

**FORM U-1A MANUFACTURER'S DATA REPORT FOR PRESSURE VESSELS**  
**(Alternative Form for Single Chamber, Completely Shop or Field Fabricated Vessels Only)**  
**As Required by the Provisions of the ASME Code Rules, Section VIII, Division 1**

1. Manufactured and certified by SMITHCO Engineering, Inc., 6211 S. 39th W. Avenue, Tulsa, Oklahoma 74132  
(Name and address of manufacturer)

2. Manufactured for Frontier Energy Services  
(Name and address of purchaser)

3. Location of installation Onstream Operations Texas Panhandle  
(Name and address)

4. Type Horiz(Non-Cir) 2010B-2541-A ----- 2010B-2541 12160 2010  
(Horiz. or vert. tank) (Mfg's serial No.) (CRN) (Drawing No.) (Nat'l Bd. No.) (Year built)

5. The chemical and physical properties of all parts meet the requirements of material specifications of the ASME BOILER AND PRESSURE VESSEL CODE.  
 The design, construction, and workmanship conform to ASME Rules, Section VIII, Division 1 2007  
Year

to 2009 ADD  
Addenda (Date)

6. Shell: Tube & Plug Sheets: SA-516 GR-70 N Fr 1.000/ Bk 1.000 .0625 Fr 0' 3.7500"/Bk 0' 7.7500" 6' 11.5625"  
Matl. (Spec. No., Grade) (Nom. Thk. (in.) (Corr. Allow. (in.) (Diam. I.D. (ft. & in.) Length (overall) (ft. & in.)

7. Seams: Corner Joint ----- 100 -----  
Long. (Welded, Dbl., Sngl., Lap, Butt) R.T. (Spot or Full) Eff.(%) H.T. Temp. (°F) Time (hr) Girth (Welded, Dbl., Spot., Lap, Butt) R.T. (Spot, Partial or Full) No. of Courses

8. Heads: (a) Matl. (a) Covers: SA-516 GR-70 N (b) Matl. (b) Ends: SA-516 GR-70 N  
(Spec. No., Grade) (Spec. No., Grade)

	Location (Top, Bottom, Ends)	Minimum Thickness	Corrosion Allowance	Crown Radius	Knuckle Radius	Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure (Convex or Concave)
(a)	Fr/Bk	0.875/0.625	0.0625	--	--	--	--	--	5.4375/2.8125 x 83.5625	Flat
(b)	Fr/Bk	0.625/0.500	0.0625	--	--	--	--	--	5.4375/2.8125 x 7.3125/7.3125	Flat

If removable, bolts used (describe other fastenings) N/A  
(Matl., Spec. No., Gr., Size, No.)

9. MAWP 1100 300 psi at max. temp 1100 psi. Hydro., pneu., or comb. test pressure 1430 psi  
(internal) (external) (internal) (external)

Min. design metal temp. 0 °F at 1100 psi.

10. Nozzles, inspection and safety valve openings:

Purpose (Inlet, Outlet, Drain)	No.	Diameter or Size	Type	Material	Nominal Thickness	Reinforcement Material	How Attached	Location
Inlet/Outlet	1/1	6"600/XS	RFWN	SA-105/SA-106B	0.432	Integral	UW-16.1(a)	Front Head
Vent/Drain	2	1.0	6000CPLG	SA-105		Integral	UW-16.1(a)	Back Head
Temp/Press	4	.75/.75	6000CPLG	SA-105		Integral	UW-16.1(a)	Front Head

11. Supports: Skirts No Lugs (No.) Legs 4 Other Attached Welded to covers  
(Yes or No) (No.) (No.) (Describe) (Where and how)

12. Remarks: Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors have been furnished for the following items of the report:

(Name of part, item number, Mfg's name and identifying stamp)

Impact testing exempt per: UG-20(f) Item: AC-1 Service: NATURALGAS CLR-1

Stay Plate: Front(1)SA-516 GR-70 0.3750 x 0.0625 x 82.0000 x 5.4375 Stay Plate: Back(1)SA-516 GR-70 0.5000 x 0.0625 x 82.250 x 2.8125

Tubes: SA-214 WLD- 142 x 1.00" x .060" x 20.0000'-Straight

Front: Constructed in conformance with appendix 28, Back: Constructed per UW13

**CERTIFICATE OF SHOP/FIELD COMPLIANCE**

We certify that the statements made in this report are correct and that all details of design, material, construction, and workmanship of this vessel conform to the ASME

Code for Pressure Vessels, Section VIII, Division 1. "U" Certificate of Authorization No. 4175 expires February 28th, 2012.

Date 06-04-2010 Co. name SMITHCO Engineering, Inc. Signed J. Carter  
(Manufacturer) (Representative)

**CERTIFICATE OF SHOP/FIELD INSPECTION**

Vessel constructed by SMITHCO Engineering, Inc. at Tulsa, Oklahoma

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and/or the State of Province of Oklahoma and employed by Seneca Insurance Company of Texas

have inspected the component described in this Manufacturer's Data Report on 6/3 20 10, and state that, to the best of my knowledge and belief, the Manufacturer has constructed this pressure vessel in accordance with ASME Code, Section VIII, Division 1. By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the pressure vessel described in this Manufacturer's Data Report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or loss of any kind arising from or connected with this inspection.

Date 6/4/10 Signed [Signature] Commissions NB12736 A OK914  
(Authorized Inspector) (Nat'l Board (incl. endorsements), State, Prov. and No.)