

**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 152337

**APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE**

1. Operator Name and Address <b>DEVON ENERGY PRODUCTION COMPANY, LP</b> 333 W. Sheridan Avenue Oklahoma City, OK 73102		2. OGRID Number 6137
		3. API Number 30-015-40513
4. Property Code 38436	5. Property Name EMERALD PWU 20	6. Well No. 008H

**7. Surface Location**

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
M	21	19S	29E	M	180	S	50	W	EDDY

**8. Pool Information**

SCANLON DRAW, BONE SPRING	55510
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**Additional Well Information**

9. Work Type New Well	10. Well Type OIL	11. Cable/Rotary	12. Lease Type State	13. Ground Level Elevation 3325
14. Multiple N	15. Proposed Depth 11729	16. Formation 1st Bone Spring Sand	17. Contractor	18. Spud Date
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

**19. Proposed Casing and Cement Program**

Type	Hole Size	Casing Type	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5	13.375	48	300	335	0
Int1	12.25	9.625	40	3200	1015	0
Prod	8.75	5.5	17	11729	1435	0
Prod	8.75	5.5	17	6300	685	2700

**Casing/Cement Program: Additional Comments**

13-3/8" Tail: 335sxs Class C Cmt + 2% bwoc CalChl + 0.125#/sx Poly-EF + 63.1% FW, 14.8 ppg, Yld: 1.35 cf/sx 9-5/8" Lead: 735sxs (65:35) Class C Cmt: Poz(Fly Ash) + 5% bwoc Sod Chl + 0.125#/sx Poly-EF + 6% bwoc Bentonite + 70.9% FW, 12.9 ppg, Yld: 1.85 cf/sx. Tail: 280sxs Class C Cm + 0.125#/sack Poly-EF + 63.5% Water, 14.8 ppg, Yld: 1.33 cf/sx 5-1/2" Lead: 685sxs (65:35) Class H Cmt: Poz(Fly Ash) + 6% bwoc Bentonite + 0.125#/sx Poly-EF1 + 0.1% bwoc HR-601 + 74.1% FW, 12.5 ppg, Yld: 1.95 cf/sk. Tail: 1435sxs (50:50) Class H Cmt: Poz(Fly Ash) + 1#/sx Sod Chl + 0.5% bwoc HALAD-344 + 0.4% bwoc CFR-3 + 0.1% bwoc HR-601 + 2% bwoc Bentonite + 58.8% FW, 14.5 ppg, Yld: 1.22 cf/sx TVD 6832

**Proposed Blowout Prevention Program**

Type	Working Pressure	Test Pressure	Manufacturer
Annular	3000	3000	
Double Ram	3000	3000	

I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines <input type="checkbox"/> , a general permit <input type="checkbox"/> , or an (attached) alternative OCD-approved plan <input type="checkbox"/> .	<b>OIL CONSERVATION DIVISION</b>
Printed Name: Electronically filed by Randy Bolles	Approved By: Randy Dade
Title: Manager, Regulatory Affairs	Title: District Supervisor
Email Address: randy.bolles@dvn.com	Approved Date: 7/23/2012   Expiration Date: 7/23/2014
Date: 7/20/2012   Phone: 405-228-8588	Conditions of Approval Attached

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

Form C-102  
August 1, 2011  
Permit 152337

**WELL LOCATION AND ACREAGE DEDICATION PLAT**

1. API Number 30-015-40513	2. Pool Code 55510	3. Pool Name SCANLON DRAW;BONE SPRING
4. Property Code 38436	5. Property Name EMERALD PWU 20	6. Well No. 008H
7. OGRID No. 6137	8. Operator Name DEVON ENERGY PRODUCTION COMPANY, LP	9. Elevation 3325

**10. Surface Location**

UL - Lot M	Section 21	Township 19S	Range 29E	Lot Idn	Feet From 180	N/S Line S	Feet From 50	E/W Line W	County EDDY
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**11. Bottom Hole Location If Different From Surface**

UL - Lot M	Section 20	Township 19S	Range 29E	Lot Idn M	Feet From 330	N/S Line S	Feet From 330	E/W Line W	County EDDY
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%; height: 150px; border-collapse: collapse;"> <tr><td style="width: 25%; height: 40px;"></td><td style="width: 25%; height: 40px;"></td><td style="width: 25%; height: 40px;"></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 style="background-color: #cccccc;"><td style="height: 40px;"></td><td style="height: 40px;"></td><td style="height: 40px;"></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: 7/20/2012</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: 5/1/2012 Certificate Number: 12797</p>



## Permit Comments

**Operator:** DEVON ENERGY PRODUCTION COMPANY, LP , 6137

**Well:** EMERALD PWU 20 #008H

**API:** 30-015-40513

Created By	Comment	Comment Date
morawford	The BOP system used to drill the intermediate and production holes will consist of a 13-5/8" 3M Triple Ram and Annular preventer. The BOP system will be tested as per BLM Onshore Oil and Gas Order No. 2 as a 3M system prior to drilling out the prior casing shoe.	7/20/2012
morawford	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.	7/20/2012
morawford	Mud: 0-300' FW, 8.4-9.0, 28-34, NC 300'-3,200' Brine, 9.8-10.2, 28-32, NC 3,200'-11,729' FW, 8.6-9.0, 28-32, NC-12	7/20/2012
morawford	No H2S is anticipated to be encountered.	7/20/2012
CSHAPARD	Land s/S	7/23/2012

## Permit Conditions of Approval

**Operator:** DEVON ENERGY PRODUCTION COMPANY, LP , 6137

**Well:** EMERALD PWU 20 #008H

**API:** 30-015-40513

OCD Reviewer	Condition
CSHAPARD	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