Form 3160-3 (April 2004) UNITED STAT		AM 10: 52 FORM APPI OMB No. 10 Expires March	1 31, 2007
DEPARTMENT OF TH BUREAU OF LAND M	IE INTERIOR RECEI	5. Lease Serial No. SF078988	
APPLICATION FOR PERMIT T	010 070 -	6. If Indian, Allotee or	Tribe Name
Ia. Type of work: DRILL	ENTER	7 If Unit or CA Agreeme Northeast Blanco	
Ib. Type of Well: Oil Well 🖌 Gas Well Other	Single Zone Mul	8. Lease Name and Well ple Zone NEBU 247	No.
2. Name of Operator Devon Energy Production Compan		9. API Well Na. 30-045-	
3a. Address 20 N. Broadway Oklahoma City, OK 73102	3b. Phone No. (include area code) 405-552-7917	10. Field and Pool, or Expl Rosa Pictured Cli	
 4. Location of Well (Report location clearly and in accordance with At surface 1,040' FNL & 30' FWL, Unit D At proposed prod. zone 1,990' FSL & 1,140' FWL, Unit 	, NW NW	11. Scc., T. R. M. or Blk.a D Sec. 20-31N-6W	nd Survey or Are
 Distance in miles and direction from nearest town or post office⁴ Approximately 14.2 miles 	· · · · · · · · · · · · · · · · · · ·	12. County or Parish San Juan	13. State
15. Distance from proposed* location to nearest property or lease line, ft,	16. No. of acres in lease	17. Spacing Unit dedicated to this well	k
(Also to nearest drig, unit line, if any) 18. Distance from proposed location*	2,560 Acres 19. Proposed Depth	160 Acres 5 W 4 20. BLM/BIA Bond No. on file	
to nearest well, drilling, completed, applied for, on this lease, ft. 319'	4,820' TMD	CO 1104	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) GR 6,335'	22. Approximate date work will s 06/14/2007	ut* 23. Estimated duration Unknown	
The following, completed in accordance with the requirements of O 1. Well plat certified by a registered surveyor. 2 A Drilling Plan. 3. A Surface Use Plan (if the location is on National Forest Sys	24. Attachments nshore Oil and Gas Order No.1, shall be 4. Bond to cover Item 20 above	t attached to this form: the operations unless covered by an exit	sting bond on file
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Submit 3 Copies To Appropriate District Office	State of New Mer Energy, Minerals and Natur		Form C-103 May 27, 2004
District I 1625 N. French Dr., Hobbs, NM 88240 District II	OIL CONSERVATION		WELL API NO. 30-045-34319
1301 W. Grand Ave., Artesia, NM 88210 <u>District III</u> 1000 Rio Brazos Rd., Aztec, NM 87410	1220 South St. Fran	cis Dr.	5. Indicate Type of Lease STATES
District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505	Santa Fe, NM 87		6. State Oil & Gas Leage No. SF 078988
SUNDRY NOTION (DO NOT USE THIS FORM FOR PROPOS DIFFERENT RESERVOIR. USE "APPLIC			7. L'ease Name or Unit Agreement Name Northeast Blanco Unit
PROPOSALS.) 1. Type of Well: Oil Well	Gas Well 🛛 Other		8. Well Number 247
2. Name of Operator Devon Energy Production Compa	ıny, L.P.		9. OGRID Number 6137
3. Address of Operator 20 N. Broadway, Oklahoma City,	OK 73102		10. Pool name or Wildcat Rosa Pictured Cliffs
	040feet from theNorthl nship 31N Range 6W		feet from theWestline County San Juan
Pit or Below-grade Tank Application 🛛 or	GR 6,335'	RKB, RT, GR, etc.)	
		ater well_>1000'_ Di	istance from nearest surface water
Pit Liner Thickness: 12 mil	Below-Grade Tank: Volume	bbls; Construc	ction MaterialSynthetic Liner
12. Check A	ppropriate Box to Indicate Na	ature of Notice, I	Report or Other Data
PERFORM REMEDIAL WORK	PLUG AND ABANDON	REMEDIAL WORK	
PULL OR ALTER CASING		CASING/CEMENT	
OTHER: Construction Drilling 8		OTHER:	
			l give pertinent dates, including estimated date ach wellbore diagram of proposed completion

Devon Energy will be constructing a lined drilling pit. The closure of said pit will be in accordance with the NMOCD regulations with the cutting of the liner applying to the BLM rules.

NEBU 247 Unit D 20-T31N-R6W San Juan Co., NM

DRILLING PLAN

1. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS & ANTICIPATED WATER, OIL, GAS OR MINERAL FORMATIONS:

Formation	TMD (FT)	TVD (FT)	Hydrocarbon/Water Bearing Zones
San Jose	Surface	Surface	
Ojo Alamo	3585	2277	Aquifer
Kirtland	3712	2389	
Fruitland	4156	2813	Gas
Fruitland 1 st Coal	4340	2997	Gas
Pictured Cliffs	4512	3169	Gas
Pictured Cliffs Main	4613	3270	Gas
Lewis	4720	3377	Gas
TD	4820	3477	

*All shows of fresh water and minerals will be adequately protected and reported.

2. PRESSURE CONTROL EQUIPMENT:

All well control equipment shall be in accordance with Onshore Order #2 for 2M systems.

The minimum specifications for pressure control equipment that will be provided are included on the attached schematic diagram, with a size of 2", and pressure ratings.

2000# BOP With Pipe Rams and 2000# BOP With Blind Rams Auxiliary equipment to be used:

• Upper kelly cock with handle available.

The manifold includes appropriate valves and adjustable chokes. The kill line will have one check valve. Ram type preventers will be pressure tested to full working pressure (utilizing a test plug) or 70% of the internal yield pressure (without a test plug) at:

- Initial installation
- Whenever any seal subject to test pressure is broken
- Following related repairs
- At 30 day intervals

Pipe and blind rams shall be activated each trip.

A BOPE pit level drill will be conducted weekly for each drilling crew. All tests and drills will be recorded in the drilling log.

The accumulator will have sufficient capacity to close all rams and retain 200 psi above precharge pressure without the use of closing unit pumps.

Master controls will be at the accumulator. Anticipated bottom hole pressure is 3400 psi.

3. CASING & CEMENTING PROGRAM:

 \approx 1500 psi

A. The proposed casing program will be as follows:

TMD	TVD	Hole Size	Size	Grade	Weight	Thread	Condition
0-285'	0-285'	12- 1/4"	9-5/8"	H-40	22 # 37.3*	STC	New
0-4340	2997 0-4840	8-3/4"	7"	K-55	23#	LTC	New
0- TD	0- TD	<u>6-</u> 1/4"	4-1/2"	J-55	11.6 #	LTC	New

The 9-5/8" surface pipe will be tested to 750 psi. All casing strings below the surface shoe shall be pressure tested to 0.22 psi/ft. of casing string length or 1500 psi, whichever is greater, but not to exceed 70% minimum internal yield.

<u>Surface</u>: The bottom three joints of the surface casing will have a minimum of one centralizer per joint and one centralizer every joint thereafter (Total 5 centralizers estimated)

<u>Intermediate</u>: The bottom three joints of the 7" casing will have a minimum of one centralizer per joint and one centralizer every fifth joint thereafter to above Ojo Alamo with turbolizers below and throughout the Ojo Alamo. (Total 12 centralizers, 3 turbolizers estimated).

<u>Production</u>: The bottom three joints will have a minimum of one centralizer per joint and one centralizer every fifth joint to 3400' (estimated 25 centralizers used). Centralizers will be open bow spring or basket bow spring type.

B. The proposed cementing program will be as follows:

Surface String:	Cement will be circulated to surface.
	Lead: 200 sks Class "B" with 100% Standard Cement, 2.00% CaCl2, .25 #/sk Flocele. Density: 15.6 lb/gal; Yield: 1.18 cuft/sk; Water: 5.24 gal/sk * * <i>Minor variations possible due to existing conditions</i>
Intermediate String:	Cement will be circulated to surface.

Lead: 500 sx 50/50 Poz, Yd-1.45, Water Gal/sx 6.8, Mixed @

13ppg Foamed W/ N2 Down To 9.0# Additives 2% Gel, 0.2% Versaset, 0.1% Diacel Lwl.

Tail: 75 sx 50/50 Poz, Yd-1.45, Water Gal/Sk 6.8, Additives 2% Gel, 0.2% Versaset, 0.1% Diacel Lwl.

* Minor variations possible due to existing conditions

If hole conditions dictate, an alternate, cement design will be used:

Lead: 575 sx 50/50 Poz with 50% Class B Cement, 50% San Juan Poz, .4% Halad-344, .1% CFR-3, 3% Bentonite, 5#/sx Gilsonite, .25#/sx Flocele. Density: 13.0 lb/gal; Yield: 1.46 cuft/sx; Water: 6.42 gal/sx

Tail: 75 sx 50/50 Poz with 94#/sx Standard Cement, 0.3% Halad-344, .25 #/sx Flocele. Density: 15.6 lb/gal; Yield: 1.18 cuft/sx; Water: 5.23 gal/sx

* Minor variations possible due to existing conditions

Production String:4-1/2" Production casing cemented in an 6-1/4" hole
11.6# J-55 LT&C 8 Rnd
Float collar
Joint
Float Shoe
Cement with 500 sacks Class B 50/50 POZ, 3% gel, 5# gilsonite,
1/2"# Flocele, .1% CFR 3, .2% Halad 344, yield 1.47 ft3/sx.
Cement designed to circulate to surface.
Pending hole conditions, cement baskets may be installed above
TD
* Minor variations possible due to existing conditions

Actual volumes will be calculated and adjusted with caliper log prior to cementing.

If hole conditions dictate an alternate cement design will be used.

Lead: 500 Sx Of 50/50/Std/ Poz, Yd-1.45, Water Gal/Sk 6.8, Mixed @ 13ppg Foamed W/ N2 Down To 9.0# Additives 2% Gel, 0.2% Versaset, 0.1% Diacel Lwl. Tail: 75 Sx50/50/Std/ Poz, Yd-1.45, Water Gal/Sk 6.8, Additives 2% Gel, 0.2% Versaset, 0.1% Diacel Lwl.

* Minor variations possible due to existing conditions

4. DRILLING FLUIDS PROGRAM:

TMD Interval	TVD Interval	Туре	Weight (ppg)	Viscosity	рН	Water Loss	Remarks
0-285'	0-285'	Spud- foam	8.4-9.0	29-70	8.0	NC	FW gel, LSND or stiff foam
285'-4,340'	285'-2,997'	Water/ Mud	8.4-9.0	29-70	8.0	NC	

		4,340' - TD	2,997' - TD	Air/N2 or Mud	8.5-9.0*	30-50	8.0-10.0	8-810cc @ TD	Low solids- non-dispersed. * min Wt. to control formation pressure
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NC = no control

Sufficient quantities of mud material will be maintained on site or be readily accessible for the purpose of assuring well control. SPR will be recorded on daily drilling report after mudding up. Visual mud monitoring will be conducted during operations.

5. EVALUATION PROGRAM:

Logs: Density Neutron Induction

In the event open hole logs are not run in the well, a cased hole evaluation log will Be run from

- **Survey:** Deviation surveys will be taken every 500' of the 8 ³/₄" hole, or first succeeding bit change. The hole will be air drilled from intermediate TD well TD. The equipment used in this type of operation will not allow for single shot suveys without considerable operational delays. A survey will be taken at TD. Similar wells in this area have not shown significant deviation in this section of the hole.
- Cores: None anticipated.
- **DST's:** None anticipated.

6. ABNORMAL CONDITIONS:

The Fruitland Coal will be encountered within the 8 $\frac{3}{4}$ " hole. Estimated formation pressure is 300 psi. No other abnormal pressures and/or temperatures are expected. No hydrogen sulfide should be present.

7. OTHER INFORMATION:

The anticipated starting date and duration of the operation will be as follows:

Starting Date:	Upon Approval
Duration:	20 days

If the well is completed as a dry hole or as a producer, Well Completion or Recompletion Report and Log (Form 3160-4) will be submitted within 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3160. Copies of all logs, core descriptions, core analyses, well test data, geologic summaries, sample descriptions, daily drilling reports, daily completion reports, and all other surveys or data obtained and compiled during the drilling, completion, and/or workover operations, will be submitted directly to the Authorized Officer or filed with Form 3160-4.

Company: Devon Energy **Lease/Well:** NEBU 247 **Location:** San Juan County **State/Country:** NM







Well Control Equipment 2,000 psi Configuration N