OCD Hobbs

Form 3160-3 (March 2012)

## HOBBS OCD

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

JAN 0 3 20 18. Lease Serial No. NMNM113420

APPLICATION FOR PERMIT TO DRI	ILL OR REENTER	ENED Indian, Allor	ice or Tribe Name
la. Type of work: DRILL REENTER		7. If Unit or CA'A	greement, Name and No.
lb. Type of Well: Oil Well Gas Well Other	Single Zone Multiple	¿     Zone      PISTOLERO 15     PIST	nd Well No. / 3203 FED COM 702H
2. Name of Operator EOG RESOURCES INCORPORATED	7377)	9. API Well-No.	-44326
	Phone No. (include area code) (	10. Field and Pool, RED HILLS / WO	or Exploratory 96694 C-025 S253402N UPPEF
4. Location of Well (Report location clearly and in accordance with any State	e requirements.*)	11. Sec., T. R. M. oi	Blk. and Survey or Area
At surface NWNW / 331 FNL / 1042 FWL / LAT 32.136866 /	LONG -103.4629701	SEC 15 / T25S /	R34E / NMP
At proposed prod. zone SWSW / 230 FSL / 660 FWL / LAT 32.1	1238991 / LONG -103:4642		
Distance in miles and direction from nearest town or post office*     16 miles		12. County or Paris LEA	h 13. State NM
5. Distance from proposed* location to nearest 230 feet property or lease line, ft. (Also to nearest drig. unit line, if any)	- S-N // AL	7. Spacing Unit dedicated to th 160	is well
to nearest well, drilling, completed, 330 feet	Proposed Depth 430 feet / 17236 feet	20. BLM/BIA Bond No. on file FED: NM2308	
	Approximate date work will start	23. Estimated dura 25 days	ition
24	4. Attachments		
the following, completed in accordance with the requirements of Onshore Oil  Well plat certified by a registered surveyor.  A Drilling Plan.  A Surface Use Plan (if the location is on National Forest System Land SUPO must be filed with the appropriate Forest Service Office).	4. Bond to cover the Item 20 above).  5. Operator certifica	e operations unless covered by	
25. Signature	Name (Printed/Typed)		Date
(Electronic Submission)	Stan Wagner / Ph: (432)6	86-3689	07/17/2017
itle Regulatory Specialsit			
Approved by (Signature)  (Electronic Submission)	Name (Printed/Typed) Bobby Ballard / Ph: (575)2	234-2235	Date 12/20/2017
itle Natural Resource Specialist	Office CARLSBAD		
Application approval does not warrant or certify that the applicant holds leg- onduct operations thereon.) Conditions of approval, if any, are attached.	al or equitable title to those rights	in the subject lease which wou	d entitle the applicant to
itle 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime tates any false, fictitious or fraudulent statements or representations as to any	for any person knowingly and wi wy matter within its jurisdiction.	Ilfully to make to any departmer	nt or agency of the United
(Continued on page 2)		*(In	nstructions on page 2)
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proval Date: 12/20/2017

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#### INSTRUCTIONS

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

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

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

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

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

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

#### **NOTICES**

The Privacy Act of 1974 and regulation in 43 CFR 2:48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service well or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts. ROUTINE USE: Information from the record and/or the record will be transferred to appropriate Federal, State, and local or foreign agencies, when relevant-to-civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:

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

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

(Continued on page 3)

(Form 3160-3, page 2)

**Approval Date: 12/20/2017** 

#### **Additional Operator Remarks**

#### **Location of Well**

1. SHL: NWNW / 331 FNL / 1042 FWL / TWSP: 25S / RANGE: 34E / SECTION: 15 / LAT: 32.136866 / LONG: -103.4629701 ( TVD:0 feet, MD:0 feet )

PPP: NWNW / 330 FNL / 660 FWL / TWSP: 25S / RANGE: 34E / SECTION: 15 / LAT: 32.1368707 / LONG: -103.4642043 (TVD: 12386 feet, MD: 12510 feet )

BHL: SWSW / 230 FSL / 660 FWL / TWSP: 25S / RANGE: 34E / SECTION: 15 / LAT: 32.1238991 / LONG: -103.46423 (TVD: 12430 feet, MD: 17236 feet )

#### **BLM Point of Contact**

Name: Tenille Ortiz

Title: Legal Instruments Examiner

Phone: 5752342224 Email: tortiz@blm.gov

(Form 3160-3, page 3)

**Approval Date: 12/20/2017** 

#### **Review and Appeal Rights**

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



(Form 3160-3, page 4)

**Approval Date: 12/20/2017** 

#### .partment of the Interior JRÉAU OF LAND MANAGEMENT

## Application Data Report

Submission Date: 07/17/2017

Highlighted data reflects the most

recent changes

Well Number: 702H

**Show Final Text** 

Well Type: OIL WELL

APD ID: 10400015517

Well Work Type: Drill

#### Section 1 - General

**Operator Name: EOG RESOURCES INCORPORATED** 

APD ID:

10400015517

Well Name: PISTOLERO 15 FED COM

Tie to previous NOS?

Federal or Indian agreement:

Submission Date: 07/17/2017

**BLM Office: CARLSBAD** 

User: Stan Wagner

Title: Regulatory Specialsit

Federal/Indian APD: FED

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

Lease number: NMNM113420

Lease Acres: 320

Reservation:

Surface access agreement in place?

Allotted?

Agreement in place? NO

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

**Operator PO Box:** 

**Zip:** 77002

**Operator City:** Houston

State: TX

**Operator Phone: (713)651-7000** 

**Operator Internet Address:** 

#### **Section 2 - Well Information**

Well in Master Development Plan? NO

Mater Development Plan name:

Well in Master SUPO? NO

Master SUPO name:

Well in Master Drilling Plan? NO

Master Drilling Plan name:

Well Name: PISTOLERO 15 FED COM

Well Number: 702H

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

Well Name: PISTOLERO 15 FED COM

Well Number: 702H

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: 702H/601H/703H

PISTOLERO 15 FED COM 601H

Well Class: HORIZONTAL

Number of Legs: 1

Well Work Type: Drill

Well Type: OIL WELL

Describe Well Type:

Well sub-Type: INFILL

Describe sub-type:

Distance to town: 16 Miles Distance to nearest well: 330 FT Distance to lease line: 230 FT

Reservoir well spacing assigned acres Measurement: 160 Acres

Well plat: Pistolero\_15\_FC\_702H\_signed\_C\_102\_06-29-2017.pdf

Well work start Date: 12/01/2017 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	DVT
SHL Leg #1	331	FNL	104 2	FWL	258	34E	15	Aliquot NWN W	32.13686 6	- 103.4629 701	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 113420	333 3	0	0
KOP Leg #1	53	FNL	680	FWL	25S	34E	15	Aliquot NWN W	32.13763 57	- 103.4641 294	LEA	t .	NEW MEXI CO	F	NMNM 113420	- 860 2	119 49	119 35
PPP Leg #1	330	FNL	660	FWL	25S	34E	15	Aliquot NWN W	32.13687 07	- 103.4642 043	LEA	1	NEW MEXI CO	F	NMNM 113420	- 905 3	125 10	123 86



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

# Drilling Plan Data Report

APD ID: 10400015517

Submission Date: 07/17/2017

Highlighted data reflects the most

recent changes

Well Name: PISTOLERO 15 FED COM

Well Number: 702H

**Show Final Text** 

Well Type: OIL WELL

Well Work Type: Drill

#### **Section 1 - Geologic Formations**

**Operator Name: EOG RESOURCES INCORPORATED** 

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**

Well Name: PISTOLERO 15 FED COM Well Number: 702H

Pressure Rating (PSI): 10M

Rating Depth: 12430

**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:**

Pistolero 15 Fed Com 702H 10 M Choke Manifold 07-17-2017.pdf

Pistolero\_15\_Fed\_Com\_702H\_Co\_Flex\_Hose\_Certification\_07-17-2017.PDF

Pistolero\_15\_Fed\_Com\_702H\_Co\_Flex\_Hose\_Test\_Chart\_07-17-2017.pdf

#### **BOP Diagram Attachment:**

Pistolero\_15\_Fed\_Com\_702H\_10\_M\_BOP\_07-17-2017.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	SURFACE	14.7 5	10.75	NEW	API	N	0	925	0	925	3333	2408	925	J-55	40.5	STC	1.12 5	1.25	BUOY	1.6	BUOY	1.6
	INTERMED IATE	9.87 5	7.625	NEW	API	Y	0	1000	0	1000	3333	2333		HCP -110	29.7	LTC	1.12 5	1.25	BUOY	1.6	BUOY	1.6
1	PRODUCTI ON	6.75	5.5	NEW .	API	Y	0	11000	0	11000	3333	-7667	11000	OTH ER		OTHER - DWC/C-IS MS	1.12 5	1.25	BUOY	1.6	BUOY	1.6

Well Name: PISTOLERO 15 FED COM

Well Number: 702H

#### **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\_702H\_BLM\_Plan\_07-17-2017.pdf

Casing ID: 2

String Type: INTERMEDIATE

**Inspection Document:** 

**Spec Document:** 

#### **Tapered String Spec:**

Pistolero\_15\_Fed\_Com\_702H\_7.625in\_29.70\_P\_110\_FlushMax\_III\_07-17-2017.pdf
Pistolero\_15\_Fed\_Com\_702H\_BLM\_Plan\_07-17-2017.pdf
Pistolero\_15\_Fed\_Com\_702H\_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

Casing ID: 3

.

String Type: PRODUCTION

**Inspection Document:** 

**Spec Document:** 

#### **Tapered String Spec:**

Pistolero\_15\_Fed\_Com\_702H\_5.500in\_20.00\_VST\_P110EC\_VAM\_SFC\_07-17-2017.pdf
Pistolero\_15\_Fed\_Com\_702H\_5.500in\_20.00\_VST\_P110EC\_DWC\_C\_IS\_MS\_07-17-2017.pdf
See\_previously\_attached\_Drill\_Plan\_07-17-2017.pdf

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

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

Well Name: PISTOLERO 15 FED COM Well Number: 702H

Section	4 -	Cemer	١t
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String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield ·	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	925	325	1.73	13.5	562	25	Class C	Class C + 4.0% Bentonite + 0.6% CD- 32 + 0.5% CaCl2 + 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% CaCl2 pumped via bradenhead (TOC@surface)
INTERMEDIATE	Tail		1150 0	1150 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
PRODUCTION	Lead		1100 0	1723 6	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 @ 11,000')

#### **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.

Well Name: PISTOLERO 15 FED COM

Well Number: 702H

#### **Circulating Medium Table**

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
925	1150 0	SALT SATURATED	8.8	10			-	,		and the second	
1150 0	·1723 6	OIL-BASED MUD	10	14						4. N	
0	925	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: 7433** 

**Anticipated Surface Pressure:** 4698.39

Anticipated Bottom Hole Temperature(F): 181

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

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

Pistolero\_15\_Fed\_Com\_702H\_H2S\_Plan\_Summary\_07-17-2017.pdf

Well Name: PISTOLERO 15 FED COM Well Number: 702H

#### **Section 8 - Other Information**

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

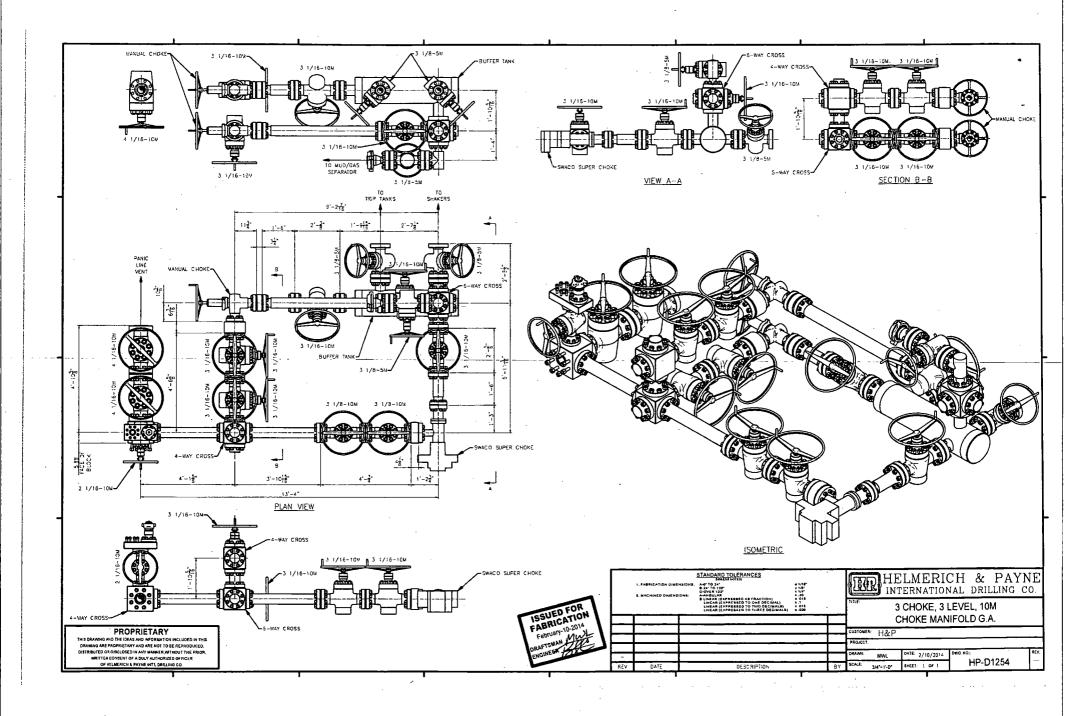
Pistolero\_15\_Fed\_Com\_702H\_Planning\_Report\_07-17-2017.pdf Pistolero\_15\_Fed\_Com\_702H\_Wall\_Plot\_07-17-2017.pdf

#### Other proposed operations facets description:

#### Other proposed operations facets attachment:

Pistolero\_15\_Fed\_Com\_702H\_Proposed\_Wellbore\_07-17-2017.pdf
Pistolero\_15\_Fed\_Com\_702H\_Rig\_Layout\_07-17-2017.pdf
Pistolero\_\_Wellhead\_Cap\_07-17-2017.pdf
Pistolero15FC702\_gas\_capture\_07-17-2017.pdf

#### Other Variance attachment:



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All target the second second

si F

required by manfacturer: No

Type: Ci	IOKE LIN	<u> </u>		Length:	35'					
I.D.	4"	INCHES	O.D.	8"	INCHES					
WORKING PRE	SSURE	TEST PRESSUR	RE	BURST PRE	SSURE					
10,000	PSI	15,000	PSI		PSI					
		COUP	LINGS							
	pe of End Fitting 4 1/16 10K FLANGE									
Type of Cou St	ALTY									
		PROC	EDURE							
Ha	aa assambh	v pressure tested w	rith water at ambier	nt temperature						
		TEST PRESSURE		URST PRESS						
	1	MIN.			0 PSI					
Ho	COMMENTS: SN#90087 M10761 Hose is covered with stainless steel armour cover and wraped with fire resistant vermiculite coated fiberglass insulation rated for 1500 degrees complete with lifting eyes									
Date:	5/2011	Tested By: BOBBY FINK	Approved: MENDI JACKSO							

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#### **Internal Hydrostatic Test Graph**

Customer: CACTUS

SALES ORDER# 90067

#### **Hose Specifications**

**Hose Type** C & K <u>I.D.</u>

**Working Pressure** 10000 PSI

**Length** 35' <u>O.D.</u>

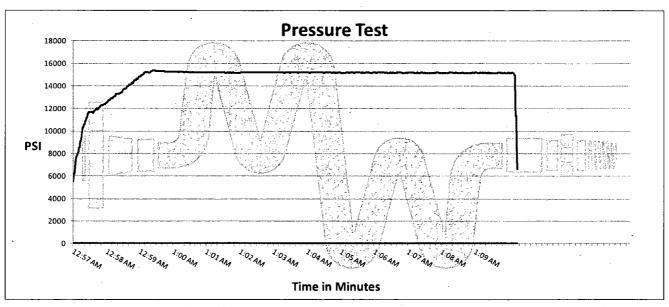
**Burst Pressure** Standard Safety Multiplier Applies

#### **Verification**

**Type of Fitting** 4 1/16 10K <u>Die Size</u>

6.62" Hose Serial # **Coupling Method** Swage Final O.D.

6.68" Hose Assembly Serial #



**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.

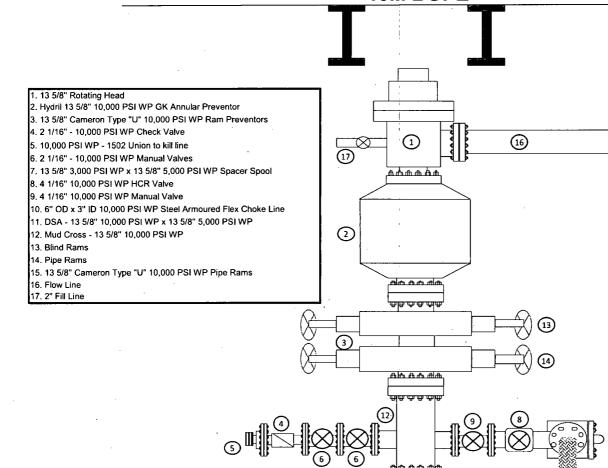
Tested By: Bobby Fink

Approved By: Mendi Jackson

x Mendi Jackson

# Exhibit 1 EOG Resources 10M BOPE

Rig Floor



DSA DSA

(11)

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

Permian

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

Rustler	901'
Top of Salt	1,032'
Base of Salt / Top Anhydrite	5,080'
Base Anhydrite	5,334'
Lamar	5,334'
Bell Canyon	5,376'
Cherry Canyon	6,332'
Brushy Canyon	7,972'
Bone Spring Lime	9,310'
1 <sup>st</sup> Bone Spring Sand	10,315'
2 <sup>nd</sup> Bone Spring Shale	10,533
2 <sup>nd</sup> Bone Spring Sand	10,843
3 <sup>rd</sup> Bone Spring Carb	11,360'
3 <sup>rd</sup> Bone Spring Sand	11,916'
Wolfcamp	12,388'
TD	12,430'

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

Upper Permian Sands	0-400'	Fresh Water
Cherry Canyon	6,332'	Oil
Brushy Canyon	7,972'	Oil
1st Bone Spring Sand	10,315	Oil
2 <sup>nd</sup> Bone Spring Shale	10,533'	Oil
2 <sup>nd</sup> Bone Spring Sand	10,843'	Oil
3 <sup>rd</sup> Bone Spring Carb	11,360'	Oil
3 <sup>rd</sup> Bone Spring Sand	11,916'	Oil
Wolfcamp	12,388'	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 925' and circulating cement back to surface.

#### 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'-17,236'	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.	Yld Ft³/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% CaCl2 pumped via Bradenhead (TOC @ Surface)
	2000	14.8	1.38	6.48	Class C + 5% Gypsum + 3% CaCl2 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" 17,236'	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.

#### 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 5,000/250 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	Туре	Weight (ppg)	Viscosity	Water Loss
0 – 925'	Fresh - Gel	8.6-8.8	28-34	N/c
925' – 11,500'	Brine	8.8-10.0	28-34	N/c
11,500' – 17,236'	Oil Base	10.0-14.0	58-68	3 - 6
Lateral	,			

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.

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 7433 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.

#### 11. WELLHEAD:

A multi-bowl wellhead system will be utilized.

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

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

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

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

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

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

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

OD 7 5/8 in. Weight 29.70 lb/ft

Wall Th. 0.375 in.

Grade VM 110 HC API Drift 6.750 in. Connection VAM® SLIJ-II

PIPE PROPER	TIES	- ; ;
Nominal OD	7.625	in.
Nominal ID	6.875	in.
Nominal Cross Section Area	8.541	sqir
Grade Type	High Collapse	
Min. Yield Strength	110	ksi
Max. Yield Strength	140	ksi
Min. Ultimate Tensile Strength	125	ksi
And the control of the comments of a control of the	THE PROPERTY OF THE PROPERTY O	

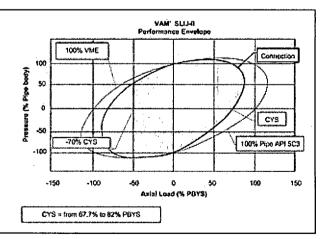
CONNECTION PROPERTIES				
Premium integral semi-flush				
7.711 in.				
6.820 in.				
4.822 in.				
5.912 sqin.				
69.2 % of pipe				
48.5 % of pipe				
100 % of pipe				
100 % of pipe				

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 VA	LUES
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

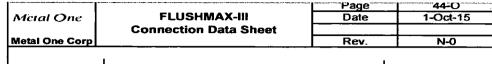
canada@vamfieldservice.com usa@vamfieldservice.com mexico@vamfieldservice.com brazil@vamfieldservice.com uk@vamfieldservice.com dubai@vamfieldservice.com nigeria@vamfieldservice.com angola@vamfieldservice.com china@vamfieldservice.com

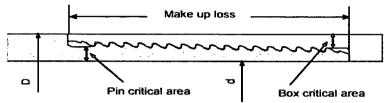
baku@vamfieldservice.com
singapore@vamfieldservice.com
australia@vamfieldservice.com

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

Other Connection Data Sheets are available at www.vamservices.com







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

#### Connection

Box OD (W)	7.625	in	193.68	mm	
PIN ID	6.875	in	174.63	mm	
Pin critical area	4.420	in <sup>2</sup>	2,852	mm <sup>2</sup>	
Box critical area ,	4.424	in <sup>2</sup>	2,854	mm²	
Joint load efficiency	60	%	60	%	
Make up loss	3.040	in	_77.22	mm	
Thread taper	1/16 ( 3/4 in per ft )				
Number of threads	5 thread per in.				

**Connection Performance Properties** 

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

Note

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

#### **Torque Recommended**

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

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

See previously attached Drill Plan

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

Permian

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

Rustler	901'
Top of Salt	1,032'
Base of Salt / Top Anhydr	ite 5,080'
Base Anhydrite	5,334'
Lamar	5,334'
Bell Canyon	5,376'
Cherry Canyon	6,332'
Brushy Canyon	7,972'
Bone Spring Lime	9,310'
1 <sup>st</sup> Bone Spring Sand	10,315'
2 <sup>nd</sup> Bone Spring Shale	10,533'
2 <sup>nd</sup> Bone Spring Sand	10,843
3 <sup>rd</sup> Bone Spring Carb	11,360'
3 <sup>rd</sup> Bone Spring Sand	11,916'
Wolfcamp	12,388'
TD	12,430'

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

Upper Permian Sands	0-400'	Fresh Water
Cherry Canyon	6,332'	Oil
Brushy Canyon	7;972'	Oil
1st Bone Spring Sand	10,315'	Oil
2 <sup>nd</sup> Bone Spring Shale	10,533'	Oil
2 <sup>nd</sup> Bone Spring Sand	10,843	Oil
3 <sup>rd</sup> Bone Spring Carb	11,360'	Oil
3 <sup>rd</sup> Bone Spring Sand	11,916'	Oil
Wolfcamp	12,388'	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 925' and circulating cement back to surface.

#### 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
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6.75"	0'-11,000'	5.5"	20#	P-110EC	DWC/C-IS MS	1.125	1.25	1.60
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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.	Yld Ft³/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)
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7-5/8" 11,500°	250	14.8	1.38	6.48	Class C + 5% Gypsum + 3% CaCl2 pumped via Bradenhead (TOC @ Surface)
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Note: Cement volumes based on bit size plus at least 25% excess in the open hole plus 10% excess in the cased-hole overlap section.

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

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Lateral	٠			

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#### 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.

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#### 11. WELLHEAD:

A multi-bowl wellhead system will be utilized.

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

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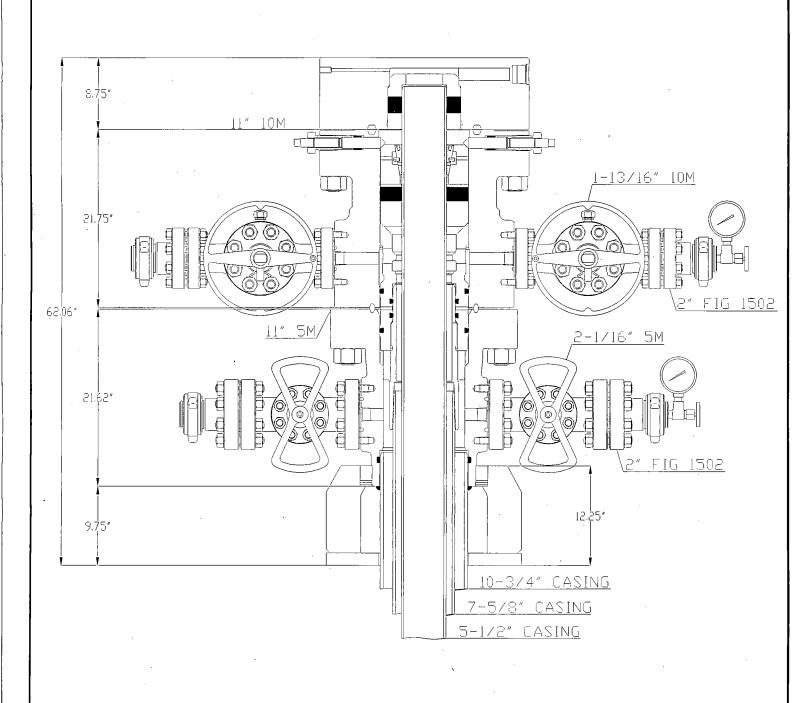
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Both the surface and intermediate casing strings will be tested as per Onshore Order No. 2 to at least 0.22 psi/ft or 1500 psi, whichever is greater.

See previously attached Drill Plan

See previously attached Drill Plan



\*CONCEPT QUOTE DRAWING \*DIMENSIONS ARE APPROXIMATE

EDG RESOURCES

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

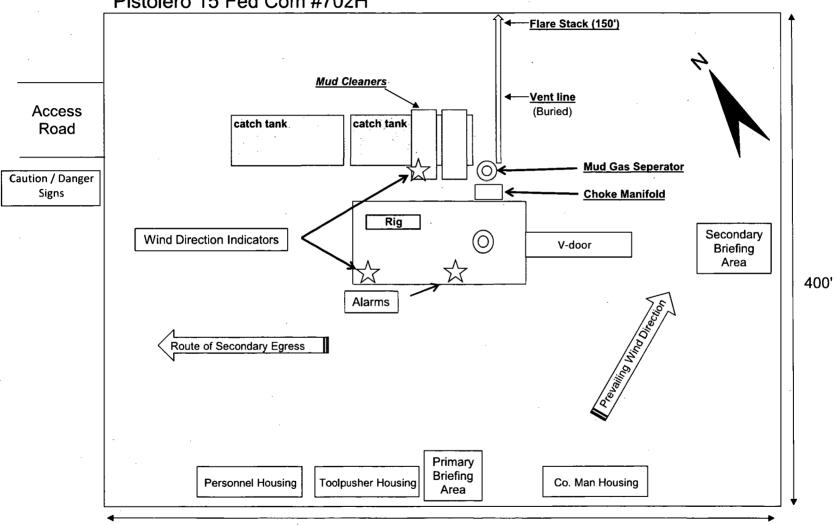
DWN	BAY	2/22/17
CHK		
APP		
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DRAWING NO WH-16618

Exhibit 4
EOG Resources
Pistolero 15 Fed Com #702H

#### Well Site Diagram



490'

Well Name: PISTOLERO 15 FED COM

Well Number: 702H

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\_702H\_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 is located in the NW/4 of section 15.

**Production Facilities map:** 

Well Name: PISTOLERO 15 FED COM Well Number: 702H

Pistolero\_15\_FC\_infrastructure\_06-29-2017.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:

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

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:

Well Name: PISTOLERO 15 FED COM

Well Number: 702H

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 containment attachment:

Waste disposal type: HAUL TO COMMERCIAL

Disposal location ownership: COMMERCIAL

**FACILITY** 

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.)

Well Name: PISTOLERO 15 FED COM

Well Number: 702H

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:

PISTOLERO\_15\_FC\_702H\_padsite\_06-29-2017.pdf PISTOLERO\_15\_FC\_702H\_wellsite\_06-29-2017.pdf

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

Well Name: PISTOLERO 15 FED COM Well Number: 702H

# **Section 10 - Plans for Surface Reclamation**

Type of disturbance: New Surface Disturbance Mult

Multiple Well Pad Name: PISTOLERO 15 FED COM 601H

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

### Recontouring attachment:

PISTOLERO\_15\_FC\_702H 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

Access road long term disturbance (acres): 0.113499

Pipeline long term disturbance (acres): 0.8140496

Other long term disturbance (acres): 0

Total long term disturbance: 3.9808085

Wellpad short term disturbance (acres): 4.499541

Access road short term disturbance (acres): 0.113499

Pipeline short term disturbance (acres): 1.3567493

Other short term disturbance (acres): 0

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 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 respreading. 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:** 

Well Name: PISTOLERO 15 FED COM

Well Number: 702H

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

Seed Type Pounds/Acre

Total pounds/Acre:

Seed reclamation attachment:

Well Name: PISTOLERO 15 FED COM

Well Number: 702H

### **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:

Well Name: PISTOLERO 15 FED COM

Well Number: 702H

**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 5/17/17. Poly lines are planned to transport water for operations. Will truck if necessary. See attached SUPO Plan. **Use a previously conducted onsite?** NO

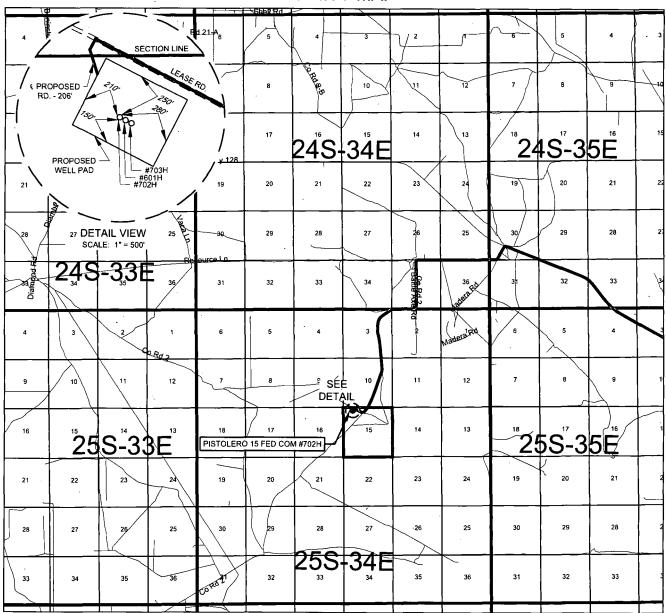
**Previous Onsite information:** 

# **Other SUPO Attachment**

PISTOLERO\_15\_FC\_702H\_elevation\_06-29-2017.pdf Pistolero\_15\_FC\_702H\_gas\_capture\_06-30-2017.pdf SUPO\_Pistolero\_15\_Fed\_Com\_702H\_06-30-2017.pdf



# EXHIBIT 2 VICINITY MAP



Seog resources, Inc.

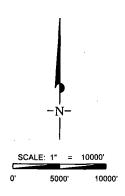
LEASE NAME & WELL NO.:	PIS	PISTOLERO 15 FED COM #702H								
SECTION 15 TWP	25-S RGE	34-E	SURVEY	N.M.P.M.						
COUNTYLE	Α	STATE	NM							
DESCRIPTION		NL & 1042	_							

### **DISTANCE & DIRECTION**

EROM INT. OF NM-18 S. & NM-128 W. GO WEST IN NM-128 W ±14.1 MILES. THENCE SOUTH (LEFT) ON BATTLE AXE RD. ±5.7 MILES. THENCE WEST (RIGHT) ON LEASE RD. ±0.3 MILES, THENCE SOUTH (LEFT) ON A PROPOSED RD. ±206 FEET, TO A POINT ±258 FEET NORTHWEST OF THE LOCATION.

THIS EASEMENT/SERVITUDE LOCATION SHOWN HEREON HAS BEEN SURVEYED ON THE GROUND UNDER MY SUPERVISION AND PREPARED ACCORDING TO THE EVIDENCE FOUND AT THE TIME OF SURVEY, AND DATA PROVIDED BY EOG RESOURCES, INC. THIS CERTIFICATION IS MADE AND LIMITED TO THOSE PERSONS OR ENTITIES SHOWN ON THE FACE OF THIS PLAT AND IS NON-TRANSFERABLE. THIS SURVEY IS CERTIFIED FOR THIS TRANSACTION ONLY.

ALL BEARINGS, DISTANCES, AND COORDINATE VALUES CONTAINED HEREON ARE GRID BASED UPON THE NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE OF THE NORTH AMERICAN DATUM 1983, U.S. SURVEY FEET.





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2903 NORTH BIG SPRING • MIDLAND, TEXAS 79705

TELEPHONE: (432) 682-1653 OR (800) 767-1653 • FAX (432) 682-1743

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# Section 3 - Unlined Pits

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

Would you like to utilize Unlined Pit PWD options? NO

Produced Water Disposal (PWD) Location:	
PWD surface owner:	PWD disturbance (acres):
Unlined pit PWD on or off channel:	
Unlined pit PWD discharge volume (bbl/day):	
Unlined pit specifications:	
Precipitated solids disposal:	
Decribe precipitated solids disposal:	
Precipitated solids disposal permit:	
Unlined pit precipitated solids disposal schedule:	
Unlined pit precipitated solids disposal schedule attachmen	it:
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 Diss that of the existing water to be protected?	colved Solids (TDS) concentration equal to or less than
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 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 disturbance (acres): PWD surface owner: 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

# **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:



U.S. Department of the Interior BUREAU OF LAND MANAGEMENT SUPO Data Report

APD ID: 10400015517

**Operator Name: EOG RESOURCES INCORPORATED** 

Submission Date: 07/17/2017

Highlighted data reflects the most

recent changes

Well Name: PISTOLERO 15 FED COM

Well Number: 702H

**Show Final Text** 

Well Type: OIL WELL

Well Work Type: Drill

# Section 1 - Existing Roads

Will existing roads be used? YES

**Existing Road Map:** 

PISTOLERO 15 FC 702H vicinity 06-29-2017.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? YES

**New Road Map:** 

PISTOLERO\_15\_FC\_702H\_padsite\_06-29-2017.pdf PISTOLERO 15 FC 702H wellsite\_06-29-2017.pdf Pistolero\_15\_FC\_infrastructure\_06-29-2017.pdf

New road type: RESOURCE

Length: 206

Feet

Width (ft.): 24

Max slope (%): 2

Max grade (%): 20

Army Corp of Engineers (ACOE) permit required? NO

**ACOE Permit Number(s):** 

New road travel width: 24

New road access erosion control: Newly constructed or reconstructed roads will be constructed as outlined in the BLM "Gold Book" and to meet the standards of the anticipated traffic flow and all anticipated weather requirements as needed. Construction will include ditching, draining, crowning and capping or sloping and dipping the roadbed as necessary to provide a well-constructed and safe road. We plan to grade and water twice a year.

New road access plan or profile prepared? NO

Well Name: PISTOLERO 15 FED COM

Well Number: 702H

											*	· · · · · · · · · · · · · · · · · · ·						
,	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County		Meridian	Lease Type	Lease Number	Elevation	MD	TVD
EXIT	330	FSL	660	FWL	25S	34E	15	Aliquot	32.12417	-	LEA	NEW	NEW	F	NMNM	-	171	124
Leg								sws	4	103.4642		MEXI	MEXI		113420	909	36	30
#1								w		293		co	co			7 .		
BHL	230	FSL	660	FWL	258	34E	15	Aliquot	32.12389	-	LEA	NEW	NEW	F	NMNM	-	172	124
Leg								sws	91	103.4642		MEXI	MEXI		113420	909	36	30
#1								w		3 .		co	co			7		



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

PWD Data Report

### 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:

Lined pit PWD on or off channel:

Lined pit PWD discharge volume (bbl/day):

Lined pit specifications:

Pit liner description:

Pit liner manufacturers information:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule attachment:

Lined pit reclamation description:

Lined pit reclamation attachment:

Leak detection system description:

Leak detection system attachment:

**Lined pit Monitor description:** 

**Lined pit Monitor attachment:** 

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

Is the reclamation bond a rider under the BLM bond?

Lined pit bond number:

Lined pit bond amount:

Additional bond information attachment:

PWD disturbance (acres):



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

# Operator Certification Data

12/217

# **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: 07/17/2017

Title: Regulatory Specialsit

Street Address: 5509 Champions Drive

City: Midland

State: TX

Zip: 79702

Phone: (432)686-3689

Email address: Stan\_Wagner@eogresources.com

### Field Representative

Representative Name: James Barwis

Street Address: 5509 Champions Drive

City: Midland

State: TX

Zip: 79706

Phone: (432)425-1204

Email address: james barwis@eogresources.com