

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone:(575) 393-6161 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 182234

**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 40426		3. API Number 30-025-41694
5. Property Name Doppieback 8 State Com		6. Well No. 001H

**7. Surface Location**

UL - Lot <b>B</b>	Section <b>8</b>	Township <b>18S</b>	Range <b>36E</b>	Lot Idn	Feet From <b>200</b>	N/S Line <b>N</b>	Feet From <b>1980</b>	E/W Line <b>E</b>	County <b>Lea</b>
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**8. Proposed Bottom Hole Location**

UL - Lot <b>O</b>	Section <b>8</b>	Township <b>18S</b>	Range <b>36E</b>	Lot Idn <b>O</b>	Feet From <b>330</b>	N/S Line <b>S</b>	Feet From <b>1980</b>	E/W Line <b>E</b>	County <b>Lea</b>
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**9. Pool Information**

WC-025 G-06 S183608B;BONE SPRING	0
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**Additional Well Information**

11. Work Type <b>New Well</b>	12. Well Type <b>OIL</b>	13. Cable/Rotary	14. Lease Type <b>State</b>	15. Ground Level Elevation <b>3852</b>
16. Multiple <b>N</b>	17. Proposed Depth <b>13762</b>	18. Formation <b>2nd Bone Spring Sand</b>	19. Contractor	20. Spud Date <b>4/30/2014</b>
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	2100	1820	0
Int1	12.25	9.625	36	3300	930	0
Prod	8.75	5.5	17	13762	2020	2800

**Casing/Cement Program: Additional Comments**

13-3/8" Surface: Lead w/1260sx 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: 6.32 g/sx, Yld 1.33 cf/sx; TOC @ surface. 9-5/8" Intermediate: Lead w/500sx (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: 9.81, Yld 1.85 cf/sx; Tail w/430sx CI C Cmt + 63.5% FW, 14.8 ppg, water volume: 6.32 g/sx, Yld 1.33 cf/sx. TOC @ surface. Pilot Hole Plug Back: Plug Cmt: 540sx CI H Cmt + 0.2% Halad-9 + 0.2% HR-601 + 60.5 % FW, 15.6 ppg, water volume: 5.39, Yld 1.19 cf/sx. 5-1/2" Production Casing: Single Stage: Lead w/680sx Tuned Light Blend + 0.125 #/sx Pol-E-Flake + 76.3% FW, 11.0 ppg, water volume: 15.23 g/sx, Yld 2.71 cf/sx; Tail w/1340sx (50:50) CI H Cmt: Poz (Fly Ash) + 0.5% bwoc HALAD-344 + 0.25% bwoc CFR-3 + 0.1% bwoc HR-601 + 2% bwoc Bent + 58.8% 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:	<b>OIL CONSERVATION DIVISION</b>
Printed Name: <b>Electronically filed by Randy Bolles</b> Title: <b>Manager, Regulatory Affairs</b> Email Address: <b>randy.bolles@dvn.com</b> Date: <b>2/27/2014</b>	Approved By: <b>Paul Kautz</b> Title: <b>Geologist</b> Approved Date: <b>2/27/2014</b> Expiration Date: <b>2/27/2016</b> Conditions of Approval Attached
Phone: 405-228-8588	

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**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

Form C-102  
August 1, 2011  
Permit 182234

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

1. API Number 30-025-41694	2. Pool Code	3. Pool Name WC-025 G-06 S183608B;BONE SPRING
4. Property Code 40426	5. Property Name Dopplebock 8 State Com	6. Well No. 001H
7. OGRID No. 6137	8. Operator Name DEVON ENERGY PRODUCTION COMPANY, LP	9. Elevation 3852

**10. Surface Location**

UL - Lot B	Section 8	Township 18S	Range 36E	Lot Idn	Feet From 200	N/S Line N	Feet From 1980	E/W Line E	County Lea
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**11. Bottom Hole Location If Different From Surface**

UL - Lot O	Section 8	Township 18S	Range 36E	Lot Idn	Feet From 330	N/S Line S	Feet From 1980	E/W Line E	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**

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 25%; height: 40px;"></td><td style="width: 25%; height: 40px;"></td><td style="width: 25%; height: 40px; text-align: center;"></td><td style="width: 25%; height: 40px;"></td></tr> <tr><td style="height: 40px;"></td><td style="height: 40px;"></td><td style="height: 40px;"></td><td style="height: 40px;"></td></tr> <tr><td style="height: 40px;"></td><td style="height: 40px;"></td><td style="height: 40px;"></td><td style="height: 40px;"></td></tr> <tr><td style="height: 40px;"></td><td style="height: 40px;"></td><td style="height: 40px; text-align: center;"></td><td style="height: 40px;"></td></tr> </table>																	<p style="text-align: center;"><b>OPERATOR CERTIFICATION</b></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> <hr/> <p style="text-align: center;"><b>SURVEYOR CERTIFICATION</b></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: 2/7/2014 Certificate Number: PLS 12797</p>

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Form APD Comments

Permit 182234

**PERMIT COMMENTS**

Operator Name and Address: DEVON ENERGY PRODUCTION COMPANY, LP [6137] 333 W. Sheridan Avenue Oklahoma City, OK 73102	API Number: 30-025-41694
	Well: Dopplebock 8 State Com #001H

Created By	Comment	Comment Date
dcook	5-1/2" Production Casing - Single Stage Tail continued: 14.5 ppg, water volume: 5.32, Yld 1.21 cf/sx. TOC @ 2800 ft.	2/27/2014
dcook	5-1/2" Production Casing - 2-Stage Option: First Lead w/510sx (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, 12.5 ppg, water volume: 10.86 g/sx, Yld 1.96 cf/sx; Tail w/1340sx (50:50) CI H Cmt: Poz (Fly Ash) + 0.5% bwoc HALAD-344 + 0.25% bwoc CFR-3 + 0.1% bwoc HR-601 + 2% bwoc Bent + 58.8% FW, 14.5 ppg, water volume: 5.38 g/sx, Yld 1.22 cf/sx. DV Tool @ 5600 ft. Second Lead w/310sx (50:50) CI H Cmt: Poz (Fly Ash) + 10% BWOC Bent + 1 lb/sk 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/s	2/27/2014
dcook	Yld 2.26 cf/sx; Tail w/120sx 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 @ 2800 ft.	2/27/2014
dcook	• Cement volumes Surface 100%, Intermediate 75%, Pilot 10% and Production 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

Permit 182234

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**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
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**PERMIT CONDITIONS OF APPROVAL**

Operator Name and Address: DEVON ENERGY PRODUCTION COMPANY, LP [6137] 333 W. Sheridan Avenue Oklahoma City, OK 73102	API Number: 30-025-41694
	Well: Dopplebock 8 State Com #001H

OCD Reviewer	Condition
pkautz	Will require a directional survey with the C-104
pkautz	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
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