

BOBBS OCD
JAN 09 2018
RECEIVEDUNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM118726
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator EOG RESOURCES INCORPORATED (777)		7. If Unit or CA Agreement, Name and No.
3a. Address 1111 Bagby Sky Lobby2 Houston TX 77002		8. Lease Name and Well No. ANTJETAM 9 FED COM 708H (317131)
3b. Phone No. (include area code) (713)651-7000		9. APT Well No. 30-025 44351
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface: NWNE / 220 FNL / 1965 FEL / LAT 32.1517455 / LONG -103.5751101 At proposed prod. zone: SWNE / 2410 FNL / 2577 FEL / LAT 32.1312105 / LONG -103.5774076		10. Field and Pool, or Exploratory RED HILLS / WC-025 S253509D UPPEF (98150)
11. Sec. T. R. M. or Blk. and Survey or Area SEC 9 / T25S / R33E / NMP		12. County or Parish LEA
13. State NM		14. Distance in miles and direction from nearest town or post office* 22 miles
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 330 feet		16. No. of acres in lease 1319.75
17. Spacing Unit dedicated to this well 240		18. Distance from proposed location* to nearest well, drilling, completed, 280 feet applied for, on this lease, ft.
19. Proposed Depth 12345 feet / 19803 feet		20. BLM/BIA Bond No. on file FED: NM2308
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3427 feet		22. Approximate date work will start* 01/01/2018
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:

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

25. Signature (Electronic Submission)	Name (Printed/Typed) Stan Wagner / Ph: (432)686-3689	Date 08/25/2017
Title Regulatory Specialist		
Approved by (Signature) (Electronic Submission)	Name (Printed/Typed) Cody Layton / Ph: (575)234-5959	Date 01/04/2018
Title 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
Approval Date: 01/04/2018K2
01/10/18
Requires NGL order
from Santa Fe
Doubt
8/1/2018



U.S. Department of the Interior
Bureau of Land Management

Application for Permit to Drill

APD Package Report

Date Printed: 01/04/2018 12:22 PM

APD ID: 10400019662

Well Status: AAPD

APD Received Date: 08/25/2017 11:54 AM

Well Name: ANTIETAM 9 FED COM

Operator: EOG RESOURCES INCORPORATED

Well Number: 708H

APD Package Report Contents

- Form 3160-3
- Operator Certification Report
- Application Report
- Application Attachments
 - Well Plat: 1 file(s)
- Drilling Plan Report
- Drilling Plan Attachments
 - Blowout Prevention Choke Diagram Attachment: 3 file(s)
 - Blowout Prevention BOP Diagram Attachment: 1 file(s)
 - Casing Taperd String Specs: 5 file(s)
 - Casing Design Assumptions and Worksheet(s): 3 file(s)
 - Hydrogen sulfide drilling operations plan: 1 file(s)
 - Proposed horizontal/directional/multi-lateral plan submission: 2 file(s)
 - Other Facets: 4 file(s)
- SUPO Report
- SUPO Attachments
 - Existing Road Map: 1 file(s)
 - Attach Well map: 1 file(s)
 - Production Facilities map: 1 file(s)
 - Water source and transportation map: 1 file(s)
 - Construction Materials source location attachment: 1 file(s)
 - Well Site Layout Diagram: 3 file(s)
 - Recontouring attachment: 1 file(s)
 - Other SUPO Attachment: 2 file(s)
- PWD Report
- PWD Attachments
 - None

HOBBS OCD
JAN 09 2017
RECEIVED



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

Application Data Report

01/04/2018

APD ID: 10400019662

Submission Date: 08/25/2017

Highlighted data
reflects the most
recent changes

Operator Name: EOG RESOURCES INCORPORATED

Well Name: ANTIETAM 9 FED COM

Well Number: 708H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - General

APD ID: 10400019662

Tie to previous NOS?

Submission Date: 08/25/2017

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: NMNM118726

Lease Acres: 1319.75

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 INCORPORATED

Operator letter of designation:

Operator Info

Operator Organization Name: EOG RESOURCES INCORPORATED

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: ANTIETAM 9 FED COM

Well Number: 708H

Well API Number:

Field/Pool or Exploratory? Field and Pool

Field Name: RED HILLS

Pool Name: WC-025 S253509D
UPPER WC

Is the proposed well in an area containing other mineral resources? NATURAL GAS,OIL

Operator Name: EOG RESOURCES INCORPORATED

Well Name: ANTIETAM 9 FED COM

Well Number: 708H

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: 708H/709H710H

Well Class: HORIZONTAL

ANTIETAM 9 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: 22 Miles

Distance to nearest well: 280 FT

Distance to lease line: 330 FT

Reservoir well spacing assigned acres Measurement: 240 Acres

Well plat: Antietam_9_Fed_Com_708H_signed_C_102_08-25-2017.pdf

Well work start Date: 01/01/2018

Duration: 25 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83

Vertical Datum: NAVD88

Survey number:

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
SHL Leg #1	220	FNL	196 5	FEL	25S	33E	9	Aliquot NWNE	32.15174 55	- 103.5751 101	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 118726	342 7	0	0
KOP Leg #1	56	FNL	254 6	FEL	25S	33E	9	Aliquot NWNE	32.15220 77	- 103.5769 828	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 118726	- 843 1	118 82	118 58
PPP Leg #1	330	FNL	258 1	FEL	25S	33E	9	Aliquot NWNE	32.15144 51	- 103.5771 007	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 118726	- 887 4	124 36	123 01



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

Drilling Plan Data Report

01/04/2018

APD ID: 10400019662

Submission Date: 08/25/2017

Highlighted data
reflects the most
recent changes

Operator Name: EOG RESOURCES INCORPORATED

Well Name: ANTIETAM 9 FED COM

Well Number: 708H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
1	PERMIAN	3427	0	0	ALLUVIUM	NONE	No
2	RUSTLER	2365	1075	1075	ANHYDRITE	NONE	No
3	TOP SALT	1943	1497	1497	SALT	NONE	No
4	BASE OF SALT	-1259	4699	4699	SALT	NONE	No
5	LAMAR	-1553	4993	4993	LIMESTONE	NONE	No
6	BELL CANYON	-1589	5029	5029	SANDSTONE	NATURAL GAS,OIL	No
7	CHERRY CANYON	-2646	6086	6086	SANDSTONE	NATURAL GAS,OIL	No
8	BRUSHY CANYON	-4143	7583	7583	SANDSTONE	NATURAL GAS,OIL	No
9	BONE SPRING LIME	-5748	9188	9188	LIMESTONE	NONE	No
10	FIRST BONE SPRING SAND	-6643	10083	10083	SANDSTONE	NATURAL GAS,OIL	No
11	BONE SPRING 2ND	-7394	10834	10834	SANDSTONE	NATURAL GAS,OIL	No
12	BONE SPRING 3RD	-8405	11845	11845	SANDSTONE	NATURAL GAS,OIL	No
13	WOLFCAMP	-8863	12303	12303	SHALE	NATURAL GAS,OIL	Yes

Section 2 - Blowout Prevention

Operator Name: EOG RESOURCES INCORPORATED

Well Name: ANTIETAM 9 FED COM

Well Number: 708H

Pressure Rating (PSI): 10M

Rating Depth: 12345

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 (10,000-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 5000/ 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 5000/ 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.

Choke Diagram Attachment:

Antietam_9_FC_708H_10_M_Choke_Manifold_08-17-2017.pdf

Antietam_9_FC_708H_Co_Flex_Hose_Certification_08-17-2017.PDF

Antietam_9_FC_708H_Co_Flex_Hose_Chart_08-17-2017.pdf

BOP Diagram Attachment:

Antietam_9_FC_708H_10_M_BOP_Diagram_08-17-2017.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	INTERMEDIATE	9.875	7.625	NEW	API	Y	0	1000	0	1000	3427	2427	1000	HCP-110	29.7	LTC	1.125	1.25	BUOY	1.6	BUOY	1.6
2	SURFACE	14.75	10.75	NEW	API	N	0	1100	0	1100	3427	2825	1100	J-55	40.5	STC	1.125	1.25	BUOY	1.6	BUOY	1.6
3	PRODUCTION	6.75	5.5	NEW	API	Y	0	10900	0	10900	3427	-7473	10900	OTHER	20	OTHER - DW/C-C-15 MS	1.125	1.25	BUOY	1.6	BUOY	1.6

Operator Name: EOG RESOURCES INCORPORATED

Well Name: ANTIETAM 9 FED COM

Well Number: 708H

Casing Attachments

Casing ID: 1 **String Type:** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

See_previously_attached_Drill_Plan_08-17-2017.pdf

Casing Design Assumptions and Worksheet(s):

See_previously_attached_Drill_Plan_08-17-2017.pdf

Casing ID: 2 **String Type:** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Antietam_9_FC_708H_BLM_Plan_08-17-2017.pdf

Casing ID: 3 **String Type:** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

See_previously_attached_Drill_Plan_08-17-2017.pdf

See_previously_attached_Drill_Plan_08-17-2017.pdf

Antietam_9_FC_708H_5.5in_20.00_VST_P110EC_VAM_SFC_08-17-2017.pdf

Antietam_9_FC_708H_5.5in_20.00_VST_P110EC_VAM_SFC_08-17-2017.pdf

Casing Design Assumptions and Worksheet(s):

See_previously_attached_Drill_Plan_08-17-2017.pdf

Operator Name: EOG RESOURCES INCORPORATED

Well Name: ANTIETAM 9 FED COM

Well Number: 708H

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	1100	520	1.73	13.5	899	25	Class C	Class C + 4.0% Bentonite + 0.6% CD-32 + 0.5% CaCl ₂ + 0.25 lb/sk Cello-Flake (TOC @ Surface)
SURFACE	Tail		1100	1100	200	1.34	14.8	268	25	Class C	Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate
INTERMEDIATE	Lead		0	1140 0	2250	1.38	14.8	3105	25	Class C	Class C + 5% Gypsum + 3% CaCl ₂ pumped via bradenhead (TOC@surface)
INTERMEDIATE	Tail		1140 0	1140 0	550	1.2	14.4	660	25	Class H	50:50 Class H:Poz + 0.25% CPT20A + 0.40% CPT49 + 0.20% CPT35 + 0.80% CPT16A + 0.25% CPT503P pumped conventionally
PRODUCTION	Lead		1090 0	1980 3	850	1.26	14.1	1071	25	Class H	Class H + 0.1% C-20 + 0.05% CSA-1000 + 0.20% C-49 + 0.40% C-17 (TOC @ 10,900')

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 INCORPORATED

Well Name: ANTIETAM 9 FED COM

Well Number: 708H

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
1100	1140 0	SALT SATURATED	8.8	10							
1140 0	1234 5	OIL-BASED MUD	10	14							
0	1100	WATER-BASED MUD	8.6	8.8							

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

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 7382

Anticipated Surface Pressure: 4666.1

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:

Antietam_9_FC_708H_H2S_Plan_Summary_08-17-2017.pdf

Operator Name: EOG RESOURCES INCORPORATED

Well Name: ANTJETAM 9 FED COM

Well Number: 708H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Antietam_9_Fed_Com_708H_Planning_Report_08-17-2017.pdf

Antietam_9_Fed_Com_708H_Wall_Plot_08-17-2017.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

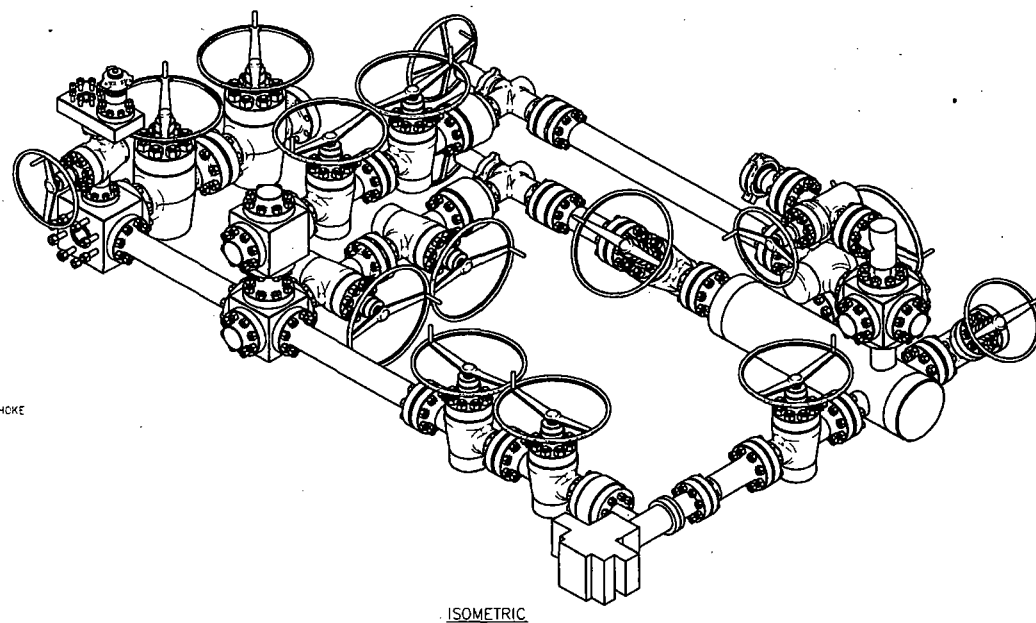
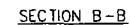
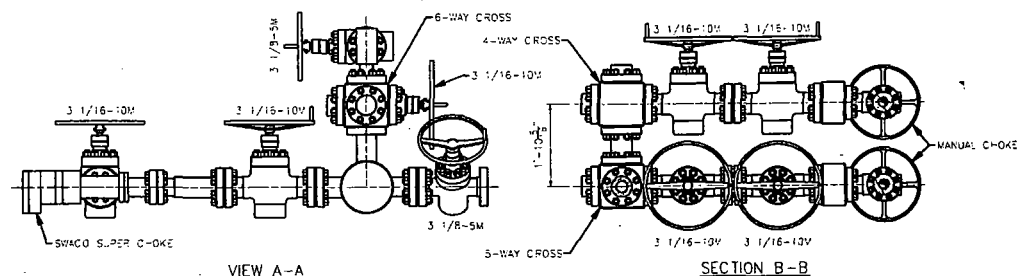
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Antietam_9_FC_708H_Wellbore_08-17-2017.pdf

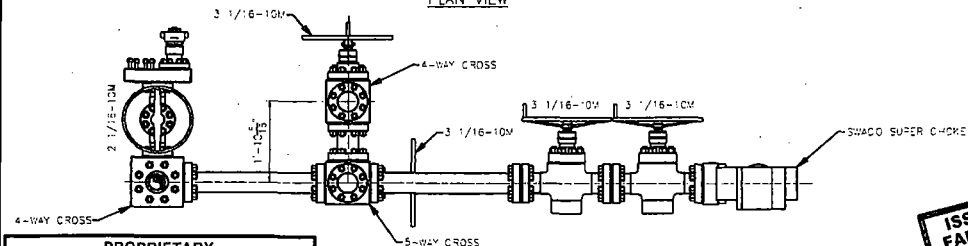
Antietam_9_FC_708H_Wellhead_Cap_08-17-2017.pdf

Antietam_9_Fed_Com_708H_gas_capture_08-17-2017.pdf

Other Variance attachment:



ISOMETRIC



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 KELMERIC & PAYNE INT'L DRILLING CO.

ISSUED FOR FABRICATION
February-10-2014
DRAFTSMAN *MW*
ENGINEER *BL*

STANDARD TOLERANCES UNLESS OTHERWISE SPECIFIED		 HELMERICH & PAYNE INTERNATIONAL DRILLING CO.
1. FABRICATION DIMENSIONS	AS FOLLOWS: 0-3/4" TO 12" ± .010" 12" TO 24" ± .015" 24" TO 48" ± .020" 48" TO 96" ± .030" 96" TO 192" ± .040" 192" TO 384" ± .050" 384" TO 768" ± .060" 768" TO 1536" ± .070" 1536" TO 3072" ± .080" 3072" TO 6144" ± .090" 6144" TO 12288 ± .100" 12288" TO 24576 ± .120" 24576" TO 49152 ± .150" 49152" TO 98304 ± .200" 98304" TO 196608 ± .250" 196608" TO 393216 ± .300" 393216" TO 786432 ± .350" 786432" TO 1572864 ± .400" 1572864" TO 3145728 ± .450" 3145728" TO 6291456 ± .500" 6291456" TO 12582912 ± .550" 12582912" TO 25165824 ± .600" 25165824" TO 50331648 ± .650" 50331648" TO 100663296 ± .700" 100663296" TO 201326592 ± .750" 201326592" TO 402653184 ± .800" 402653184" TO 805306368 ± .850" 805306368" TO 1610612736 ± .900" 1610612736" TO 3221225472 ± .950" 3221225472" TO 6442450944 ± 1.000"	
2. MACHINED DIMENSIONS	AS FOLLOWS: 0-3/4" TO 12" ± .005" 12" TO 24" ± .007" 24" TO 48" ± .010" 48" TO 96" ± .013" 96" TO 192" ± .016" 192" TO 384" ± .020" 384" TO 768" ± .025" 768" TO 1536" ± .030" 1536" TO 3072" ± .035" 3072" TO 6144" ± .040" 6144" TO 12288 ± .045" 12288" TO 24576 ± .050" 24576" TO 49152 ± .055" 49152" TO 98304 ± .060" 98304" TO 196608 ± .065" 196608" TO 393216 ± .070" 393216" TO 786432 ± .075" 786432" TO 1572864 ± .080" 1572864" TO 3145728 ± .085" 3145728" TO 6291456 ± .090" 6291456" TO 12582912 ± .095" 12582912" TO 25165824 ± .100" 25165824" TO 50331648 ± .105" 50331648" TO 100663296 ± .110" 100663296" TO 201326592 ± .115" 201326592" TO 402653184 ± .120" 402653184" TO 805306368 ± .125" 805306368" TO 1610612736 ± .130" 1610612736" TO 3221225472 ± .135" 3221225472" TO 6442450944 ± .140" 6442450944" TO 12884901888 ± .145" 12884901888" TO 25769803776 ± .150" 25769803776" TO 51539607552 ± .155" 51539607552" TO 103079215104 ± .160" 103079215104" TO 206158430208 ± .165" 206158430208" TO 412316860416 ± .170" 412316860416" TO 824633720832 ± .175" 824633720832" TO 1649267441664 ± .180" 1649267441664" TO 3298534883328 ± .185" 3298534883328" TO 6597069766656 ± .190" 6597069766656" TO 13194139533312 ± .195" 13194139533312" TO 26388279066624 ± .200"	

Type: CHOKER LINE		Length: 35'	
I.D. 4" INCHES		O.D. 8" INCHES	
WORKING PRESSURE	TEST PRESSURE	BURST PRESSURE	
10,000 PSI	15,000 PSI	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		ACTUAL BURST PRESSURE:	
1 MIN.		0 PSI	
COMMENTS: SN#90087 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	



Midwest Hose
& Specialty, Inc.

Internal Hydrostatic Test Graph

Customer: CACTUS

SALES ORDER# 90067

Hose Specifications

Hose Type

C & K

I.D.

4"

Working Pressure

10000 PSI

Length

35'

O.D.

8"

Burst Pressure

Standard Safety Multiplier Applies

Verification

Type of Fitting

4 1/16 10K

Die Size

6.62"

Hose Serial

Coupling Method

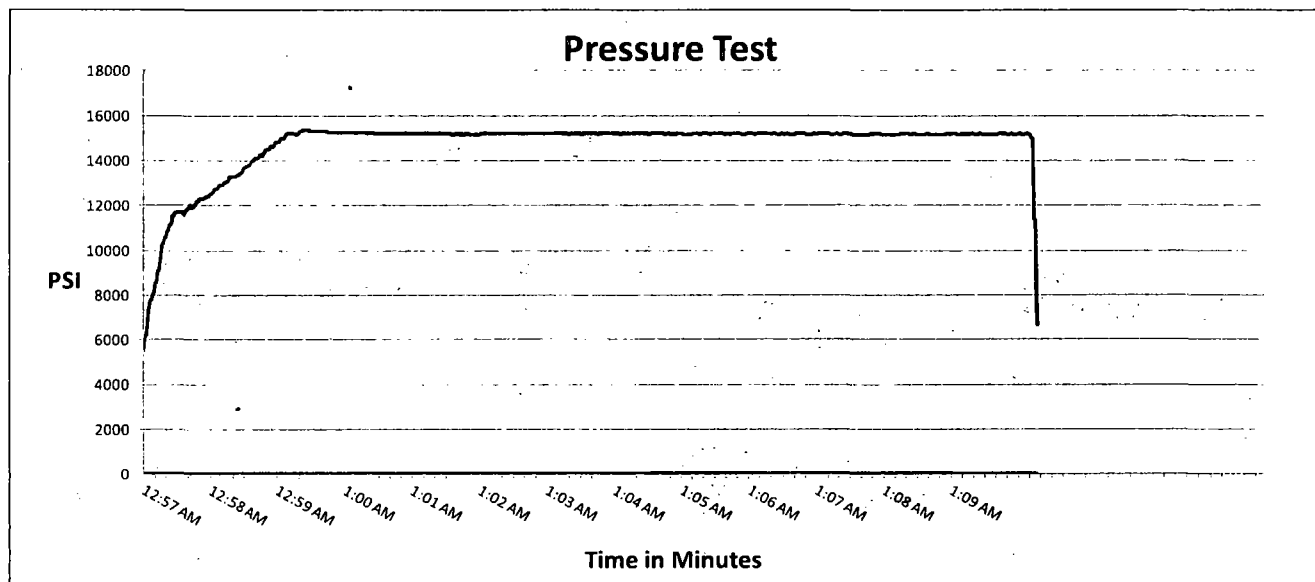
Swage

Final O.D.

6.68"

Hose Assembly Serial

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

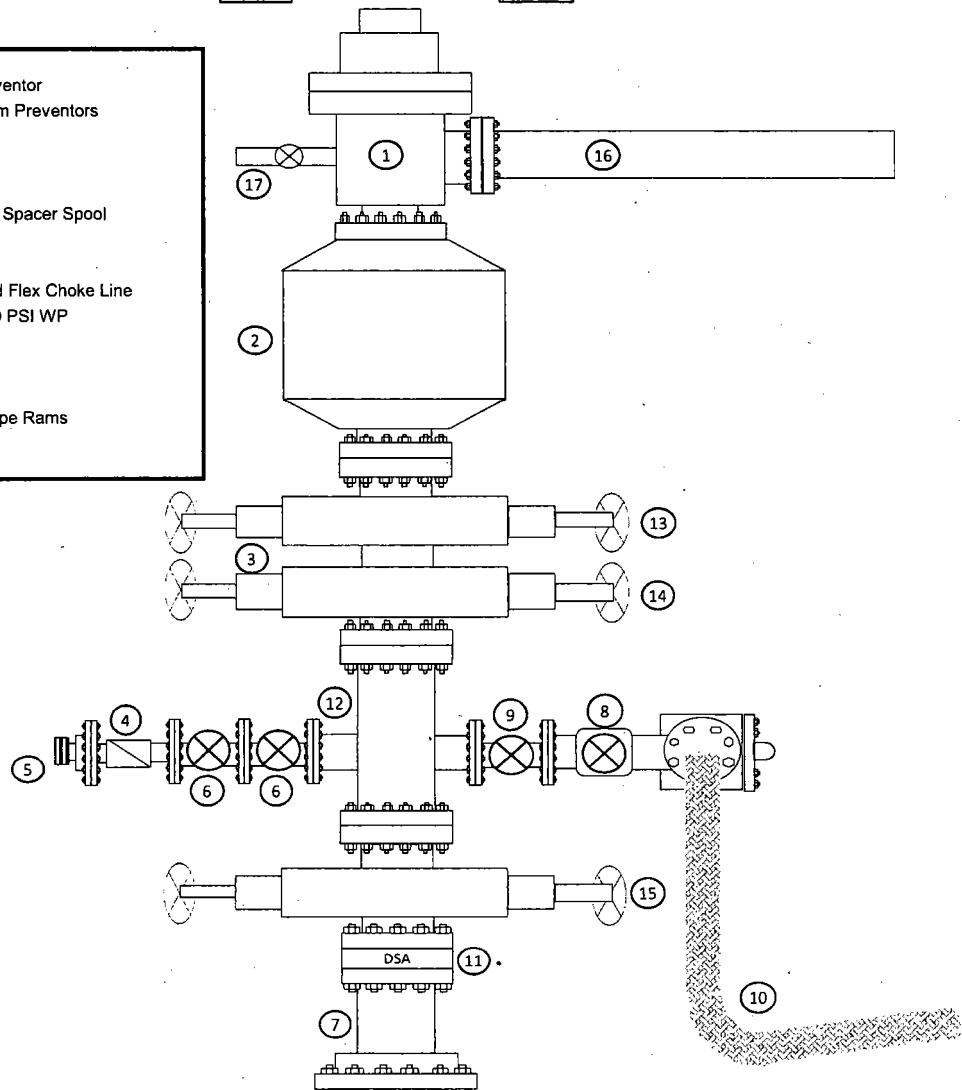
Exhibit 1

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



EOG RESOURCES, INC.
ANTIETAM 9 FED COM NO. 708H

1. GEOLOGIC NAME OF SURFACE FORMATION:

Permian

2. ESTIMATED TOPS OF IMPORTANT GEOLOGICAL MARKERS:

Rustler	1,075'
Top of Salt	1,497'
Base of Salt / Top Anhydrite	4,699'
Base Anhydrite	4,993'
Lamar	4,993'
Bell Canyon	5,029'
Cherry Canyon	6,086'
Brushy Canyon	7,583'
Bone Spring Lime	9,188'
1 st Bone Spring Sand	10,083'
2 nd Bone Spring Shale	10,332'
2 nd Bone Spring Sand	10,834'
3 rd Bone Spring Carb	11,213'
3 rd Bone Spring Sand	11,845'
Wolfcamp	12,303'
TD	12,345'

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

Upper Permian Sands	0- 400'	Fresh Water
Cherry Canyon	6,086'	Oil
Brushy Canyon	7,583'	Oil
1 st Bone Spring Sand	10,083'	Oil
2 nd Bone Spring Shale	10,332'	Oil
2 nd Bone Spring Sand	10,834'	Oil
3 rd Bone Spring Carb	11,213'	Oil
3 rd Bone Spring Sand	11,845'	Oil
Wolfcamp	12,303'	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 1,100' and circulating cement back to surface.

EOG RESOURCES, INC.
ANTIETAM 9 FED COM NO. 708H

4. CASING PROGRAM - NEW

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DF _{min} Collapse	DF _{min} Burst	DF _{min} Tension
14.75"	0 – 1,100'	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' – 11,400'	7.625"	29.7#	HCP-110	FlushMax III	1.125	1.25	1.60
6.75"	0' – 10,900'	5.5"	20#	P-110EC	DWC/C-IS MS	1.125	1.25	1.60
6.75"	10,900'-19,803'	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 ³ /ft	Mix Water Gal/sk	Slurry Description
10-3/4" 1,100'	520	13.5	1.73	9.13	Class C + 4.0% Bentonite + 0.6% CD-32 + 0.5% CaCl ₂ + 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" 11,400'	250	14.8	1.38	6.48	Class C + 5% Gypsum + 3% CaCl ₂ pumped via Bradenhead (TOC @ Surface)
	2000	14.8	1.38	6.48	Class C + 5% Gypsum + 3% CaCl ₂ 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" 19,803'	850	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 @ 10,900')

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.

EOG RESOURCES, INC.
ANTIETAM 9 FED COM NO. 708H

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 (10,000-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 10,000/ 250 psig and the annular preventer to 5,000/ 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 10,000/ 250 psig and the annular preventer to 5000/ 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 – 1,100'	Fresh - Gel	8.6-8.8	28-34	N/c
1,100' – 11,400'	Brine	8.8-10.0	28-34	N/c
11,400' – 19,803' 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.

EOG RESOURCES, INC.
ANTIETAM 9 FED COM NO. 708H

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) H₂S 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 7382 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.

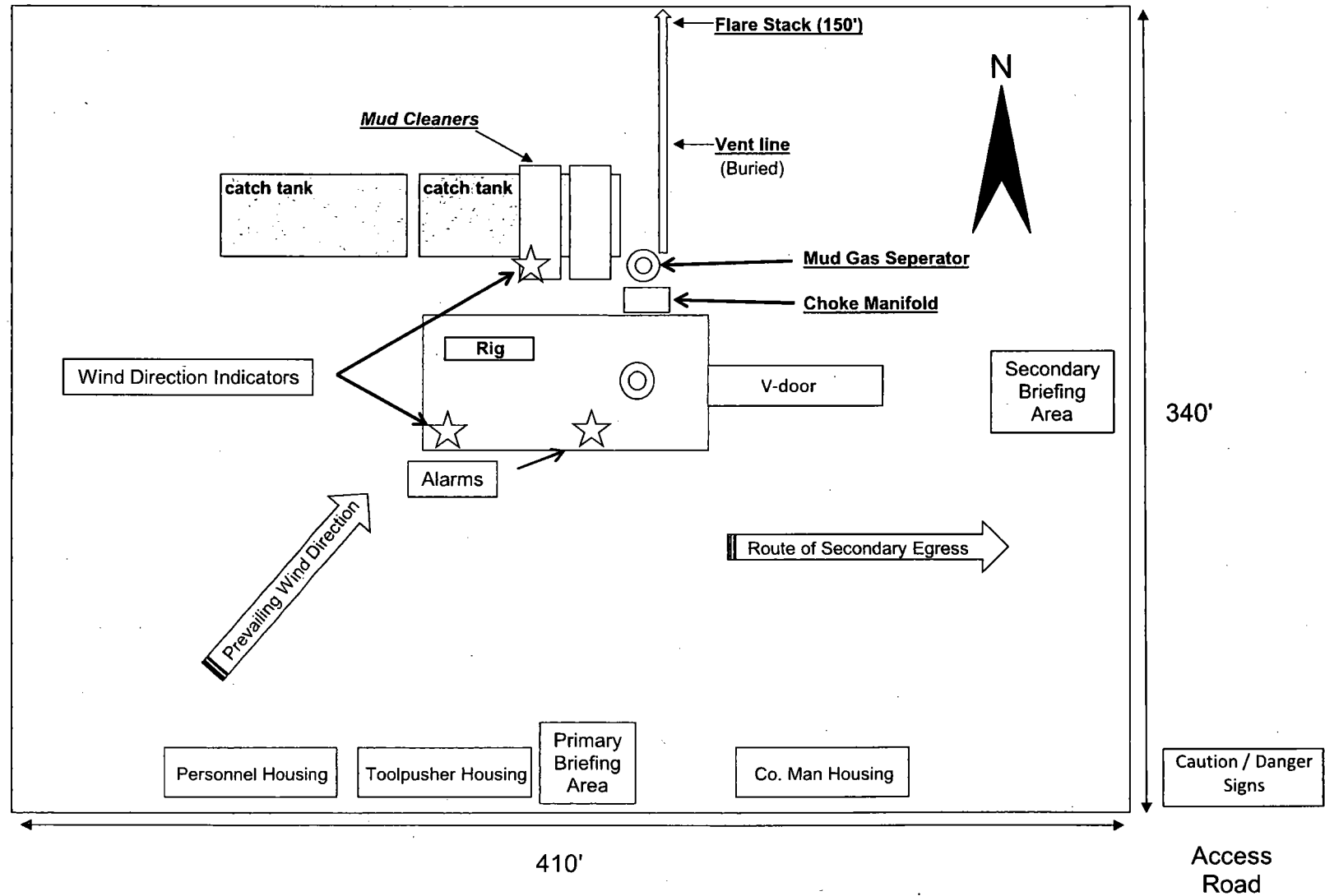
10. ANTICIPATED STARTING DATE AND DURATION OF OPERATIONS:

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. After WOC 8 hours or 500 psi compressive strength (whichever is greater), the Surface Rig will move off so 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 (diagram attached). 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.

Exhibit 4
EOG Resources
Antietam 9 Fed Com #708H

Well Site Diagram



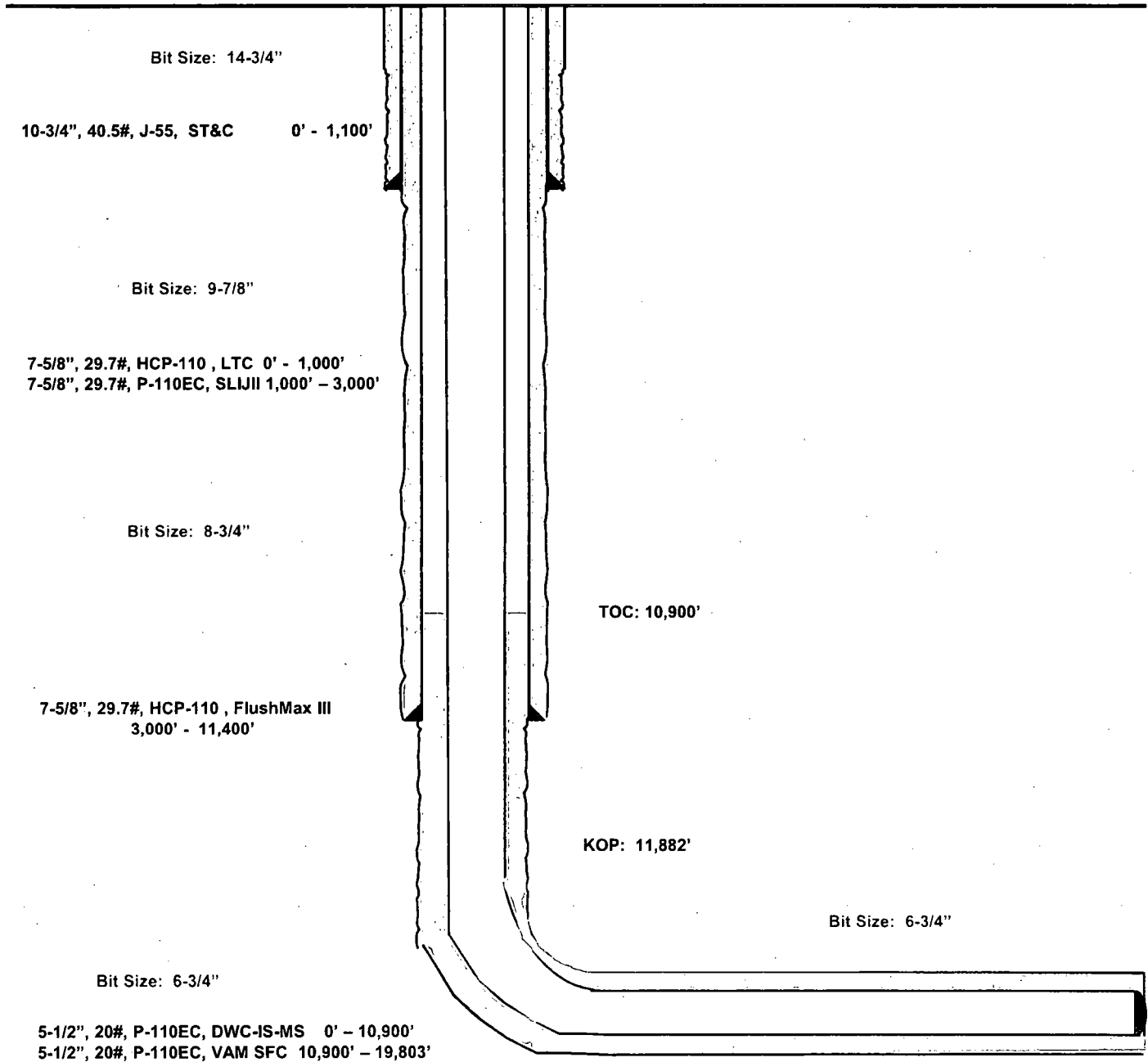
Antietam 9 Fed Com #708H

**Lea County, New Mexico
Proposed Wellbore**

**220' FNL
1965' FEL
Section 9
T-25-S, R-33-E**

API: 30-025-*****

**KB: 3,452'
GL: 3,427'**



**Lateral: 19,803' MD, 12,345' TVD
Upper Most Perf:
330' FNL & 2581' FEL Sec. 9
Lower Most Perf:
2310' FNL & 2577' FWL Sec. 16
BH Location: 2410' FNL & 2577' FWL
Section 16
T-25-S, R-33-E**



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

SUPO Data Report

01/04/2018

APD ID: 10400019662

Submission Date: 08/25/2017

Highlighted data
reflects the most
recent changes

Operator Name: EOG RESOURCES INCORPORATED

Well Name: ANTIETAM 9 FED COM

Well Number: 708H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

ANTIETAM9FEDCOM708H_vicinity_08-21-2017.pdf

Existing Road Purpose: ACCESS,FLUID TRANSPORT

Row(s) Exist? NO

ROW ID(s)

ID:

Do the existing roads need to be improved? NO

Existing Road Improvement Description:

Existing Road Improvement Attachment:

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? NO

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

ANTIETAM9FEDCOM708H_radius_08-21-2017.pdf

Operator Name: EOG RESOURCES INCORPORATED

Well Name: ANTIETAM 9 FED COM

Well Number: 708H

Existing Wells description:

Section 4 - Location of Existing and/or Proposed Production Facilities

Submit or defer a Proposed Production Facilities plan? SUBMIT

Production Facilities description: Antietam 9 Fed Com central battery is located in the NE/4 of section 9

Production Facilities map:

ANTIETAM9FEDCOM_infrastructure_08-21-2017.pdf

Section 5 - Location and Types of Water Supply

Water Source Table

Water source use type: OTHER

Water source type: RECYCLED

Describe type:

Source latitude:

Source longitude:

Source datum:

Water source permit type: WATER RIGHT

Source land ownership: FEDERAL

Water source transport method: PIPELINE,TRUCKING

Source transportation land ownership: FEDERAL

Water source volume (barrels): 0

Source volume (acre-feet): 0

Source volume (gal): 0

Water source and transportation map:

Antietam_9_Fed_Com_water_and_caliche_Map__08-21-2017.pdf

Water source comments:

New water well? NO

New Water Well Info

Well latitude:

Well Longitude:

Well datum:

Well target aquifer:

Est. depth to top of aquifer(ft):

Est thickness of aquifer:

Aquifer comments:

Aquifer documentation:

Well depth (ft):

Well casing type:

Operator Name: EOG RESOURCES INCORPORATED

Well Name: ANTIETAM 9 FED COM

Well Number: 708H

Well casing outside diameter (in.):

Well casing inside diameter (in.):

New water well casing?

Used casing source:

Drilling method:

Drill material:

Grout material:

Grout depth:

Casing length (ft.):

Casing top depth (ft.):

Well Production type:

Completion Method:

Water well additional information:

State appropriation permit:

Additional information attachment:

Section 6 - Construction Materials

Construction Materials description: Caliche will be supplied from pits shown on the attached caliche source map. Caliche utilized for the drilling pad will be obtained either from an existing approved mineral pit, or by benching into a hill, which will allow the pad to be level with existing caliche from the cut, or extracted by "Flipping" the well location. A mineral material permit will be obtained from BLM prior to excavating any caliche on Federal Lands. Amount will vary for each pad. The procedure for "Flipping" a well location is as follows: * -An adequate amount of topsoil/root zone (usually top 6 inches of soil) will be stripped from the proposed well location and stockpiled along the side of the well location as depicted on the well site diagram/survey plat. -An area will be used within the proposed well site dimensions to excavate caliche. Subsoil will be removed and stockpiled within the surveyed well pad dimensions. -Once caliche/surfacing mineral is found, the mineral material will be excavated and stock piled within the approved drilling pad dimensions. -Then, subsoil will be pushed back in the excavated hole and caliche will be spread accordingly across the entire well pad and road (if available). -Neither caliche, nor subsoil will be stock piled outside of the well pad dimensions. Topsoil will be stockpiled along the edge of the pad as depicted in the Well Site Layout or survey plat. * In the event that no caliche is found onsite, caliche will be hauled in from a BLM approved caliche pit or other established mineral pit. A BLM mineral material permit will be acquired prior to obtaining any mineral material from BLM pits or federal land.

Construction Materials source location attachment:

Antietam_9_Fed_Com_water_and_caliche_Map__08-21-2017.pdf

Section 7 - Methods for Handling Waste

Waste type: DRILLING

Waste content description: Drill fluids and produced oil and water from the well during drilling and completion operations will be stored safely and disposed of properly in an NMOCD approved disposal facility. Garbage and trash produced during drilling and completion operations will be collected in a trash container and disposed of properly. Human waste and grey water will be properly contained of and disposed of properly. After drilling and completion operations; trash, chemicals, salts, frac sand, and other waste material will be removed and disposed of properly at a state approved disposal facility.

Amount of waste: 0 barrels

Waste disposal frequency : Daily

Safe containment description: Steel Tanks

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL FACILITY

Disposal location ownership: COMMERCIAL

Disposal type description:

Operator Name: EOG RESOURCES INCORPORATED

Well Name: ANTIETAM 9 FED COM

Well Number: 708H

Disposal location description: Trucked to NMOCD approved disposal facility

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit?

Reserve pit length (ft.)

Reserve pit width (ft.)

Reserve pit depth (ft.)

Reserve pit volume (cu. yd.)

Is at least 50% of the reserve pit in cut?

Reserve pit liner

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? YES

Description of cuttings location Closed Loop System. Drill cuttings will be disposed of into steel tanks and taken to an NMOCD approved disposal facility.

Cuttings area length (ft.)

Cuttings area width (ft.)

Cuttings area depth (ft.)

Cuttings area volume (cu. yd.)

Is at least 50% of the cuttings area in cut?

WCuttings area liner

Cuttings area liner specifications and installation description

Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: NO

Ancillary Facilities attachment:

Comments:

Section 9 - Well Site Layout

Well Site Layout Diagram:

Antietam_9_FC_708H_Rig_Layout_08-17-2017.pdf

ANTIETAM9FEDCOM708H_padsite_08-21-2017.pdf

ANTIETAM9FEDCOM708H_wellsite_08-21-2017.pdf

Operator Name: EOG RESOURCES INCORPORATED

Well Name: ANTIETAM 9 FED COM

Well Number: 708H

Comments: Exhibit 2A-Wellsite & Exhibit 2B-Padsite Rig Layout Exhibit 4

Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name: ANTIETAM 9 FED COM

Multiple Well Pad Number: 708H/709H710H

Recontouring attachment:

ANTIETAM9FEDCOM708H_reclamation_08-21-2017.pdf

Drainage/Erosion control construction: Proper erosion control methods will be used on the area to control erosion, runoff, and siltation of the surrounding area.

Drainage/Erosion control reclamation: The interim reclamation will be monitored periodically to ensure that vegetation has reestablished and that erosion is controlled.

Wellpad long term disturbance (acres): 1.997245

Wellpad short term disturbance (acres): 3.200184

Access road long term disturbance (acres): 0

Access road short term disturbance (acres): 0

Pipeline long term disturbance (acres): 0.7417355

Pipeline short term disturbance (acres): 1.2362258

Other long term disturbance (acres): 0

Other short term disturbance (acres): 0

Total long term disturbance: 2.7389805

Total short term disturbance: 4.43641

Reconstruction method: In areas planned for interim reclamation, all the surfacing material will be removed and returned to the original mineral pit or recycled to repair or build roads and well pads. Areas planned for interim reclamation will be recontoured to the original contour if feasible, or if not feasible, to an interim contour that blends with the surrounding topography as much as possible. Where applicable, the fill material of the well pad will be backfilled into the cut to bring the area back to the original contour. The interim cut and fill slopes prior to re-seeding will not be steeper than a 3:1 ratio, unless the adjacent native topography is steeper. Note: Constructed slopes may be much steeper during drilling, but will be recontoured to the above ratios during interim reclamation.

Topsoil redistribution: Topsoil will be evenly respread and aggressively revegetated over the entire disturbed area not needed for all-weather operations including cuts and fills. To seed the area, the proper BLM seed mixture, free of noxious weeds, will be used. Final seedbed preparation will consist of contour cultivating to a depth of 4 to 6 inches within 24 hours prior to seeding, dozer tracking, or other imprinting in order to break the soil crust and create seed germination micro-sites.

Soil treatment: Re-seed according to BLM standards. All reclaimed areas will be monitored periodically to ensure that revegetation occurs, that the area is not redisturbed, and that erosion is controlled.

Existing Vegetation at the well pad: Grass, forbs, and small woody vegetation, such as mesquite will be excavated as the topsoil is removed. Large woody vegetation will be stripped and stored separately and respreads evenly on the site following topsoil resspreading. Topsoil depth is defined as the top layer of soil that contains 80% of the roots. In areas to be heavily disturbed, the top 6 inches of soil material, will be stripped and stockpiled on the perimeter of the well location and along the perimeter of the access road to control run-on and run-off, to keep topsoil viable, and to make redistribution of topsoil more efficient during interim reclamation. Stockpiled topsoil should include vegetative material. Topsoil will be clearly segregated and stored separately from subsoils.

Existing Vegetation at the well pad attachment:

Existing Vegetation Community at the road: All disturbed areas, including roads, pipelines, pads, will be recontoured to the contour existing prior to the initial construction or a contour that blends indistinguishably with the surrounding landscape. Topsoil that was spread over the interim reclamation areas will be stockpiled prior to recontouring. The topsoil will be redistributed evenly over the entire disturbed site to ensure successful revegetation.

Operator Name: EOG RESOURCES INCORPORATED

Well Name: ANTIETAM 9 FED COM

Well Number: 708H

Existing Vegetation Community at the road attachment:

Existing Vegetation Community at the pipeline: All disturbed areas, including roads, pipelines, pads, will be recontoured to the contour existing prior to the initial construction or a contour that blends indistinguishably with the surrounding landscape. Topsoil that was spread over the interim reclamation areas will be stockpiled prior to recontouring. The topsoil will be redistributed evenly over the entire disturbed site to ensure successful revegetation.

Existing Vegetation Community at the pipeline attachment:

Existing Vegetation Community at other disturbances: All disturbed areas, including roads, pipelines, pads, will be recontoured to the contour existing prior to the initial construction or a contour that blends indistinguishably with the surrounding landscape. Topsoil that was spread over the interim reclamation areas will be stockpiled prior to recontouring. The topsoil will be redistributed evenly over the entire disturbed site to ensure successful revegetation.

Existing Vegetation Community at other disturbances attachment:

Non native seed used? NO

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? NO

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? NO

Seed harvest description:

Seed harvest description attachment:

Seed Management

Seed Table

Seed type:

Seed source:

Seed name:

Source name:

Source address:

Source phone:

Seed cultivar:

Seed use location:

PLS pounds per acre:

Proposed seeding season:

Seed Summary

Total pounds/Acre:

Seed Type

Pounds/Acre

Operator Name: EOG RESOURCES INCORPORATED

Well Name: ANTIETAM 9 FED COM

Well Number: 708H

Seed reclamation attachment:

Operator Contact/Responsible Official Contact Info

First Name: Stan

Last Name: Wagner

Phone: (432)686-3689

Email: stan_wagner@eogresources.com

Seedbed prep:

Seed BMP:

Seed method:

Existing invasive species? NO

Existing invasive species treatment description:

Existing invasive species treatment attachment:

Weed treatment plan description: All reclaimed areas will be monitored periodically to ensure that revegetation occurs, that the area is not redisturbed, erosion is controlled, and free of noxious weeds. Weeds will be treated if found.

Weed treatment plan attachment:

Monitoring plan description: Reclamation will be completed within 6 months of well plugging. All reclaimed areas will be monitored periodically to ensure that revegetation occurs, that the area is not redisturbed, erosion is controlled, and free of noxious weeds.

Monitoring plan attachment:

Success standards: N/A

Pit closure description: NA

Pit closure attachment:

Section 11 - Surface Ownership

Disturbance type: WELL PAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Other Local Office:

Operator Name: EOG RESOURCES INCORPORATED

Well Name: ANTIETAM 9 FED COM

Well Number: 708H

USFS Region:

USFS Forest/Grassland:

USFS Ranger District:

Fee Owner: Oliver Kiehne

Fee Owner Address: P.O. Box 135 Orla, TX 79770

Phone: (575)399-9281

Email:

Surface use plan certification: NO

Surface use plan certification document:

Surface access agreement or bond: Agreement

Surface Access Agreement Need description: surface use agreement

Surface Access Bond BLM or Forest Service:

BLM Surface Access Bond number:

USFS Surface access bond number:

Section 12 - Other Information

Right of Way needed? NO

Use APD as ROW?

ROW Type(s):

ROW Applications

SUPO Additional Information: An onsite meeting was conducted 7/18/17. Poly lines are planned to transport water for operations. Will truck if necessary. See attached SUPO Plan.

Use a previously conducted onsite? NO

Previous Onsite information:

Other SUPO Attachment

ANTIETAM9FEDCOM708H_location_08-21-2017.pdf

SUPO_Antietam_9_Fed_Com_708H_08-21-2017.pdf

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
BUREAU OF LAND MANAGEMENT

Bond Info Data Report

01/04/2018

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:

Operator Name: EOG RESOURCES INCORPORATED

Well Name: ANTIETAM 9 FED COM

Well Number: 708H

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
EXIT Leg #1	231 0	FNL	257 7	FEL	25S	33E	16	Aliquot SWNE	32.13148 54	- 103.5771 076	LEA	NEW MEXI CO	NEW MEXI CO	S	STATE	- 891 8	197 03	123 45
BHL Leg #1	241 0	FNL	257 7	FEL	25S	33E	16	Aliquot SWNE	32.13121 05	- 103.5771 076	LEA	NEW MEXI CO	NEW MEXI CO	S	STATE	- 891 8	198 03	123 45



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

PWD Data Report

01/04/2018

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:



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

Operator Certification Data Report

01/04/2018

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: 08/25/2017

Title: Regulatory Specialist

Street Address: 5509 Champions Drive

City: Midland

State: TX

Zip: 79702

Phone: (432)686-3689

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Field Representative

Representative Name: James Barwis

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