5.537	2.540	0.000	0.184
OD:	60.325	**Avg**	5.23					**Remaining Life:**	13.37 Yrs
Spec:	ASME B31.3	**Comments:**	ASSUMED NOMINAL, EROSION NOTED					**Retirement Date:**	9/21/2028

TML Description			Baseline					**Material:** A-234-WPB	
50	PIPING		**2015**	**Flag**	**CA**	**Nominal**	**T Min**	**STCR mm/yr**	**LTCR mm/yr**
Shape:	90° Elbow	**Min**	8.48	7.623	1.089	8.712		0.000	0.057
OD:	60.325	**Avg**	9.02					**Remaining Life:**	
Spec:	ASME B31.3	**Comments:**	ASSUMED NOMINAL					**Retirement Date:**	

TML Description			Baseline					**Material:** A-234-WPB	
55	PIPING		**2015**	**Flag**	**CA**	**Nominal**	**T Min**	**STCR mm/yr**	**LTCR mm/yr**
Shape:	90° Elbow	**Min**	5.16	4.845	0.692	5.537		0.000	0.095
OD:	60.325	**Avg**	5.51					**Remaining Life:**	
Spec:	ASME B31.3	**Comments:**	ASSUMED NOMINAL					**Retirement Date:**	

Ultrasonic Corrosion Survey

*All values are in millimeters unless otherwise stated.

Survey Name: Husky Energy **Date:** May 12, 2015

Inspector: D. Skeard

LSD:	14-21-50-19W5 SUR 10-21 DH	**Area:**	ANSELL/MINEHEAD		**Location:**	FIELD		
A #:	A0612542	**Tag Number:**			**Vessel Name:**	SEPARATOR		
CRN:	P7217.231	**Year Built:**	2011		**Serial Number:**	12342		
RT:	2	**Vessel CA:**	1.600	mm	**Manufacturer:**	RJV GASFIELD SERVICES		
		Shell MAWP:	1480 PSI	**MAWTF:** 100 °F	**Tube MAWP:**	PSI	**MAWTF:** °F	**Pipe/Plate** PIPE

TML Description			Baseline				**Material:** SA-106-B	
60	PIPING		**2015**	**Flag**	**CA**	**Nominal**	**T Min**	**STCR mm/yr**	**LTCR mm/yr**
Shape:	360° Circ	**Min**	6.48	5.556	0.794	6.350		0.000	0.000
OD:	33.401	**Avg**	6.93					**Remaining Life:**	
Spec:	ASME B31.3	**Comments:**	ASSUMED NOMINAL					**Retirement Date:**	

TML Description			Baseline				**Material:** SA-106-B	
65	PIPING		**2015**	**Flag**	**CA**	**Nominal**	**T Min**	**STCR mm/yr**	**LTCR mm/yr**
Shape:	360° Circ	**Min**	6.27	5.556	0.794	6.350		0.000	0.019
OD:	33.401	**Avg**	6.60					**Remaining Life:**	
Spec:	ASME B31.3	**Comments:**	ASSUMED NOMINAL					**Retirement Date:**	

TML Description			Baseline				**Material:** SA-106-B	
70	PIPING		**2015**	**Flag**	**CA**	**Nominal**	**T Min**	**STCR mm/yr**	**LTCR mm/yr**
Shape:	360° Circ	**Min**	6.20	5.556	0.794	6.350		0.000	0.038
OD:	33.401	**Avg**	6.48					**Remaining Life:**	
Spec:	ASME B31.3	**Comments:**	ASSUMED NOMINAL					**Retirement Date:**	

ALBERTA MUNICIPAL AFFAIRS
ABSA, the pressure equipment safety authority
9410 – 20th Avenue
Edmonton, AB T6N 0A4
Partial/ *Partiel* ☐

(A) 612542

MANUFACTURER'S DATA REPORT FOR PRESSURE VESSEL

DÉCLARATION DE CONFORMITÉ DU CONSTRUCTEUR D'APPAREILS SOUS PRESSION

Upon shipment of a pressure vessel, this form fully and correctly filled in must be mailed to the office of the Chief Inspector in the province of installation in accordance with the regulations under the Act, governing the construction and installation of pressure vessels.

Au moment de l'expédition d'un appareil sous pression, ce formulaire complété correctement, doit être envoye au bureau de l'inspecteur en chef de la province d'installation tel que prévu dans les règlements de la loi sur les appareils sous pression.

Manufactured by *Construit par*	Name and address of Manufacturer/ *Nom et adresse du constructeur* **RJV Gasfield Services 4901 Bruce Road, Vegreville, Alberta T9C 1C3**
Manufactured for *Construit pour*	Name and address of Purchaser or Consignee/ *Nom et adresse du client ou de son représentant* **RJV Gasfield Services 4901 Bruce Road, Vegreville, Alberta T9C 1C3**
Ultimate owner *Utilisateur*	Name and address/ *Nom et adresse* **Stock**
Location of installation *Lieu d'installation*	Address/ *Adresse* **Stock**

Pressure vessel/ *Appareil*

Type/ *Genre*	Overall Length/*Longeur totale*	Serial No./ *N° de série*	Year built/Année de fabrication
Vertical 3 Phase Separator	**2285mm sm/sm**	**12342**	**2011**
Provincial Registration No. – C.R.N./N° d'enregistrement provincial - N.E.C. **P7217.231**		National Board No./ *N° National Board* **N/A**	Drawing No./ *N° de dessin* **V01-381-R1**

The chemical and physical properties of all parts meet the requirements of material specifications of the A.S.M.E. Code.
Les propriétés chimiques et physiques de toutes les composantes respectent les exigences des spécifications de matériaux de code ASME.

The design, construction and workmanship conform to CSA B51. *La conception, la construction et la façon sont conformes à ACNOR B51.*	ASME	Division	Addenda/*Supplément*	Code case No. *N ° de cas*
	Section VIII	1	2010	N/A

Manufacturer's partial data reports properly identified and signed by authorized inspectors have been furnished for the following items of the report, and attached to this report:
Les rapports partiels du constructeur adqéuatement identifiés et signés par les inspecteurs authorisés ont été produits pour les items suivants du rapport, et attachés à ce rapport:

Names of parts/ *Nom de la composante*	Item No./ *N□ d'item*	Manufacturer's Name/ *Nom du constructeur*	Identifying Stamp/ *Estampe d'identification*

Shell/ *Virole*

Description	Material *Matériau*	Thickness *Épaisseur*	Corr. Allow. *Surépais. de corr.*	Diameter *Diamètre*	Longitudinal Joints *Joints longitudineux*			P.W.H.T. *Traitement therm*		Girth Joints *Joints de circonférence*		Number of courses *Nombre de sections*
					Type	R.T. *Radiog.*	Efficiency *Efficacité*	Temp.	Time *Durée*	Type	R.T. *Radiog.*	
Shell	**SA-106-B**	**21.44 mm**	**1.6mm**	**406mm**	**Sml's**	**N/A**	**N/A**	**N/A**	**N/A**	**1**	**Spot**	**1**
											70%	

Heads/ *Tetes*

Description	Material *Matériau*	Min. Thickn. *Épais minim.*	Corr. Allow *Surép. Corr.*	Crown. Radius *Rayon couron.*	Knuckle Radius *Petit rayon*	Ellipse Ratio *Rapp. ellipse*	Conical Apex Angle *Angle conique*	Hemisph. Radius *Ray. Hémisph*	Flat Diameter *Diam.plat*	Side to pressure *Côte sous pression*
Top	**SA-516-70**	**20.63mm**	**1.6mm**	------	------	**2.1**	------	------	------	**Concave**
Bottom	**SA-516-70**	**20.63mm**	**1.6mm**	------	------	**2.1**	------	------	------	**Concave**

Removable bolts used (describe other fastenings) *Boulons amovible utilisés (décrire tout autre attache)*	Mat'l Spec./ *Spéc. du mat.*	Grade	Size/ *Dimension*

Pressure - Temperature/ *Pression - température*

Pressure Vessel Part *Partie de l'appareil*	Constructed for max. allowable working pressure *Construit pour une pression maximale de marche permise*	At max. temp. *A une temp. max.*	Min. Temp. (when less than -29°C) *Temp. min. (inférieure à -29°C)*	Test pressure (hydro-pneumatic or combination) *Pression d'épreuvre (hydro-pneumatique ou combinaison)*
Vessel	10,205 Kpa.	38°C	-29°C	15,307 Kpa.

A 612542

Tube Section/ *Faisceau tubulaire*

Tubesheet/ *Plaque tubulaire*	Material/ *Matériau*	Diameter/ *Diametre*	Nominal Thickness *Epaisseur nominale*	Corr. Allow. *Surépais. corrosion*	Attachment *Mode d'attachement*
Tube material/ *Materiau des tubes*	Diameter/ *Diamètre*	Nominal Thickness (gauge) *Épaisseur nominale (calibre)*	Number/ *Nbre*	Type (Straight or U) *Type (Droit ou U)*	Heating Surface *Surface de chauffe*

Jacket/ *Chemise*

Type of jacket/ *Genre de chemise*	Jacket closure *Fermeture de chemise*	Proof Test *Pression d'épreuve*	Heating Surface *Surface de chauffe*	Sketch/ *Schéma*

Safety Valve Outlets/ *Soupapes de sûreté*

Number/ *Nombre*	Dimension	Location/ *Endroit*
1	33.4mm	Shell

Nozzles and Openings/ *Tubulures et ouvertures*

Purpose/ *But*	Number *Nombre*	Dimension	Type	Material *Matériau*	Nominal Thickness *Épaisseur nominale*	Reinforcement material *Matériau de renfort*	How attached *Genre d'attaches*	Location/ *Endroit*
Inlet/Outlet	2	60.3mm	CL600RFWN	SA-105/SA-106-B	8.74mm	N/A	UW16.1{c}	Top Head/Shell
L.L.C./H.L.S.D./L.L.S.D.	5	60.3mm	Coupling	SA-105	CL6000	N/A	UW16.1{c}	Shell/Bottom Head
P.S.V.	1	33.4mm	Coupling	SA-105	CL6000	N/A	UW16.1{c}	Shell
Sight Glass/Temp. Ind.	5	26.7mm	Coupling	SA-105	CL6000	N/A	UW16.1{c}	Shell
Pressure Indicator	1	21.4mm	Coupling	SA-105	CL6000	N/A	UW16.1{c}	Shell
Liquid out	2	60.3mm	Coupling	SA-105	CL6000	N/A	UW16.1{c}	Shell

Supports/ *Supports*

Skirt/ *Jupe* Yes/ *Oui* No/ *Non*	Lugs/ Oreilles *No./ Nbre*	Legs/ Pieds *No./ Nbre*	Other/ *Autres* (Description)	Attached/ *Attaches* (Where and How/ *Méthode et endroit*)
☒ ☐	No	No	N/A	Welded to bottom head

Remarks/ *Observations* (Cubical capacity/ Volume)

Volume=.262 Cubic Meters
Exempt from impact test requirements as per UG20(f) 1 to 5
Hydrostaticlly tested in the vertical position
Nozzel to shell weld full penitration

Certificate of Compliance/ *Certificat de conformité*

We certify that the statements made in this data report are correct and that the said vessel has been constructed in accordance with the Provincial Registered design below and the requirements of standard CSA B51.

Nous certifions que les données de la déclaration de conformité sont correctes et que l'appareil a été construit en accord avec l'enregistrement provincial ci-dessous et les exigences de la norme ACNOR B51.

Provincial Registered Design
Enregistrement provincial P7217.231

Manufacturer
Constructeur RJV Gasfield Services

Signature _____ Date NOV 10 2011

Certificate of Shop Inspection/ Certificat d'inspecton en usine

I, the undersigned, a duly authorized boiler and pressure vessel inspector
Je, soussigné, inspecteur autorisé de chaudières et appareil sous pression
employed by (employé par) ABSA
of (de) Alberta
have inspected the above vessel and state that to the best of my knowledge and belief the manufacturer has constructed the vessel in accordance with Canadian Registration No. P7217.231 and the requirements of CSA Standard B51. By signing this certificate, neither the inspector nor his or her employer makes any warranty, expressed or implied, concerning the vessel described in this manufacturer's data report. Furthermore, neither the inspector nor his or her employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
ai inspecté l'appareil précité et, autant que je sache, le constructeur a construit l'appareil en accord avec le numéro d'enregistrement canadien P7217.231 et les exigences de la norme CSA B51. En signant ce certificate, ni l'inspecteur ni son employeur ne donnent de garantie explicite ou implicite relativement à l'appareil décrit dans la présente déclaration. De plus, ni l'inspecteur ni son employeur ne doivent être tenus responsables de quelque manière que ce soit des dommages, matériels ou corporels, ou des pertes de quelque nature que ce soit pouvant résulter de cette inspection.

Inspector's Name
Nom de l'inspecteur Jason Reinhart AB 248 NB 12899 A

Signature _____ Date NOV 10 2011

Certificate of Compliance - Field Work/ *Certificat de conformité - Installation au chantier*

We certify that the field installation of all parts of the vessel conforms with the requirements of Provincial Regulations.

Nous certifions que l'installation au chantier de toutes les composantes de l'appareil est conforme aux règlements provinciaux.

Installer's Name
Nom de l'installateur _____

Signature _____

Date _____

Certificate of Field Inspection/ *Certificat d'inspection - Installation au chantier*

I, the undersigned, a duly authorized boiler and pressure vessel inspector
Je, soussigné, inspecteur autorisé de chaudières et appareil sous pression
employed by
employé par ABSA
have inspected the items not covered by the Certificate of Shop inspection and the installation of the items and state that to the best of my knowledge and belief the construction and assembly of the items are in accordance with the provincial regulations. By signing this certificate, neither the inspector nor his or her employer makes any warranty, expressed or implied, concerning the vessel described in this manufacturer's data report. Furthermore, neither the inspector nor his or her employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.
ai inspecté les composantes non couvertes par le certificate d'inspection en usine et l'installation de l'appareil et, autant que je sache, la construction et l'assemblage de l'appareil sont en accord avec les règlements provinciaux. En signant ce certificate, ni l'inspecteur ni son employeur ne donnent de garantie explicite ou implicite relativement à l'appareil décrit dans la présente déclaration. De plus, ni l'inspecteur ni son employeur ne doivent être tenus responsables de quelque manière que ce soit des dommages, matériels ou corporels, ou des pertes de quelque nature que ce soit pouvant résulter de cette inspection.

Inspector's Name
Nom de l'inspecteur _____
Signature Date