Form 3160-5 (August 2007)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2019

	CLAO OF LAND MAP	NM033775				
Do not use this		ORTS ON WELLS to drill or to re-enter a APD) for such proposa		6. If Indian, Allottee o	r Tribe Name	
	IT IN TRIPLICATE – Othe	r instructions on page 2.		7. If Unit of CA/Agree	ement. Name and/or No.	
I. Type of Well ☐ Oil Well ☐ Gas Well ☐ Other				8. Well Name and No. NBQU #49		
2. Name of Operator SandRidge E&P, LLC				9. API Well No. 30-015-36901		
3a. Address 123 Robert S. Kerr Ave. OKC OK 73102-6406	3b. Phone No. (include area code) 405-476-6085		10. Field and Pool or Exploratory Area Benson Queen Grayburg, North			
4. Location of Well (Footage, Sec., T.,R.,M., or Survey Description) 2520 FSL / 1510 FEL Sec 28. T18S, R30E				11. Country or Parish, State Eddy County, NM		
12. CHE	CK THE APPROPRIATE BO	OX(ES) TO INDICATE NATUR	E OF NOTIO	CE, REPORT OR OTHI	ER DATA	
TYPE OF SUBMISSION		TY	YPE OF ACT	ION		
✓ Notice of Intent	Acidize Alter Casing	Deepen Fracture Treat	=	uction (Start/Resume)	Water Shut-Off Well Integrity	
Subsequent Report Final Abandonment Notice	Casing Repair Change Plans Convert to Injection	New Construction Plug and Abandon Plug Back	Temp	mplete porarily Abandon r Disposal	Other Amended csg design	
the proposal is to deepen direction Attach the Bond under which the following completion of the invol- testing has been completed. Final determined that the site is ready for	hally or recomplete horizontal work will be performed or proved operations. If the operation Abandonment Notices must or final inspection.)	Ily, give subsurface locations and ovide the Bond No. on file with l ion results in a multiple completi- be filed only after all requiremen	I measured ar BLM/BIA. R on or recomp nts, including	nd true vertical depths of dequired subsequent rep letion in a new interval.	orts must be filed within 30 days , a Form 3160-4 must be filed once	
Attached please find the new casin	g design for our APD exter	nsion request dated 9/16/2010) .			

Accepted for record NMOCD

(Instructions on page 2)

fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

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14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed) Linda Guthrie	•
	Title Regulatory Manager
signed La Guthrus	Date 03/02/2011 (1995年) (19954004) (19954004) (19954004) (19954004) (
THIS SPACE FOR FEDER	RAL OR STATE OFFICE USE
Approved by /s/ Don reterson	Title FIELD MANAGER , Date APR 2.5 2001
Conditions of approval, if any, are attached. Approval of this notice does not warrant or ce that the applicant holds legal or equitable title to those rights in the subject lease which wou entitle the applicant to conduct operations thereon.	
Title 1811 S.C. Section 1001 and Title 4311 S.C. Section 1212, make it a crime for any per	son knowingly and willfully to make to any department or agency of the United States any false

DRILLING PROGRAM NBQU #49

1. Geological Name of Surface Formation

a. Permian

2. Estimated Tops of Geological Markers

Total Depth 3500'

a. Top of Anhydrite
b. Top of Yates 1672'
c. Top of Queens
d. Top of Penrose
e. Top of Grayburg
330'
Possibly yield hydrocarbons @ 1650'
Possibly yield hydrocarbons @ 2800'
Possibly yield hydrocarbons @ 3200'

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 11 3/4" casing at 400' and circulating cement back to surface. Potash will be protected by setting 8 5/8" casing at 2500' and circulating cement to surface. Fresh water sands will be protected by setting 5 1/2" casing at 3500' and circulating cement to surface.

3. Casing Program:

<u>Hole Size</u>	<u>Depth</u>	OD Csg	Weight	<u>Collar</u>	<u>Grade</u>	New/Used
14 3/4	400'	11 3/4	47#	ST&C	J-55	New
10 5/8	2500'	8 5/8	32#	LT&C	J-55	New
7 7/8	3500′	5 1/2	15.5#	LT&C	J-55	New
Safety factors:		Burs	t 1.1	Collap	se 1.125	Tension 1.8

4. Cement Progam: (Note yields; and dv tool depths if multiple stages)

a.	11 3/4"	Surface	Circulate cement to surface with 240 sks Class C cement +
			2% CaCl2 (wt. 14.8 lbs/gal., Yield 1.34 cuft/sk)
b.	8 5/8"	Intermediate	Circulate cement to surface with lead cement from 2000'
			to surface with 360 sks class C + 5% Salt + 0.25 lb/sk LCM (wt. 12.4
			lbs/gal, Yield 2.12 cuft/sk)
			Tail Cement: 170 sks Class C + 2% CaCl2 (wt 14.8 lbs/gal, Yield 1.34
			cuft/sk) from 2500' to 2000'
c.	5 1/2"	Production	Circulate cement to surface with lead cement from 3300'
			to surface with 350 sks 50:50 POZ class C + 2% Bentonite +
			0.5% F.L. + 0.25 lb/sk LCM + 0.4% anti foam (wt. 11.9
			lbs/gal, Yield 2.06 cuft/sk)
			Tail Cement: 50 sks Class C +2% CaCl2 (wt 14.8 lbs/gal, Yield 1.34
			cuft/sk) from 3500' to 3300'

The above cement volumes could be revised pending the caliper measurement from open hole logs. The top of cement is designed to reach surface.