

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-8161 Fax:(575) 393-0720

District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form C-101
August 1, 2011
Permit 182243

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address DEVON ENERGY PRODUCTION COMPANY, LP 333 W. Sheridan Avenue Oklahoma City, OK 73102		2. OGRID Number 6137
4. Property Code 39877		3. API Number 30-025-41696
5. Property Name IRONHOUSE 24 STATE COM		6. Well No. 004H

7. Surface Location

UL - Lot M	Section 24	Township 18S	Range 34E	Lot Idn	Feet From 200	N/S Line S	Feet From 660	E/W Line W	County Lea
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8. Proposed Bottom Hole Location

UL - Lot D	Section 24	Township 18S	Range 34E	Lot Idn D	Feet From 330	N/S Line N	Feet From 660	E/W Line W	County Lea
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9. Pool Information

WC-025 G-06 S183518A;BONE SPRING	97930
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Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 3980
16. Multiple N	17. Proposed Depth 14415	18. Formation 2nd Bone Spring Sand	19. Contractor	20. Spud Date 6/30/2014
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

☒ We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.2	13.375	54.5	1875	1670	0
Int1	12.25	9.625	36	3450	990	0
Prod	8.75	5.5	17	14415	2260	3000

Casing/Cement Program: Additional Comments

13-3/8" Surface: Lead w/1110sx CI C Cmt + 0.125 #/sx Poly-E-Flake + 4% bwoc Bent + 70.1% FW, 13.5 ppg, water volume: 9.08 g/sx, Yld 1.72 cf/sx; Tail w/560sx CI C Cmt + 63.5% FW, 14.8 ppg, water volume: 6.34 g/sx, Yld 1.33 cf/sx; TOC @ surface. 9-5/8" Intermediate: Lead w/560sx (65:35) CI C Cmt: Poz (Fly Ash): 6% BWOC Bent + 5% BWOW Sodium Chloride + 0.125 #/sx Poly-E-Flake + 70.9 % FW, 12.9 ppg, water volume: 9.82, Yld 1.85 cf/sx; Tail w/430sx CI C Cmt + 0.125 #/sx Poly-E-Flake + 63.5% FW, 14.8 ppg, water volume: 6.32 g/sx, Yld 1.33 cf/sx. TOC @ surface. 5-1/2" Production Casing: Single Stage: First Lead w/600sx (50:50) CI H Cmt: Poz (Fly Ash) + 10% BWOC Bent + 1 #/sx of Kol-Seal + 0.3% BWOC HR-601 + 0.5 #/sx D-Air 5000 + 76.4% FW, 11.9 ppg, water volume: 12.89 g/sx, Yld 2.26 cf/sx; Second Lead w/330sx (65:35) CI H Cmt: Poz (Fly Ash) + 6% BWOC Bent + 0.25% BWOC HR-601 + 0.125 #/sx Poly-E-Flake + 74.1 % FW. Continued in Comments section.

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Annular	3000	3000	
Double Ram	3000	3000	

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify I have complied with 19.15.14.9 (A) NMAC <input checked="" type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input checked="" type="checkbox"/> , if applicable. Signature: _____ Printed Name: Electronically filed by Randy Bolles Title: Manager, Regulatory Affairs Email Address: randy.bolles@dmn.com Date: 2/27/2014	<p style="text-align: center;">OIL CONSERVATION DIVISION</p> Approved By: Paul Kautz Title: Geologist Approved Date: 2/27/2014 Expiration Date: 2/27/2016 Conditions of Approval Attached
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State of New Mexico

Energy, Minerals and Natural Resources

Oil Conservation Division

1220 S. St Francis Dr.

Santa Fe, NM 87505

Form C-102

August 1, 2011

Permit 182243

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-025-41696	2. Pool Code 97930	3. Pool Name WC-025 G-06 S183518A;BONE SPRING
4. Property Code 39877	5. Property Name IRONHOUSE 24 STATE COM	6. Well No. 004H
7. OGRID No. 6137	8. Operator Name DEVON ENERGY PRODUCTION COMPANY, LP	9. Elevation 3980

10. Surface Location

UL - Lot M	Section 24	Township 18S	Range 34E	Lot Idn	Feet From 200	N/S Line S	Feet From 660	E/W Line W	County Lea
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11. Bottom Hole Location If Different From Surface

UL - Lot D	Section 24	Township 18S	Range 34E	Lot Idn	Feet From 330	N/S Line N	Feet From 660	E/W Line W	County Lea
12. Dedicated Acres 160.00	13. Joint or Infill		14. Consolidation Code				15. Order No.		

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<p align="center">OPERATOR CERTIFICATION</p> <p><i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location(s) or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i></p> <p>E-Signed By: Randy Bolles Title: Manager, Regulatory Affairs Date: 2/27/2014</p>	
	<p align="center">SURVEYOR CERTIFICATION</p> <p><i>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i></p> <p>Surveyed By: Filimon Jaramillo Date of Survey: 1/23/2014 Certificate Number: PLS 12797</p>	

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Form APD Comments

Permit 182243

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

PERMIT COMMENTS

Operator Name and Address: DEVON ENERGY PRODUCTION COMPANY, LP [6137] 333 W. Sheridan Avenue Oklahoma City, OK 73102	API Number: 30-025-41696
	Well: IRONHOUSE 24 STATE COM #004H

Created By	Comment	Comment Date
dcook	5-1/2" Production Casing - Single Stage Option Continued: 12.5 ppg, water volume: 10.81 g/sx, Yld 1.96 cf/sx; Tail w/1330sx (50:50) CI H Cmt: Poz (Fly Ash) + 1 lb/sk Sodium Chloride + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.2% bwoc HR-601 + 2% bwoc Bent + 58.8% FW, 14.5 ppg, water volume: 5.38 g/sx, Yld 1.22 cf/sx. TOC @ 3000 ft.	2/27/2014
dcook	5-1/2" Production Casing - Two Stage Option: First Lead w/710sx (65:35) CI H Cmt: Poz (Fly Ash) + 6% BWOC Bent + 0.25% BWOC HR-601 + 0.125 lbs/sack Poly-E-Flake + 74.1 % FW, 12.5 ppg, water volume: 10.81 g/sx, Yld 1.96 cf/sx; Tail w/1330sx (50:50) CI H Cmt: Poz (Fly Ash) + 1 lb/sk Sodium Chloride + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.2% bwoc HR-601 + 2% bwoc Bent + 58.8% FW, 14.5 ppg, water volume: 5.38, Yld 1.22 cf/sx. DV Tool @ 5000 ft.	2/27/2014
dcook	5-1/2" Production Casing - Two Stage Option: Secon Lead w/200sx (50:50) CI H Cmt: Poz (Fly Ash) + 10% BWOC Bent + 1 lb/sk of Kol-Seal + 0.3% BWOC HR-601 + 0.5lb/sk D-Air 5000 + 76.4% FW, 11.9 ppg, water volume: 12.89 g/sx, Yld 2.26 cf/sx; Tail w/120sx CI C Cmt + 0.125 lbs/sack Poly-E-Flake + 63.5% FW, 14.8 ppg, water volume: 6.32, Yld 1.33 cf/sx. Stage 1 TOC @ 5000 ft Stage 2 TOC @ 3000 ft	2/27/2014
dcook	• Cement volumes Surface 100%, Intermediate 75% and Production Casing based on at least 25% excess • Actual cement volumes will be adjusted based on fluid caliper and caliper log data • If lost circulation is encountered while drilling the production and/or the intermediate wellbores, a DV tool will be installed a minimum of 50' below the previous casing shoe and a minimum of 200' above the current shoe. If the DV tool has to be moved, the cement volumes will be adjusted proportionately. Both single and double stage proposals are listed in the cement table.	2/27/2014
dcook	A 3M 13-5/8" BOP system (Double Ram and Annular preventer) will be installed and tested prior to drilling out the surface casing shoe. The BOP system used to drill the intermediate hole will be tested per BLM Onshore Oil and Gas Order 2.	2/27/2014
dcook	A 3M 13-5/8" BOP system (Double Ram and Annular preventer) will be installed and tested prior to drilling out the intermediate casing shoe. The BOP system used to drill the production hole will be tested per BLM Onshore Oil and Gas Order 2.	2/27/2014
dcook	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.	2/27/2014
dcook	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.	2/27/2014

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Form APD Conditions

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Oil Conservation Division
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Santa Fe, NM 87505

Permit 182243

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: DEVON ENERGY PRODUCTION COMPANY, LP [6137] 333 W. Sheridan Avenue Oklahoma City, OK 73102	API Number: 30-025-41696
	Well: IRONHOUSE 24 STATE COM #004H

OCD Reviewer	Condition
DMULL	Will require a directional survey with the C-104
DMULL	Pit construction and closure must satisfy all requirements of your approved plan, O.C.D. Rule 19.15.2.50, and the Pit and Below-Grade Tank Guidelines
DMULL	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string
pkautz	1) SURFACE & INTERMEDIATE CASING - Cement must circulate to surface -- 2) PRODUCTION CASING - Cement must tie back into intermediate casing --
pkautz	Surface casing must be set 25' below top of Rustler Anhydrite in order to seal off protectable water