Form 3160-3 (August 1999)

OCD-ARTESIA

UNITED STATES

E-29

FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000
•

DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

5.	Lease Senal No.
	NMNM0533177A

APPROVAL FOR 1 YEAR

APPLICATION FOR PERMIT	O DRILL OR REENTER	6. If Indian, Allottee or Trib	e Name
1a. Type of Work: ☑ DRILL ☐ REENTER		7. If Unit or CA Agreement, 3333 8. Lease Name and Well No	32
1b. Type of Well: Oil Well Gas Well Oth	er Single Zone Multiple Zone	TODD 14 B FEDERAL	3
	KAREN COTTOM E-Mail: karen.cottom@dvn.com	9. API Well No.	2 - ~ ~ ~
3a. Address	3b. Phone No. (include area code)	30 -015 - 10. Field and Pool, or Explo	<u> </u>
20 NORTH BROADWAY SUITE 1500 OKLAHOMA CITY, OK 73102	Ph: 405.228.7512 Fx: 405.552.4621	INGLE WELLS-DELA	
4. Location of Well (Report location clearly and in accordance	nce with any State requirements.*)	11. Sec., T., K., M., or Blk.	and Survey or Area
At surface NWNE 660FNL 1886FEL At proposed prod. zone NWNE 660FNL 1886FEL	W. O R-111-P Potesh	Sec 14 T23S R31E N	/ler NMP
		171 Combo on United	1.12 - N-4-
14. Distance in miles and direction from nearest town or post 35 MILES WEST-NORTHWEST OF JAL, NM	63	12. County or Parish EDDY	13. State NM
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of Acres in Lease 10 10	17. Spacing Unit dedicated t	o this well
660	800.00	40.00	
 Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 	8350 MD RECEIVED	20. BLM/BIA Bond No. on	hle
21. Elevations (Show whether DF, KB, RT, GL, etc. 3488 GL	22. Approximate data wark will start 03/01/2003	23. Estimated duration 45	
	24. Attachment St tz EZ Co		
The following, completed in accordance with the requirements of	f Onshore Oil and Gas Order No. 1, shall be attached to	this form:	
 Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest Syst SUPO shall be filed with the appropriate Forest Service Off 		ns unless covered by an existin	•
25. Signature (Electronic Submission)	Name (Printed/Typed) KAREN COTTOM		Date 02/13/2003
Title ENGINEERING TECHNICIAN			
Approved by (Signature)	Name (Printed/Typed)		Date
ISI CARY L. JOHNSON	1S/ GARY 2. JOHNSON	,	APR 28 2003
Title STATE DIRECTOR Application approval does not warrant or certify the applicant ho	Office NM STATE OFFICE Ids legal or equitable title to those rights in the subject.	ease which would entitle the a	oplicant to conduct

Additional Operator Remarks (see next page)

Conditions of approval, if any, are attached.

operations thereon.

Electronic Submission #18505 verified by the BLM Well Information System APPROVAL SUBJECT TO For DEVON ENERGY PRODUCTION CO L P, sent to the Carlsbad GENERAL REQUIREMENTS AND AFMSS for processing by Linda Askwig on 02/13/2003 (03LA0320AE) SPECIAL STIPULATIONS ATTACHED

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

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

Additional Operator Remarks:

Devon Energy proposes to drill to approximately 8350' to test the Delaware for commercial quantities of oil. If the Delaware is deemed non-commercial, the wellbore will be plugged and abandoned as per Federal regulations. Programs to adhere to onshore oil and gas regulations are outlined in the following exhibits and attachments.

DRILLING PROGRAM

Attached to Form 3160-3
Devon Energy Production Company, LP
TODD 14 B FEDERAL #3
(B) 660' FNL & 1886' FEL, Section 14 T23S, R31E
Eddy, County, New Mexico

1. Geologic Name of Surface Formation

Permian

2. Estimated Tops of Important Geologic Markers

Rustler	800,
Top of Salt	1100'
Base of Salt	3900'
Bell Canyon	4435'
Cherry Canyon	5610'
Brushy Canyon	6970'
Bone Spring Lime	8265'
Total Depth	8350'

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

Upper Permian Sands	Fresh Water
Delaware	4435' Oil
Delaware(Cherry Canyon)	6010' Oil
Delaware (Brushy Canyon)	8025' Oil

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 850' and circulating cement back to surface. Potash and salt will be protected by setting 8 5/8" casing at 4400' and circulating cement to surface. The Delaware intervals will be isolated by setting 5 ½" casing to total depth and circulating cement above the base of the 8 5/8" casing.

4. Casing Program

Hole Size	Interval	OD Csg	Weight	Collar	Grade
30"	0-40'	20"	Conductor	0.30" wall	
17 ½"	0-850'	13 3/8"	48#	ST&C	H-40
11"	0-4400'	8 5/8"	32#	ST&C	J-55
7 7/8"	0'- TD	5 1/2"	15.5 & 17#	LT&C	R-3

5. CASING CEMENTING & SETTING DEPTH:

20"	Conductor Casing:	Cemented with ready-mix to surface.
13 3/8"	Surface	Cemented to surface using 450 sx POZ "C" (35:65) + 6% Gel + 1/4# sk cellophane flakes followed by 200 sx Class "C" + 2% CC.
8 5/8	Intermediate	Cement to surface with 1600 sx Poz Class "C" (35:65) + 6% Gel + 15% Salt + ¼ lb/sk cellophane flakes followed by 200 sx Class "C" + 2% CC + ¼ lb/sk cellophane flakes.
5 ½"	Production	Cemented with 400 sx Poz C (35:65) +3% Salt + 0.6% fluid loss additive + 1/4 lb/sk cellophane flakes followed by 500 sx 60:40 Class "C" + 4% gel.

The above cement volumes could be revised pending the caliper measurement from the open hole logs. The top of cement is designed to reach 450' (±) above the 8 5/8" casing seat at 4400'.

6. <u>Minimum Specifications for Pressure Control:</u>

The blow-out preventor equipment (BOP) shone in Exhibit #1 will consist of a (3M system) double ram type (3000 psi WP) preventor and a bag-type (Hydril) preventor (3000 psi WP). Both units will be hydraulically operated and the ram type preventor will be equipped with blind rams on top and 4 ½" drill pipe rams on bottom. Both BOP's 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 before drilling out the 13 3/8" casing shoe (70% of 48#, H-40 casing). Prior to drilling out the 8 5/8"

Todd 14B Federal #3

DRILLING PLAN

PAGE 3

casing shoe, the BOP's and Hydril will be tested as per BLM Drilling Operations Order #2.

Pipe rams will be operated and check 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 3000 psi WP rating.

7. Types and Characteristics of the Proposed Mud System:

The well will be drilled to total depth using brine, cut brine and polymer mud systems. Depths of systems are as follows:

DEPTH	MUD. WT.	MUD VISC.	FLUID LOSS	TYPE MUD
0' – 850'	8.8	34-36	NC	Fresh water
850' – 4400'	10	28	NC	Brine water
4400' – TD'	8.8	32-36	10-20	Fresh Water
				Polymer

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 and breathing equipment will be in operations after drilling out the 8 5/8" casing shoe until total depth is reached.

9. <u>Logging, Testing and Coring Program:</u>

- A. Drill stem tests will be based on geological sample shows.
- B. The open hole electrical logging program will be:
 - a. TD to Intermediate Casing Dual Laterolog-Micro Laterolog with SP and Gamma ray. Compensated Neutron Z-Density Log with Gamma Ray and Caliper.
 - b. TD to Surface Compensated Neutron with Gamma Ray.
 - c. No coring program is planned.
 - d. Additional testing will be initiated subsequent to setting the 5 ½" production casing. Specific intervals will be targeted based on log evaluation, geological sample shows and drill stem tests.

Todd 14B Federal #3 DRILLING PLAN PAGE 4

10 Abnormal Pressures, Temperatures and Potential Hazards:

No abnormal pressures or temperatures are foreseen. The anticipated bottom hole temperature at total depth is 125 degrees and maximum bottom hole pressure is 2900 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.

11. Anticipated Starting Date and Duration of Operations

Road and location preparation will not be undertaken until approval has been received from the BLM. The anticipated spud date for the project is in March 2003. The drilling operation should require approximately 45 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 SFS Operating, Inc.

Todd 14B Federal #3

(B) 660' FNL & 1886' FEL, Section 14, T-23-S, R-31-E Eddy, 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 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.

State of New Mexico

DISTRICT I -P.O. Box 1980, Hobbs, NM 88241-1980

Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994

DISTRICT II P.O. Drawer DD, Artesia, NM 86211-0719

OIL CONSERVATION DIVISION P.O. Box 2088

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

DISTRICT III 1000 Rio Brazos Rd., Artec. NM 87410 Santa Fe, New Mexico 87504-2088

DISTRICT IV	WELL.	LOCATION	AND	ACREAGE	DEDICATION	PLAT
.O. BOX 2088, SANTA FE, N.M. 87504-2088						

□ AMENDED REPORT

P.O. BOX 2088, SANTA FE, N.M. 87504-2			
API Number	Pool Code	Pool Name	
	33745	INGLE WELLS DELAWARE	
Property Code	Prop	rty Name Vell	Number
	TOD) 14 B	3
OGRID No.			evation
6137	DEVON ENERGY PROI	OUCTION COMPANY, L.P.	3488'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
В	14	23-S	31-E		660'	NORTH	1886'	EAST	EDDY

Bottom Hole Location If Different From Surface

	Bottom 1200 200 100 100 100 100 100 100 100 10										
UL or lot No.	Section	Township	Range	Lot idn	Feet from the	North/South line	Feet from the	East/West line	County		
Dedicated Acre	B Joint o	r Infill	Consolidation	Code Or	der No.	<u> </u>		I			

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

	3485.6' 3496.3 3484.2' 3491.5'	OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief. Signature
GEOGRAPHIC COORDINATES NAD 1927 NME X = 476913.8 Y = 681565.4 LAT. 32'18'35.22"N		James Blount Printed Name Operations Engineer Adviso
LONG. 103°44'44.33°W		February 7, 2003 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.
		JANUARY 30, 2003 Date Surveyor Signature A Scal of Professional Surveyor 2/82/42
		Contificate No. RONALD FIDSON 3238

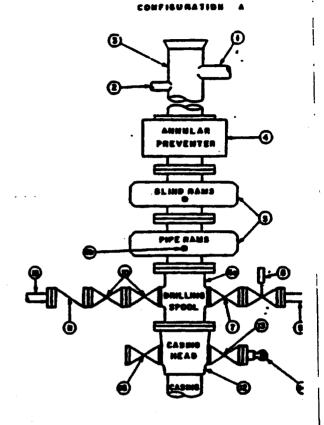
MINIMUM BLOWOUT PREVENTER RL .REMENTS

3,000 pol Working Pressure

3 MWP

STACK REQUIREMENTS

No.	Nem	Mm. LD.	Min. Nominal					
T	Flowing							
2	FIX up line		5.					
3	Dritting supple	<u> </u>						
1	Annular preventer							
5	Two single or one dust hydrautically operated rems							
80	Drilling speel with 2" min. hill line and 3" min choke line exists							
80	2" min. till line and 3" min. chake line outlets in ram. (Alternate to 6a above.)	•						
7	Valve Gale D	3-1/0"	, .					
•	Gate valve—power operated	3-1/6*						
•	Line to choke manifold		3*					
10	Valves Gate D Plug D	2-1/16*						
11	Check valve	2-1/16"						
12	Casing head							
13	Valve Gale C	1-13/16*						
14	Pressure gauge with needle valve							
	Kill line to rig mud pump mentfold		3-					



1-13/16"

CONTRACTOR'S OPTION TO PURMISH:

- 1,All equipment and connections above bradenhead or casinghead. Working pressure of preventers to be 3,000 pci, minimum.
- Automatic accumulator (80 patters, minimum) capable of closing SOP in 30 seconds or toos and, holding them closed against full rated working pressure.
- 3.80P controls, to be located near drillers
- 4. Kelly equipped with Kelly cock.
- S.inside blowout provventor or the equivalent on derrick floor at all times with proper threads to fit pipe being used.
- 6.Kelly sever-sub equipped with rubber casing protector at all times.
- 7.Plug type blowaut preventer tester.
- 8.Extra set pipe rams to fit drill pipe in use on location at all times.
- 8. Type RX sing gaskets in place of Type R.

MEC TO FURNISH:

- 1.Bradenhaed or casingheed and alde valves.
- 2. Wear bushing, If required.

GENERAL NOTES:

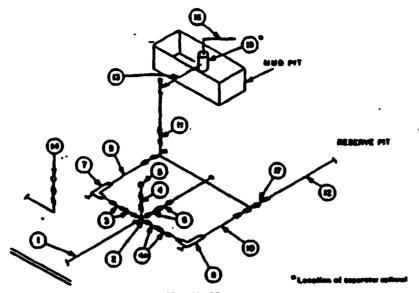
- Deviations from this drawing may be made only with the express permission of MEC's Drilling Manager.

 2.All connections, where, fittings, stoing.
- 2.All connections, valves, fittings, piping, etc., subject to well or pump pressure must be flanged faultable clamp connections acceptable) and have minimum working pressure equal to rated working pressure of preventers up through chore. Valves must be full opening and suitable for high pressure must senice.
- Centrale to be of standard design and each marked, shouling apening and clooing problem.
- 4. Chaises will be positioned so as not to hamper or delay changing of choice beans. Replaceable parts for adjustable choice, other bean sizes, retainers, and choice wrenches to be conveniently located for immediate use.
- S.All valves to be equipped with handwheels or handles ready for immediate
- 6. Chake lines must be suitably anchored.

- 7. Hendeheels and extensions to be connected and ready for use.
- 8. Valves adjacent to drilling apost to be hapt open. Use outside valves encept in emergency. 8.All seemices steel central piping (2000)
- All seemises steel central piping (2000)
 pel working pressure) to have flouble
 joints to evald stress. Hosse will be
 permitted.
- 18. Casingheed connections shall not be used except in case of emergency.
- 11.Do not use till line for routine fill-up operations.

MINIMUM CHOICE MANIFOLD 2,000, 5,000 and 10,000 PSI Working Pro.

3 MWP - 5 MWP - 10 MWP



BETOND SUBSTRUCTURE

MINIMUM PECUPREMENTS										
		3,000 MMP 8,000 MMP				10,000 MMP				
No.		LO	HOMBAL	PATING	LD.	HOMMAN	MATINO	I.D.	HOMINAL	MATING
H	Line from drilling speet		3"	3,000		3"	5,000		3.	10,000
 	Creet 3.13.13.15.			3,000			5,000		L	
•	Cont 3"13"13"13"								<u> </u>	10,000
3	Valves(1) Gate (3 Play (3/2)	3-145*		3,000	3-1/8*		5,900	3-1/8"		10,000
•	Valve Gets G Plug (1/2)	1-13/16"		3,800	1-13/10*		8,000	1-13/16"		10,000
49	Values(1)	3-N18.		3,000	3-1/16"		\$,000	3110		10,000
3	Pressure Gauge			2,000			5,000			10,000
•	Valves Plug (C)	3-1/8"		3,000	3-1/0"		6,000	3-1/8"		10,000
7	Adhestable Chehe(3)	2"		3,000	2		5,000	*		10,000
•	Adjustable Chale	1.		3,000	10		5,000	2		10,000
1	Line		3"	3,000		3"	8,000		3"	19,000
10	Line		2"	3,000		2"	5,000		3*	10,000
"	Values Plag (32)	3-1/8"		3,800	3-1/6"		8,000	3-100.		10,000
112	Lings		3"	1,000		3.	1,000		7	2,000
13	Lines		3"	1,800		3.	1,000		3	2,000
14	Plante reading compound standalpe processes gauge			3,990			5,000			10,000
15			5,74			5.4Q.			5,42,	
18			4.	1,000		4.	1,000			2,800
177	Values Plug (D(Z)	318"		3,000	3-145*		6,000	3-1/0"		10,000

- (1) Only one required in Class 3M.
- (2) Gate valves only shall be used for Class 18ML
- (3) Remain operated hydroulic chahn required on \$,000 pel and 10,000 pel for drilling.

ECLIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTIONS

- All connections in choirs menticld shall be welded, studded, flanged or Comeron clamp of comparable rating.
 All tlanges shall be API 6B or 6BX and ring gashets shall be API RX or BX. Use only BX for 10 MWP.

- os chall be equipped with tungaten carbide costs and needles, and replacements shall be evalished, o manifold pressure and standpipe pressure gauges shall be evalished at the choice manifold to assist in regulating on. As an alternate with automatic choice, a choice manifold pressure gauge shall be located on the rig liver in con-
- junction with the standpipe pressure gauge.

 8. Une from drilling speel to choke mentiold should be as straight as possible. Lines downstream from chakes shall make turns by large bonds or 90° bonds using buil plugged tees.

 7. Discharge lines from chokes, choke bypass and from top of gas asperator should vent as for as practical from the well.

