(April 2004)	. OCD	HOBBS	FORM APPROV OMB No. 1004-0 Expires March 31	137 - 22
UNITED STATES DEPARTMENT OF THE	INTERIOR		5. Lease Serial No. NMNM-65194	
BUREAU OF LAND MAN			6. If Indian, Allotee or Trit	e Name
APPLICATION FOR PERMIT TO	DRILL OR REENTER			
la. Type of work: DRILL REENT	ER		7 If Unit or CA Agreement,	Name and No.
lb. Type of Well: Oil Well 🗹 Gas Well Other	Single Zone	Iultiple Zone	8. Lease Name and Well No. Paloma Blanco 17 Fe	7
2. Name of Operator Devon Energy Production Company, L	P Lb	(37)	9. API Well No. 30.025.	33024
3a. Address 20 North Broadway Oklahoma City, Oklahoma City 73102-8260	3b. Phone No. (include area cod 405-552-8198	e)	10. Field and Pool, or Explora Morrow	tory
4. Location of Well (Report location clearly and in accordance with an	ny State requirements.*)		11. Sec., T. R. M. or Blk. and	Survey or Area
At surface660 FSL & 1980 FWLAt proposed prodizone660 FSL & 1980 FWL	Unit N	1	Sec 17, T23S R34E	
<ol> <li>Distance in miles and direction from nearest town or post office*</li> </ol>	walt w		12. County or Parish	13. State
20 miles west of Jal, NM			Lea County	NM
15. Distance from proposed* location to nearest , property or lease line, ft.	16. No. of acres in lease		ng Unit dedicated to this well	
(Also to nearest drig. unit line, if any)	632.280 acres	320 a	cres BIA Bond No. on file	151677
<ol> <li>Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.</li> </ol>	<ol> <li>Proposed Depth</li> <li>13,850'</li> </ol>	20. DL/W	1213	141516777873
21. Elevations (Show whether DF, KDB, RT, GL, etc.)	22. Approximate date work wi 07/10/2005	ll start*	23. Estimated duration	1111
3474' GL	07/10/2005		55 days	CUL MIR -
The following, completed in accordance with the requirements of Onsho	24. Attachments		Controlled Water E	Ceived Ocp
The following, completed in accordance with the requirements of Onsho 1. Well plat certified by a registered surveyor. 2. A Drilling Plan.	24. Attachments pre Oil and Gas Order No.1, shall 4. Bond to co Item 20 abo 5. Operator ca	be attached to the ver the operation ove). ertification site specific inf	Contralled Water E	g bond on file (see
The following, completed in accordance with the requirements of Onsho 1. Well plat certified by a registered surveyor. 2. A Drilling Plan. 3. A Surface Use Plan (if the location is on National Forest System	24. Attachments         pre Oil and Gas Order No.1, shall         4. Bond to co         1 Lands, the         5. Operator ce         6. Such other authorized         Name (Printed/Typed)	be attached to the ver the operation ove). ertification site specific information	Composited Watter E nis form: ons unless covered by an existin formation and/or plans as may b Date	
The following, completed in accordance with the requirements of Onsho 1. Well plat certified by a registered surveyor. 2. A Drilling Plan. 3. A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office). 25. Signature	24. Attachments ore Oil and Gas Order No.1, shall 4. Bond to co Item 20 abo 5. Operator ce 6. Such other authorized	be attached to the ver the operation ove). ertification site specific information	Composited Watter E nis form: ons unless covered by an existin formation and/or plans as may b Date	dul AIA Heceived OCD g bond on file (see 5/30/2005
The following, completed in accordance with the requirements of Onsho 1. Well plat certified by a registered surveyor. 2. A Drilling Plan. 3. A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office). 25. Junture Title Sr. Staff Eng. Tech Approved by (Signature)	24. Attachments         ore Oil and Gas Order No.1, shall         4. Bond to contern 20 aborts         5. Operator conternation         6. Such other authorized         Name (Printed/Typed)         Norvella Adam         Name (Printed/Typed)	be attached to the ver the operation verification site specific information officer.	Controlled Water E us form: ons unless covered by an existin formation and/or plans as may b Date 0	5/30/2005
The following, completed in accordance with the requirements of Onsho 1. Well plat certified by a registered surveyor. 2. A Drilling Plan. 3. A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office). 25. Signature Title Sr. Staff Eng. Tech Approved by (Signature) /S/ Tony J. Herrell Title	24. Attachments         pre Oil and Gas Order No.1, shall         4. Bond to co         1 Lands, the         5. Operator cc         6. Such other         authorized         Name (Printed/Typed)         Name (Printed/Typed)         //s/Tc	be attached to the ver the operation vve). rrtification site specific inf officer. s	Composited Watter E is form: ons unless covered by an existin formation and/or plans as may b Date 0 Date	5/30/2005 JUL 1 3 2006
The following, completed in accordance with the requirements of Onsho 1. Well plat certified by a registered surveyor. 2. A Drilling Plan. 3. A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office). 25. January Title Sr. Staff Eng. Tech Approved by (Signature) /s/ Tony J. Herrell Title FIELD MANAGER	24. Attachments         ore Oil and Gas Order No.1, shall         4. Bond to conduct the 20 about 20	be attached to the ver the operation ove). retification site specific inf officer. s	Controlled Water E us form: ons unless covered by an existin formation and/or plans as may b Date 0 errell D FIELD OFF	5/30/2005 JUL 1 3 2006 ICE
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The following, completed in accordance with the requirements of Onsho 1. Well plat certified by a registered surveyor. 2. A Drilling Plan. 3. A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office). 25. Jienature Title Sr. Staff Eng. Tech Approved by (Signature) /s/ Tony J. Herrell Title FIELD MANAGER Application approval does not warrant or certify that the applicant hol conduct operations thereon. Conditions of approval, if any, are attached. Title 8 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a	24. Attachments         ore Oil and Gas Order No.1, shall         4. Bond to collem 20 abc         5. Operator cc         6. Such other authorized         Name (Printed/Typed)         Norvella Adam         Vame (Printed/Typed)         //s/Tec         Office         Office         Attachments         As legal or equitable title to those         As legal or equitable title to those	be attached to the ver the operation ove). rification site specific information officer. s DNY J. H RLSBA rights in the sul PPROV and willfully to r	Composited Water E is form: ons unless covered by an existin cormation and/or plans as may b Date DIFIELD OFF bject lease which would entitle th /AL FOR 1 Y	5/30/2005 JUL 1 3 2006 ICE he applicant to EAR
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DISTRICT I 1625 N. French Dr., Hobbs, NM 86240 DISTRICT II

811 South First, Artesia, NM 88210

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410 DISTRICT IV 2040 South Pacheco, Santa Fe, NM 87505

#### State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102<sup>/</sup> Revised March 17, 1999

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

#### OIL CONSERVATION DIVISION

2040 South Pacheco Santa Fe. New Mexico 87504-2088

WELL LOCATION AND ACREAGE DEDICATION PLAT

□ AMENDED REPORT

#### Pool Code **API** Number Pool Name Bell 30.025-38024 71920 Morrow North **Property** Code Property Name 30876 PALOMA BLANCO "17" FEDERAL Com 2 OGRID No. **Operator** Name Elevation 6137 DEVON ENERGY PRODUCTION COMPANY LP 3474' Surface Location UL or lot No. North/South line Section Township Range Lot Idn Feet from the Feet from the East/West line County SOUTH Ν 17 23 S 34 E 660 1980 WEST LEA Bottom Hole Location If Different From Surface UL or lot No. Section Lot Idn Feet from the North/South line Feet from the East/West line Township Range County **Dedicated** Acres Joint or Infill **Consolidation** Code 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 **OPERATOR CERTIFICATION** I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief. Signature Norvella Adams Printed Name Sr. Staff Eng. Tech. Title May 30, 2006 Date SURVEYOR CERTIFICATION 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 supervison, and that the same is true and correct to the best of my belief. Lat.: N32\*17'57.0" Long.: W103\*29'39.3" MAY (NAD-83) Date Surveye RY L. JONES Signature ์ ระล์ Profession 3473.8 3468.8 1980 Certifica 7977 lonè 3479.1 3483.7 BASIN SURVE





	P.U. BOX 1/86	W.O. Number: 6522T – JMS	
	1120 N. West County Rd. Hobbs, New Mexico 88241	Survey Date: 05–11–2006	DEVON ENERGY
<b>Surveys</b>	(505) 393-7316 - Office (505) 392-3074 - Fax	Scale: 1" = 2000'	PROD. CO., L.P.
tocused on eventionee	basinsurveys.com	Date: 05-12-2006	

## **DRILLING PROGRAM**

## Devon Energy Production Company, LP **PALOMA BLANCO 17 FEDERAL COM 2** (N) 660' FSL & 1980' FWL, Section 17, T-23-S, R-34-E Lea County, New Mexico

## 1. <u>Geologic Name of Surface Formation</u>

Alluvium

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## 2. Estimated Tops of Important Geologic Markers

Rustler	1,050'
Salt	4,454'
Delaware	5,000'
Bone Spring	8,600'
Wolfcamp	10,600'
Strawn	11,900'
Atoka	12,300'
Morrow	12,900'
TD	13,850'

## 3. Estimated Depths of Anticipated Fresh Water, Oil or Gas

The estimated depths at which water, oil and gas will be encountered are as follows.

Water:	None expected in area
Oil	Bone Spring @ 9,100'
Gas:	Upper Morrow @ 13,100'

### 4. <u>Casing Program</u>

Intermediate

Production 8 3/4"

<b>INTERVALS</b>	<b>LENGTH</b>	CASING		
<u>Surface</u> 0 – 1075'	1075	13 3/8" 48# H-40	STC	Witness Surface & Intermediate Casing
$\frac{\text{Intermediate}}{0-5000'}$	5000'	9 5/8" 40#N-80 & HCK	-55 LT&C	
<u>Production</u> 0 - 11800'	11800	7" 26# HCP-110 I	LTC	
Liner				
11800 - 13850'		4 1/2" 13.5# P-110	LTC	
Cementing Prog	ram			
HOLE SIZE Surface	<u>DEPTH</u>	CEMENT	TOC	WOC <u>HRS</u>
17 1/2"		: 350 sxs 35/65 POZ + 6% 1/4#/sx celloflk (12.7#/gal)	Surf.	12

Liner 6 1/8" 11,800 – 13,850 Cmt w/250 sx Class H The cement volumes for the 4 1/2" liner will be revised pending the caliper measurement

**Tail:** 200 sxs Cl "C" + 2%

Lead: 1200 sxs 50/50 POZ +

10% gel 5% salt +1/4#/sx celloflk (12.7#/gal)

Lead: 300 sx Light

Tail: 300 sx Class H

Surf.

6000

12

24

CaCl2

5000'

11,800

The cement volumes for the 4 1/2" liner will be revised pending the caliper measurement from the open hole logs.

### 5. <u>Minimum Specifications for Pressure Control</u>

The blowout preventer equipment (BOP) shown in Exhibit #1 A Blow-out Preventer (5,000/10,000 PSI working pressure) consisting of double ram type preventor and bag type preventer. Units will be hydraulically operated. See Exhibit #2 for Choke Manifold and Closing Unit. Blind rams on top, pipe rams on bottom to correspond with size of drill pipe in use. BOP will be tested as well as choke manifold. BOP will be worked at least once each day while drilling & blind ram will be worked on trips when no drill pipe is in hole. Full opening stabbing valve and upper Kelly cock will be utilized. Anticipated BHP 8000 psi and 190° BHT.

Pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These functional tests will be documented on the daily drillers log. A 2" kill line and 3" choke line will be incorporated in the drilling spool below the ram-type BOP. Other accessory BOP equipment will include a kelly cock, floor safety valve, choke lines and choke manifold having 8000 psi WP rating.

## 6. Types and Characteristics of the Proposed Mud System

The well will be drilled to total depth brine with starch mud systems. Depths of systems are as follows.

Depth	Type	Weight (ppg)	Viscosity	Water Loss (cc)
			<u>(1/sec)</u>	
0' - 2000'	Fresh Water	8.5	40	No control
2000' - 5200'	Fresh Brine	10	28-30	No control
5200' - 12,000'	Cut Brine	9.0 - 9.2	28-30	No control
12,000' – TD	Cut Brine/Starch	9.8 - 13	38-40	6-10

The necessary mud products for weight addition and fluid loss control will be on location at all times.

## 7. Auxiliary Well Control and Monitoring Equipment

- A. A kelly cock will be in the drill string at all times.
- B. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.

## 8. Logging, Testing and Coring Program

- A. Drill stem tests may be run on potential pay interval.
- B. The open hole electrical logging program will be as follows.
  - 1) DLL/MSFL/GR from total depth to base of intermediate casing.
  - 2) CNL/LDT/GR from total depth to base of intermediate casing with CNL/GR to surface.
- C. No coring program is planned.
- D. Additional testing will be initiated subsequent to setting the 4 1/2" production liner. Specific intervals will be targeted based on log evaluation, geological sample shows and drill stem tests.

### 9. Abnormal Pressures, Temperatures and Potential Hazards

No abnormal pressures or temperatures are foreseen. The anticipated bottom hole temperature at total depth is 190 degrees and maximum bottom hole pressure is 8000 psi. No Hydrogen sulfide or other hazardous gases or fluids have been encountered, reported or are known to exist at this depth in this area. No major loss circulation intervals have been encountered in adjacent wells.

#### 10. Anticipated Starting Date and Duration of Operations

Road and location preparation will not be undertaken until approval has been received from the BLM. If approved, this well will be drilled as part of a development project. The drilling operation should require approximately 55 days. If the well is deemed productive, completion operations will require, at minimum, an additional 30 days of testing to ascertain whether permanent production facilities will be constructed.

#### Attachment to Exhibit #1

## NOTES REGARDING BLOWOUT PREVENTERS Devon Energy Production Company, LP PALOMA BLANCO 17 FEDERAL COM 2 (N) 660' FSL & 1980' FWL, Section 17, T-23-S, R-34-E Lea County, New Mexico

- 1. Drilling nipple will be constructed so it can be removed mechanically without the aid of a welder. The minimum internal diameter will equal BOP bore.
- 2. Wear ring will be properly installed in head.
- 3. Blowout preventer and all associated fittings will be in operable condition to withstand a minimum 5000/10000 psi working pressure.
- 4. All fittings will be flanged.
- 5. A full bore safety valve tested to a minimum 3000 psi WP with proper thread connections will be available on the rotary rig floor at all times.
- 6. All choke lines will be anchored to prevent movement.
- 7. All BOP equipment will be equal to or larger in bore than the internal diameter of the last casing string.
- 8. Will maintain a kelly cock attached to the kelly.
- 9. Hand wheels and wrenches will be properly installed and tested for safe operation.
- 10. Hydraulic floor control for blowout preventer will be located as near in proximity to driller's controls as possible.
- 11. All BOP equipment will meet API standards and include a minimum 40 gallon accumulator having two independent means of power to initiate closing operation.

## UNITED STATES DEPARTMENT OF THE INTERIOR Bureau of Land Management Carlsbad Field Office 620 E. Greene Street Carlsbad, New Mexico 88221-1778

Statement Accepting Responsibility for Operations

Operator Name: Street or Box: City, State: Zip Code:

## Devon Energy Production Company, LP 20 North Broadway, Suite 1500 Oklahoma City, Oklahoma 73102-8260

The undersigned accepts all applicable terms, conditions, stipulations and restrictions concerning operations conducted on the leased land or portion thereof, as described below.

Lease No.:

## NMNM65194

Legal Description of Land:

Formation(s):

Bond Coverage:

BLM Bond File No.:

Nationwide

**Bell Lake (Morrow)** 

**SE/4 SW/4** 

**CO110**4

Norvella Adams

320 acres 17-T23S-R34E (160 acres dedicated from this lease)

Sr. Staff Engineering Technician

May 30, 2006

Authorized Signature:

Title:

Date:

Well na	ame:			Palor	na Blanc	0- 17 FED	ERAL COM	2	
Operate		on Energy	y			ê X			
String t	hype: Inte	rmediate							
Locatio	m: Nev	v Mexico							
Design	a paramet	ers:		Minimum	design fac	ctors:	Environm	ent:	
Collaps	se .			Collapse:	Ū		H2S conside	ered?	No
Mud	weight:	1	0.000 ppg	Design fac	tor	1.125	Surface tem	perature;	75 °F
Desi	gn is based	on evacual	led pipe.				Temperature	temperature: e gradient: ction tength:	1.40 °F/1001
				Burst: Design fac	for	1.00			
Burst				200.g. 100					
Max	anticipated	surface							
р	ressure:		1,390 psi						
	nal gradien		0.268 psi/ft	Tension:			Non-directio	nal string.	
Calc	ulated BHP		2,727 psi	8 Round S		1.80 (J)			
	•.			8 Round L	TC:	1.80 (J)			
No b	ackup mud	specified.		Buttress:		1.60 (J)			
				Premium:		1.50 (J)	D- sub-		
				Body yield	:	1.60 (8)		uent strings: ting depth;	11,800 ft
				Tonsion is	based on air	woint		ing depin. id weight:	10.000 ppg
				Neutral po		4.256 ft		ting BHP:	6,130 psi
				i i conar po		1,200 N		mud wt:	10.500 ppg
							Fracture		5.000 ft
				Estimated	cost: 6	62,357 (\$)	Injection	pressure	2,727 psi
Run	Segment		Nominal		End	True Vert	Measured	Drift	Est.
Seq	Length	Size	Weight	Grade	Finish	Depth	Depth	Diameter	Cost
	(ft)	(in)	(ibs/fi)		• • • • • • •	(ft)	(ft)	(in)	(\$)
Ż	2000	9.625	40.00	N-80	LT&C	2000	2000	8,75	25450
1	3000	9.625	40.00	HCK-55	LT8C	5000	5000	8.75	36907
Run	Collapse	Collapse	Collapse	Burst	Burst	Burst	Tension	Tension	Tension
Seq	Load	Strength	•	Load	Strength	Design	Load	Strength	Design
•	(psi)	(psi)	Factor	(psi)	(psi)	Factor	(kips)	(kips)	Factor
2	1039	2960	2.85	1925	5750	2.99	200	737	3.68 J
1	2597	4230	1.63	2727	3950	1.45	120	630	5.25 B

Date: June 4,2002 Oklahoma City, Oklahoma

Remarks:

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Collapse is based on a vertical depth of 5000 ft, a mud weight of 10 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

Wellna	me:			Paloi	na Blanc	• 17 FEDE	RAL COM	2	
Operato String h		von Energy rface	,					Ŧ	
Samya	ype. Su	nace							
Locatio	n: Ne	w Mexico							·····
)esign	parame	lers:		Minimun	n design fa	clors:	Environme	ent:	
ollaps	e			Collapse:	9		H2S conside	ered?	No
Mud weight: 8.800 ppg Design is based on evacuated pipe.			Design fac	clor	1.125	Temperature	temperature	1.40 °F/100	
				<u>Burst:</u> Design fac	tor	1.00	Minimum Dr		2.250 in
Max	anticipate	teudaca							
	essure:	u sunace	500 psi						
•	nal gradier	at (	0.080 psi/ft	Tension:			Non-directio	nal string	
	ulated BH		586 psi	8 Round S	STC:	1,80 (J)		ndi oʻlurg.	
				8 Round L	TC:	1.80 (J)			
No b	ackup mu	d specified.		Buttress:		1.60 (J)			
		•		Premium:		1.50 (J)			
				Body yield	h:	1.60 (B)	Re subsequ	uent strings:	
							Next set	ting depth:	5,000 ft
					based on ai			id weight:	10.000 ppg
				Neutral po	pint:	937 ft		ting BHP:	2,597 psi
								mud wt:	10.500 ppg
							Fracture	e depin: 1 pressure	1,075 ft
							ngecion	i pressure	586 psi
Run	Segmen	1	Nominal		End	True Vert	Measured	Drift	Es1.
Seq	Length	Size	Weight	Grade	Finish	Depth	Depth	Diameter	Cost
	(ft)	(in)	(Ibs/ft)			(ft)	(ft)	(in)	(\$)
1	1075	13.375	48.00	H-40	ST&C	1075	1075	12.59	13332
Run	Collaps	e Collapse	Collapse	Burst	Burst	Burst	Tension	Tension	Tension
Seq	Load	Strength	Design	Load	Strength	Design	Load	Strength	Design
	(psi)	(psi)	Factor	(psi)	(psi)	Factor	(kips)	(kips)	Factor
1	491	740	1.51	586	1730	2.95	51.6	322	6.24 J

#### Date: June 4,2002 Okfahoma City, Oklahoma

Collapse is based on a vertical depth of 1075 ft, a mud weight of 8.8 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Duntop & Kemler method of biaxiat correction for tension.

Burst strength is not adjusted for tension.

Remarks:

.

Engineering responsibility for use of this design will be that of the purchaser.

Well name:			Paloma Bla	anco 17 FE	DERAL COM 2
Operator:	Devon Ene	rgy		4.1	
String type:	Production				· · · · · ·
Location:	New Mexico	)			
Design para	ameters:		Minimum desigi	n factors:	Environment:
Collapse			Collapse:		H2S considered? No
Mud weigt Design is l	ht: based on evac	10.000 ppg uated pipe.	Design factor	1.125	Surface temperature: 75 °F Bottom hole temperature: 240 °F Temperature gradient: 1.40 °F/100ft Minimum section length; 1,000 ft
			Burst:		<b>C</b> .
			Design factor	1.00	
Burst					
	ipated surface				
pressu		1,061 psi	- ·		
Internal gr		0.430 psi/ft	Tension:		Non-directional string.
Calculated	9 BHP	6 <b>,130</b> psi	8 Round STC:	1.80 (J)	
			8 Round LTC:	1.80 (J)	
No backuj	p mud specifie	đ.	Buttress:	1.60 (J)	
			Premium:	1.50 (J)	
			Body yield:	1.60 <b>(B)</b>	
			Tension is based o	on air weight.	
			Neutral point:	10,020 ft	

Run	Segment		Nominal		End	True Vert	Measured	Drift	Est.
Seq	Length	Size	Weight	Grade	Finish	Depth	Depth	Diameter	Cost
	(ft)	(in)	(Ibs/ft)			(f1)	(ft)	(in)	(\$)
1	11800	7	26.00	HCP-110	LT&C	11800	11800	6.151	122661
Run	Collapse	Collapse	Collapse	Burst	Burst	Burst	Tension	Tension	Tension
Seq	Load	Strength	Design	Load	Strength	Design	Load	Strength	Design
	(psi)	(psi)	Factor	(psi)	(psi)	Factor	(kips)	(kips)	Factor
1	6130	7800	1.27	6130	9950	1.62	306.8	693	2.26 J

Date: June 4,2002 Oklahoma City, Oklahoma

#### Remarks:

Collapse is based on a vertical depth of 11800 ft, a mud weight of 10 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension

Engineering responsibility for use of this design will be that of the purchaser.

Well name:	,	Paloma Bla	anco 17 FI	EDERAL COM 2	
Operator: Devo	n Energy		1, 1,		
	Production				
Location: New I	Mexico				
Design parameter	s:	Minimum desig	n factors:	Environment:	
Collapse		Collapse:		H2S considered?	No
Mud weight:	11.500 ppg	Design factor	1.125	Surface temperature:	75 °F
Design is based o	n evacuated pipe.	Burst:		Bottom hole temperatu Temperature gradient: Minimum section lengt	1.40 °F/100f
		Design factor	1.00		
Burst		•			
Max anticipated si	urface				
pressure:	2,350 psi			Liner top:	11,800 ft
Internal gradient:	0.430 psi/ft	Tension:		Non-directional string.	
Calculated BHP	8,364 psi	8 Round STC:	1.80 (J)		
		8 Round LTC:	1.80 (J)		
No backup mud s	pecilied.	Buttress:	1.60 (J)		
		Premium:	1.50 (J)		
		Body yield:	1.60 (B)		
		Tension is based o	on air weight.		
		Neutral point:	13,627 ft		

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (Ibs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost (\$)
1	2050	_ 4.5	13.50	P-110	LT&C	13850	13850	3.795	12327
Run Seq 1	Collapse Load (psi) 8364	Collapse Strength (psi) 10680	Collapse Design Factor 1.28	Burst Load (psi) 8364	Burst Strength (psi) 12410	Burst Design Factor 1.48	Tension Load (kips) 29.7	Tension Strength (kips) 338	Tension Design Factor 11.38 J

Date: June 4,2002 Oklahoma City, Oklahoma

For this liner string, the top is rounded to the nearest 100 ft. Collapse is based on a vertical depth of 14000 ft, a mud weight of 11.5 ppg. The Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Remarks:

Engineering responsibility for use of this design will be that of the purchaser.

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 MIDLAND, TX
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 OKLAHOMA CITY, OK
 (405) 810-0021

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HOUSTON, TX LAFAYETTE, LA NEW ORLEANS, LA (281) 877-1200 (337) 237-5300 (504) 566-0411

Subject Nabors Rig # 730	Page No.	of	
File		Ву	Date 5-10-06
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< 140' →> 10-15'deep.			
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#### **CONDITIONS OF APPROVAL - DRILLING**

Operator's Name: Well Name & No. Location: Lease:

#### DEVON ENERGY PRODUCTION COMPANY, LP 2 – PALOMA BLANCO 17 FEDERAL COM 660' FSL & 1980' FWL – SEC 17 – T23S – R34E – LEA COUNTY NM-65194

I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Roswell Field Office, 2909 West Second St., Roswell NM 88201, (505) 627-0272 for wells in Chaves and Roosevelt Counties; the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 234-5909 or (505) 361-2822 (After hours) - for wells in Eddy County; and the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:

A. Spudding

B. Cementing casing: <u>13-3/8</u> inch <u>9-5/8</u> inch <u>7</u> inch <u>4-1/2</u> liner

C. BOP tests

# 2. No Hydrogen Sulfide (H2S) gas has been encountered, reported or is known to exist at this depth in this area.

3 Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

4. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing ( size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.

5. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

6. A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.

#### **II. CASING:**

1. The <u>13-3/8</u> inch surface casing shall be set at <u>1075 feet</u>, below usable water and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.

2. The minimum required fill of cement behind the <u>9-5/8</u> inch intermediate casing is <u>circulate cement to</u> <u>the surface.</u>

3. The minimum required fill of cement behind the <u>7</u> inch production casing is <u>tie back 200 feet into the</u> <u>9-5/8 inch intermediate casing.</u>

4. The minimum required fill of cement behind the <u>4-1/2</u> inch production liner is <u>cement shall extend</u> <u>upward to the top of the liner at approximately 11800 feet.</u>

#### **III. PRESSURE CONTROL:**

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the <u>13-3/8</u> inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

2. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling the surface and intermediate casing shall be <u>2000</u> psi. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling below the <u>9-5/8</u> inch casing shall be <u>10000</u> psi.

- 3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.
- The tests shall be done by an independent service company.
- The results of the test shall be reported to the appropriate BLM office.
- Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
- Testing must be done in a safe workman-like manner. Hard line connections shall be required.
- BOPE must be tested prior to drilling into the Wolfcamp Formation by an independent service company.

#### **IV. DRILLING MUD:**

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the <u>Wolfcamp</u> Formation, and shall be used until production casing is run and cemented. Monitoring equipment shall consist of the following:

- 1. Recording pit level indicator to indicate volume gains and losses.
- 2. Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.
- 3. Flow-sensor on the flow line to warn of abnormal mud returns from the well.

District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III	State of New Mexico Energy Minerals and Natural Resources Oil Conservation Division		Form C-144 June 1, 2004 For drilling and production facilities, submit to		
1000 Rio Brazos Road, Aztec, NM 87410 <u>District IV</u> 1220 S. St. Francis Dr., Santa Fe, NM 87505	1220 South St. Francis Dr. Santa Fe, NM 87505		appropriate NMOCD District Office. For downstream facilities, submit to Santa Fe office		
Pit or Below-Grade Tank Registration or Closure Is pit or below-grade tank covered by a "general plan"? Yes 🛛 No 🗌 Type of action: Registration of a pit or below-grade tank 🖾 Closure of a pit or below-grade tank 🗔					
Operator: _Devon Energy Production Company, LP Address:PO Box 250 Artesia NM 88211 Facility or well name:Paloma Blanco 17 Federal Com County: _Lea Surface Owner: Federal 🛛 State 🗌 Private 🗌 Indian [ Pit	2API #: <b>30</b> Latitude_N3	U/L or Qtr/Qtr_N	Sec 17T 23SR34E		
Type:       Drilling ⊠ Production □ Disposal □         Workover □ Emergency □         Lined ⊠ Unlined □         Liner type:       Synthetic ⊠ Thickness _12_mil         Pit Volumebbl	]	Volume:bbl Type of fluid: Construction material: Double-walled, with leak detection? Yes			
Depth to ground water (vertical distance from bottom of high water elevation of ground water.)	pit to seasonal	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) ( 0 points)		
Wellhead protection area: (Less than 200 feet from a pri water source, or less than 1000 feet from all other water		Yes No	(20 points) ( 0 points)		
Distance to surface water: (horizontal distance to all we irrigation canals, ditches, and perennial and ephemeral w		Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more Ranking Score (Total Points)	(20 points) (10 points) ( 0 points) 0 Points		
If this is a pit closure:       (1) Attach a diagram of the facility showing the pit's relationship to other equipment and tanks.       (2) Indicate disposal location:       (check the onsite box if         your are burying in place) onsite       offsite       If offsite, name of facility					
Additional Comments:			tify that the above-described pit or below-grade tank		
I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank					
has been/will be constructed or closed according to N Date:6/13/06 Printed Name/Title Norvella Adams / Sr. Staff Engineer Your certification and NMOCD approval of this applica otherwise endanger public health or the environment. N regulations.	ing Technician tion/closure does	Signature	ed) alternative OCD-approved plan [].		
Approval: <b>PETROLEUM ENGIN</b>	EER	Signature	JUL 2 6 2006		
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