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HOBBS OCD

Form 3160 -3 (March 2012)

# OCD Hobbs JAN 032018

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

ECEIVED Lease Serial No.
NMNM113420

APPLICATION FOR PERMIT TO DI	RILL OR REENTER	6. If Indian,	Allotee of Tribe Name
la. Type of work:  DRILL  REENTER		7. If Unit or C	A Agreement-Name and No.
lb. Type of Well: Oil Well Gas Well Other	Single Zone Multiple		ne and Well No. <b>32055</b> 0 15 FED COM 603H
2. Name of Operator EOG RESOURCES INCORPORATED	7377)	9. API Well	
4444 D1- OL 1-1- OLL -1- TV 77000	o. Phonc No. (include area code) / 713)651-7000		Pool, or Exploratory (F/02) RED HILLS; BONE SPRING
4. Location of Well (Report location clearly and in accordance with any S. At surface NENW / 901 FNL / 2374 FWL / LAT 32.1352945	5 / LONG -103.4586698	SEC 15 / T2	M. or Blk. and Survey or Area 5S / R34E / NMP
At proposed prod. zone SESW / 230 FSL / 2311 FWL / LAT 3  14. Distance in miles and direction from nearest town or post office*  16 miles	2.12369427 LONG -103.4366	12. County or LEA	Parish 13. State NM
location to pagget 220 feet	16. No. of acres in lease	17. Spacing Unit dedicated 160	to this well
to nearest well, drilling, completed, 330 feet	19. Proposed Depth 12211 feet / 17059 feet	20. BLM/BIA Bond No. or FED: NM2308	n file
3334 feet	2 Approximate date work will start 12/01/2017	23. Estimated 25 days	duration
	24. Attachments		
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest System Lan SUPO must be filed with the appropriate Forest Service Office).</li> </ol>	4. Bond to cover the Item 20 above).  nds, the 5. Operator certifica	operations unless covere	d by an existing bond on file (see
25. Signature (Electronic Submission)	Name (Printed/Typed) Stan Wagner / Ph: (432)6	86-3689	Date 07/19/2017
Title Regulatory Specialsit			· · · · · · · · · · · · · · · · · · ·
Approved by (Signature) (Electronic Submission)	Name (Printed/Typed) Bobby Ballard / Ph. (575)2	234-2235	Date 12/20/2017
Title Natural Resource Specialist	Office CARLSBAD	,	
Application approval does not warrant or certify that the applicant holds to conduct operations thereon. Conduct operations thereon. Conditions of approval, if any, are attached.	egal or equitable title to those rights	in the subject lease which	would entitle the applicant to
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a criminal statement of representations as to a	e for any person knowingly and wi	llfully to make to any depar	rtment or agency of the United

(Continued on page 2)

\*(Instructions on page 2)



Sontoped

#### **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** 

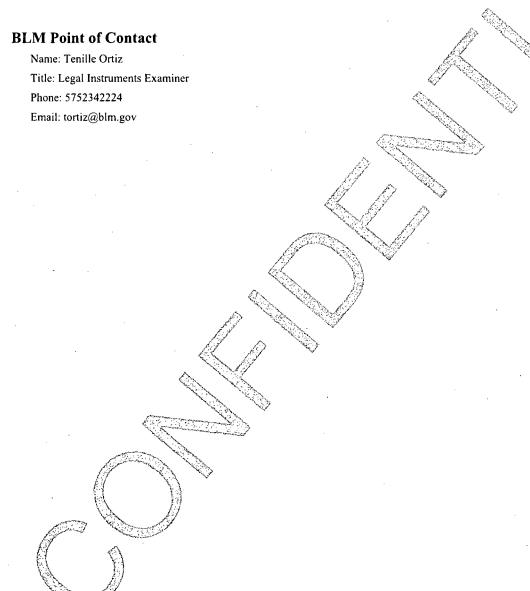
# **Additional Operator Remarks**

#### Location of Well

1. SHL: NENW / 901 FNL / 2374 FWL / TWSP: 258 / RANGE: 34E / SECTION: 15 / LAT: 32.1352945 / LONG: -103.4586698 ( TVD: 0 feet, MD: 0 feet )

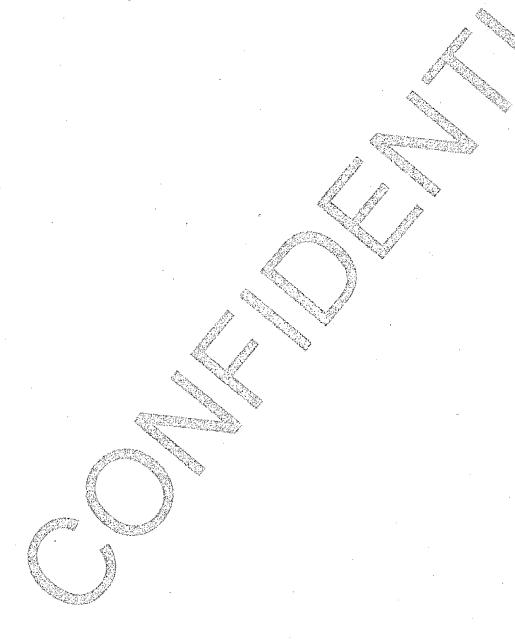
PPP: NENW / 330 FNL / 2306 FWL / TWSP: 25S / RANGE: 34E / SECTION: 15 / LAT: 32.1368653 / LONG: -103.4588859 ( TVD: 12170 feet, MD: 12334 feet )

BHL: SESW / 230 FSL / 2311 FWL / TWSP: 25S / RANGE: 34E / SECTION: 15 / LAT: 32.1238942 / LONG: -103.4588982 ( TVD: 12211 feet, MD: 17059 feet )



#### **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.



Well Name: PISTOLERO 15 FED COM

Well Number: 603H

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: 706H/603H/707H

Well Class: HORIZONTAL

PISTOLERO 15 FED COM 601H

Number of Legs: 1

Well Work Type: Drill

Well Type: OIL WELL

**Describe Well Type:** 

Well sub-Type: INFILL

Describe sub-type:

Distance to nearest well: 330 FT

Distance to lease line: 230 FT

Reservoir well spacing assigned acres Measurement: 160 Acres

Well plat:

 $Pistolero\_15\_FC\_603H\_signed\_C\_102\_06-29-2017.pdf$ 

Well work start Date: 12/01/2017

Distance to town: 16 Miles

**Duration: 25 DAYS** 

#### **Section 3 - Well Location Table**

Survey Type: RECTANGULAR

**Describe Survey Type:** 

Datum: NAD83

Vertical Datum: NAVD88

Survey number:

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
SHL Leg #1	901	FNL	237 4	FWL	258	34E	15	Aliquot NENW	32.13529 45	- 103.4586 698	LEA	NEW MEXI CO		F		333 · 4	0	0
KOP Leg #1	330	FNL	230 6	FWL	25S	34E	15	Aliquot NENW	32.13686 53	- 103.4588 859	LEA	NEW MEXI CO		F	NMNM 113420	- 883 6	123 34	121 70
PPP Leg #1	330	FNL	230 6	FWL	258	34E	15	Aliquot NENW	32.13686 53	- 103.4588 859	LEA	NEW MEXI CO	146.77	F	NMNM 113420	- 883 6	123 34	121 70

Well Name: PISTOLERO 15 FED COM

Well Number: 603H

	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	231 1	FWL	258	34E	15	Aliquot SESW	32.12416 91	- 103.4588 975	LEA	MEXI CO	NEW MEXI CO	F	NMNM 113420	- 887 7	169 59	122 11
BHL Leg #1	230	FSL	231 1	FWL	25S	34E	15	Aliquot SESW	32.12389 42	- 103.4588 982	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 113420	- 887 7	170 59	122 11

Well Name: PISTOLERO 15 FED COM

Well Number: 603H

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\_603H\_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:** 

Well Name: PISTOLERO 15 FED COM Well Number: 603H

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: 603H

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 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: 603H

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\_603H\_padsite\_06-29-2017.pdf

PISTOLERO\_15\_FC\_603H\_wellsite\_06-29-2017.pdf

Pistolero\_15\_Fed\_Com\_603H\_Rig\_Layout\_07-18-2017.pdf

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

Well Name: PISTOLERO 15 FED COM Well Number: 603H

#### **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: 706H/603H/707H

#### Recontouring attachment:

PISTOLERO\_15\_FC\_603H\_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

Pipeline long term disturbance (acres): 1.5874655 Pipeline short term disturbance (acres): 2.645776

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

Total long term disturbance: 4.8027086 Total short term disturbance: 7.3073

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: 603H

**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 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.

Non native seed used? NO

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? NO

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? NO

Seed harvest description:

Seed harvest description attachment:

#### **Seed Management**

Seed Table	
Seed type:	Seed source:
Seed name:	
Source name:	Source address:
Source phone:	
Seed cultivar:	
Seed use location:	
PLS pounds per acre:	Proposed seeding season:

Seed Summary

Total pounds/Acre:

Seed Type Pounds/Acre

Seed reclamation attachment:

Well Name: PISTOLERO 15 FED COM

Well Number: 603H

## 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: 603H

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\_603H\_elevation\_06-29-2017.pdf
Pistolero\_15\_FC\_603H\_gas\_capture\_06-30-2017.pdf
SUPO\_Pistolero\_15\_Fed\_Com\_603H\_06-30-2017.pdf
Pistolero\_15\_FC\_603H\_deficiency\_response\_20171017120151.pdf

Well Name: PISTOLERO 15 FED COM- Well Number: 603H

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\_603H\_10\_M\_Choke\_Manifold\_07-18-2017.pdf

Pistolero\_15\_Fed\_Com\_603H\_Co\_Flex\_Hose\_Certification\_07-18-2017.PDF

Pistolero\_15\_Fed\_Com\_603H\_Co\_Flex\_Hose\_Test\_Chart\_07-18-2017.pdf

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

 $Pistolero\_15\_Fed\_Com\_603H\_10\_M\_BOP\_07\text{-}18\text{-}20\!\!.17.pdf$ 

#### 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 <sub>.</sub>	0	925	0	925	3334	2409	925	J-55	40.5	STC	1.12 5	1.25	BUOY	1.6	BUOY	1.6
1	INTERMED IATE	9.87 5	7.625	NEW	APÍ	Y	0	1000	0	1000	3334	2334	1000	HCP -110	29.7	LTC	1.12 5	1.25	BUOY	1.6	BUOY	1.6
3	PRODUCTI ON	6.75	5.5	NEW	API	Y	0	17059	0	12211	3334	-8877	17059	OTH ER		OTHER - DWC/C-IS MS	1.12 5	1.25	BUOY	1.6	BUOY	1.6

#### **Casing Attachments**

Well Name: PISTOLERO 15 FED COM

Well Number: 603H

**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\_603H\_BLM\_Plan\_07-18-2017.pdf

Casing ID: 2

String Type: INTERMEDIATE

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Pistolero\_15\_Fed\_Com\_603H\_7.625in\_29.7\_P110EC\_VAM\_SLIJ\_II\_07-18-2017.pdf Pistolero\_15\_Fed\_Com\_603H\_7.625in\_29.70\_P\_110\_FlushMax\_III\_07-18-2017.pdf See\_previously\_attached\_Drill\_Plan\_07-18-2017.pdf

Casing Design Assumptions and Worksheet(s):

See\_previously\_attached\_Drill\_Plan\_07-18-2017.pdf

Casing ID: 3

String Type: PRODUCTION

**Inspection Document:** 

**Spec Document:** 

**Tapered String Spec:** 

Pistolero\_15\_Fed\_Com\_603H\_5.500in\_20.00\_VST\_P110EC\_DWC\_C\_IS\_MS\_07-18-2017.pdf See\_previously\_attached\_Drill\_Plan\_07-18-2017.pdf Pistolero\_15\_Fed\_Com\_603H\_5.500in\_20.00\_VST\_P110EC\_VAM\_SFC\_07-18-2017.pdf

Casing Design Assumptions and Worksheet(s):

See\_previously\_attached\_Drill\_Plan\_07-18-2017.pdf

Well Name: PISTOLERO 15 FED COM

Well Number: 603H

#### Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess% .	Cement type	Additives
SURFACE	Lead		0	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 pumped conventionally
PRODUCTION	Lead		1100 0	1705 9	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: 603H

#### **Circulating Medium Table**

Top Depth	Bottom Depth	Mud Type	Min Weight (Ibs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	표	Viscosity (CP)	Salinity (ppm)	Filtration (cc)		Additional Characteristics	
925	1150 0	SALT SATURATED	8.8	10									
1150 0	1705 9	OIL-BASED MUD	10	14					,		·	,	
0 ,	925	WATER-BASED MUD	8.6	8.8				٠			·.		

# 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: 7302** 

**Anticipated Surface Pressure: 4615.58** 

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\_603H\_H2S\_Plan\_Summary\_07-18-2017.pdf

Well Name: PISTOLERO 15 FED COM Well Number: 603H

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

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

Pistolero\_15\_Fed\_603H\_Com\_Planning\_Report\_07-18-2017.pdf Pistolero\_15\_Fed\_603H\_Wall\_Plot\_07-18-2017.pdf

#### Other proposed operations facets description:

#### Other proposed operations facets attachment:

Pistolero\_15\_Fed\_Com\_603H\_Proposed\_Wellbore\_07-18-2017.pdf

Pistolero\_15\_Fed\_Com\_603H\_Rig\_Layout\_07-18-2017.pdf

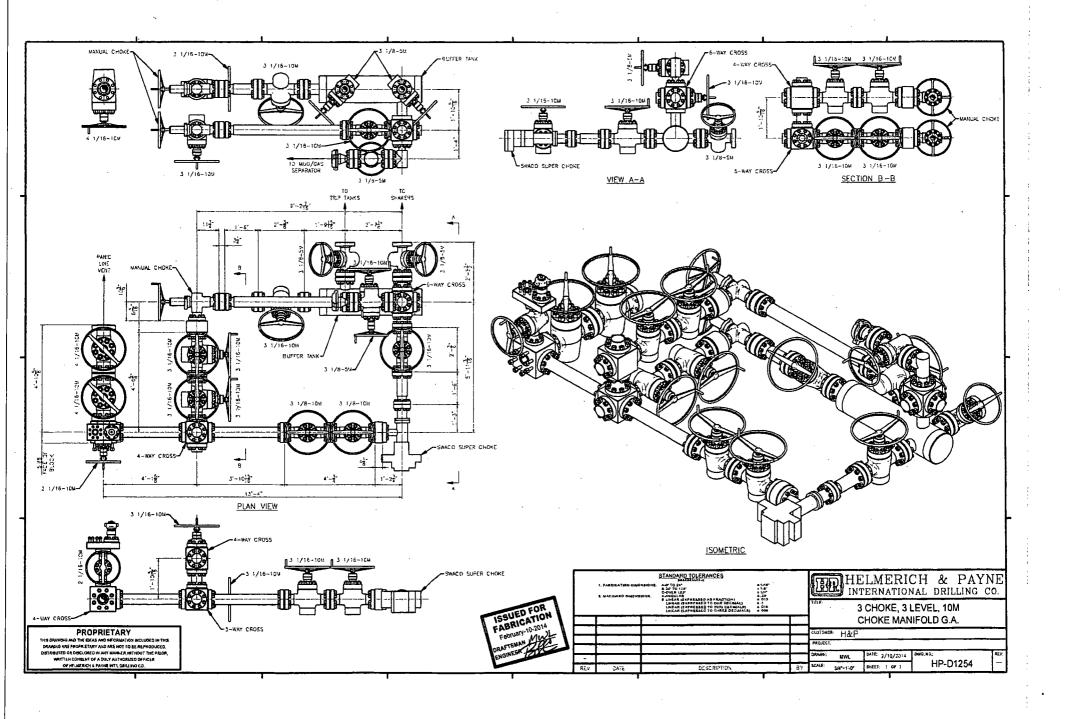
Pistolero\_\_Wellhead\_Cap\_07-18-2017.pdf

Pistolero15FC603\_gas\_capture\_07-18-2017.pdf

Pistolero\_15\_FC\_603H\_gas\_capture\_20171017120104.pdf

Pistolero\_15\_FC\_603H\_deficiency\_response\_20171017120125.pdf

#### Other Variance attachment:



Туре:	CHOKE LIN	E		Length:	35'
I.D.	4"	INCHES	O.D.	8"	INCHES
WORKING F	PRESSURE	TEST PRESSUR	E	BURST PRE	SSURE
10,000	PSI	15,000	PSI		PSI
		COUP	LINGS		
	nd Fitting 4 1/16 10K F	LANGE			
Type of C	oupling: SWEDGED		MANUFACTU MIDWEST HOS		ALTY
		PROC	EDURE		
	<u>Hose assembly</u>	onessure tested w	ith water at ambian	it temperatura	
ł ·		TEST PRESSURE	<u> </u>	SURST PRESS	
	1	MINL			0 PSI
COMMENT					
		M10761	`		_
		ered with staini			_
		fire resistant ve ated for 1500 de			
Date:		Tested By:		Approved:	
L	6/6/2011	BOBBY FINK		MENDI.	JACKSON

į

recialty

required by manfacturer: No



# **Internal Hydrostatic Test Graph**

supplied but have the

**Customer: CACTUS** 

SALES ORDER# 90067

Verification

#### **Hose Specifications**

Hose Type C&K LD. **Working Pressure** 10000 PSI

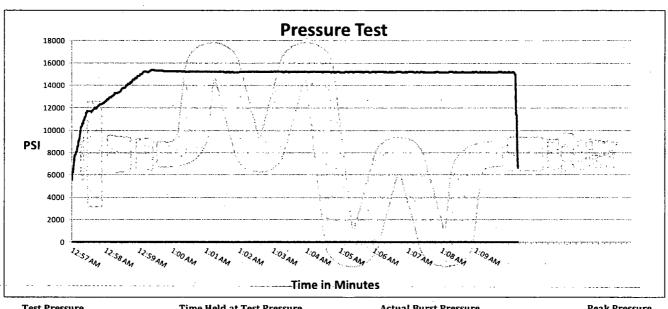
<u>Length</u> 35' <u>O.D.</u> **Burst Pressure** Standard Safety Multiplier Applies

4 1/16 10K Die Size - 6.62" Hose Serial #

Type of Fitting

**Coupling Method** Swage Final O.D. 6.68" **Hose Assembly Serial #** 

90067



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

Mendi Jackson

# **EOG Resources 10M BOPE** Rig Floor 1. 13 5/8" Rotating Head 2. Hydril 13 5/8" 10,000 PSI WP GK Annular Preventor 3. 13 5/8" Cameron Type "U" 10,000 PSI WP Ram Preventors 4. 2 1/16" - 10,000 PSI WP Check Valve 16) 5. 10,000 PSĮ 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 **44444** 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 2 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 (3) <del>Ф</del>ФФ

Exhibit 1



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 PROPERMES							
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						
The second secon							

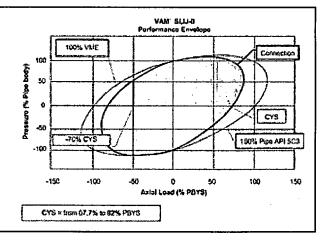
CONNECTION PROPERTIES						
Connection Type	Premium integral semi-flush					
Connection OD (nom)	7.711 in.					
Connection ID (nom)	6.820 in.					
Make-up Loss	4.822 in.					
Critical Cross Section	5.912 sqin.					
Tension Efficiency	69.2 % of pipe					
Compression Efficiency	48.5 % of pipe					
Internal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

GONNEGTION 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.



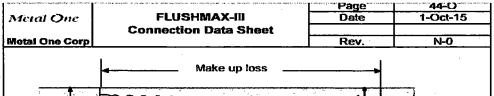
#### Do you need help on this product? - Remember no one knows VAM® like VAM

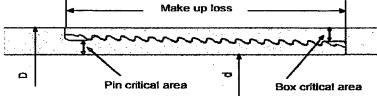
canada@vamfieldservice.com usa@vamfieldservice.com mexico@vamfieldservice.com brazil@vamfieldservice.com uk@vamfieldservice.com dubai@vamfieldservice.com rilgeria@vamfieldservice.com angola@vamfieldservice.com china@vamfieldservice.com baku@vamfieldservice.com singapore@vamfieldservice.com australia@vamfieldservice.com

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

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







Pipe Body	Imperial	S.L			
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	in²	5,508	mm <sup>2</sup>	
Drift Dia.	6.750	in	171.45	mm	

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

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

5 thread per in.

Note

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

**Torque Recommended** 

Number of threads

i di quo i touditti il ditudu				
Min.	8,700	ft-lb	11,700	N-m
Opti.	9,700	ft-lb	13,100	N-m
Max.	10,700	ft-lb	14,500	N-m
Operational Max.	23,600	ft-lb	32,000	N-m

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

## 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'
1st 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'
TD	12,211'

#### 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
1 <sup>st</sup> 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

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		Csg				DF <sub>min</sub>	DF <sub>min</sub>	DF <sub>min</sub>
Size	Interval	OD	Weight	Grade	Conn	Collapse	Burst	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-	LTC	1.125	1.25	1.60
ļ				110				
9.875"	1,000' -	7.625"	29.7#	P-110EC	SLIJ II	1.125	1.25	1.60
	3,000'							
8.75"	3,000' – 11,500'	7.625"	29.7#	HCP-	FlushMax III	1.125	1.25	1.60
				110				
6.75"	0' - 11,000'	5.5"	20#	P-110EC	DWC/C-IS	1.125	1.25	1.60
	}	•			MS			
6.75"	11,000'-17,059'	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 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"	850	14.1	1.26	5.80	Class H + 0.1% C-20 + 0.05% CSA-1000 + 0.20% C-49 +
17,059'		•			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	Type	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' – 17,059'	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 7302 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.

See previously attached Drill Plan



# United States Department of the Interior

BUREAU OF LAND MANAGEMENT CARLSBAD FIELD OFFICE 620 E. GREENE ST. CARLSBAD, NM 88220



In Reply To:

3160 (Office Code) [ NMNM113420 ]

10/16/2017

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 / 603H

Legal Description:

T25S, R34E, SEC 15, NENW

County, State:

LEA, NM

Date APD Received:

07/19/2017

Dear Operator:

The BLM received your Application for Permit to Drill (APD), for the referenced well, on 07/19/2017. 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
	$\checkmark$	Drilling Plan
•		Surface Use Plan of Operations (SUPO)
		Certification of Private Surface Owner Access Agreement
		Bonding
		Onsite (The BLM has scheduled the onsite to be on )
		This requirement is exempt of the 45-day timeframe to submit deficiencies. This requirement will be satisfied on the date of the onsite.
		Other

[Please See Addendum for further clarification of deficiencies]

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

[Please See Addendum for further clarification of deficiencies]

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

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

#### **Extension Requests:**

- If you know you will not be able to meet the 45-day timeframe for reasons beyond your control, you must submit a written request through email/standard mail for extension prior to the 45<sup>th</sup> calendar day from this notice, 11/30/2017.
- 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.
  - o 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) 234-2224.

Sincerely,

Cody Layton Assistant Field Manager

cc: Official File

# ADDENDUM - Incomplete/Deficient

Clarifications

#### ADDENDUM - Deficient

# **Engineering Comments**

- Engineering Review: Other identified drilling plan deficiencies

Not a deficiency but cannot approve APD without a waste minimization plan. Please attach state submitted gas capture plan (this will be a sufficient substitute for waste minimization plan).





## 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):

# Section 3 - Unlined Pits

**Produced Water Disposal (PWD) Location:** 

Injection PWD discharge volume (bbl/day):

PWD surface owner:

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 attachment: Unlined pit reclamation description: Unlined pit reclamation attachment: Unlined pit Monitor description: **Unlined pit Monitor attachment:** Do you propose to put the produced water to beneficial use? Beneficial use user confirmation: Estimated depth of the shallowest aquifer (feet): Does the produced water have an annual average Total Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected? TDS lab results: Geologic and hydrologic evidence: State authorization: **Unlined Produced Water Pit Estimated percolation:** Unlined pit: do you have a reclamation bond for the pit? Is the reclamation bond a rider under the BLM bond? Unlined pit bond number: Unlined pit bond amount: Additional bond information attachment: Section 4 - Injection Would you like to utilize Injection PWD options? NO

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 disturbance (acres): PWD surface owner: 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):

Have other regulatory requirements been met?

Other regulatory requirements attachment:

Other PWD type description:
Other PWD type attachment:



# 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:





# **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: 07/19/2017

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





APD ID: 10400015515

Submission Date: 07/19/2017

Highlighted data reflects the most

**Operator Name: EOG RESOURCES INCORPORATED** 

recent changes

Well Name: PISTOLERO 15 FED COM

Well Number: 603H

**Show Final Text** 

Well Type: OIL WELL

Well Work Type: Drill

#### Section 1 - General

APD ID: 10400015515

Tie to previous NOS?

Submission Date: 07/19/2017

**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

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

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: 603H

Well API Number:

Field/Pool or Exploratory? Field and Pool

Field Name: RED HILLS

Pool Name: RED HILLS; BONE

SPRING, EAST

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



# Drilling Plan Data Report

**APD ID:** 10400015515

Submission Date: 07/19/2017

Highlighted data reflects the most

Operator Name: EOG RESOURCES INCORPORATED

recent changes

Well Name: PISTOLERO 15 FED COM

Well Number: 603H

**Show Final Text** 

Well Type: OIL WELL

Well Work Type: Drill

# **Section 1 - Geologic Formations**

Formation	,		True Vertical	Measured			Producing
ID	Formation Name	Elevation	Depth	Depth	Lithologies	Mineral Resources	Formation
1	PERMIAN	3334	0	Ö	ALLUVIUM	NONE	No
2	RUSTLER	2433	901	901	ANHYDRITE	NONE	No
3	TOP SALT	2302	1032	1032	SALT	NONE	No
4	BASE OF SALT	-1746	5080	5080	SALT	NONE	No
5	LAMAR	-2000	5334	5334	LIMESTONE	NONE	No
6	BELL CANYON	-2042	5376	5376	SANDSTONE	NATURAL GAS,OIL	No
7	CHERRY CANYON	-2998	6332	6332	SANDSTONE	NATURAL GAS,OIL	No
8	BRUSHY CANYON	-4638	7972	7972	SANDSTONE	NATURAL GAS,OIL	No
9	BONE SPRING LIME	-5976	9310	9310	LIMESTONE	NONE	No
10	FIRST BONE SPRING SAND	-6981	10315	10315	SANDSTONE	NATURAL GAS,OIL	No
11	BONE SPRING 2ND	-7509	10843	10843	SANDSTONE	NATURAL GAS,OIL	No
12	BONE SPRING 3RD	-8582	11916	11916	SANDSTONE	NATURAL GAS,OIL	No

#### **Section 2 - Blowout Prevention**

Pressure Rating (PSI): 10M

Rating Depth: 12211

**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



SUPO Data Report

APD ID: 10400015515

**Operator Name: EOG RESOURCES INCORPORATED** 

Well Name: PISTOLERO 15 FED COM

Well Type: OIL WELL

Submission Date: 07/19/2017

Well Number: 603H

Well Work Type: Drill

Highlighted data reflects the most recent changes

**Show Final Text** 

### Section 1 - Existing Roads

Will existing roads be used? YES

**Existing Road Map:** 

PISTOLERO\_15\_FC\_603H\_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 603H padsite 06-29-2017.pdf PISTOLERO 15 FC 603H wellsite 06-29-2017.pdf Pistolero\_15\_FC\_infrastructure\_06-29-2017.pdf

New road type: RESOURCE

Length: 294

Feet

Width (ft.): 24

Max slope (%): 2

Max grade (%): 20

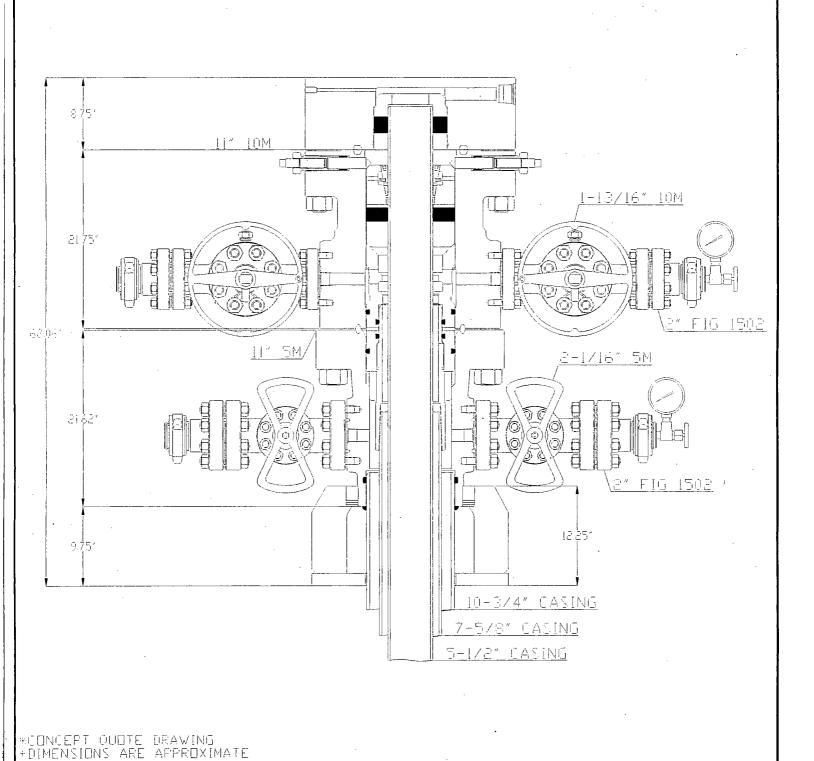
Army Corp of Engineers (ACOE) permit required? NO

**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



2/22/17

DATE

Worldwide Expertise - Global Strength

DRAWING NO

WH-16618

BAY

ĒΥ

DWN

CHK

APP

10-3/4" X 7-5/8" X 5-1/2"

FBD-100 WELLHEAD SYSTEM OUDTE: HOU - 102101



# United States Department of the Interior

BUREAU OF LAND MANAGEMENT CARLSBAD FIELD OFFICE 620 E. GREENE ST. CARLSBAD, NM 88220



In Reply To:

3160 (Office Code) [ NMNM113420 ]

10/16/2017

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 / 603H

Legal Description:

T25S, R34E, SEC 15, NENW

County, State:

LEA, NM

Date APD Received:

07/19/2017

Dear Operator:

The BLM received your Application for Permit to Drill (APD), for the referenced well, on 07/19/2017. 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 43	5 calendar days of the date of this notice or the BLM will return you	ur APD.)
	Well Plat	
$\checkmark$	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 su deficiencies. This requirement will be satisfied on the dat	
	Othor	•

[Please See Addendum for further clarification of deficiencies]

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

[Please See Addendum for further clarification of deficiencies]

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

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

#### **Extension Requests:**

- If you know you will not be able to meet the 45-day timeframe for reasons beyond your control, you must submit a written request through email/standard mail for extension prior to the 45<sup>th</sup> calendar day from this notice, 11/30/2017.
- 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.
  - o 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.
  - o 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) 234-2224.

Sincerely,

Cody Layton Assistant Field Manager

cc: Official File

# ADDENDUM - Incomplete/Deficient

Clarifications

# ADDENDUM - Deficient

# **Engineering Comments**

- Engineering Review: Other identified drilling plan deficiencies

Not a deficiency but cannot approve APD without a waste minimization plan. Please attach state submitted gas capture plan (this will be a sufficient substitute for waste minimization plan).