



10158

CERTIFIED BY
CIMARRON ENERGY INC.
NORMAN, OKLAHOMA

1390 PSI AT 130 °F
MAX. ALLOWABLE WORKING PRESS

-20 °F AT 1390 PSI
MIN. DESIGN METAL TEMP.

10158N
MANUFACTURER'S SERIAL NUMBER

2018
YEAR BUILT

SEPXT00013

W

RT1

HT

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 Page 1 of 2

1. Manufactured and certified by Cimarron Energy, Inc., 4190 S. Harvey Ave., Norman, Oklahoma, 73072, USA

(Name and address of Manufacturer)

2. Manufactured for XTO Energy

(Name and address of Purchaser)

3. Location of Installation Unknown Built For Stock

(Name and address)

4. Type Horizontal 10158N N/A Q14145-3-02-03 10158 2018
(Horizontal or vertical, tank) (Manufacturer's serial number) (CRN) (Drawing number) (National Board number) (Year built)5. ASME Code, Section VIII, Division 1 2017/ N/A N/A N/A
[Edition and Addenda, if applicable (date)] (Code Case numbers) [Special service per UG-120(d)]6. Shell: SA-516-70N 1.75" 0.125" 0' 48.0" (OD) 15' 0.0"
(Material spec. number, grade) (Nominal thickness) (Corr. allow.) (Inner diameter) [Length (overall)]

Body Flanges on Shells

No.	Type	ID	OD	Flange Thk	Min Hub Thk	Material	How Attached	Location	Bolting			
									Num & Size	Bolting Material	Washer (OD, ID, thk)	Washer Material
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

7. Seams: Type 1 Full 100% 1150 Min 1 hr 45 min Type 1 Full 100% 2
[Long. (welded, dbl., sngl., lap, butt)] [R.T. (spot or full)] (Eff. %) (H.T. temp) (Time, hr) [Girth. (welded, dbl., sngl., lap, butt)] [R.T. (spot or full)] (Eff. %) (No. of courses)8. Heads: (a) Material SA-516-70N (b) Material SA-516-70N
(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)	END	1.6841"	0.125"	N/A	N/A	2:1	N/A	N/A	N/A	Concave
(b)	END	1.6841"	0.125"	N/A	N/A	2:1	N/A	N/A	N/A	Concave

Body Flanges on Heads

No.	Location	Type	ID	OD	Flange Thk	Min Hub Thk	Material	How Attached	Bolting			
									Num & Size	Bolting Material	Washer (OD, ID, thk)	Washer Material
(a)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A

9. MAWP 1390 psi N/A at max. temp. 130 °F N/A
(Internal) (External) (Internal) (External)Min. design metal temp. -20 °F at 1390 psi . Hydro, pneu., or comb. test pressure HYDRO at 1807 psi .Proof test N/A .

10. Nozzles, inspection and safety valve openings:

Purpose (Inlet, Outlet, Drain, etc.)	No.	Diameter or Size	Type	Material		Nozzle Thickness		Reinforcement Material	Attachment Details		Location (Insp. Open.)
				Nozzle	Flange	Nom.	Corr.		Nozzle	Flange	
manway	1	18"	RFLWN	SA-105-N		600#	0.125"	Inherent	UW16.1(c)		Shell
Drain, LSHH, LLC	3	2"	Coupling	SA-105		6000#	0.125"	Inherent	UW16.1(c)		Shell
Gas Dome	1	12" 600#	RFWN	SA-106-C	SA-105	.688"	0.125"	SA-516-70	UW16.1(c)		Shell
Level gauge, TI	3	3/4"	Coupling	SA-105		6000#	0.125"	Inherent	UW16.1(c)		Head/Shell
Relief	1	3"	RFLWN	SA-105		600#	0.125"	SA-516-70	UW16.1(c)		Shell
PI	1	1/2"	Coupling	SA-105		6000#	0.125"	Inherent	UW16.1(c)		Shell
Liquid Outlet	1	8"	RFLWN	SA-105		6000#	0.125"	Inherent	UW16.1(c)		Head
Inlet	1	8"	RFLWN HB	SA-350-LF2		600#	0.125"	Inherent	UW16.1(C)		Head

11. Supports: Skirt No Lugs 2 Legs 2 Other Name Plate Bracket SA-516-70 Attached Welded to Shell
(Yes or no) (Number) (Number) (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:

7125-14, Shell-Greens Bayou Pipe Mill 13935 Industrial Road Houston, Texas 77015 U#42546

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

Impact Tested per UCS-66 For Corrosive Service ; Relief per UG-125 ; RT per UW-11(A) ; Post Weld Heat Treat in accordance with UCS-561-1

Manufactured by Cimarron Energy, Inc., 4190 S. Harvey Ave., Norman, Oklahoma, 73072, USAManufacturer's Serial No. 10158NCRN N/ANational Board No. 10158

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 AND PRESSURE VESSEL CODE, Section VIII, Division 1. "U" Certificate of Authorization Number 35622

expires February 17, 2021Date 07/05/2018

Co. name

Cimarron Energy, Inc.
(Manufacturer)

Signed

Angela Brassfield
(Representative)

CERTIFICATE OF SHOP/FIELD INSPECTION

Vessel constructed by Cimarron Energy, Inc. at 4190 S. Harvey Ave., Norman, Oklahoma, 73072, USA

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and employed by OneCIS Insurance Company, of Lynn, MA

have inspected the component described in this Manufacturer's Data Report on July 9, 2018, 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 property damage or a loss of any kind arising from or connected with this inspection.

Date 07/10/2018

Signed


(Authorized Inspector)

Commissions

12164, OK856

(National Board Authorized Inspector Commission number)

NB#10158

FORM U-2A MANUFACTURER'S PARTIAL DATA REPORT (ALTERNATIVE FORM)
A Part of a Pressure Vessel Fabricated by One Manufacturer for Another Manufacturer
As Required by the Provisions of the ASME Boiler and Pressure Vessel Code Rules, Section VIII, Division 1

1. Manufactured and certified by Greens Bayou Pipe Mill 13935 Industrial Road Houston, Texas 77015
(Name and address of Manufacturer)

2. Manufactured for Northshore Supply 13935 Industrial Road Houston, Texas 77015
(Name and address of Purchaser)

3. Location of installation Unknown
(Name and address)

4. Type 7 Shell 7125-12 THRU 7125-18
[Description of vessel part (shell, two-piece head, tube bundle)] (Manufacturer's serial number) (CRN)
(National Board number) (Drawing number) (Drawing prepared by) (Year built)
2017

5. ASME Code, Section VIII, Div. 1 2015
(Edition and Addenda, if applicable (date)) (Code Case number) [Special service per UG-120(d)]

6. Shell: (a) Number of course(s) 1 (b) Overall length 7'-0"

Course(s)			Material		Thickness		Long. Joint (Cat. A)			Circum. Joint (Cat. A, B & C)			Heat Treatment	
No.	Diameter	Length	Spec./Grade or Type		Nom.	Corr.	Type	Full, Spot, None	Eff.	Type	Full, Spot, None	Eff.	Temp.	Time
1	48" OD	7'-0"	SA516-70-N		1.75"	*	1	Full	*					

Body Flanges on Shells													
No.	Type	ID	OD	Flange Thk	Min Hub Thk	Material	How Attached	Location	Bolting				Washer Material
									Num & Size	Bolting Material	Washer (OD, ID, thk)		

7. Heads: (a) _____ (Material spec. number, grade or type) (H.T. — time and temp.) (b) _____ (Material spec. number, grade or type) (H.T. — time and temp.)

	Location (Top, Bottom, Ends)	Thickness		Radius		Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure		Category A		
		Min.	Corr.	Crown	Knuckle					Convex	Concave	Type	Full, Spot, None	Eff.
(a)														
(b)														

Body Flanges on Heads													
	Location	Type	ID	OD	Flange Thk	Min Hub Thk	Material	How Attached	Bolting				Washer Material
									Num & Size	Bolting Material	Washer (OD, ID, thk)		
(a)													
(b)													

8. MAWP _____ at max. temp. _____ Min. design metal temp. _____ at _____
(Internal) (External) (Internal) (External)

9. Impact test Yes - Base, Haz, Weld at test temperature of -20 F
[Indicate yes or no and the component(s) impact tested]

10. Hydro., pneu., or comb. test pressure None Proof test _____

11. Nozzles, inspection, and safety valve openings:

Purpose (Inlet, Outlet, Drain, etc.)	No.	Diameter or Size	Type	Material		Nozzle Thickness		Reinforcement Material	Attachment Details		Location (Insp. Open.)
				Nozzle	Flange	Nom.	Corr.		Nozzle	Flange	

12. Identification of part(s)

Name of Part	Quantity	Line No.	Mfr's. Identification No.	Mfr's. Drawing No.	CRN	National Board No.	Year Built

13. Supports: Skirt No Lugs Legs Other Attached
(Yes or no) (Number) (Number) (Describe) (Where and how)

14. Remarks _____

*No Design Functions by Greens Bayou Pipe Mill; WPS is qualified with and without PWHT. Formed in Accordance with UG 79, UG 80 and UCS 79.

NB# 10158

FORM U-2A (Back)

CERTIFICATE OF SHOP/FIELD COMPLIANCE

We certify that the statements made in this report are correct and that all details of material, construction, and workmanship of this pressure vessel part conform to the ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1.

U Certificate of Authorization No. 42,546 Expires 01/19/2021

Date 01/19/2018 Name Greens Bayou Pipe Mill Signed [Signature]
(Manufacturer) (Representative)

CERTIFICATE OF SHOP/FIELD INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by Authorized Inspection Associates, LLC of Houston, Texas

have inspected the pressure vessel part described in this Manufacturer's Data Report on 01/19/2018 and state that, to the best of my knowledge and belief, the Manufacturer has constructed this pressure vessel part 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 part 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 property damage or a loss of any kind arising from or connected with this inspection.

Date 01/19/2018 Signed [Signature] Commissions NB13919AIR
(Authorized Inspector) (National Board (incl. endorsements))

12656

CERTIFIED BY
CIMARRON ENERGY INC.
MARLOW, OKLAHOMA

1390 PSI AT 130 °F
MAX. ALLOWABLE WORKING PRESS

-20 °F AT 1390 PSI
MIN. DESIGN METAL TEMP.

M-12851

MANUFACTURER'S SERIAL NUMBER

2017

X TO -000 YEAR BUILT



U

W

RT-1

HT

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 Cimarron Energy Inc., 120 East Blackburn Road, Marlow, Oklahoma, 73055, USA

(Name and address of Manufacturer)

2. Manufactured for N/A

(Name and address of Purchaser)

3. Location of Installation Unknown Built For Stock

(Name and address)

4. Type Horizontal M-12851 N/A Q14145-3-01-03 12656 2017
(Horizontal or vertical, tank) (Manufacturer's serial number) (CRN) (Drawing number) (National Board number) (Year built)5. ASME Code, Section VIII, Division 1 2015/ N/A N/A N/A
(Edition and Addenda, if applicable (date)) (Code Case numbers) (Special service per UG-120(d))6. Shell: SA-516-70N 1.75" 0.125" 0' 48.0" (OD) 15' 0.0"
(Material spec. number, grade) (Nominal thickness) (Corr. allow.) (Inner diameter) (Length (overall))

Body Flanges on Shells

No.	Type	ID	OD	Flange Thk	Min Hub Thk	Material	How Attached	Location	Bolting			
									Num & Size	Bolting Material	Washer (OD, ID, thk)	Washer Material
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

7. Seams: Type 1 Full 100% 1150 Min 1 hr 45 min Type 1 Full 100% 2
[Long. (welded, dbl., sngl., lap, butt)] [R.T. (spot or full)] (Eff. %) (H.T. temp) (Time, hr) [Girth. (welded, dbl., sngl., lap, butt)] [R.T. (spot or full)] (Eff. %) (No. of courses)8. Heads: (a) Material SA-516-70N (b) Material SA-516-70N
(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)	END	1.6841"	0.125"	N/A	N/A	2:1	N/A	N/A	N/A	Concave
(b)	END	1.6841"	0.125"	N/A	N/A	2:1	N/A	N/A	N/A	Concave

Body Flanges on Heads

No.	Location	Type	ID	OD	Flange Thk	Min Hub Thk	Material	How Attached	Bolting			
									Num & Size	Bolting Material	Washer (OD, ID, thk)	Washer Material
(a)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A

9. MAWP 1390 psi N/A at max. temp. 130 °F N/A
(Internal) (External) (Internal) (External)Min. design metal temp. -20 °F at 1390 psi . Hydro, pneu., or comb. test pressure HYDRO at 1807 psi .Proof test N/A .

10. Nozzles, inspection and safety valve openings:

Purpose (Inlet, Outlet, Drain, etc.)	No.	Diameter or Size	Type	Material		Nozzle Thickness		Reinforcement Material	Attachment Details		Location (Insp. Open.)
				Nozzle	Flange	Nom.	Corr.		Nozzle	Flange	
manway	1	18"	RFLWN	SA-105-N		600#	0.125"	Inherent	UW16.1(c)		Shell
Drain, LSHH, LLC	3	2"	Coupling	SA-105		6000#	0.125"	Inherent	UW16.1(c)		Shell
Gas Dome	1	12"	Pipe	SA-106-B/C		.688"	0.125"	Inherent	UW16.1(c)	TYPE 1	Shell
Level gauge, TI	3	3/4"	Coupling	SA-105		6000#	0.125"	Inherent	UW16.1(c)		Head/Shell
Relief	1	3"	RFLWN	SA-105		600#	0.125"	Repad	UW16.1(c)		Shell
PI	1	1/2"	Coupling	SA-105		6000#	0.125"	Inherent	UW16.1(c)		Shell
Liquid Outlet	1	8"	RFLWN	SA-105		6000#	0.125"	Inherent	UW16.1(c)		Head

11. Supports: Skirt No Lugs 2 Legs 2 Other Name Plate Bracket SA-516-70 Attached Welded to Shell
(Yes or no) (Number) (Number) (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:

2097-B, 2157-B Shell-Universal Steel America, Inc. 1230 East Richey Road, Texas 77073 U#44222

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

Impact Tested per UCS-66 For Corrosive Service ; Relief per UG-125 ; RT per UW-11(A) ; Post Weld Heat Treat in accordance with UCS-561-1

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 AND PRESSURE VESSEL CODE, Section VIII, Division 1. "U" Certificate of Authorization Number 24087
expires May 30, 2019.

Date 12/08/2017 Co. name Cimarron Energy Inc.
(Manufacturer)

Signed

Angela Brassfield
(Representative)

CERTIFICATE OF SHOP/FIELD INSPECTION

Vessel constructed by Cimarron Energy Inc. at 120 East Blackburn Road, Marlow, Oklahoma, 73055, USA

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and employed by OneCIS Insurance Company, of Lynn, MA

have inspected the component described in this Manufacturer's Data Report on December 6, 2017,
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 property damage or a loss of any kind arising from or connected with this inspection.

Date 12/08/2017

Signed

Harry J. Woods
(Authorized Inspector)

Commissions

12164, OK856

(National Board (incl. endorsements))

FORM U-2A MANUFACTURER'S PARTIAL DATA REPORT (ALTERNATIVE FORM)
A Part of a Pressure Vessel Fabricated by One Manufacturer for Another Manufacturer
As Required by the Provisions of the ASME Boiler and Pressure Vessel Code Rules, Section VIII, Division 1

1. Manufactured and certified by Universal Steel America, Inc. Houston 1230 East Richey Road Houston, Texas 77073
(Name and address of Manufacturer)

2. Manufactured for Cimarron Energy - Katy 6818 FM 2855 Katy, Texas 77493
(Name and address of Purchaser)

3. Location of installation Unknown
(Name and address)

4. Type Cylinder 2097 A,B,C,D,E -
(Description of vessel part (shell, two-piece head, tube bundle)) (Manufacturer's serial number) (CRN)

2017
(National Board number) (Drawing number) (Drawing prepared by) (Year built)

5. ASME Code, Section VIII, Div. 1 2015 - -
(Edition and Addenda, if applicable (date)) (Code Case number) (Special service per UG-120(d))

6. Shell: (a) Number of course(s) 1 (b) Overall length 96"

Course(s)			Material	Thickness		Long. Joint (Cat. A)			Circum. Joint (Cat. A, B & C)			Heat Treatment	
No.	Diameter	Length	Spec./Grade or Type	Nom.	Corr.	Type	Full, Spot, None	Eff.	Type	Full, Spot, None	Eff.	Temp.	Time
1	48" OD	96"	SA 516-70N	1.75"	-	1	Full	100	-	-	-	None	None
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-

Body Flanges on Shells										Bolting			
No.	Type	ID	OD	Flange Thk	Min Hub Thk	Material	How Attached	Location		Num & Size	Bolting Material	Washer (OD, ID, thk)	Washer Material
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-

7. Heads: (a) None (b) None
(Material spec. number, grade or type) (H.T. — time and temp.) (Material spec. number, grade or type) (H.T. — time and temp.)

	Location (Top, Bottom, Ends)	Thickness		Radius		Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure		Category A		
		Min.	Corr.	Crown	Knuckle					Convex	Concave	Type	Full, Spot, None	Eff.
(a)														
(b)														

Body Flanges on Heads										Bolting			
	Location	Type	ID	OD	Flange Thk	Min Hub Thk	Material	How Attached		Num & Size	Bolting Material	Washer (OD, ID, thk)	Washer Material
(a)	-	-	-	-	-	-	-	-	-	-	-	-	-
(b)	-	-	-	-	-	-	-	-	-	-	-	-	-

8. MAWP Not Rated - at max. temp. Not Rated -. Min. design metal temp. - at -.
(Internal) (External) (Internal) (External)

9. Impact test Yes weld and material at test temperature of -20° F.
(Indicate yes or no and the component(s) impact tested)

10. Hydro., pneu., or comb. test pressure None Proof test None

11. Nozzles, inspection, and safety valve openings:

Purpose (Inlet, Outlet, Drain, etc.)	No.	Diameter or Size	Type	Material		Nozzle Thickness		Reinforcement Material	Attachment Details		Location (Insp. Open.)
				Nozzle	Flange	Nom.	Corr.		Nozzle	Flange	
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

12. Identification of part(s)

Name of Part	Quantity	Line No.	Mfr's. Identification No.	Mfr's. Drawing No.	CRN	National Board No.	Year Built
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-

13. Supports: Skirt No Lugs 0 Legs 0 Other - Attached -
(Yes or no) (Number) (Number) (Describe) (Where and how)

14. Remarks

Cimarron Energy PO# KTY1756 Universal Steel WO# 67867-1
 5 ea 1.75" x 48" OD x 96" Cylinder
 No Design Function Performed By USA, Inc.
 No Hydro Test Performed
 Formed In Accordance with UG-79,UG-80,and UCS-79

FORM U-2A (Back)

CERTIFICATE OF SHOP/FIELD COMPLIANCE

We certify that the statements made in this report are correct and that all details of material, construction, and workmanship of this pressure vessel part conform to the ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1.

U Certificate of Authorization No. 44,222 Expires Sept 27, 2018

Date 08/25/2017 Name Universal Steel America, Inc. Houston Signed Billy N. Nicks
(Manufacturer) (Representative)

CERTIFICATE OF SHOP/FIELD INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by The Hartford Steam Boiler Inspection and Insurance Company of CT

have inspected the pressure vessel part described in this Manufacturer's Data Report on 08/25/2017 and state that, to the best of my knowledge and belief, the Manufacturer has constructed this pressure vessel part 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 part 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 property damage or a loss of any kind arising from or connected with this inspection.

Date 08/25/2017 Signed [Signature] Commissions 12906
(Authorized Inspector) (National Board (incl. endorsements))

NB#12656

FORM U-2A MANUFACTURER'S PARTIAL DATA REPORT (ALTERNATIVE FORM)
A Part of a Pressure Vessel Fabricated by One Manufacturer for Another Manufacturer
As Required by the Provisions of the ASME Boiler and Pressure Vessel Code Rules, Section VIII, Division 1

1. Manufactured and certified by Universal Steel America, Inc. Houston 1230 East Richey Road Houston, Texas 77073
(Name and address of Manufacturer)
2. Manufactured for Cimarron Energy - Katy 6818 FM 2855 Katy, Texas 77493
(Name and address of Purchaser)
3. Location of installation Unknown
(Name and address)
4. Type Cylinder
(Description of vessel part (shell, two-piece head, tube bundle)) 2157 A,B,C,D
(Manufacturer's serial number) 2017
(CRN)
5. ASME Code, Section VIII, Div. 1 2015
(National Board number) 2015
(Drawing number) 2015
(Drawing prepared by) 2017
(Year built)
6. Shell: (a) Number of course(s) 1 (b) Overall length 84"
(Edition and Addenda, if applicable (date)) 2015
(Code Case number) 2015
(Special service per UG-120(d))

Course(s)			Material	Thickness		Long. Joint (Cat. A)			Circum. Joint (Cat. A, B & C)			Heat Treatment	
No.	Diameter	Length	Spec./Grade or Type	Nom.	Corr.	Type	Full, Spot, None	Eff.	Type	Full, Spot, None	Eff.	Temp.	Time
1	48" OD	84"	SA 516-70N	1.75"	-	1	Full	100	-	-	-	None	None
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-

Body Flanges on Shells										Bolting			
No.	Type	ID	OD	Flange Thk	Min Hub Thk	Material	How Attached	Location		Num & Size	Bolting Material	Washer (OD, ID, thk)	Washer Material
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-

7. Heads: (a) None (b) None
(Material spec. number, grade or type) (H.T. — time and temp.) None
(Material spec. number, grade or type) (H.T. — time and temp.)

	Location (Top, Bottom, Ends)	Thickness		Radius		Elliptical Ratio	Conical Apex Angle	Hemispherical Radius	Flat Diameter	Side to Pressure		Category A		
		Min.	Corr.	Crown	Knuckle					Convex	Concave	Type	Full, Spot, None	Eff.
(a)														
(b)														

Body Flanges on Heads										Bolting			
	Location	Type	ID	OD	Flange Thk	Min Hub Thk	Material	How Attached		Num & Size	Bolting Material	Washer (OD, ID, thk)	Washer Material
(a)	-	-	-	-	-	-	-	-	-	-	-	-	-
(b)	-	-	-	-	-	-	-	-	-	-	-	-	-

8. MAWP Not Rated at max. temp. Not Rated Min. design metal temp. - at -
(Internal) - (External) - (Internal) - (External)

9. Impact test Yes weld and material at test temperature of -20° F
(Indicate yes or no and the component(s) impact tested)

10. Hydro., pneu., or comb. test pressure None Proof test None

11. Nozzles, inspection, and safety valve openings:

Purpose (Inlet, Outlet, Drain, etc.)	No.	Diameter or Size	Type	Material		Nozzle Thickness		Reinforcement Material	Attachment Details		Location (Insp. Open.)
				Nozzle	Flange	Nom.	Corr.		Nozzle	Flange	
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

12. Identification of part(s)

Name of Part	Quantity	Line No.	Mfr's. Identification No.	Mfr's. Drawing No.	CRN	National Board No.	Year Built
-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-

13. Supports: Skirt No Lugs 0 Legs 0 Other - Attached -
(Yes or no) (Number) (Number) (Describe) (Where and how)

14. Remarks

Cimarron Energy PO# KTY1756 Universal Steel WO# 67867-2
 4 ea 1.75" x 48" OD x 84" Cylinder
 No Design Function Performed By USA, Inc.
 No Hydro Test Performed
 Formed In Accordance with UG-79,UG-80,and UCS-79

FORM U-2A (Back)

CERTIFICATE OF SHOP/FIELD COMPLIANCE

We certify that the statements made in this report are correct and that all details of material, construction, and workmanship of this pressure vessel part conform to the ASME BOILER AND PRESSURE VESSEL CODE, Section VIII, Division 1.

U Certificate of Authorization No. 44,222 Expires Sept 27, 2018

Date 08/25/2017 Name Universal Steel America, Inc. Houston Signed Billy Wilson
(Manufacturer) (Representative)

CERTIFICATE OF SHOP/FIELD INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and employed by The Hartford Steam Boiler Inspection and Insurance Company of CT

have inspected the pressure vessel part described in this Manufacturer's Data Report on 08/25/2017 and state that, to the best of my knowledge and belief, the Manufacturer has constructed this pressure vessel part 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 part 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 property damage or a loss of any kind arising from or connected with this inspection.

Date 08/25/2017 Signed [Signature] Commissions 12906
(Authorized Inspector) [National Board (incl. endorsements)]

12795

CERTIFIED BY
CIMARRON ENERGY INC.
MARLOW, OKLAHOMA

U

1390 PSI AT 130 °F
MAX. ALLOWABLE WORKING PRESS

W

RT-1

HT

-20 °F AT 1390 PSI
MIN. DESIGN METAL TEMP.

M-12990

MANUFACTURER'S SERIAL NUMBER

2018

YEAR BUILT

SEPXTO 0011

1. Manufactured and certified byCimarron Energy Inc., 120 East Blackburn Road, Marlow, Oklahoma, 73055, USA
(Name and address of Manufacturer)

2. Manufactured forXTO Energy
(Name and address of Purchaser)

3. Location of InstallationUnknown Built For Stock
(Name and address)

4. TypeHorizontalM-12990N/AQ14145-3-02-01127952018
(Horizontal or vertical, tank)(Manufacturer's serial number)(CRN)(Drawing number)(National Board number)(Year built)

5. ASME Code, Section VIII, Division 12017/ N/AN/AN/A
(Edition and Addenda, if applicable (date))(Code Case numbers)(Special service per UG-120(d))

6. Shell:SA-516-70N1.75"0.125"0' 48.0" (OD)15' 0.0"
(Material spec. number, grade)(Nominal thickness)(Corr. allow.)(Inner diameter)(Length (overall))

Body Flanges on Shells										Bolting			
No.	Type	ID	OD	Flange Thk	Min Hub Thk	Material	How Attached	Location		Num & Size	Bolting Material	Washer (OD, ID, thk)	Washer Material
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

7. Seams:Type 1Full100%1150 Min1 hr 45 minType 1Full100%2
(Long. (welded, dbl., sngl., lap, butt))(R.T.(spot or full))(Eff. %)(H.T. temp)(Time, hr)(Girth. (welded, dbl., sngl., lap, butt))(R.T. (spot or full))(Eff. %)(No. of courses)

8. Heads: (a) MaterialSA-516-70N(b) MaterialSA-516-70N
(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)	END	1.6841"	0.125"	N/A	N/A	2:1	N/A	N/A	N/A	Concave
(b)	END	1.6841"	0.125"	N/A	N/A	2:1	N/A	N/A	N/A	Concave

Body Flanges on Heads										Bolting			
No.	Location	Type	ID	OD	Flange Thk	Min Hub Thk	Material	How Attached		Num & Size	Bolting Material	Washer (OD, ID, thk)	Washer Material
(a)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			N/A	N/A	N/A

9. MAWP1390 psiN/Aat max. temp.130 °FN/A
(Internal)(External)(Internal)(External)

Min. design metal temp.-20 °F at 1390 psi . Hydro, pneu., or comb. test pressureHYDRO at 1807 psi .

Proof testN/A .

10. Nozzles, inspection and safety valve openings:

Purpose (Inlet, Outlet, Drain, etc.)	No.	Diameter or Size	Type	Material		Nozzle Thickness		Reinforcement Material	Attachment Details		Location (Insp. Open.)
				Nozzle	Flange	Nom.	Corr.		Nozzle	Flange	
manway	1	18"	RFLWN	SA-105-N		600#	0.125"	Inherent	UW16.1(c)		Shell
Drain, LSHH, LLC	3	2"	Coupling	SA-105		6000#	0.125"	Inherent	UW16.1(c)		Shell
Gas Dome	1	12" 600#	RFWN	SA-106-C	SA-105	.688"	0.125"	SA-516-70	UW16.1(c)		Shell
Level gauge, TI	3	3/4"	Coupling	SA-105		6000#	0.125"	Inherent	UW16.1(c)		Head/Shell
Relief	1	3"	RFLWN	SA-105		600#	0.125"	SA-516-70	UW16.1(c)		Shell
PI	1	1/2"	Coupling	SA-105		6000#	0.125"	Inherent	UW16.1(c)		Shell
Liquid Outlet	1	8"	RFLWN	SA-105		6000#	0.125"	Inherent	UW16.1(c)		Head
Inlet	1	8"	RFLWN HB	SA-350-LF2		600#	0.125"	Inherent	UW16.1(C)		Head

11. Supports: SkirtNoLugs2Legs2OtherName Plate Bracket SA-516-70AttachedWelded to Shell
(Yes or no)(Number)(Number)(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:

N/A
(Name of part, item number, Manufacturer's name and identifying stamp)

Impact Tested per UCS-66 For Corrosive Service ; Relief per UG-125 ; RT per UW-11(A) ; Post Weld Heat Treat in accordance with UCS-561-1

Manufactured by Cimarron Energy Inc., 120 East Blackburn Road, Marlow, Oklahoma, 73055, USAManufacturer's Serial No. M-12990CRN N/ANational Board No. 12795

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 AND PRESSURE VESSEL CODE, Section VIII, Division 1. "U" Certificate of Authorization Number 24087

expires May 30, 2019Date 05/14/2018

Co. name

Cimarron Energy Inc.

(Manufacturer)

Signed


(Representative)

CERTIFICATE OF SHOP/FIELD INSPECTION

Vessel constructed by Cimarron Energy Inc. at 120 East Blackburn Road, Marlow, Oklahoma, 73055, USA

I, the undersigned, holding a valid commission issued by The National Board of Boiler and Pressure Vessel Inspectors and employed by

OneCIS Insurance Company, of Lynn, MAhave inspected the component described in this Manufacturer's Data Report on April 23, 2018,

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 property damage or a loss of any kind arising from or connected with this inspection.

Date 05/15/2018

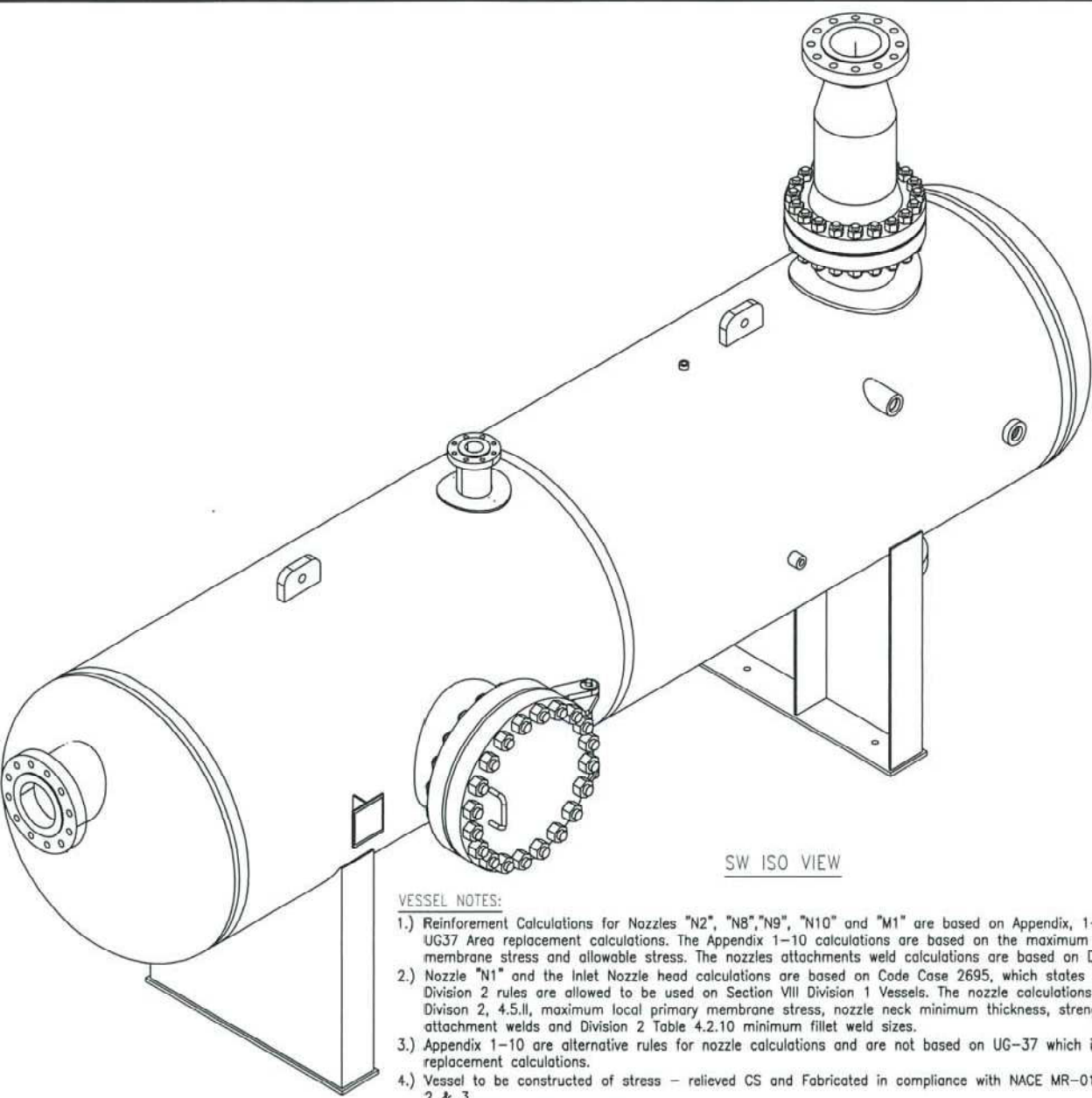
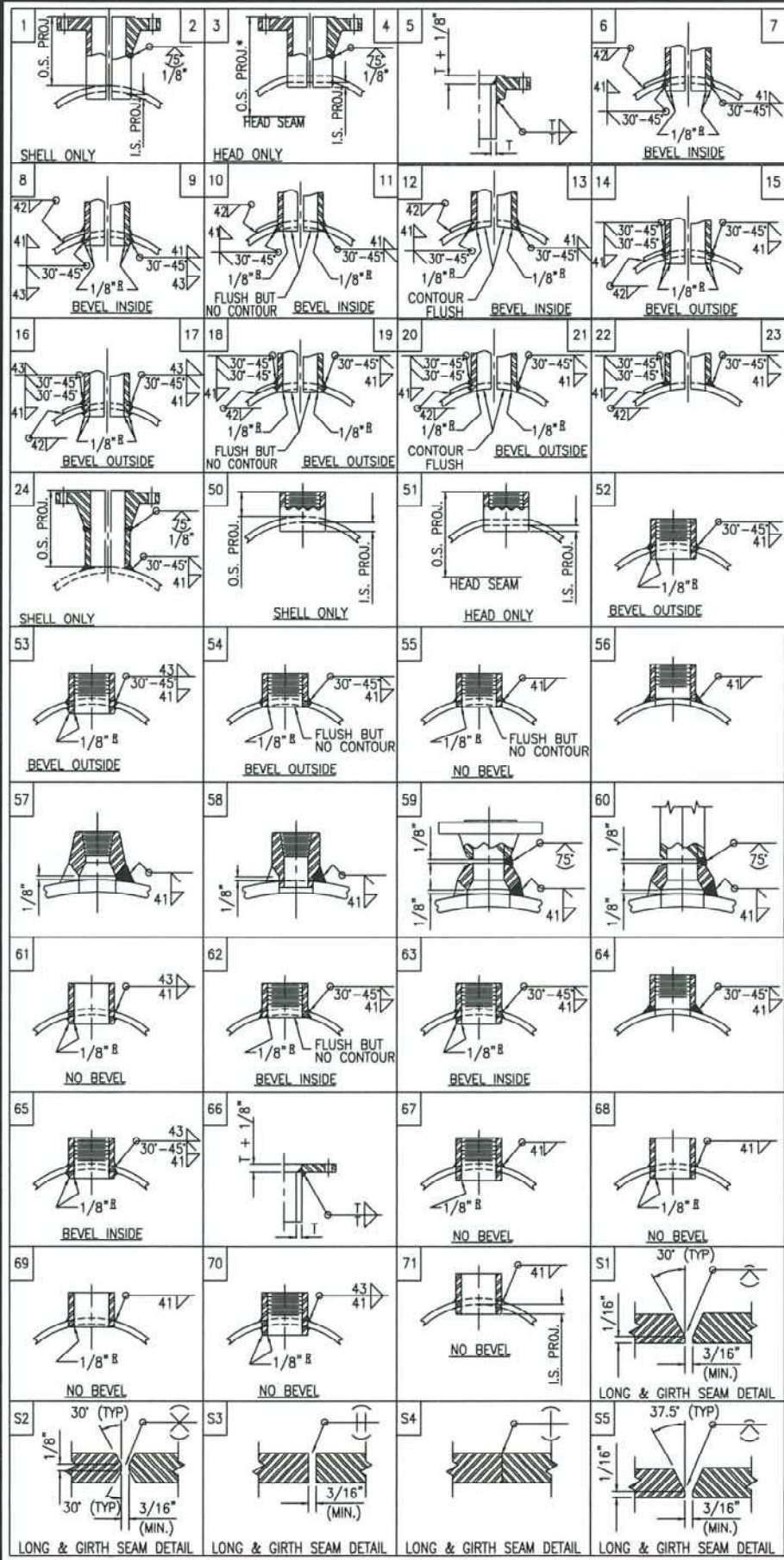
Signed


(Authorized Inspector)

Commissions

12164, OK856

(National Board Authorized Inspector Commission number)



VESSEL NOTES:

- 1.) Reinforcement Calculations for Nozzles "N2", "N8", "N9", "N10" and "M1" are based on Appendix, 1-10 in lieu of UG37 Area replacement calculations. The Appendix 1-10 calculations are based on the maximum local primary membrane stress and allowable stress. The nozzle attachments weld calculations are based on Division 2 Part 4.5.
- 2.) Nozzle "N1" and the Inlet Nozzle head calculations are based on Code Case 2695, which states Section VIII Division 2 rules are allowed to be used on Section VIII Division 1 Vessels. The nozzle calculations are based on Division 2, 4.5.11, maximum local primary membrane stress, nozzle neck minimum thickness, strength of nozzle attachment welds and Division 2 Table 4.2.10 minimum fillet weld sizes.
- 3.) Appendix 1-10 are alternative rules for nozzle calculations and are not based on UG-37 which is based on area replacement calculations.
- 4.) Vessel to be constructed of stress - relieved CS and Fabricated in compliance with NACE MR-0175/ISO 15156-1, 2 & 3.
- 5.) Vessel shall conform to NACE SP 0178.
- 6.) Internal welds shall meet weld condition D described in NACE SP 0178, Appendix C.
- 7.) Production impact required per UG-84.
- 8.) Carbon steel maximum hardness permitted on any of the weld, heat affected zone, or parent metal shall be Vickers HV₁₀ ≤ 240.

TESTING NOTES:

- HARDNESS TESTING IS VICKERS HV10 (240)
- LONG SEAM = 1 SET PER 10 FT. (1 PER)
- LONG SEAM = 1 SET PER 10 FT. (2 PER)
- NOZZLE = 1 SET PER INTRUSION

FABRICATION TOLERANCES:

0 TO 10'-0" = ±1/8"
> 10'-0" = ±1/4"
ANGLE = ±1/2"
SHOP RECORDS REQ'D

- ☒ MAT'L RECORDS
- ☒ NAME PL. RUBBING
- ☒ STRESS RELIEVE CHART
- ☒ TEST PRESSURE CHART
- ☐ STENCIL OPENINGS

WELDING PROCEDURES:

CO-1 (GMAW)
CO-2 (GMAW)
SA-II

CERTIFIED BY:
CIMARRON ENERGY INC.
MARLOW, TEXAS

1390 PSI AT 130 °F
MAX. ALLOWABLE WORKING PRESS

-20 °F AT 1390 PSI
MIN. DESIGN METAL TEMP.

SEPXT00010 THRU 0014
MANUFACTURER'S SERIAL NUMBER

2018
YEAR BUILT

"NACE"

REVISED PRINT
DESTROY ALL OTHERS
4/3/18
Matt Underwood

JOB No:

SEPXT00010-0000
THRU
SEPXT00014-0000

REV.	DATE	BY	CK	APPRO.	DESCRIPTION
1	3/28/18	EH	JT	MU	REV'D JOB No.; REV'D BOLT, WASHER, & NUT COUNT ON SHT 3
0	11/27/17	EH	MHS	MU	ISSUED FOR CONSTRUCTION

TITLE: 2PH HOZ. SEPARATOR DETAILS
48" OD x 180" S/S 1390#
XTO ENERGY

DESIGN BY: JJG CHK. BY: MHS APPD. BY: MU
DATE: NOVEMBER 2017

PART No: SEPXT0001001 JOB No: Q14145
DRAWING NO. SHEETS REV.
Q14145-3-02-01 1 OF 5 1

