

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA
S

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.

5. Lease Serial No
NMNM-44594

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE – Other instructions on page 2.

1 Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

APR 29 2008

2 Name of Operator
Devon Energy Production Co., LP

OCD-ARTESIA

3a Address
20 North Broadway
OKC, OK 73102

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

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

8 Well Name and No.
Arenoso 22 Federal 2

9 API Well No.
30-015-35631

4 Location of Well (Footage, Sec, T, R., M, or Survey Description)
SL. NESE 1980' FSL & 990' FEL BHL. NWSE 1980' & 1650' FEL
Sec 22-T19S-R31E

10. Field and Pool or Exploratory Area
Lusk; Morrow (Gas), West

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 APD Change;
	<input checked="" type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Int Depth & BOP
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	Variance

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 Co., LP respectfully requests approval to change intermediate casing depth due to stuck casing & request BOP variance:

Will set 9 5/8" HCK-55 @ 0' - 4,140', instead of 4,560' depth; Devon & BLM Geologist verify salt water at this depth. Set cmt & drill out with salt water or fresh water as appropriate; circulation is currently maintained. Current depth @ 4,140'; DV tool @ 1,804'. A fluid caliper will be run to dictate the cement volumes that will need to be pumped to surface. Estimated cement calculation ran based on 4,140', the most additional sacks of cement that will be needed are: 1st stage lead 845 sx, tail w/300 sx - 2nd stage lead 950 sx, tail w/160 sx @ 200% excess. Mud loggers on location. *Already cemented*

Request a variance on testing BOP/BOPE prior to entering the Wolfcamp per conditions of approval III D #5:

- * If < 20 days no testing required
- * If > 20 days, run Wolfcamp BOP test.

Contingency Plan if lost circulation or problems arise below Delaware or Bone Springs: Run 7" 26# HCP-110 LT&C; casing Interval: 0' - 10,300', as contingency string. DV tool @ 8,500'; tie back to casing shoe @ approximately +/- 3,600'. Run 4 1/2" 11.6# HCP-110 LT&C; casing interval: 10,000' - 12,750'. Will notify BLM if "contingency plan" is deemed necessary to implement.

See attached cementing report for 7" and 4 1/2" liner.

14 I hereby certify that the foregoing is true and correct

Name (Printed/Typed)
Stephanie A. Ysasaga

Title Sr. Staff Engineering Technician

Signature

Date 04/23/2008

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Office

APPROVED

APR 24 2008

Date
WESLEY W. INGRAM
PETROLEUM ENGINEER

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)

Accepted for record - NMOCD



Proposal No: 215854149D

**Devon Energy Corp
Arenoso 22 Federal #2**

API # 30-015-35631-0000
Happy Valley Field
Sec. 22-19S-31E
Eddy County, New Mexico
April 23, 2008

Well Recommendation

Prepared for:

Don Webb
Drilling Engineer
Oklahoma City, Oklahoma
Bus Phone: (405) 228-7540

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:

Michael Palmer
District Sales Supervisor
Artesia, New Mexico

Operator Name: Devon Energy Corp
Well Name: Arenoso 22 Federal #2
Job Description: 7" Intermediate Casing Option
Date: April 23, 2008



Proposal No: 215854149D

JOB AT A GLANCE

Depth (TVD)	10,300 ft
Depth (MD)	10,300 ft
Hole Size	8.75 in
Casing Size/Weight :	7 in, 26 lbs/ft
Pump Via	7" O.D. (6.276" I.D) 26
Total Mix Water Required	9,610 gals
Stage No: 1	Float Collar set @ 10,220 ft
Spacer	
Fresh Water	20 bbls
Density	8.3 ppg
Spacer	
Mud Clean II	1,500 gals
Density	8.5 ppg
Spacer	
Fresh Water	10 bbls
Density	8.3 ppg
Cement Slurry	
60:40 Poz:Class H (MPA)	365 sacks
Density	13.8 ppg
Yield	1.35 cf/sack
Displacement	
Displacement Fluid	391 bbls

Operator Name: Devon Energy Corp
Well Name: Arenoso 22 Federal #2
Job Description: 7" Intermediate Casing Option
Date: April 23, 2008



Proposal No: 215854149D

JOB AT A GLANCE (Continued)

Stage No: 2	Stage Collar set @	8,500 ft
Spacer		
Fresh Water		30 bbls
Density		8.3 ppg
Lead Slurry		
35:65:6 Poz:Class C:Gel		565 sacks
Density		12.5 ppg
Yield		1.94 cf/sack
Tail Slurry		
60:40 Poz:Class C (MPA)		225 sacks
Density		13.8 ppg
Yield		1.34 cf/sack
Displacement		
Displacement Fluid		325 bbls

**Proposal No: 215854149D**

WELL DATA

ANNULAR GEOMETRY

ANNULAR I.D. (in)	DEPTH(ft)	
	MEASURED	TRUE VERTICAL
8.835 CASING	4,140	4,140
8.750 HOLE	10,300	10,300

SUSPENDED PIPES

DIAMETER (in)		WEIGHT (lbs/ft)	DEPTH(ft)	
O.D.	I.D.		MEASURED	TRUE VERTICAL
7.000	6.276	26	10.300	10.300

<u>STAGE:</u> 1	Float Collar set @	10,220 ft
	Mud Density	10.00 ppg
	Est. Static Temp.	162 ° F
	Est. Circ. Temp.	139 ° F

VOLUME CALCULATIONS

1,800 ft	x	0.1503 cf/ft	with	75 % excess	=	473.5 cf
80 ft	x	0.2148 cf/ft	with	0 % excess	=	17.2 cf (inside pipe)
TOTAL SLURRY VOLUME					=	490.7 cf
					=	87 bbls

<u>STAGE: 2</u>	Stage Collar set @	8,500 ft
	Mud Density	10.00 ppg
	Est. Static Temp.	148 ° F
	Est. Circ. Temp.	128 ° F

VOLUME CALCULATIONS

500 ft	x	0.1585 cf/ft	with	0 % excess	=	79.2 cf
3,360 ft	x	0.1503 cf/ft	with	100 % excess	=	1010.2 cf
1,000 ft	x	0.1503 cf/ft	with	100 % excess	=	300.7 cf
TOTAL SLURRY VOLUME					=	1390.1 cf
					=	248 bbls

Operator Name: Devon Energy Corp
Well Name: Arenoso 22 Federal #2
Job Description: 7" Intermediate Casing Option
Date: April 23, 2008



Proposal No: 215854149D

FLUID SPECIFICATIONS

STAGE NO.: 1

Spacer 20.0 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
Cement Slurry	491	/ 1.35	= 365 sacks (60:40) Poz (Fly Ash):Class H Cement + 1% bwow Sodium Chloride + 0.2% bwoc R-3 + 0.125 lbs/sack Cello Flake + 2 lbs/sack Kol Seal + 0.75% bwoc BA-10A + 0.2% bwoc FL-52A + 4% bwoc MPA-5 + 61.2% Fresh Water
Displacement			391.0 bbls Displacement Fluid

CEMENT PROPERTIES

SLURRY NO. 1

Slurry Weight (ppg)	13.80
Slurry Yield (cf/sack)	1.35
Amount of Mix Water (gps)	6.01
Estimated Pumping Time - 70 BC (HH:MM)	4:00

COMPRESSIVE STRENGTH

12 hrs @ 162 ° F (psi)	1100
24 hrs @ 162 ° F (psi)	2150
72 hrs @ 162 ° F (psi)	3000

Operator Name: Devon Energy Corp
Well Name: Arenoso 22 Federal #2
Job Description: 7" Intermediate Casing Option
Date: April 23, 2008



Proposal No: 215854149D

FLUID SPECIFICATIONS (Continued)

STAGE NO.: 2

Spacer 30.0 bbls Fresh Water @ 8.34 ppg

Lead Slurry 1089 / 1.94 = 565 sacks (35:65) Poz (Fly Ash):Premium Plus C
Cement + 0.125 lbs/sack Cello Flake + 6% bwoc
Bentonite + 102.1% Fresh Water

Tail Slurry 301 / 1.34 = 225 sacks (60:40) Poz (Fly Ash):Premium Plus C
Cement + 1% bwoc Sodium Chloride + 4% bwoc
MPA-5 + 0.1% bwoc R-3 + 0.75% bwoc BA-10A +
0.125 lbs/sack Cello Flake + 63.1% Fresh Water

Displacement 325.2 bbls Displacement Fluid

CEMENT PROPERTIES

	SLURRY NO. 1	SLURRY NO. 2
Slurry Weight (ppg)	12.50	13.80
Slurry Yield (cf/sack)	1.94	1.34
Amount of Mix Water (gps)	10.65	6.20
Estimated Pumping Time - 70 BC (HH:MM)	4:00	3:00

COMPRESSIVE STRENGTH

12 hrs @ 128 ° F (psi)	300	
24 hrs @ 128 ° F (psi)	400	
72 hrs @ 128 ° F (psi)	850	
12 hrs @ 148 ° F (psi)		900
24 hrs @ 148 ° F (psi)		2100
72 hrs @ 148 ° F (psi)		3000

CEMENT VOLUMES MAY VARY BASED ON CALIPER.

Operator Name: Devon Energy Corp
Well Name: Arenoso 22 Federal #2
Job Description: 4 1/2" Liner Option
Date: April 23, 2008



Proposal No: 215854149D

JOB AT A GLANCE

Depth (TVD)	12,750 ft
Depth (MD)	12,750 ft
Hole Size	6.125 in
Liner Size/Weight :	4 1/2 in, 11.6 lbs/ft
Pump Via	Drill Pipe 3 1/2" O.D. (2.764" I.D) 13.3 Casing 4 1/2" O.D. (4.000" I.D) 11.6
Total Mix Water Required	2,100 gals
Spacer	
Turbo Flow III	20 bbls
Density	11.5 ppg
Spacer	
Fresh Water	5 bbls
Density	8.3 ppg
Spacer	
Surebond III	500 gals
Density	9.4 ppg
Spacer	
Fresh Water	10 bbls
Density	8.3 ppg
Cement Slurry	
Super C Modified	275 sacks
Density	13.3 ppg
Yield	1.57 cf/sack
Displacement	
Displacement Fluid	116 bbls

Operator Name: Devon Energy Corp
Well Name: Arenoso 22 Federal #2
Job Description: 4 1/2" Liner Option
Date: April 23, 2008



Proposal No: 215854149D

WELL DATA

ANNULAR GEOMETRY

ANNULAR I.D. (in)	DEPTH(ft)	
	MEASURED	TRUE VERTICAL
6.276 CASING	10,300	10,300
6.125 HOLE	12,750	12,750

SUSPENDED PIPES

DIAMETER (in)		WEIGHT (lbs/ft)	DEPTH(ft)	
O.D.	I.D.		MEASURED	TRUE VERTICAL
4.500	4.000	11.6	12,750	12,750

Drill Pipe 3.5 (in) OD, 2.764 (in) ID, 13.3 (lbs/ft) set @ 10,000 ft
 Drill Pipe 4.5 (in) OD, 4.0 (in) ID, 11.6 (lbs/ft) set @ 12,750 ft
 Depth to Top of Liner 10,000 ft
 Float Collar set @ 12,670 ft
 Mud Density 10.00 ppg
 Est. Static Temp. 182 ° F
 Est. Circ. Temp. 145 ° F

VOLUME CALCULATIONS

200 ft	x	0.2148 cf/ft	with	0 % excess	=	43 cf
300 ft	x	0.1044 cf/ft	with	0 % excess	=	31 cf
2,450 ft	x	0.0942 cf/ft	with	50 % excess	=	346 cf
80 ft	x	0.0873 cf/ft	with	0 % excess	=	7 cf (inside pipe)
TOTAL SLURRY VOLUME					=	427 cf
					=	76 bbls

Operator Name: Devon Energy Corp
Well Name: Arenoso 22 Federal #2
Job Description: 4 1/2" Liner Option
Date: April 23, 2008



Proposal No: 215854149D

FLUID SPECIFICATIONS

Spacer	20.0 bbls Turbo Flow III @ 11.5 ppg
Spacer	5.0 bbls Fresh Water @ 8.34 ppg
Spacer	500.0 gals Surebond III @ 9.35 ppg
Spacer	10.0 bbls Fresh Water @ 8.34 ppg

<u>FLUID</u>	<u>VOLUME CU-FT</u>	<u>VOLUME FACTOR</u>	<u>AMOUNT AND TYPE OF CEMENT</u>
Cement Slurry	427	/ 1.57	= 275 sacks (15:61:11) Poz (Fly Ash):Premium Plus C Cement:CSE-2 + 1% bwow Potassium Chloride + 0.75% bwoc EC-1 + 0.125 lbs/sack Cello Flake + 0.4% bwoc CD-32 + 2 lbs/sack LCM-1 + 0.6% bwoc FL-25 + 0.6% bwoc FL-52A + 0.3% bwoc R-3 + 73.2% Fresh Water

Displacement 115.7 bbls Displacement Fluid

CEMENT PROPERTIES

SLURRY NO. 1

Slurry Weight (ppg)	13.30
Slurry Yield (cf/sack)	1.57
Amount of Mix Water (gps)	7.64
Estimated Pumping Time - 70 BC (HH:MM)	4:00
Free Water (mls) @ 145 ° F @ 90 ° angle	0.0
Fluid Loss (cc/30min) at 1000 psi and 145 ° F	50.0

COMPRESSIVE STRENGTH

12 hrs @ 182 ° F (psi)	1400
24 hrs @ 182 ° F (psi)	2000
72 hrs @ 182 ° F (psi)	2500

ACTUAL CEMENT VOLUMES MAY VARY BASED ON CALIPER.

BATCH MIX THE SUPER C MODIFIED CEMENT SLURRY.