

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OCD Hobbs

FORM APPROVED  
OMB NO. 1004-0135  
Expires: July 31, 2010

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.*

5. Lease Serial No.  
NMNM108977

6. If Indian, Allottee or Tribe Name

**SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

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

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.  
DELLA 29 FED 602H

2. Name of Operator  
EOG RESOURCES, INC.

Contact: STAN WAGNER  
E-Mail: stan\_wagner@eogresources.com

9. API Well No.  
30-025-43054

3a. Address  
P.O. BOX 2267  
MIDLAND, TX 79702

3b. Phone No. (include area code)  
Ph: 432-686-3689

10. Field and Pool, or Exploratory  
LEA; BONE SPRING, SOUTH

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 29 T20S R34E SESE 250FSL 1300FEL

11. County or Parish, and State

LEA COUNTY, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Change to Original A
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	PD

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

EOG Resources requests an amendment to our approved APD for this well to reflect a change in casing design, and our intention to use a multi-bowl wellhead system in the drilling of the well.

Detailed information attached regarding the casing design and multi-bowl WH system.

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #338411 verified by the BLM Well Information System  
For EOG RESOURCES, INC., sent to the Hobbs  
Committed to AFMSS for processing by KENNETH RENNICK on 06/01/2016 ()

Name (Printed/Typed) STAN WAGNER

Title REGULATORY ANALYST

Signature (Electronic Submission)

Date 05/05/2016

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved By *Kenneth Rennick*

Title *Field Office Engineer*

Date *6/2/2014*

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

Office *Carlsbad Field Office*

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

**\*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\* OPERATOR-SUBMITTED \*\***

*KZ*



Rennick, Kenneth <krennick@blm.gov>

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## NOI Sundry - Della 29 Fed 701H & 602H

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**Rennick, Kenneth** <krennick@blm.gov>

Wed, Jun 1, 2016 at 10:27 AM

To: Stan Wagner <Stan\_Wagner@eogresources.com>

Cc: Edward Fernandez <efernand@blm.gov>

Hello Again Mr. Stan Wagner,

I am reviewing the Della 29 Fed 602H, and it seems that the directional survey slightly changes from the original APD. The sundry has the measured depth of the bottom hole being 16,093, which is different from the original 16,024 of the APD.

So if you may send in an updated directional survey for the 602H that will be greatly appreciated.

Also I assume that the 7-5/8th intermediate casing will be kept fluid filled for both the 701H and 602H since I am seeing the similar collapse situation as with the Hawk wells.

Thank You in Advance!!

Kenny Rennick

[Quoted text hidden]

—

Kenneth Rennick

Petroleum Engineer  
Bureau of Land Management  
Carlsbad Field Office  
(575) 234-5964  
[krennick@blm.gov](mailto:krennick@blm.gov)



Rennick, Kenneth <krennick@blm.gov>

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## NOI Sundry - Della 29 Fed 701H & 602H

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**Stan Wagner** <Stan\_Wagner@eogresources.com>  
To: "Rennick, Kenneth" <krennick@blm.gov>

Wed, Jun 1, 2016 at 12:17 PM

Yes on the casing.

**From:** Rennick, Kenneth [mailto:krennick@blm.gov]  
**Sent:** Wednesday, June 01, 2016 11:28 AM  
**To:** Stan Wagner  
**Cc:** Edward Fernandez  
**Subject:** Re: NOI Sundry - Della 29 Fed 701H & 602H

\*\* External email. Use caution.\*\*

[Quoted text hidden]





Rennick, Kenneth <krennick@blm.gov>

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## NOI Sundry - Della 29 Fed 701H & 602H

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**Stan Wagner** <Stan\_Wagner@eogresources.com>  
To: "Rennick, Kenneth" <krennick@blm.gov>

Wed, Jun 1, 2016 at 12:38 PM

Hi Kenny, I checked with Bruce... the directional you have for 16024' is correct. 16093' was a typo on the detail sheets. Will you cross out 16093' and correct to 16024' please and that will not necessitate sending new pages.

Stan

**From:** Rennick, Kenneth [mailto:krennick@blm.gov]  
**Sent:** Wednesday, June 01, 2016 11:28 AM  
**To:** Stan Wagner  
**Cc:** Edward Fernandez  
**Subject:** Re: NOI Sundry - Della 29 Fed 701H & 602H

\*\* External email. Use caution.\*\*

Hello Again Mr. Stan Wagner,

[Quoted text hidden]

[Quoted text hidden]

**Della 29 Fed 602H  
30-025-43054  
EOG Resources, Inc  
Surface Location: Sec. 29, T. 20S, R. 34E  
Conditions of Approval**

See below for the updated Conditions of Approval for the Drilling Section.

**DRILLING**

**A. DRILLING OPERATIONS REQUIREMENTS**

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

☒ **Lea County**

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240,  
(575) 393-3612

1. A Hydrogen Sulfide (H<sub>2</sub>S) Drilling Plan shall be activated at **2500** feet drilling depth. **As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.**
2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval. **If the drilling rig is removed without approval – an Incident of Non-Compliance will be written and will be a “Major” violation.**
3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works is located, this does not include the dog house or stairway area.

4. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

## **B. CASING**

Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.).

The initial wellhead installed on the well will remain on the well with spools used as needed.

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

### **Wait on cement (WOC) for Potash Areas:**

After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE.

Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

### **Risks:**

Possibility of Water Flows in the Capitan Reef, in the Salado and in the Artesia Group.  
Possibility of Lost Circulation in the Rustler, in the Capitan Reef, in the Red Beds, in the Delaware and in the Artesia Group.



1. The **10 3/4 inch** surface casing shall be set at approximately **1625 feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt)** and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - b. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.**
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
  - d. If cement falls back, remedial cementing will be done prior to drilling out that string.

**Formation below the 10 3/4 inch shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.**

**Special Capitan Reef requirements:**

**If lost circulation (50% or greater) occurs below the Base of the Salt, the operator shall do the following:**

- a. **Switch to fresh water mud to protect the Capitan Reef and use fresh water mud until setting the intermediate casing. The appropriate BLM office is to be notified for a PET to witness the switch to fresh water.**
- b. **Daily drilling reports from the Base of the Salt to the setting of the intermediate casing are to be submitted to the BLM CFO engineering staff via e-mail by 0800 hours each morning. Any lost circulation encountered is to be recorded on these drilling reports. The daily drilling report should show mud volume per shift/tour. Failure to submit these reports will result in an Incidence of Non-Compliance being issued for failure to comply with the Conditions of Approval. If not already planned, the operator shall run a caliper survey for the intermediate well bore and submit to the appropriate BLM office.**

**The intermediate casing shall be kept fluid filled to avoid approaching the minimum collapse pressure rating of the casing.**

2. The minimum required fill of cement behind the 7 5/8 inch intermediate casing is:

☒ Cement to surface. If cement does not circulate see B.1.a, c-d above.

**Formation below the 7 5/8 inch shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.**

**Variance is granted for centralizers in the production interval per the drilling program.**

3. The minimum required fill of cement behind the 5 1/2 inch production casing is:

☒ **Cement should tie-back to cover casing 50 feet above Capitan Reef, which shall be approximately at a depth of 4000 feet. Operator shall provide method of verification. Proposed cement calculates to negative 33% to achieve this goal - Additional cement shall be required.**

4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

## **C. PRESSURE CONTROL**

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API 53.
2. Variance approved to use flex line from BOP to choke manifold. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. **Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.** If the BLM inspector questions the straightness of the hose, a BLM engineer will be contacted and will review in the field or via picture supplied by inspector to determine if changes are required (operator shall expect delays if this occurs).



3. Operator has proposed a **multi-bowl wellhead assembly**. This assembly (BOPE/BOPE) will be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M) psi**. **5M system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.**
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. All BOP equipment will be tested utilizing a conventional test plug. Not a cup or J-packer type.
  - c. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - d. Manufacturer representative shall install the test plug for the initial and all BOP testing.
  - e. **Prior to running the intermediated casing, the rams will be changed out to accommodate the 7-5/8 inch casing. After installing the intermediate casing the casing rams will be removed and replaced with variable bore rams.**
4. Operator has broken a seal on the BOP stack therefore per Onshore Oil and Gas Order No. 2 **the entire BOP stack shall be tested prior to drilling out the intermediated casing.**
  - a. A solid steel body pack-off will be utilized after running & cementing the intermediate casing. After installation of the pack-off and lower flange will be pressure tested to 5000 psi.
  - b. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - a. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time.
  - b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**.

- c. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- d. The results of the test shall be reported to the appropriate BLM office.
- e. All tests are required to be recorded on a calibrated test chart. **A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.**
- f. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

#### **D. DRILL STEM TEST**

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

#### **E. WASTE MATERIAL AND FLUIDS**

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

**KGR 05312016**

**EOG RESOURCES, INC.**  
**DELLA 29 FED COM NO. 602H**

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

Permian

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

Rustler	1,600'
Top of Salt	1,984'
Base of Salt / Top Anhydrite	3,500'
Base Anhydrite	3,736'
Yates	3,736'
Capitan	4,060'
Cherry Canyon	5,550'
Brushy Canyon	7,100'
Bone Spring Lime	8,610'
1 <sup>st</sup> Bone Spring Sand	9,809'
2 <sup>nd</sup> Bone Spring Lime	10,033'
2 <sup>nd</sup> Bone Spring Sand	10,239'
3 <sup>rd</sup> Bone Spring Carb	10,699'
3 <sup>rd</sup> Bone Spring Sand	10,982'
TD	11,260'

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

Upper Permian Sands	0- 400'	Fresh Water
Cherry Canyon	5,550'	Oil
Brushy Canyon	7,030'	Oil
Bone Spring Lime	8,610'	Oil
1 <sup>st</sup> Bone Spring Sand	9,809'	Oil
2 <sup>nd</sup> Bone Spring Lime	10,033'	Oil
2 <sup>nd</sup> Bone Spring Sand	10,239'	Oil
3 <sup>rd</sup> Bone Spring Carb	10,699'	Oil
3 <sup>rd</sup> Bone Spring Sand	10,982'	Oil

No other Formations are expected to give up oil, gas or fresh water in measurable quantities. Surface fresh water sands will be protected by setting 10.75" casing at 1,625' and circulating cement back to surface.



**EOG RESOURCES, INC.  
DELLA 29 FED COM NO. 602H**

**4. CASING PROGRAM - NEW**

*See COA*

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 - 1,625'	10.75"	40.5#	J55	STC	1.125	1.25	1.60
9.875"	0-8,000'	7.625"	29.7#	HCP-110	LTC	1.125	1.25	1.60
8.75"	8,000' - 10,700'	7.625"	29.7#	HCP-110	Ultra FJ	1.125	1.25	1.60
6.75"	0' - <del>16,093'</del>	5.5"	23#	HCP-110	ULT SFII	1.125	1.25	1.60

*See COA*

*See COA*

*See COA*

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. Centralizers will be placed in the 9-7/8" hole interval at least one every third joint.

*16,024  
Per Operator,  
See Email*

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:**

*See COA*

Depth	No. Sacks	Wt. ppg	Yld Ft <sup>3</sup> /ft	Mix Water Gal/sk	Slurry Description
10-3/4" 1,625	700	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)
	300	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" 10,700'	780	9.0	2.86	11.14	D195 LiteFill (Beads) + 0.50% Retarder + D046 Antifoam
	525	13.5	1.55	7.47	50:50 Class H:Poz + 0.10% D065 + 0.20% D112 + 10% D154 + 2.0% D174 + 0.40% D800
5-1/2" <del>16,093'</del>	575	14.1	1.26	5.80	Class H + 0.1% C-20 + 0.05% CSA-1000 + 0.20% C-49 + 0.40% C-17

*Extremely low  
Cement  
See COA*

*16,024* 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.

*Production casing cement  
should tie-back to  
cover at least 50 feet  
above Capitan Reef, approximately  
4,000 feet.*

**EOG RESOURCES, INC.**  
**DELLA 29 FED COM NO. 602H**

**5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:**

*See COA*  
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 (5000-psi WP). Both units will be hydraulically operated and the ram-type will be equipped with blind rams on bottom and drill pipe rams on top. All BOPE will be tested in accordance with Onshore Oil & Gas order No. 2.

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.

**6. TYPES AND CHARACTERISTICS OF THE PROPOSED MUD SYSTEM:**

During this procedure we plan to use a Closed-Loop System and haul contents to the required disposal.

The applicable depths and properties of the drilling fluid systems are as follows.

Depth	Type	Weight (ppg)	Viscosity	Water Loss
0 - 1,625'	Fresh - Gel	8.6-8.8	28-34	N/c
1,625' - 10,700'	Brine	8.8-10.0	28-34	N/c
10,746' - <del>16,093'</del> Lateral	Oil Base	10.0-11.5	58-68	3 - 6

*16,024*  
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.



**EOG RESOURCES, INC.**  
**DELLA 29 FED COM NO. 602H**

**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:**

*See COA*

The estimated bottom-hole temperature (BHT) at TD is 170 degrees F with an estimated maximum bottom-hole pressure (BHP) at TD of 6733 psig. No hydrogen sulfide or other hazardous gases or fluids have been encountered, reported or are known to exist at this depth in this area. No major loss circulation zones have been reported in offsetting wells.

**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.

**11. WELLHEAD:**

*See COA*

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 5000 psi will be installed on the wellhead system and will be pressure tested to 250 psi low followed by a 5000 psi pressure test. This pressure test will be repeated at least every 30 days, as per Onshore Order No. 2



**EOG RESOURCES, INC.**  
**DELLA 29 FED COM NO. 602H**

The minimum working pressure of the BOP and related BOPE required for drilling below the surface casing shoe shall be 5000 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.

*See  
COA*

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. Prior to running the intermediate casing, the rams will be changed out to accommodate the 7-5/8" casing. The bonnet seals will be tested to 1500 psi. After installing the intermediate casing the casing rams will be removed and replaced with variable bore rams. The remaining BOPE will not be retested after installing the intermediate casing.

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.

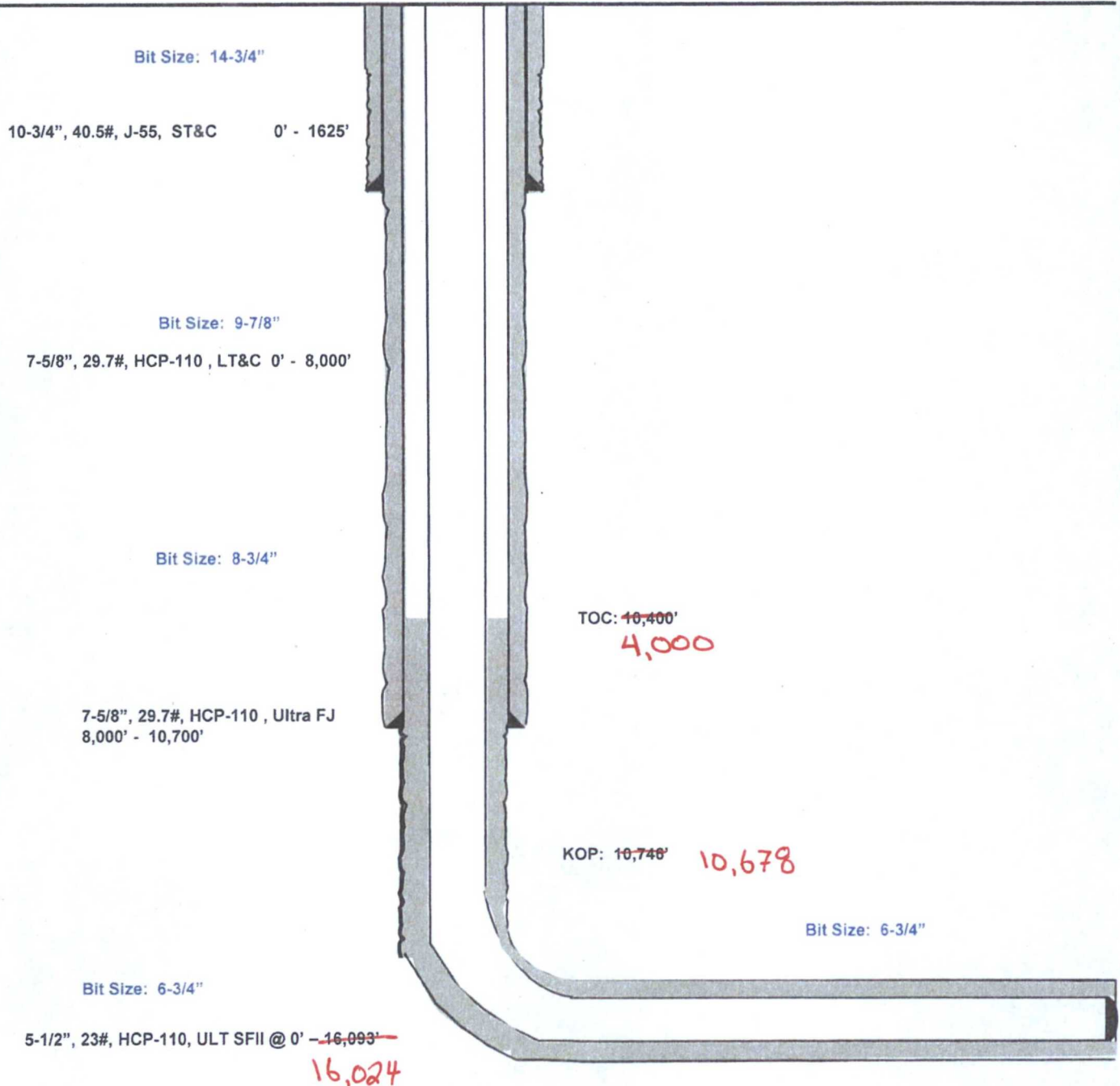
Wellhead drawing Attached.

Della 29 Fed #602H

250' FSL  
1300' FEL  
Section 29  
T-20-S, R-34-E

Lea County, New Mexico  
Proposed Wellbore  
Revised 5/4/16  
API: 30-025-43054

KB: 3,744'  
GL: 3,714'



Lateral: 16,093' MD, 11,260' TVD  
Upper Most Perf:  
330' FSL & 2530' FEL Sec. 29  
Lower Most Perf:  
330' FNL & 2530' FEL Sec. 29  
BH Location: 230' FNL & 2530' FEL  
Section 29  
T-20-S, R-34-E