Form 3160-3 (August 1999)

OCD-ARTESIA

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			_

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0136
Expires November 30: 20
Expires November 30, 20

5.	Lease Serial-No. NMNM0418220A	A

NIVINIVION 1822UA				
6.	If Indian, Allottee	of III be	2008	

			E DECE	6
1a. Type of Work: ☑ DRILL ☐ REENTER	R-11	1-POTASH	7. If Unit of CA Agreement OD - A 8. Lease Name and Well No	RIESIA &
1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Oth	her 🛭 Sing	le Zone	TODD 260 FEDERAL	21 10/359
Name of Operator Contact: DEVON ENERGY PRODUCTION CO L P	KAREN COTTOM E-Mail: karen.cottom@d	vn.com 61.37	9. API Well No. 92 %	35077
3a. Address 20 NORTH BROADWAY SUITE 1500 OKLAHOMA CITY, OK 73102	3b. Phone No. (included Ph: 405.228.7512) Fx: 405.552.4621	2 ´	10. Field and Pool, or Explo INGLE WELLS-DEL	oratory AWARE
4. Location of Well (Report location clearly and in accorda	mce with any State requi	rements.*)	11. Sec., T., R., M., or Blk.	and Survey or Area
At surface NWNW 660FNL 660FWL			Sec 26 T23S R31E	Mer NMP
At proposed prod. zone NWNW 660FNL 660FWL				
14. Distance in miles and direction from nearest town or post 35 MILES FROM JAL NEW MEXICO	office*	-	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 L	ease	17. Spacing Unit dedicated	to this well
lease line, it. (Also to heatest difg. diff. line, it ally)	720.00		40.00	
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 8350 MD		20. BLM/BIA Bond No. on	file
21. Elevations (Show whether DF, KB, RT, GL, etc. 3427 GL	22. Approximate date 11/15/2003	work will start	23. Estimated duration 45 DAYS	
	24. Atta	achments Continu	ed Controlled Water	Sasta
The following, completed in accordance with the requirements o	of Onshore Oil and Gas C			
 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 		Item 20 above). 5. Operator certification	ons unless covered by an existing	
25. Signature (Electronic Submission)	Name (Printed/Typed) KAREN COTTOM Date 10/1		Date 10/17/2003	
Title ENGINEERING TECHNICIAN				
Approved by (Signature)	Name (Printed/Typed)	/s/ Jesse J. Juer		Date
/s/ Jesse J. Juen	0.00	/s/ Jesse J. Juer	<u>.</u>	AUG 0 2 2006
STATE DIRECTOR	Office	NM STATE O		
Application approval does not warrant or certify the applicant ho operations thereon. Conditions of approval, if any, are attached.	olds legal or equitable titl		ase which would entitle the app PROVAL FOR	olicant to conduct

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Additional Operator Remarks (see next page)

APPROVAL SUBJECT TO Electronic Submission #24366 verified by the BLM For DEVON ENERGY PRODUCTION CO L P, s
GENERAL REQUIREMENTING FMSS for processing by LINDA ASKWIG SPECIAL STIPULATIONS ATTACHED

If earthen pits are used in association with the drilling of this well, an OCD pit permit must be obtained prior to pit construction.

** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED **

DISTRICT I 1625 M. French Dr., Hobbs, NM 88240 DISTRICT II 511 South First, Artesia, NM 88210

State of New Mexico Energy, Minerals and Natural Resources Department

Form C-102 Revised March 17, 1999

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

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410 DISTRICT IV

2040 South Pacheco, Santa Fe, NM 87505

OIL CONSERVATION DIVISION

2040 South Pacheco

Santa Fe, New Mexico 87504-2088

D AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

APl	Number		Pool Code Pool Name 33745 INGLE WELLS: DELAWARE						
Property	Code		Property Name Well Numb TODD "26D" FEDERAL 21						
ogrid No 6137	o.		Operator Name Elevation DEVON ENERGY PRODUCTION CO., L.P. 3427'						
					Surface Loc	ation			
UL or lot No.	Section	Township	Range	Lot kin	Feet from the	North/South line	Feet from the	East/West line	County
D	26	23 S	31 E		660	NORTH	660	WEST	EDDY
	-		Bottom	Hole Loc	ation If Diffe	erent From Sur	face		
UL or lot No.	Section	Township	Range	Lot 1dn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acre	s Joint o	r Infill Co	nsolidation (Code Or	der No.			l	<u> </u>

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

	DARD UNIT HAS BEEN APPROVED BY THE	
3421.8		OPERATOR CERTIFICATION 1 hereby certify the the information
Lat - N32*15'51.2"		contained herein is true and complete to the best of my knowledge and belief.
Long - W103°45'18.0"		Sanardire Ottom
	1	Karen Cottom
1]	Printed Name
		Operations Technician
;		Title
1		Cctober 17, 2003
] ;	
		SURVEYOR CERTIFICATION
		I hereby certify that the well location shown
	1 1	on this plat was plotted from field notes of
	1	actual surveys made by me or under my supervison and that the same is true and
. 1		correct to the best of my belief.
<u> </u>	ļ ļ	OCTOBER 08, 2003
]] !	Date Surveyed
	 	Signature Spal df JONES Professional Surseyor
		1 DORTSIN
	!	M.O. No. 3664
		Certificate No. Gary L. Jones 7977
		ACT SURVEYS

Additional Operator Remarks:

Devon Energy Productin Company, LP proposes to drill to a depth suffient to test the Delaware formation for oil. If productive, 5 1/2" casing will be cemented at TD. If non oroductive the well will be plugged and abandoned in a manner consistent with federal regulations: Detailed information on this proposed operation is provided in the attached documents.

DRILLING PROGRAM

Devon Energy Production Company, LP **Todd 26D Federal #21**

Surface Location: 660' FNL & 660' FWL, Unit D, Sec 26 T23S R31E, Eddy, NM Bottom hole Location: 660' FNL & 660' FWL, Unit D, Sec 26 T23S R31E, Eddy, NM

1. Geologic Name of Surface Formation

a. Permian

2. Estimated tops of geological markers:

a.	Rustler	865'
b.	Top of Salt	1190'
c.	Base of Salt	3955'
d.	Bell Canyon	4520'
e.	Cherry Canyon	5680'
f.	Brushy Canyon	7000'
g.	1 st Bone Spring Lime	8265'
h.	Total Depth	8350'

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

a.	Upper Permian Sands		Fresh Water
b.	Delaware	4520'	Oil
c.	Delaware (Cherry Canyon)	5680'	Oil
d.	Delaware (Brushy Canyon)	7000'	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:

<u>Hole Size</u>	<u>Interval</u>	OD Csg	<u>Weight</u>	<u>Collar</u>	<u>Grade</u>
30"	0' -40'	20"	Na	Na	Conductor
17 ½"	0' - 850'	13 3/8"	4 8#	ST&C	H-40 WITHESS
11"	0' - 4400'	8 5/8"	32#	ST&C	J55 WITNESS
7 7/8"	0' - 8350'	5 ½"	15.5# & 17#	LT&C	J55

5. Cement & Setting Depth:

a.	20"	Conductor	Cement with ready-mix to surface.
b.	13 3/8"	Surface	Cement to surface with 450 sx Poz C (35:65) + 6% Gel + ½# sx Flocele followed by 200 sx Class C + 2% CC

c.	8 5/8"	Intermediate	Cement to surface with 1600 sx Poz C (35:65) + 6% Gel + 10% salt + \(\frac{1}{4}\)# sx Flocele followed by 200 sx Class C + 2% CC + 0.25
			lb/sx Flocele.
d.	5 ½"	Production	Cement with 500 sx Class H + 3% Salt + 0.6% Halad 322 + 10#/sx
		•	Silicalite + 1/4# sx Flocele. Stage Tool @ 5500'. Cement with 200
			sx Poz H $(35:65) + 6\%$ Gel + 5% salt + $\frac{1}{4}$ # sx Flocele followed by
			425 sx 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 above the 8.5/8° casing seat @ 4400°

6. Pressure Control Equipment:

The blowout preventor equipment (BOP) shown 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" 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. Proposed Mud Circulation System

<u>Depth</u>	Mud Wt.	<u>Visc</u>	Fluid Loss	Type System
0'-850'	8.8	34 - 36	NC	Fresh Water
850' - 4400'	10.0	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 equipment will be in operations after drilling out the 13 3/8" casing shoe until the 8 5/8" 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 ½" 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 H2S in this area. If H2S 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 125°.

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.

SURFACE USE PLAN

Devon Energy Production Company, LP

Todd 26D Federal #21

Surface Location: 660' FNL & 660' FWL, Unit D, Sec 26 T23S R31E, Eddy, NM Bottom hole Location: 660' FNL & 660' FWL, Unit D, Sec 26 T23S R31E, Eddy, NM

1. Existing Roads:

- a. The well site and elevation plat for the proposed are reflected on Exhibit 2. The well was staked by John West Engineering Company.
- b. All roads into the location are depicted on Exhibit 3.
- c. Directions to Location: From the junction of Co. Rd. 799 and State Hwy 128, go north on 799 for approx. 2.0 miles to a lease road; thence west on lease road for approx. 0.3 mile; thence north for approx 0.3 mile; thence northwest for approx 0.75 mile; thence south for approx. 0.75 mile to proposed lease road to the Todd 26D Fed 22 thence south 1186 feet to the proposed #22 and the proposed lease road to the #21.

2. Access Road

- a. Exhibit #3 shows the existing lease road. Approximately 1020' of new access road will be required. It 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. Devon Energy Production Company, LP. Operates a production facility on this lease in the southeast quarter of Section 27.
- b. In the event the well is found productive, the probable production equipment will be as follows:
 - i. The well will be connected to the existing facility outlined on Exhibit #5 by boring under the road or a tank battery would be constructed on the pad of another proposed well in this section. The new tank battery would be configured similar to the existing battery.
 - ii. The well will be operated by means of a gas driven prime mover. No power will be required.
- c. The tank battery, all connections and all 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 pits is proposed to be unlined unless subsurface condition 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 b 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, sagebrush, yucca and miscellaneous weeds
- b. The surface and minerals are 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. An archaeological survey will be forward to the Bureau of Land Management.
- 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.

James Blount Operations Engineer Advisor Don Mayberry Superintendent

Devon Energy Production Company, L.P. 20 North Broadway, Suite 1500 Oklahoma City, OK 73102-8260

Devon Energy Production Company, L.P. Post Office Box 250 Artesia, NM 88211-0250

(405) 228-4301 (office)

(505) 748-3371 (office)

(405) 834-9207 (Cellular)

(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.

Operations Technician

Date: October 17, 2003

Attachment to Exhibit #1 NOTES REGARDING BLOWOUT PREVENTERS

Devon Energy Production Company, LP

Todd 26D Federal #21

Surface Location: 660' FNL & 660' FWL, Unit D, Sec 26 T23S R31E, Eddy, NM Bottom hole Location: 660' FNL & 660' FWL, Unit D, Sec 26 T23S R31E, Eddy, NM

- 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. If H2S is present in this area the following will apply.
- 2. 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.
- 3. 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.
- 4. 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
- 5. 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.
- 6. Well Control Equipment
 - a. See Exhibit "E" & "E-1"
- 7. 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.
- 8. 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.
- 9. 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.

UNITED STATES DEPARTMENT OF THE INTERIOR

Bureau of Land Management
Roswell Field Office
2909 West Second Street
Roswell, New Mexico 88201-1287

Statement Accepting Responsibility for Operations

Operator Name:	
Street or Box:	
City, State:	
7in 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.:

NMNM0418220-A

Legal Description of Land:

40 acres 27-T23S-R31E

Formation(s):

Delaware

Bond Coverage:

Nationwide

BLM Bond File No .:

CO-1104

Authorized Signature:

Karen Cottom

Title:

Operations Technician

Date:

10/17/03

SECTION 26, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M., NEW MEXICO. EDDY COUNTY. 3421.8 600' 3429.1 150' NORTH 1 1020 Proposed Leasel Rd. 3429.2 TODD 26D FED. #22 DEVON ENERGY PRODUCTION CO., L.P. TODD "26D" FEDERAL #21 Elev. - 3427' D 150' EAST OFF SET • Lat.-N 32"15'51.2" 3426.3 Long-W 103°45'18.0" 150' SOUTH DO 3727.4 600' 3428.7' 3428.8 Directions to Location: 100 100 200 FEET FROM THE JUNCTION OF CO. RD. 799 AND STATE HWY 128, GO NORTH ON 799 FOR APPROX. 2.0 SCALE: 1" = 100 MILES TO A LEASE ROAD; THENCE WEST ON LEASE ROAD FOR APPROX. 0.3 MILE; THENCE NORTH FOR APPROX. 0.3 MILE; THENCE NORTHWEST FOR APPROX. 0.75 MILE; THENCE SOUTH FOR APPROX. DEVON ENERGY PROD. CO., L.P. 0.75 MILE TO PROPOSED LEASE ROAD TO THE TODD TODD "26D" FED. No. 21 / Well Pad Topo "260" FED. #22; THENCE SOUTH 1186 FEET TO THE THE TODD "26D" FED. No. 21 LOCATED 660' FROM PROPOSED #22 AND THE PROPOSED LEASE ROAD TO THE #21. THE NORTH LINE AND 660' FROM THE WEST LINE OF BASIN SURVEYS P.O. BOX 1786-HOBBS, NEW MEXICO SECTION 26, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO. W.O. Number: 3664 Drawn By: K. GOAD Disk: KJG CD#4 3664A.DWG Sheet Sheets 10-13-2003 Survey Date: 10-08-2003

MINIMUM BLOWOUT PREVENTER REQUIREMENTS

3,000 pel Working Pressure

3 HWP

STACK REQUIREMENTS

			Man	Min
No.	hem		I.D.	Nominal
-	Flowling			
2	Fill up tine			5.
3	Drilling nipple			
4	Annular preventer			
5	Two single or one dual hy operated rame	draulically		
62	Orilling speel with 2° min. 3° min choke line autlets	tulis time and		
6 b	2" min. kill line and 3" mb outlets in ram. (Alternate I			
7	Valve	Gate [] Plug []	3-1/6"	
8	Gate valvo-power opera	led	3-1/8"	
	Line to choke manifold			3.
10	Valves	Gate C Plug C	2-W16.	
11	Check valve		2-1/16"	
12	Casing head			
13	Valve	Gale D Plug D	1-13/16*	
14	Pressure gauge with need	de valve		
15	Kill line to rig mud pump]	5.

ANNUL AR PREVENTER OLIND RAMS) .
PIPE RAMS	
DANILLING SPOOL	
MEAD CASUME ®	0

COMFIGURATION

OPTIONAL							
16 Flanged valve	1-13/16"						

CONTRACTOR'S OPTION TO FURNISH:

- All equipment and connections above bradenhead or casinghead. Working pressure of proventors to be 3,000 psi, minimum.
- Automatic accumulator (80 gallon, minimum) capable of closing SOP in 20 seconds or less and, holding them closed against full roted working pressure.
- 3.BOP controls, to be located near drillers position.
- 4.Kelly equipped with Kelly cock.
- 5.Inside blowout prevventer or its equivalent on derrick floor at all times with proper throads to ill pipe traing used.
- Kelly saver-sub equipped with rubber casing protector at all times.
- 7. Plug type blowout preventer tester.
- 8.Extra set pipe rams to (it drill pipe in use on location at all times.
- 9. Type RX ring gaskets in place of Type R.

MEC TO FURNISH:

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

GENERAL NOTER:

- 1.Deviations from this drawing may be made only with the appress permission of MEC's Drilling Manager.
- 2.All connections, valves, littings, piping, otc., subject to well or pump pressure must be flanged (suitable clemp connections acceptable) and have minimum working pressure equal to rated working pressure of preventors up through chore. Valves must be tult oponing and suitable for high pressure mud service.
- Centrols to be of standard design and each marked, showing opening and ciocing position.
- 4. Chokes will be positioned so as not to hamper or delay changing of cheke beens. Replaceable parts for adjustable choke, other bean sizes, retainers, and choke wronches to be conveniently located for immediate was.
- S.All valves to be equipped with handwheels or handles ready for immediate was.
- 6.Choke lines must be suitably anchored.

- 7. Handwheets and extensions to be connected and ready for use.
- Valves adjacent to drilling apool to be kept open. Use outside valves except for emergency.
- All seemiess stool control piping (2000 pel working pressure) to have flexible joints to avoid stress. Hoses will be permitted.
- Casinghead connections shall not be used except in case of emergency.
- 11.Do not use kill line for routine fill-up operations.

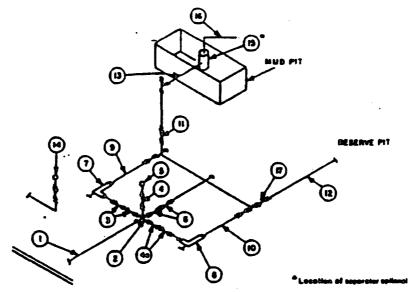
Attachment to Exhibit #1

NOTES REGARDING BLOWOUT PREVENTORS Todd "27D" Federal #4 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 preventor 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 preventor 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.

MINIMUM CHOKE MANIFOLD 3,600, 5,000 and 10,000 PSI Working Prossure

3 MWP - 5 MWP - 10 MWP



BETOND S	٧B	87	auc	TVR	E
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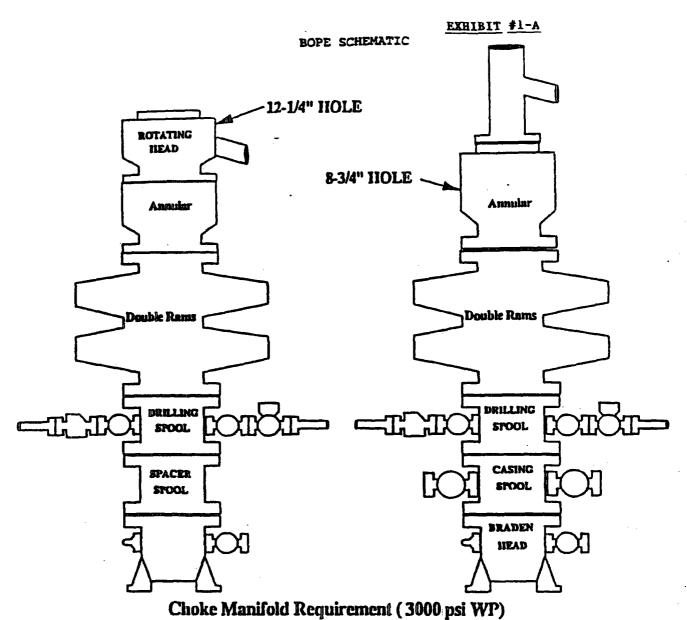
			MINE	MUM RECL	MEMENTS		1			
			3.000 MWP			5,000 MWP			10,000 MWF)
No.		I.D	NOMMAL	RATING	LD.	NOMINAL	RATING	I.D.	NOMINAL	RATING
1	Line from drilling speel		3°	3,000		3.	5,000		3.	10,000
2	Cress 3"x3"x3"x2"			3,000			\$.000			
Ĭ .	Cress 3*x3*x3*x3*						1			10.000
3	Valves(1) Gate [] Plug [](2)	3-1/6"		3,900	3-1/8°		8,000	3-145.		10,000
4	Value Gate D Plug (D(2)	1-12/16*		3,800	1-13/16*		5,000	1-13/16*		10,000
4	Values(1)	5-111E.		3,800	2-1/16°		5,000	318.		10,000
5	Pressure Gauge			3,000			5,000			10,000
•	Valves Gate C Plug (2)	3-1/8*		3,000	3-1/R*		8,000	3-1/6"		10,000
7	Adjustable Cheto(3)	3.		3,000	2"		\$.000	5.	T	10,000
	Adjustable Chake	1.		3,000	1.		\$,000	5.		10,000
	Lino		3.	3,000		2-	5,000		3-	10,000
10	Line		2"	3,000		2.	5,000	1	3°	10,000
11	Values Gate [] Plug [](2)	3-1/8*		3,000	3-1/8"		5,000	3-1/6"		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 standpine pressure gauge			3.000			5,000	•		10,000
15	Gas Soporator		5.E2.			2'x5'	,	1	2'25'	
16	Line		4.	1,000		4*	1,000	1	4*	2.000
17	Valves Gate []	3-112-		3,000	3-1/8°		8,000	3-1/6"		10,000

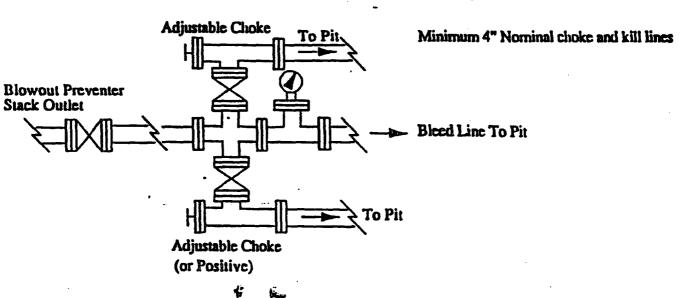
- (1) Only one required in Class 3M.
- (2) Gate velver-only shall be used for Class 10ML
- (3) Floreste appreted hydroulis shake required on 5,000 pel and 10,000 pel for stilling.

EQUIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTIONS

- 1. All connections in choke manifold shall be welded, studded, flanged or Cameron clamp of comparable rating.
- 2. All flanges chell be API 6B or 6BX and ring gaskets shall be API RX or BX. Use only BX for 10 MWP.
- 3. All lines shall be securely anchored.
- 4. Choken shall be equipped with tungsten carbide seats and needles, and replacements shall be available.
- 5. Choke manifold pressure and standpipe preceure gauges shall be available at the choke manifold to assist in regulating choken. 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.

 6. Line from drilling speci to choke manifold should be as straight as possible. Lines downstream from chokes shall make
- turns by large bands or 90° bands using bull plugged toos.
- 7. Discharge lines from chokes, choke bypass and from top of gas separator should vent as far as practical from the well.





CONDITIONS OF APPROVAL - DRILLING

Operator's Name:

Devon Energy Production Company, L.P.

Well Name & No.

Todd 26D Federal #21

Location:

660' FNL, 660' FWL, Section 26, T. 23 S., R. 31 E., Eddy County, New Mexico

Lease: NM-0418220A

DDILLING OPERATIONS REQUIREMENTS.

II. DRILLING OPERATIONS REQUIREMENTS:

- 1. The Bureau of Land Management (BLM) is to be notified at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 for wells in Eddy County in sufficient time for a representative to witness:
 - A. Well spud
 - B. Cementing casing: 13-3/8 inch 8-5/8 inch 5-1/2 inch
 - C. BOP tests
- 2. 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.
- 3. 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.
- 4. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.
- 5. Gamma-Ray/Neutron logs shall be run from the base of the Salado formation to the surface; cable speed not to exceed 30 feet per minute.

II. CASING:

- 1. The <u>13-3/8</u> inch surface casing shall be set at <u>approximately 850 feet in the top of the Rustler anhydrite 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.</u>
- 2. The minimum required fill of cement behind the <u>8-5/8</u> inch intermediate casing is to be sufficient to circulate to the surface.
- 3. The minimum required fill of cement behind the <u>5-1/2</u> inch production casing is <u>to be sufficient to circulate to the surface.</u>
- 4. Whenever a casing string is cemented in the R-111-P Potash Area, cement shall be allowed to stand a minimum of twelve (12) hours under pressure and a total of twenty-four (24) hours before drilling the plug or initiating tests.

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 13-3/8 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) shall be 2000 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.