

ALBERTA MUNICIPAL AFFAIRS

ABSA, the pressure equipment safety authority

9410 - 20th Avenue

Edmonton, AB T6N 0A4

Partial/ Partiel ☐

①619594

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 envoyé 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 Coral Oilfield Services Inc. 15303-94 St. T8X 0L2
Manufactured for Construit pour	Name and address of Purchaser or Consignee/ Nom et adresse du client ou de son représentant Haltech Testing Box 92 Baytree, AB T0H 0A0
Ultimate owner Utilisateur	Name and address/ Nom et adresse Haltech Testing Box 92 Baytree, AB T0H 0A0
Location of installation Lieu d'installation	Address/ Adresse Not Known

Pressure vessel/ Appareil

Type/ Genre Horizontal	Overall Length/Longueur totale 30' S-S	Serial No./ N° de série 4044-01	Year built/Année de fabrication 2013
Provincial Registration No. - C.R.N./N° d'enregistrement provincial - N.E.C. V9366.21		National Board No./ N° National Board N/A	Drawing No./ N° de dessin 3968-01 Rev.2

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 Section VIII	Division 1	Addenda/Supplément 2011	Code case No. N° de cas 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: Rapports partiels du constructeur adéquatement identifiés et signés par les inspecteurs autorisés ont été produits pour les items suivants du rapport, et attachés à ce rapport:				
Names of parts/ Nom de la composante N/A	Item No./ N° d'item N/A	Manufacturer's Name/ Nom du constructeur N/A	Identifying Stamp/ Estampe d'identification N/A	
N/A	N/A	N/A	N/A	

Shell/ Virole

Description	Material Matériau	Thickness Épaisseur	Corr. Allow. Surépais. de corr.	Diameter Diamètre	Longitudinal Joints Joints longitudinaux			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-516-70N	0.5"	0.125"	108" I.D.	1	FULL	100%	1125F	44 Min	1	FULL	3

Heads/ Têtes

Description	Material Matériau	Min. Thickn. Épais min.	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
Head	SA-516-70N	0.5"	0.125"			2:1				Concave
Head	SA-516-70N	0.5"	0.125"			2:1				Concave
Removable bolts used (describe other fastenings) Boulons amovibles utilisés (décrire tout autre attache)					Mat'l Spec./ Spéc. du mat. SA-193			Grade B7		Size/ Dimension 1 1/8"

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'épreuve (hydro-pneumatique ou combinaison)
Vessel	125 Psi	300 F	-50 F	163 Psi

Tube Section/ Faisceau tubulaire

④619 594

Tubeshet/ Plaque tubulaire	Material/ Matériau	Diameter/ Diamètre	Nominal Thickness Épaisseur nominale	Corr. Allow. Surépais. corrosion	Attachment Mode d'attachement
Tube material/ Matériau 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
----------------	-----------	-------------------

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
Gas Inlet, Gas Outlet, Drain	5	4"	RFWN	SA-105N	XXH		UW16.1(D)	
PSV, Water, Oil Outet	4	3"	RFWN	SA-105N	XXH		UW16.1(D)	
Sparge, Coil	11	2"	RFWN	SA-105N	XXH		UW16.1(D)	
Sight glass, PI, Spare	12	1"	RFWN	SA-105N	XXH		UW16.1(D)	
Manway	2	20"	RFWN	SA-105N	STD	1/2" Thick SA-516-70N	UW16.1(H)	

Supports/ Supports

Skirt/ Jupe Yes/ Oui No/ Non ☐ ☐	Lugs/ Oreilles No./ Nbre	Legs/ Pieds No./ Nbre 2	Other/ Autres (Description)	Attached/ Attaches (Where and How/ Méthode et endroit)
--	-----------------------------	-------------------------------	-----------------------------	---

Remarks/ Observations (Cubical capacity/ Volume)

Impact tests exempt as per UCS-66a, UCS-66b
Coil: MAWP: 150 PSI @ 350F, MAEWP: 125 PSI, MDMT: -50F @ 150 PSI
2" NPS XH SA-106B Flange: 2" Class 150 RFSO SA-105N

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 V.9366.21

Manufacturer
Constructeur Coral Oilfield Services Ltd.

Signature [Signature] Date MAY 29, 2013

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 Shop Inspection/ Certificat d'inspection 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. V.9366.21 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 V.9366.21 et les exigences de la norme CSA B51. En signant ce certificat, 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 P. EBERT AB 293 NB 13287 A
Nom de l'inspecteur

Signature [Signature] Date MAY 29/13

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 certificat 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 certificat, 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 _____



277 Burnt park drive

Red Deer County AB T4S-2L4

Phone 1.866.660.KING Fax 347-1470

Email info@kingsenergy.com

Date : Apr. 18 / 2013

Sales Order # : 016208

Serial # : 016208-10

Part#: 83J5811341-60-60-0

Customer : CORAL OILFIELD

GRANDE PRAIRIE

ALBERTA

JOB# 4044-01

Customer PO # : 4044-01

Safety Relief Valve Certification

Taylor Valve Technology, Inc. Safety Relief Valves are designed, manufactured and tested in accordance with the provisions of the ASME Boiler and Pressure Vessel Code. as allowed for within the provisions of ASME. The published relieving capacities have been certified by the National Board of Boiler and Pressure Vessel Inspectors.

Valve Specifications

Model Number :	Taylor Model 8300 Soft Seat	Orifice :	J
Body Size :	3 Inch	Diameter:	1.350 Inches
Part Number :	83J5811341-60-60-0	Area :	1.431 In ²
Body Configuration :	FLANGED	Temperature :	70 °F
Inlet Connection :	3" ANSI Class 150# RFF	Spring Range :	91-140 PSIG
Outlet Connection :	3" ANSI Class 150# RFF	Set Pressure :	125.0 PSIG
CRN:	0G01316.2C		

Materials

Body :	WCC Carbon Steel	Spring :	MP35N or Equal
Seat Frame :	Carbon Steel	Guide :	304 Stainless Steel
Seat Housing :	316 Stainless Steel	Adj Screw :	Carbon Steel with EN Plating
Trim :	Nace	Options :	None
Seat :	FKM 90d		

Set Pressure Specifications

	ASME Units		
Set Pressure :	125.0	psig	
ASME High Set Limit :	128.8	psig	
ASME Low Set Limit :	121.3	psig	

ASME (90%) rated capacity at set pressure for indicated fluid, specific gravity and temperature.

Certifying Fluid :	Air	3,227 SCFM	Spec Gravity : 1.00	Temp : 20°C
--------------------	-----	------------	---------------------	-------------

Tested by :

Department : Valve Technician

Signed Adam Darlow

Approved by :

Department : Shipping

Signed Tracy Kulba-Gibbons

TRAVEL SHEET

DO NOT START CONSTRUCTION WITHOUT AI REVIEW					TRAVEL SHEET REVISION NO.:				
AI REVIEW: <i>Harvey Waddy</i>		REVIEW DATE: <i>April 22/13</i>							
SERIAL NO.: <i>4044-01</i>		JOB NO.: <i>4044</i>		VESSEL TYPE: <i>SEPARATOR</i>					
DRAWING NO.: <i>3968-01</i>		DWG. REVISION NO.: <i>2</i>		TRAVEL SHEET INITIATION BY: <i>RYAN O'TOOLE</i>					
Seq.	Item	Comments	Q.C.I.	Date	A.I. Hold Points	A.I.	Date	Owner	Date
1.	Calculations in File		<i>P</i>	<i>MM 9/13</i>	<i>x</i>				
2.	Release of App'd Dwg.		<i>P</i>	<i>5/9/13</i>					
3.	Materials Examined		<i>P</i>	<i>5/9/13</i>					
4.	Heat Numbers Recorded		<i>P</i>	<i>5/9/13</i>					
5.	MTRs Checked		<i>P</i>	<i>5/9/13</i>	<i>x</i>				
6.	WPS(s) Checked		<i>P</i>	<i>5/9/13</i>	<i>x</i>				
7.	Welder(s) Qualified		<i>P</i>	<i>5/9/13</i>	<i>x</i>				
8.	Thicknesses Verified & Recorded		<i>P</i>	<i>5/9/13</i>					
9.	Shell(s) & Head(s) Fit-up Inspection		<i>P</i>	<i>5/9/13</i>					
10.	Nozzles & Fittings Fit-up Inspection		<i>P</i>	<i>5/9/13</i>					
11.	Nozzle Orientation		<i>P</i>	<i>5/9/13</i>					
12.	Nozzle & Flange Rating Checked		<i>P</i>	<i>5/9/13</i>					
13.	Impact Tests		<i>P</i>	<i>5/9/13</i>					
14.	Internals Checked		<i>P</i>	<i>5/9/13</i>					
15.	Final Internal Inspection	Shell Side Tube Side	<i>P</i>	<i>5/9/13</i>	<i>x</i>	<i>HW</i>	<i>May 9/13</i>		
16.	Weld Sizes Checked		<i>P</i>	<i>5/9/13</i>	<i>x</i>	<i>HW</i>	<i>May 9/13</i>		
17.	Welder I.D. Checked		<i>P</i>	<i>5/9/13</i>	<i>x</i>	<i>HW</i>	<i>May 9/13</i>		
18.	Final External Inspection		<i>P</i>	<i>5/9/13</i>					
19.	Radiography		<i>P</i>	<i>5/9/13</i>	<i>x</i>	<i>(P)</i>	<i>May 29/13</i>		
20.	Other N.D.E.		<i>P</i>	<i>5/9/13</i>					
21.	Final Ext. Prior to P.W.H.T.		<i>P</i>	<i>5/9/13</i>	<i>x</i>	<i>(HW)</i>	<i>May 9/13</i>		
22.	PWHT Chart Checked		<i>P</i>	<i>5/14/13</i>	<i>x</i>				
23.	Hydrostatic Test	Shell Gauge # Side Tube Gauge # Side			<i>x</i>	<i>(P)</i>	<i>May 29/13</i>		
24.	CRN Drawing	CRN# <i>V9366.21</i>	<i>P</i>	<i>5/28/13</i>	<i>x</i>	<i>(P)</i>	<i>May 29/13</i>		
25.	N.C.R. #								
26.	Nameplate Stamping		<i>P</i>	<i>5/29/13</i>	<i>x</i>	<i>(P)</i>	<i>May 29/13</i>		
27.	Manuf. Data Report Completed & Verified	<i>AB-25</i>	<i>P</i>	<i>5/29/13</i>	<i>x</i>	<i>(P)</i>	<i>May 29/13</i>		
28.	Nameplate Installation								

The Authorized Inspector shall be presented with the Travel Sheet prior to construction so that he can designate additional inspection points and/or Hold Points. Any revisions shall be marked with a delta symbol with revision number and described at the bottom of this page.

* Denotes an A.I. Inspection Point ** Denotes an A.I. Hold Point

TRAVEL SHEET (BACK)

MATERIAL THICKNESS VERIFICATION AND IDENTIFICATION				WELD I.D. / WELDER SYMBOLS / FIT-UP						
Description	Thickness	Material Spec. & Grade	Heat & Plate Identifier or I.D. Number	Weld I.D.	Welder Symbol	Fit-Up Exam.	Weld I.D.	Welder Symbol	Fit-Up Exam.	Verify Type 1 Joint
Shell #1	0.5"	SA-516-70N	351731-50438	L S-2	D,T,T	P	CS-1	U,T,D	P	
Shell #2	0.5"	SA-516-70N	LT213874 A302697-02	L S-3	D,E,E	P	CS-2	U,T,D		
Shell #3	0.5"	SA-516-70N	LT213894 A302699-02	L S-1	D,V,V	P				
Head #1	0.625"	SA-516-70N	370659-40332	CS-3	U,T,D	P				
Head #2	0.625"	SA-516-70N	368821-71824	CS-4	U,T,D	P				
Weir	0.375"	44W	491183	T,V	P					
Saddle Repad	0.375"	SA-516-70N	LK580600 A30287-02	T,U	P					
Nameplate	0.125"	44W	8172L	T	P					
Davit Arm	0.75"	44W	PL12105321	T,T	P					
Lifting lug Repad	0.375"	SA-516-70N	LK580600 A302870	T,T	P					
Building tab	0.25"	44W	PL12105444	T,U	P					

ATTACHMENT AND / OR NOZZLE MATERIAL THICKNESS VERIFICATION AND IDENTIFICATION						WELDER SYMBOLS / FIT-UP			
Mark	Mat. I.D.	Neck	Fitting	Flange	Repad or Attachment	Cat. B	Cat. C	Cat. D	Pad OD
N1A 4"	Spec.-Grd.	SA-106-B		SA-105N		V		V	
	Thk./Rating	XXH		CL 150		P		P	
	Heat# or ID	105742		121406					
N1B 4"	Spec.-Grd.	SA-106-B		SA-105N		E		V	
	Thk./Rating	XXH		CL 150		P		P	
	Heat# or ID	105742		121406					
N2 4"	Spec.-Grd.	SA-106-B		SA-105N		E		V	
	Thk./Rating	XXH		CL 150		P		P	
	Heat# or ID	105742		121406					
N3A 2"	Spec.-Grd.	SA-106-B		SA-105N		E		V	
	Thk./Rating	XXH		CL 150		P		P	
	Heat# or ID	JOKC132		0683					
N3B 2"	Spec.-Grd.	SA-106-B		SA-105N		Z		V	
	Thk./Rating	XXH		CL 150		P		P	
	Heat# or ID	JOKC132		0683					
N4A 1"	Spec.-Grd.	SA-106-B		SA-105N		A		V	
	Thk./Rating	XXH		CL 150		P		P	
	Heat# or ID	571893		310A1					
N4B 1"	Spec.-Grd.	SA-106-B		SA-105N		A		E	
	Thk./Rating	XXH		CL 150		P		P	
	Heat# or ID	57189		310A1					
N5A 1"	Spec.-Grd.	SA-106-B		SA-105N		A		V	
	Thk./Rating	XXH		CL 150		P		P	
	Heat# or ID	57189		310A1					

ATTACHMENT AND / OR NOZZLE MATERIAL THICKNESS VERIFICATION AND IDENTIFICATION						WELDER SYMBOLS / FIT-UP			
Mark	Mat. I.D.	Neck	Fitting	Flange	Repad or Attachment	Cat. B	Cat. C	Cat. D	Pad OD
N5B 1"	Spec.-Grd.	SA-106-B		SA-105N		E		E	
	Thk./Rating	XXH		CL 150					
	Heat# or ID	571893		310A1					
N5C 1"	Spec.-Grd.	SA-106-B		SA-105N		A		V	
	Thk./Rating	XXH		CL 150					
	Heat# or ID	571893		310A1					
N5D 1"	Spec.-Grd.	SA-106-B		SA-105N		A		V	
	Thk./Rating	XXH		CL 150					
	Heat# or ID	571893		310A1					
N6A 1"	Spec.-Grd.	SA-106-B		SA-105N		E		T	
	Thk./Rating	XXH		CL 150					
	Heat# or ID	571893		310A1					
N6B 1"	Spec.-Grd.	SA-106-B		SA-105N		A		T	
	Thk./Rating	XXH		CL 150					
	Heat# or ID	571893		310A1					
N6C 1"	Spec.-Grd.	SA-106-B		SA-105N		E		T	
	Thk./Rating	XXH		CL 150					
	Heat# or ID	571893		310A1					
N6D 1"	Spec.-Grd.	SA-106-B		SA-105N		E		T	
	Thk./Rating	XXH		CL 150					
	Heat# or ID	571893		310A1					
N6E 1"	Spec.-Grd.	SA-106-B		SA-105N		A		T	
	Thk./Rating	XXH		CL 150					
	Heat# or ID	571893		310A1					
N6F 1"	Spec.-Grd.	SA-106-B		SA-105N		A		T	
	Thk./Rating	XXH		CL 150					
	Heat# or ID	571893		310A1					
N7 4"	Spec.-Grd.	SA-106-B		SA-105N		E		U	
	Thk./Rating	XXH		CL 150					
	Heat# or ID	105742		121406					
N8 4"	Spec.-Grd.	SA-106-B		SA-105N		E		T	
	Thk./Rating	XXH		CL 150					
	Heat# or ID	105742		121406					
N9 3"	Spec.-Grd.	SA-106-B	SA-234-WPB	SA-105N		E	E	U	
	Thk./Rating	XXH	XXH	CL 150					
	Heat# or ID	12-102849	1X058	121341					
N10 3"	Spec.-Grd.	SA-106-B		SA-105N		E		T	
	Thk./Rating	XXH		CL 150					
	Heat# or ID	12-102893		121341					
N11 3"	Spec.-Grd.	SA-106-B		SA-105N		E		T	
	Thk./Rating	XXH		CL 150					
	Heat# or ID	12-102893		121341					
N12 3"	Spec.-Grd.	SA-106-B		SA-105N		E		T	
	Thk./Rating	XXH		CL 150					
	Heat# or ID	12-102893		121341					

ATTACHMENT AND / OR NOZZLE MATERIAL THICKNESS VERIFICATION AND IDENTIFICATION						WELDER SYMBOLS / FIT-UP			
Mark	Mat. I.D.	Neck	Fitting	Flange	Repad or Attachment	Cat. B	Cat. C	Cat. D	Pad OD
N13A 2"	Spec.-Grd.	SA-106-B		SA-105N		E		T	
	Thk./Rating	XXH		CL 150					
	Heat# or ID	JOKC132		0683					
N13B 2"	Spec.-Grd.	SA-106-B		SA-105N		Z		T	
	Thk./Rating	XXH		CL 150					
	Heat# or ID	JOKC132		0683					
N13C 2"	Spec.-Grd.	SA-106-B		SA-105N		Z		T	
	Thk./Rating	XXH		CL 150					
	Heat# or ID	1026532		0683					
N14A 2"	Spec.-Grd.	SA-106-B		SA-105N		Z		V	
	Thk./Rating	XXH		CL 150					
	Heat# or ID	JOKC132		0683					
N14B 2"	Spec.-Grd.	SA-106-B		SA-105N		E		V	
	Thk./Rating	XXH		CL 150					
	Heat# or ID	JOKC132		0683					
N14C 2"	Spec.-Grd.	SA-106-B		SA-105N		E		V	
	Thk./Rating	XXH		CL 150					
	Heat# or ID	JOKC132		0683					
M1 20"	Spec.-Grd.	SA-106-B		SA-105N	SA-516-70N	U		T	T
	Thk./Rating	STD		CL 150	0.5"				
	Heat# or ID	629474		7855	G0640-670100212				
M2 20"	Spec.-Grd.	SA-106-B		SA-105N	SA-516-70N	U		U	U
	Thk./Rating	STD		CL 150	0.5"				
	Heat# or ID	629474		7855	G0640-670100212				
	Spec.-Grd.								
	Thk./Rating								
	Heat# or ID								
	Spec.-Grd.								
	Thk./Rating								
	Heat# or ID								
	Spec.-Grd.								
	Thk./Rating								
	Heat# or ID								
	Spec.-Grd.								
	Thk./Rating								
	Heat# or ID								
	Spec.-Grd.								
	Thk./Rating								
	Heat# or ID								
	Spec.-Grd.								
	Thk./Rating								
	Heat# or ID								

October 22, 2012

Riley Johnson
CORAL OILFIELD SERVICES INC
BOX 21160
GRANDE PRAIRIE, AB

Dear Riley Johnson,

The design submission, tracking number 2012-07082, originally received on October 15, 2012 was surveyed and accepted for registration as follows:

CRN : V9366.2

Accepted on: October 22, 2012

Reg Type : Revision To Acc. Design

Drawing No. : 3968 SHTS 1, 2 Rev 3 As Noted

Design registered in the name of : CORAL OILFIELD SERVICES INC

Description	MAWP	Design Temperature	MDMT
Internal Pressure	862 kPa	149°C	-46°C
COIL MAWP	1034 kPa	177°C	-46°C
COIL EXTERNAL PRESS.	862 kPa	177°C	-46°C

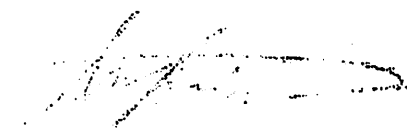
The registration is conditional on your compliance with the following notes:

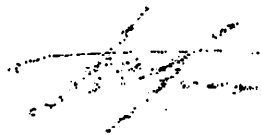
WPS # to be indicated on the construction drawing for each applicable weld detail prior to start fabrication.

An invoice covering survey and registration fees will be forwarded from our Revenue Accounts.

Enclosed are stamped prints for your reference.

Sincerely,


FERNANDO
Design Surveyor


Riley Johnson



505 - 6th Street, Suite 200
New Westminster, BC V3L 0E1

Toll Free: 1-866-566-SAFE
Fax: (778) 396 - 2064
www.safetyauthority.ca

CORAL OILFIELD SERVICES INC.
BOX 21160
GRAND PRAIRIE AB T8V 6W7

Date: November 21, 2012
Account #: 52081
Journal #: 55964
Our File #: 5298193

Attn: RILEY JOHNSON

Re: Application for Design Registration

The design, as detailed in your, Ref: 4014, for a Pressure Vessel is accepted for registration as follows:

Registered To: CORAL OILFIELD SERVICES INC. **CRN:** V9366.21

MDMT: -50 deg F

MAWT: 300 deg F

MAWP: 125 psig

Drawing #: 3968 Shts 1, 2

Drawing Revision: 3

Conditions Of Registration:

1- Coil design condition: 150 psig (internal) & 125 psig (external) @ -50/+350 deg F.

	<u>Amount</u>	<u>HST</u>	<u>Total</u>
Fee for reviewing your design:	\$222.00	\$26.64	\$248.64
Total:	\$222.00	\$26.64	\$248.64
Less amount received with submission:			\$0.00
			\$248.64

An invoice for \$248.64 will follow.

Contact me if you have any questions.

ALIREZA BONAKDAR
(778) 396-2032
Alireza.Bonakdar@safetyauthority.ca
Design Engineer

cc:

HT
W
RT 1

CERTIFIED BY
CORAL
OILFIELD SERVICES

(780)-402-9800
www.coraloilfield.com

MAWP 125 PSI AT 300 °F

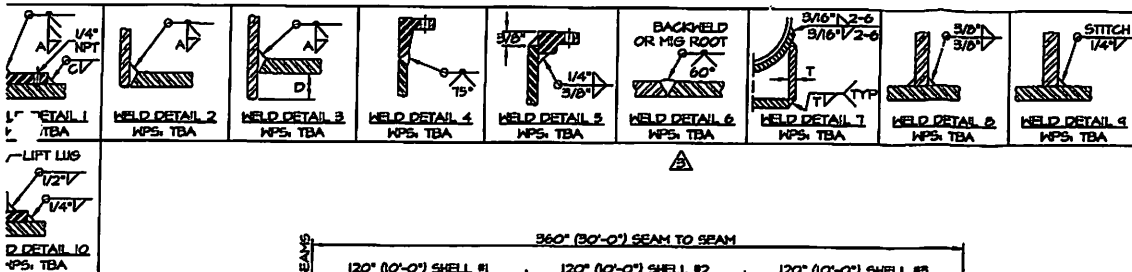
MAEWP — PSI AT — °F

MDMT 50 °F AT 125 PSI

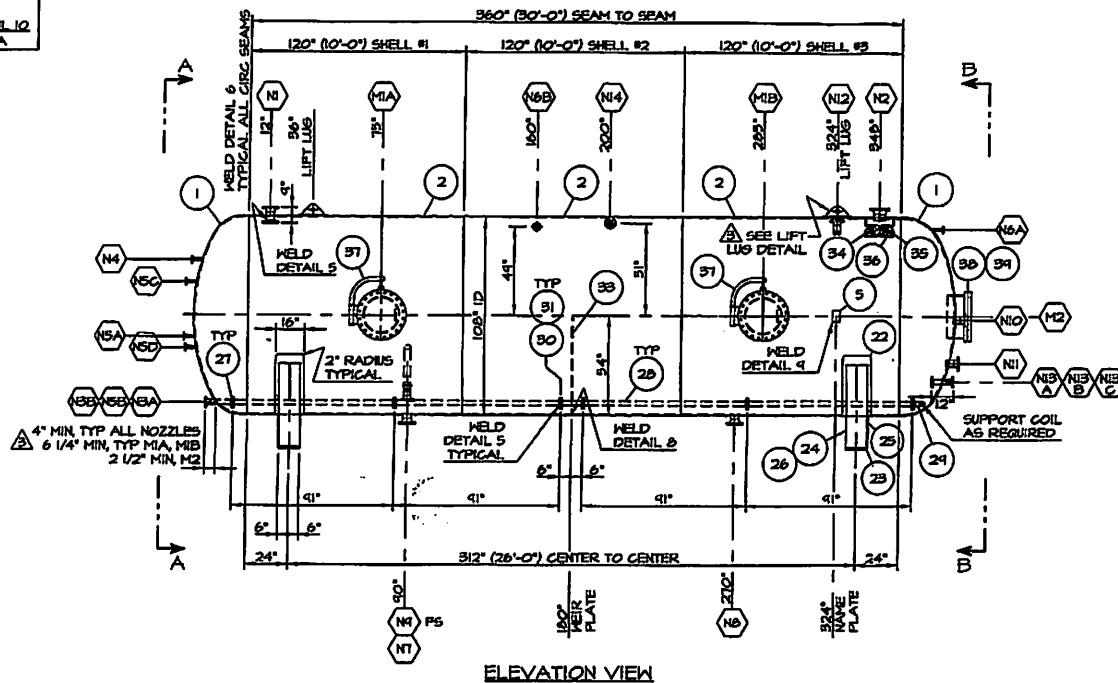
SERIAL NO. 4044-01 YEAR BUILT 2013

CRN V9366.21

619594



CONNECTION SCHEDULE										
MARK	SIZE	SCH	CLASS	TYPE	SERVICE	WELD	A	B	C	D ITEM NOS
N1	4"	X0H	150	RFWN	INLET	3,4	3/8"	-	-	3/8" 9, 14, 10
N2	6"	160	150	RFWN	GAS OUTLET	3,4	3/8"	-	-	1" 15, 14
N3AB	2"	X0H	150	RFWN	COIL	3,4	1/2"	-	-	1/2" 7, 17
N4	1"	X0H	150	RFWN	PI	2,4	3/8"	-	-	6, 16
N5AD	1"	X0H	150	RFWN	SOLIDS LG	2,4	3/8"	-	-	6, 16
N6AB	1"	X0H	150	RFWN	LG / SPARE	2,4	3/8"	-	-	6, 16
N7	4"	X0H	150	RFWN	SOLIDS DRAIN	2,4	3/8"	-	-	9, 14
N8	4"	X0H	150	RFWN	LIQUIDS DRAIN	2,4	3/8"	-	-	9, 14
N9	3"	X0H	150	RFWN	LIQUID OUTLET	2,4	3/8"	-	-	8, 18, 21
N10	3"	X0H	150	RFWN	HC LG	2,4	3/8"	-	-	8, 18
N11	3"	X0H	150	RFWN	WATER LG	2,4	3/8"	-	-	8, 18
N12	3"	X0H	150	RFWN	PSV	2,4	3/8"	-	-	8, 18
N13A-C	2"	X0H	150	RFWN	SPARSE	3,4	1/2"	-	-	1/2" 7, 17
N14	2"	X0H	150	RFWN	SPARE	2,4	1/2"	-	-	7, 17
M1AB	20"	STD	150	RFWN	MANWAY	1,4	3/8"	-	3/8"	8, 11, 12, 20
M2	20"	160"	150	RF HB	MANWAY	3	3/8"	-	1 1/8"	12, 15



GENERAL NOTES

1. QUALITY CONTROL PROGRAM NUMBER: AGP-1522
2. WELDING PROCEDURE REGISTRATION NUMBER: WP-3150-2
3. CAPACITY: 2122 FT³
4. SERVICES: HYDROCARBONS
5. EXPOSED INSIDE OR OUTSIDE EDGES OF NOZZLES OR OPENINGS SHALL HAVE AN 1/8\"/>

DESIGN NOTES

- DESIGN & FABRICATE TO: ASME SECTION VIII, DIVISION I, 2010 EDITION, 2011 ADDENDA
- MAXIMUM ALLOWABLE WORKING PRESSURE (MAWP): 125 PSIG
- DESIGN TEMPERATURE: 300° F
- MINIMUM DESIGN METAL TEMPERATURE (MDMT): -50° F AT 125 PSIG
- IMPACT TESTS: EXEMPT PER UCS-66a, UCS-66b
- RADIOGRAPHY - LONG SEAMS: FULL PER UH-11a
- SPOT PER UH-11a(b) (RT-2) (NOTE E)
- PAINT PER UCS-56: NOT REQUIRED (NOTE F)
- HYDROSTATIC TEST PRESSURE: 185 PSIG
- CORROSION ALLOWANCE: 1/8"
- HEIGHT EMPTY: 21,000 LBS
- HEIGHT FULL OF WATER: 160,000 LBS

OIL DESIGN NOTES

- DESIGN & FABRICATE TO: ASME SECTION VIII, DIVISION I, 2010 EDITION, 2011 ADDENDA
- MAXIMUM ALLOWABLE WORKING PRESSURE
- INTERNAL MAWP: 150 PSIG
- EXTERNAL MAWP: 125 PSIG
- MINIMUM DESIGN METAL TEMPERATURE (MDMT): -50° F AT 150 PSIG
- IMPACT TESTS: EXEMPT PER UCS-66a, UCS-66b
- RADIOGRAPHY: NONE PER UH-11c
- PAINT PER UCS-56: NOT REQUIRED
- HYDROSTATIC TEST PRESSURE: 185 PSIG MINIMUM
- CORROSION ALLOWANCE (INTERNAL): 0"
- CORROSION ALLOWANCE (EXTERNAL): 1/16"
- SERVICE: EXPANSIBLE FLUID

CRN: V9366.2

ALBERTA BOILERS SAFETY ASSOCIATION PROVINCE OF ALBERTA SAFETY CODES ACT			
REQ. No. V 9366.2			
DWG. No. 3968 SHTS 1,2 REV 3 AS NOTED.			
VESSEL INT. 862		Design Temp. °C 149.7	
COIL INT/EXT. 103/862		177.7°C	
ACCEPTED			
OCT 22 2012		Signed <i>[Signature]</i>	
Date		F. SCHERPENISSE	

CANADIAN REGISTRATION NUMBER

NO.	DATE	REVISION	BY	APP
3	12-10-10	WD-6, NOTES, OUTSIDE PROJECTION	P.J.D.	R.J.
2	12-04-21	REVISE NOTE 12, COIL IMPACT TESTS	P.J.D.	R.J.
1	12-08-21	REVISED, ISSUED FOR REGISTRATION	P.J.D.	R.J.
0	12-08-21	ISSUED FOR APPROVAL	P.J.D.	R.J.

CORAL OILFIELD SERVICES INC.

Box 2160, 5303 - 94 STREET
GRANDE PRAIRIE, AB T8X 0L2
TELEPHONE: (780) 882-4800 FAX: (780) 882-6868

CLIENT:		DATE: 12-08-15	
BDD NO.: 3968		JOB NO.:	
SCALE: NTS		108" ID x 30'-0" S/S	
DRAWN BY: P.J.D.		125 PSIG AT -50° / 300° F	
CHECKED BY: R.J.		DWG NO.: SHEET 1 OF 2	
APP BY: P.J.D.		3968	
		REV. 3	



V 9 3 6 6 . 2

FABRICATION NOTES

- A. THE SHELL LENGTH MAY BE LESS THAN 30'-0". PROVIDED THE SPACINGS OF NOZZLES MEET CODE.
- B. MATERIAL SPECIFICATIONS MAY BE UPGRADED AS FOLLOWS:
PLATE SA-36 TO 64021-44N TO SA-516-TO TO SA-516-TON
WELD FITTING (B16.9), SA-234-1NPS TO SA-420-WPL6
PIPE (B36.10), SA-53-B, ERN TO SA-106-B TO SA-333-6R 6
FORINGS (B36.15/B16.1), SA-109 TO SA-105N TO SA-350-LP2 CLASS 1
- C. ANY CONNECTION MAY BE DELETED EXCEPT A DRAIN (1" NPS MIN), LOCATED AT THE LOWEST POINT PRACTICABLE IN THE VESSEL PER UG-25F AND ONE INSPECTION MANNWAY.
- D. MANNWAYS M1A & M1B MAY ONLY BE LOCATED RADIALLY ON THE SHD AND M2 MAY ONLY BE LOCATED ON THE CENTERLINE OF THE HEADS
- E. RADIOGRAPHY ON THE CIRCUMFERENTIAL SEAMS MAY BE INCREASED TO FULL PER UH-11g.
- F. POST WELD HEAT TREATMENT MAY BE ADDED PROVIDED A PINT WELDING PROCEDURE IS USED (TBA), TEMPERATURE AND TIME (125° F 125° F FOR 44 MINUTES (MINIMUM)).

BILL OF MATERIALS			
ITEM	QTY	DESCRIPTION	MATERIAL
1	2	HEADS - 108" ID x 5/8" THK (500" MIN) 2:1 SE, 2" SF	SA-516-TON
2	3	PLATE - 108" ID x 1/2" THK x 10'-0" L6	SHELL #1, #2, #3 SA-516-TON
3	2	PLATE - 1/2" THK x 52" OD x 20 1/8" ID	MIA, MIB REPAD, NOTE 9 SA-516-TON
4	2	PLATE - 1/2" THK x 10" x 16" L6	LIFT LUG PAD, NOTE 9 SA-516-TON
5	1	STANDARD NAME PLATE AND BRACKET	304 SS/SA-36
6	6	FLANGE - 1" CLASS 150 RFWN c/w SCH XXH BORE	N4, N5AD, N5AB SA-105N
7	6	FLANGE - 2" CLASS 150 RFWN c/w SCH XXH BORE	N5AB, ISAB3, 14 SA-105N
8	4	FLANGE - 3" CLASS 150 RFWN c/w SCH XXH BORE	N4, N10, N1, N12 SA-105N
9	3	FLANGE - 4" CLASS 150 RFWN c/w SCH XXH BORE	N2, N7, N3 SA-105N
10	1	FLANGE - 4" CLASS 150 RPSO	N1 INTERNAL SA-105N
11	2	FLANGE - 20" CLASS 150 RFWN c/w SCH STD BORE	MIA, MIB SA-105N
12	3	FLANGE - 20" CLASS 150 RF BLIND	MIA, MIB, M2 SA-105N
13	1	FLANGE - 6" CLASS 150 RFWN c/w SCH 160 BORE	N2 SA-105N
14	1	PIPE - 6" SCH 160 (718") x CUT TO SUIT	M2 SA-106-B
15	1	FLANGE - 20" CLASS 150 RF HB x 12" L6	M2 SA-105N
16	6	PIPE - 1" SCH XXH (358") x CUT TO SUIT	N4, N5AD, N5AB SA-106-B
17	6	PIPE - 2" SCH XXH (436") x CUT TO SUIT	N5AB, N5AB3C, N4 SA-106-B
18	4	PIPE - 3" SCH XXH (600") x CUT TO SUIT	N4, N10, N1, N12 SA-106-B
19	3	PIPE - 4" SCH XXH (674") x CUT TO SUIT	N1, N7, N3 SA-106-B
20	2	PIPE - 20" SCH STD (375") x CUT TO SUIT	MIA, MIB SA-106-B
21	1	ELBOW - 3" SCH XXH (600") LR 45° WELD	N4 SA-254-WPB
22	2	PLATE - 3/8" THK x 16" x 128" L6	WEAR PL, ROLL-109" ID, NOTE 9 SA-516-TON
23	2	PLATE - 1" THK x 12" x 96" L6	BASE PLATE SA-36
24	4	PLATE - 3/8" THK x 12" x 45 3/8" L6	SIDE PLATE SA-36
25	2	PLATE - 3/8" THK x 45 3/8" x 96" L6	FACE PLATE, TRIM TO FIT SA-36
26	4	PLATE - 3/8" THK x 12" x 14 1/2" L6	RIB PLATE SA-36
27	21	FLANGE - 2" CLASS 150 RPSO	COIL, N3AB3C SA-105N
28	1	PIPE - 2" SCH XXH (218") x CUT TO SUIT	COIL SA-53-B, BR
29	2	ELBOW - 2" SCH XXH (218") LR 90° WELD	COIL SA-254-WPB
30	12	GASKET - 2" CLASS 150 SPIRAL WOUND x 1/8" THK	COIL 304 SS
31	40	STUDS - 5/8" DIA x 5 1/4" L6 c/w 2 NUTS EACH (SA-194-2H)	COIL SA-193-B7
32	2	PLATE - 1" THK x 6" x 12" L6	SEE LIFT LUG DETAIL SA-36
33	1	PLATE - 3/8" THK x 107 7/8" OD x 54" HIGH	WIER PLATE SA-36
34	1	PIPE - 16" SCH STD (375") x 10" L6	MIST PAD HOUSING SA-106-B
35	1	MIST PAD - 15 1/4" OD x 6" THK x 94" FT3	MIST PAD 316 SS
36	2	FLAT BAR - 1/2" SQUARE x 46 1/4" L6	MIST PAD, ROLL-15 1/8" OD SA-36
37	3	STANDARD 20" CLASS 150 MANWAY DAVIT	MIA, MIB, M2 SA-36
38	3	GASKET - 20" CLASS 150 SPIRAL WOUND x 1/8" THK	MIA, MIB, M2 304 SS
39	60	STUDS- 1/8" DIA x 6 1/4" L6 c/w 2 NUTS EACH (SA-194-2H)	MAB, M2 SA-193-B7

3	12-10-10	ADD NOTES E, F	PJD...	RJ...
2	12-09-21	ADD N1, N2 SHELL OFFSET DISTANCE	PJD...	RJ...
1	12-08-31	REVISED, ISSUED FOR REGISTRATION	PJD...	RJ...
0	12-08-27	ISSUED FOR APPROVAL	PJD...	RJ...
NO.	DATE	REVISION	BY	APP

CORAL OILFIELD SERVICES INC.

BOX 21160, 15905 - 94 STREET
GRANDE POINTE, AB. T4X 1L2

TELEPHONE: (780) 882-4800 FAX: (780) 882-6868

REF DWG.

DATE: 12-08-15

BDD NO. 3468

JOB NO.:

SCALE:	NTS
--------	-----

DRAWN BY: PJD...

CHECKED BY: RJ

APP BY: PJD..

SEPARATOR

108" ID x 30'-0" 5/5
BOM, END VIEWS, DETAIL

CHECKED BY: RJ	DWG NO.: SHEET 2 OF 2
----------------	-----------------------

APP BY: PJD... 3968

WELDING PROCEDURE SPECIFICATION NO.: _____ COS-2 (Rev. 1)

WELDING PROCEDURE QUALIFICATION RECORD NO.(S): COS-2-1, COS-2-2,
COS-7-2

QUALIFIED FOR

Base Metal (Typical): Std. Appl.: P1 to P1
Notch Appl.: P1 Groups 1 & 2 to P1 Groups 1 & 2
(SA 333 Gr. 6, SA 350 Gr. LF2, SA 420 WPL6, SA 516 Gr. 70, etc.)
Process(es): SMAW Weld Types: GROOVE & FILLET
Position: ALL POSITIONS Diameter: ALL DIAMETERS
Filler Metal: Std. Appl.: E6010, E7018, E7018-1
Notch Appl.: E6010, E7018-1

BASE METAL CONDITIONS & GROOVE THICKNESS RANGE QUALIFIED:

BASE METAL THICKNESS RANGE - ASME SECTION IX

STANDARD APPLICATIONS WITH P.W.H.T. 1.6 to 203 mm (0.062 to 8.00 in.) inclusive

NOTCH TOUGHNESS APPLICATIONS TO -46°C (-50°F) WITH P.W.H.T.

3.2 to 203 mm (0.125 to 8.00 in.) inclusive

COMBINED DEPOSITED WELD METAL THICKNESS

ASME B31.1 & B31.3 203 mm (8.00 in.) maximum
ASME SECT. VIII, DIV.1 203 mm (8.00 in.) maximum
CSA Z662 FABRICATION 203 mm (8.00 in.) maximum

ABXA	
SAFETY CODES ACT - PROVINCE OF ALBERTA	
WELDING PROCEDURE	
Reg. No. WP	<u>3150.2</u>
Spec. No.	<u>COS-2 (REV1)</u>
Weld Process	<u>SMAW</u>
Mater. Gr. P No.	<u>Gr 1+2 to P No. 1 Gr 1+2</u>
Elec. Gr. F No.	<u>3+4</u> A No. <u>1</u>
Th. Qual. For	<u>203 mm P.W.H.T.</u> <u>YES</u>
<u>MIN Th. Qual 3.2 mm, CVN -46°C</u>	
Yr. 12 No. <u>8</u> Day <u>1</u> Signed <u>[Signature]</u>	
H. ROSEBERG, P.ENG. WELDING SPECIALIST	

PROVINCIAL REGISTRATION

--

WELDING PROCEDURE SPECIFICATION NO.: COS-9

WELDING PROCEDURE QUALIFICATION RECORD NO.(S): COS-7-1, COS-7-2

QUALIFIED FOR

Base Metal (Typical): Std. Appl.: P1 to P1
Notch Appl.: P1 Groups 1 & 2 to P1 Groups 1 & 2
(SA 333 Gr. 6, SA 350 Gr. LF2, SA 516 Gr. 70, etc.)
Process(es): GMAW / FCAW Weld Types: GROOVE & FILLET
Position: ALL POSITIONS Diameter: ALL DIAMETERS
Filler Metal: GMAW: ER70S-6 FCAW: E71T-12MJ

BASE METAL CONDITIONS & GROOVE THICKNESS RANGE QUALIFIED:

STANDARD APPLICATIONS WITH P.W.H.T.

NOTCH TOUGHNESS APPLICATIONS TO -46°C (-50°F) WITH P.W.H.T.

BASE METAL THICKNESS RANGE

ASME SECTION IX

4.8 to 203 mm (0.188 to 8.00 in.) inclusive

COMBINED DEPOSITED WELD METAL THICKNESS

ASME B31.1 & B31.3

203 mm (8.00 in.) maximum

ASME SECT. VIII, DIV.1

203 mm (8.00 in.) maximum

CSA Z662 FABRICATION

203 mm (8.00 in.) maximum

ADAA	
SAFETY CODES ACT - PROVINCE OF ALBERTA	
WELDING PROCEDURE	
Reg. No. WP	<u>3150.2</u>
Spec. No.	<u>COS-9</u>
Weld Process	<u>GMAW / FCAW</u>
Matl. Gr. P No.	<u>1 Gr. 1+2</u> to P No. <u>1 Gr. 1+2</u>
Elec. Gr. F No.	<u>6+6</u> A No. <u>1</u>
Th. Qual. For	<u>4.8 to 203 mm P.W.H.T.</u> <u>YES</u>
	<u>CVN - 46°C</u>
Yr. 12 No.	<u>8</u> Day <u>2</u> Signed <u>[Signature]</u>
	R. ROSEBERG, P.ENG. WELDING SPECIALIST

PROVINCIAL REGISTRATION

--

WELDING PROCEDURE SPECIFICATION NO.: COS-11

WELDING PROCEDURE QUALIFICATION RECORD NO.(S): COS-11-1, COS-7-2

QUALIFIED FOR

Base Metal (Typical): Std. Appl.: P1 to P1
Notch Appl.: P1 Groups 1 & 2 to P1 Groups 1 & 2
(SA 333 Gr. 6, SA 350 Gr. LF2, SA 420 WPL6, SA 516 Gr. 70, etc.)
Process(es): GMAW / SMAW / SAW Weld Types: GROOVE & FILLET
Position: GMAW & SMAW: ALL POSITIONS SAW: FLAT & HORIZONTAL
Diameter: ALL DIAMETERS
Filler Metal: Std. Appl.: GMAW: ER70S-6 SMAW: E7018, E7018-1 SAW: F7PX-EM14K
Notch Appl.: GMAW: ER70S-6 SMAW: E7018-1 SAW: F7P6/8-EM14K

BASE METAL CONDITIONS & GROOVE THICKNESS RANGE QUALIFIED:

BASE METAL THICKNESS RANGE - ASME Section IX

STANDARD APPLICATIONS WITH P.W.H.T. 4.8 to 203 mm (0.188 to 8.00 in.) inclusive

NOTCH TOUGHNESS APPLICATIONS TO -46°C (-50°F) WITH P.W.H.T.
15.9 to 203 mm (0.625 to 8.00 in.) inclusive

COMBINED DEPOSITED WELD METAL THICKNESS

ASME B31.1 & B31.3	<u>203 mm (8.00 in.) maximum</u>
ASME SECT. VIII, DIV.1	<u>203 mm (8.00 in.) maximum</u>
CSA Z662 FABRICATION	<u>203 mm (8.00 in.) maximum</u>

WMA	
SAFETY CODES ACT - PROVINCE OF ALBERTA	
WELDING PROCEDURE	
Reg. No. WP	<u>3150.2</u>
Spec. No.	<u>COS-11</u>
Weld Process	<u>GMAW / SMAW / SAW</u>
Met. Gr. P No.	<u>1 Gr 1+2</u>
Met. Gr. F No.	<u>6+4+6</u>
Th. Qual Per	<u>203mm PWMT. YES</u>
MIN Th. Qual	<u>15.9mm, CVL - 46°C</u>
Yr. <u>12</u> Mo. <u>8</u> Day <u>1</u>	Signed <u>R. ROSEBERG, P.E.N.G.</u>
	WELDING SPECIALIST

PROVINCIAL REGISTRATION

--



PRESSURE PIPING CONSTRUCTION AND TEST DATA REPORT

In accordance with the provisions of the PESR Section 31(1)

Shop Construction ☒;Field Construction ☒;Final Data Report ☐;Partial Data Report ☐ (from one ABSA- authorized Contractor to another ABSA- authorized Contractor).

Complete both sides of this Form

1. Constructed By: Coral Oilfield Services Inc. Owner's Job No: 4044
 (Name of ABSA authorized primary contractor or subcontractor)
15303 94 St. Grande Prairie AB

(Address)

Certificate of Authorization Permit No. AQP-1522 Expiry Date: July 18, 2015

2. Constructed For: _____
 (Name of primary contractor if different from above)

(Address)

Certificate of Authorization Permit No. AQP- Expiry Date: _____

(Required when the primary contractor undertakes some/all of the quality functions, e.g., NDE, PWHT, Tie-in, fabrication, hydro test, final assembly etc.)

3. Owner: Haltech Testing Box 92 Baytree AB, TOH 0A0
 (Name and address)

Not Known

(Location of installation)

Certificate of Authorization Permit No. AQP- Expiry Date: _____

(Required when the owner undertakes some/all of the quality functions, e.g., NDE, PWHT, Tie-in, fabrication, hydro test, final assembly etc.)

4. Piping Design Alberta Registration No.: PP-
 (Required if aggregate piping volume is over 0.5m³)

5. Design Responsibility: Owner ☐; Contractor ☐

6. WP No.: WP-3150.2; Company: Coral Oilfield Services Inc. Owner's WP No. (If used): WP-
 (Alberta Registration No.) (Alberta Registration No.)
 WPS No(s). used: _____; Owner's WPS No(s). (If used): _____

7. Code: ASME B31.1 Non Boiler External Piping ☐; ASME B31.1 Boiler External Piping ☐;
 B31.5 ☐; B31.9 ☐; CSA Z662 Steam Pipelines ☐;
 ASME B31.3 ☒ - Service Category: Normal ☐, D ☐, M ☐, High Pressure ☐; Severe Cyclic Condition ☒
 High Purity ☐

Drawing No. Rev. No. Line No.	Fluid (Air/Stm. Etc.)	Des. Press. kPa	Des. Temp. °C (Max. & Min.)	Pressure Test kPa	Test Medium	Pipe Mat'l Spec. & Grade	C.A. mm	Pipe NPS & Schedule	Flange Material & Rating	PWHT/ Preheat Temp. °C	NDE
Control #1	W.O.G.	862 KPA	-46C	1293 KPA	H2O	SA333-6	N/A	4" Sch80	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #2	W.O.G.	862 KPA	-46C	1293 KPA	H2O	SA333-6	N/A	4",3" Sch80	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #3	W.O.G.	862 KPA	-46C	1293 KPA	H2O	SA333-6	N/A	4",3" Sch80	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #5	W.O.G.	862 KPA	-46C	1293 KPA	H2O	SA333-6	N/A	3" Sch40	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #6	W.O.G.	862 KPA	-46C	1293 KPA	H2O	SA333-6	N/A	4" Sch160	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #7	W.O.G.	862 KPA	-46C	1293 KPA	H2O	SA333-6	N/A	4" Sch160	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT

Control #8	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	4" Sch160	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #9	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	4",3" Sch80	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #10	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	4" Sch80	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #11	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	3" Sch80	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #12	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	4" Sch80	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #13	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	3" Sch80	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #14	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	3" Sch80	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #15	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	4" Sch160	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #16	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	4",3" Sch80	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #17	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	4",3" Sch80	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #18	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	4",3" Sch80	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #19	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	3" XH	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #20	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	3" STD	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #21	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	4" Sch80	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #22	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	3" STD	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #24	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	3" STD	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #25	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	3" STD	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #26	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	3" STD	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #27	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	3" STD	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #28	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	4" Sch160	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #29	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	3" STD	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #30	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	3" STD	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #31	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	3" STD	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #32	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	3" STD	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT

Control #33	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	3" STD	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #34	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	3" STD	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #35	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	3" STD	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #36	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	3" STD	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #37	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	3" STD	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #38	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	3" STD	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #39	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	3" STD	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #40	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	3" STD	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #41	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	3" STD	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #42	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	3" STD	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #43	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	3" STD	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #44	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	3" STD	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #45	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	3" STD	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #46	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	3" STD	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #47	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	3" STD	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #48	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	3" STD	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #49	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	3" STD	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #50	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	3" STD	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #51	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	2" Sch80	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #52	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	2" Sch80	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #53	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	2" Sch80	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #54	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	2" Sch80	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #55	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	2" Sch80	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #56	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	2" Sch80	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT

Control #57	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	2" Sch80	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #64	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	2" Sch80	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #65	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	2" Sch80	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #66	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	2" Sch80	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #67	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	4",3" Sch80	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #68	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	4" Sch80	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #69	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	4" Sch160	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #70	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	4" Sch160	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #71	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	4" Sch160	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #72	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	4" Sch160	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #73	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	4" Sch160	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT
Control #74	W.O.G.	862 KPA	-46C	1293 KPA	H20	SA333-6	N/A	4" Sch160	SA-350-LF2 CL 150	N/A	100% VT 100% MT 100% RT

Partial Data Reports certified by sub-contractors are listed below and attached to this Data Report ☐

No.	Line No.	Spool No.	Dwg. No. (With Rev. No.)	Sub-contractor (Name)	AQP No. (if from Alberta)	Expiry (if from Alberta)

Remarks: For partial data report provide information about the code work that was not completed by the subcontractor (e.g., hydrostatic test, PWHT etc.). For final data report provide information about the code work that was not completed by subcontractors and subsequently completed by the primary contractor (e.g., hydrostatic test of entire assembly, PWHT etc.)

Endorse certificate 'A' or 'B'

A. CERTIFICATE OF COMPLIANCE

Signed by the subcontractor when supplying this certificate as a
Partial Data Report

We certify that the statements in this Data Report are correct and that materials, construction and workmanship of the piping fabrication conform to the registered quality system and the applicable Piping code(s).

Date: _____
Contractor

Print Authorized Representative's Name Signature

**This certificate is not valid unless it forms part of a
Final Data Report signed by Primary Contractor**

B. CERTIFICATE OF COMPLIANCE

Signed by the primary contractor when supplying this certificate as a
Final Data Report

We certify that the statements in this Data Report are correct and that piping job no. 4044-01 described in this Data Report was constructed in accordance with the Province of Alberta Safety Codes Act and Regulations, and applicable ASME Piping Code(s).

Date: May 31, 2013 Coral Oilfield Services Inc.
Contractor

Ryan O'Toole _____
Print Authorized Representative's Name Signature

CERTIFICATE OF INSPECTION

I, the undersigned, employed by _____ have verified that all required examination and testing has been completed, and inspected the piping described in this construction data report to the extent necessary to be satisfied that it conforms to all applicable examination requirements of the Code and of the engineering design, and state that, to the best of my knowledge and belief, the contractor has constructed this piping in accordance with the Alberta Safety Codes Act and Regulations. By signing this certificate neither the inspector nor his or her employer makes any warranty, expressed or implied, concerning the piping described in this construction 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.

Date: _____ Date: _____

Owner's Inspector Name (please print)

ABSA Safety Codes Officer (please print)
(BOILER EXTERNAL PIPING ONLY)

Owner's Inspector Signature:

ABSA Safety Codes Officer's Signature

PRESSURE PIPING SPECIFICATION SHEET

PRESSURE PIPING SPECIFICATION SHEET

(For Construction/Repair/Alteration of Pressure Piping Systems Less Than or Equal to 500 Litres, Aggregate Internal Volume)

Owner: Haltech Testing Contractor: Coral Oilfield Services Inc. AQP: 1522
 Plant Location: Not Known Job#: 4044

Material List				Piping Sketch (Reference attached drawings if appropriate)				
Item No.	Description	Mat'l Spec. & Grade	Sch./ Rating	(use for recording RT No's. & Welder Symbols)				
				See Attached Drawings				
Line No.	Design Pressure	Design Temp. Min. / Max.	Corr. All.	Code ASME B31.1/B31.3	Service (e.g., Normal, Cat. D, M, K)	Severe Cyclic Yes/No	Test Pressure	Test Medium
1-3	125 PSI	-50F	N/A	B31.3	Cat. M	Yes	188 PSI	H2O
5-22	125 PSI	-50F	N/A	B31.3	Cat. M	Yes	188 PSI	H2O
24-57	125 PSI	-50F	N/A	B31.3	Cat. M	Yes	188 PSI	H2O
64-74	125 PSI	-50F	N/A	B31.3	Cat. M	Yes	188 PSI	H2O

(Note: Pneumatic tests must have prior acceptance from ABSA.)

Welding Procedure Specification No's: COS-1

Line No.	MT / PT Extent %	Radiography Extent %	Hardness Testing	Ultrasonic - Other NDE Description / Extent %	Other Requirements
1-3	100%	100%	N/A	N/A	N/A
5-22	100%	100%	N/A	N/A	N/A
24-57	100%	100%	N/A	N/A	N/A
64-74	100%	100%	N/A	N/A	N/A

Inspectrum Testing

N/A

NDE Contractor: _____ Post Weld Heat Treatment Yes/N.A.: _____

Post Weld Heat Treatment Time/Temp.: N/A PWHT Contractor: N/A

Approved by Owner: _____ Date: _____

Approved by Contractor: _____ Date: _____

Comments: _____

WORK COMPLETED AND ACCEPTED (AB-83 COMPLETED)

Contractor Signature: _____ Date: May 31, 2013