

UNITED STATES **OCD-ARTESIA**  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No 1004-0137  
Expires March 31, 2007

**SUNDRY NOTICES AND REPORTS ON WELLS**  
**Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.**

**SUBMIT IN TRIPLICATE – Other instructions on page 2.**

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator  
Devon Energy Production Co., LP

3a. Address  
20 North Broadway  
OKC, OK 73102

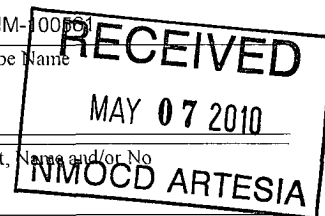
3b. Phone No. (include area code)  
(405)-552-7802

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)  
Sec 7-T19S-R31E  
SL 2160' FNL & 340' FEL BHL 2310' FNL & 340' FWL

5. Lease Serial No.

NMNM-100661

6. If Indian, Allottee or Tribe Name



7. If Unit of CA/Agreement, Name and/or No

8. Well Name and No

Strawberry 7 Federal 5H

9. API Well No

30-015-37257

10. Field and Pool or Exploratory Area

Hackberry, Bone Springs, North

11. Country or Parish, State

Eddy County, NM

**12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <u>Change Drilling</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<u>Program - Run 7"</u>
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	<u>Casing</u>

13. Describe Proposed or Completed Operation. Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Devon Energy Production Company, LP respectfully requests permission to change our plans and 7" as follows:

(see attached)

**SEE ATTACHED FOR  
CONDITIONS OF APPROVAL**

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)  
Stephanie A. Ysasaga

Title Sr. Staff Engineering Technician

Signature

Date 04/22/2010

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

Title

Office

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon



Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false fictitious or fraudulent statements or representations as to any matter within its jurisdiction

(Instructions on page 2)

**DD 5-10-10**



Devon Energy Corporation  
20 North Broadway  
Oklahoma City, OK 73102-8260

405 235 3611 Phone  
www.devonenergy.com

April 22, 2010

United States  
Department of The Interior  
Carlsbad, New Mexico  
Re: Strawberry 7 Fed #5H  
Sec 7-T19S-R31E  
Lea County, New Mexico  
API # 30-015-37257

Devon Energy would like to make the following changes to the approved drilling design for the above referred well.

1. Run 7" 26# HCP-110 BTC casing to -9,200' and cement to surface.  
Safety factors to the casing are: Collapse 1.72 Burst 2.64 Tensile 3.55
2. The cement job will be 3 stages as follow: 1<sup>st</sup> stage Lead: 295 sks 35:65 Poz class H yield 2.00 cuft/sk, Tail: 215 sks 50:50 Poz Class H yield 1.31 cuft/sk. DV TOOL @ 5,500'. 2<sup>nd</sup> stage Lead: 145 sks Class C yield 2.89 cuft/sk, Tail: 150 sks 60:40 Poz Class C yield 1.35 cuft/sk. DV TOOL @ 3,050'. 3<sup>rd</sup> stage Lead: 240 sks Class C 2.91 cuft/sk, Tail: 100 sks 1.34 cuft/sk.
3. The production liner design is not complete and will be forwarded 4-26-10.

*See 10A*  
Devon Energy reserves the right to change the drilling procedures as the well is being drilled and will inform the Carlsbad New Mexico BLM office within 24 hours of any changes which may occur.

Regards  
Pat Brown  
Drilling Engineer  
Devon Energy  
Western Region USA  
Office: 405-228-8511



Proposal No: 215855879D

**Devon Energy Corp  
Strawberry 7 Fed #5H**

API # 30-015-37257-0000

Sec. 7-19S-31E  
Eddy County, New Mexico  
April 22, 2010

**Cement Recommendation**

**Prepared for:**

Pat Brown  
Drilling Engineer  
Oklahoma City, Oklahoma  
Bus Phone: (405) 228-8511

**Prepared by:**

John Parks  
Region Technical Rep.  
Oklahoma City, Oklahoma  
Bus Phone: (405) 228-4302



**Service Point:**

Artesia  
Bus Phone: (505) 746-3140  
Fax: (505) 746-2293

**Service Representatives:**

Larry Johnson  
Senior Sales Rep  
Artesia, New Mexico

**Operator Name:** Devon Energy Corp  
**Well Name:** Strawberry 7 Fed #5H  
**Job Description:** 2nd Intermediate - 3 Stage  
**Date:** April 22, 2010



**Proposal No:** 215855879D

## **JOB AT A GLANCE**

<b>Depth (TVD)</b>	8,755 ft
<b>Depth (MD)</b>	9,300 ft
<b>Hole Size</b>	8.75 in
<b>Casing Size/Weight :</b>	7 in, 26 lbs/ft
<b>Pump Via</b>	7" O.D. (6.276" I.D) 26 #
<b>Total Mix Water Required</b>	12,954 gals
<b>Stage No: 1</b>	<b>Float Collar set @</b> 9,260 ft
<b>Spacer</b>	
<b>Fresh Water</b>	10 bbls
<b>Density</b>	8.3 ppg
<b>Spacer</b>	
<b>Mud Clean II</b>	1,500 gals
<b>Density</b>	8.5 ppg
<b>Spacer</b>	
<b>Fresh Water</b>	10 bbls
<b>Density</b>	8.3 ppg
<b>Lead Slurry</b>	
<b>35:65:6 Poz:Class H</b>	295 sacks
<b>Density</b>	12.5 ppg
<b>Yield</b>	2.00 cf/sack
<b>Tail Slurry</b>	
<b>50:50 Poz:Class H</b>	215 sacks
<b>Density</b>	14.2 ppg
<b>Yield</b>	1.31 cf/sack
<b>Displacement</b>	
<b>Displacement Fluid</b>	354 bbls

**JOB AT A GLANCE** (Continued)

Stage No: 3	Stage Collar set @	3,050 ft
Spacer		
Fresh Water		20 bbls
Density		8.3 ppg
Lead Slurry		
Class C + Additives		240 sacks
Density		11.4 ppg
Yield		2.91 cf/sack
Tail Slurry		
Class C		100 sacks
Density		14.8 ppg
Yield		1.34 cf/sack
Displacement		
Displacement Fluid		117 bbls

**Operator Name:** Devon Energy Corp  
**Well Name:** Strawberry 7 Fed #5H  
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**Date:** April 22, 2010



**Proposal No:** 215855879D

## WELL DATA

### ANNULAR GEOMETRY

ANNULAR I.D. (in)	DEPTH(ft)	
	MEASURED	TRUE VERTICAL
8.921 CASING	2,200	2,200
8.750 HOLE	9,300	8,755

### SUSPENDED PIPES

DIAMETER (in)		WEIGHT (lbs/ft)	DEPTH(ft)	
O.D.	I.D.		MEASURED	TRUE VERTICAL
7.000	6.276	26	9,300	8,755

**STAGE: 1**      **Float Collar set @**      9,260 ft  
                  **Mud Density**      9.50 ppg  
                  **Est. Static Temp.**      150 ° F  
                  **Est. Circ. Temp.**      130 ° F

### VOLUME CALCULATIONS

2,600 ft	x	0.1503 cf/ft	with	51 % excess	=	591.2 cf
1,200-ft	x	0.1503 cf/ft	with	50 % excess	=	270.6 cf
40 ft	x	0.2148 cf/ft	with	0 % excess	=	8.6 cf (inside pipe)
<b>TOTAL SLURRY VOLUME</b>					=	870.4 cf
					=	155 bbls

**STAGE: 2**      **Stage Collar set @**      5,500 ft  
                  **Mud Density**      9.50 ppg  
                  **Est. Static Temp.**      124 ° F  
                  **Est. Circ. Temp.**      108 ° F

### VOLUME CALCULATIONS

1,650 ft	x	0.1503 cf/ft	with	69 % excess	=	418.6 cf
800 ft	x	0.1503 cf/ft	with	68 % excess	=	202.1 cf
<b>TOTAL SLURRY VOLUME</b>					=	620.7 cf
					=	111 bbls

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**Proposal No:** 215855879D

**WELL DATA (Continued)**

<b><u>STAGE:</u> 3</b>	<b>Stage Collar set @</b>	3,050 ft
	<b>Mud Density</b>	9.50 ppg
	<b>Est. Static Temp.</b>	104 ° F
	<b>Est. Circ. Temp.</b>	94 ° F

**VOLUME CALCULATIONS**

2,200 ft	x	0.1668 cf/ft	with	0 % excess	=	367.0 cf
484 ft	x	0.1503 cf/ft	with	355 % excess	=	330.8 cf
366 ft	x	0.1503 cf/ft	with	143 % excess	=	133.5 cf
<b>TOTAL SLURRY VOLUME</b>					=	831.3 cf
					=	148 bbls

**Operator Name:** Devon Energy Corp  
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**Job Description:** 2nd Intermediate - 3 Stage  
**Date:** April 22, 2010



**Proposal No:** 215855879D

## FLUID SPECIFICATIONS

### STAGE NO.: 1

Spacer 10.0 bbls Fresh Water @ 8.34 ppg  
 Spacer 1,500.0 gals Mud Clean II @ 8.45 ppg  
 Spacer 10.0 bbls Fresh Water @ 8.34 ppg

FLUID	VOLUME CU-FT	VOLUME FACTOR	AMOUNT AND TYPE OF CEMENT
Lead Slurry	591	/ 2	= 295 sacks (35:65) Poz (Fly Ash):Class H Cement + 3% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 6% bwoc Bentonite + 0.7% bwoc FL-52A + 105.4% Fresh Water
Tail Slurry	279	/ 1.31	= 215 sacks (50:50) Poz (Fly Ash):Class H Cement + 5% bwow Sodium Chloride + 0.3% bwoc CD-32 + 0.5% bwoc FL-25 + 2% bwoc Bentonite + 0.65% bwoc Sodium Metasilicate + 0.5% bwoc FL-52A + 58.4% Fresh Water

Displacement 354.3 bbls Displacement Fluid

### CEMENT PROPERTIES

	SLURRY NO. 1	SLURRY NO. 2
Slurry Weight (ppg)	12.50	14.20
Slurry Yield (cf/sack)	2.00	1.31
Amount of Mix Water (gps)	10.99	5.88
Estimated Pumping Time - 70 BC (HH:MM)	5:00	3:30
Free Water (mls) @ ° F @ 90 ° angle		0.0
Fluid Loss (cc/30min) at 1000 psi and ° F		50.0
<b>COMPRESSIVE STRENGTH</b>		
12 hrs @ 140 ° F (psi)	175	250
24 hrs @ 140 ° F (psi)	250	1500
72 hrs @ 140 ° F (psi)	700	2000



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**Date:** April 22, 2010



**Proposal No:** 215855879D

## FLUID SPECIFICATIONS (Continued)

### STAGE NO.: 2

Spacer			20.0 bbls Fresh Water @ 8.34 ppg
Lead Slurry	419	/ 2.89	= 145 sacks Class C Cement + 1% bwoc Calcium Chloride + 0.125 lbs/sack Cello Flake + 3% bwoc Sodium Metasilicate + 157.8% Fresh Water
Tail Slurry	202	/ 1.35	= 150 sacks (60:40) Poz (Fly Ash):Class C Cement + 2% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 0.2% bwoc Sodium Metasilicate + 4% bwoc MPA-5 + 64% Fresh Water

<u>FLUID</u>	<u>VOLUME CU-FT</u>	<u>VOLUME FACTOR</u>	<u>AMOUNT AND TYPE OF CEMENT</u>
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Displacement	210.4 bbls Displacement Fluid
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### CEMENT PROPERTIES

	<u>SLURRY NO. 1</u>	<u>SLURRY NO. 2</u>
Slurry Weight (ppg)	11.40	13.80
Slurry Yield (cf/sack)	2.89	1.35
Amount of Mix Water (gps)	17.78	6.29
Estimated Pumping Time - 70 BC (HH:MM)	3:45	2:30
Free Water (mls) @ ° F @ 90 ° angle		
Fluid Loss (cc/30min) at 1000 psi and ° F		

### COMPRESSIVE STRENGTH

12 hrs @ 112 ° F (psi)	130	
24 hrs @ 112 ° F (psi)	300	
12 hrs @ 125 ° F (psi)		900
24 hrs @ 125 ° F (psi)		1800
72 hrs @ 125 ° F (psi)		2500

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**Proposal No:** 215855879D

## **FLUID SPECIFICATIONS (Continued)**

### **STAGE NO.: 3**

Spacer 20.0 bbls Fresh Water @ 8.34 ppg  
 Lead Slurry 698 / 2.91 = 240 sacks Class C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Cello Flake + 3% bwoc Sodium Metasilicate + 158.6% Fresh Water  
 Tail Slurry 134 / 1.34 = 100 sacks Class C Cement + 1% bwoc Calcium Chloride + 56.3% Fresh Water

<b>FLUID</b>	<b>VOLUME CU-FT</b>	<b>VOLUME FACTOR</b>	<b>AMOUNT AND TYPE OF CEMENT</b>
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Displacement 116.7 bbls Displacement Fluid

### **CEMENT PROPERTIES**

	<b>SLURRY NO. 1</b>	<b>SLURRY NO. 2</b>
Slurry Weight (ppg)	11.40	14.80
Slurry Yield (cf/sack)	2.91	1.34
Amount of Mix Water (gps)	17.88	6.34
Estimated Pumping Time - 70 BC (HH:MM)	3:30	2:30
Free Water (mls) @ ° F @ 90 ° angle		
Fluid Loss (cc/30min) at 1000 psi and ° F		
<b>COMPRESSIVE STRENGTH</b>		
12 hrs @ 104 ° F (psi)	130	900
24 hrs @ 104 ° F (psi)	300	1500

### **CALCULATIONS FROM CALIPER LOG:**

1st STG LEAD - 5500' - 8100' => 486 FT3 X 1.2 = 583 FT3

2nd STG LEAD - 3050' - 4700' => 350 FT3 X 1.2 = 420 FT3

2nd STG TAIL - 4700' - 5500' => 160 FT3 X 1.25 = 200 FT3

3rd STG LEAD - Surface - 2194 => 366 FT3 X 1.2 = 440 FT3

2194' - 2684' => 200 FT3 X 1.3 = 260 FT3 (TOTAL 700 FT3 OF LEAD)

3rd STG TAIL - 2684' - 3050' => 73 FT3 X 1.85 = 134 FT3

**Ysasaga, Stephanie**

**From:** Ysasaga, Stephanie  
**Sent:** Thursday, April 22, 2010 2:28 PM  
**To:** 'Wesley\_Ingram@blm.gov'; 'Christopher\_Walls@blm.gov'  
**Cc:** Brown, Patrick; McKinney, Curt; Jones, Steven  
**Subject:** Strawberry 7 Federal 5H: NOI for 7" Casing

**Attachments:** Strawberry 7 Federal 5H\_NOI7.pdf

Wesley & Chris,

Can you please review the attached and let me or Pat Brown know if you have any questions. When you fax back the approval can you please cc Pat? I am hoping we will have the approval today, but if we get it tomorrow, I may be out of the office. If you cc Pat, at least he will have his approval via e-mail.

Thank you so much!



Strawberry 7  
Federal 5H\_NOI7.p..

***Stephanie A. Ysasaga***

Sr. Staff Engineering Technician  
(405)-552-7802 Phone (405)-721-7689 Cell  
(405)-552-8113 Fax  
Corporate Tower 03.056  
[Stephanie.Ysasaga@dnv.com](mailto:Stephanie.Ysasaga@dnv.com)

**PECOS DISTRICT  
CONDITIONS OF APPROVAL**

<b>OPERATOR'S NAME:</b>	<b>Devon Energy Production Co.</b>
<b>LEASE NO.:</b>	<b>NMNM-100561</b>
<b>WELL NAME &amp; NO.:</b>	<b>Strawberry 7 Federal 5H</b>
<b>SURFACE HOLE FOOTAGE:</b>	<b>2160' FNL &amp; 340' FEL</b>
<b>BOTTOM HOLE FOOTAGE:</b>	<b>2310' FNL &amp; 340' FWL</b>
<b>LOCATION:</b>	<b>Section 7, T. 19 S., R 31 E., NMPM</b>
<b>COUNTY:</b>	<b>Eddy County, New Mexico</b>

**A. CASING**

**Changes to the approved APD casing and cement program require submitting a sundry and receiving approval prior to work. Failure to obtain approval prior to work will result in an Incident of Non-Compliance being issued.**

1. The minimum required fill of cement behind the 7 inch production casing is:

a. First stage to DV tool, cement shall:

☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job.

b. Second stage above DV tool, cement shall:

☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with third stage cement job.

c. Third stage above DV tool, cement shall:

☒ Cement to surface. If cement does not circulate, contact the appropriate BLM office.

**CRW 042310**