N.M. Oil Cons. DIV-Dist. 2 1301 W. Grand Avenue Artasia, NM 88210

Form 3160-3 (April 2004)

0140

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

	Expires Match 31,	
5.	Lease Serial No.	
	NM_NM0405444	

BUREAU OF LAND MA	NACEMENT		11172 111720 105-	***		
	APPLICATION FOR PERMIT TO DRILL OR REENTER					
la. Type of work: DRILL REEN	TER R-111-POTA	SH	7 If Unit or CA Agr	eement, Name and No.		
Ib. Type of Well: Oil Well Gas Well Other	Single Zone N	Aultiple Zone	8. Lease Name and Todd 23M Fe			
2. Name of Operator Devon Energy Production Company,	LP		9. API Well No. 30-015-32800			
3a. Address 20 North Broadway Oklahoma City, Oklahoma City 73102-8260	3b. Phone No. (include area coo 405-552-7802	le)	10. Field and Pool, or Ingle Wells (I			
4. Location of Well (Report location clearly and in accordance with At surface SWSW 560' FSL & 660' FWL At proposed prod. zone SWSW 560' FSL & 660' FWL	any State requirements.*)		11. Sec., T. R. M. or E	Blk. and Survey or Area T23S R31E		
14. Distance in miles and direction from nearest town or post office* 35 mile WNW of Jal, New Mexico			12. County or Parish Eddy County	13. State NM		
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 660'	16. No. of acres in lease	17. Spacii	ng Unit dedicated to this	well RECEIVE		
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 2823'	19. Proposed Depth 8800'	20. BLM/	BIA Bond No. on file	JAN 1 1 20		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3421' GL	22. Approximate date work wi	ll start*	23. Estimated duration 45 days	on OCU-APTE		
The following, completed in accordance with the requirements of Onsh	24. Attachments nore Oil and Gas Order No.1, shall		ad Controlled । nis form:	Vator Dacin		
1. Well plat certified by a registered surveyor. 2. A Drilling Plan. 3. A Surface Use Plan (if the location is on National Forest Syster SUPO shall be filed with the appropriate Forest Service Office).	m Lands, the 5. Operator co	ove). ertification site specific inf	·	n existing bond on file (see		
25. Signature	Name (Printed/Typed) Stephanie A. Y	sasaga		Date 11/02/2005		
itle Senior Engineering Technician						
Approved by (Signature) Jesse J. Juen	Name (Printed/Typed)	Jesse J.	Juen	Date JAN 9		
STATE DIRECTOR	Office	NM ST	ATE OFFICE			

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

APPROVAL FOR 1 YEAR

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.

*(Instructions on page 2)

APPROVAL SUBJECT TO GENERAL REQUIREMENTS ASSO SPECIAL STIPULATIONS ATTACHED Witness Surface & Intermediate Casing

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

9.5 Salt

Additional Operator Remarks:

Devon Energy Production Company, LP proposes to drill a Delaware well to 8,800' 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:

Travel west-northwest from Jal, NM approximately 35 miles on State Highway #128 to County Road #798, just into Eddy County from Lea County. Turn north (right) on County #798 and travel approximately 2.25 miles. Then, turn left (west) onto existing lease road. Go approximately 0.25 miles and turn left (south) and go approximately 0.10 mile to Todd 23O Federal #1. Turn right (west) and go approximately 0.60 mile to proposed Todd 23M Federal #22 location.

Access Road:

Approximately 737' of access road will be required. Archeological survey's will be requested for the pad and access road.

H2S:

No H2S is expected to be encountered.

State of New Mexico

DISTRICT I P.O. Hox 1980, Hobbs, NM #8241-1880

Surgy, Minerals and Natural Resources Department

Form C-102 Revised February 10, 1994 Submit to Appropriate District Office

DISTRICT II P.G. Braver DD, Artesia, NM 86211-0719

OIL CONSERVATION DIVISION

State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT III 1000 Rio Brazos Rd., Astec. NM 67410 P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT IV P.B. BOX 2000, SANTA FE, M.M. 87504-2	well location and	ACREAGE DEDICATION PLAT	AMENDED REPORT
API Number	Pool Code	Pool Name	
	33745	INGLE WELLS, DELAWARE	
Property Code	Prop	erty Name	Well Number
	TOD	D 23M	22
OGRID No.		stor Name	Elevation
6137	DEVON ENERGY PRO	DUCTION COMPANY, L.P.	3420'

Surface Location

1	UL or lot No.	Section	Township	Range	Lot idn	Feet from the	North/South line	Feet from the	East/West line	County
١	M ·	23	23-S	31-E		560'	SOUTH	660'	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint or	Infill Co	onsolidation (Code Ore	der No.	<u> </u>			
40	<u> </u>		-	1					

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
1	i i	I hereby certify the the information
		contained herein is true and complete to the best of my knowledge and bolist.
	GEOGRAPHIC COORDINATES WGS 84 LAT. 32'17'03.34'N	Signature Signat
	LONG. 103'45'18.02'W	Engineering Technician
	1 1	11/02/05
1	1	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 supervises, and that the same to true and correct to the best of my belief.
# -# -# -	_	DECEMBER 18, 2002 Date Surveyed E/Dilling Signature & Good, 6000000000000000000000000000000000000
3416.5' 3421.8'		Derry Dellym 12 30/02
3426.2' 3423.2'		Cortification No Rokalio Findson 3239

DRILLING PROGRAM

Attached to Form 3160-3
Devon Energy Corporation (Nevada)
TODD "23M" FEDERAL #22
560' FSL & 660' FWL
Section 23-T23S-R31E, Unit M
Eddy County, New Mexico

1. Geologic Name of Surface Formation

Permian

2. Estimated Tops of Important Geologic Markers

800'
1100'
3900'
4400'
5600'
7000'
8300'
8800'

3. Estimated Depths of Possible Fresh Water-, Oil-, or Gas-Bearing Formations

Upper Permian Sands	above 800'	fresh water
Delaware (Bell Canyon)	4400'	oil
Delaware (Cherry Canyon)	6000'	oil
Delaware (Brushy Canyon)	8000'	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. The Potash and Salt intervals will be protected by setting 8 5/8" casing at 4350' 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

Hole Size	Interval	Casing OD	Weight	Grade	Туре
30 "	0-40'	20"		Conductor	0.30" wall
17 1/2"	0-850'	13 3/8"	48#	H-40	ST&C, new R-3
11"	0-4350'	8 5/8"	32#	J-55	ST&C, new R-3
7 7/8"	0'-TD (8800'±)	5 1/2"	15.5# & 17#	J-55	LT&C, new R-3

Cementing Program

20" Conductor Casing	Cement with Ready-mix to surface.
13 3/8" Surface Casing	Cement to surface using 500 sx Poz (35% Poz, 65% Class C, 6% gel) with 2% CaCl ₂ and 1/4 lb/sx Cellophane flakes + 200 sx Class C with 2% CaCl ₂ and 1/4 lb/sx Cellophane flakes.
8 5/8" Intermediate Casing	Cement to surface using 1600 sx Poz (35% Poz, 65% Class C, 6% gel, 15% salt) with 1/4 lb/sx Cellophane flakes + 200 sx Class C with 2% CaCl ₂ , 1/4 lb/sx Cellophane flakes
5 1/2" Production Casing	Cement 1st stage with 525 sx Silica Lite (Class H) with 3% salt, 0.6% FL additive, 1/4 lb/sx Cellophane flakes
with DV tool at ±5500'	Cement 2nd stage with 225 sx Poz (35% Poz, 65% Class H, 6% gel) with 1/4 lb/sx Cellophane flakes + 400 sx Class H with 4% gel, 5% salt, 1/4 lb/sx Cellophane flakes.

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 4350'.

5. Minimum Specifications for Pressure Control

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of a (3M system) double ram type (2000 psi WP) preventer and a bag-type (Hydril) preventer (2000 psi WP). Both units will be hydraulically operated and the ram type preventer will be equipped with blind rams on top and 4 1/2" 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 function 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 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.

6. 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.

		Weight	Viscosity	Water Loss
Depth	Туре	(ppg)	(1/sec)	(cc/30 mins)
0-850'	Fresh water	8.8	34-36	No control
850-4350'	Brine water	10.0	28	No control
4350'-TD	Fresh water polymer	8.8	32-36	10-20

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.
- C. Hydrogen Sulfide detection equipment (Compliance Package) will be in operation when drilling out the 13 3/8" casing shoe until the 5 1/2" casing is cemented.

8. Logging, Testing and Coring Program

- A. Drill stem tests will be based on geological sample shows.
- B. The open hole wireline logging program will be as follows.

TD to intermediate casing: Induction / Gamma Ray / Neutron / Density Log.

TD to surface: Neutron with Gamma Ray.

- C. Rotary sidewall cores are planned.
- D. 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.

9. Abnormal Pressures, Temperatures and Potential Hazards

No abnormal pressures or temperatures are foreseen. The anticipated bottom hole temperature at total depth is approximately 130 degrees and maximum bottom hole pressure is approximately 2900 psig. No hydrogen sulfide gas has been reported or is known to exist at these depths in this area. No major lost circulation intervals have been encountered in adjacent wells.

10. Anticipated Starting Date and Duration of Operations

A Cultural Resources Examination will be completed by Don Clifton Archaeological Consultant, and submitted to the BLM. Road and location preparation will not be undertaken until approval has been received from the BLM. If approved, the anticipated spud date for the well will be in the third quarter, 1998. The drilling operation should require approximately 21 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.

SURFACE USE AND OPERATING PLAN

Attachment to Form 3160-3
Devon Energy Corporation (Nevada)
TODD "23M" FEDERAL #22
560' FSL & 660' FWL
Section 23-T23S-R31E, Unit M
Eddy County, New Mexico

1. Existing Roads

- A. The well site and elevation plat for the proposed TODD "23M" FEDERAL #22 are reflected on Exhibit #2. This well was staked by Topographic Land Surveyors of Midland, Texas.
- B. All roads into the location are depicted in Exhibit #3. New construction from the County road will be used to access the location. New construction will conform to the specifications outlined in item 2 below.
- C. Directions to location: Travel west-northwest from Jal, NM approximately 35 miles on State Highway #128 to County Road #798, just into Eddy County from Lea County. Turn north (right) on County Road #798 and travel approximately 2.25 miles. Then, turn left (west) onto existing lease road. Go approximately 0.25 mile and turn left (south) and go approximately 0.10 mile to Todd "230" Federal #1. Turn right (west) and go approximately 0.60 mile to proposed TODD "23M" FEDERAL #22 location.

2. Proposed Access Road

Access to this location will require the construction of approximately 737' of new access road from the County road. All new road construction would adhere to the following specifications:

- A. The maximum width of the road will be fifteen (15) feet.
- B. It will be crowned and made of 6 inches 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.
- D. The average grade will be approximately 1%.

TODD "23M" FEDERAL #22 Surface Use and Operating Plan Page 2

- E. No cattle guards, grates or fence cuts will be required.
- F. No turnouts are planned.

3. <u>Location of Existing Wells</u>

Exhibit #4 shows all existing wells within a one-mile radius of the proposed TODD "23M" FEDERAL #22.

4. Location of Existing and/or Proposed Facilities

- A. In the event the well is found productive, a tank battery would be constructed.
 - 1. Exhibit #5 shows the battery facility to be utilized by the TODD "23M" FEDERAL #22.
 - 2. The tank battery, all connections and all lines will adhere to API standards.
 - 3. The well will be operated by means of an electric prime mover. Electric power poles will be set along side of the access road.
- B. If the well is productive, rehabilitation plans are as follows.
 - 1. The reserve pit will be back-filled after the contents of the pit are dry (within 120 days after completion, weather permitting).
 - 2. Caliche from unused portions of the drill pad will be removed. The original topsoil from the well site will be returned to the location. The drill site will then be contoured to the original natural state.

TODD "23M" FEDERAL #22 Surface Use and Operating Plan Page 3

5. Location and Type of Water Supply

The TODD "23M" FEDERAL #22 will be drilled using a combination of brine and fresh water mud systems (outlined in Drilling Program). The water will be obtained from commercial water stations in the area and hauled to location by transport truck using the existing and proposed roads shown in Exhibit #3. Additionally, produced salt water from lease gathering tanks may be utilized. No water well will be drilled on the location.

6. Source of Construction Materials

All caliche utilized for the drilling pad and proposed access road will be obtained from an existing BLM approved pit or from prevailing deposits found under the location. All roads will be constructed of 6" rolled and compacted caliche.

7. Methods of Handling Water Disposal

- A. Drill cuttings will be disposed into the reserve pit.
- B. Drilling fluids will be contained in steel mud tanks. The reserve pit will contain excess drilling fluid or fluid from the well during drilling, cementing and completion operations. The reserve pit will be an earthen pit roughly 125' x 125' x 6', or smaller, in size.
- C. The reserve pit will be fenced on three sides throughout drilling operations and will be totally isolated upon removal of the rotary rig. The pit will be lined using a 5-7 mil plastic to minimize loss of drilling fluids and saturation of the ground with brine water used to drill from 850' to 4350'.
- D. Water produced from the well during completion operations will be disposed into a steel tank or reserve pit, if volumes prove excessive. After placing the well on production through the production facilities, all water will be collected in tanks. Produced oil will be separated into steel stock tanks until sold.
- E. A portable chemical toilet will be available on the location for human waste during the drilling operations.
- F. Garbage, trash and waste paper produced during drilling operations will be collected in a contained trailer and disposed at an approved landfill. All waste

material will be contained to prevent scattering by the wind. All water, fluids, salt or other chemicals will be disposed into the reserve pit. No toxic waste or hazardous chemicals will be generated by this operation.

G. All waste material will be removed within 30 days after the well is either completed or abandoned. The reserve pit will be completely fenced until it has dried. At the point the reserve pit is found sufficiently dry, it will be backfilled and reclaimed as per BLM specifications. Only the portion of the drilling pad used by the production equipment (pumping unit and tank battery) will remain in use. If the well is deemed non-commercial, only a dry hole marker will remain.

8. Ancillary Facilities

No campsite or other facilities will be constructed as a result of this well.

9. Well Site Layout

- A. The drill pad is shown on Exhibit #6. Approximate dimensions of the pad, pits and general location of the rig equipment are displayed. Top soil will be stored adjacent to the pad until reclamation efforts are undertaken. Only modest cuts will be necessary to build the pad which will be covered with 6" of compacted caliche.
- B. No permanent living facilities are planned, but temporary trailers for the tool pusher, drilling foreman and mud logger may be on location throughout drilling operations.
- C. The reserve pit will be lined using plastic sheeting of 5-7 mil thickness.

10. Plans for Restoration of Surface

A. After concluding the drilling and/or completion operations, if the well is found non-commercial, the caliche will be removed from the pad and transported to the original caliche pit or used for other drilling locations. The road will be reclaimed as directed by the BLM. The reserve pit area will be broken out and leveled after drying to a condition where these efforts are feasible. The original top soil will again be returned to the pad and contoured, as close as possible, to the original topography.

- B. The pit lining will be buried or hauled away in order to return the location and road to their pristine nature. All pits will be filled and location leveled, weather permitting, within 120 days after abandonment.
- C. The location and road will be rehabilitated as recommended by the BLM.
- D. The reserve pit will be fenced on three sides throughout drilling operations. After the rotary rig is removed, the reserve pit will be fenced on the fourth side to preclude endangering wildlife. The fencing will be in place until the pit is reclaimed.
- E. If the well is deemed commercially productive, the reserve pit will be restored as described in 10 (A) within 120 days subsequent to the completion date. Caliche from areas of the pad site not required for operations will be reclaimed. The original top soil will be returned to the area of the drill pad not necessary to operate the well. These unused areas of the drill pad will be contoured, as close as possible, to match the original topography.

11. Surface Ownership

The well site is owned by the Bureau of Land Management.

Road routes have been approved and the surface location will be restored as directed by the BLM.

12. Other Information

- A. The area surrounding the well site is grassland. The top soil is very sandy in nature. The vegetation is moderately sparse with native prairie grass, sagebrush, yucca and miscellaneous weeds.
- B. There is no permanent or live water in the general proximity of the location.
- C. A Cultural Resources Examination will be completed by Don Clifton Archaeological Consultant, and forwarded to the BLM office in Carlsbad, New Mexico.

TODD "23M" FEDERAL #22 Surface Use and Operating Plan Page 6

13. Lessee's and Operator's Representative

The Devon Energy Corporation (Nevada) representatives responsible for ensuring compliance of the surface use plan are:

Walter Frank
District Engineer

Daryl Lowder Superintendent

DEVON ENERGY CORPORATION 20 North Broadway, Suite 1500 Oklahoma City, OK 73102 DEVON ENERGY CORPORATION Post Office Box 250 Artesia, NM 88211-0250

(405) 552-4595 (office) (405) 364-3504 (home)

(505) 748-3371 (office) (505) 677-2103 (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 Corporation (Nevada) and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Cianad.

Senior Engineering Technician

D-4-.

3.000 pel Working Pressure

3 MWP

STACK REQUIREMENTS

	T		Man	Min
No.	ttem		I.D.	Nominal
1	Flowline			
2	Fill up line			2"
3	Orilling nipple			
4	Annular preventer			
5	Two single or one dual h operated rams	ydraulically		
6a	Oriting spool with 2" mir 3" min choke line outlets			
6 b	2" min. kill line and 3" m outlets in ram. (Alternate			
7	Valve	Gale □ Plug □	3-1/8"	
8	Gate valve—power oper	ated	3-1/8"	
9	Line to choke manifold			3-
10	Vaives	Gate C Plug C	2-1/16"	
11	Check valve		2-1/16"	
12	Casing head			
13	Valve	Gate □ Plug □	1-13/16*	
14	Pressure gauge with nee	idle valve		
15	Kill line to rig mud pump			2-

(P
·. (3
	ANNULAR]•
	BL IND RAMS	
.	PIPE RAMS	
	ORILLING SPOOL	
ø	CASING NEAD	9 9 6
	(6) CASING	@ 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 preventers to be 3,000 psi, minimum.
- Automatic accumulator (80 gallon, minimum) capable of closing BOP in 30 seconds or less and, holding them closed against full rated working pressure.
- BOP controls, to be located near drillers position.
- 4. Kelly equipped with Kelly cock.
- Inside blowout prevventer or its equivalent on derrick floor at all times with proper threads to fit pipe being used.
- 8.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:

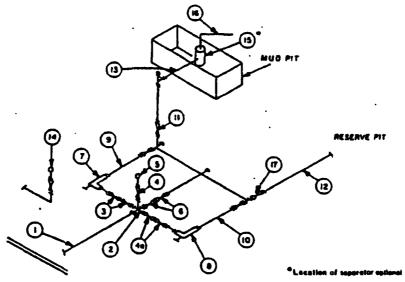
- Bradenhead or casinghead and side valves.
- 2.Wear bushing, if required.

GENERAL NOTES:

- Deviations from this drawing may be made only with the express permission of MEC's Drilling Manager.
- 2. All connections, valves, littings, 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 chore. Valves must be full opening and suitable for high pressure mud service.
- 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 beens. Replaceable parts for adjustable choke, other been sizes, retainers, and choke wrenches to be conveniently located for immediate use.
- All valves to be equipped with handwheels or handles ready for immediate use.
- 6. Chake lines must be suitably anchored.

- Handwheels and extensions to be connected and ready for use.
- Valves adjacent to drilling spool to be kept open. Use outside valves except for emergency.
- 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.

3 MWP - 5 MWP - 10 MWP



BEYOND SUBSTRUCTURE

MINIMUM REQUIREMENTS										
		3.000 MWP 5.000 MWP						10,000 MWP		
No.		1.0.	NOMINAL	RATING	1.0.	NOMINAL	RATING	1.0.	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 □ Plug □(2)	3-1/6"		3,000	3-1/6"		5,000	3-1/8"		10,000
4	Valve Gate □ Plug □(2)	1-13/16*		3,000	1-13/16"		5,000	1-13/16"		19,000
48	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 C Ptug ()(2)	3-1/6*		3.000	3-1/8-		\$,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	tine		3.	3,000		3.	5,000		3-	10.000
10	Line		2"	3,000		5.	5,000		3-	10,000
11	Valves Gate [] Plug [](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		2.	1,000		3-	1,000	· · · ·	3"	2,000
14	Remote reading compound standpips 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 Plug ()(2)	3-1/8"		3,000	3-1/8"		5,000	3-1/0"		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

- 1. All connections in choke manifold shall be welded, studded, flanged or Cameron clamp of comparable rating.
- 2. All flanges shall be API 68 or 68X and ring gaskets shall be API RX or 8X. Use only 8X for 10 MWP.
- 3. All lines shall be securely anchored.
- 4. Chokes shall be equipped with tungsten carbide seats and needles, and replacements shall be available.
- 5. Choke manifold pressure and standpipe pressure gauges shell be available at the choke manifold to assist in regulating chokes. As an atternate with automatic chokes, a choke manifold pressure gauge shell 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 buil plugged tees.
- 7. Discharge lines from chokes, choke bypass and from top of gas separator should vent as far as practical from the well.

Exhibit #1A NOTES REGARDING BLOWOUT PREVENTERS

Devon Energy Corporation (Nevada)

TODD "23M" FEDERAL #22

560' FSL & 660' FWL

Section 23-T23S-R31E, Unit M

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.

DEVON ENERGY CORPORATION

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

A. Hydrogen Sulfide Training

All rig crews and company personnel will receive training from a qualified instructor in the following areas prior to penetrating any hydrogen sulfide bearing formations during drilling operations:

- 1. The hazards and characteristics of hydrogen sulfide (H2S).
- 2. The proper use and maintenance of the H2S safety equipment and of personal protective equipment to be utilized at the location such as H2S detection monitors, alarms and warning systems, and breathing equipment. Briefing areas and evacuation procedures will also be discussed and established.
- 3. Proper rescue techniques and procedures will be discussed and established.

In addition to the above, supervisory personnel will be trained in the prevention of oil and gas well blowouts in accordance with Minerals Management Service Standards Subpart - 0 - 250 - 212.

Prior to penetrating any known H2S bearing formation, H2S training will be required at the rig sight for all rig crews and company personnel that have not previously received such training. This instruction will be provided by a qualified instructor with each individual being required to pass a 20 question test regarding H2S safety procedures. All contract personnel employed on an unscheduled basis will be required to have received appropriate H2S training.

This Hydrogen Sulfide Drilling And Operations Plan shall be available at the wellsite during drilling operations.

B. H2S Safety Equipment And Systems

All H2S safety equipment and systems will be installed, tested, and operational when drilling operations reach a depth approximately 500' above any known or probable H2S bearing formation. The safety systems to be utilized during drilling operations are as follows:

Hydrogen Sulfide Drilling Operations Plan

1. Well Control Equipment

- (a) Double ram BOP with a properly sized closing unit and pipe rams to accommodate all pipe sizes in use.
- (b) A choke manifold with a minimum of one remote choke.

2. H2S Detection And Monitoring Equipment

- (a) Three (3) H2S detection monitors will be placed in service at the location. One monitor will be placed near the bell nipple on the rig floor; one will be placed at the rig substructure; and, one will be at the working mud pits or shale shaker. This monitoring system will have warning lights and audible alarms that will alert personnel when H2S levels reach 10 ppm.
- (b) One (1) Sensidyne Pump with the appropriate detection tubes will also be available to perform spot checks for H2S concentrations in any remote or isolated areas.
- 3. Protective Equipment For Essential Personnel

Protective equipment will consist of the following:

- (a) Four (4) five minute escape packs located at strategic points around the rig.
- (b) Two (2) thirty minute rescue packs to be located at the designated briefing areas.

4. Visual Warning System

Visual warning system will consist of the following:

- (a) Two wind direction indicators.
- (b) One condition / warning sign which will be posted on the road providing direct access to the location. The sign will contain lettering of sufficient size to be readable at a reasonable distance from the immediate location. The sign will inform the public that a hydrogen sulfide gas environment could be encountered at the location.

Hydrogen Sulfide Drilling Operations Plan

5. Mud Program

The mud program has been designed to minimize the volume of H2S circulated to surface. Proper mud weight and safe drilling practices (for example, keeping the hole filled during trips) will minimize hazards when drilling in H2S bearing formations.

6. Metallurgy

All drill strings, casings, tubing, wellhead, blowout preventers, drilling spools, kill lines, choke manifold and lines and valves shall be suitable for H2S service.

7. Communication

Cellular telephone communication will be available in company vehicles.

C. Diagram of Drilling Location

Attached is a diagram representing a typical location layout as well as the location of H2S monitors, briefing areas and wind direction indicators.

CONDITIONS OF APPROVAL - DRILLING

Operator's Name:

Devon Energy Production Company

Well Name & No.

Todd '23M' Federal # 22

Location:

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

Lease:

NM-0405444

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.</u> 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>8-5/8</u> inch intermediate casing is <u>to be sufficient to circulate to the surface</u>.
- 3. The minimum required fill of cement behind the <u>5-1/2</u> inch production casing is <u>to be sufficient to reach approximately 500 feet above the base of the 8-5/8 inch casing shoe.</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 3000 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.