

**EOG RESOURCES, INC.**  
**AUDACIOUS BTL 19 FED COM NO. 3H**

**1. GEOLOGIC NAME OF SURFACE FORMATION:**

Permian

**2. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:**

Rustler	934'
Top of Salt	1,264'
Base of Salt / Top Anhydrite	4,694'
Base Anhydrite	4,934'
Lamar	4,934'
Bell Canyon	4,969'
Cherry Canyon	6,044'
Brushy Canyon	7,594'
Bone Spring Lime	9,104'
1 <sup>st</sup> Bone Spring Sand	10,049'
2 <sup>nd</sup> Bone Spring Shale	10,269'
2 <sup>nd</sup> Bone Spring Sand	10,544'
3 <sup>rd</sup> Bone Spring Carb	11,059'
3 <sup>rd</sup> Bone Spring Sand	11,731'
Wolfcamp	12,173'
TD	12,400'

**3. ESTIMATED DEPTHS OF ANTICIPATED FRESH WATER, OIL OR GAS:**

Upper Permian Sands	0- 400'	Fresh Water
Cherry Canyon	6,044'	Oil
Brushy Canyon	7,594'	Oil
1 <sup>st</sup> Bone Spring Sand	10,049'	Oil
2 <sup>nd</sup> Bone Spring Shale	10,269'	Oil
2 <sup>nd</sup> Bone Spring Sand	10,544'	Oil
3 <sup>rd</sup> Bone Spring Carb	11,059'	Oil
3 <sup>rd</sup> Bone Spring Sand	11,731'	Oil
Wolfcamp	12,173'	Oil

No other Formations are expected to give up oil, gas or fresh water in measurable quantities. Surface fresh water sands will be protected by setting 10.75" casing at 960' and circulating cement back to surface.

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**4. CASING PROGRAM - NEW**

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DF <sub>min</sub> Collapse	DF <sub>min</sub> Burst	DF <sub>min</sub> Tension
14.75"	0 – 960'	10.75"	40.5#	J55	STC	1.125	1.25	1.60
9.875"	0 – 1,000'	7.625"	29.7#	HCP-110	LTC	1.125	1.25	1.60
9.875"	1,000' – 3,000'	7.625"	29.7#	P-110EC	SLIJ II	1.125	1.25	1.60
8.75"	3,000' – 11,100'	7.625"	29.7#	HCP-110	FlushMax III	1.125	1.25	1.60
6.75"	0' – 10,600'	5.5"	20#	P-110EC	DWC/C-IS MS	1.125	1.25	1.60
6.75"	10,600'-19,847'	5.5"	20#	P-110EC	VAM SFC	1.125	1.25	1.60

Variance is requested to wave the centralizer requirements for the 7-5/8" FJ casing in the 8-3/4" hole size. An expansion additive will be utilized, in the cement slurry, for the entire length of the 8-3/4" hole interval to maximize cement bond and zonal isolation.

Variance is also requested to wave any centralizer requirements for the 5-1/2" FJ casing in the 6-3/4" hole size. An expansion additive will be utilized, in the cement slurry, for the entire length of the 6-3/4" hole interval to maximize cement bond and zonal isolation.

**Cementing Program:**

Depth	No. Sacks	Wt. ppg	Yld Ft <sup>3</sup> /ft	Mix Water Gal/sk	Slurry Description
10-3/4" 960'	325	13.5	1.73	9.13	Class C + 4.0% Bentonite + 0.6% CD-32 + 0.5% CaCl <sub>2</sub> + 0.25 lb/sk Cello-Flake (TOC @ Surface)
	200	14.8	1.34	6.34	Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate
7-5/8" 11,100'	250	14.8	1.38	6.48	Class C + 5% Gypsum + 3% CaCl <sub>2</sub> pumped via Bradenhead (TOC @ Surface)
	2000	14.8	1.38	6.48	Class C + 5% Gypsum + 3% CaCl <sub>2</sub> pumped via Bradenhead
	550	14.4	1.20	4.81	50:50 Class H:Poz + 0.25% CPT20A + 0.40% CPT49 + 0.20% CPT35 + 0.80% CPT16A + 0.25% CPT503P pumped Conventionally
5-1/2" 19,847'	1000	14.1	1.26	5.80	Class H + 0.1% C-20 + 0.05% CSA-1000 + 0.20% C-49 + 0.40% C-17 (TOC @ 10,600')

Note: Cement volumes based on bit size plus at least 25% excess in the open hole plus 10% excess in the cased-hole overlap section.

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**5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:**

Variance is requested to use a co-flex line between the BOP and choke manifold (instead of using a 4" OD steel line).

The minimum blowout preventer equipment (BOPE) shown in Exhibit #1 will consist of a single ram, mud cross and double ram-type (10,000 psi WP) preventer and an annular preventer (5000-psi WP). Both units will be hydraulically operated and the ram-type will be equipped with blind rams on bottom and drill pipe rams on top. All BOPE will be tested in accordance with Onshore Oil & Gas order No. 2.

Before drilling out of the surface casing, the ram-type BOP and accessory equipment will be tested to 5000/ 250 psig and the annular preventer to 3500/ 250 psig. The surface casing will be tested to 1500 psi for 30 minutes.

Before drilling out of the intermediate casing, the ram-type BOP and accessory equipment will be tested to ~~5000~~<sup>10,000</sup>/ 250 psig and the annular preventer to ~~3500~~<sup>5000</sup>/ 250 psig. The intermediate casing will be tested to 2000 psi for 30 minutes.

Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets.

A hydraulically operated choke will be installed prior to drilling out of the intermediate casing shoe.

**6. TYPES AND CHARACTERISTICS OF THE PROPOSED MUD SYSTEM:**

During this procedure we plan to use a Closed-Loop System and haul contents to the required disposal.

The applicable depths and properties of the drilling fluid systems are as follows.

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 - <del>960</del> <sup>995</sup> '	Fresh - Gel	8.6-8.8	28-34	N/c
<del>960</del> <sup>995</sup> ' - 11,100'	Brine	8.8-10.0	28-34	N/c
11,100' - 19,847' Lateral	Oil Base	10.0-14.0	58-68	3 - 6

The highest mud weight needed to balance formation is expected to be 11.5 ppg. In order to maintain hole stability, mud weights up to 14.0 ppg may be utilized.

An electronic pit volume totalizer (PVT) will be utilized on the circulating system, to monitor pit volume, flow rate, pump pressure and stroke rate.

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Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the wellsite at all times.

**7. AUXILIARY WELL CONTROL AND MONITORING EQUIPMENT:**

- (A) A kelly cock will be kept in the drill string at all times.
- (B) A full opening drill pipe-stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times.
- (C) H<sub>2</sub>S monitoring and detection equipment will be utilized from surface casing point to TD.

**8. LOGGING, TESTING AND CORING PROGRAM:**

Open-hole logs are not planned for this well.

GR-CCL Will be run in cased hole during completions phase of operations.

**9. ABNORMAL CONDITIONS, PRESSURES, TEMPERATURES AND POTENTIAL HAZARDS:**

The estimated bottom-hole temperature (BHT) at TD is 181 degrees F with an estimated maximum bottom-hole pressure (BHP) at TD of 7415 psig (based on 11.5 ppg MW). No hydrogen sulfide or other hazardous gases or fluids have been encountered, reported or are known to exist at this depth in this area. Severe loss circulation is expected from 7,300' to Intermediate casing point.

**10. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:**

The drilling operation should be finished in approximately one month. If the well is productive, an additional 60-90 days will be required for completion and testing before a decision is made to install permanent facilities.

- (A) EOG Resources requests the option to contract a Surface Rig to drill, set surface casing, and cement on the subject well. If the timing between rigs is such that EOG Resources would not be able to preset the surface, the Primary Rig will MIRU and drill the well in its entirety per the APD.

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**11. WELLHEAD:**

A multi-bowl wellhead system will be utilized.

After running the 10-3/4" surface casing, a 13-5/8" BOP/BOPE system with a minimum working pressure of ~~5000~~<sup>10,000</sup> psi will be installed on the wellhead system and will be pressure tested to 250 psi low followed by a ~~5000~~<sup>10,000</sup> psi pressure test. This pressure test will be repeated at least every 30 days, as per Onshore Order No. 2

The minimum working pressure of the BOP and related BOPE required for drilling below the surface casing shoe shall be ~~5000~~<sup>10,000</sup> psi.

The multi-bowl wellhead will be installed by vendor's representative(s). A copy of the installation instructions for the Stream Flo FBD100 Multi-Bowl WH system has been sent to the NM BLM office in Carlsbad, NM.

The wellhead will be installed by a third party welder while being monitored by WH vendor's representative.

All BOP equipment will be tested utilizing a conventional test plug. Not a cup or J-packer type.

A solid steel body pack-off will be utilized after running and cementing the intermediate casing. After installation the pack-off and lower flange will be pressure tested to 5000 psi.

Both the surface and intermediate casing strings will be tested as per Onshore Order No. 2 to at least 0.22 psi/ft or 1500 psi, whichever is greater.

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## EOG Resources Surface Casing Option Request

### 1. Request for variance for the option to preset surface casing with surface rig:

- a) EOG Requests the option to contract a Surface Rig to drill, set surface casing, and cement on the following subject wells. After WOC 8 hours or 500 psi compressive strength (whichever is greater), the Surface Rig will move off so that the wellhead can be installed. A welder will cut the casing to the proper height and weld on the wellhead (both "A" and "B" sections). The weld will be tested to 1000 psi. All valves will be closed and a wellhead cap will be installed. See attached wellhead diagram below. If the timing between rigs is such that

EOG Resources would not be able to preset surface, the Primary Rig will MIRU and drill the well in its entirety per the APD. *Primary Rig needs to move in within 90 days. BLM needs to be contacted 24 hr. before commencing spudde rig operation & also before the larger rig moves back on the pre-set location.*

#### Wellname

ANTIETAM 9 FED COM #701H  
ANTIETAM 9 FED COM #702H  
ANTIETAM 9 FED COM #703H  
ANTIETAM 9 FED COM #704H  
COLGROVE FED COM #707H  
COLGROVE FED COM #708H  
ENDURANCE 36 STATE COM #707H  
ENDURANCE 36 STATE COM #708H  
HOUND 30 FED #701H  
HOUND 30 FED #702H  
HOUND 30 FED #703H  
HOUND 30 FED #704H  
LUCKY 13 FED COM #8H  
LUCKY 13 FED COM #9H  
TRIGG 5 FED #1



# Exhibit 1

## EOG Resources

### 10M BOPE

Rig Floor

1. 13 5/8" Rotating Head
2. Hydril 13 5/8" 10,000 PSI WP GK Annular Preventor
3. 13 5/8" Cameron Type "U" 10,000 PSI WP Ram Preventors
4. 2 1/16" - 10,000 PSI WP Check Valve
5. 10,000 PSI WP - 1502 Union to kill line
6. 2 1/16" - 10,000 PSI WP Manual Valves
7. 13 5/8" 3,000 PSI WP x 13 5/8" 5,000 PSI WP Spacer Spool
8. 4 1/16" 10,000 PSI WP HCR Valve
9. 4 1/16" 10,000 PSI WP Manual Valve
10. 6" OD x 3" ID 10,000 PSI WP Steel Armoured Flex Choke Line
11. DSA - 13 5/8" 10,000 PSI WP x 13 5/8" 5,000 PSI WP
12. Mud Cross - 13 5/8" 10,000 PSI WP
13. Blind Rams
14. Pipe Rams
15. 13 5/8" Cameron Type "U" 10,000 PSI WP Pipe Rams
16. Flow Line
17. 2" Fill Line

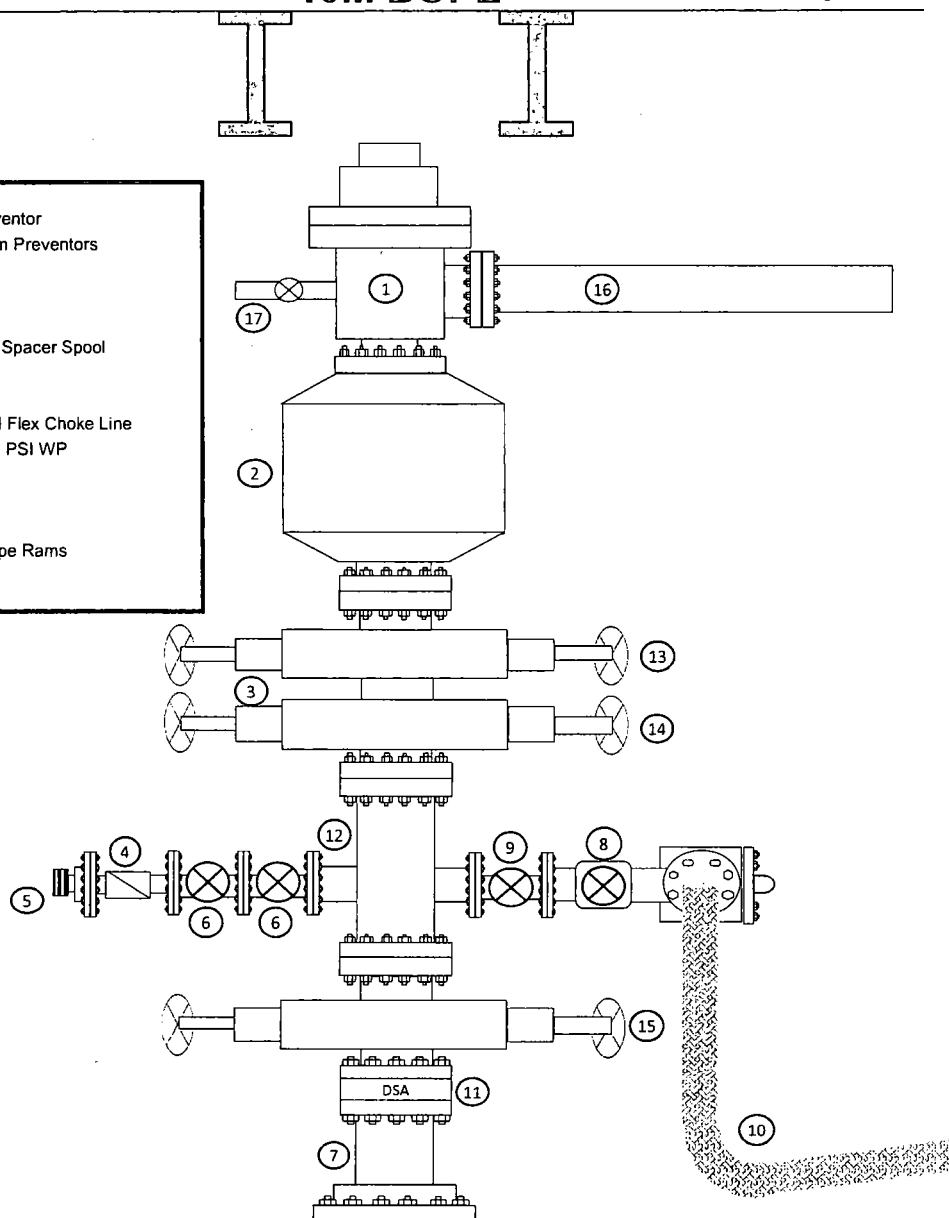
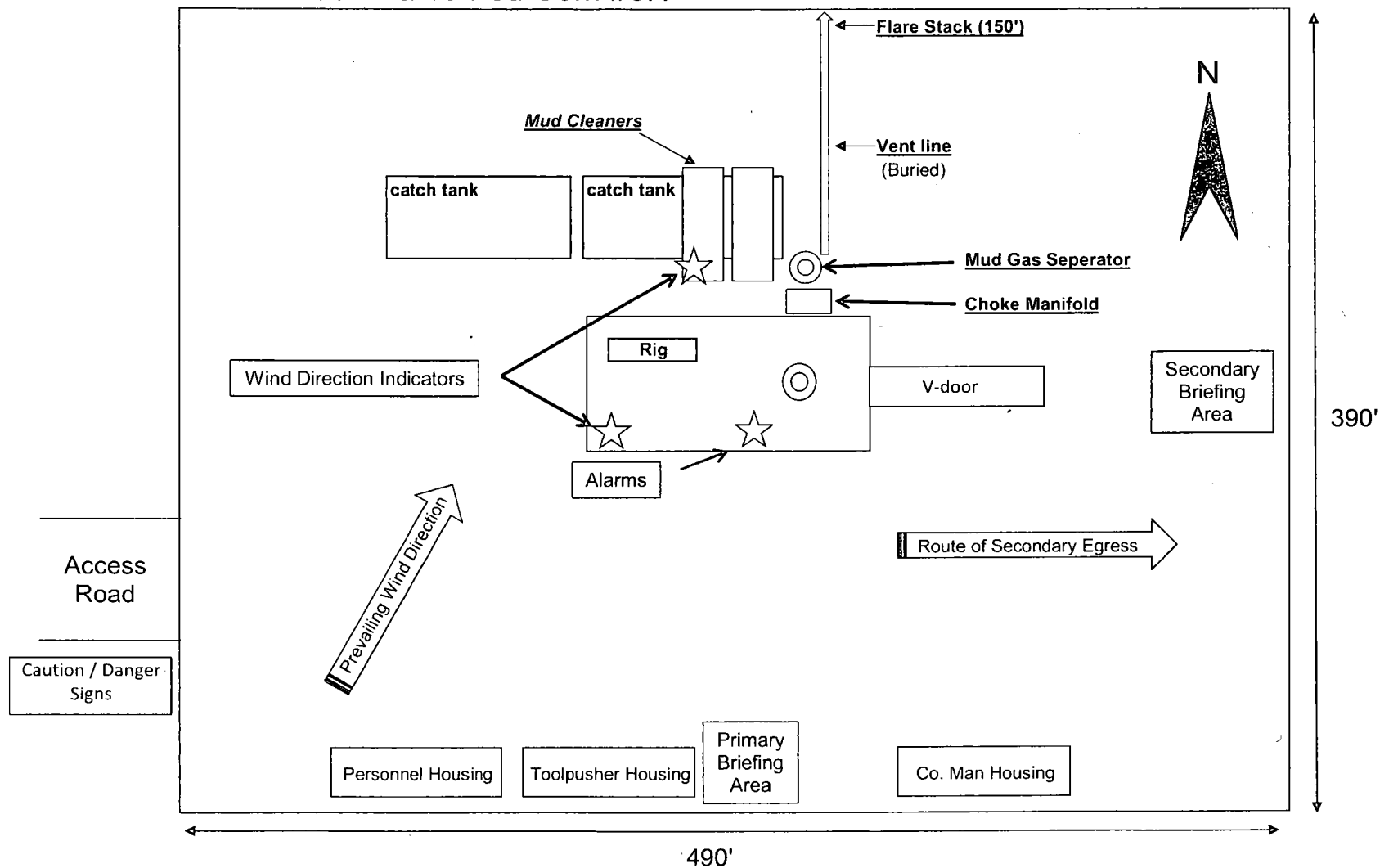


Exhibit 4

## EOG Resources

Audacious BTL 19 Fed Com #3H

## Well Site Diagram



Metal One Corp	FLUSHMAX-III Connection Data Sheet		Page	44-O
			Date	1-Oct-15
			Rev.	N-0

The diagram illustrates a pipe connection. A horizontal pipe is shown with a wavy line representing the joint. Above the pipe, a double-headed arrow indicates the 'Make up loss' length. Below the pipe, two vertical arrows point to the 'Pin critical area' on the left and the 'Box critical area' on the right.

Pipe Body	Imperial		S.I.	
Grade	P110		P110	
Pipe OD ( D )	7 5/8	in	193.68	mm
Weight	29.7	lb/ft	44.25	kg/m
Actual weight	29.0	lb/ft	43.26	kg/m
Wall thickness ( t )	0.375	in	9.53	mm
Pipe ID ( d )	6.875	in	174.63	mm
Pipe body cross section	8.537	in <sup>2</sup>	5,508	mm <sup>2</sup>
Drift Dia.	6.750	in	171.45	mm

Connection				
Box OD ( W )	7.625	in	193.68	mm
PIN ID	6.875	in	174.63	mm
Pin critical area	4.420	in <sup>2</sup>	2,852	mm <sup>2</sup>
Box critical area	4.424	in <sup>2</sup>	2,854	mm <sup>2</sup>
Joint load efficiency	60	%	60	%
Make up loss	3.040	in	77.22	mm
Thread taper	1/16 ( 3/4 in per ft )			
Number of threads	5 thread per in.			

Connection Performance Properties				
Tensile Yield load	563.4	kips	2,506	kN
M.I.Y.P.	7,574	psi	52.2	MPa
Collapse strength	5,350	psi	36.9	MPa

Note  
M.I.Y.P. = Minimum Internal Yield Pressure of the connection

Torque Recommended				
Min.	8,700	ft-lb	11,700	N-m
Opti.	9,700	ft-lb	13,100	N-m
Max.	10,700	ft-lb	14,500	N-m
Operational Max.	23,600	ft-lb	32,000	N-m

Note : Operational Max. torque can be applied for high torque application

OD	Weight	Wall Th.	Grade	API Drift	Connection
7 5/8 in.	29.70 lb/ft	0.375 in.	VM 110 HC	6.750 in.	VAM® SLIJ-II

PIPE PROPERTIES	
Nominal OD	7.625 in.
Nominal ID	6.875 in.
Nominal Cross Section Area	8.541 sqin.
Grade Type	High Collapse
Min. Yield Strength	110 ksi
Max. Yield Strength	140 ksi
Min. Ultimate Tensile Strength	125 ksi

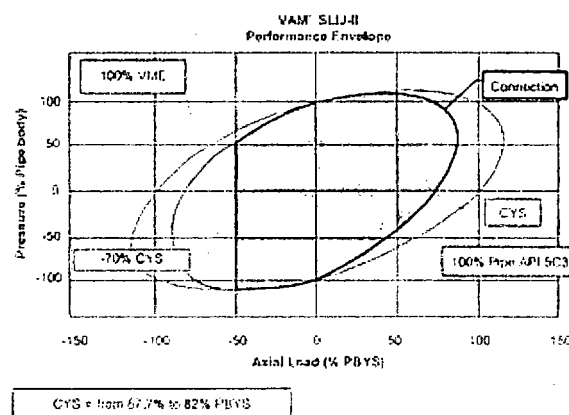
CONNECTION PROPERTIES	
Connection Type	Premium integral semi-flush
Connection OD (nom)	7.711 in.
Connection ID (nom)	6.820 in.
Make-up Loss	4.822 in.
Critical Cross Section	5.912 sqin.
Tension Efficiency	69.2 % of pipe
Compression Efficiency	48.5 % of pipe
Internal Pressure Efficiency	100 % of pipe
External Pressure Efficiency	100 % of pipe

CONNECTION PERFORMANCES	
Tensile Yield Strength	651 klb
Compression Resistance	455 klb
Internal Yield Pressure	9470 psi
Uniaxial Collapse Pressure	7890 psi
Max. Bending Capacity	TDB
Max Bending with Sealability	20 °/100 ft

FIELD TORQUE VALUES	
Min. Make-up torque	11300 ft.lb
Opti. Make-up torque	12600 ft.lb
Max. Make-up torque	13900 ft.lb

**VAM® SLIJ-II** is a semi-flush integral premium connection for all casing applications. It combines a near flush design with high performances in tension, compression and gas sealability.

VAM® SLIJ-II has been validated according to the most stringent tests protocols, and has an excellent performance history in the world's most prolific HPHT wells.



Do you need help on this product? - Remember no one knows VAM® like VAM

canada@vamfieldservice.com  
usa@vamfieldservice.com  
mexico@vamfieldservice.com  
brazil@vamfieldservice.com

uk@vamfieldservice.com  
dubai@vamfieldservice.com  
nigeria@vamfieldservice.com  
angola@vamfieldservice.com

china@vamfieldservice.com  
baku@vamfieldservice.com  
singapore@vamfieldservice.com  
australia@vamfieldservice.com

Over 140 VAM® Specialists available worldwide 24/7 for Rig Site Assistance

Other Connection Data Sheets are available at [www.vamservices.com](http://www.vamservices.com)

**Vallourec Group**



**Manufacturer: Midwest Hose & Specialty**

**Serial Number: SN#90067**

**Length: 35'**

**Size: OD = 8" ID = 4"**

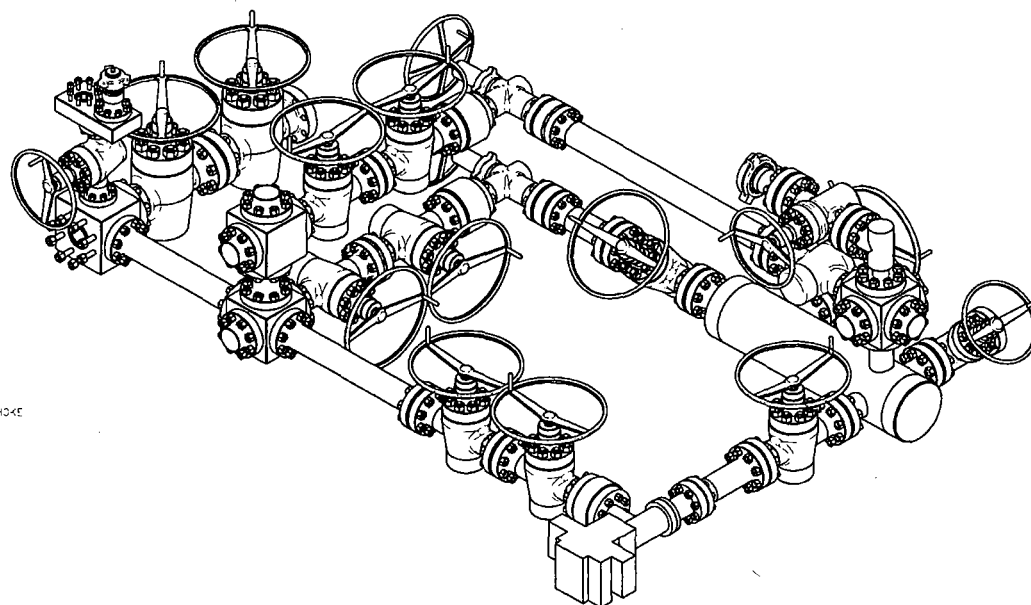
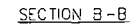
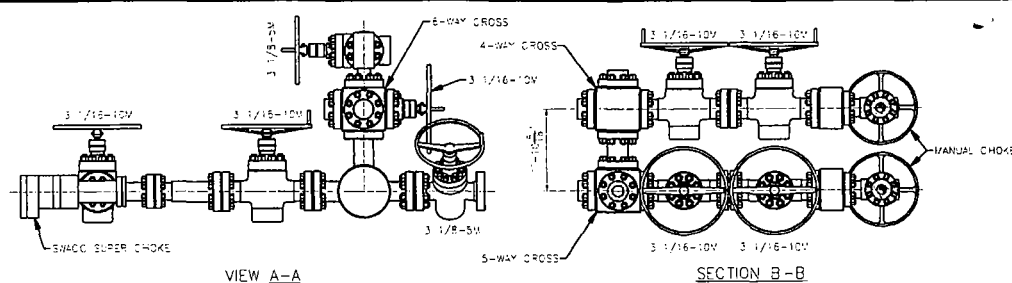
**Ends: Flanges Size: 4-1/16"**

**WP Rating: 10,000 psi    Anchors required by manufacturer: No**

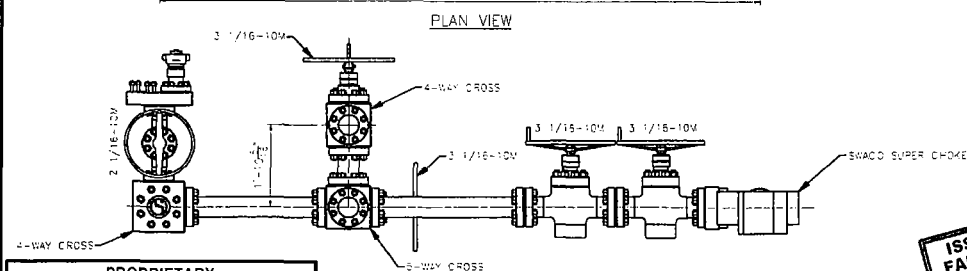
# M I D W E S T

## HOSE AND SPECIALTY INC.

INTERNAL HYDROSTATIC TEST REPORT			
Customer: CACTUS		P.O. Number: RIG #123 Asset # M10761	
HOSE SPECIFICATIONS			
Type: CHOKER LINE		Length: 35'	
I.D. 4" INCHES		O.D. 8" INCHES	
WORKING PRESSURE 10,000 PSI	TEST PRESSURE 15,000 PSI	BURST PRESSURE PSI	
COUPLINGS			
Type of End Fitting 4 1/16 10K FLANGE			
Type of Coupling: SWEDGED		MANUFACTURED BY MIDWEST HOSE & SPECIALTY	
PROCEDURE			
<i>Hose assembly pressure tested with water at ambient temperature.</i>			
TIME HELD AT TEST PRESSURE 1 MIN.		ACTUAL BURST PRESSURE: 0 PSI	
COMMENTS: SN#90067 M10761 Hose is covered with stainless steel armour cover and wrapped with fire resistant vermiculite coated fiberglass insulation rated for 1500 degrees complete with lifting eyes			
Date: 6/6/2011	Tested By: BOBBY FINK	Approved: MENDI JACKSON	




ISOMETRIC



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WRITTEN CONSENT OF A DULY AUTHORIZED OFFICER  
OF HELMERICH & PAYNE INT'L DRILLING CO

**ISSUED FOR FABRICATION**  
February-10-2014

STANDARD TOLERANCES DIMENSIONS										 HELMERICH & PAYNE INTERNATIONAL DRILLING CO.					
1. FABRICATION DIMENSIONS: 2. MACHINED DIMENSIONS:															
3/16" TO 1/2" ± .015" 1/2" TO 1" ± .010" 1" TO 2" ± .008" 2" TO 4" ± .006" 4" TO 6" ± .005" 6" TO 12" ± .004" OVER 12" ± .003" ANGULAR ± 30" RADIUS (EXPRESSED AS FRACTIONS) ± .015" LINEAR (EXPRESSED TO FOUR DECIMALS) ± .005" LINEAR (EXPRESSED TO TWO DECIMALS) ± .010" LINEAR (EXPRESSED TO THREE DECIMALS) ± .008"										TITLE:  3 CHOKE, 3 LEVEL, 10M CHOKE MANIFOLD G.A.					
CUSTOMER: H&P										PROJECT:					
DRAWN: MWL										DATE: 27-6-2014		DWG NO:		REV:	
SCALE: 3/4"=1'-0"										SHEET: 1 OF 1		HP-D1254			
#BY		DATE		DESCRIPTION				BY							



Midwest Hose  
& Specialty, Inc.

## Internal Hydrostatic Test Graph

Customer: CACTUS

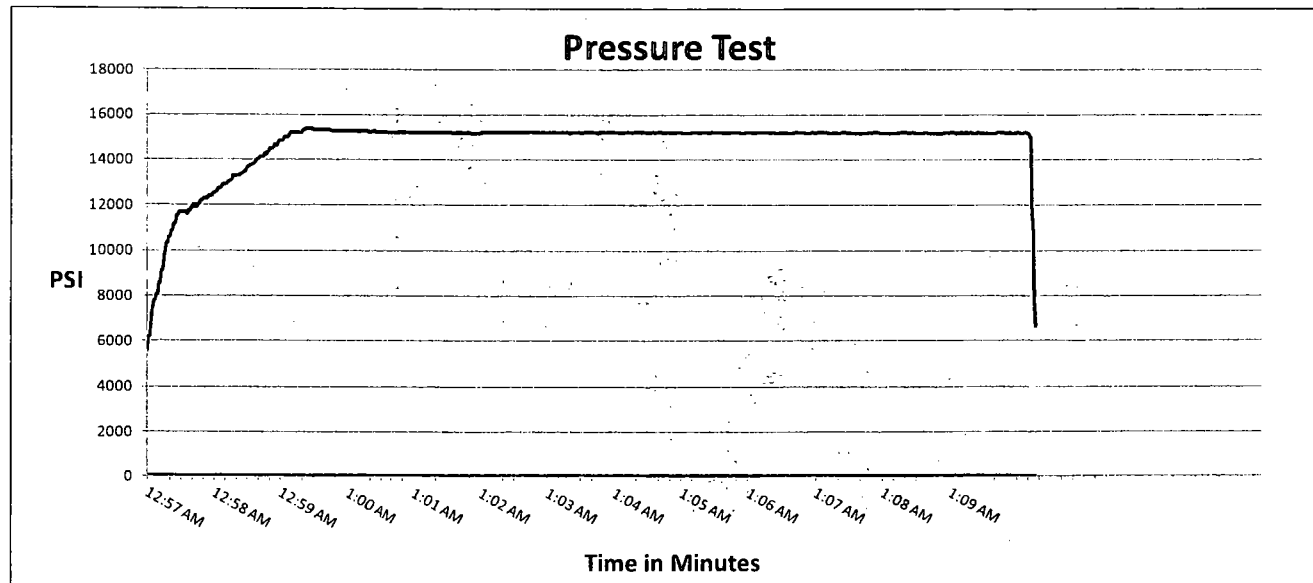
SALES ORDER# 90067

### Hose Specifications

<u>Hose Type</u>	<u>Length</u>
C & K	35'
<u>I.D.</u>	<u>O.D.</u>
4"	8"
<u>Working Pressure</u>	<u>Burst Pressure</u>
10000 PSI	Standard Safety Multiplier Applies

### Verification

<u>Type of Fitting</u>	<u>Coupling Method</u>
4 1/16 10K	Swage
<u>Die Size</u>	<u>Final O.D.</u>
6.62"	6.68"
<u>Hose Serial #</u>	<u>Hose Assembly Serial #</u>
	90067



Test Pressure  
15000 PSI

Time Held at Test Pressure  
11 1/4 Minutes

Actual Burst Pressure

Peak Pressure  
15439 PSI

**Comments:** Hose assembly pressure tested with water at ambient temperature.

**Tested By:** Bobby Fink

**Approved By:** Mendi Jackson

*Bobby Fink*

*Mendi Jackson*





U.S. Department of the Interior  
BUREAU OF LAND MANAGEMENT

## Drilling Plan Data Report

06/09/2017

APD ID: 10400009722

Submission Date: 01/25/2017

Operator Name: EOG RESOURCES INC

Well Name: AUDACIOUS BTL 19 FED COM

Well Number: 3H

Well Type: OIL WELL

Well Work Type: Drill

### Section 1 - Geologic Formations

ID: Surface formation

Name: RUSTLER

Lithology(ies):

ANHYDRITE

Elevation: 2503

True Vertical Depth: 934

Measured Depth: 934

Mineral Resource(s):

NONE

Is this a producing formation? N

ID: Formation 1

Name: TOP SALT

Lithology(ies):

SALT

Elevation: 1239

True Vertical Depth: 1264

Measured Depth: 1264

Mineral Resource(s):

NONE

Is this a producing formation? N

ID: Formation 2

Name: BASE OF SALT

Lithology(ies):

SALT

Elevation: -2191

True Vertical Depth: 4694

Measured Depth: 4694

Mineral Resource(s):

NONE

Is this a producing formation? N

**Operator Name:** EOG RESOURCES INC

**Well Name:** AUDACIOUS BTL 19 FED COM

**Well Number:** 3H

**ID:** Formation 3

**Name:** LAMAR

**Lithology(ies):**

LIMESTONE

**Elevation:** -2431

**True Vertical Depth:** 4934

**Measured Depth:** 4934

**Mineral Resource(s):**

NONE

**Is this a producing formation?** N

**ID:** Formation 4

**Name:** BELL CANYON

**Lithology(ies):**

SANDSTONE

**Elevation:** -2466

**True Vertical Depth:** 4969

**Measured Depth:** 4969

**Mineral Resource(s):**

NATURAL GAS

OIL

**Is this a producing formation?** N

**ID:** Formation 5

**Name:** CHERRY CANYON

**Lithology(ies):**

SANDSTONE

**Elevation:** -3541

**True Vertical Depth:** 6044

**Measured Depth:** 6044

**Mineral Resource(s):**

NATURAL GAS

OIL

**Is this a producing formation?** N

**ID:** Formation 6

**Name:** BRUSHY CANYON

**Lithology(ies):**

SANDSTONE

**Elevation:** -5091

**True Vertical Depth:** 7594

**Measured Depth:** 7594

**Operator Name:** EOG RESOURCES INC

**Well Name:** AUDACIOUS BTL 19 FED COM

**Well Number:** 3H

**Mineral Resource(s):**

NATURAL GAS

OIL

**Is this a producing formation?** N

**ID:** Formation 7

**Name:** BONE SPRING LIME

**Lithology(ies):**

LIMESTONE

**Elevation:** -6601

**True Vertical Depth:** 9104

**Measured Depth:** 9104

**Mineral Resource(s):**

NONE

**Is this a producing formation?** N

**ID:** Formation 8

**Name:** FIRST BONE SPRING SAND

**Lithology(ies):**

SANDSTONE

**Elevation:** -7546

**True Vertical Depth:** 10049

**Measured Depth:** 10049

**Mineral Resource(s):**

NATURAL GAS

OIL

**Is this a producing formation?** N

**ID:** Formation 9

**Name:** BONE SPRING 2ND

**Lithology(ies):**

SANDSTONE

**Elevation:** -8041

**True Vertical Depth:** 10544

**Measured Depth:** 10544

**Mineral Resource(s):**

NATURAL GAS

OIL

**Is this a producing formation?** N

**Operator Name:** EOG RESOURCES INC

**Well Name:** AUDACIOUS BTL 19 FED COM

**Well Number:** 3H

**ID:** Formation 10

**Name:** BONE SPRING 3RD

**Lithology(ies):**

SANDSTONE

**Elevation:** -9228

**True Vertical Depth:** 11731

**Measured Depth:** 11731

**Mineral Resource(s):**

NATURAL GAS

OIL

**Is this a producing formation?** N

**ID:** Formation 11

**Name:** WOLFCAMP

**Lithology(ies):**

SHALE

**Elevation:** -9670

**True Vertical Depth:** 12173

**Measured Depth:** 12173

**Mineral Resource(s):**

NATURAL GAS

OIL

**Is this a producing formation?** Y

## Section 2 - Blowout Prevention

**Pressure Rating (PSI):** 5M

**Rating Depth:** 12173

**Equipment:** The minimum blowout preventer equipment (BOPE) shown in Exhibit #1 will consist of a single ram, mud cross and double ram-type (10,000 psi WP) preventer and an annular preventer (5000-psi WP). Both units will be hydraulically operated and the ram-type will be equipped with blind rams on bottom and drill pipe rams on top. All BOPE will be tested in accordance with Onshore Oil and Gas order No. 2.

**Requesting Variance?** YES

**Variance request:** Variance is requested to use a co-flex line between the BOP and choke manifold (instead of using a 4" OD steel line). Variance is requested to wave the centralizer requirements for the 7-5/8" FJ casing in the 8-3/4" hole size. An expansion additive will be utilized, in the cement slurry, for the entire length of the 8-3/4" hole interval to maximize cement bond and zonal isolation. Variance is also requested to wave any centralizer requirements for the 5-1/2" FJ casing in the 6-3/4" hole size. An expansion additive will be utilized, in the cement slurry, for the entire length of the 6-3/4" hole interval to maximize cement bond and zonal isolation.

**Testing Procedure:** Before drilling out of the surface casing, the ram-type BOP and accessory equipment will be tested to 5000/ 250 psig and the annular preventer to 3500/ 250 psig. The surface casing will be tested to 1500 psi for 30 minutes. Before drilling out of the intermediate casing, the ram-type BOP and accessory equipment will be tested to 5000/ 250 psig and the annular preventer to 3500/ 250 psig. The intermediate casing will be tested to 2000 psi for 30 minutes. Pipe rams will be operationally checked each 24-hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. A hydraulically operated choke will be installed prior to drilling out of the intermediate casing shoe.

**Operator Name:** EOG RESOURCES INC

**Well Name:** AUDACIOUS BTL 19 FED COM

**Well Number:** 3H

**Choke Diagram Attachment:**

audacious19fedcom3H 5 M Choke Manifold Diagram (3-21-14)\_01-25-2017.pdf

**BOP Diagram Attachment:**

audacious19fedcom3H 5 M BOP Diagram (8-14-14)\_01-25-2017.pdf

---

### Section 3 - Casing

---

**String Type:** INTERMEDIATE

**Other String Type:**

**Hole Size:** 8.75

**Top setting depth MD:** 3000

**Top setting depth TVD:** 3000

**Top setting depth MSL:** -11961

**Bottom setting depth MD:** 11100

**Bottom setting depth TVD:** 11100

**Bottom setting depth MSL:** -20061

**Calculated casing length MD:** 8100

**Casing Size:** 7.625

**Other Size**

**Grade:** HCP-110

**Other Grade:**

**Weight:** 29.7

**Joint Type:** OTHER

**Other Joint Type:** Flushmax III

**Condition:** NEW

**Inspection Document:**

**Standard:** API

**Spec Document:**

**Tapered String?:** N

**Tapered String Spec:**

### Safety Factors

**Collapse Design Safety Factor:** 1.125

**Burst Design Safety Factor:** 1.25

**Joint Tensile Design Safety Factor type:** BUOYANT

**Joint Tensile Design Safety Factor:** 1.6

**Body Tensile Design Safety Factor type:** BUOYANT

**Body Tensile Design Safety Factor:** 1.6

**Casing Design Assumptions and Worksheet(s):**

Audacious BTL 19 Fed Com 3H BLM Plan\_01-25-2017.pdf

---

**Operator Name:** EOG RESOURCES INC

**Well Name:** AUDACIOUS BTL 19 FED COM

**Well Number:** 3H

**String Type:** SURFACE

**Other String Type:**

**Hole Size:** 14.75

**Top setting depth MD:** 0

**Top setting depth TVD:** 0

**Top setting depth MSL:** -8961

**Bottom setting depth MD:** 960

**Bottom setting depth TVD:** 960

**Bottom setting depth MSL:** -9921

**Calculated casing length MD:** 960

**Casing Size:** 10.75

**Other Size**

**Grade:** J-55

**Other Grade:**

**Weight:** 40.5

**Joint Type:** STC

**Other Joint Type:**

**Condition:** NEW

**Inspection Document:**

**Standard:** API

**Spec Document:**

**Tapered String?:** N

**Tapered String Spec:**

### **Safety Factors**

**Collapse Design Safety Factor:** 1.125

**Burst Design Safety Factor:** 1.25

**Joint Tensile Design Safety Factor type:** BUOYANT

**Joint Tensile Design Safety Factor:** 1.6

**Body Tensile Design Safety Factor type:** BUOYANT

**Body Tensile Design Safety Factor:** 1.6

**Casing Design Assumptions and Worksheet(s):**

Audacious BTL 19 Fed Com 3H BLM Plan\_01-25-2017.pdf

**Operator Name:** EOG RESOURCES INC

**Well Name:** AUDACIOUS BTL 19 FED COM

**Well Number:** 3H

**String Type:** INTERMEDIATE

**Other String Type:**

**Hole Size:** 9.875

**Top setting depth MD:** 0

**Top setting depth TVD:** 0

**Top setting depth MSL:** -8961

**Bottom setting depth MD:** 1000

**Bottom setting depth TVD:** 1000

**Bottom setting depth MSL:** -9961

**Calculated casing length MD:** 1000

**Casing Size:** 7.625

**Other Size**

**Grade:** HCP-110

**Other Grade:**

**Weight:** 29.7

**Joint Type:** LTC

**Other Joint Type:** Flushmax III

**Condition:** NEW

**Inspection Document:**

**Standard:** API

**Spec Document:**

**Tapered String?:** N

**Tapered String Spec:**

### **Safety Factors**

**Collapse Design Safety Factor:** 1.125

**Burst Design Safety Factor:** 1.25

**Joint Tensile Design Safety Factor type:** BUOYANT

**Joint Tensile Design Safety Factor:** 1.6

**Body Tensile Design Safety Factor type:** BUOYANT

**Body Tensile Design Safety Factor:** 1.6

**Casing Design Assumptions and Worksheet(s):**

Audacious BTL 19 Fed Com 3H BLM Plan\_01-25-2017.pdf

**Operator Name:** EOG RESOURCES INC

**Well Name:** AUDACIOUS BTL 19 FED COM

**Well Number:** 3H

**String Type:** PRODUCTION

**Other String Type:**

**Hole Size:** 6.75

**Top setting depth MD:** 0

**Top setting depth TVD:** 0

**Top setting depth MSL:** -8961

**Bottom setting depth MD:** 10600

**Bottom setting depth TVD:** 10600

**Bottom setting depth MSL:** -19561

**Calculated casing length MD:** 10600

**Casing Size:** 5.5

**Other Size**

**Grade:** OTHER

**Other Grade:** P-110EC

**Weight:** 20

**Joint Type:** OTHER

**Other Joint Type:** DWC/C-IS MS

**Condition:** NEW

**Inspection Document:**

**Standard:** API

**Spec Document:**

**Tapered String?:** N

**Tapered String Spec:**

### **Safety Factors**

**Collapse Design Safety Factor:** 1.125

**Burst Design Safety Factor:** 1.25

**Joint Tensile Design Safety Factor type:** BUOYANT

**Joint Tensile Design Safety Factor:** 1.6

**Body Tensile Design Safety Factor type:** BUOYANT

**Body Tensile Design Safety Factor:** 1.6

**Casing Design Assumptions and Worksheet(s):**

Audacious BTL 19 Fed Com 3H BLM Plan\_01-25-2017.pdf



**Operator Name:** EOG RESOURCES INC

**Well Name:** AUDACIOUS BTL 19 FED COM

**Well Number:** 3H

**String Type:** PRODUCTION

**Other String Type:**

**Hole Size:** 6.75

**Top setting depth MD:** 10600

**Top setting depth TVD:** 10600

**Top setting depth MSL:** -19561

**Bottom setting depth MD:** 19847

**Bottom setting depth TVD:** 12400

**Bottom setting depth MSL:** -21361

**Calculated casing length MD:** 9247

**Casing Size:** 5.5

**Other Size**

**Grade:** OTHER

**Other Grade:** P-110EC

**Weight:** 20

**Joint Type:** OTHER

**Other Joint Type:** VAM SFC

**Condition:** NEW

**Inspection Document:**

**Standard:** API

**Spec Document:**

**Tapered String?:** N

**Tapered String Spec:**

### **Safety Factors**

**Collapse Design Safety Factor:** 1.125

**Burst Design Safety Factor:** 1.25

**Joint Tensile Design Safety Factor type:** BUOYANT

**Joint Tensile Design Safety Factor:** 1.6

**Body Tensile Design Safety Factor type:** BUOYANT

**Body Tensile Design Safety Factor:** 1.6

**Casing Design Assumptions and Worksheet(s):**

Audacious BTL 19 Fed Com 3H BLM Plan\_01-25-2017.pdf

**Operator Name:** EOG RESOURCES INC

**Well Name:** AUDACIOUS BTL 19 FED COM

**Well Number:** 3H

**String Type:** INTERMEDIATE

**Other String Type:**

**Hole Size:** 9.875

**Top setting depth MD:** 1000

**Top setting depth TVD:** 1000

**Top setting depth MSL:** -9961

**Bottom setting depth MD:** 3000

**Bottom setting depth TVD:** 3000

**Bottom setting depth MSL:** -11961

**Calculated casing length MD:** 2000

**Casing Size:** 7.625

**Other Size**

**Grade:** OTHER

**Other Grade:** P-110EC

**Weight:** 29.7

**Joint Type:** OTHER

**Other Joint Type:** SLIJ II

**Condition:** NEW

**Inspection Document:**

**Standard:** API

**Spec Document:**

**Tapered String?:** N

**Tapered String Spec:**

### **Safety Factors**

**Collapse Design Safety Factor:** 1.125

**Burst Design Safety Factor:** 1.25

**Joint Tensile Design Safety Factor type:** BUOYANT

**Joint Tensile Design Safety Factor:** 1.6

**Body Tensile Design Safety Factor type:** BUOYANT

**Body Tensile Design Safety Factor:** 1.6

**Casing Design Assumptions and Worksheet(s):**

Audacious BTL 19 Fed Com 3H BLM Plan\_01-25-2017.pdf

---

### **Section 4 - Cement**

**Casing String Type:** INTERMEDIATE

Operator Name: EOG RESOURCES INC

Well Name: AUDACIOUS BTL 19 FED COM

Well Number: 3H

Stage Tool Depth:

Lead

Top MD of Segment: 0

Bottom MD Segment: 0

Cement Type: 0

Additives: 0

Quantity (sks): 0

Yield (cu.ff./sk): 0

Density: 0

Volume (cu.ft.): 0

Percent Excess:

Stage Tool Depth:

Lead

Top MD of Segment: 0

Bottom MD Segment: 0

Cement Type: 0

Additives: 0

Quantity (sks): 0

Yield (cu.ff./sk): 0

Density: 0

Volume (cu.ft.): 0

Percent Excess:

Casing String Type: SURFACE

Stage Tool Depth:

Lead

Top MD of Segment: 0

Bottom MD Segment: 960

Cement Type: Class C

Additives: Class C + 4.0% Bentonite +  
0.6% CD-32 + 0.5% CaCl<sub>2</sub> + 0.25 lb/sk  
Cello-Flake (TOC @ Surface)

Quantity (sks): 325

Yield (cu.ff./sk): 1.73

~~Fail~~ Density: 13.5

Volume (cu.ft.): 562

Percent Excess: 25

Top MD of Segment: 960

Bottom MD Segment: 960

Cement Type: Class C

Additives: Class C + 0.6% FL-62 +  
0.25 lb/sk Cello-Flake + 0.2% Sodium  
Metasilicate

Quantity (sks): 200

Yield (cu.ff./sk): 1.34

Density: 14.8

Volume (cu.ft.): 268

Percent Excess: 25

Casing String Type: INTERMEDIATE

Stage Tool Depth:

Lead

Top MD of Segment: 0

Bottom MD Segment: 11100

Cement Type: Class C

Additives: Class C + 5% Gypsum + 3%  
CaCl<sub>2</sub> pumped via bradenhead  
(TOC@surface)

Quantity (sks): 2250

Yield (cu.ff./sk): 1.38

~~Fail~~ Density: 14.8

Volume (cu.ft.): 3105

Percent Excess: 25

Top MD of Segment: 11100

Bottom MD Segment: 11100

Cement Type: Class H

Additives: 50:50 Class H:Poz + 0.25%  
CPT20A + 0.40% CPT49 + 0.20%

Quantity (sks): 550

Yield (cu.ff./sk): 1.2

Volume (cu.ft.): 660

Percent Excess: 25

**Operator Name:** EOG RESOURCES INC

**Well Name:** AUDACIOUS BTL 19 FED COM

**Well Number:** 3H

CPT35 + 0.80% CPT16A + 0.25%

CPT503P

**Density:** 14.4

**Percent Excess:** 25

**Casing String Type:** PRODUCTION

**Stage Tool Depth:**

Lead

**Top MD of Segment:** 10600

**Bottom MD Segment:** 19847

**Cement Type:** Class H

**Additives:** Class H + 0.1% C-20 +  
0.05% CSA-1000 + 0.20% C-49 +  
0.40% C-17 (TOC @ 10,600')

**Quantity (sks):** 1000

**Yield (cu.ff./sk):** 1.26

**Volume (cu.ft.):** 1260

**Percent Excess:** 25

**Density:** 14.1

**Stage Tool Depth:**

Lead

**Top MD of Segment:** 10600

**Bottom MD Segment:** 20185

**Cement Type:** Class H

**Additives:** Class H + 0.1% C-20 +  
0.05% CSA-1000 + 0.20% C-49 +  
0.40% C-17 (TOC @ 10,600')

**Quantity (sks):** 725

**Yield (cu.ff./sk):** 1.26

**Volume (cu.ft.):** 913

**Percent Excess:** 25

**Density:** 14.1

## Section 5 - Circulating Medium

**Mud System Type:** Closed

**Will an air or gas system be Used?** NO

**Description of the equipment for the circulating system in accordance with Onshore Order #2:**

**Diagram of the equipment for the circulating system in accordance with Onshore Order #2:**

**Describe what will be on location to control well or mitigate other conditions:** (A) A Kelly cock will be kept in the drill string at all times. (B) A full opening drill pipe-stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times. (C) H2S monitoring and detection equipment will be utilized from surface casing point to TD.

**Describe the mud monitoring system utilized:** An electronic pit volume totalizer (PVT) will be utilized on the circulating system to monitor pit volume, flow rate, pump pressure and stroke rate.

## Circulating Medium Table

**Operator Name:** EOG RESOURCES INC

**Well Name:** AUDACIOUS BTL 19 FED COM

**Well Number:** 3H

**Top Depth:** 960

**Bottom Depth:** 11100

**Mud Type:** SALT SATURATED

**Min Weight (lbs./gal.):** 8.8

**Max Weight (lbs./gal.):** 10

**Density (lbs/cu.ft.):**

**Gel Strength (lbs/100 sq.ft.):**

**PH:**

**Viscosity (CP):**

**Filtration (cc):**

**Salinity (ppm):**

**Additional Characteristics:**

---

**Top Depth:** 11100

**Bottom Depth:** 19847

**Mud Type:** OIL-BASED MUD

**Min Weight (lbs./gal.):** 10

**Max Weight (lbs./gal.):** 11.5

**Density (lbs/cu.ft.):**

**Gel Strength (lbs/100 sq.ft.):**

**PH:**

**Viscosity (CP):**

**Filtration (cc):**

**Salinity (ppm):**

**Additional Characteristics:**

---

**Top Depth:** 0

**Bottom Depth:** 960

**Mud Type:** WATER-BASED MUD

**Min Weight (lbs./gal.):** 8.6

**Max Weight (lbs./gal.):** 8.8

**Density (lbs/cu.ft.):**

**Gel Strength (lbs/100 sq.ft.):**

**PH:**

**Viscosity (CP):**

**Filtration (cc):**

**Salinity (ppm):**

**Additional Characteristics:**

---

### Section 6 - Test, Logging, Coring

**List of production tests including testing procedures, equipment and safety measures:**

Open-hole logs are not planned for this well.

**List of open and cased hole logs run in the well:**

DS

**Coring operation description for the well:**

None

**Operator Name:** EOG RESOURCES INC

**Well Name:** AUDACIOUS BTL 19 FED COM

**Well Number:** 3H

### Section 7 - Pressure

**Anticipated Bottom Hole Pressure:** 7415

**Anticipated Surface Pressure:** 4687

**Anticipated Bottom Hole Temperature(F):** 181

**Anticipated abnormal pressures, temperatures, or potential geologic hazards?** NO

**Describe:**

**Contingency Plans geohazards description:**

**Contingency Plans geohazards attachment:**

**Hydrogen Sulfide drilling operations plan required?** YES

**Hydrogen sulfide drilling operations plan:**

Audacious BTL 19 Fed Com 3H H2S Plan Summary\_01-25-2017.pdf

### Section 8 - Other Information

**Proposed horizontal/directional/multi-lateral plan submission:**

Audacious BTL Federal Com 3H Planning Report\_01-25-2017.pdf

Audacious BTL Federal Com 3H Wall Plot\_01-25-2017.pdf

**Other proposed operations facets description:**

**Other proposed operations facets attachment:**

audacious19fedcom3H 5.500in 20.00 VST P110EC DWC\_C-IS MS Spec Sheet\_01-25-2017.pdf

Audacious BTL 19 Fed Com 3H rig layout\_01-25-2017.pdf

audacious19fedcom3H 5.500in 20.00 VST P110EC VAM SFC Spec Sheet\_01-25-2017.pdf

audacious19fedcom3H 7.625in 29.70 P-110 FlushMax III Spec Sheet\_01-25-2017.pdf

audacious19fedcom3H 7.625in 29.7 P110EC VAM SLIJ-II\_01-25-2017.pdf

audacious19fedcom3H Co-Flex Hose Certification\_01-25-2017.PDF

audacious19fedcom3H Co-Flex Hose Test Chart\_01-25-2017.pdf

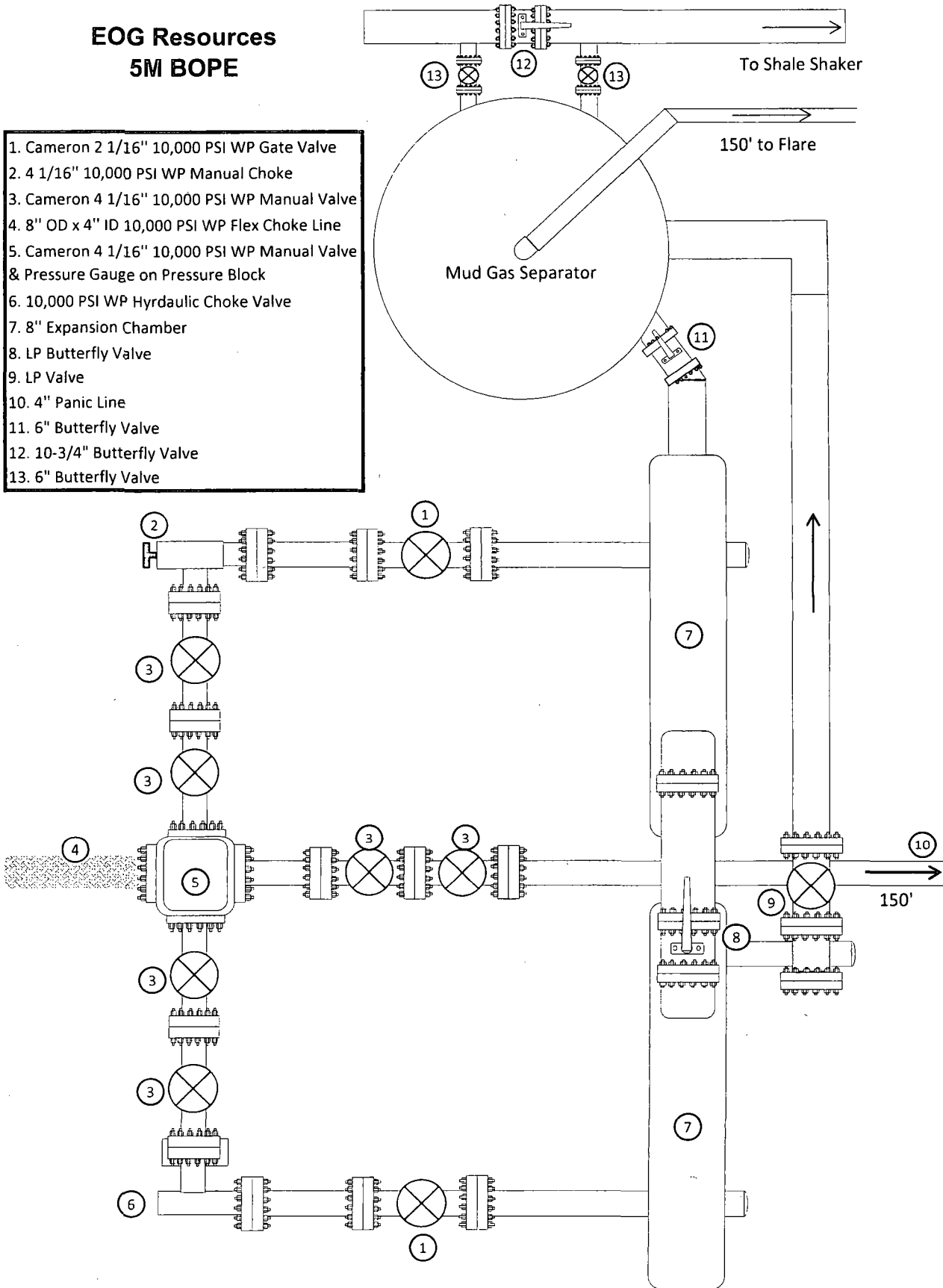
**Other Variance attachment:**

Audacious BTL 19 Fed Com 3H BLM Plan\_01-25-2017.pdf

# Exhibit 1a

## EOG Resources 5M BOPE

1. Cameron 2 1/16" 10,000 PSI WP Gate Valve
2. 4 1/16" 10,000 PSI WP Manual Choke
3. Cameron 4 1/16" 10,000 PSI WP Manual Valve
4. 8" OD x 4" ID 10,000 PSI WP Flex Choke Line
5. Cameron 4 1/16" 10,000 PSI WP Manual Valve & Pressure Gauge on Pressure Block
6. 10,000 PSI WP Hyrdraulic Choke Valve
7. 8" Expansion Chamber
8. LP Butterfly Valve
9. LP Valve
10. 4" Panic Line
11. 6" Butterfly Valve
12. 10-3/4" Butterfly Valve
13. 6" Butterfly Valve



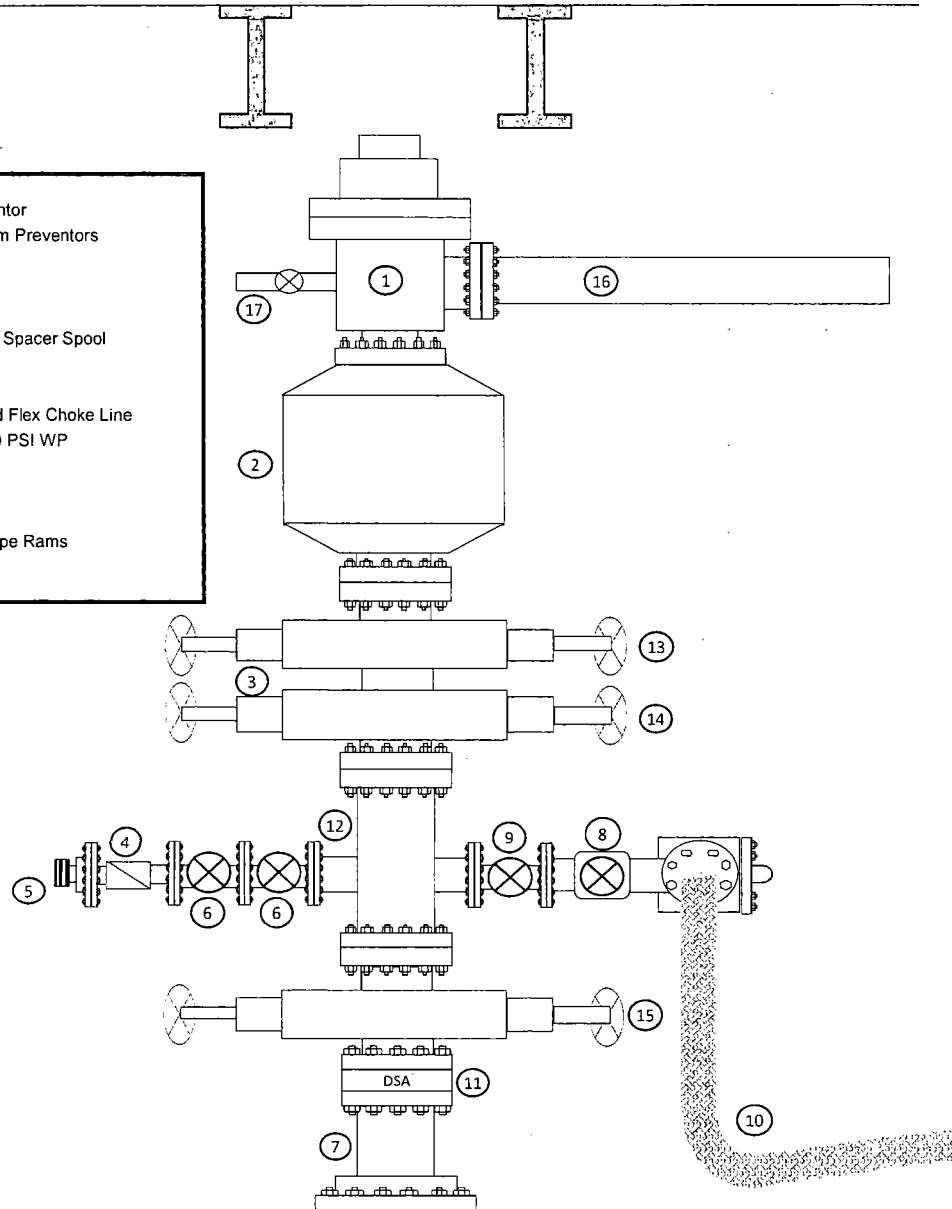
# Exhibit 1

## EOG Resources

### 5M BOPE

Rig Floor

1. 13 5/8" Rotating Head
2. NOV 13 5/8" 5,000 PSI WP GK Annular Preventor
3. 13 5/8" Cameron Type "U" 10,000 PSI WP Ram Preventors
4. 2 1/16" - 10,000 PSI WP Check Valve
5. 10,000 PSI WP - 1502 Union to kill line
6. 2 1/16" - 10,000 PSI WP Manual Valves
7. 13 5/8" 3,000 PSI WP x 13 5/8" 5,000 PSI WP Spacer Spool
8. 4 1/16" 10,000 PSI WP HCR Valve
9. 4 1/16" 10,000 PSI WP Manual Valve
10. 6" OD x 3" ID 10,000 PSI WP Steel Armoured Flex Choke Line
11. DSA - 13 5/8" 10,000 PSI WP x 13 5/8" 5,000 PSI WP
12. Mud Cross - 13 5/8" 10,000 PSI WP
13. Blind Rams
14. Pipe Rams
15. 13 5/8" Cameron Type "U" 10,000 PSI WP Pipe Rams
16. Flow Line
17. 2" Fill Line







## United States Department of the Interior

BUREAU OF LAND MANAGEMENT  
CARLSBAD FIELD OFFICE  
620 E. GREENE ST.  
CARLSBAD, NM 88220  
BLM\_NM\_CFO\_APD@BLM.GOV



In Reply To:  
3160  
[ NMNM110838 ]

03/27/2017

Attn: STAN WAGNER  
EOG RESOURCES INC  
1111 BAGBY SKY LOBBY2  
HOUSTON, TX 77002

Re: Receipt and Acceptability of Application for Permit to Drill (APD)

**FEDERAL - NMNM110838**

Well Name / Number: **AUDACIOUS BTL 19 FED COM / 3H**  
Legal Description: T25S, R33E, SEC 19, NESE  
County, State: LEA, NM  
Date APD Received: 01/25/2017

Dear Operator:

The BLM received your Application for Permit to Drill (APD), for the referenced well, on 01/25/2017. The BLM reviewed the APD package pursuant to part III.B.2 of Onshore Oil and Gas Order No.1 and it is:

1. ☒ Incomplete/Deficient (*The BLM cannot process the APD until you submit the identified items within 45 calendar days of the date of this notice or the BLM will return your APD.*)

- ☐ Well Plat
- ☐ Drilling Plan
- ☒ Surface Use Plan of Operations (SUPO)
- ☐ Certification of Private Surface Owner Access Agreement
- ☐ Bonding
- ☐ Onsite (The BLM has scheduled the onsite to be on \_\_\_\_\_)  
This requirement is exempt of the 45-day timeframe to submit deficiencies. This requirement will be satisfied on the date of the onsite.
- ☐ Other

[Please See Addendum for further clarification of deficiencies]

2. ☐ Missing Necessary Information (*The BLM can start, but cannot complete the analysis until you submit the identified items. This is an early notice and the BLM will restate this in a 30-day deferral letter, if you have not submitted the information at that time. You will have two (2) years from the date of the deferral to submit this information or the BLM will deny your APD.*)

*[Please See Addendum for further clarification of deficiencies]*

NOTE: The BLM will return your APD package to you, unless you correct all deficiencies identified above (item 1) within 45 calendar days.

- The BLM will not refund an APD processing fee or apply it to another APD for any returned APD.

**Extension Requests:**

- If you know you will not be able to meet the 45-day timeframe for reasons beyond your control, you must submit a written request through email/standard mail for extension prior to the 45<sup>th</sup> calendar day from this notice, **05/11/2017**.
- The BLM will consider the extension request if you can demonstrate your diligence (providing reasons and examples of why the delay is occurring beyond your control) in attempting to correct the deficiencies and can provide a date by which you will correct the deficiencies. If the BLM determines that the request does not warrant an extension, the BLM will return the APD as incomplete after the 45 calendar days have elapsed.
  - The BLM will determine whether to grant an extension beyond the required 45 calendar days and will document this request in the well file. If you fail to submit deficiencies by the date defined in the extension request, the BLM will return the APD.

**APDs remaining Incomplete:**

- If the APD is still not complete, the BLM will notify you and allow 10 additional business days to submit a written request to the BLM for an extension. The request must describe how you will address all outstanding deficiencies and the timeframe you request to complete the deficiencies.
  - The BLM will consider the extension request if you can prove your diligence (providing reasons and examples of why the delay is occurring) in attempting to correct the deficiencies and you can provide a date by which you will correct the deficiencies. If the BLM determines that the request does not warrant an additional extension, the BLM will return the APD as incomplete.

If you have any questions, please contact Melissa Agee at (575) 234-5937.

Sincerely,

*Cody Layton*  
*Assistant Field Manager*

cc: Official File

Surface Comments

- Plans for Surface Reclamation Deficiency:

Please provide an interim reclamation plat showing how much interim reclamation will be on this location. Please be sure to include how many feet and on what sides it will be occurring.

*Plat attached*



U.S. Department of the Interior  
BUREAU OF LAND MANAGEMENT

PWD Data Report

06/09/2017

## Section 1 - General

Would you like to address long-term produced water disposal? NO

## Section 2 - Lined Pits

Would you like to utilize Lined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Lined pit PWD on or off channel:

Lined pit PWD discharge volume (bbl/day):

Lined pit specifications:

Pit liner description:

Pit liner manufacturers information:

Precipitated solids disposal:

Describe precipitated solids disposal:

Precipitated solids disposal permit:

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule attachment:

Lined pit reclamation description:

Lined pit reclamation attachment:

Leak detection system description:

Leak detection system attachment:

Lined pit Monitor description:

Lined pit Monitor attachment:

Lined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Lined pit bond number:

Lined pit bond amount:

Additional bond information attachment:

### **Section 3 - Unlined Pits**

Would you like to utilize Unlined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit specifications:

Precipitated solids disposal:

Describe precipitated solids disposal:

Precipitated solids disposal permit:

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule attachment:

Unlined pit reclamation description:

Unlined pit reclamation attachment:

Unlined pit Monitor description:

Unlined pit Monitor attachment:

Do you propose to put the produced water to beneficial use?

Beneficial use user confirmation:

Estimated depth of the shallowest aquifer (feet):

Does the produced water have an annual average Total Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected?

TDS lab results:

Geologic and hydrologic evidence:

State authorization:

Unlined Produced Water Pit Estimated percolation:

Unlined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Unlined pit bond number:

Unlined pit bond amount:

Additional bond information attachment:

### **Section 4 - Injection**

Would you like to utilize Injection PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

Injection well type:

Injection well number:

Injection well name:

Assigned injection well API number?

Injection well API number:

Injection well new surface disturbance (acres):

Minerals protection information:

Mineral protection attachment:

Underground Injection Control (UIC) Permit?

UIC Permit attachment:

### Section 5 - Surface Discharge

Would you like to utilize Surface Discharge PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Surface discharge PWD discharge volume (bbl/day):

Surface Discharge NPDES Permit?

Surface Discharge NPDES Permit attachment:

Surface Discharge site facilities information:

Surface discharge site facilities map:

### Section 6 - Other

Would you like to utilize Other PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Other PWD discharge volume (bbl/day):

Other PWD type description:

Other PWD type attachment:

Have other regulatory requirements been met?

Other regulatory requirements attachment:



U.S. Department of the Interior  
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## Bond Info Data Report

06/09/2017

### Bond Information

Federal/Indian APD: FED

BLM Bond number: NM2308

BIA Bond number:

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

Is the reclamation bond BLM or Forest Service?

BLM reclamation bond number:

Forest Service reclamation bond number:

Forest Service reclamation bond attachment:

Reclamation bond number:

Reclamation bond amount:

Reclamation bond rider amount:

Additional reclamation bond information attachment:





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## Operator Certification Data Report

06/09/2017

### Operator Certification

*I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.*

**NAME:** Stan Wagner

**Signed on:** 01/25/2017

**Title:** Regulatory Specialsit

**Street Address:** 5509 Champions Drive

**City:** Midland

**State:** TX

**Zip:** 79702

**Phone:** (432)686-3689

**Email address:** Stan\_Wagner@eogresources.com

### Field Representative

**Representative Name:** James Barwis

**Street Address:** 5509 Champions Drive

**City:** Midland

**State:** TX

**Zip:** 79705

**Phone:** (432)425-1204

**Email address:** james\_barwis@eogresources.com



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## Application Data Report

06/09/2017

APD ID: 10400009722

Submission Date: 01/25/2017

Operator Name: EOG RESOURCES INC

Well Name: AUDACIOUS BTL 19 FED COM

Well Number: 3H

Well Type: OIL WELL

Well Work Type: Drill

### Section 1 - General

APD ID: 10400009722

Tie to previous NOS?

Submission Date: 01/25/2017

BLM Office: CARLSBAD

User: Stan Wagner

Title: Regulatory Specialist

Federal/Indian APD: FED

Is the first lease penetrated for production Federal or Indian? FED

Lease number: NMNM110838

Lease Acres: 1761.04

Surface access agreement in place?

Allotted?

Reservation:

Agreement in place? NO

Federal or Indian agreement:

Agreement number:

Agreement name:

Keep application confidential? YES

Permitting Agent? NO

APD Operator: EOG RESOURCES INC

Operator letter of designation:

Keep application confidential? YES

### Operator Info

Operator Organization Name: EOG RESOURCES INC

Operator Address: 1111 Bagby Sky Lobby2

Zip: 77002

Operator PO Box:

Operator City: Houston

State: TX

Operator Phone: (713)651-7000

Operator Internet Address:

### Section 2 - Well Information

Well in Master Development Plan? NO

Master Development Plan name:

Well in Master SUPO? NO

Master SUPO name:

Well in Master Drilling Plan? NO

Master Drilling Plan name:

Well Name: AUDACIOUS BTL 19 FED COM

Well Number: 3H

Well API Number:

Field/Pool or Exploratory? Field and Pool

Field Name: RED HILLS

Pool Name: WC-025 S253309P

**Operator Name:** EOG RESOURCES INC

**Well Name:** AUDACIOUS BTL 19 FED COM

**Well Number:** 3H

**Is the proposed well in an area containing other mineral resources?** USEABLE WATER

**Describe other minerals:**

**Is the proposed well in a Helium production area?** N

**Use Existing Well Pad?** NO

**New surface disturbance?**

**Type of Well Pad:** MULTIPLE WELL

**Multiple Well Pad Name:**

**Number:** 3H/4H/5H

**Well Class:** HORIZONTAL

AUDACIOUS BTL 19 FED COM

**Number of Legs:** 1

**Well Work Type:** Drill

**Well Type:** OIL WELL

**Describe Well Type:**

**Well sub-Type:** INFILL

**Describe sub-type:**

**Distance to town:** 40 Miles

**Distance to nearest well:** 577 FT

**Distance to lease line:** 230 FT

**Reservoir well spacing assigned acres Measurement:** 240 Acres

**Well plat:** Audacious19FedCom3H\_signed C-102\_01-25-2017.pdf

**Well work start Date:** 06/01/2017

**Duration:** 25 DAYS

### Section 3 - Well Location Table

**Survey Type:** RECTANGULAR

**Describe Survey Type:**

**Datum:** NAD83

**Vertical Datum:** NAVD88

**Survey number:**

**STATE:** NEW MEXICO

**Meridian:** NEW MEXICO PRINCIPAL **County:** LEA

**Latitude:** 32.1159505

**Longitude:** -103.6060397

**SHL**

**Elevation:** 3437

**MD:** 0

**TVD:** 0

**Leg #: 1**

**Lease Type:** FEDERAL

**Lease #:** NMNM110838

**NS-Foot:** 2590

**NS Indicator:** FSL

**EW-Foot:** 990

**EW Indicator:** FEL

**Twsp:** 25S

**Range:** 33E

**Section:** 19

**Aliquot:** NESE

**Lot:**

**Tract:**