

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.*

**HOBBS OCD**

JUL 27 2015

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

1. Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		<b>RECEIVED</b>	5. Lease Serial No. NMNM43564
2. Name of Operator DEVON ENERGY PRODUCTION CO E			6. If Indian, Allottee or Tribe Name
3a. Address 333 WEST SHERIDAN AVE OKLAHOMA CITY, OK 73102		Contact: TRINA C COUCH Email: trina.couch@dmn.com	7. If Unit or C/A Agreement, Name and/or No.
3b. Phone No. (include area code) Ph: 405-228-7203		9. API Well No. 30-025-42136-00-X1	10. Field and Pool, or Exploratory WC-025 G06 S223421L
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec:21 T22S R34E SESW 200FSL 1450FWL 32.369934 N Lat, 103.483603 W Lon		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.)

Devon Energy Production Company, L.P. respectfully requests to change the cement on the production long string, bringing the cement to surface due to issues cementing the intermediate 9-5/8".

Attached please see the revised drilling plan.

Thank you

**SEE ATTACHED FOR  
CONDITIONS OF APPROVAL**

14. I hereby certify that the foregoing is true and correct. <b>Electronic Submission #309678 verified by the BLM Well Information System For DEVON ENERGY PRODUCTION CO LP, sent to the Hobbs Committed to AFMSS for processing by JENNIFER SANCHEZ on 07/20/2015 (15JAS0078SE)</b>			
Name (Printed/Typed)	TRINA C COUCH	Title	REGULATORY ANALYST
Signature	(Electronic Submission)	Date	07/20/2015
<b>THIS SPACE FOR FEDERAL OR STATE OFFICE USE</b>			
Approved By	BUREAU OF LAND MANAGEMENT CARLSBAD FIELD OFFICE		Date
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	
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.			

**\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\***

JUL 31 2015

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**Casing and Cementing Plan Summary**

The surface fresh water sands will be protected by setting 13 3/8" casing and circulating cement back to surface. The fresh water sands will be protected by setting 9 5/8" casing and circulating cement to surface. The Delaware intervals will be isolated by setting 5 1/2" casing to total depth and circulating cement above the base of the 9 5/8" casing. All casing is new and API approved.

**Casing program:**

Hole Size	Hole Interval	Casing OD	Casing interval	Casing Wt (ppf)	Connection	Casing Grade
17-1/2"	0 – 1,820'	13-3/8"	0 – 1,820'	54.5	STC	J-55
12-1/4"	1,820 - 5,000'	9-5/8"	0 - 5,000'	36	BTC	HCK-55
8-3/4"	5,000 - 15,165'	5-1/2"	0 - 15,165'	17	BTC	HCP-110

An 8-3/4" pilot hole will be drilled to 10,659' and plugged back to KOP (for volumes & TOC see cement table)

**Design factors:**

Casing	Collapse	Burst	Tension
13-3/8" J-55 STC	1.49	3.71	5.55
9-5/8" HCK-55 BTC	1.43	2.03	5.76
5-1/2" HCP-110 BTC	1.73	2.37	2.18

**Mud program:**

Depth	Mud Wt. (ppg)	Visc. (cp)	Fluid loss	Type System
0 - 1,820'	8.4 - 8.6	1 - 3	NC	Fresh water
1,820 - 5,000'	9.8 - 10.0	1 - 3	NC	Brine
5,000 - 15,329'	8.8 - 9.2	1 - 3	NC-12	Fresh water/cut brine

The necessary mud products for weight addition and fluid loss control will be on location at all times.

**Pressure control equipment:**

- The BOP system used to drill the intermediate hole will consist of a 13-5/8" 3M Double Ram and Annular preventer. The BOP system will be tested as per BLM Onshore Oil and Gas Order No. 2 as a 3M system prior to drilling out the surface casing shoe.
- The BOP system used to drill the production hole will consist of a 13-5/8" 3M Double Ram and Annular preventer. The BOP system will be tested as per BLM Onshore Oil and Gas Order No. 2 as a 3M system prior to drilling out the intermediate casing shoe.
- The pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These tests will be logged in the daily driller's log. A 2" kill line and 3" choke line will be incorporated into the drilling spool below the ram BOP. In addition to the rams and annular preventer, additional BOP accessories include a kelly cock, floor safety valve, choke lines, and choke manifold rated at 3,000-psi WP.
- Devon requests a variance to use a flexible line with flanged ends between the BOP and the choke manifold (choke line). The line will be kept as straight as possible with minimal turns.

**Auxiliary Well Control and Monitoring Equipment:**

- A Kelly cock will be in the drill string at all times.
- A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.
- Hydrogen Sulfide detection equipment will be in operation after drilling out the 13 3/8" casing shoe until the 5 1/2" casing is cemented. Breathing equipment will be on location upon drilling the 13 3/8" shoe until total depth is reached.

**Anticipated Starting Date and Duration of Operations:**

Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon as a rig becomes available following BLM approval. Move in operations and drilling is expected to take 32 days.

**Location and Types of Water Supply:**

This location will be drilled using a combination of water mud systems (outlined in the Drilling Program). The water will be obtained from commercial water stations in the area and hauled to location by transport truck using the existing and proposed roads shown in the C-102. On occasion, water will be obtained from a pre-existing water well, running a pump directly to the drill rig. In these cases where a poly pipeline is used to transport water for drilling purposes, proper authorizations will be secured. If a poly pipeline is used, the size, distance, and map showing route will be provided to the BLM via sundry notice.

**Methods of Handling Waste Material:**

- Drill cuttings will be disposed of in a closed loop system.
- All trash, junk and other waste material will be contained in trash cages or trash bins to prevent scattering. When the job is completed all contents will be removed and disposed of in an approved sanitary landfill.
- The supplier will pick up salts remaining, including broken sacks, after completion of well.
- A Porto-john will be provided for the rig crews. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete.
- Remaining drilling fluids will be sent to a closed loop system.
- Disposal of fluids to be transported by the following companies:
  - American Production Service Inc, Odessa TX
  - Gandy Corporation, Lovington NM
  - I & W Inc, Loco Hill NM
  - Jims Water Service of Co Inc, Denver CO

String	Number of sx	Weight lbs/gal	Water Volume g/sx	Yield cf/sx	Stage; Lead/Tail	Slurry Description
13-3/8" Surface	970	13.5	9.07	1.72	Lead	Class C Cement + 0.125 lbs/sack Poly-E-Flake + 4% bwoc Bentonite + 70.8% Fresh Water
	560	14.8	6.32	1.33	Tail	Class C Cement + 0.125 lbs/sack Poly-E-Flake + 63.5% Fresh Water
9-5/8" Intermediate	740	12.9	9.81	1.85	Lead	(65:35) Class C Cement: Poz (Fly Ash): 6% BWOC Bentonite + 5% BWOW Sodium Chloride + 0.125 lbs/sack Poly-E-Flake + 70.9 % Fresh Water
	430	14.8	6.32	1.33	Tail	Class C Cement + 0.125 lbs/sack Poly-E-Flake + 63.5% Fresh Water
9-5/8" Inter. Two Stage Option	150	12.9	9.81	1.85	14	1 <sup>st</sup> Stage Lead: (65:35) Class C Cement: Poz (Fly Ash): 6% BWOC Bentonite + 5% BWOW Sodium Chloride + 0.125 lbs/sack Poly-E-Flake
	220	14.8	6.32	1.33	6	1 <sup>st</sup> Stage Tail: Class C Cement + 0.125 lbs/sack Poly-E-Flake
	DV Tool = 4000ft					
	845	12.9	9.81	1.85	14	2 <sup>nd</sup> Stage Lead: (65:35) Class C Cement: Poz (Fly Ash): 6% BWOC Bentonite + 5% BWOW Sodium Chloride + 0.125 lbs/sack Poly-E-Flake
	210	14.8	6.32	1.33	6	2 <sup>nd</sup> Stage Tail: Class C Cement + 0.125 lbs/sack Poly-E-Flake
5-1/2" Production	1013	11.9	12.89	2.26	Lead	(50:50) Class H Cement: Poz (Fly Ash) + 10% BWOC Bentonite + 1 lb/sk of Kol-Seal + 0.3% BWOC HR-601 + 0.5lb/sk D-Air 5000 + 76.4% Fresh Water
	330	12.5	10.86	1.96	Lead	(65:35) Class H Cement: Poz (Fly Ash) + 6% BWOC Bentonite + 0.25% BWOC HR-601 + 0.125 lbs/sack Poly-E-Flake + 74.1 % Fresh Water
	1320	14.5	5.31	1.2	Tail	(50:50) Class H Cement: Poz (Fly Ash) + 0.5% bwoc HALAD-344 + 0.25% bwoc CFR-3 + 0.1% bwoc HR-601 + 2% bwoc Bentonite + 58.8% Fresh Water
Two Stage Option						
5-1/2" Production 1 <sup>st</sup> Stage	570	11.9	13.25	2.29	Lead	(50:50) Class H Cement: Poz (Fly Ash) + 10% BWOC Bentonite + 1 lb/sk of Kol-Seal + 0.5% BWOC HR-601 + 0.5lb/sk D-Air 5000 + 77% Fresh Water
	1195	14.5	5.59	1.22	Tail	(50:50) Class H Cement: Poz (Fly Ash) + 0.5% bwoc HALAD-344 + 0.25% bwoc CFR-3 + 0.1% bwoc HR-601 + 2% bwoc Bentonite + 61% Fresh Water
DV TOOL 6,500'						
5-1/2" Production 2 <sup>nd</sup> Stage	750	11.9	13.21	2.29	Lead	(50:50) Class H Cement: Poz (Fly Ash) + 10% BWOC Bentonite + 0.30% BWOC HR-601 + 1 lb/sk Kol-Seal + 0.5lb/sk D-Air 5000 + 76.9 % Fresh Water

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	50	14.8	6.34	1.32	Tail	Class C Cement + 0.1% HR-800 + 63.9% Fresh Water
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**TOC for all Strings:**

13-3/8" Surface 0ft

9-5/8" Intermediate 0ft

5-1/2" Production 0ft

**Notes:**

- Cement volumes Surface 100%, Intermediate 75%, and Production based on at least 25% excess
- DV tool depth(s) will be adjusted based on hole conditions and cement volumes will be adjusted proportionally. DV tool will be set a minimum of 50 feet below previous casing and a minimum of 200 feet above current shoe. If the DV tool is moved the cement volumes will be adjusted proportionately. Lab reports with the 500 psi compressive strength time for the cement will be onsite for review.
- Actual cement volumes will be adjusted based on fluid caliper or caliper log data

**PECOS DISTRICT  
CONDITIONS OF APPROVAL**

<b>OPERATOR'S NAME:</b>	Devon Energy Production, L.P.
<b>LEASE NO.:</b>	NMNM-43564
<b>WELL NAME &amp; NO.:</b>	Gaucha 21 Federal 3H
<b>SURFACE HOLE FOOTAGE:</b>	0200' FSL & 1450' FWL
<b>BOTTOM HOLE FOOTAGE:</b>	0330' FNL & 0660' FWL
<b>LOCATION:</b>	Section 21, T. 22 S., R 34 E., NMPM
<b>COUNTY:</b>	Lea County, New Mexico

**Production Cement:**

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

**Option #1 (Single Stage):**

- ☒ Cement to surface. If cement does not circulate, contact the appropriate BLM office. **Excess calculates to 15% - Additional cement may be required.**

**Option #2:**

**Operator has proposed DV tool at depth of 6500', but will adjust cement proportionately if moved. DV tool shall be set a minimum of 50' below previous shoe and a minimum of 200' above current shoe. Operator shall submit sundry if DV tool depth cannot be set in this range.**

- a. First stage to DV tool:

- ☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve circulation on the next stage.

- b. Second stage above DV tool:

- ☒ Cement to surface. If cement does not circulate, contact the appropriate BLM office. **Excess calculates to 3% - Additional cement may be required.**

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