

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(505) 393-8161 Fax:(505) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(505) 748-1283 Fax:(505) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-8178 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 193289

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 38639		3. API Number 30-025-42163
5. Property Name BLACK MAMBA 15 STATE COM		6. Well No. 004H

7. Surface Location

UL - Lot	B	Section	15	Township	23S	Range	33E	Lot Idn	Feet From	450	N/S Line	N	Feet From	2370	E/W Line	E	County	Lea
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8. Proposed Bottom Hole Location

UL - Lot	O	Section	15	Township	23S	Range	33E	Lot Idn	O	Feet From	330	N/S Line	S	Feet From	1980	E/W Line	E	County	Lea
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9. Pool Information

CRUZ BONE SPRING	14865
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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 3704
16. Multiple N	17. Proposed Depth 15887	18. Formation 2nd Bone Spring Sand	19. Contractor	20. Spud Date 10/22/2014
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	48	1350	1240	0
Int1	12.25	9.625	40	5150	1510	0
Prod	8.75	5.5	17	15887	2300	4650

Casing/Cement Program: Additional Comments

Surface Csg: Lead w/690sx CI C Cmt + 0.125 #/sx Pol-E-Flake + 4% bwoc Bent; 13.5 ppg, Yld. 1.72 cu/ft, 9.07 gal/sx water. Tail w/550sx CI C Cmt + 0.125 #/sx Poly-E-Flake + 1% BWOC Calcium Chloride; 14.8 ppg, Yld 1.34 cu/ft, 6.34 gal/sx water. TOC @ surface. Intermediate Csg: Lead w/1080sx (65:35) CI C Cmt: Poz (Fly Ash): 6% BWOC Bent + 5% BWOW Sodium Chloride + 0.125 #/sx Poly-E-Flake, 12.9 ppg, Yld. 9.81 cu/ft, 1.85 gal/sx water. Tail w/430sx CI C Cmt + 0.125 #/sx Poly-E-Flake, 14.8 ppg, Yld. 1.33 cu/ft, 6.32 gal/sx water; TOC @ surface. Production Csg: 1st Lead w/610sx (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, 11.9 ppg, Yld. 2.3 cu/ft, 13.29 gal/sx water; 2nd 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, 12.5 ppg, Yld. 1.96 cu/ft, 10.86 gal/sx water. 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:	OIL CONSERVATION DIVISION
Printed Name: Electronically filed by Randy Bolles	Approved By: Paul Kautz
Title: Manager, Regulatory Affairs	Title: Geologist
Email Address: randy.bolles@dmv.com	Approved Date: 10/1/2014 Expiration Date: 10/1/2016
Date: 9/30/2014 Phone: 405-228-8588	Conditions of Approval Attached

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Form C-102
August 1, 2011
Permit 193289

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-025-42163	2. Pool Code 14865	3. Pool Name CRUZ,BONE SPRING
4. Property Code 38639	5. Property Name BLACK MAMBA 15 STATE COM	6. Well No. 004H
7. OGRID No. 6137	8. Operator Name DEVON ENERGY PRODUCTION COMPANY, LP	9. Elevation 3704







10. Surface Location

UL - Lot B	Section 15	Township 23S	Range 33E	Lot Idn	Feet From 450	N/S Line N	Feet From 2370	E/W Line E	County Lea
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11. Bottom Hole Location If Different From Surface

UL - Lot O	Section 15	Township 23S	Range 33E	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; height: 150px;"> <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;">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: 9/30/2014</p> <hr/> <p style="text-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: 4/3/2013 Certificate Number: PLS 12797</p>
																	
																	

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Form APD Comments

Permit 193289

PERMIT COMMENTS

Operator Name and Address: DEVON ENERGY PRODUCTION COMPANY, LP [6137] 333 W. Sheridan Avenue Oklahoma City, OK 73102		API Number: 30-025-42163
		Well: BLACK MAMBA 15 STATE COM #004H

Created By	Comment	Comment Date
dcook	Production Csg continued: Tail w/1360sx (50:50) CI H Cmt: Poz (Fly Ash) + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.2% BWOC HR-601 + 2% bwoc Bent., 14.5 ppg, Yld. 1.2 cu/ft, 5.31 gal/sx water; TOC @ 4650'.	9/30/2014
dcook	Contingency 2 Stage Cmt program: Surface Csg: Lead w/370sx CI C Cmt + 0.125 #/sx Pol-E-Flake + 4% bwoc Bent., 13.5 ppg, Yld. 1.72 cu/ft, 9.07 gal/sx water; 1st stage Tail w/550sx CI C Cmt + 0.125 #/sx Poly-E-Flake + 1% BWOC Calcium Chloride, 14.8 ppg, Yld. 1.34 cu/ft, 6.34 gal/sx water; DV/ECP Tool @ 400'. 2nd stage Tail w/420sx CI C Cmt + 0.125 #/sx Poly-E-Flake + 1% BWOC Calcium Chloride, 14.8 ppg, Yld. 1.34 cu/ft, 6.34 gal/sx water.	9/30/2014
dcook	Contingency 2 State Cmt program: Intermediate Csg: 1st stage Lead w/960sx (65:35) CI C Cmt: Poz (Fly Ash): 6% BWOC Bent + 5% BWOW Sodium Chloride + 0.125 #/sx Poly-E-Flake, 12.9 ppg, Yld. 9.81 cu/ft, 1.85 gal/sx water; 1st stage Tail w/220sx CI C Cmt + 0.125 #/sx Poly-E-Flake, 14.8 ppg, Yld. 1.33 cu/ft, 6.32 gal/sx water; DV/ECP Tool @ 1450'. 2nd stage Lead w/180sx (65:35) CI C Cmt: Poz (Fly Ash): 6% BWOC Bent + 5% BWOW Sodium Chloride + 0.125 #/sx Poly-E-Flake, 12.9 ppg, Yld. 9.81 cu/ft, 1.85 gal/sx water;	9/30/2014
dcook	Contingency 2 State Cmt program continued: 2nd stage Tail w/150sx CI C Cmt + 0.125 #/sx Poly-E-Flake + 1% BWOC Calcium Chloride, 14.8 ppg, Yld. 1.33 cu/ft, 6.32 gal/sx water.	9/30/2014
dcook	Contingency Production Cmt program for 7" x 5.5" Csg: Lead w/390sx Tuned Light® Cmt + 0.125 #/sx Pol-E-Flake, 10.4 ppg, Yld. 3.17 cu/ft, 16.8 gal/sx water; Tail w/1360sx (50:50) CI H Cmt: Poz (Fly Ash) + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.2% BWOC HR-601 + 2% bwoc Bent., 14.5 ppg, Yld. 1.2 cu/ft, 5.31 gal/sx water. TOC @ 4650'.	9/30/2014
dcook	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. Lab reports with the 500 psi compressive strength time for the cement will be onsite for review.	9/30/2014
dcook	Pilot Hole Cementing specs: Pilot hole depth 11450 KOP 10728 Plug top Plug Bottom % Excess No. Sacks Wt. lb/gal Yld ft3/sack Water gal/sk Slurry Description and Cement Type 10528 11450 10 360 15.6 1.19 5.42 Class H + 0.5% BWOC HR-601 + 0.2% BWOC Halad-9	9/30/2014
dcook	Pilot Hole Cmtng Specs: PH depth: 11,450'; KOP @ 10,728'. Plug Top: 10,528', Plug Bottom: 11,450', pump 360sx CI H Cmt + 0.5% BWOC HR-601 + 0.2% BWOC Halad-9, 15.6 ppg, Yld. 1.19 cu/ft, 5.42 gal/sx water,	9/30/2014
dcook	BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.	9/30/2014
dcook	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. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold.	9/30/2014
dcook	See attached Drilling Plan for further information.	9/30/2014

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Form APD Conditions

Permit 193289

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: DEVON ENERGY PRODUCTION COMPANY, LP [6137] 333 W. Sheridan Avenue Oklahoma City, OK 73102	API Number: 30-025-42163
	Well: BLACK MAMBA 15 STATE COM #004H

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	If using a pit for drilling and completion operations, must have an approved pit from prior to spudding the well.
pkautz	Surface casing must be set 25' below top of Rustler Anhydrite in order to seal off protectable water
pkautz	1) SURFACE & INTERMEDIATE CASING - Cement must circulate to surface -- 2) PRODUCTION CASING - Cement must tie back into intermediate casing --
pkautz	If cement does not circulate to surface, must run temperature survey or other log to determine top of cement