Additional Drawing No. 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 Boiler and Pressure Vessel Code Rules, Section VIII, Division 1

1. Manufactured and certified by Air-X-Changers, A Harsco Company, 5215 Arkansas Road, Catoosa, Oklahoma, 74015, USA (Name and address of manufacturer)
2. Manufactured for CHEVRON TEXACO, P.O. BOX 1392, BAKERSFIELD, CA, 93302, USA
2. Manufactured for CHEVRON TEXACO, P.O. BOX 1392, BAKERSFIELD, CA, 93302, USA (Name and address of purchaser) 4. Type Heat Exchanger 031951 N/A HDR-1, REV1 66125 2009 (Potizonita or vertical, tunk) (Manufactured's serial number) (CRN) (CRN) (CRN) (Manufactured's serial number) (CRN) (Manufactured's serial number) (CRN) (Manufactured's serial number) (Special serice per UG-120(d)) (Manufactured's serial number) (Special serice per UG-120(d)) (Manufactured's serial number) (Manufactured's serial numbe
3. Location of Installation UNKNOWN (Name and address) 4. Type Heat Exchanger (Hotizorial or verticul, tank) (Manufacturer's serial number) (CNN) (Deawing No) (Realona Board number) (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 to A08 N/A (veer) (Addendis (Date)) 6. Shell: SA516 70 See Remarks (Hotiminal bioinciness) (Cort. allow) (Inner diameter) (Length (overall)) 7. Seams: Corner Joint N/A C=20 1150 °F 0.5 N/A
(Name and address) 4. Type Heat Exchanger 083195.1 N/A HDR-1, REV1 66125 2009 (Hotizontal or vertical, bink) (Manufacturer's serial number) (CRN) (Drawing No.) (National Board number) (Year built) (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 2007 to A08 N/A (year) (Addenda (Date))
1. Type Heat Exchanger 083195.1 N/A HDR-1, REV1 66125 2009
CODE. The design, construction, and workmanship conform to ASME Rules, Section VIII, Division 1 (year) (Addenda (Date))
See Remarks
6. Shell: SA516 70
Material spec. number, grade (Noninal thickness) (Corr. allow.) (Inner diameter) (Langth (overall)) (Langth (overall)) (T. Sepatr File) (Ength (overall)) (Ength (overall) (Ength (overall)) (Ength (overall) (Ength (overall)) (Ength (overall)) (Ength (overall)) (Ength (overall)
End Construction End E
8. Heads: (a) Material SA516 70 (b) Material SA516 70 (coation (Top, Bottom, Minimum Corosion Ends) Finishness Allowance (a) TOP, BTM .5" 0.125 N/A
Coation (Top, Bottom, Minimum Corrosion Ends) Crown Radius Knuckle Radius Conical Ratio Apex Angle Cal Radius Flat Diameter Side to Pressure (Convex or Concave)
Location (Top, Bottom, Ends) Minimum Thickness Corrosion Allowance Crown Radius Knuckle Radius Elliptical Ratio Apex Angle Hemispheri Flat Diameter Side to Pressure (Convex or Concave)
(a) TOP, BTM .5" 0.125 N/A N/A N/A N/A N/A N/A A N/A A N/A A N/A A N/A A N/A N/
ENDS .5" 0.125 N/A N/A N/A N/A N/A N/A N/A See Remarks N/A
f removable, bolts used (describe other fastenings) 9. MAWP 203 psi N/A (External) at max. temp. 390 °F N/A (Internal) (External) Min. design metal temp. 0 °F at 203 psi . Hydro, pneu., or comb. test pressure HYDRO. at 264 psi 0. Nozzles, inspection and safety valve openings: Purpose (Inlet, Outlet, Drain) Number Size Type Material Nominal Thickness Reinforcement Material Attached Location NOUT 2 4" 150# RFWN SA105/SA106 GR.B SCH-160 Weld Welded Header NOUT 2 4" 150# RFWN SA105 SCH-160 Weld Welded Header NOUT 2 4" 150# RFWN SA105 SCH-160 Weld Welded Header NOUT 2 4" 150# RFWN SA105 SCH-160 Weld Welded Header NOUT 2 4" 150# RFWN SA105 SCH-160 Weld Welded Header NOUT 2 4" 150# RFWN SA105 SCH-160 Weld Welded Header NOUT 2 4" 150# RFWN SA105 SCH-160 Weld Welded Header NOUT 2 4" 150# RFWN SA105 SCH-160 Weld Welded Header NOUT 2 4" 150# RFWN SA105 SCH-160 Weld Welded Header NOUT 2 4" 150# RFWN SA105 SCH-160 Weld Welded Header NOUT 2 4" 150# RFWN SA105 SCH-160 Weld Welded Header NOUT 2 4" 150# RFWN SA105 SCH-160 Weld Welded Header NOUT 2 4" 150# RFWN SA105 SCH-160 Weld Welded Header NOUT 2 4" 150# RFWN SA105 SCH-160 Weld Welded Header NOUT 2 4" 150# RFWN SA105 SCH-160 Weld Welded Header NOUT 2 4" 150# RFWN SA105 SCH-160 Weld Welded Header NOUT 2 4" 150# RFWN SA105 SCH-160 Weld Welded Header NOUT 2 4" 150# RFWN SA105 SCH-160 Weld Welded Header NOUT 2 4" 150# RFWN SA105 SCH-160 Weld Welded Header NOUT 2 4" 150# RFWN SA105 SCH-160 Welded Header NOUT 2 4" 150# RFWN SA105 SCH-160 Welded Header NOUT 2 4" 150# RFWN SA105 SCH-160 Welded Header NOUT 2 4" 150# RFWN SA105 SCH-160 Welded Header NOUT 2 4" 150# RFWN SA105 SCH-160 Welded Header NOUT 2 4" 150# RFWN SA105 SCH-160 Welded Header NOUT 2 4" 150# RFWN SA105 SCH-160 Welded Header NOUT 2 4" 150# RFWN SA105 SCH-160 Welded Header NOUT 2 4" 150# RFWN SA105 SCH-160 Welded Header NOUT 2 4" 150# RFWN SA105 SCH-160 Welded Header NOUT 2 4" 150# RFWN SA105 SCH-160 Welded Header NOUT 2 4" 150# RFWN SA105 SCH-160 Welded Header NOUT 2 4" 150# RFWN SA105 SCH-160 Welded Header NOUT 2 4
MAWP 203 psi
Min. design metal temp. 0 °F at 203 psi . Hydro, pneu., or comb. test pressure HYDRO. at 264 psi 0. Nozzles, inspection and safety valve openings: Purpose (Inlet, Outlet, Drain) Diameter or Size Type Material Nominal Thickness Reinforcement Material Attached Location Drain) N/OUT 2 4" 150# RFWN SA105/SA106 GR.B SCH-160 Weld Welded Header DRAIN 2 1" CPLG SA105 6000# Weld Welded Header N/OUT 2 4" 150# RFWN SA105 SCH-160 Weld Welded Header N/OUT 2 4" 150# RFWN SA105 SCH-160 Weld Welded Header N/OUT 2 4" 150# RFWN SA105 SCH-160 Weld Welded Header N/OUT 2 4" 150# RFWN SA105 SCH-160 Weld Welded Header N/OUT 2 4" 150# RFWN SA105 SCH-160 Weld Welded Header N/OUT 2 4" 150# RFWN SA105 SCH-160 Weld Welded Header N/OUT 2 4" 150# RFWN SA105 SCH-160 Weld Welded Header N/OUT 2 4" 150# RFWN SA105 SCH-160 Weld Welded Header N/OUT 2 4" 150# RFWN SA105 SCH-160 Weld Welded Header N/OUT SCH-160 Welded Header N/OUT SCH-160 Welded
Min. design metal temp. 0 °F at 203 psi . Hydro, pneu., or comb. test pressure HYDRO. at 264 psi 0. Nozzles, inspection and safety valve openings: Purpose (Inlet, Outlet, Drain)
D. Nozzles, inspection and safety valve openings: Purpose (Inlet, Outlet, Drain) Number Size Type Material Nominal Thickness Reinforcement Material How Attached Location NOUT 2 4" 150# RFWN SA105/SA106 GR.B SCH-160 Weld Welded Header DRAIN 2 1" CPLG SA105 6000# Weld Welded Header N/OUT 2 4" 150# RFWN SA105 SCH-160 Weld Welded Header N/OUT 2 4" 150# RFWN SA105 SCH-160 Weld Welded Header 1. Supports: Skirt NO Lugs N/A Legs N/A Other Structure Attached Bolted (Yes or no) (Number) (Describe) (Where and how) 2. Remarks: Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors, have been furnished for the following items of the report: 6 Shell Thickness & Diameter: 2 @ 1" X 10.5" / 4 @ 1" X 5.0625"
Purpose (Inlet, Outlet, Drain) Purpose (Inlet, Outlet, Drain)
N/OUT 2 4" 150# RFWN SA105/SA106 GR.B SCH-160 Weld Welded Header
N/OUT 2 4" 150# RFWN SA105/SA106 GR.B SCH-160 Weld Welded Header DRAIN 2 1" CPLG SA105 6000# Weld Welded Header N/OUT 2 4" 150# RFWN SA105 SCH-160 Weld Welded Header 1. Supports: Skirt NO Lugs N/A Legs N/A Other Structure Attached Bolted (Number) (Describe) (Where and how) 2. Remarks: Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors, have been furnished for the following items of the report: 6 Shell Thickness & Diameter: 2 @ 1" X 10.5" / 4 @ 1" X 5.0625"
N/OUT 2 4" 150# RFWN SA105 SCH-160 Weld Welded Header 1. Supports: Skirt NO Lugs N/A Legs N/A Other Structure Attached (Number) (Describe) (Where and how) 2. Remarks: Manufacturer's Partial Data Reports properly identified and signed by Commissioned Inspectors, have been furnished for the following items of the report: 6 Shell Thickness & Diameter: 2 @ 1" X 10.5" / 4 @ 1" X 5.0625"
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6 Shell Thickness & Diameter: 2 @ 1" X 10.5" / 4 @ 1" X 5.0625"
0 Office Trickings & Diameter. 2 @ 1 X 10.0 7 4 @ 1 X 0.0020
8b Ends: 2 @ 4" X 9.5" / 4 @ 4" X 4.0625"
(Name of part, item number, Manufacturer's name and identifying stamp)
Line 6 Tube and Plug Dimensions OR Header Dimensions: 0.0" X 1.0" X 7' 11.5000"
Straight length of tubes, OR, Distance between the headers: 22' 0.0" Additional Remarks - See Attached U-4
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 BOILER
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 BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. "U" Certificate of Authorization No. 4241 expires December 31, 2011
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 BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. "U" Certificate of Authorization No. 4241 expires December 31, 2011 Date 03/23/2009 Co. name Air-X-Changers, A Harsco Company Signed
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 BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. "U" Certificate of Authorization No. 4241 expires December 31, 2011 Date 03/23/2009 Co. name Air-X-Changers, A Harsco Company (Manufacturer)
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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 BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. "U" Certificate of Authorization No. 4241 expires December 31, 2011 Date 03/23/2009 Co. name Air-X-Changers, A Harsco Company (Manufacturer) CERTIFICATE OF SHOP/FIELD INSPECTION Vessel constructed by Air-X-Changers, A Harsco Company at 5215 Arkansas Road, Catoosa, Oklahoma, 74015, USA I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province OK and employed by OneBeacon America Insurance Co., of Lynn, MA have inspected the component described in this Manufacturer's Data Report on have inspected the component described in this Manufacturer's Data Report on have inspected the component described in this Manufacturer's Data Report on
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 BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. "U" Certificate of Authorization No. 4241 expires December 31, 2011 Date 03/23/2009 Co. name Air-X-Changers, A Harsco Company (Manufacturer) CERTIFICATE OF SHOP/FIELD INSPECTION Vessel constructed by Air-X-Changers, A Harsco Company at 5215 Arkansas Road, Catoosa, Oklahoma, 74015, USA I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province OK and employed by OneBeacon America Insurance Co., of Lynn, MA have inspected the component described in this Manufacturer's Data Report on March 23, 2009 and state that, to the best of my knowledge and belief, the Manufacturer has constructed this pressure vessel in accordance with ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. By signing this certificate neither the Inspector nor his/her employer makes any warranty, expressed or implied, concerning
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 BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. "U" Certificate of Authorization No. 4241 expires December 31, 2011 Date 03/23/2009 Co. name Air-X-Changers, A Harsco Company (Manufacturer) CERTIFICATE OF SHOP/FIELD INSPECTION Vessel constructed by Air-X-Changers, A Harsco Company at 5215 Arkansas Road, Catoosa, Oklahoma, 74015, USA I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province OK and employed by OneBeacon America Insurance Co., of Lynn, MA have inspected the component described in this Manufacturer's Data Report on March 23, 2009 and state that, to the best of my knowledge and belief, the Manufacturer has constructed this pressure vessel in accordance with ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. By signing this certificate neither the Inspector nor his/her employer makes any warranty, expressed or implied, concerning the pressure vessel described in this Manufacturer's Data Report. Furthermore, neither the Inspector nor his/her employer shall be liable in any manner for any personal injury or
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 BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. "U" Certificate of Authorization No. 4241 expires December 31, 2011 Date 03/23/2009 Co. name Air-X-Changers, A Harsco Company Signed CERTIFICATE OF SHOP/FIELD INSPECTION Vessel constructed by Air-X-Changers, A Harsco Company at 5215 Arkansas Road, Catoosa, Oklahoma, 74015, USA I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and/or the State or Province OK and employed by OneBeacon America Insurance Co., of Lynn, MA have inspected the component described in this Manufacturer's Data Report on have inspected the component described in this Manufacturer's Data Report on March 23, 2009 and state that, to the best of my knowledge and belief, the Manufacturer has constructed this pressure vessel in accordance with ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1. By signing this certificate neither the Inspector nor his/her employer makes any warranty, expressed or implied, concerning

FORM U-4 MANUFACTURER'S DATA REPORT SUPPLEMENTARY SHEET

As Required by the Provisions of the ASME Boiler and Pressure Vessel Code Rules, Section VIII, Division 1

	(Name and address of (Name and N/A) N/A (Tank, separator, heat exch., etc.) R-1, REV1 (Ving number) erial: SA213 316L Rolled: SA105 (C)IMPACT REQUI	083195.1 (Manufacturer's serial number)	2009 ear built)
Type Heat Exchanger (Horizontal, vertical, or sphere) N/A HDF (CRN) (Dra Data Report Item Number itional Remarks:)TUBES: 166 x 1" OD, Gauge: 14BWG, Material	(Name an N/A (Tank, separator, heat exch., etc.) R-1, REV1 (ring number) erial: SA213 316L Rolled: SA105 (C)IMPACT REQUI	nd address) 083195.1 (Manufacturer's serial number) 66125 (National Board number) Remarks 1 Tube Sheet (B)INSP.OPENINGS:	
Type Heat Exchanger (Horizontal, vertical, or sphere) N/A HDF (CRN) (Dra Data Report Item Number itional Remarks:)TUBES: 166 x 1" OD, Gauge: 14BWG, Material	N/A (Tank, separator, heat exch., etc.) R-1, REV1 (Ving number) erial: SA213 316L Rolled: SA105 (C)IMPACT REQUI	083195.1 (Manufacturer's serial number) 66125 (National Board number) Remarks 1 Tube Sheet (B)INSP.OPENINGS:	
N/A HDF (CRN) (Dra Data Report Item Number itional Remarks:)TUBES: 166 x 1" OD, Gauge: 14BWG, Mat 2, Type: 1-1/8X12UNF-Threaded, Material	N/A (Tank, separator, heat exch., etc.) R-1, REV1 (Ving number) erial: SA213 316L Rolled: SA105 (C)IMPACT REQUI	083195.1 (Manufacturer's serial number) 66125 (National Board number) Remarks 1 Tube Sheet (B)INSP.OPENINGS:	
N/A HDF (CRN) (Dra Data Report Item Number itional Remarks:)TUBES: 166 x 1" OD, Gauge: 14BWG, Material	(Tank, separator, heat exch., etc.) R-1, REV1 Ving number) Perial: SA213 316L Rolled: SA105 (C)IMPACT REQUI	(Manufacturer's serial number) 66125 2 (National Board number) (Yes Remarks 1 Tube Sheet (B)INSP.OPENINGS:	
N/A HDF (CRN) (Dra Data Report Item Number itional Remarks:)TUBES: 166 x 1" OD, Gauge: 14BWG, Mat 2, Type: 1-1/8X12UNF-Threaded, Material	erial: SA213 316L Rolled: SA105 (C)IMPACT REQUI	(National Board number) (Year Remarks 1 Tube Sheet (B)INSP.OPENINGS:	
(CRN) (Dra Data Report Item Number itional Remarks:)TUBES: 166 x 1" OD, Gauge: 14BWG, Mat 2, Type: 1-1/8X12UNF-Threaded, Material	erial: SA213 316L Rolled: SA105 (C)IMPACT REQUI	(National Board number) (Year Remarks 1 Tube Sheet (B)INSP.OPENINGS:	
Item Number tional Remarks: TUBES: 166 x 1" OD, Gauge: 14BWG, Mat Type: 1-1/8X12UNF-Threaded, Material	: SA105 (C)IMPACT REQUI	d Tube Sheet (B)INSP.OPENINGS:	
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TUBES: 166 x 1" OD, Gauge: 14BWG, Mat 2, Type: 1-1/8X12UNF-Threaded, Material	: SA105 (C)IMPACT REQUI		
TUBES: 166 x 1" OD, Gauge: 14BWG, Material	: SA105 (C)IMPACT REQUI		
Certificate of Authorization: Type "U"	No. 4241	Expires December 31, 2011	
Date 03/23/2009 Name Air-X-C	110. <u>167 I</u>	Signed Wish Low	

Commissions

12752A, OK951
(National Board Authorized Inspector Commission number)

Signed William B Bright (Manufacturer)

Date 03/23/2009