

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) 334-8178 Fax:(505) 334-8170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3482

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 200840

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 314232		3. API Number 30-025-42465
5. Property Name NORTH THISTLE 34 STATE COM		6. Well No. 001H

7. Surface Location

UL - Lot M	Section 34	Township 22S	Range 33E	Lot Idn	Feet From 290	N/S Line S	Feet From 485	E/W Line W	County Lea
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8. Proposed Bottom Hole Location

UL - Lot D	Section 34	Township 22S	Range 33E	Lot Idn D	Feet From 330	N/S Line N	Feet From 485	E/W Line W	County Lea
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9. Pool Information

BRINNINSTOOL;BONE SPRING	7320
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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 3567
16. Multiple N	17. Proposed Depth 15671	18. Formation 2nd Bone Spring Sand	19. Contractor	20. Spud Date 7/18/2015
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	1400	1230	0
Int1	12.25	9.625	40	5250	1530	0
Prod	8.75	7	29	10685	350	0
Prod	8.75	5.5	17	15670	1320	4750

Casing/Cement Program: Additional Comments

13-3/8" Surface: Lead w/680sx (65:35) CI C Cmt: Poz (Fly Ash): 6% BWOC Bent + 5% BWOW NaCl + 0.125 #/sx Poly-E-Flake, 12.9 ppg, H2O: 9.81 gal/sx, Yld. 1.85 cf/sx; Tail w/550sx CI C Cmt + 0.125 #/sx Poly-E-Flake, 14.8 ppg, H2O: 6.32 gal/sx, Yld. 1.33 cf/sx; TOC @ surface. 9-5/8" Intermediate: Lead w/1100sx (65:35) CI C Cmt: Poz (Fly Ash): 6% BWOC Bent + 5% BWOW CaCl2 + 0.125 #/sx Poly-E-Flake, 12.9 ppg, H2O: 9.81 gal/sx, Yld. 1.85 cf/sx; Tail w/430sx CI C Cmt + 0.125 #/sx Poly-E-Flake, 14.8 ppg, H2O: 6.32 gal/sx, Yld. 1.33 cf/sx; TOC @ surface. 7 x 5-1/2" Combo Production: Lead w/350sx Tuned Light @ + 0.125 #/sx Poly-E-Flake, 10.4 ppg, H2O: 16.9 gal/sx, Yld. 3.17 cf/sx; Tail w/1320sx (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, H2O: 16.9 gal/sx, Yld. 1.2 cf/sx; TOC @ 4750'.

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: 3/5/2015 Expiration Date: 3/5/2017	
Date: 3/5/2015 Phone: 405-228-8588		Conditions of Approval Attached	

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Form C-102
August 1, 2011
Permit 200840

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. API Number 30-025-42465	2. Pool Code 7320	3. Pool Name BRINNINSTOOL;BONE SPRING
4. Property Code 314232	5. Property Name NORTH THISTLE 34 STATE COM	6. Well No. 001H
7. OGRID No. 6137	8. Operator Name DEVON ENERGY PRODUCTION COMPANY, LP	9. Elevation 3567







10. Surface Location

UL - Lot M	Section 34	Township 22S	Range 33E	Lot Idn	Feet From 290	N/S Line S	Feet From 485	E/W Line W	County Lea
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11. Bottom Hole Location If Different From Surface

UL - Lot D	Section 34	Township 22S	Range 33E	Lot Idn	Feet From 330	N/S Line N	Feet From 485	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

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="width: 25%; height: 40px; text-align: center;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td><td style="width: 25%;"></td></tr> <tr><td style="height: 40px;"></td><td></td><td></td><td></td></tr> <tr><td style="height: 40px;"></td><td></td><td></td><td></td></tr> <tr><td style="height: 40px;"></td><td></td><td></td><td></td></tr> <tr><td style="height: 40px; text-align: center;"></td><td></td><td></td><td></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: 3/5/2015</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: Richard Brooks Date of Survey: 12/9/2014 Certificate Number: 20451</p>
																					
																					

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Form APD Comments

Permit 200840

PERMIT COMMENTS

Operator Name and Address: DEVON ENERGY PRODUCTION COMPANY, LP [6137] 333 W. Sheridan Avenue Oklahoma City, OK 73102		API Number: 30-025-42465
		Well: NORTH THISTLE 34 STATE COM #001H

Created By	Comment	Comment Date
dcook	Pilot Hole depth @ 11,400'; KOP @ 10,685'. Plug Top @ 10,485'; Plug Bottom @ 11,400' Pump: 355sx CI H + 0.5% BWOC HR-601 + 0.2% Halad-9, 15.6 ppg, H2O: 1.19 gal/sx, Yld. 1.19 cf/sx; % excess = 10.	3/5/2015
dcook	7 x 5-1/2" Combo Production Two Stage Option: 1st Stage Lead w/520sx (65:35) Class H Cement: Poz (Fly Ash) + 6% BWOC Bent + 0.25% BWOC HR-601 + 0.125 lbs/sack Poly-E-Flake, 12.5 ppg, H2O: 10.86 gal/sx, Yld. 1.96 cf/sx; 1st Stage Lead w/1320sx (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, H2O: 5.31 gal/sx, Yld. 1.2 cf/sx; DV Tool @ 5,300'. 2nd Stage Lead w/20sx Tuned Light @ + 0.125 #/sx Pol-E-Flake, 10.4 ppg, H2O: 16.9 gal/sx, Yld. 3.17 cf/sx, 2nd Stage Tail w/30sx CI C Cmt + 0.125 #/sx Poly-E-Flake, 14.8 ppg, H2O: 6.32 ga	3/5/2015
dcook	7 x 5-1/2" Combo Production Two Stage Option continued: DV Tool @ 5,300'. 2nd Stage Lead w/20sx Tuned Light @ + 0.125 #/sx Pol-E-Flake, 10.4 ppg, H2O: 16.9 gal/sx, Yld. 3.17 cf/sx, 2nd Stage Tail w/30sx CI C Cmt + 0.125 #/sx Poly-E-Flake, 14.8 ppg, H2O: 6.32 gal/sx, Yld. 1.33 cf/sx; TOC 1st stage @ 5,300'; TOC 2nd stage @ 4,750'.	3/5/2015
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.	3/5/2015
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.	3/5/2015
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.	3/5/2015
dcook	Devon proposes using a multi-bowl wellhead assembly (FMC Uni-head). This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 3000 (3M) psi.	3/5/2015

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Form APD Conditions

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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: 30-025-42465
	Well: NORTH THISTLE 34 STATE COM #001H

OCD Reviewer	Condition
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
pkautz	Surface casing must be set 25' below top of Rustler Anhydrite in order to seal off protectable water
pkautz	Will require a directional survey with the C-104
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.