

OCD Hobbs

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Form 3160-3  
(March 2012)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

JAN 03 2018

RECEIVED

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. NMNM113420
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 (7377)		7. If Unit or CA Agreement, Name and No.
3a. Address 1111 Bagby Sky Lobby2 Houston TX 77002		8. Lease Name and Well No. (320550) PISTOLERO 15 FED COM 703H
3b. Phone No. (include area code) (713)651-7000		9. API Well No. 30-025-44739
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NWNW / 363 FNL / 1104 FWL / LAT 32.1367773 / LONG -103.4627694 At proposed prod. zone SWSW / 230 FSL / 990 FWL / LAT 32.1238982 / LONG -103.4631631		10. Field and Pool, or Exploratory (96994) RED HILLS / WC-025 S253402N UPPEF
14. Distance in miles and direction from nearest town or post office* 16 miles		11. Sec., T. R. M. or Blk. and Survey or Area SEC 15 / T25S / R34E / NMP
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 320	17. Spacing Unit dedicated to this well 160
18. Distance from proposed location* to nearest well, drilling, completed, 330 feet applied for, on this lease, ft.	19. Proposed Depth 12538 feet / 17342 feet	20. BLM/BIA Bond No. on file FED: NM2308
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3333 feet	22. Approximate date work will start* 12/01/2017	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 (Electronic Submission)	Name (Printed/Typed) Stan Wagner / Ph: (432)686-3689	Date 07/17/2017
Title Regulatory Specialist		
Approved by (Signature) (Electronic Submission)	Name (Printed/Typed) Bobby Ballard / Ph: (575)234-2235	Date 12/21/2017
Title Natural Resource Specialist		

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: 12/21/2017

miss. by p801  
1/11/2018



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

## Drilling Plan Data Report

12/21/2017

APD ID: 10400015519

Submission Date: 07/17/2017

Highlighted data  
reflects the most  
recent changes

Operator Name: EOG RESOURCES INCORPORATED

Well Name: PISTOLERO 15 FED COM

Well Number: 703H

[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	3333	0	0	ALLUVIUM	NONE	No
2	RUSTLER	2432	901	901	ANHYDRITE	NONE	No
3	TOP SALT	2301	1032	1032	SALT	NONE	No
4	BASE OF SALT	-1747	5080	5080	SALT	NONE	No
5	LAMAR	-2001	5334	5334	LIMESTONE	NONE	No
6	BELL CANYON	-2043	5376	5376	SANDSTONE	NATURAL GAS,OIL	No
7	CHERRY CANYON	-2999	6332	6332	SANDSTONE	NATURAL GAS,OIL	No
8	BRUSHY CANYON	-4639	7972	7972	SANDSTONE	NATURAL GAS,OIL	No
9	BONE SPRING LIME	-5977	9310	9310	LIMESTONE	NONE	No
10	FIRST BONE SPRING SAND	-10315	10315	10315	SANDSTONE	NATURAL GAS,OIL	No
11	BONE SPRING 2ND	-7510	10843	10843	SANDSTONE	NATURAL GAS,OIL	No
12	BONE SPRING 3RD	-8583	11916	11916	SANDSTONE	NATURAL GAS,OIL	No
13	WOLFCAMP	-9055	12388	12388	SHALE	NATURAL GAS,OIL	Yes

### Section 2 - Blowout Prevention

**Operator Name:** EOG RESOURCES INCORPORATED

**Well Name:** PISTOLERO 15 FED COM

**Well Number:** 703H

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
5	INTERMEDIATE	8.75	7.625	NEW	API	N	3000	11500	3000	11500	333	-8167	8500	HCP-110	29.7	OTHER - Flushmax III	1.125	1.25	BUOY	1.6	BUOY	1.6
6	PRODUCTION	6.75	5.5	NEW	API	N	11000	17342	11000	12538	-7667	-9205	6342	OTHER	20	OTHER - VAM SFC	1.125	1.25	BUOY	1.6	BUOY	1.6

#### Casing Attachments

**Casing ID:** 1      **String Type:** SURFACE

**Inspection Document:**

**Spec Document:**

**Tapered String Spec:**

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

Pistolero\_15\_Fed\_Com\_703H\_BLM\_Plan\_07-17-2017.pdf

**Casing ID:** 2      **String Type:** INTERMEDIATE

**Inspection Document:**

**Spec Document:**

**Tapered String Spec:**

Pistolero\_15\_Fed\_Com\_703H\_7.625in\_29.70\_P\_110\_FlushMax\_III\_07-17-2017.pdf

See\_previously\_attached\_Drill\_Plan\_07-17-2017.pdf

Pistolero\_15\_Fed\_Com\_703H\_7.625in\_29.7\_P110EC\_VAM\_SLIJ\_II\_07-17-2017.pdf

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

See\_previously\_attached\_Drill\_Plan\_07-17-2017.pdf

Operator Name: EOG RESOURCES INCORPORATED

Well Name: PISTOLERO 15 FED COM

Well Number: 703H

#### Casing Attachments

Casing ID: 6 String Type: PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

See\_previously\_attached\_Drill\_Plan\_20171003130118.pdf

#### Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
PRODUCTION	Lead		0	0	0	0	0	0	0	0	0

INTERMEDIATE	Lead		0	0	0	0	0	0	0	0	0
--------------	------	--	---	---	---	---	---	---	---	---	---

INTERMEDIATE	Lead		0	0	0	0	0	0	0	0	0
--------------	------	--	---	---	---	---	---	---	---	---	---

SURFACE	Lead		0	925	325	1.73	13.5	562	25	Class C	Class C + 4.0% Bentonite + 0.6% CD-32 + 0.5% CaCl <sub>2</sub> + 0.25 lb/sk Cello-Flake (TOC @ Surface)
SURFACE	Tail		925	925	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	1150 0	2250	1.38	14.8	3105	25	Class C	Class C + 5% Gypsum + 3% CaCl <sub>2</sub> pumped via bradenhead (TOC@surface)

## Additional Operator Remarks

### Location of Well

1. SHL: NWNW / 363 FNL / 1104 FWL / TWSP: 25S / RANGE: 34E / SECTION: 15 / LAT: 32.1367773 / LONG: -103.4627694 ( TVD: 0 feet, MD: 0 feet )  
PPP: NWNW / 330 FNL / 988 FWL / TWSP: 25S / RANGE: 34E / SECTION: 15 / LAT: 32.1368696 / LONG: -103.4631443 ( TVD: 12496 feet, MD: 12617 feet )  
BHL: SWSW / 230 FSL / 990 FWL / TWSP: 25S / RANGE: 34E / SECTION: 15 / LAT: 32.1238982 / LONG: -103.4631631 ( TVD: 12538 feet, MD: 17342 feet )

### BLM Point of Contact

Name: Tenille Ortiz

Title: Legal Instruments Examiner

Phone: 5752342224

Email: tortiz@blm.gov

CONFIDENTIAL



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

## Application Data Report

12/21/2017

APD ID: 10400015519

Submission Date: 07/17/2017

Highlighted data  
reflects the most  
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Operator Name: EOG RESOURCES INCORPORATED

Well Name: PISTOLERO 15 FED COM

Well Number: 703H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

### Section 1 - General

APD ID: 10400015519

Tie to previous NOS?

Submission Date: 07/17/2017

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: NMNM113420

Lease Acres: 320

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: PISTOLERO 15 FED COM

Well Number: 703H

Well API Number:

Field/Pool or Exploratory? Field and Pool

Field Name: RED HILLS

Pool Name: WC-025 S253402N  
UPPER WC

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

**Operator Name:** EOG RESOURCES INCORPORATED

**Well Name:** PISTOLERO 15 FED COM

**Well Number:** 703H

	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	330	FSL	990	FWL	25S	34E	15	Aliquot SWS W	32.12417 31	- 103.4631 624	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 113420	- 920 5	172 42	125 38
BHL Leg #1	230	FSL	990	FWL	25S	34E	15	Aliquot SWS W	32.12389 82	- 103.4631 631	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 113420	- 920 5	173 42	125 38

**Operator Name:** EOG RESOURCES INCORPORATED

**Well Name:** PISTOLERO 15 FED COM

**Well Number:** 703H

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
0	925	WATER-BASED MUD	8.6	8.8							14.0 ppg may be utilized.

### 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:** 9127

**Anticipated Surface Pressure:** 6368.64

**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:**

Pistolero\_15\_Fed\_Com\_703H\_H2S\_Plan\_Summary\_07-17-2017.pdf





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

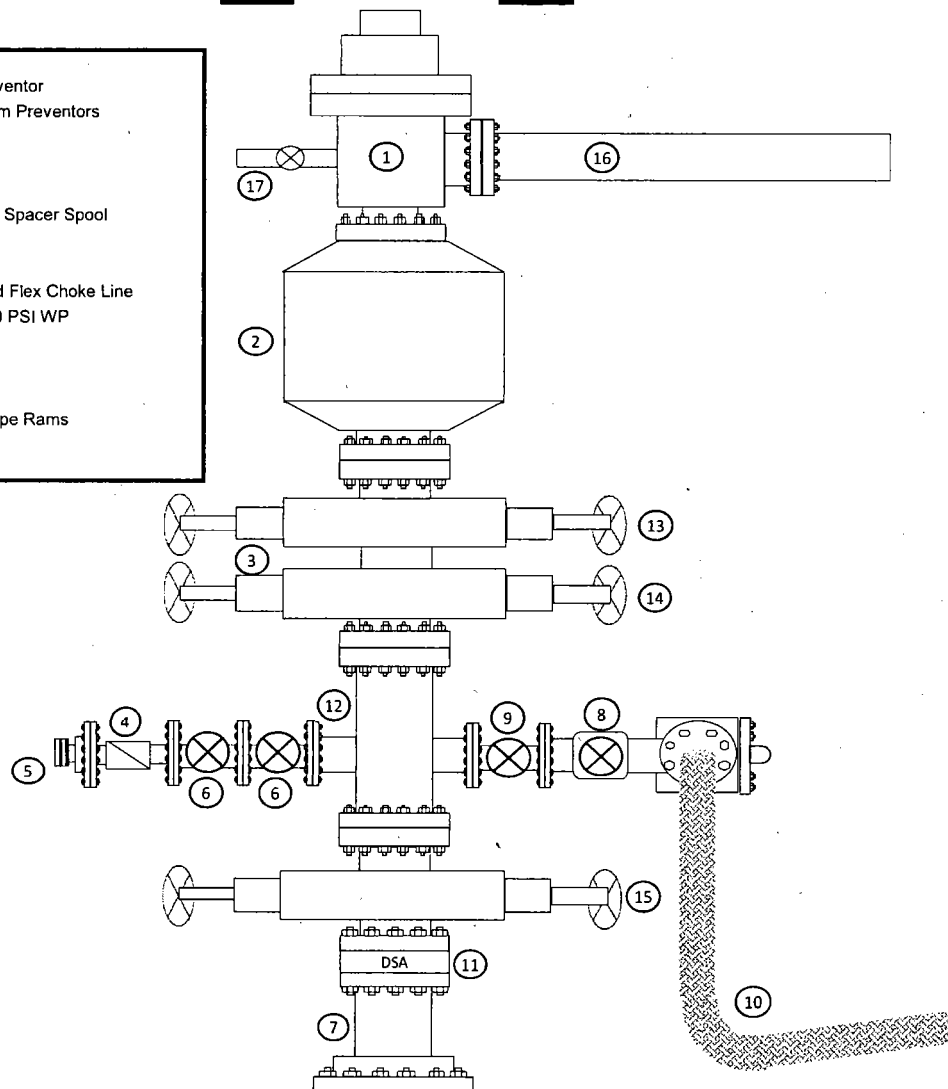
# Exhibit 1

## EOG Resources

### 10M BOPE

Rig Floor

1. 13 5/8" Rotating Head
2. Hydrii 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



Issued on: 24 Jan. 2017

# VAM® SLIJ-II

Connection Data Sheet

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

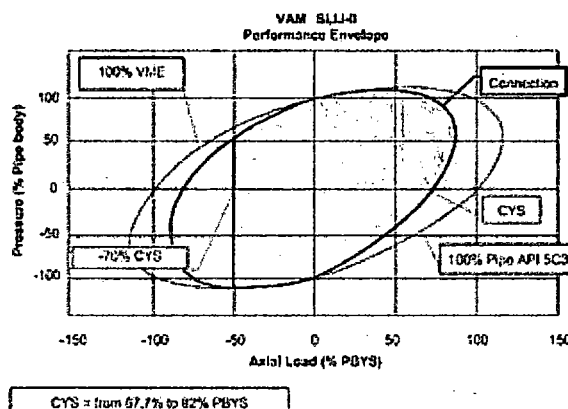
PIPE PROPERTIES	
Nominal OD	7.625 in.
Nominal ID	6.875 in.
Nominal Cross Section Area	8.541 sqin.
Grade Type	High Collapse
Min. Yield Strength	110 ksi
Max. Yield Strength	140 ksi
Min. Ultimate Tensile Strength	125 ksi

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

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

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

**VAM® SLIJ-II** is a semi-flush integral premium connection for all casing applications. It combines a near flush design with high performances in tension, compression and gas sealability. VAM® SLIJ-II has been validated according to the most stringent tests protocols, and has an excellent performance history in the world's most prolific HPHT wells.



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

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

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

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

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

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

Vallourec Group



**EOG RESOURCES, INC.**  
**PISTOLERO 15 FED COM NO. 703H**

**4. CASING PROGRAM - NEW**

Hole Size	Interval	Csg OD	Weight	Grade	Conn	DF <sub>min</sub> Collapse	DF <sub>min</sub> Burst	DF <sub>min</sub> Tension
14.75"	0 – 925'	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' – 11,500'	7.625"	29.7#	HCP-110	FlushMax III	1.125	1.25	1.60
6.75"	0' – 11,000'	5.5"	20#	P-110EC	DWC/C-IS MS	1.125	1.25	1.60
6.75"	11,000' - 17,342'	5.5"	20#	P-110EC	VAM SFC	1.125	1.25	1.60

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

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

**Cementing Program:**

Depth	No. Sacks	Wt. ppg	Yld Ft <sup>3</sup> /ft	Mix Water Gal/sk	Slurry Description
10-3/4" 925'	325	13.5	1.73	9.13	Class C + 4.0% Bentonite + 0.6% CD-32 + 0.5% CaCl <sub>2</sub> + 0.25 lb/sk Cello-Flake (TOC @ Surface)
	200	14.8	1.34	6.34	Class C + 0.6% FL-62 + 0.25 lb/sk Cello-Flake + 0.2% Sodium Metasilicate
7-5/8" 11,500'	250	14.8	1.38	6.48	Class C + 5% Gypsum + 3% CaCl <sub>2</sub> pumped via Bradenhead (TOC @ Surface)
	2000	14.8	1.38	6.48	Class C + 5% Gypsum + 3% CaCl <sub>2</sub> pumped via Bradenhead
	550	14.4	1.20	4.81	50:50 Class H:Poz + 0.25% CPT20A + 0.40% CPT49 + 0.20% CPT35 + 0.80% CPT16A + 0.25% CPT503P pumped Conventionally
5-1/2" 17,342'	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 @ 11,000')

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.**  
**PISTOLERO 15 FED COM NO. 703H**

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

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

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

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

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

Open-hole logs are not planned for this well.

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

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

The estimated bottom-hole temperature (BHT) at TD is 181 degrees F with an estimated maximum bottom-hole pressure (BHP) at TD of 7497 psig (based on 11.5 ppg MW). No hydrogen sulfide or other hazardous gases or fluids have been encountered, reported or are known to exist at this depth in this area. Severe loss circulation is expected from 7,300' to Intermediate casing point.

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

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

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

**EOG RESOURCES, INC.**  
**PISTOLERO 15 FED COM #703H**

- **Mud program:**  
The mud program has been designed to minimize the volume of H<sub>2</sub>S circulated to surface. The operator will have the necessary mud products to minimize hazards while drilling in H<sub>2</sub>S bearing zones.
- **Metallurgy:**  
All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold and lines, and valves shall be suitable for H<sub>2</sub>S service.
- **Communication:**  
Communication will be via cell phones and land lines where available.

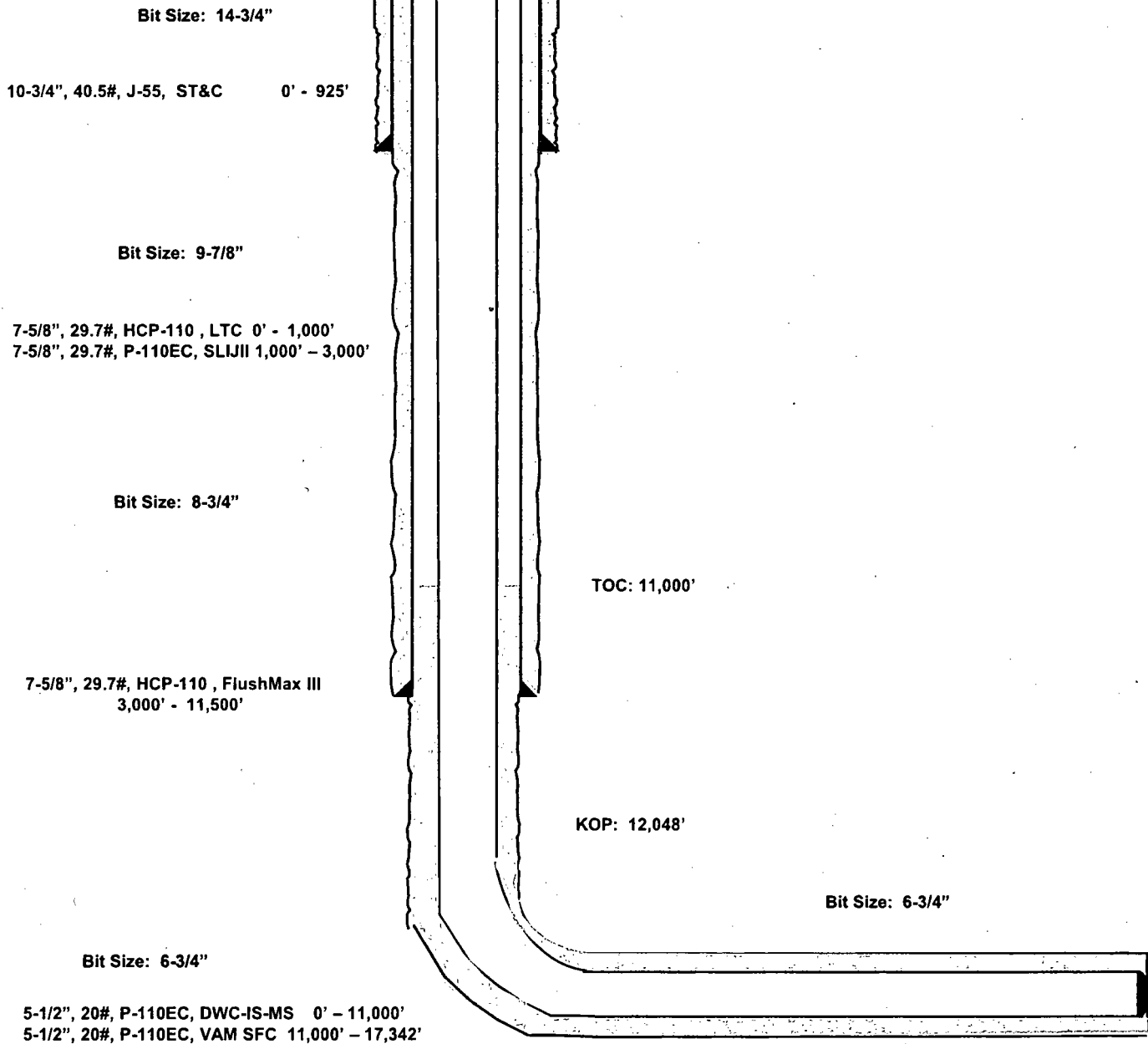
**Pistolero 15 Fed Com #703H**

**Lea County, New Mexico  
Proposed Wellbore**

**363' FNL  
1104' FWL  
Section 15  
T-25-S, R-34-E**

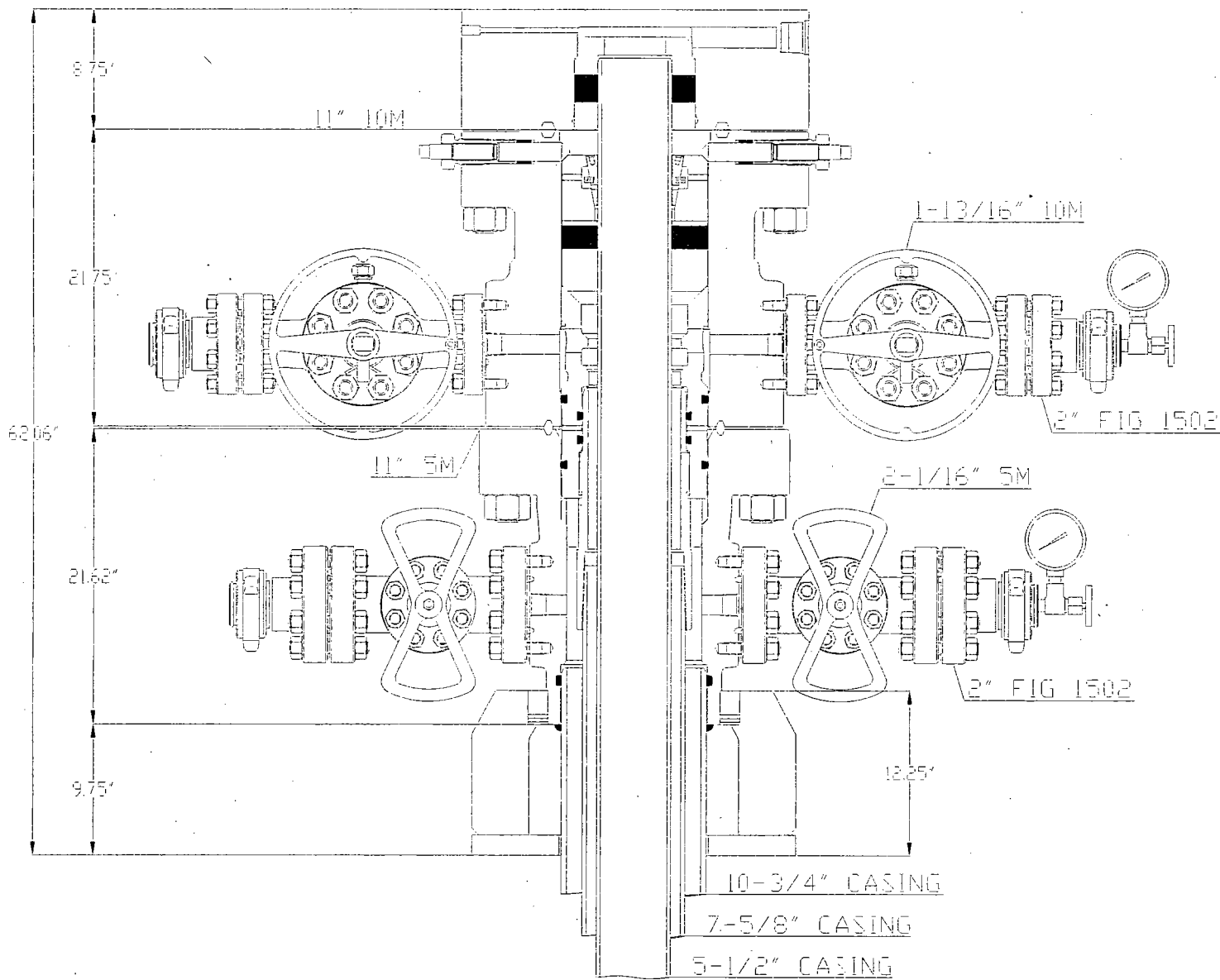
**API: 30-025-\*\*\*\*\***

**KB: 3,358'  
GL: 3,333'**



**Lateral: 17,342' MD, 12,538' TVD  
Upper Most Perf:  
330' FNL & 988' FWL Sec. 15  
Lower Most Perf:  
330' FSL & 990' FWL Sec. 15  
BH Location: 230' FSL & 990' FWL  
Section 15  
T-25-S, R-34-E**





#CONCEPT QUOTE DRAWING  
#DIMENSIONS ARE APPROXIMATE

EDG RESOURCES

10-3/4" X 7-5/8" X 5-1/2"  
FBD-100 WELLHEAD SYSTEM  
QUOTE: HDU - 102101

DWN	BAY	2/22/17
CHK		
APP		
	BY	DATE



Worldwide Expertise - Global Strength

DRAWING NO  
WH-16618



## United States Department of the Interior



BUREAU OF LAND MANAGEMENT  
CARLSBAD FIELD OFFICE

620 E. GREENE ST.

CARLSBAD, NM 88220

BLM\_NM\_CFO\_APD@BLM.GOV

In Reply To:

3160 (Office Code)

[ NMNM113420 ]

09/26/2017

Attn: STAN WAGNER

EOG RESOURCES INCORPORATED

1111 BAGBY SKY LOBBY2

HOUSTON, TX 77002

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

**FEDERAL - NMNM113420**

Well Name / Number: **PISTOLERO 15 FED COM / 703H**

Legal Description: T25S, R34E, SEC 15, NWNW

County, State: LEA, NM

Date APD Received: 07/17/2017

Dear Operator:

The BLM received your Application for Permit to Drill (APD), for the referenced well, on 07/17/2017. The BLM reviewed the APD package pursuant to part III.D of Onshore Oil and Gas Order No.1 and it is:

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

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

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

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

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

**Extension Requests:**

- If you know you will not be able to meet the 45-day timeframe for reasons beyond your control, you must submit a written request through email/standard mail for extension prior to the 45<sup>th</sup> calendar day from this notice, **11/10/2017**.
- The BLM will consider the extension request if you can demonstrate your diligence (providing reasons and examples of why the delay is occurring beyond your control) in attempting to correct the deficiencies and can provide a date by which you will correct the deficiencies. If the BLM determines that the request does not warrant an extension, the BLM will return the APD as incomplete after the 45 calendar days have elapsed.
  - The BLM will determine whether to grant an extension beyond the required 45 calendar days and will document this request in the well file. If you fail to submit deficiencies by the date defined in the extension request, the BLM will return the APD.

**APDs remaining Incomplete:**

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

If you have any questions, please contact Tenille Ortiz at (575) 234-5983.

Sincerely,

*Cody Layton*  
*Assistant Field Manager*

cc: Official File

**EOG RESOURCES, INC.  
PISTOLERO 15 FED COM NO. 703H**

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

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

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

Open-hole logs are not planned for this well.

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

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

The estimated bottom-hole temperature (BHT) at TD is 181 degrees F with an estimated maximum bottom-hole pressure (BHP) at TD of 9127 psig (based on 14.0 ppg MW). No hydrogen sulfide or other hazardous gases or fluids have been encountered, reported or are known to exist at this depth in this area. Severe loss circulation is expected from 7,300' to Intermediate casing point.

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

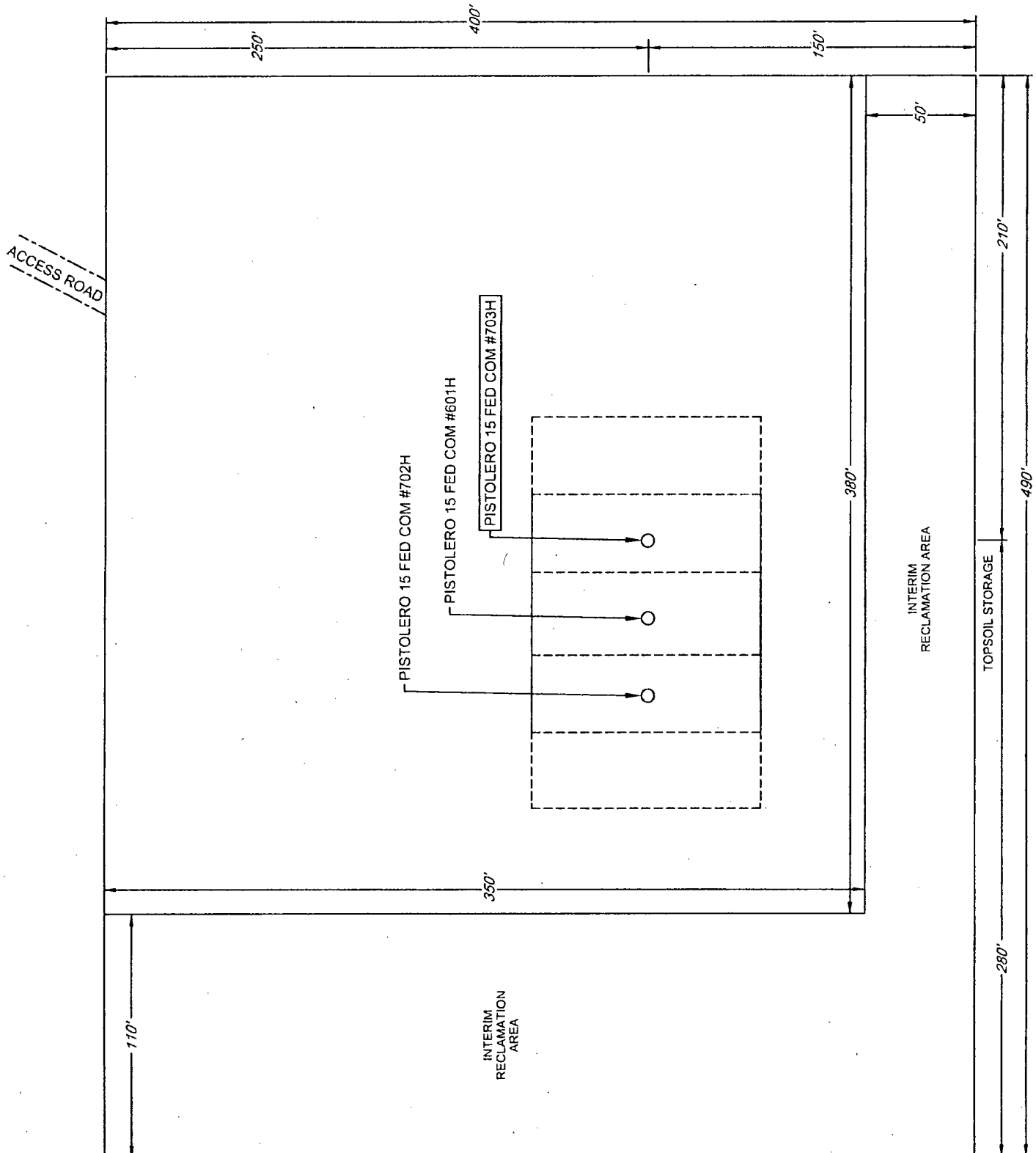
The drilling operation should be finished in approximately one month. If the well is productive, an additional 60-90 days will be required for completion and testing before a decision is made to install permanent facilities.

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

EXHIBIT 2C  
RECLAMATION AND FACILITY DIAGRAM - PRODUCTION FACILITIES DIAGRAM

SECTION 15, TOWNSHIP 25-S, RANGE 34-E, N.M.P.M.  
LEA COUNTY, NEW MEXICO

DETAIL VIEW  
SCALE: 1" = 60'



LEASE NAME & WELL NO.: PISTOLERO 15 FED COM #703H  
#703H LATITUDE N 32.1367773 #703H LONGITUDE W 103.4627694

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

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

## ADDENDUM - Incomplete/Deficient

## Clarifications

### ADDENDUM - Deficient

#### Surface Comments

- New and Reconstructed Roads Deficiency:

Access road needs to be on the NE side of pad not the NW. Please update plat to reflect the road coming in on the side closest to Battle Axe road.

*Previously submitted 10/12/17*

- Plans for Surface Reclamation Deficiency:

Move the road or change the 110' Interim reclamation to the east side.

#### Engineering Comments

- Casing design information is inadequate and/or incomplete

Submit Production Casing grade in section 3.

Submit correct casing program because casing program in APD do not match drilling plan casing program.

Submit correct hole sizes because hole sizes in APD do not match drilling plan casing program.

- Cementing design information is inadequate and/or incomplete

Submit the correct depth for the each casing depth of the cement in the APD. Production joint type do not match the drilling plan.

*Corrected in Afmass*

**Operator Name:** EOG RESOURCES INCORPORATED

**Well Name:** PISTOLERO 15 FED COM

**Well Number:** 703H

**New road access plan attachment:**

**Access road engineering design?** NO

**Access road engineering design attachment:**

**Access surfacing type:** OTHER

**Access topsoil source:** ONSITE

**Access surfacing type description:** 6" of Compacted Caliche

**Access onsite topsoil source depth:** 6

**Offsite topsoil source description:**

**Onsite topsoil removal process:** An adequate amount of topsoil/root zone will be stripped by dozer from the proposed well location and stockpiled along the side of the well location as depicted on the well site diagram / survey plat.

**Access other construction information:**

**Access miscellaneous information:**

**Number of access turnouts:**

**Access turnout map:**

### **Drainage Control**

**New road drainage crossing:** OTHER

**Drainage Control comments:** No drainage crossings

**Road Drainage Control Structures (DCS) description:** N/A

**Road Drainage Control Structures (DCS) attachment:**

### **Access Additional Attachments**

**Additional Attachment(s):**

## **Section 3 - Location of Existing Wells**

**Existing Wells Map?** YES

**Attach Well map:**

PISTOLERO\_15\_FC\_703H\_radius\_06-29-2017.pdf

**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:** Central Tank Battery located in NW/4 of section 15.

**Production Facilities map:**



**Operator Name:** EOG RESOURCES INCORPORATED

**Well Name:** PISTOLERO 15 FED COM

**Well Number:** 703H

**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:**

Pistolero\_15\_FC\_water\_source\_and\_caliche\_map\_06-29-2017.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:**

**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.)**

**Operator Name:** EOG RESOURCES INCORPORATED

**Well Name:** PISTOLERO 15 FED COM

**Well Number:** 703H

## Section 10 - Plans for Surface Reclamation

**Type of disturbance:** New Surface Disturbance

**Multiple Well Pad Name:** PISTOLERO 15 FED COM 601H

**Multiple Well Pad Number:** 702H/601H/703H

**Recontouring attachment:**

PISTOLERO\_15\_FC\_703H\_reclamation\_06-29-2017.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):** 3.05326

**Wellpad short term disturbance (acres):** 4.499541

**Access road long term disturbance (acres):** 0.113499

**Access road short term disturbance (acres):** 0.113499

**Pipeline long term disturbance (acres):** 0.8140496

**Pipeline short term disturbance (acres):** 1.3567493

**Other long term disturbance (acres):** 0

**Other short term disturbance (acres):** 0

**Total long term disturbance:** 3.9808085

**Total short term disturbance:** 5.9697895

**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 redistributed, 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.

**Existing Vegetation Community at the road attachment:**

**Operator Name:** EOG RESOURCES INCORPORATED

**Well Name:** PISTOLERO 15 FED COM

**Well Number:** 703H

### 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:** STATE GOVERNMENT

**Other surface owner description:**

**BIA Local Office:**

**BOR Local Office:**

**COE Local Office:**

**DOD Local Office:**

**NPS Local Office:**

**State Local Office:** STATE OF NEW MEXICO

**Military Local Office:**

**USFWS Local Office:**

**Other Local Office:**

**USFS Region:**

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

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

## ADDENDUM - Incomplete/Deficient

## Clarifications

### ADDENDUM - Deficient

#### Surface Comments

- New and Reconstructed Roads Deficiency:

Access road needs to be on the NE side of pad not the NW. Please update plat to reflect the road coming in on the side closest to Battle Axe road.

*We will move road to NE as requested.  
New plats attached.*

- Plans for Surface Reclamation Deficiency:

Move the road or change the 110' Interim reclamation to the east side.

*Reclamation will remain 110' on NW side. per VW 10/6/17*

#### Engineering Comments

- Casing design information is inadequate and/or incomplete

Submit Production Casing grade in section 3.

Submit correct casing program because casing program in APD do not match drilling plan casing program.

Submit correct hole sizes because hole sizes in APD do not match drilling plan casing program.

- Cementing design information is inadequate and/or incomplete

Submit the correct depth for the each casing depth of the cement in the APD.

- Bottom hole pressures and hazards inadequate and/or incomplete

Submit correct hole sizes because hole sizes in APD do not match drilling plan casing program.

ABHP in section 7 is not sufficient for the Max MW in section 5.

*Corrected in  
AFmass.*



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

**PWD Data Report**

12/21/2017

## Section 1 - General

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

## Section 2 - Lined Pits

Would you like to utilize Lined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Lined pit PWD on or off channel:

Lined pit PWD discharge volume (bbl/day):

Lined pit specifications:

Pit liner description:

Pit liner manufacturers information:

Precipitated solids disposal:

Describe precipitated solids disposal:

Precipitated solids disposal permit:

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule attachment:

Lined pit reclamation description:

Lined pit reclamation attachment:

Leak detection system description:

Leak detection system attachment:

Lined pit Monitor description:

Lined pit Monitor attachment:

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

Is the reclamation bond a rider under the BLM bond?

Lined pit bond number:

Lined pit bond amount:

Additional bond information attachment:

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:



United States Department of the Interior  
Bureau of Land Management  
Carlsbad Field Office



Refer to: 3160-3

COPY

To: AFM, Lands & Minerals, CFO  
From: Geologist, CFO  
Subject: Geologic Review of Application for Permit to Drill

Operator: EOG Resources Inc  
Well Name and Number: PISTOLERO 15 FED COM-703H  
Potash: No  
Location: SHL:363'/N.& 1104'/W. SEC015 T025S, R034E.(NWNW)  
County Lea Lease Number: NMNM113420 APD Received: 7-17-2017  
Ground Level Elevation: 3333 Surface Geology: Qe-Eolian deposits  
TVD: 12538 MD: 17342 BH Mud Weight: 14  
BHP: 9128 MASP: 6369

1. Geologic Marker Tops (from reports on surrounding wells):

					Proposed Well
	SMITH 1	FAIRVIEW 14 FEE	PRE-ONGARD	PRE-ONGARD	PISTOLERO 15 FED
	3002520906	#001	WELL #002	WELL #001	COM-703H
	T25S R34E Sec 10	T25S R34E Sec 14	T25S R34E Sec 16	T25S R34E Sec 10	T025S,
	660 FSL 660 FWL	1980FNL 1980FEL	1980FNL 1980FEL	990FNL 1980FEL	R034E.(NWNW)SEC015
	Elevation	Elevation	Elevation	Elevation	Unit
Geologic Marker	Depth	Depth	Depth	Depth	Elevation
Rustler	870	900	900	934	901
Top of Salt	-	-	1260	-	1032
Castile	-	-	-	-	3155
Castile	-	-	-	-	5080
Lamar	5308	5408	5338	5320	5334
Bell Canyon	5350	5440	5378	5355	5376
Cherry Canyon	-	6414	6345	6321	6332
Brushy Canyon	-	8053	7966	7972	7972
Bone Spring Lime	-	9330	9340	9252	9310
1st BS Sand	-	10386	10350	10314	10315
2nd BS Sand	-	10990	10960	10900	10843
3rd BS Sand	-	12063	11970	11910	11916
Wolfcamp	-	12463	12416	12203	12388
Strawn	-	14312	13970	13850	13915
Atoka	-	14544	14165	14070	14168
Morrow	-	15275	14932	14823	15050



## 2. Fresh Water Information

a. Fresh Water: 946

### b. Fresh Water Remarks:

According to well data from the New Mexico Office of the State Engineer's Water Rights Reporting System, there are 27 water wells within a six-mile radius of the proposed project. Depth to water ranges from 30' to 430' with the deepest well drilled to 600'. BLM identified groundwater may also be encountered in the Magenta Dolomite Member of the Rustler Formation down to a depth of approximately 946'.

c. Water Basin: Capitan Water Basin

## 3. Recommended Casing Setting Depth

a. Surface Casing Depth: 976

b. Intermediate Casing Depth: 11500

c. 2nd Interm. Casing Depth

### d. Casing Depth Remarks:

The operator proposes to set surface casing at 925':BLM proposes 976', adequately protect BLM identified groundwater. If salt is encountered set casing at least 25' above the salt. The operator proposes to set intermediate casing at 11,500' BLM accepts 3 Bone Springs Carbonate formation depth set point.

## 4. Geologic Hazards

a. Cave/Karst Occurance: Low

b. Potential Cave/Karst Depth:

c. Possible Water Flows: Castile, Salado,

d. Possible Lost Circulation: Rustler, Red Beds, Delaware,

e. Possible Abnormal Pressure: NO

f. H2S within 1 mile: NO

### g. H2S Remarks:

Wells do NOT have recordings of elevated H2S above action levels for safety.

## 5. Additional Remarks

D NWNW WC

Geologist: Mark Lewis

Sign Off Date: 9-25-2017



United States Department of the Interior  
Bureau of Land Management  
Carlsbad Field Office

 **ORIGINAL**



Refer to: 3160-3

To: AFM, Lands & Minerals, CFO  
From: Geologist, CFO  
Subject: Geologic Review of Application for Permit to Drill

Operator: EOG Resources Inc  
Well Name and Number: PISTOLERO 15 FED COM-703H  
Potash: No  
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Castile	-	-	-	-	3155
Lamar	5308	5408	5338	5320	5080
Bell Canyon	5350	5440	5378	5355	5334
Cherry Canyon	-	6414	6345	6321	5376
Brushy Canyon	-	8053	7966	7972	6332
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e. Possible Abnormal Pressure: NO

f. H2S within 1 mile: NO

### g. H2S Remarks:

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## 5. Additional Remarks

D NWNW WC

Geologist: Mark Lewis

Sign Off Date: 9-25-2017