Form 3160-3
(March 2012)

HOBBS OCD

JUN 16 2017

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FORM APPROVED
OMB No. 1004-0137
Expires October 31, 2014

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.: NMNM110838

6. If Indian, Allotee or Tribe Name:

1a. Type of work: ☑ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No.:

1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other ☑ Single Zone ☐ Multiple Zone

8. Lease Name and Well No.: AUDACIOUS BTL 19 FED COM 5H (318084)

2. Name of Operator: EOG RESOURCES INC

9. API Well No.: 30-025-43866

3a. Address: 1111 Bagby Sky Lobby2 Houston TX 77002

3b. Phone No. *(include area code)*: (713)651-7000

10. Field and Pool, or Exploratory: WC-025 G-09 S253309P; UPR WC

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*

At surface: NESE / 2589 FSL / 920 FEL / LAT 32.1159495 / LONG -103.6058136

At proposed prod. zone: SESE / 230 FSL / 330 FEL / LAT 32.0949528 / LONG -103.6039204

11. Sec., T. R. M. or Blk. and Survey or Area: SEC 19 / T25S / R33E / NMP

14. Distance in miles and direction from nearest town or post office*: 40 miles

12. County or Parish: LEA

13. State: NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any): 230 feet

16. No. of acres in lease: 1761.04

17. Spacing Unit dedicated to this well: 240

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.: 577 feet

19. Proposed Depth: 12400 feet / 19853 feet

20. BLM/BIA Bond No. on file: FED: NM2308

21. Elevations (Show whether DF, KDB, RT, GL, etc.): 3435 feet

22. Approximate date work will start*: 06/01/2017

23. Estimated duration: 25 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the BLM.

25. Signature	Name *(Printed/Typed)*	Date
(Electronic Submission)	Stan Wagner / Ph: (432)686-3689	01/25/2017

Title: Regulatory Specialsit

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
(Electronic Submission)	Cody Layton / Ph: (575)234-5959	06/08/2017

Title	Office
Supervisor Multiple Resources	CARLSBAD

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

*(Instructions on page 2)

APPROVED WITH CONDITIONS

KZ
06/16/17

* Doublesided *

KZ

INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.
AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160
PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service well or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.
ROUTINE USE: Information from the record and/or the record will be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.
EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:
The BLM collects this information to allow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

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Additional Operator Remarks

Location of Well

1. SHL: NESE / 2589 FSL / 920 FEL / TWSP: 25S / RANGE: 33E / SECTION: 19 / LAT: 32.1159495 / LONG: -103.6058136 (TVD: 0 feet, MD: 0 feet)
   PPP: NENE / 1320 FNL / 330 FEL / TWSP: 25S / RANGE: 33E / SECTION: 30 / LAT: 32.1052038 / LONG: -103.6039147 (TVD: 12356 feet, MD: 12488 feet)
   PPP: NESE / 2310 FSL / 330 FEL / TWSP: 25S / RANGE: 33E / SECTION: 19 / LAT: 32.1151824 / LONG: -103.6039192 (TVD: 12356 feet, MD: 12488 feet)
   BHL: SESE / 230 FSL / 330 FEL / TWSP: 25S / RANGE: 33E / SECTION: 30 / LAT: 32.0949528 / LONG: -103.6039204 (TVD: 12400 feet, MD: 19853 feet)

BLM Point of Contact

Name: Melissa Agee

Title: Legal Instruments Examiner

Phone: 5752345937

Email: magee@blm.gov

Review and Appeal Rights

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.

AFMSS

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

Application Data Report
06/12/2017

APD ID: 10400009723 **Submission Date:** 01/25/2017

Operator Name: EOG RESOURCES INC

Well Name: AUDACIOUS BTL 19 FED COM **Well Number:** 5H

Well Type: OIL WELL **Well Work Type:** Drill

Section 1 - General

APD ID: 10400009723 **Tie to previous NOS?** **Submission Date:** 01/25/2017

BLM Office: CARLSBAD **User:** Stan Wagner **Title:** Regulatory Specialsit

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? NO

Permitting Agent? NO **APD Operator:** EOG RESOURCES INC

Operator letter of designation:

Keep application confidential? NO

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 **Mater 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:** 5H **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:** 5H

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:** AUDACIOUS BTL 19 FED COM **Number:** 3H/4H/5H

Well Class: HORIZONTAL **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: Audacious19FedCom5H_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: 32.1159495	**Longitude:** -103.6058136	
SHL	**Elevation:** 3435	**MD:** 0	**TVD:** 0
Leg #: 1	**Lease Type:** FEDERAL	**Lease #:** NMNM110838	
	NS-Foot: 2589	**NS Indicator:** FSL	
	EW-Foot: 920	**EW Indicator:** FEL	
	Twsp: 25S	**Range:** 33E	**Section:** 19
	Aliquot: NESE	**Lot:**	**Tract:**

Operator Name: EOG RESOURCES INC

Well Name: AUDACIOUS BTL 19 FED COM **Well Number:** 5H

	STATE: NEW MEXICO	**Meridian:** NEW MEXICO PRINCIPAL	**County:** LEA
	Latitude: 32.1159477	**Longitude:** -103.6040195	
KOP	**Elevation:** -8488	**MD:** 11943	**TVD:** 11923
Leg #: 1	**Lease Type:** FEDERAL	**Lease #:** NMNM110838	
	NS-Foot: 2592	**NS Indicator:** FSL	
	EW-Foot: 364	**EW Indicator:** FEL	
	Twsp: 25S	**Range:** 33E	**Section:** 19
	Aliquot: NESE	**Lot:**	**Tract:**

	STATE: NEW MEXICO	**Meridian:** NEW MEXICO PRINCIPAL	**County:** LEA
	Latitude: 32.1052038	**Longitude:** -103.6039147	
PPP	**Elevation:** -8921	**MD:** 12488	**TVD:** 12356
Leg #: 1	**Lease Type:** FEDERAL	**Lease #:** NMNM15913	
	NS-Foot: 1320	**NS Indicator:** FNL	
	EW-Foot: 330	**EW Indicator:** FEL	
	Twsp: 25S	**Range:** 33E	**Section:** 30
	Aliquot: NENE	**Lot:**	**Tract:**

	STATE: NEW MEXICO	**Meridian:** NEW MEXICO PRINCIPAL	**County:** LEA
	Latitude: 32.1151824	**Longitude:** -103.6039192	
PPP	**Elevation:** -8921	**MD:** 12488	**TVD:** 12356
Leg #: 1	**Lease Type:** FEDERAL	**Lease #:** NMNM110838	
	NS-Foot: 2310	**NS Indicator:** FSL	
	EW-Foot: 330	**EW Indicator:** FEL	
	Twsp: 25S	**Range:** 33E	**Section:** 19
	Aliquot: NESE	**Lot:**	**Tract:**

	STATE: NEW MEXICO	**Meridian:** NEW MEXICO PRINCIPAL	**County:** LEA
	Latitude: 32.0952278	**Longitude:** -103.6039195	
EXIT	**Elevation:** -8965	**MD:** 19753	**TVD:** 12400
Leg #: 1	**Lease Type:** FEDERAL	**Lease #:** NMNM110838	
	NS-Foot: 330	**NS Indicator:** FSL	
	EW-Foot: 330	**EW Indicator:** FEL	

Operator Name: EOG RESOURCES INC

Well Name: AUDACIOUS BTL 19 FED COM **Well Number:** 5H

	Twsp: 25S	**Range:** 33E	**Section:** 30
	Aliquot: SESE	**Lot:**	**Tract:**
	STATE: NEW MEXICO	**Meridian:** NEW MEXICO PRINCIPAL	**County:** LEA
	Latitude: 32.0949528	**Longitude:** -103.6039204	
BHL	**Elevation:** -8965	**MD:** 19853	**TVD:** 12400
Leg #: 1	**Lease Type:** FEDERAL	**Lease #:** NMNM110838	
	NS-Foot: 230	**NS Indicator:** FSL	
	EW-Foot: 330	**EW Indicator:** FEL	
	Twsp: 25S	**Range:** 33E	**Section:** 30
	Aliquot: SESE	**Lot:**	**Tract:**

APD ID: 10400009723 **Submission Date:** 01/25/2017

Operator Name: EOG RESOURCES INC

Well Name: AUDACIOUS BTL 19 FED COM **Well Number:** 5H

Well Type: OIL WELL **Well Work Type:** Drill

Section 1 - Geologic Formations

ID: Surface formation **Name:** RUSTLER

Lithology(ies):

ANHYDRITE

Elevation: 2501 **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: 1237 **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: -2193 **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:** 5H

ID: Formation 3 **Name:** LAMAR

Lithology(ies):

LIMESTONE

Elevation: -2433 **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: -2468 **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: -3543 **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: -5093 **True Vertical Depth:** 7594 **Measured Depth:** 7594

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 7 **Name:** BONE SPRING LIME

Lithology(ies):

LIMESTONE

Elevation: -6603 **True Vertical Depth:** 9104 **Measured Depth:** 9104

Mineral Resource(s):

NONE

Is this a producing formation? N

ID: Formation 8 **Name:** BONE SPRING 1ST

Lithology(ies):

SANDSTONE

Elevation: -7548 **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: -8043 **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:** 5H

ID: Formation 10 **Name:** BONE SPRING 3RD

Lithology(ies):

SANDSTONE

Elevation: -9230 **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: -9672 **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:** 12400

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:** 5H

Choke Diagram Attachment:

audacious19fedcom5H_5 M Choke Manifold Diagram (3-21-14)_01-25-2017.pdf

BOP Diagram Attachment:

audacious19fedcom5H_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: -11921

Bottom setting depth MD: 11100 **Bottom setting depth TVD:** 11100

Bottom setting depth MSL: -20021

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 5H BLM Plan_01-25-2017.pdf

Operator Name: EOG RESOURCES INC

Well Name: AUDACIOUS BTL 19 FED COM **Well Number:** 5H

String Type: SURFACE **Other String Type:**

Hole Size: 14.75

Top setting depth MD: 0 **Top setting depth TVD:** 0

Top setting depth MSL: -8921

Bottom setting depth MD: 960 **Bottom setting depth TVD:** 960

Bottom setting depth MSL: -9881

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 5H BLM Plan_01-25-2017.pdf

Operator Name: EOG RESOURCES INC

Well Name: AUDACIOUS BTL 19 FED COM **Well Number:** 5H

String Type: INTERMEDIATE **Other String Type:**

Hole Size: 9.875

Top setting depth MD: 0 **Top setting depth TVD:** 0

Top setting depth MSL: -8921

Bottom setting depth MD: 1000 **Bottom setting depth TVD:** 1000

Bottom setting depth MSL: -9921

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 5H BLM Plan_01-25-2017.pdf

Operator Name: EOG RESOURCES INC

Well Name: AUDACIOUS BTL 19 FED COM **Well Number:** 5H

String Type: PRODUCTION **Other String Type:**

Hole Size: 6.75

Top setting depth MD: 0 **Top setting depth TVD:** 0

Top setting depth MSL: -8921

Bottom setting depth MD: 10600 **Bottom setting depth TVD:** 10600

Bottom setting depth MSL: -19521

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 5H BLM Plan_01-25-2017.pdf

Operator Name: EOG RESOURCES INC

Well Name: AUDACIOUS BTL 19 FED COM **Well Number:** 5H

String Type: PRODUCTION **Other String Type:**

Hole Size: 6.75

Top setting depth MD: 10600 **Top setting depth TVD:** 10600

Top setting depth MSL: -19521

Bottom setting depth MD: 19853 **Bottom setting depth TVD:** 12400

Bottom setting depth MSL: -21321

Calculated casing length MD: 9253

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 5H BLM Plan_01-25-2017.pdf

Operator Name: EOG RESOURCES INC

Well Name: AUDACIOUS BTL 19 FED COM **Well Number:** 5H

String Type: INTERMEDIATE **Other String Type:**

Hole Size: 9.875

Top setting depth MD: 1000 **Top setting depth TVD:** 1000

Top setting depth MSL: -9921

Bottom setting depth MD: 3000 **Bottom setting depth TVD:** 3000

Bottom setting depth MSL: -11921

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:** SJIJ 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 5H BLM Plan_01-25-2017.pdf

Section 4 - Cement

Casing String Type: INTERMEDIATE

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% CaCl2 + 0.25 lb/sk Cello-Flake (TOC @ Surface) **Quantity (sks):** 325 **Yield (cu.ff./sk):** 1.73
Density: 13.5 **Volume (cu.ft.):** 562 **Percent Excess:** 25

Tail

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% CaCl2 pumped via bradenhead (TOC@surface) **Quantity (sks):** 2250 **Yield (cu.ff./sk):** 1.38
Density: 14.8 **Volume (cu.ft.):** 3105 **Percent Excess:** 25

Tail

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

CPT35 + 0.80% CPT16A + 0.25% CPT503P pumped conventionally.
Density: 14.4

Percent Excess: 25

Casing String Type: PRODUCTION

Stage Tool Depth:

Lead

Top MD of Segment: 10600 **Bottom MD Segment:** 19853 **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')
Density: 14.1

Quantity (sks): 1000 **Yield (cu.ff./sk):** 1.26

Volume (cu.ft.): 1260 **Percent Excess:** 25

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')
Density: 14.1

Quantity (sks): 725 **Yield (cu.ff./sk):** 1.26

Volume (cu.ft.): 913 **Percent Excess:** 25

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:** 5H

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:** 19853

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:** 5H

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 7415 **Anticipated Surface Pressure:** 4687

Anticipated Bottom Hole Temperature(F): 181

Anticipated abnormal proessures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

Audacious BTL 19 Fed Com 5H H2S Plan Summary_01-25-2017.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Audacious BTL Federal Com 5H Planning Report_01-25-2017.pdf
Audacious BTL Federal Com 5H Wall Plot_01-25-2017.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

Auadacious19fedcom5H_Co-Flex Hose Certification_01-25-2017.PDF
Audacious BTL 19 Fed Com 5H rig layout_01-25-2017.pdf
Audacious19fedcom5H Co-Flex Hose Test Chart_01-25-2017.pdf
audacious19fedcom5H_5.500in 20.00 VST P110EC DWC_C-IS MS Spec Sheet_01-25-2017.pdf
audacious19fedcom5H_5.500in 20.00 VST P110EC VAM SFC Spec Sheet_01-25-2017.pdf
audacious19fedcom5H_7.625in 29.7 P110EC VAM SLIJ-II_01-25-2017.pdf
Audacious19fedcom5H_7.625in 29.70 P-110 FlushMax III Spec Sheet_01-25-2017.pdf

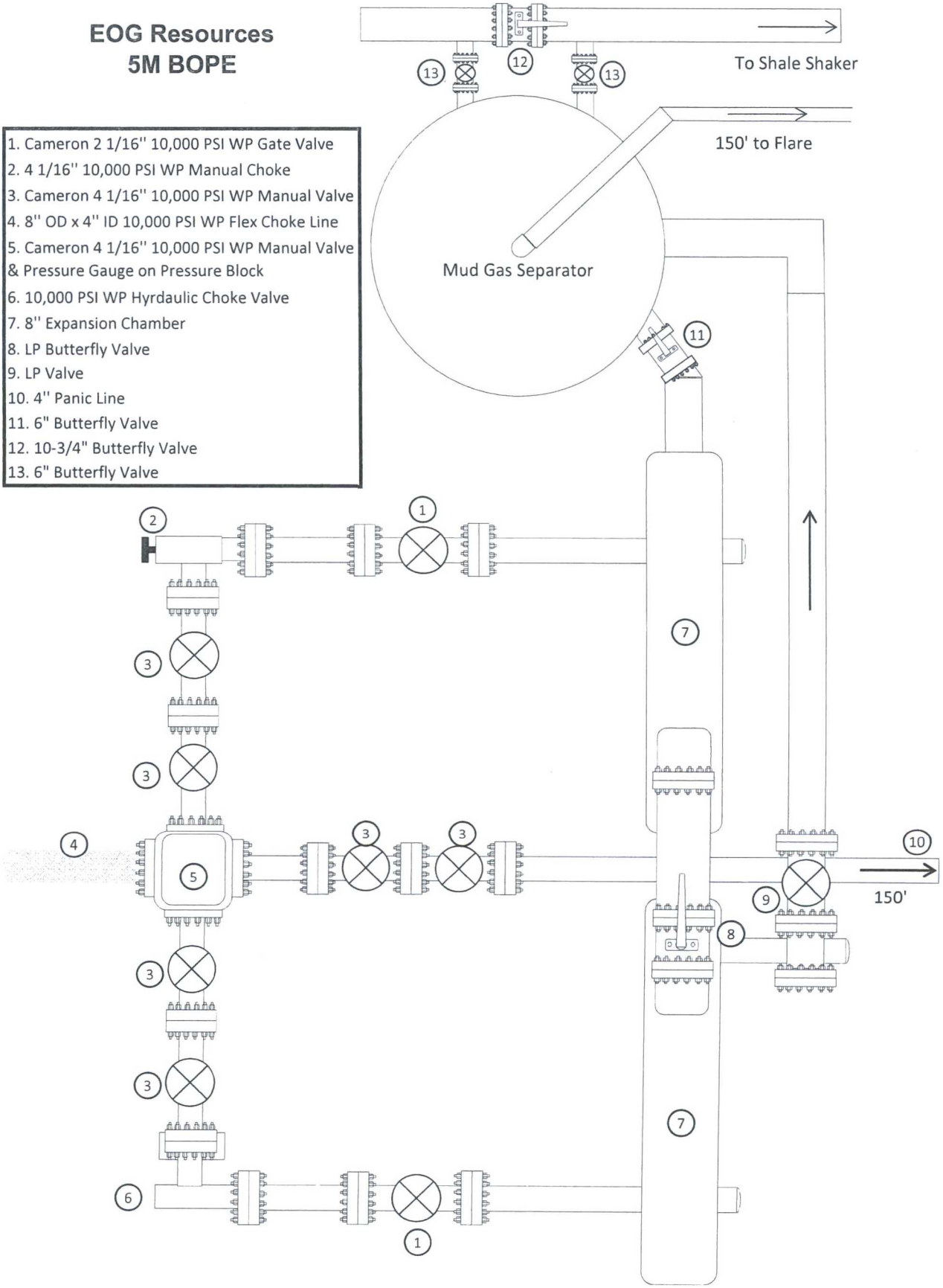
Other Variance attachment:

Audacious BTL 19 Fed Com 5H 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 Hyrdaulic 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



EOG 5M Choke Manifold Diagram (rev. 3/21/14)

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:

Decribe 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:

ADDENDUM - Incomplete/Deficient Clarifications

Surface Comments

- New and Reconstructed Roads Deficiency:
  Please provide a separate plat for the access road to be built and record the footage in the SUPO. If access road is not needed please state that in the SUPO.

- Well Site Layout Deficiency:
  Please provide the IR distances agreed upon at the onsite.

Plats attached

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:

Decribe 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:

AFMSS

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

Bond Info Data Report

06/12/2017

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:

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 spudder rig operation & also before the longer 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

BLM APD Waste Minimization Plan Checklist

Well Name: Audacious BTL 19 Fed Com 5H (APD)
Well Location: 2589' FSL & 920' FEL, NESE 19-25S-33E, Lea County

Production Facility Name: Audacious BTL 19 Fed Com Central Tank Battery
Production Facility Location: CTB Located in NE/ 4 of section 19. Gas is gathered at CTB and piped through EOG gathering system to (Lucid) Agave Energy Company gas pipeline tie-in.

Anticipated Well Completion Date: Estimated 01/01/2018

- Initial Production Volumes: Estimated ~4000 – 8000 MCFPD initial rate.

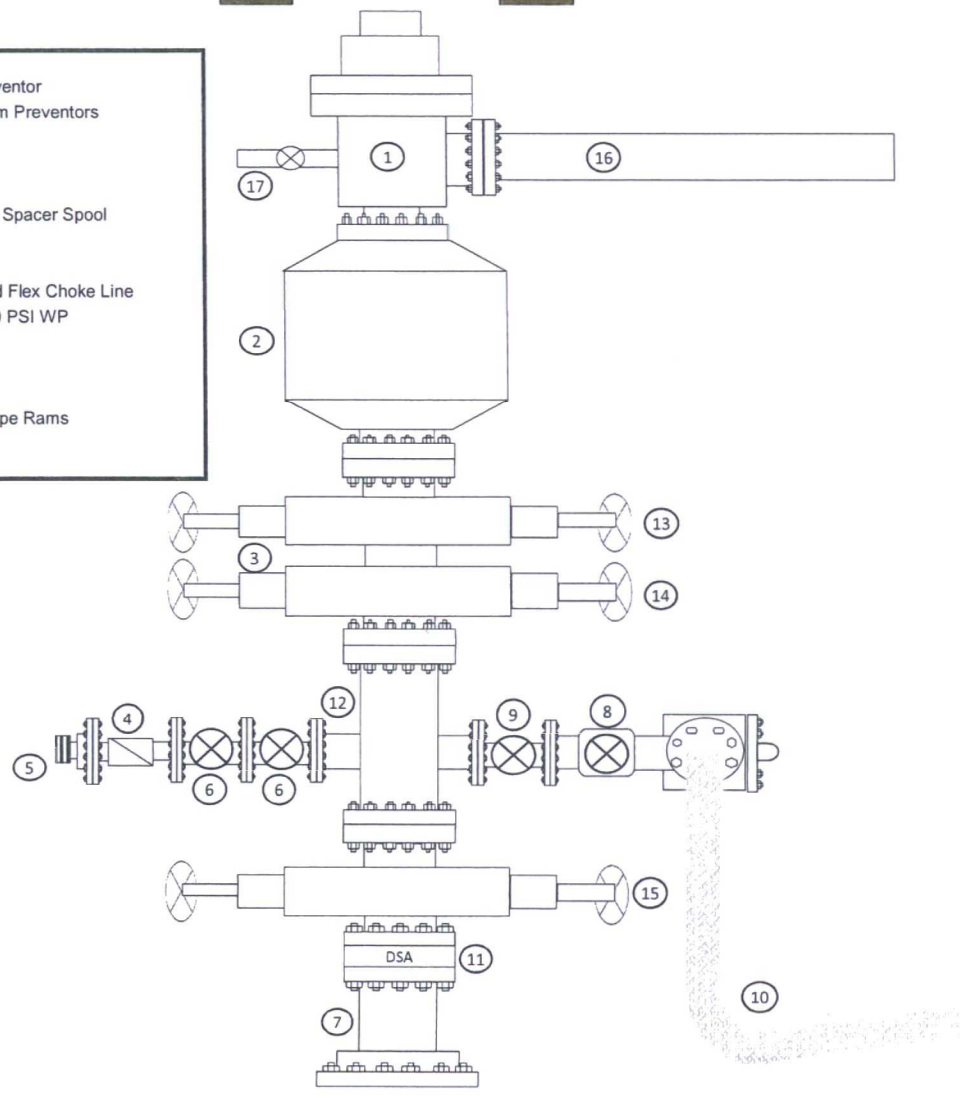
In accordance with 3162.3-1(j)(3), one or more third-party, midstream processors have been notified of our development plan. Information provided includes anticipated completion dates and gas production rates.

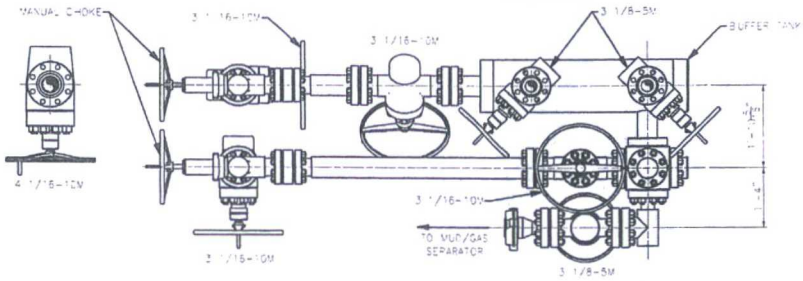
NMOCD gas capture plan attached.

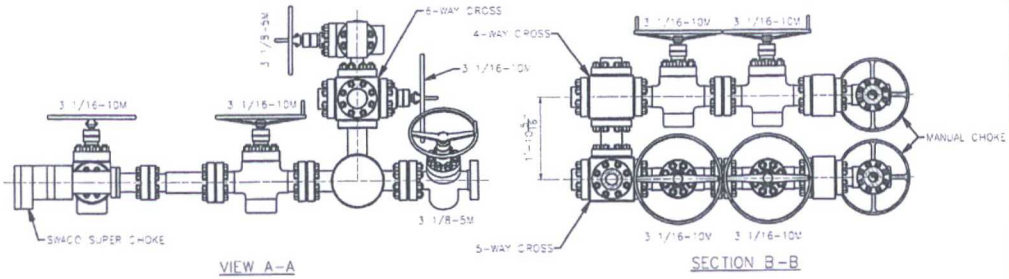
Exhibit 1
EOG Resources
10M BOPE

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

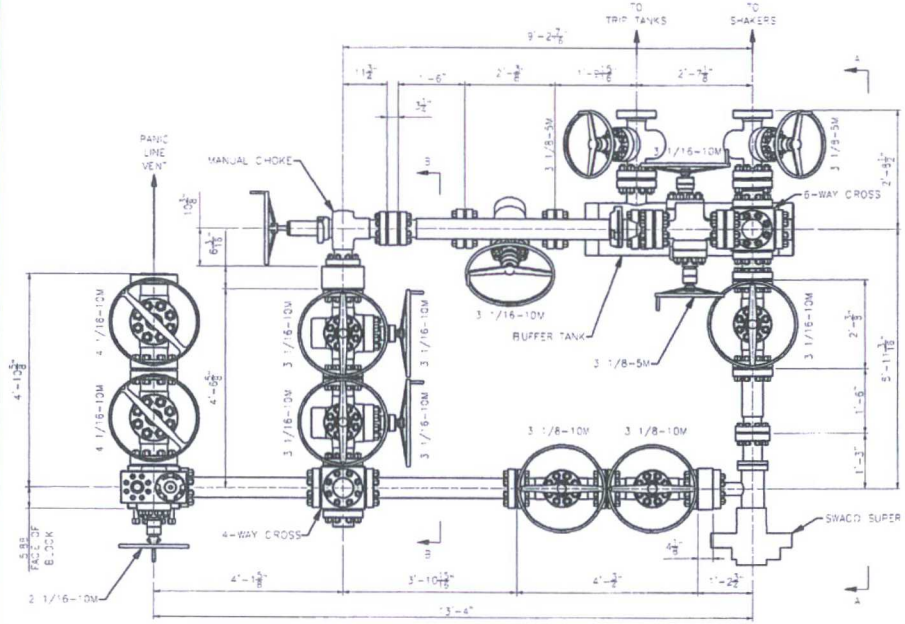




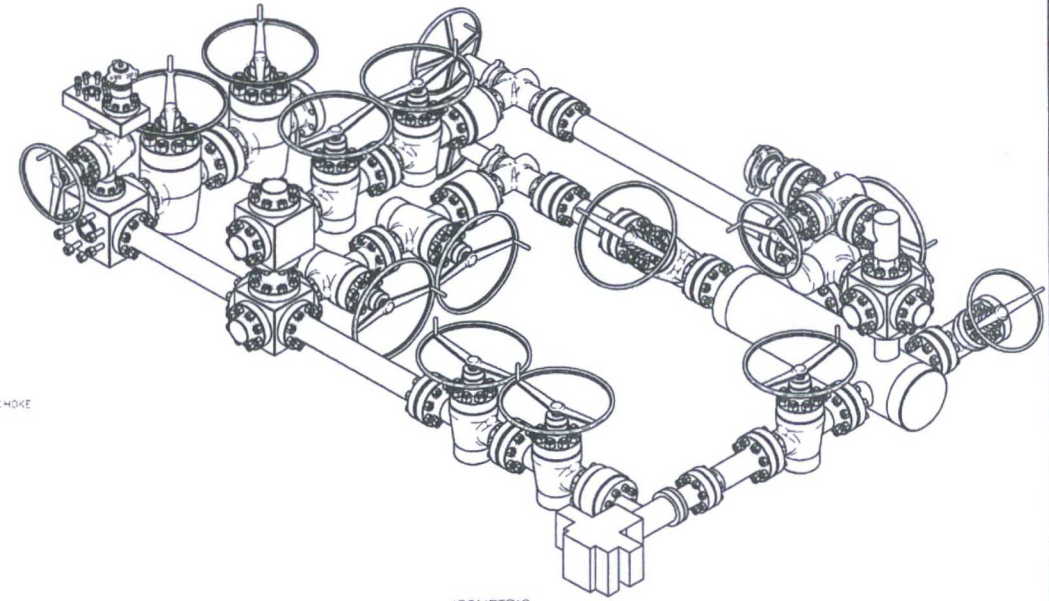


VIEW A-A

SECTION B-B



PLAN VIEW



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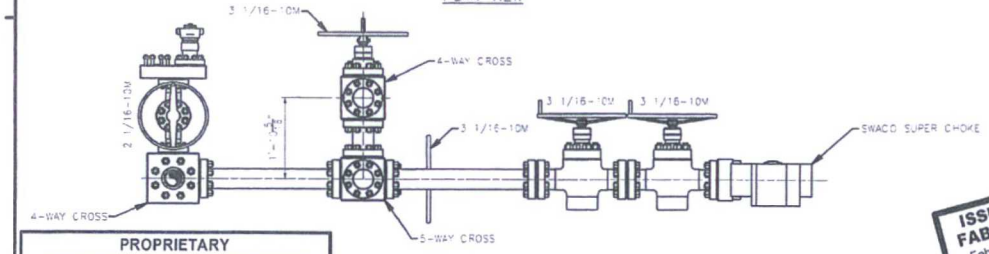

PROPRIETARY

THIS DRAWING AND THE IDEAS AND INFORMATION INCLUDED IN THIS DRAWING ARE PROPRIETARY AND ARE NOT TO BE REPRODUCED, DISTRIBUTED OR DISCLOSED IN ANY MANNER,WITHOUT THE PRIOR, WRITTEN CONSENT OF A DULY AUTHORIZED OFFICER OF HELMERICH & PAYNE INT'L DRILLING CO

ISSUED FOR FABRICATION
February-10-2014
DRAFTSMAN
ENGINEER

STANDARD TOLERANCES
(UNLESS NOTED)

1. FABRICATION DIMENSIONS:	A-0" TO 24"	± 1/16"
	B-24" TO 120"	± 1/8"
	C-OVER 120"	± 1/4"
2. MACHINED DIMENSIONS:	A-ANGULAR	± 30'
	B-LINEAR (EXPRESSED AS FRACTION)	± 0/32
	LINEAR (EXPRESSED TO ONE DECIMAL)	± .1
	LINEAR (EXPRESSED TO TWO DECIMALS)	± 015
	LINEAR (EXPRESSED TO THREE DECIMALS)	± .005

REV	DATE	DESCRIPTION	BY
-			

HELMERICH & PAYNE
INTERNATIONAL DRILLING CO.

TITLE: 3 CHOKE, 3 LEVEL, 10M CHOKE MANIFOLD G.A.

CUSTOMER: H&P

PROJECT:

DRAWN: MWL | DATE: 2/10/2014 | DWG NO.: HP-D1254 | REV: -

SCALE: 3/4"=1'-0" | SHEET: 1 OF 1

AFMSS

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

erator Certification Data Report

06/12/2017

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:** 79706

Phone: (432)425-1204

Email address: james_barwis@eogresources.com