

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
SUNDRY NOTICES AND REPORTS ON WELLS

OCD-ARTESIA

FORM APPROVED  
OMB NO. 1004-0135  
EXPIRES: March 31, 2007

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals

SUBMIT IN TRIPLICATE

1a. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other \_\_\_\_\_  
2. Name of Operator  
DEVON ENERGY PRODUCTION COMPANY, LP  
3. Address and Telephone No.  
20 N. Broadway, Oklahoma City, Ok 73102-8260 405-235-3611  
4. Location of Well (Report location clearly and in accordance with Federal requirements)\*  
660 FSL 430 FEL Unit D SEC 1 T24S R30E

5. Lease Serial No.  
NM-97133  
6. If Indian, Allottee or Tribe Name  
7. Unit or CA Agreement Name and No.  
8. Well Name and No.  
Black Jack 1 Federal 3  
9. API Well No.  
30 015 35797  
10. Field and Pool, or Exploratory  
Sand Dunes South; Delaware  
11. County or Parish State  
Eddy NM

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other Change
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	APD
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work and approximate duration thereof. If the proposal deepens directionally or recompletes horizontally, give subsurface location and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirement, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Devon Energy Production Company, L. P. has changed the location of the original APD to meet the BLM requirements. Please see attached C-102 which was changed from 660 FSL & 330 FEL to 660 FSL & 430 FEL. Note: elevation changed from 3439' to 3438'.

OK JH  
7/17/2007

(Attached C-102)

14. I hereby certify that the foregoing is true and correct

Signed Judy A. Barnett Name Judy A. Barnett X8699  
Title Regulatory Analyst Date 7/13/2007

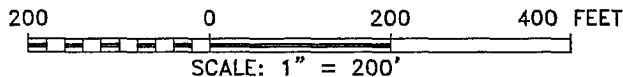
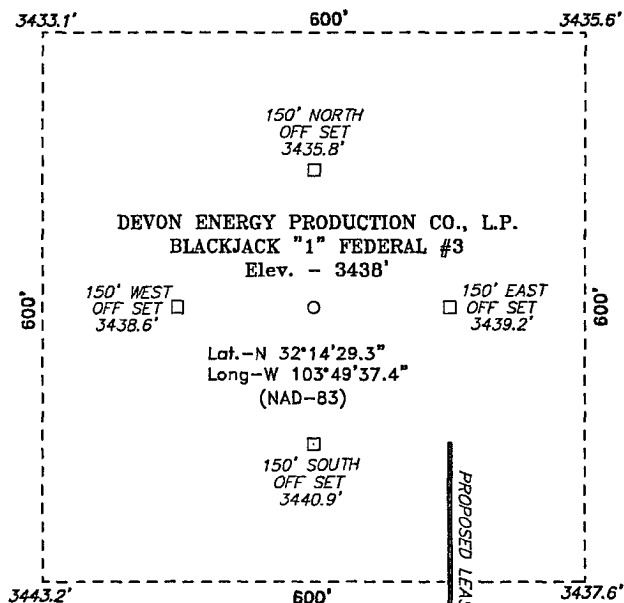
(This space for Federal or State Office use)

Approved by Jesse J. Tuen Title FOR STATE DIRECTOR Date 9-7-07  
Conditions of approval, if any:

True to U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make any department or agency of the United States any false, fictitious or fraudulent statements or representations to any matter within its jurisdiction.

\*See Instruction on Reverse Side

SECTION 1, TOWNSHIP 24 SOUTH, RANGE 30 EAST, N.M.P.M.,  
EDDY COUNTY, NEW MEXICO.



Directions to Location:

FROM MILE MARKER 12 OF STATE HWY 128,  
PROCEED EAST 0.5 MILES TO CO. RD. 787 (TWIN  
WELLS), GO SOUTH ON CO. RD. 787 FOR 4.1 MILES  
TO LEASE ROAD, ON LEASE ROAD GO WEST 0.5  
MILES TO YATES WELL AND LEASE ROAD, PROCEED  
WEST ON LEASE ROAD 0.1 MILES TO PROPOSED  
LEASE ROAD.

**DEVON ENERGY PROD. CO., L.P.**

REF: BLACKJACK "1" FEDERAL #3 / WELL PAD TOPO

THE BLACKJACK "1" FEDERAL No. 3 LOCATED 660'

FROM THE SOUTH LINE AND 430' FROM THE EAST LINE OF

SECTION 1, TOWNSHIP 24 SOUTH, RANGE 30 EAST,

N.M.P.M., EDDY COUNTY, NEW MEXICO.

**BASIN SURVEYS** P.O. BOX 1786-HOBBS, NEW MEXICO

W.O. Number: 18213

Drawn By: J. M. SMALL

Date: 06-08-2007

Disk: 18213W JMS

Survey Date: 06-07-2007

Sheet 1 of 1 Sheets

## DRILLING PROGRAM

Devon Energy Production Company, LP

### **Black Jack 1 Federal 3**

Surface Location: 660' FSL & ~~330'~~ FEL, Lot P, Sec 1 T24S R30E, Eddy, NM

Bottom Hole Location: 660' FSL & ~~330'~~ FEL, Lot P, Sec 1 T24S R30E, Eddy, NM

#### 1. **Geologic Name of Surface Formation**

*430' per SN dated 7/16/07*

a. Delaware

#### 2. **Estimated tops of geological markers:**

a. Rustler	490'
b. Salado	810'
c. Salt	945'
d. Base of Salt	3895'
e. Delaware	4120'
f. Cherry Canyon	5055'
g. Brushy-Canyon	6650'
h. Bone Springs	8000'
i. Total Depth	8300'

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

a. Rustler	490'
b. Delaware	4120'-TD

Fresh Water  
Oil

*570*

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 13 3/8" casing at 520' and circulating cement back to surface. Fresh water sands will be protected by setting 8 5/8" casing at 4000' and circulating cement to surface. The Delaware intervals will be isolated by setting 5 1/2" casing to total depth and circulating cement above the base of the 8 5/8" casing.

#### 4. **Casing Program:**

*See COA*

<u>Hole Size</u>	<u>Interval</u>	<u>OD Csg</u>	<u>Weight</u>	<u>Collar</u>	<u>Grade</u>
17 1/2"	0' - <u>520'</u>	13 3/8"	48#	ST&C	H-40
11"	0' - 4000'	8 5/8"	32#	LT&C	K-55
7 7/8"	0' - 8300'	5 1/2"	15.5 & 17#	LT&C	J-55

*570'*

#### 5. **Cement Program:**

*550' - 8300'*

*0 - 550'*

13 3/8"      Surface      Lead: 310 sx 35:65 Cl C + 2% CaCl + 0.25 lbs.sack Cello Flake + 6% Bentonite Slurry: 12.8 ppg, 1.83 ft<sup>3</sup>/sx, 9,76 gps  
Tail: 250 sx Cl C + 2% CaCl + 0.25 lbs.sx Cello Flake  
Slurry: 14.8 ppg, 1.35 ft<sup>3</sup>/sx, 6.35 gps

8 5/8" Intermediate

Lead: 925 sx 35:65 Poz Cl C + 5% NaCl + 0.25 lb/sx Cello Flake + 6% Bentonite

Slurry: 12.5 ppg, 2.04 ft<sup>3</sup>/sx, 11.24 gps

Tail: 300 sx 60:40 Poz Cl C + 5% NaCl + 0.25 lb/sx Cello Flake + 4% MPA-1, 0.4% Sodium Metasilicate

Slurry: 13.8 ppg, 1.37 ft<sup>3</sup>/sx, 6.36 gpS

5 1/2" Production

#### Single Stage Option

Spacer Option: 35 bbls FW + 10010 scf N<sub>2</sub> @ 8.34 ppg

1500 gals Mud Clean II @ 8.45 ppg

10 bbls FW @ 8.34 ppg

Lead: 480 sx 35:65 Poz Cl C + 3% NaCl + .25% R-3 + .25 #/sx Cello Flake + 3 #/sx LCM-1 + 0.3% FL-52A + 6% Bentonite.

Slurry: 12.5 ppg, 2.01 cf/sx, 10.69 gps

Tail: 475 sx 60:40 Poz Class C + 1% NaCl + .5% BA-10 + .25 #/sx Cello Flake + 2 #/sx Kol Seal + 4% MPA-1 + 0.1% bwoc R-3

Slurry: 13.8 ppg, 1.34 cf/sx, 6.03 gps

#### Two-Stage Option

##### Stage 1:

Lead: 325 sx 35:65 Poz Cl C + 3% NaCl + 0.25% R-3 + 0.25 lb/sx Cello Flake + 3 lb/sack LCM-1 + 0.3% FL-52A + 6% Bentonite

Slurry: 12.5 ppg, 2.01 ft<sup>3</sup>/sx, 10.69 gps

Tail: 475 sx 60:40 Poz Cl C + 1% NaCl + 0.5% BA-10 + 0.25 lb/sx Cello Flake + 2 lb/sx Kol Seal + 4% MPA-1

Slurry: 13.8 ppg, 1.34 ft<sup>3</sup>/sx, 6.03 gps

##### Stage 2: (DV Tool @ 4540')

Lead: 230 sx 60:40 Poz Class C + 5% NaCl + 0.25 lb/sx Cello Flake + 0.4% Sodium Metasilicate + 4% MPA-1

Slurry: 13.8 ppg, 1.37 ft<sup>3</sup>/sx, 6.36 gps

The above cement volumes could be revised pending the caliper measurement from the open hole logs. The top of cement is designed to reach approximately 500' above the 8 5/8" casing shoe.

#### 6. Pressure Control Equipment:

The blowout preventor equipment (BOP) shown in Exhibit #1 will consist of a (5M system) double ram type (3000 psi WP) preventor and a bag-type (Hydril) preventor (3000 psi WP) and rotating head. Both units will be hydraulically operated and the ram type preventor will be equipped with blind rams on top and 4 1/2" drill pipe rams on bottom. The drilling head will be installed on the 13 3/8" surface casing and utilized continuously until total depth is reached. All BOP's and associated equipment will be tested to **1200 psi with the rig pump before drilling out the 13 3/8" casing shoe (70% of 48#, H-40 casing)**. Prior to drilling out the 8 5/8" casing shoe, the BOP's and Hydril will be tested as per BLM Drilling Operations Order #2.

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

see  
CD

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 3000 psi WP rating.

**7. Proposed Mud Circulation System**

<u>Depth</u>	<u>Mud Wt.</u>	<u>Visc</u>	<u>Fluid Loss</u>	<u>Type System</u>
0' - <del>520'</del> <sup>510'</sup>	8.4-9.0	35-40	NC	Fresh Water
520' - 4000'	10	28-30	NC	Brine
4000' - 8300'	8.3-9.0	28-30	NC	Cut Brine

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

**8. 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.
- c. Hydrogen Sulfide detection equipment will be in operation after drilling out the 13 3/8" casing shoe until the 5 1/2" casing is cemented. Breathing equipment will be on location upon drilling the 13 3/8" shoe until total depth is reached.

**9. Logging, Coring, and Testing Program:**

- a. Drill stem tests will be based on geological sample shows.
- b. The open hole electrical logging program will be:
  - i. Total Depth to Intermediate Casing      Dual Laterolog-Micro Laterolog with SP and Gamma Ray. Compensated Neutron – Z Density log with Gamma Ray and Caliper.
  - ii. Total Depth to Surface      Compensated Neutron with Gamma Ray
  - iii. No coring program is planned
  - iv. Additional testing will be initiated subsequent to setting the 5 1/2" production casing. Specific intervals will be targeted based on log evaluation, geological sample shows and drill stem tests.

**10. Potential Hazards:**

- a. No abnormal pressures or temperatures are expected. There is no known presence of H<sub>2</sub>S in this area. If H<sub>2</sub>S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6 No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 2900 psi and Estimated BHT 130°.

**11. Anticipated Starting Date and Duration of Operations:**

- a. Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 32 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flow lines in order to place well on production.

**Additional Operator Remarks:**

Devon Energy Production Company, LP proposes to drill a well to Delaware 8300' for commercial quantities of oil and gas. If the well is deemed noncommercial, the wellbore will be plugged and abandoned per Federal regulations. Devon Energy Production Co., LP plans to drill the well per the attached Drilling and Surface Use Plan.

**Directions To Location:** From mile marker 12 of State Hwy 128 proceed east 0.5 miles to County Road 787 (Twin Wells) go south for 4.1 miles to lease road, on lease road go west 0.5 miles to Yates well and lease road, proceed west on lease road 0.1 miles to proposed lease road.

**Access Road:**

Approximately 388.2' of access road will be required. Archeological survey's will be requested for the pad and access road.

**H2S:**

No H2S is anticipated to be encountered.

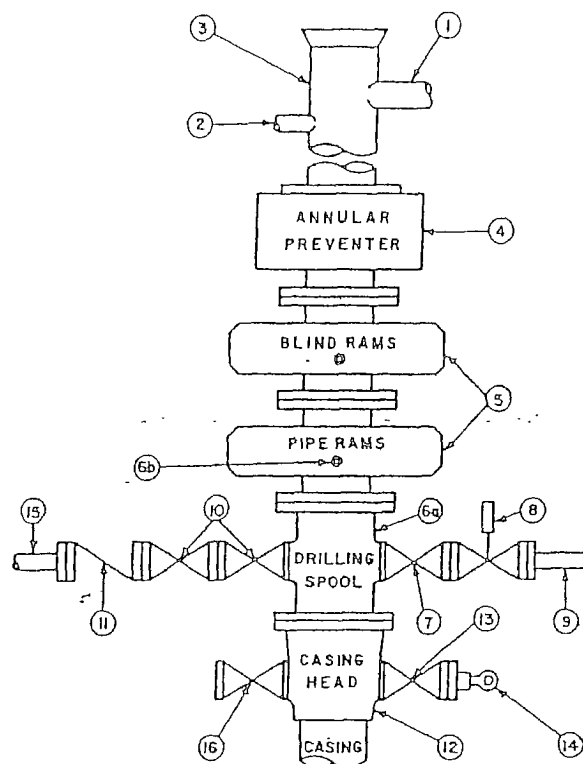
# STACK REQUIREMENTS

No.	Item	Min. I.D.	Min Nominal
1	Flowline		
2	Fill up line		2"
3	Drilling nipple		
4	Annular preventer		
5	Two single or one dual hydraulically operated rams		
6a	Drilling spool with 2" min. kill line and 3" min choke line outlets		
6b	2" min. kill line and 3" min. choke line outlets in ram. (Alternate to 6a above.)		
7	Valve <span style="float:right">Gate <input type="checkbox"/> Plug <input type="checkbox"/></span>	3-1/8"	
8	Gate valve—power operated	3-1/8"	
9	Line to choke manifold		3"
10	Valves <span style="float:right">Gate <input type="checkbox"/> Plug <input type="checkbox"/></span>	2-1/16"	
11	Check valve	2-1/16"	
12	Casing head		
13	Valve <span style="float:right">Gate <input type="checkbox"/> Plug <input type="checkbox"/></span>	1-13/16"	
14	Pressure gauge with needle valve		
15	Kill line to rig mud pump manifold		2"

## OPTIONAL

16	Flanged valve	1-13/16"	
----	---------------	----------	--

CONFIGURATION A



## CONTRACTOR'S OPTION TO FURNISH:

1. All equipment and connections above bradenhead or casinghead. Working pressure of preventers to be 3,000 psi, minimum.
2. Automatic accumulator (80 gallon, minimum) capable of closing BOP in 30 seconds or less and, holding them closed against full rated working pressure.
3. BOP controls, to be located near drillers position.
4. Kelly equipped with Kelly cock.
5. Inside blowout preventer or its equivalent on derrick floor at all times with proper threads to fit pipe being used.
6. Kelly saver-sub equipped with rubber casing protector at all times.
7. Plug type blowout preventer tester.
8. Extra set pipe rams to fit drill pipe in use on location at all times.
9. Type RX ring gaskets in place of Type R.

## MEC TO FURNISH:

1. Bradenhead or casinghead and side valves.
2. Wear bushing, if required.

## GENERAL NOTES:

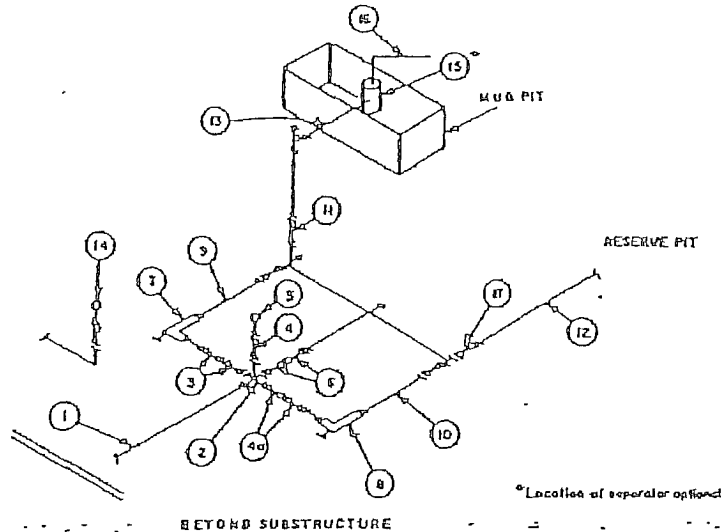
1. Deviations from this drawing may be made only with the express permission of MEC's Drilling Manager.
2. All connections, valves, fittings, piping, etc., subject to well or pump pressure must be flanged (suitable clamp connections acceptable) and have minimum working pressure equal to rated working pressure of preventers up through choke. Valves must be full opening and suitable for high pressure mud service.
3. Controls to be of standard design and each marked, showing opening and closing position.
4. Chokes will be positioned so as not to hamper or delay changing of choke beans. Replaceable parts for adjustable choke, other bean sizes, retainers, and choke wrenches to be conveniently located for immediate use.
5. All valves to be equipped with handwheels or handles ready for immediate use.
6. Choke lines must be suitably anchored.

7. Handwheels and extensions to be connected and ready for use.
8. Valves adjacent to drilling spool to be kept open. Use outside valves except for emergency.
9. All seamless steel control piping (3000 psi working pressure) to have flexible joints to avoid stress. Hoses will be permitted.
10. Casinghead connections shall not be used except in case of emergency.
11. Do not use kill line for routine fill-up operations.

**MINIMUM CHOKE MANFOLD**  
3,000, 5,000 and 10,000 PSI Working Pressure

3 MWP - 5 MWP - 10 MWP

Exhibit E



MINIMUM REQUIREMENTS										
No.		3,000 MWP			5,000 MWP			10,000 MWP		
		I.D.	NOMINAL	RATING	I.D.	NOMINAL	RATING	I.D.	NOMINAL	RATING
1	Line from drilling spool		3"	3,000		3"	5,000		3"	10,000
2	Cross 3"x3"x3"x2"			3,000			5,000			
	Cross 3"x3"x3"x3"									10,000
3	Valves (1) Gate <input type="checkbox"/> Plug <input type="checkbox"/> (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000
4	Valve Gate <input type="checkbox"/> Plug <input type="checkbox"/> (2)	1-13/16"		3,000	1-13/16"		5,000	1-13/16"		10,000
4a	Valves (1)	2-1/16"		3,000	2-1/16"		5,000	3-1/8"		10,000
5	Pressure Gauge			3,000			5,000			10,000
6	Valves Gate <input type="checkbox"/> Plug <input type="checkbox"/> (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000
7	Adjustable Choke (3)	2"		3,000	2"		5,000	2"		10,000
8	Adjustable Choke	1"		3,000	1"		5,000	2"		10,000
9	Line		3"	3,000		3"	5,000		3"	10,000
10	Line		2"	3,000		2"	5,000		3"	10,000
11	Valves Gate <input type="checkbox"/> Plug <input type="checkbox"/> (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000
12	Lines		3"	1,000		3"	1,000		3"	2,000
13	Lines		3"	1,000		3"	1,000		3"	2,000
14	Remote reading compound standpipe pressure gauge			3,000			5,000			10,000
15	Gas Separator		2"x5"			2"x5"			2"x5"	
16	Line		4"	1,000		4"	1,000		4"	2,000
17	Valves Gate <input type="checkbox"/> Plug <input type="checkbox"/> (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000

(1) Only one required in Class 3M.

(2) Gate valves only shall be used for Class 10M.

(3) Remote operated hydraulic choke required on 5,000 psi and 10,000 psi for drilling.

**EQUIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTIONS**

- All connections in choke manifold shall be welded, studded, flanged or Cameron clamp of comparable rating.
- All flanges shall be API 6B or 6BX and ring gaskets shall be API RX or BX. Use only BX for 10 MWP.
- All lines shall be securely anchored.
- Chokes shall be equipped with tungsten carbide seats and needles, and replacements shall be available.
- Choke manifold pressure and standpipe pressure gauges shall be available at the choke manifold to assist in regulating chokes. As an alternate with automatic chokes, a choke manifold pressure gauge shall be located on the rig floor in conjunction with the standpipe pressure gauge.
- Line from drilling spool to choke manifold should be as straight as possible. Lines downstream from chokes shall make turns by large bends or 90° bends using bull plugged tees.
- Discharge lines from chokes, choke bypass and from top of gas separator should vent as far as practical from the well.



Attachment to Exhibit #1  
NOTES REGARDING BLOWOUT PREVENTERS  
Devon Energy Production Company, LP

**Black Jack 1 Federal 3**

Surface Location: 660' FSL & ~~330'~~ FEL, Lot P, Sec 1 T24S R30E, Eddy, NM

Bottom Hole Location: 660' FSL & ~~330'~~ FEL, Lot P, Sec 1 T24S R30E, Eddy, NM

*430' per SN dated 7/16/07 CR*

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 3000 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.

## HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

1. All Company and Contract personnel admitted on location must be trained by a qualified H2S safety instructor to the following:
  - a. Characteristics of H2S
  - b. Physical effects and hazards
  - c. Proper use of safety equipment and life support systems.
  - d. Principle and operation of H2S detectors, warning system and briefing areas
  - e. Evacuation procedures, routes and first aid.
  - f. Proper use of 30-minute pressure demand air pack.
2. H2S Detection and Alarm System
  - a. H2S detectors and audio alarm system to be located at bell nipple, end of blooie line (mud pit) and on derrick floor or doghouse.
3. Windsock and/or wind streamers
  - a. Windsock at mud pit area should be high enough to be visible
  - b. Windsock at briefing area should be high enough to be visible
  - c. There should be a windsock at entrance to location
4. Condition Flags and Signs
  - a. Warning Sign on access road to location
  - b. Flags to be displayed on sign at entrance to location. Green flag, normal safe condition. Yellow flag indicates potential pressure and danger. Red flag, danger, H2S present in dangerous concentration. Only emergency personnel admitted to location.
5. Well Control Equipment
  - a. See Exhibit "E" & "E-1"
6. Communication
  - a. While working under masks chalkboards will be used for communication.
  - b. Hand signals will be used where chalk board is inappropriate
  - c. Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephones will be available at most drilling foreman's trailer or living quarters.
7. Drill stem Testing
  - a. Exhausts will be watered
  - b. Flare line will be equipped with an electric igniter or a propane pilot light in case gas reaches the surface.
  - c. If the location is near to a dwelling a closed DST will be performed.
8. Drilling contractor supervisor will be required to be familiar with the effects H2S has on tubular goods and other mechanical equipment.

If H2S is encountered, mud system will be altered if necessary to maintain control or formation. A mud gas separator will be brought into service along with H2S scavengers if necessary.

## **SURFACE USE PLAN**

Devon Energy Production Company, LP

### **Black Jack 1 Federal 3**

Surface Location: 660' FSL & 330' FEL, Lot P, Sec 1 T24S R30E, Eddy, NM

Bottom Hole Location: 660' FSL & 330' FEL, Lot P, Sec 1 T24S R30E, Eddy, NM

*430' per SN dated 7/16/07. CR*

#### **1. Existing Roads:**

- a. The well site and elevation plat for the proposed well are reflected on Exhibit 2. The well was staked by Basin Surveys.
- b. All roads into the location are depicted on Exhibit 3.
- c. Directions to Location: From mile marker 12 of State Hwy 128, proceed east 0.5 miles to Co. Rd 787 (Twin Wells) go south on Co. Rd 787 for 4.1 miles to lease road; thence west on lease road 0.5 miles to Yates Well and lease road, thence west on lease road for 0.1 miles to proposed lease road.

#### **2. Access Road**

- a. Exhibit #3 shows the existing lease road. Approximately 388.2' of new access road will be constructed as follows:
- b. The maximum width of the road will be 15'. It will be crowned and made of 6" of rolled and compacted caliche. Water will be deflected, as necessary, to avoid accumulation and prevent surface erosion.
- c. Surface material will be native caliche. This material will be obtained from a BLM approved pit nearest in proximity to the location. The average grade will be approximately 1%.
- d. No cattle guards, grates or fence cuts will be required. No turnouts are planned.

#### **3. Proposed Facilities**

- a. In the event the well is found productive, the Black Jack 1 Federal 2 tank battery would be utilized and the necessary production equipment will be installed at the well site.
- b. If necessary, the well will be operated by means of an electric prime mover. Electric power poles will be set along side of the access road.
- c. All flow lines will adhere to API standards.
- d. If the well is productive, rehabilitation plans are as follows:
  - i. The reserve pit will be back-filled after the contents of the pit are dry (within 120 days after completion, weather permitting).
  - ii. The original topsoil from the well site will be returned to the location. The drill site will then be contoured as close as possible to the original state.

#### **4. Methods of Handling Waste Material:**

- a. Drill cuttings will be disposed of in the reserve pits.
- b. All trash, junk and other waste material will be contained in trash cages or trash bins to prevent scattering. When the job is completed all contents will be removed and disposed of in an approved sanitary landfill.
- c. The supplier, including broken sacks, will pick up salts remaining after completion of well.
- d. Wastewater from living quarters will be drained into hole with a minimum of 10'. These holes will be covered during drilling and will be back filled when the well is completed. A Porto-john

will be provided for the rig crews. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete.

- e. Remaining drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry enough to be broken out for further drying. If the drilling fluids do not evaporate in a reasonable time they will be hauled off by transports to a state approved disposal site. Later pits will be broken out to speed dry. Water produced during completion will be put in reserve pits. Oil and condensate produced will be put in a storage tank and sold.

**5. Well Site Layout**

- a. Exhibit D Shows the proposed well site layout.
- b. This exhibit indicated proposed location of reserve and sump pits and living facilities.
- c. Mud pits in the active circulating system will be steel pits & the reserve pit is proposed to be unlined unless subsurface conditions encountered during pit construction indicate that lining is needed for lateral containment of fluids.
- d. If needed, the reserve pit is to be lined with polyethylene. The pit liner will be 6 mils thick. Pit liner will extend a minimum 2'00" over the reserve pits dikes where the liner will be anchored down.
- e. The reserve pit will be fenced on three sides with four strands of barbed wire during drilling and completion phases. The fourth side will be fenced after all drilling operations have ceased. If the well is a producer, the reserve pit fence will be torn down. The reserve pit and those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements.

**6. Other Information:**

- a. The area surrounding the well site is grassland. The topsoil is very sandy in nature. The vegetation is moderately sparse with native prairie grass, some mesquite bushes and shinnery oak. No wildlife was observed but it is likely that deer, rabbits, coyotes, and rodents traverse the area.
- b. The surface is owned by the US Government and is administered by the Bureau of Land Management. The surface is of limited use except for the grazing of livestock and the production of oil and gas.
- c. A Cultural Resources Examination will be completed by Southern New Mexico Archaeological Services, Inc. and forwarded to the BLM office in Carlsbad, New Mexico.
- d. There are no dwellings within 2 miles of location.

**Operators Representative:**

The Devon Energy Production Company, L.P. representatives responsible for ensuring compliance of the surface use plan are listed below.

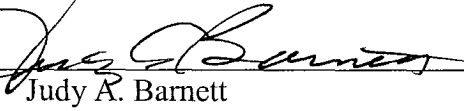
Jim Cromer  
Operations Engineer Advisor  
Devon Energy Production Company, L.P.  
20 North Broadway  
Oklahoma City, OK 73102-8260  
405-228-4464 (ofc) 405-694-7718 Cellular

Don Mayberry  
Superintendent  
Devon Energy Production Company, L.P.  
Post Office Box 250  
Artesia, NM 88211-0250  
505-748-3371 (ofc) 505-746-4945 (home)

### **Certification**

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access road; that I am familiar with the conditions that presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Devon Energy Production Company, L.P. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Signed: \_\_\_\_\_



Judy A. Barnett  
Regulatory Analyst

Date: 05/08/07

## **Conditions of Approval Cave and Karst**

EA#: NM-520-07-0810

Lease #: NM-NM-97133

**Devon Energy Production Company, LP  
Black Jack 1 Federal No.3**

### **Cave/Karst Surface Mitigation**

The following stipulations will be applied to minimize impacts during construction, drilling and production.

#### **Berming:**

Any tank batteries will be constructed and bermed large enough to contain any spills that may occur.

Bermed areas will be lined with rip-stop padding to prevent tears or punctures in liners and lined with a permanent 20 mil plastic liner.

### **Cave/Karst Subsurface Mitigation**

The following stipulations will be applied to protect cave/karst and ground water concerns:

#### **Rotary Drilling with Fresh Water:**

Rotary drilling techniques in cave or karst areas will include the use of fresh water as a circulating medium in zones where caves or karst features are expected. Use depth to the deepest expected fresh water as listed in the geologist report.

#### **Casing:**

All casing will meet or exceed National Association of Corrosion Engineers specifications pertaining to the geology of the location and be run to American Petroleum Institute and BLM standards.

#### **Lost Circulation:**

ALL lost circulation zones from the surface to the base of the cave occurrence zone will be logged and reported.

Regardless of the type of drilling machinery used, if a void (bit drops) of four feet or more and circulation losses greater than 75 percent occur simultaneously while drilling in any cave-bearing zone, drilling operations will immediately stop and the BLM will be notified by the operator. The BLM will assess the consequences of the situation and work with operator on corrective actions to resolve the problem.

**Abandonment Cementing:**

Upon well abandonment the well bore will be cemented completely from 100 feet below the bottom of the cave bearing zone to the surface.

**Record Keeping:**

The Operator will track customary drilling activities, including the rate of penetration, pump pressure, weight on bit, bit drops, percent of mud returns, and presence of absence of cuttings returning to the surface. As part of customary record keeping, each detectable void or sudden increase in the rate of penetration not attributable to a change in the formation type should be documented and evaluated as it is encountered.

## CONDITIONS OF APPROVAL - DRILLING

**Operator's Name:** Devon Energy Prod. Co. LP  
**Well Name & No.** Black Jack 1 Federal # 3  
**Location:** 660'FSL, 430'FEL, SEC1, T24S, R30E, Eddy County, NM  
**Lease:** NM-97133

.....

### I. DRILLING OPERATIONS REQUIREMENTS:

- A. The Bureau of Land Management (BLM) is to be notified a minimum of 4 hours in advance for a representative to witness:
1. Spudding well
  2. Setting and/or Cementing of all casing strings
  3. BOPE tests
- Eddy County call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822
- B. A Hydrogen Sulfide (H<sub>2</sub>S) Drilling Plan is N/A.
- C. 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.
- D. If floor controls are required, (3M or Greater) controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
- E. Gamma-Ray/Neutron logs shall be run from the base of the Salado formation to the surface. The logs shall be run at a speed which allows the logs to be legible and no faster than manufactures of the logging tools recommended speed.

### II. CASING:

- A. The 13.375 inch surface casing shall be set at 570 feet and cemented to the surface.
1. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
  2. Wait on cement (WOC) time for a primary cement job will be a minimum of 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compression strength, whichever is greater. (This is to include the lead cement)
  3. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compression strength, whichever is greater.
  4. If cement falls back, remedial action will be done prior to drilling out that string.
- B. The minimum required fill of cement behind the 8.625 inch intermediate casing is circulating cement to the surface. If cement does not circulate see A.1 thru 4.



- C. The minimum required fill of cement behind the 5.5 inch production casing is circulating cement to 500 feet above the shoe of the 8.625 inch intermediate casing. The 5.5 inch 17# casing will be used from 0-550 feet and the 5.5 inch 15.5# casing will be used from 550-8300'.
- D. If hardband drill pipe is rotated inside casing; returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool I joints of the drill pipe will be installed prior to continuing drilling operations.
- E. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

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

- A. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2.
- B. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 2000 psi.
- C. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 8.625 Intermediate casing shoe shall be 3000 psi.
- D. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - 1. The tests shall be done by an independent service company.
  - 2. The results of the test shall be reported to the appropriate BLM office.
  - 3. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
  - 4. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi in accordance with API RP 53, section 17. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.

### **IV. Hazards:**

- 1. Our geologist has indicated that there is high potential for Cave / Karst features with known caves in the vicinity.
- 2. Our geologist has indicated that there is potential for lost circulation in the Delaware group and the Bone Springs formation.

**Engineering can be reached at 505-706-2779 for variances.**

**FWright 7/19/07**