Form 3160 - 3 (April 2004)

#### UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

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

1	al 6	1 1	: 1			
				5.	Lease Seria	i No
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APPLICATION FOR PERMIT TO	DRILL (	OR REENTER AR	MINGT	6. If Indian, Allotee or	Tribe Name
la. Type of work: DRILL REEN	7 If Unit or CA Agreement, Name and No. Northeast Blanco Unit				
b. Type of Well: Oil Well Gas Well Other	8. Lease Name and Well NEBU 68M	l No.			
Name of Operator  Devon Energy Production Company,	9. API Well No. 30-045-3	3474			
a. Address PO Box 6459 Farmington, NM 87419	i i	No. (include area code) 632-0244		10. Field and Pool, or Exp Blanco Mesaverd	
Location of Well (Report location clearly and in accordance with At surface NE NE, Unit A, 500' FNL & 1,20		rements.*)		11. Sec., T. R. M. or Blk.a	
At proposed prod. zone NW NE, Unit B, 900' FNL & 1,80	00' FEL			A Sec. 35, T31N, R7	w
Distance in miles and direction from nearest town or post office*  Approximately 14 miles				12. County or Parish San Juan	13. State NM
Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)  500'	16. No. o	f acres in lease	17. Spacir	g Unit dedicated to this well	
Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.		9. Proposed Depth 20. BLM/BIA Bond No. on file 8,110' MD / 8,000' VD			
Elevations (Show whether DF, KDB, RT, GL, etc.) GR 6,333'	22. Appro	oximate date work will sta 04/01/2005	rt*	23. Estimated duration Unknown	
	24. At	tachments			
e following, completed in accordance with the requirements of Ons	hore Oil and C	ias Order No.1, shall be a	ttached to th	is form:	
Well plat certified by a registered surveyor.  A Drilling Plan.  A Surface Use Plan (if the location is on National Forest Syste	om Lande the	Bond to cover t tem 20 above).     Operator certification.		ns unless covered by an exi	sting bond on file (see
SUPO shall be filed with the appropriate Forest Service Office).			specific inf	ormation and/or plans as ma	y be required by the
Signature M.S. T	Nai	ne <i>(Printed/Typed)</i> Melisa Zimmermar	1	Da	te 12-8-05
le Senior Operations Technician					
oproved by (Signature)	Na	me (Printed/Typed)	Tour	rsen & Di	ate 2/10/6
the Action Arm	Off		)	Trus -	0/10/0
polication approval does not warrant or certify that the applicant h	olds legalore	ouitable title to those righ	its in the sub	piect lease which would entit	le the applicant to

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

\*(Instructions on page 2)

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".



District 1 PO Box 1980, Hobbs NM 88241-1980

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** 

Form C-102 Revised February 21, 1994

Instructions on back

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

PO Box 2088 Santa Fe, NM 87504F2088 2 9 8 1

RECEIVED

# WELL LOCATION AND ACREAGE DEDICATION PLAT

'API Numbe	r	<sup>2</sup> Pool Code	' Poc	ol Name		
30-045-33		71599/80690	71599/80690 Basin Dakota/5. Coo Pinos Fot/sd Pi			
4 Property Code			Property Name	<sup>6</sup> Well Number		
19441 -	NE	EBU Northeas	t Blanco Unik	# 68M		
¹ OGRID No.			* Operator Name	<sup>4</sup> Elevation		
4137 /	De	von Energy Produ	ection Company, L.P.	6333		

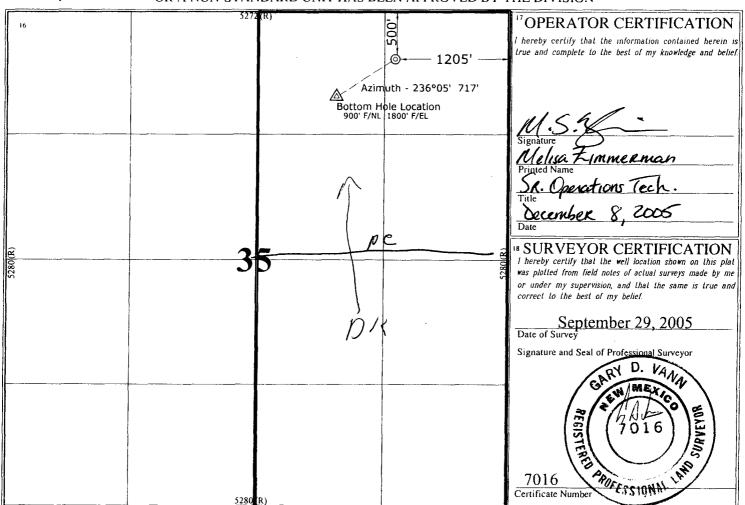
Surface Location

	UL or Lot No.	Section	Lownship	Kange	Lot Idn	Feet from the	140rm/30dm mie	Feet from the	East/West line	County
	A	35	31 N	7 W		500	NORTH	1205	EAST	SAN JUAN
"Bottom Hole Location If Different From Surface										
	7 III or lot no	Section	Township	Range	Louidn	Feet from the	North/South time	Feet from the	East/West line	County

	Bottom Frois Education in Billionent From Guirage											
' UL or lot no.	no. Section Township Range Lot Idn Feet from the North/South line		Feet from the	East/West line	County							
В	35	31 N	7 W		900	NORTH	1800	EAST	SAN JUAN			
12 Dedicated Acres	Join	t or Infill 14	Consolidatio	n Code 15	Order No.		<u> </u>	<u> </u>				
32011												

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



(R) - GLO Record

Office	State of New Mexico	Form C-103
<u>District 1</u> Energy, N	Minerals and Natural Resources	March 4, 2004
1625 N. French Dr., Hobbs, NM 88240		WELL API NO. 30-046-33474
District II 1301 W. Grand Ave., Artesia, NM 88210 OIL CC	NSERVATION DIVISION	5. Indicate Type of Lease
District III 122	20 South St. Francis Dr.	STATE FEE
1000 Rio Brazos Rd., Aztec, NM 87410 District IV	Santa Fe, NM 87505	6. State Oil & Gas Lease No.
1220 S. St. Francis Dr., Santa Fe, NM	•	SF 079003
87505 SUNDRY NOTICES AND REP	OPTS ON WELLS	7. Lease Name or Unit Agreement Name
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL O		7. Lease Name of Our Agreement Name
DIFFERENT RESERVOIR. USE "APPLICATION FOR PERI		NORTHEAST BLANCO UNIT
PROPOSALS.)		8. Well Number
1. Type of Well:		68M
Oil Well Gas Well Other		
2. Name of Operator		9. OGRID Number
Devon Energy Production	on Company, L.P.	6137
3. Address of Operator		10. Pool name or Wildcat
PO Box 6459, Navajo Dam, NM 87419		Basin Dakota / Pictured Cliffs
4. Well Location		
GR 6,333'	ge 7W NMPM (Show whether DR, RKB, RT, GR, e	County - SAN JUAN
Pit or Below-grade Tank Application (For pit or below-grad	e tank closures, a form C-144 must be atta	thed)
Pit Location: UL_ASect_35_Twp_31N_Rng_7W_P	Pit typeDrillingDepth to Groundwater_	>100'_Distance from nearest fresh water well_>1000'_
Distance from nearest surface water_>1000'_ Below-grade	e Tank Location ULSectT	wp;
feet from theline andfeet from tl		
	sox to Indicate Nature of Notic	
NOTICE OF INTENTION T	1	BSEQUENT REPORT OF:
PERFORM REMEDIAL WORK PLUG AND A	BANDON  REMEDIAL WO	ORK ALTERING CASING
TEMPORARILY ABANDON   CHANGE PLA	ANS COMMENCE	ORILLING OPNS. PLUG AND ABANDONMENT
PULL OR ALTER CASING	CASING TEST CEMENT JOB	
OTHER: CONSTRUCT DRILLING PIT	☐ OTHER:	П
13 Describe proposed or completed operations		and give pertinent dates, including estimated date
of starting any proposed work). SEE RULI or recompletion.	E 1103. For Multiple Completions: g a lined drilling pit. The clo	Attach wellbore diagram of proposed completion sure of said pit will be in accordance
I hereby certify that the information above is true an	d complete to the best of my knowle	dge and belief. I further certify that any nit or below-
grade tank has been/will be constructed or closed according to		
SIGNATURE M.S.2	TITLE _Sr_Operations T	Cechnician DATE 12-8-05
Type or print name Melisa Zimmerman E-m		vn.com Telephone No. 405-552-7917
	nail address: Melisa.zimmerman@d	VII.COM 1 CICPHONE (40. 403-332-171)
(This space for State use)	nail address: Melisa.zimmerman@d	vincom Telephone (vi. 403-332-7717
2	TITLE PEPUTY OU & GAS	

## PAD LAYOUT PLAN & PROFILE DEVON ENERGY PRODUCTION COMPANY, L.P.

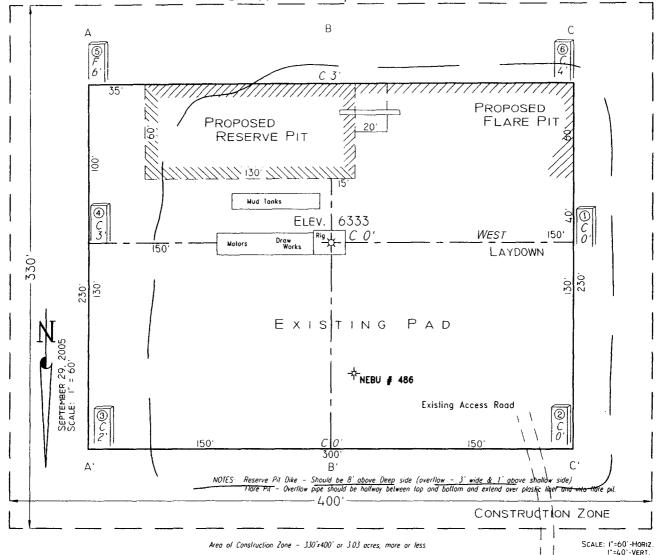
Nebu # 68M 500' F/NL 1205' F/EL Long: 107.5356°

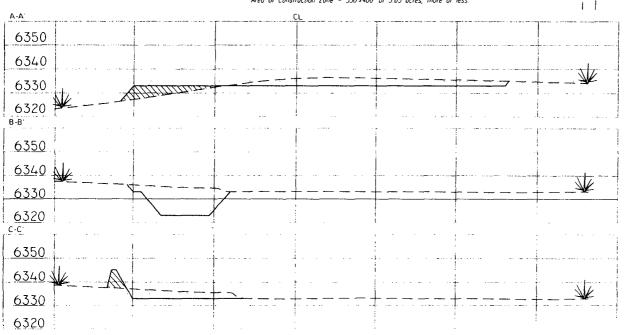
Lat:

36.8619°

SEC. 35, T31N, R7W, N.M.P.M. SAN JUAN COUNTY, NEW MEXICO

36°51'43" 107°32'07" Lat: Long:





NOTE: Contractor should call One-Call for location of any marked or unmarked buried pipelines or cables on well pad and/or access road at least two (2) working days prior to construction.

Cuts and fills shown are approximate - final finished elevation is to be adjusted so earthwork will balance. Corner stakes are approximate and do not for sideslopes and drainages. Final Pad Dimensions are to be verified by Contractor

> VANN SURVEYS P. O. Box 1306 Farmington, NM

# NEBU 68M Unit A 35-31N-7W 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	2316	2225	Aquifer
Kirtland	2429	2333	
Fruitland	2878	2771	Gas
Pictured Cliffs Tongue	3263	3153	Gas
Pictured Cliffs Main	3385	3275	Gas
Lewis	3495	3385	Gas
Intermediate TD	3595	3485	
Huefanito Bentonite	4114	4004	Gas
Chacra / Otera	4506	4396	Gas
Cliff House	5307	5197	Gas
Menefee	5347	5237	Gas
Point Lookout	5645	5535	Gas
Mancos	5959	5849	Gas
Gallup	6970	6860	Gas
Greenhorn	7666	7556	
Graneros	7722	7612	Gas
Dakota	7842	7732	Gas
Paguate	7852	7742	
Cubero	7888	7778	
Oak Canyon	7936	7826	
Encinal Canyon	7962	7852	

Lower Encinal Canyon	7986	7876	
Burro Canyon	8019	7909	
Morrison	8060	7950	
TD	8110	8000	

<sup>\*</sup>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 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:

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	32#	STC	New

0-3595	0-3485	8-3/4"	7"	K-55	23#	LTC	New
0- TD	0- TD	6-1/4"	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).

**Production**: The bottom three joints will have a minimum of one centralizer per joint and one centralizer every fifth joint to 3500' (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 sx Class "B" with 100% Standard Cement, 2.00% CaCl2, .25 #/sx Flocele. Density: 15.6 lb/gal; Yield: 1.18 cuft/sx; Water: 5.24 gal/sx

\* Minor variations possible due to existing conditions

#### 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:**

TOC designed to circulate 1000' into intermediate string, cement will tie into the intermediate casing as a minimum. Volumes may vary with actual well characteristics.

**Lead:** 250 sx 50/50 Poz with 2% Gel, 0.2% Halad, 0.1% CFR-3, 5 #/sx Gilsonite, 0.25 #/sx Flocele. Mixed at 13 ppg, 1.47 ft 3/sx foamed to 9 ppg, 2.18 ft 3/sx.

**Tail:** 450 sx 50/50 Poz with 50% Standard Cement, 50% San Juan Poz, 3% Bentonite, 1.40% Halad-9, .10% CFR-3, .10% HR-5, 5 #/sx Gilsonite, 0.25 #/sx Flocele. Density: 13.0 lb/gal; Yield: 1.47 cuft/sx; Water: 6.35 gal/sx \*

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

## 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'-3,595'	285'-3,485'	Air				NC	
3,595' - TD	3,485' - 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

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.

Survey:

Deviation surveys will be taken every 500' from 0-TD or first succeeding bit change. The hole will be air drilled from intermediate casing point to TD. The equipment used in this type of operation will not allow for single shot surveys 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.

<sup>\*</sup> Minor variations possible due to existing conditions

Cores: None anticipated.

**DST's:** None anticipated.

# 6. ABNORMAL CONDITIONS:

The Fruitland Coal will be encountered in the 8-3/4" 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:

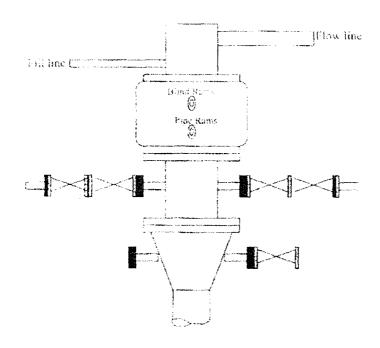
**Upon Approval** 

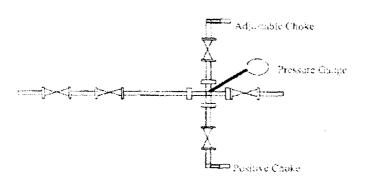
Duration:

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.

# Well Control Equipment 2,000 psi Configuration

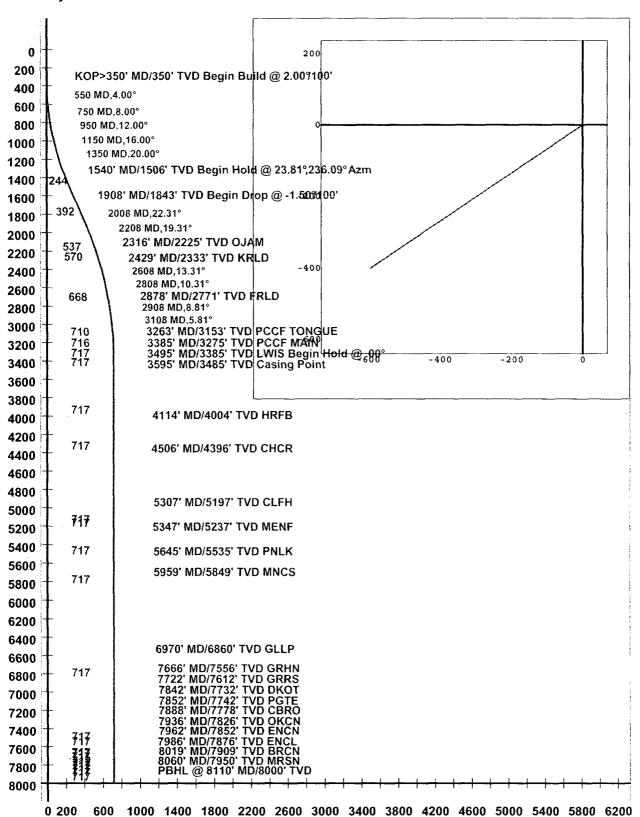




Company: Devon Energy Lease/Well: NEBU 68 M Location: San Juan County

State/Country: NM





800 1200 1600 2000 2400 2800 3200 3600 4000 4400 4800 5200 5600 6000