For	m:	3160	)-3
(A	pril	20	04)

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

UNITED STATES DEPARTMENT OF THE	INTERIOR	1 AM	SE Lease Serial No.			
BUREAU OF LAND MAN	REC	EIVED	6. If Indian, Allotee	or Tribe Name		
APPLICATION FOR PERMIT TO	DRILL OR HEFTO FARM	UNGTO	M BIM			
la. Type of work:			7 If Unit or CA Agreement, Name and No. Northeast Blanco Unit			
b. Type of Well: Oil Well Gas Well Other	Single Zone Multi	ole Zone	8. Lease Name and V NEBU 49M	Vell No.		
<ol> <li>Name of Operator</li> <li>Devon Energy Production Company, L</li> </ol>	9. APL Well No.	(-33305				
a. Address PO Box 6459 Farmington, NM 87419	10. Field and Pool, or Basin Dakota/	Exploratory Blanco Mesaverde				
Location of Well (Report location clearly and in accordance with ar At surface SE NE, Unit H, 2,450' FNL & 2' FI	• •		11. Sec., T. R. M. or B	•		
At proposed prod. zone NE SE, Unit I, 2,150' FSL & 870' F	FEL		# Sec. 30, T31N,	R7W		
<ol> <li>Distance in miles and direction from nearest town or post office*</li> <li>Approximately 15.1 miles</li> </ol>			12. County or Parish San Juan	13. State		
5. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)  2'	16. No. of acres in lease 2056.12	338	In Unit dedicated to this varieties (28 / 2 )	vell		
8. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	Distance from proposed location* 19. Proposed Depth 20. BLN onearest well, drilling, completed,					
Elevations (Show whether DF, KDB, RT, GL, etc.)  GR 6,382'	l art*	23. Estimated duration Unknown				
	24. Attachments					
he following, completed in accordance with the requirements of Onsho	ore Oil and Gas Order No.1, shall be	attached to th	nis form:			
. Well plat certified by a registered surveyor.  A Drilling Plan.	4. Bond to cover Item 20 above).		ons unless covered by an	existing bond on file (see		
. A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office).		specific inf	formation and/or plans as	s may be required by the		
5. Signature	Name (Printed/Typed)			Date		
ite M.S. S	Melisa Zimmerma	n		8-23-05		
Senior Operations Technician						
pproved by (Si mature)	Name (Printed/Typed)			Date 9   7   0		
Holm Feld Manager-M	Office					
pplication approval does not warrant or certify that the applicant holonduct operations hereon.  conditions of approval, if any, are attached.	ds legal or equitable title to those rig	hts in the su	bject lease which would (	entitle the applicant to		
itle 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a tates any false, fictitious or fraudulent statements or representations as		willfully to	make to any department	or agency of the United		
(Instructions on page 2)	MOLD CTOIT dir	ection	ial ASS	10 11 12 13 14 15 PM		
	DRILLING OPERATIONS AUTHO		Tio 1	P 2005		

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

SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".





PO Box 1980, Hobbs NM 88241-1980

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 24 AM 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

RECEIVED MIN MCTONIMAAA 070

AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

'API Number	<sup>1</sup> Pool Code <sup>1</sup> Pool Name	
	71599 + 72319 Basin Dakota+ Blanco A	desaverde
Property Code	<sup>3</sup> Property Name	Well Number
19441	NEBU	# 49M
7 OGRID No.	Operator Name	<sup>4</sup> Elevation
4137	Devon Energy Production Company, L.P.	6382

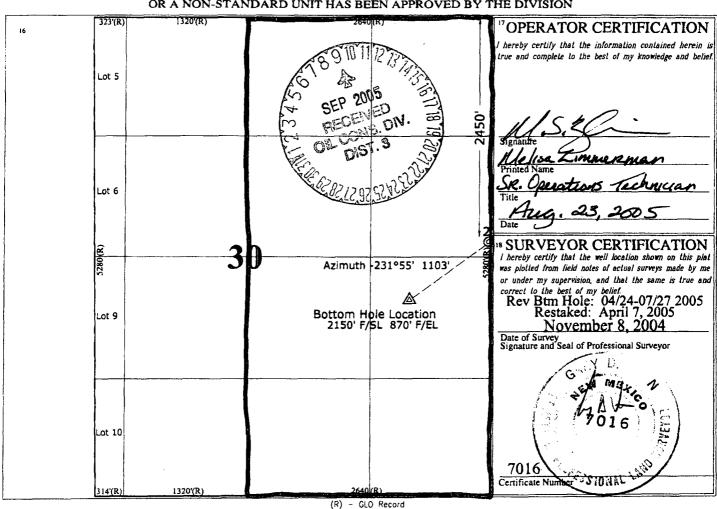
#### **Surface Location**

UL or Lot N	. Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Н	30	31 N	7 W		2450	NORTH	2	EAST	SAN JUAN

## "Bottom Hole Location If Different From Surface

<sup>7</sup> UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	30	31 N	7 W		2150	SOUTH	870	EAST	SAN JUAN
12 Dedicated Acre	<sup>13</sup> Join	t or Infill 14	Consolidatio	n Code 15	Order No.		·		
320									

## 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

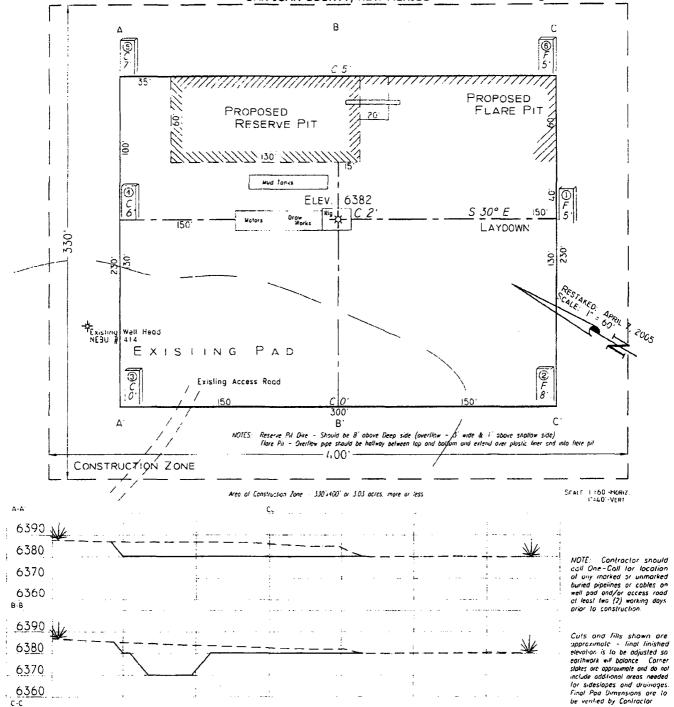


Submit 3 Copies To Appropriate District	State of No	ew Mexico			Form C-103
Office District I	Energy, Minerals an	d Natural Resource	es _		March 4, 2004
1625 N. French Dr., Hobbs, NM 88240				WELL API NO	0.
District II 1301 W. Grand Ave., Artesia, NM 88210	OIL CONSERVA	TION DIVISION	N	5 I. 11 Tr	- FI
District III	1220 South S	st. Francis Dr. 17	734	5. Indicate Typ STATE	
1000 Rio Brazos Rd., Aztec, NM 87410		M 87505	(1)	6. State Oil &	
<u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM		SEP 2005	E.	SF 080557	Gas Lease No.
07505			U.		
SUNDRY NOTION (DO NOT USE THIS FORM FOR PROPOS	CES AND REPORTS ON	WELLS-COMS FAV	, =	7. Lease Name	or Unit Agreement Name
DIFFERENT RESERVOIR. USE "APPLIC	ATION FOR PERMIT" (FORM)	ENO1) FOR SUICHS	~ ~~	NORTHEAST	BLANCO UNIT
PROPOSALS.)	4	365	£.	8. Well Number	
1. Type of Well: Oil Well Gas Well	Other	(C) (200, 200 )		49M	
	Otner	EC 92 57 17 57 30			
2. Name of Operator	D	T.D		9. OGRID Nur	mber
3. Address of Operator	ergy Production Compan	у, г.Р.		6137 10. Pool name	or Wildest
PO Box 6459, Navajo Dam, NM	87419				Blanco Mesaverde
4. Well Location	0/41/			Dusin Dukota /	Dianeo iviesa verde
4. Wen Location					
Unit LetterH:_2	,450'feet from theNo	orth line and2'_	feet i	from theEast_	line
Section 30 Townsh	ip 31N Range 7	W NMP	PM	County -	SAN JUAN
	11. Elevation (Show when		R, etc.)		
	GR				
Pit or Below-grade Tank Application (For				_	
Pit Location: UL_HSect_30_Twp_3					
Distance from nearest surface water_>10	000'_ Below-grade Tank Locati	on ULSect	Twp_	Rng	_;
feet from theline and	feet from thel	ine			
12 Check A	ppropriate Box to Indi	icate Nature of N	otice	Report or Oth	er Data
NOTICE OF IN					REPORT OF:
PERFORM REMEDIAL WORK		REMEDIAL			ALTERING CASING
				` _	
TEMPORARILY ABANDON	CHANGE PLANS	COMMEN	CE DRI	LLING OPNS.□	
PULL OR ALTER CASING	MULTIPLE	☐ CASING T	EST AN	ND 🗆	ABANDONMENT
FOLE ON ALTER CASING	COMPLETION	CEMENT			I
		_			_
OTHER: CONSTRUCT DRILLING	PIT	OTHER:			
13. Describe proposed or comp					
	rk). SEE RULE 1103. For	r Multiple Completic	ons: At	tach wellbore dia	agram of proposed completion
or recompletion.					
14.	constructing a limed.	duilling wid. The	ماممت	of anid	will be in essendance
Devon Energy will be					
with the NMOCD reg	ulations with the cutt	ing of the finer a	appıyı	ng to the BL	vi rules.
I hereby certify that the information	have is true and complete	to the best of my kno	owledg	e and belief I for	ether cortify that any pit or helesy
grade tank has been/will be constructed or	closed according to NMOCD gu	idelines 🖾, a general pe	ermit 🗌	or an (attached) alt	ernative OCD-approved plan .
11/50	_				
SIGNATURE	T	ITLE <u>Sr. Operation</u>	ons Tec	hnician	DATE 8-23-05
Type or print name Melisa Zimme	rman F_mail address	: Melisa.zimmerma	n@dv=	com Talanha	one No. 405-552-7917
Type of print name Wiensa Zilling	L-man addiess.	. wiensa.zmmenna	TIGOTAIL	.com relepho	710 110. TUJ-JJZ-/71/
(This space for State use)	4				
	A.		<b>A</b> 00 ***		SEP A O 200
APPPROVED BY	TI TI	TLE COUNTY ULS	W CHO	Brecium, Davi.	DATEDATE
Conditions of approval, if any:					

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

Nebu # 49M 2450' F/NL 2' F/EL SEC. 30, T31N, R7W, N.M.P.M. SAN JUAN COUNTY, NEW MEXICO Lat: 36.8711° Long: 107.6033°

Lat: 36°52'16" Long: 107°36'12"



6390 6380

6370

6360

VANN SURVEYS P O Box 1306 Farmington, NM

## NEBU 49M Unit H 30-31N-7W San Juan Co., NM

## **DRILLING PLAN**

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

Formation	TVD (ft)	TMD (ft)	Hydrocarbon/Water Bearing Zones
San Jose	Surface	Surface	
Ojo Alamo	2226	2524	Aquifer
Kirtland	2322	2624	
Fruitland	2815	3123	Gas
Pictured Cliffs Tongue	3226	3534	Gas
Pictured Cliffs Main	3317	3625	Gas
Lewis	3415	3723	Gas
Intermediate TD	3515	3823	
Mesaverde	4072	4380	Gas
Chacra / Otera	4451	4759	Gas
Cliff House	5257	5565	Gas
Menefee	5318	5626	Gas
Point Lookout	5599	5907	Gas
Mancos	5992	6300	Gas
Gallup	6924	7232	Gas
Greenhorn	7619	7927	
Graneros	7674	7982	Gas
Dakota	7794	8102	Gas
Paguate	7806	8114	
Cubero	7841	8149	
Oak Canyon	7894	8202	
Encinal Canyon	7910	8218	

Lower Encinal Canyon	7956	8264	
Burro Canyon	7988	8296	
Morrison	8100	8408	
TD	8100	8408	

<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:

TVD	TMD	Hole Size	Size	Grade	Weight	Thread	Condition
0-285	0-285	12- 1/4"	9-5/8"	H-40	32#	STC	New
0-3515	0-3823	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).

<u>Production</u>: 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 \*

\* Minor variations possible due to existing conditions

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

## 4. DRILLING FLUIDS PROGRAM:

TVD Interval	TMD 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
285-3,515	285-3,823	Air				NC	
3,515 - TD	3,823 – 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.

**Cores:** None anticipated.

**DST's:** None anticipated.

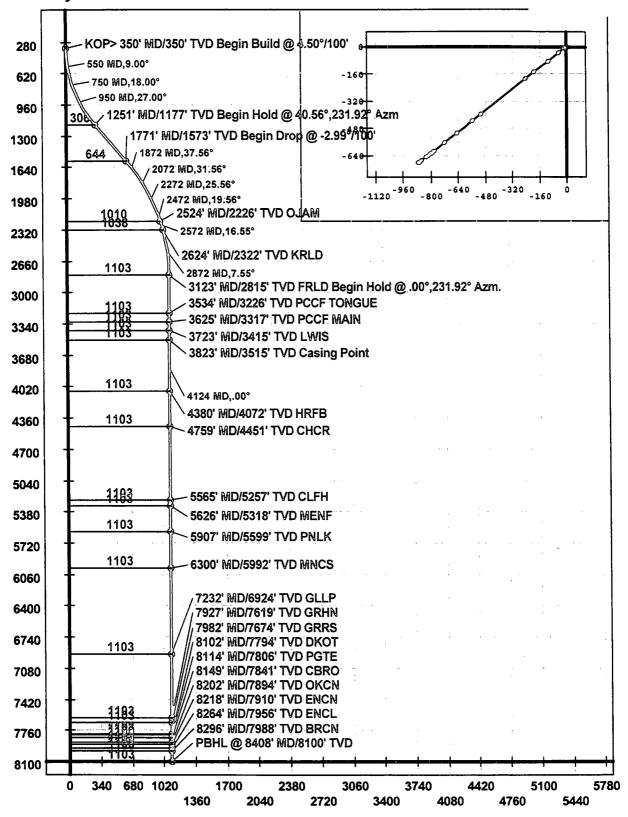
## 6. ABNORMAL CONDITIONS:

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

Company: Devon Energy Lease/Well: NEBU 49M Location: San Juan County

State/Country: NM





# Well Control Equipment 2,000 psi Configuration

