

**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 201800

**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 30884		3. API Number 30-025-42486
5. Property Name THISTLE UNIT		6. Well No. 072H

**7. Surface Location**

UL - Lot	O	Section	27	Township	23S	Range	33E	Lot Idn	Feet From	330	N/S Line	S	Feet From	2630	E/W Line	E	County	Lea
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**8. Proposed Bottom Hole Location**

UL - Lot	B	Section	27	Township	23S	Range	33E	Lot Idn	B	Feet From	330	N/S Line	N	Feet From	2630	E/W Line	E	County	Lea
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**9. Pool Information**

TRIPLE X;BONE SPRING	59900
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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 3667
16. Multiple N	17. Proposed Depth 15698	18. Formation 2nd Bone Spring Sand	19. Contractor	20. Spud Date 5/24/2015
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	1405	1230	0
Int1	12.25	9.625	40	5250	1530	0
Prod	8.75	7	29	11657	810	4750
Liner1	6.125	4.5	13.5	15698	660	10752

**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 NaCl + 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" Inter. Two Stage: Lead w/360sx (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, H2O: 12.89 gal/sx, Yld. 2.31 cf/sx; See comments section for continued cement program.

**22. Proposed Blowout Prevention Program**

Type	Working Pressure	Test Pressure	Manufacturer
Annular	5000	5000	
Double Ram	5000	5000	

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: Electronically filed by Randy Bolles	Approved By: Paul Kautz
Title: Manager, Regulatory Affairs	Title: Geologist
Email Address: randy.bolles@dmv.com	Approved Date: 3/24/2015      Expiration Date: 3/24/2017
Date: 3/24/2015      Phone: 405-228-8588	Conditions of Approval Attached

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

Form C-102  
August 1, 2011  
Permit 201800

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

1. API Number 30-025-42486	2. Pool Code 59900	3. Pool Name TRIPLE X;BONE SPRING
4. Property Code 30884	5. Property Name THISTLE UNIT	6. Well No. 072H
7. OGRID No. 6137	8. Operator Name DEVON ENERGY PRODUCTION COMPANY, LP	9. Elevation 3667

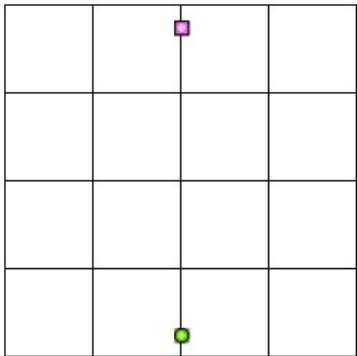
**10. Surface Location**

UL - Lot O	Section 27	Township 23S	Range 33E	Lot Idn	Feet From 330	N/S Line S	Feet From 2630	E/W Line E	County Lea
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**11. Bottom Hole Location If Different From Surface**

UL - Lot B	Section 27	Township 23S	Range 33E	Lot Idn	Feet From 330	N/S Line N	Feet From 2630	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**

	<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: 3/24/2015</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: 3/12/2015 Certificate Number: PLS 12797</p>
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Form APD Comments

Permit 201800

**PERMIT COMMENTS**

Operator Name and Address: DEVON ENERGY PRODUCTION COMPANY, LP [6137] 333 W. Sheridan Avenue Oklahoma City, OK 73102	API Number: 30-025-42486
	Well: THISTLE UNIT #072H

Created By	Comment	Comment Date
dcook	7" Inter. Two Stage Continued: Tail w/320sx (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 @ 5300 ft. Tail w/130sx CI C Cmt + 0.125 #/sx Poly-E-Flake, 14.8 ppg, H2O: 6.32 gal/sx, Yld. 1.33 cf/sx. TOC @ 4,750ft.	3/24/2015
dcook	4-1/2" Liner: Pump 660sx (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. TOC @ 10,752ft.	3/24/2015
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.	3/24/2015
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.	3/24/2015
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.	3/24/2015
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 5000 (5M) psi.	3/24/2015



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Form APD Conditions

Permit 201800

**PERMIT CONDITIONS OF APPROVAL**

Operator Name and Address: DEVON ENERGY PRODUCTION COMPANY, LP [6137] 333 W. Sheridan Avenue Oklahoma City, OK 73102	API Number: 30-025-42486
	Well: THISTLE UNIT #072H

OCD Reviewer	Condition
pkautz	Will require a directional survey with the C-104
pkautz	Will require a administrative order for non-standard location prior to placing the well on production.
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	3) PRODUCTION CASING - Cement must tie back into intermediate1 casing -- 4) Liner - Cement must tie back into production 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	
pkautz	1) SURFACE & INTERNEMATE CASING - Cement must circulate to surface -- 2) PRODUCTION CASING - Cement must tie back into intermediate casing --