

**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 182227

**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 40427		3. API Number 30-025-41693
5. Property Name Dunkle 7 State		6. Well No. 001H

**7. Surface Location**

UL - Lot M	Section 7	Township 18S	Range 36E	Lot Idn 4	Feet From 200	N/S Line S	Feet From 865	E/W Line W	County Lea
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**8. Proposed Bottom Hole Location**

UL - Lot D	Section 7	Township 18S	Range 36E	Lot Idn 1	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 S183608B;BONE SPRING	0
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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 3866
16. Multiple N	17. Proposed Depth 13752	18. Formation 2nd Bone Spring Sand	19. Contractor	20. Spud Date 4/30/2014
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	17.5	13.375	54.5	2000	1780	0
Int1	12.25	9.625	36	3225	910	0
Prod	8.75	5.5	17	13752	2050	2725

**Casing/Cement Program: Additional Comments**

13-3/8" Surface: Lead w/1220 sx Cl 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: 560 sx Cl 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/480 sx (65:35) Cl 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 g/sx, Yld 1.85 cf/sx; Tail: 430sx Cl 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 Cmt: 560sx Cl H Cmt + 0.2% Halad-9 + 0.2% HR-601 + 60.5 % FW, 15.6 ppg, water volume 5.39 g/sx, Yld 1.19 cf/sx. Pilot Hole Plug back @ 8354 ft. See Comments for 5 1/2" Production Cmt & 2 Stage Option.

**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: Randy Bolles	Approved By: Paul Kautz	
Title: Manager, Regulatory Affairs	Title: Geologist	
Email Address: randy.bolles@dmn.com	Approved Date: 2/27/2014	Expiration Date: 2/27/2016
Date: 2/27/2014	Phone: 405-228-8588	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 182227

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

1. API Number 30-025-41693	2. Pool Code	3. Pool Name WC-025 G-06 S183608B;BONE SPRING
4. Property Code 40427	5. Property Name Dunkle 7 State	6. Well No. 001H
7. OGRID No. 6137	8. Operator Name DEVON ENERGY PRODUCTION COMPANY, LP	9. Elevation 3866



**10. Surface Location**

UL - Lot M	Section 7	Township 18S	Range 36E	Lot Idn 4	Feet From 200	N/S Line S	Feet From 865	E/W Line W	County Lea
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**11. Bottom Hole Location If Different From Surface**

UL - Lot D	Section 7	Township 18S	Range 36E	Lot Idn 1	Feet From 330	N/S Line N	Feet From 660	E/W Line W	County Lea
12. Dedicated Acres 148.28	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**

<div style="display: flex; flex-direction: column; align-items: center;"> <div style="margin-bottom: 20px;">  </div> <div style="margin-bottom: 20px;">  </div> </div>	<div style="text-align: center; font-weight: bold; margin-bottom: 10px;">OPERATOR CERTIFICATION</div> <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/> <div style="text-align: center; font-weight: bold; margin-bottom: 10px;">SURVEYOR CERTIFICATION</div> <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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**Santa Fe, NM 87505**

Form APD Comments

Permit 182227

**PERMIT COMMENTS**

Operator Name and Address: DEVON ENERGY PRODUCTION COMPANY, LP [6137] 333 W. Sheridan Avenue Oklahoma City, OK 73102	API Number: 30-025-41693
	Well: Dunkle 7 State #001H

Created By	Comment	Comment Date
dcook	5-1/2" Production Casing Single Stage: Lead w/670sx 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/1380sx (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 5.32 g/sx, Yld 1.21 cf/sx. TOC @ 2725 ft.	2/26/2014
dcook	5-1/2" Production Casing 2 Stage Option: First Stage: Lead w/530sx (65:35) Class H Cement: 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/1380sx (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. TOC @ 5300 ft. DV Tool @ 5300 ft. Second Stage: Lead w/270sx (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, 1	2/26/2014
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.	2/26/2014
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. 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.	2/26/2014
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. 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	2/26/2014

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Form APD Conditions

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

Permit 182227

**PERMIT CONDITIONS OF APPROVAL**

Operator Name and Address: DEVON ENERGY PRODUCTION COMPANY, LP [6137] 333 W. Sheridan Avenue Oklahoma City, OK 73102	API Number: 30-025-41693
	Well: Dunkle 7 State #001H

OCD Reviewer	Condition
pkautz	Will require a directional survey with the C-104
pkautz	1) SURFACE & INTERNEMATE CASING - Cement must circulate to surface -- 2) PRODUCTION CASING - Cement must tie back into intermediate casing --
pkautz	1) SURFACE & INTERNEMATE 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
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