## 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

2. Manufactured for MURPHY EXPLORATION , 16290 KATY FREEWAY #600 SUITE, HOUSTON, Texas, 77094, USA  (Name and address of Purchaser)  3. Location of Installation    UNKNOWN	1. Manufactured and certified by J.W. Williams, Inc., 19814 G.H. Circle, Waller, Texas, 77484, USA																			
A. Type																				
4. Type	3. Location of Installation UNKNOWN																			
5. ASME Code. Section VIII. Division 1  5. ASME Code. Section VIII. Division 1  6. Shell:  5. ASME Code. Section VIII. Division 1  6. Shell:  5. ASME Code. Section VIII. Division 1  6. Shell:  5. ASME Code. Section VIII. Division 1  6. Shell:  5. ASME Code. Section VIII. Division 1  6. Shell:  5. ASME Code. Section VIII. Division 1  6. Shell:  5. ASME Code. Section VIII. Division 1  6. Shell:  5. ASME Code. Section VIII. Division 1  6. Shell:  5. ASME Code. Section VIII. Division 1  6. Shell:  5. ASME Code. Section VIII. Division 1  6. Shell:  5. ASME Code. Section VIII. Division 1  6. Shell:  5. ASME Code. Section VIII. Division 1  6. Shell:  5. ASME Code. Section VIII. Division 1  6. Shell:  5. ASME Code. Section VIII. Division 1  6. Shell:  5. ASME Code. Section VIII. Division 1  6. Shell:  5. ASME Code. Section VIII. Division 1  6. Shell:  5. ASME Code. Section VIII. Division 1  6. Shell:  5. ASME Code. Section VIII. Division 1  6. Shell:  7. Shell:	(Name and address)																			
Edition and Addenical, lingspirable (edite)    Coce Class marbers)   Coce class   Coce cla	,																			
Shell:   SA-516-70N	5. ASME Code, Section VIII, Division 1 2013/ N/A N/A N/A																			
No.   Type   D																				
No.   Type													,							
No.   Type   ID   OD   Flange   ID   OD   ID   OD   Flange   ID   OD   ID   I																				
No.	Ī	_				Flange													1	
7. Seams:   TYPE 1	No.	Туре		ID	OD		Min H	ub Thk	Ma	aterial			Loc	cation	Num & Size			`	, ID,	
R. Heads: (a) Material   S.A516-70N	N/A	N/A	N/A	١	N/A	N/A	N/A		N/A		N/A		N/A		N/A	N/A		N/A		N/A
Contain   Cont	[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)																			
Ends   Thickness   Allowance	(a) Material SA-516-70N SA-516-70N																			
Control   Cont		, , ,	ottom,	1				Crow	n Radius	Knuckle Ra	dius	Elliptica	Ratio		·   _ · · · ·			_		1.
Chapter   Company   Comp	(a)	ENDS			.4375 .125 N/A N/A		2:	2:1 N/A		N/A		N/A	CC	NCA	VE					
No. Location Type ID OD Flange Thk Min Hub Thk Material How Attached Num & Size Bolting Material Washer (OD) Washer Material (ID, thk) Washer Material Washer (OD) Washer Material (ID, thk) Washer Material Washer (OD) Washer Material Washer (ID, thk) Washer Material (ID, thk) Washer Material (ID, thk) Washer Material (ID, thk) Washer Material Washer Washer (ID, thk) Washer Material Washer (ID, thk) W										N/A			1	N/A	N/A	N/A		CONCAVE		
No. Location Type ID OD Flange Thk Min Hub Thk Material How Attached Num & Size Bolting Material Washer (OD) Washer Material (ID, thk) Washer Material Washer (OD) Washer Material (ID, thk) Washer Material Washer (OD) Washer Material Washer (ID, thk) Washer Material (ID, thk) Washer Material (ID, thk) Washer Material (ID, thk) Washer Material Washer Washer (ID, thk) Washer Material Washer (ID, thk) W										Body Flanc	nes on	Heads			•					
No.									Min Huk								Во	olting		
9. MAWP 250 psi (Internal) (External) at max. temp. 150 °F (Internal) (External)  Min. design metal temp20 °F at 250 psi . Hydro, pneu., or comb. test pressure HYDRO at 325 psi .  Proof test N/A  10. Nozzles, inspection and safety valve openings:  Purpose (Inlet, Outlet, Drain, etc.) No. Diameter or Size Type Nozzle Flange Nom. Corr. Material Nozzle Flange (Insp. Open.)  MISC 3 3/3/4 XL CPLG * 6000# Integral * SHELL MISC 11 2 RFLWN * 150# Integral * SHELL WATER OUTLET 1 3 RFLWN * 150# Integral * SHELL GAS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL GAS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL GAS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL GAS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL GAS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL GAS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL GAS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL GAS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL GAS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL GAS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL GAS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL GAS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL GAS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL GAS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL GAS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL GAS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL GAS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL GAS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL GAS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL GAS IN/OUTLET * SHELL GAS IN/OUTL	No.					OD		ige Thk		Mate			ached	Num & Size		ting Mater				
Min. design metal temp.	(a)	N/A N/	Α		N/A	N/A	N/A		N/A	N/A		_				N/A	١	N/A	N	/A
Min. design metal temp20 °F	9. M	AWP									at n	nax. te	mp.							_
Proof test  N/A  10. Nozzles, inspection and safety valve openings:  Purpose (Inlet, Outlet, Drain, etc.) No. Diameter or Size Type Nozzle Flange Nom. Corr. Material Nozzle Flange (Insp. Open.)  MISC 3 3/4 XL CPLG * 6000# Integral * SHELL MISC 11 2 RFLWN * 150# Integral * SHELL MISC NATE OUTLET 1 3 RFLWN * 150# Integral * SHELL MISC 3 4 RFLWN * 150# Integral * SHELL MISC 3 4 RFLWN * 150# Integral * SHELL MISC AS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL MISC AS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL MISC AS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL MISC AS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL MISC AS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL MISC AS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL MISC AS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL MISC AS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL MISC AS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL MISC AS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL MISC AS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL MISC AS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL MISC AS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL MISC AS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL MISC AS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL MISC AS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL MISC AS IN/OUTLET * SHELL MISC AS IN					,	_		•	•						, ,			,		
10. Nozzles, inspection and safety valve openings:  Purpose (Inlet, Outlet, Drain, etc.)  No. Diameter or Size Type Nozzle Flange Nom. Corr. Material Nozzle Flange (Insp. Open.)  MISC 3 3/4 XL CPLG * 6000# Integral * SHELL  MISC 11 2 RFLWN * 150# Integral * SHELL  WATER OUTLET 1 3 RFLWN * 150# Integral * SHELL  MISC 3 4 RFLWN * 150# Integral * SHELL  GAS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL  GAS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL  MANWAY 1 18 RFLWN HB * 150# Integral * SHELL  MANWAY 1 18 RFLWN HB * 150# Integral * SHELL  11. Supports: Skirt NO Lugs N/A Legs N/A Other TWO SADDLES Attached WELDED AT THE BOTTOM OF SHELL  (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:	IVII	n. design me	tal ter	mp	-20 °I		at _		250 psi	<u> </u>		Hydr	o, pne	u., or co	omb. test pres	ssure		нүрко а	t 325	psi .
Purpose (Inlet, Outlet, Drain, etc.)  No. Diameter or Size Type Nozzle Flange Nom. Corr. Nozzle Flange Nom. Corr. Nozzle Flange Nom. Corr. Nozzle Flange Nom. Corr. Nozzle Flange Nozzle Flange Nozzle Flange Nozzle Flange Nozzle Flange Nozzle Flange (Insp. Open.)  Nozzle Flange Nozzle Flange (Insp. Open.)  Nozzle Flange Nozzle Flange (Insp. Open.)  Nozzle Flange Nozzle Flange (Insp. Open.)  Nozzle Flange Nozzle Fla	Pr	oof test										N/A								
MISC 3 3/4 XL CPLG * 6000# Integral * SHELL  MISC 11 2 RFLWN * 150# Integral * SHELL  WATER OUTLET 1 3 RFLWN * 150# Integral * SHELL  MISC 3 4 RFLWN * 150# Integral * SHELL  GAS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL  GAS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL  MANWAY 1 18 RFLWN B * 150# Integral * SHELL  11. Supports: Skirt NO Lugs N/A Legs N/A Other TWO SADDLES Attached WELDED AT THE BOTTOM OF SHELL  (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:	10. No	ozzles, inspec	tion a	and sa	afety valv	e openi	ngs:													
etc.) No. or Size Type Nozzle Flange Nom. Corr. Material Nozzle Flange (Insp. Open.)  MISC 3 3/4 XL CPLG * 6000# Integral * SHELL  MISC 11 2 RFLWN * 150# Integral * SHELL  WATER OUTLET 1 3 RFLWN * 150# Integral * SHELL  MISC 3 4 RFLWN * 150# Integral * SHELL  GAS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL  MANWAY 1 18 RFLWN HB * 150# Integral * SHELL  11. Supports: Skirt NO Lugs N/A Legs N/A Other TWO SADDLES Attached WELDED AT THE BOTTOM OF SHELL  (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:	Purpose	e (Inlet, Outlet, Dra	in.		Diameter	Τ_			Mater	ial		Nozzle	Thicknes	SS F	Reinforcement	A	tachment D	etails		Location
MISC 11 2 RFLWN * 150# Integral * SHELL  WATER OUTLET 1 3 RFLWN * 150# Integral * SHELL  MISC 3 4 RFLWN * 150# Integral * SHELL  GAS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL  GAS IN/OUTLET 1 18 RFLWN * 150# Integral * SHELL  MANWAY 1 18 RFLWN HB * 150# Integral * SHELL  11. Supports: Skirt NO Lugs N/A Legs N/A Other TWO SADDLES Attached WELDED AT THE BOTTOM OF SHELL  (Ves 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:	1 1 1		, N	0.				Nozz	zle			Nom.	Corr			Noz	zle	U	ge (Insp. Open.)	
WATER OUTLET  1 3 RFLWN  * 150# Integral  * SHELL  MISC 3 4 RFLWN  * 150# Integral  * SHELL  GAS IN/OUTLET 2 10 RFLWN  * 150# Integral  * SHELL  GAS IN/OUTLET 2 10 RFLWN  * 150# Integral  * SHELL  Integral  * SHELL  * 12 * SHELL  * SHELL			_	_							_									
MISC 3 4 RFLWN * 150# Integral * SHELL  GAS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL  MANWAY 1 18 RFLWN HB * 150# Integral * SHELL/HEAD  MANWAY 1 18 RFLWN HB * 150# Integral * SHELL/HEAD  11. Supports: Skirt NO Lugs N/A Legs N/A Other TWO SADDLES Attached WELDED AT THE BOTTOM OF 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:				_																
GAS IN/OUTLET 2 10 RFLWN * 150# Integral * SHELL/HEAD  MANWAY 1 18 RFLWN HB * 150# Integral * SHELL/HEAD  11. Supports: Skirt NO Lugs N/A Legs N/A Other TWO SADDLES Attached WELDED AT THE BOTTOM OF SHELL (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:			-	_							_									
MANWAY 1 18 RFLWN HB * 150# Integral * SHELL  11. Supports: Skirt NO Lugs N/A Legs N/A Other TWO SADDLES Attached WELDED AT THE BOTTOM OF SHELL (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:			-	_																
11. Supports: Skirt No Lugs N/A Legs N/A Other TWO SADDLES Attached WELDED AT THE BOTTOM OF SHELL (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:				_							_									
(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:		MANWAY	_   1	1	18	RFLW	N HB			*		150#			Integral			*		SHELL
	11. S	upports: Skir						Legs		Other					S	_Attach	ned <b>WE</b> I			
			turer's	Partia	l Data Repo	orts prope	erly ident	ified and	signed by	Commissione	ed Insp	ectors,	have be	een furnis	shed for the follo	wing ite	ms of the	report:		

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

WELDED PER FABRICATION DRAWING IMPACT EXEMPT UCS-66

FORM U-1A (Back)

NB Number 7556

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 34164  expires  October 15, 2015												
Date 10/27/2014	Co. name	J.W. Willia (Manufacturer)	ms, Inc.	Signed Manuel Mustrix K (Representative)								
CERTIFICATE OF SHOP/FIELD INSPECTION												
Vessel constructed by												
OneCIS Insurance Company, of Lynn, MA												
have inspected the component described in this Manufacturer's Data Report on October 27, 2014, 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.												
Date10/27/201	4 Signed	Muthorizat Indector)	Commissions	[Nation	12355A, TX1681 nal Board (incl. endorsements)]							

Form and version: U1A-18 2117136 exe: v6.4.57