

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. <b>SF-078988</b>	
1b. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name <b>N/A</b>	
2. Name of Operator <b>Attn: Diane Busch Devon Energy Production Company, L.P.</b>		7. If Unit or CA Agreement, Name and No. <b>NORTHEAST BLANCO UNIT</b>	
3a. Address <b>20 N. Broadway Oklahoma City, OK 73102</b>		8. Lease Name and Well No. <b>NEBU 499A</b>	
3b. Phone No. (include area code) <b>(405) 228-4362</b>		9. API Well No. <b>30-039-27445</b>	
4. Location of well (Report location clearly and in accordance with any State requirements. *) At surface <b>1875' FSL &amp; 1420' FEL NW SE Unit J</b> At bottom hole <b>800' FNL &amp; 1300' FEL NE NE Unit A</b> At proposed prod. zone		10. Field and Pool, or Exploratory <b>Basin Fruitland Coal</b>	
11. Sec., T., R., M., or Blk. And Survey or Area <b>J Sec. 20 T 31N R 6W</b> <b>BH Sec. 20 T 31N R 6W</b>		12. County or Parish <b>Rio Arriba - Surf, San Juan, BH</b>	
13. State <b>NM</b>		14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* <b>Approximately 57 miles northeast of Bloomfield, New Mexico</b>	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg unit line, if any) <b>1420'</b>		16. No. of Acres in lease <b>2560</b>	
17. Spacing Unit dedicated to this well <b>320</b>		18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	
19. Proposed Depth <b>3130'</b>		20. BLM/ BIA Bond No. on file <b>CO-1104</b>	
21. Elevations (Show whether DF, RT, GR, etc.) <b>6279' GL</b>		22. Approximate date work will start* <b>Upon Approval</b>	
23. Estimated Duration <b>20 Days</b>		24. Attachments <b>Drilling operations authorized are subject to compliance with attached General Requirements.</b>	
25. Signature <b>Diane Busch</b>		Name (Printed/ Typed) <b>Diane Busch</b>	
Title <b>Sr. Operations Technician</b>		Date <b>5/30/03</b>	
Approved By (Signature) <b>David J. Mankiewicz</b>		Name (Printed/ Typed) <b>David J. Mankiewicz</b>	
Title <b></b>		Date <b>SEP 15 2003</b>	
Office <b></b>			

Application approval 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 operations thereon.

Conditions of approval, if any, are attached.

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

\* (Instructions on reverse)

HOLD C104 FOR Directional survey NMOC

District I  
PO Box 1980, Hobbs NM 88241-1980  
District II  
PO Drawer KK, Artesia, NM 87211-0719  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

Form C-102  
Revised February 21, 1994

Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30-039-27445	<sup>2</sup> Pool Code 71629	<sup>3</sup> Pool Name BASIN FRUITLAND COAL
<sup>4</sup> Property Code 19641	<sup>5</sup> Property Name NEBU	<sup>6</sup> Well Number # 499A
<sup>7</sup> OGRID No. 6137	<sup>8</sup> Operator Name Devon Energy Production Company, L.P.	<sup>9</sup> Elevation 6279

<sup>10</sup> Surface Location

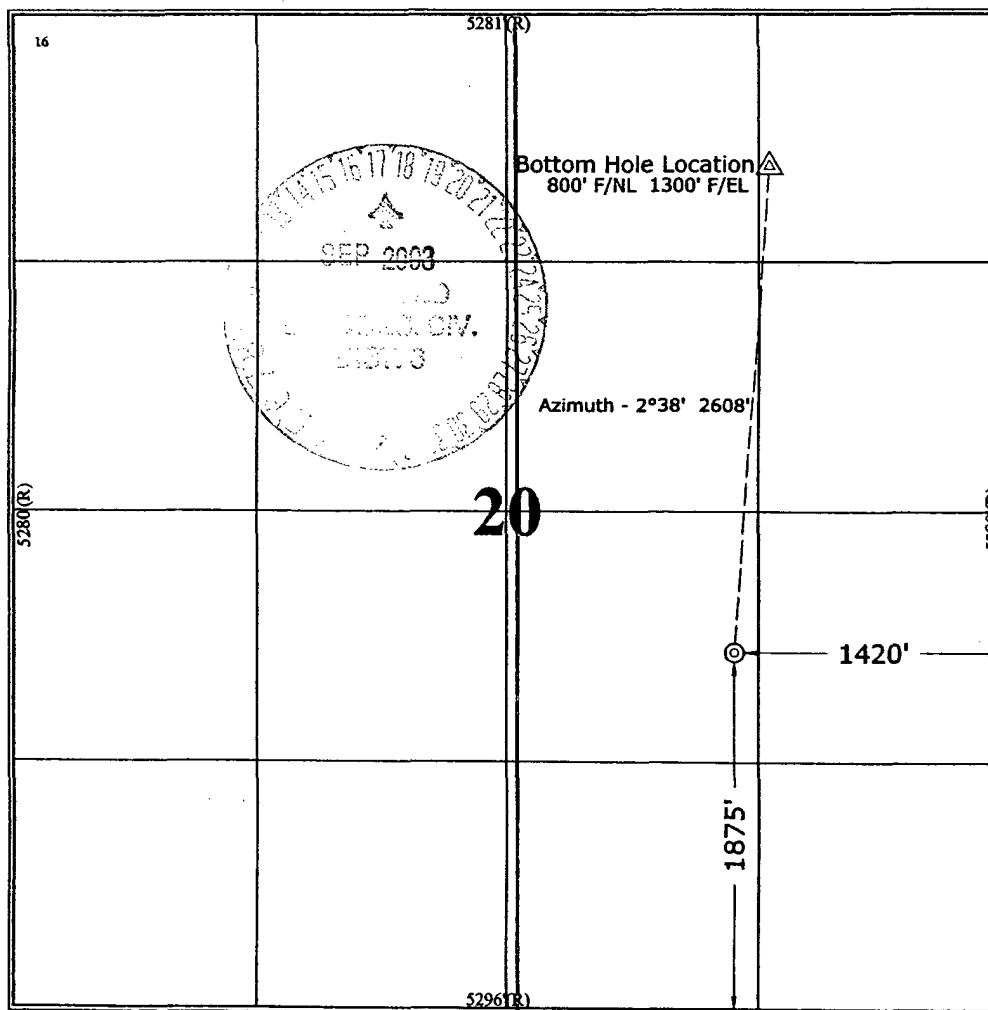
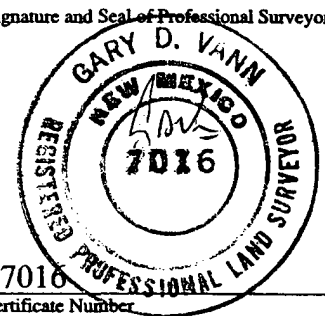
UL or Lot No. J	Section 20	Township 31 N	Range 6 W	Lot Idn	Feet from the 1875	North/South line SOUTH	Feet from the 1420	East/West line EAST	County Rio Arriba
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<sup>11</sup> Bottom Hole Location If Different From Surface

<sup>1</sup> UL or lot no. A	Section 20	Township 31 N	Range 6 W	Lot Idn	Feet from the 800	North/South line NORTH	Feet from the 1300	East/West line EAST	County SAN JUAN
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<sup>12</sup> Dedicated Acres FC-E/320	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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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

	<p><sup>17</sup> OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Giane Busch</i> Signature DIANE BUSCH Printed Name SR OPERATIONS TECH Title 5-30-03 Date</p>
	<p><sup>18</sup> SURVEYOR CERTIFICATION</p> <p>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.</p> <p>January 27, 2003 Date of Survey</p> <p>Signature and Seal of Professional Surveyor</p> <p> 7016 Certificate Number</p>

**NEBU 499A  
Unit J 20-31N-6W  
Rio Arriba 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	3564'	2265'	Aquifer
Kirtland	3702'	2375'	
Fruitland	4140'	2795'	Gas
Pictured Cliffs	4475'	3130'	Gas
TD	4475'	3130'	

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 which shows the size and pressure ratings.

2000# BOP With Pipe Rams  
2000# BOP With Blind Rams

The anticipated bottom hole pressure is 300 psi.

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 pre-charge pressure without the use of closing unit pumps.

Master controls will be at the accumulator.

### **3. CASING & CEMENTING PROGRAM:**

A. The proposed casing program will be as follows:

<b>TMD</b>	<b>TVD</b>	<b>Hole Size</b>	<b>Size</b>	<b>Grade</b>	<b>Weight</b>	<b>Thread</b>	<b>Condition</b>
0'-250'	0-250'	12-1/4"	9-5/8"	H-40	32#	STC	New
0-4140'	0-2795'	8-3/4"	7"	K-55	23#	LTC	New
4090'-4475'	2745'-TD	6-1/4"	5-1/2"	K-55	15.5 #	LTC	New

All casing strings below the conductor 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.

**Surface:** 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)

**7" Casing:** 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 one turbolizer below and throughout the Ojo Alamo. (Total 12 centralizers, 3 turbolizers estimated).

B. The proposed casing and cementing program will be as follows:

**Surface String:** 9-5/8" Surface cemented in a 12-1/4" hole at 250'.  
 32.3# H-40 ST&C 8 Rnd  
 Saw tooth guide shoe  
 Cemented with 200 sacks Class B mixed at 15.6 ppg w/.25 pps  
 celloflake, 2% calcium chloride. Yield 1.19 ft<sup>3</sup>/sx, cement  
 designed to circulate to surface.

**Production String:** 7" Intermediate cemented in an 8-3/4" hole.  
 23# J-55 LT&C 8 Rnd  
 Float Collar  
 Joint  
 Float Shoe *lead*:  
 Cemet with 450 sacks Class B 50/50 POZ, 3% gel, 5# gilsonite,  
 1/4"# Flocele, .1% CFR 3, .2% Halad 344, yield 1.47 ft<sup>3</sup>/sx.  
 Cement designed to circulate to surface.  
 Pending hole conditions cement baskets may be installed above  
 TD. *Also running tail: 100 SK, 1.18 ft<sup>3</sup>/sk, 15.4 ppg*  
*Class B w/additives*  
*Per Darrin Segrest*  
*6/11/08*

**Liner:** 5-1/2" Liner  
 15.5# J-55 LT&C 8 Rnd  
 Shoe  
 Not cemented

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

#### 4. DRILLING FLUIDS PROGRAM:

TMD	TVD	Type	Weight (ppg)	Viscosity	pH	Water Loss	Remarks
0-250'	0-250'	Spud	8.4-9.0	29-70	8.0	NC	FW gel
250'-4140'	250-2795'	LSND	8.4-9.0	29-70	8.0	10-12	LCM as needed
4140'-4475'	2795'-TD	Air					Foam as needed

NC = no control

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

#### 5. EVALUATION PROGRAM:

Wire Line Logs: None