Form 3160-3 (December 1990)

UNITED STATES DEPARTMENT OF THE INTERIOR

SUBMIT IN
(See other instructions on reverse side)

Form approved.

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AF	PLICA	ATION	FOR PERM	IIT TO DRILL (IR DEE	PEN	. ∀isi o	NM-NM	0405444 N, allottee or tribe	NAME
la TYPE OF WORK:		RILL	\boxtimes	DEEPEN	311 5.	. 36		N/A		
b. TYPE OF WELL:				_	Artesi	a, NM 📑	[⊕] 10-2834	7.UNIT AG	REEMENT NAME	
OIL XELL.	WELL [7	Other	SINGLE ZONE		MULTIPLE ZONE	j	N/A	R LEASE NAME, WELL N	
2 NAME OF OPERAT									5L" Federal #12	J.
			ERGY CORPO	RATION (NEVADA	<u>4)</u>			9.API WEI	L NO.	
3. ADDRESS AND TE			DWAY, SUITE	1500, OKC, OK 73	3102 (405	0 235-3611		30-015		
4. LOCATION OF WEI	L (Repor	t locatio	on clearly and in ac	cordance with any Sta	te requirem	ents)*			AND POOL, OR WILDCAT	
At surface 1980'	FSL & 60	50' FWI	L, Unit L, Section	on 15-T23S-R31E, Ed					Vells (Delaware) R.,M.,OR BLOCK AND SU	RVEY OR AREA
At top proposed prod.	zone (SAME)		[C	}.]]],	-P-P0T/		Unit I		
14.DISTANCE IN MILES AND			NEADEST TOWN OR		<i>u</i> കൊലു	1 G A 11	19900		15-T23S-R31E TY OR PARISH	13. STATE
35 miles WNW of Jal			MEAREST TOWN OR	1031 OFFICE				Eddy	II OR FARISH	New Mexico
		AICU			1.07	REC	EIVED	Eddy	Carro on a como	
15.DISTANCE FROM PROPO LOCATION TO NEARES:				16.NO. OF ACRES IN LI	CASE	Man			17.NO. OF ACRES AS TO THIS WELL	SSIGNED
PROPERTY OR LEASE L (Also to nearest drig, unit lin			660'	1320		NOV	2 4 2003		40	
(Also to nearest drig unit lin 18.DISTANCE FROM PROPO TO NEAREST WELL, DR	SED LOCA	TION* OMPLETE	D.	19.PROPOSED DEPTH		OCD-A	ARTESIA		20.ROTARY OR CAL	BLE TOOLS*
OR APPLIED FOR, ON T			N/A	8800'	-ABI				Rotary	
21.ELEVATIONS (Show wheth GL 3404'	er DF, RT,	GR, etc.)				SBAD	5.6		PPROX. DATE WORK WIL	L START
GL 3404				CONTH	OLLEL) WATER	BASIN	sec	ond quarter, 1999	
23. SIZE OF HOLE	GR	ADE. SIZ	E OF CASING	PROPOSED CASING WEIGHT PER FO			OGRAM TTING DEPTH		QUANTITY OF	CEMENT
17 1/2"	13 3/8"		-	48#		850'	MATAI	:66	500 sx 35/65 Poz + 2	<u> </u>
11"	8 5/8"	J-55		32#		4350'	500 IN		1600 sx 35/65 Poz +	
7 7/8"	5 1/2"	J-55	·····	15.5# & 17#		8800'		200	1st Stage 525 sx Sili	ca Lite Class"H"
	•		•			DV Tool +/-	5500'	•	2nd Stage 225 sx 35 400 sx Class "H"	3/65 Poz +
Devon Energy propose wellbore will be plugg and attachments. Drilling Program, Sur Exhibits #1 = Blowor Exhibits #2 = Location Exhibits #3 = Road M Exhibits #4 = Wells W Exhibits #5 = Produce Exhibit #6 = Rotary F Exhibit #7 = Casing I H2S Operating Plan Archaeological Surve IN ABOVE SPACE DE proposal is to drill or deany.	ged and a rface Use at Preven and Ele fap and T //ithin 1 M tion Facil Rig Layou Design EY SCRIBE	bandon and Or tion Equivation F Topo Ma file Rad lities Pla ut	ed as per Federal perating Plan uipment Plat ap lius at	regulations. Program	The undand restr portions Lease #: Legal De Bond Co BLM Bo pen, give d	ersigned accerictions conce thereof, as de NM-NM040: escription: Se verage: Nationd #: CO-110 ata on present measured and	pts all applical rining operations of the section 15-T238 onwide GEN	ble terms ons condu ROVAL ERAL CIAL S one and pre	conditions, stipulaticted on the leased la L SUBJECT TO REQUIREMEN	ving exhibits ions · ind or TS AND AND
SIGNED (This space for Fede	nda	ce∫(2. Draha	<u>w</u> TITLE		R. Graham ing Technicia	un DA'	ΓΕ <u>Jun</u>	<u>15, 1998</u>	·
	01 00	VIII				4 DDD 037 4	I DATE			
PERMIT NO.					*4- 4- 4		L DATE			
Application approval does thereon.	eut Warfan	n or cert	uy unat the applicant	noms legal or equitable t	rue to those	rights in the subj	ject lease which w	ould entitle	e tne applicant to conduc	r operations
CONDITIONS OF APP	ROVAL,	, IF AN	Y:				74 A			
APPROVED BY	CAL-	re	NF Go	F TITLE D.	5 D M	WCLASS	1 CAN	DA'	TE 11-19-	o 3

DRILLING PROGRAM

Attached to Form 3160-3
Devon Energy Corporation (Nevada)
TODD "15L" FEDERAL #12
1980' FSL & 660' FWL
Section 15-T23S-R31E, Unit L
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. <u>Casing Program</u>

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 $450^{\circ}\pm$ above the 8.5/8" casing seat at 4350° .

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

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

- 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 was completed by New Mexico Archaeological Services, 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 second quarter, 1999. 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 "15L" FEDERAL #12
1980' FSL & 660' FWL
Section 15-T23S-R31E, Unit L
Eddy County, New Mexico

1. Existing Roads

- A. The well site and elevation plat for the proposed TODD "15L" FEDERAL #12 are reflected on Exhibit #2. This well was staked by John West Engineering and Land Surveyors of Hobbs, New Mexico.
- 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 3.2 miles. Then, turn left (west) onto lease road. Go approximately 1.3 miles, turn right (north) and go approximately 0.25 mile and turn left (west) and go approximately 0.50 mile to proposed TODD "15L" FEDERAL #12 location.

2. Proposed Access Road

Access to this location will require the construction of approximately 10,660' 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 "15L" FEDERAL #12 Surface Use and Operating Plan Page 2

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

3. Location of Existing Wells

Exhibit #4 shows all existing wells within a one-mile radius of the proposed TODD "15L" FEDERAL #12.

4. <u>Location of Existing and/or Proposed Facilities</u>

- 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 "15L" FEDERAL #12.
 - 2. The tank battery, all connections and all lines will adhere to API standards.
 - 3. The well will be operated by means of a gas driven prime mover. No power will be required.
- 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.

5. <u>Location and Type of Water Supply</u>

The TODD "15L" FEDERAL #12 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 was completed by New Mexico Archaeological Services, and forwarded to the BLM office in Carlsbad, New Mexico.

TODD "15L" FEDERAL #12 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.

Signed:

Walter M. Frank

District Engineer

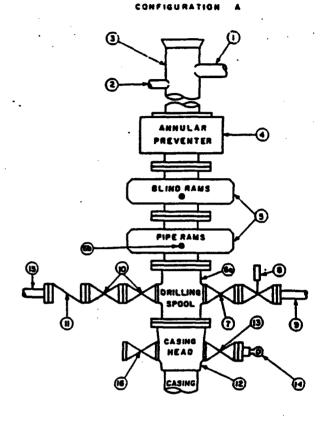
Date:

3,000 psi Working Pressure

3 MWP

STACK REQUIREMENTS

No.	Item		Min. I.D.	Min. Nominal
	Flowline			
2	Fill up hne			2-
3	Orilling nipple			
4	Annular preventer			
5	Two single or one dual hy operated rams	draulically		
6a	Drilling spool with 2" min. 3" min choke line outlets	, kill line and		
6b	2" min. kill line and 3" mi outlets in ram. (Alternate			
7	Valve	Gate □ Plug □	3-1/8*	
8	Gate valve-power opera	ted	3-1/8"	
9	Line to choke manifold			3*
10	Vaives	Gate 🗆 Plug 🗔	2-1/16*	
11	Check valve		2-1/16"	
12	Casing head			
13	Valve	Gate Plug	1-13/16*	
14	Pressure gauge with need	ile valve		
15	Kill line to rig mud pump r	nanifold		2.



	OPTIC)NAL	
16 F	langed 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.
- 2.Automatic accumulator (80 gailon, 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.
- S.Inside blowout prevventer 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:

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

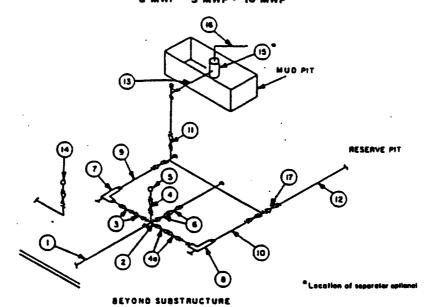
GENERAL NOTES:

- Deviations from this drawing may be made only with the express permission of MEC's Drilling Manager.
- 2.All connections, valves, 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 chore. Valves must be full opening and suitable for high pressure mud service.
- 3. Controls to be of standard design and each mericed, showing opening and closing position.
- 4. Chokes will be positioned so as not to hamper or delay changing of choke beans. Replaceable parts for edjustable choke, other bean sizes, retainers, and choke wrenches to be conveniently located for immediate use.
- S.All valves to be equipped with handwheels or handles ready for immediate use,
- 6. Choke lines must be suitably anchored.

- Handwheels and extensions to be connected and ready for use.
- Valves adjacent to driffing 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.

- Casinghead connections shall not be used except in case of emergency.
- 11.Do not use kill line for routine fill-up operations.

. X



	······································		MINII	MUM REQU	REMENT	3				
			3,000 MWP			5,000 MWP			10,000 MWF	,
No.		I.D.	NOMINAL	RATING	1.0.	NOMINAL	RATING	1.D.	NOMINAL	RATING
1	Line from drilling spool		3-	3,000	L	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)	3-1/8"		3,000	3-1/8"		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*		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 □ (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		5-	3,000		2-	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		3-	1,000		3.	1,000		3-	2,000
14	Remote reading compound standpipe pressure gauge			3.000			5,000	٠		10,000
15	Gas Separator		2'x5'			2'x5'			2'x5'	
16	Une		4°	1,000		4"	1,000		4"	2,000
17	Valves Gate □ Plug □(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

- 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 BX. Use only BX 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.
- 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.
- 6. 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 "15L" FEDERAL #12
1980' FSL & 660' FWL
Section 15-T23S-R31E, Unit L
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.

DISTRICT III

100

Form C-102 Revised 1-1-89

OIL CONSERVATION DIVISION

DISTRICT | P.O. Box 1980, Hobbs, NM 88240

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

EXHIBIT# 2

DISTRICT II P.O. Drawer DD, Artesia, NM 88210

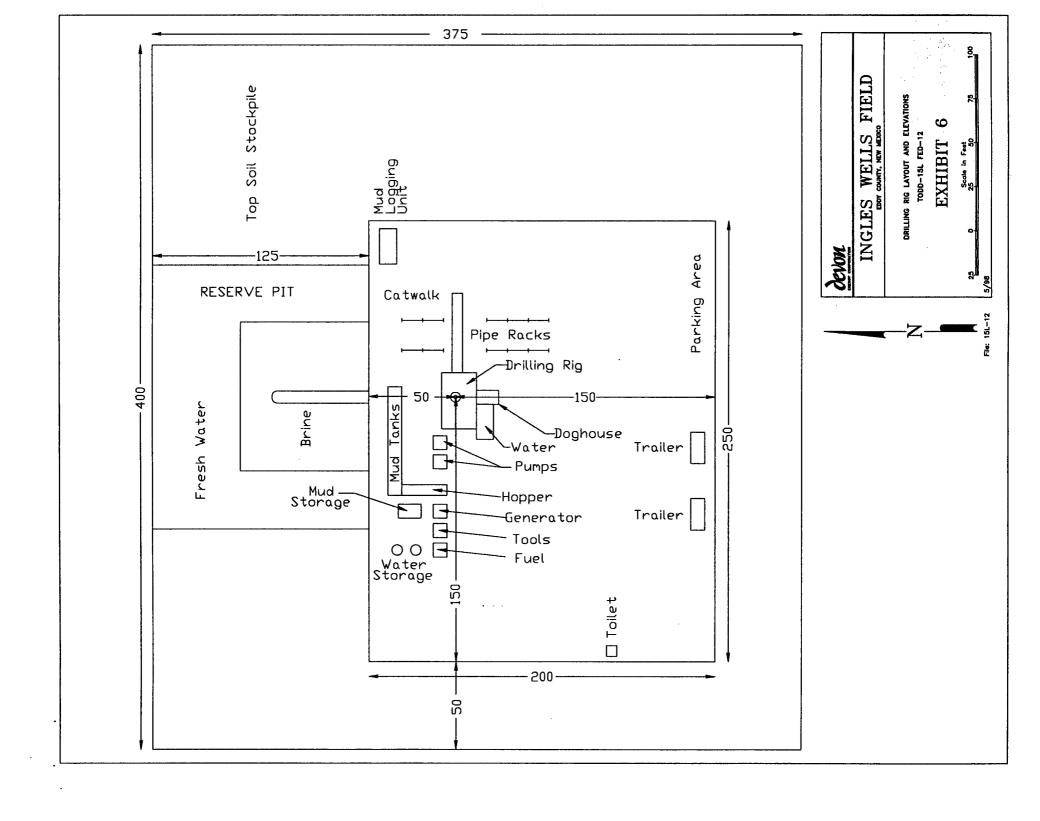
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator			Lease	T000 := :			Well No.
#6137	DEVON ENERG	Y CORP. (NEVADA)		TODD 15-L	FEDERAL		12
Unit Letter	Section _	Township	Range	74 =		County	5004
L Actual Postage Los	15	23_SOUTH	<u> </u>	31 EAST	NMPM	L	EDDY
Actual Footage Loc 1980 feet	501	JTH was and	660		#	the WES	T 11-0
Ground Level Elev	- 17 cm		Pool		feet from	-	line Dedicated Acreage:
3403.8'		33745	Ing	gle Wełls	(Delaware)	40 Acres
1. Outline the ac	creage dedicated to	the subject well by colored p	encil or hach	ure marks on ti	he plat below.		
2. If more than	one lease is dedica	ated to the well, outline each	and identify	the ownership	thereof (both	as to working	g interest and royalty).
	one lease of differ orce-pooling, etc.?	ent ownership is dedicated to	the well, ha	we the interest	of all owners	been consol	idated by communitization,
Yes Yes	☐ No	If answer is "yes" type o	f consolidati	on			
if answer is "no this form necess		d tract descriptions which b	ave actually	been consolidat	ed. (Use reve	rse side of	
No allowable w	rill be assigned to	the well unit all interest					nitization, forced-pooling.
						OPERAT	TOR CERTIFICATION
	Ì			I		I her	eby certify the the information
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	i			İ		oust of my kn	owledge and belief.
	i					Signature,	0 11 1
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	i			i	[Devon	Energy Corporation
	i			i		Date	9 1000
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				!	-	I hereby certi	ify that the well location shown
K//]		1		_	was plotted from field notes of s made by me or under my
3405.0	3403.9			<u> </u>			and that the same is true and
660				ļ		correct to i	the best of my knowledge and
7400	2 / 1						
3400.4	3405.87			1		Date Surve	yed MAY 18, 1993
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DEVON ENERGY

Operator: DEVON ENERGY CORP | Well Name: TODD FEDERAL AREA

Project ID: | Location: T235-R31E

Design Factors: Design Parameters: : 1.125 Must weight (9.00 ppg) : 0.468 mi/ft Colleges Shut in surface pressure : 765 : 1.00 Burnt pai/ft Internal gradient (burst) : 0.100 : 1.80 (J) 8 Round Armular gradient (burst) : 0.000 pai/ft Buttress : 1.60 (J) Tensile load is determined using air weight Body Yield : 1.50 (B) Service rating is "Sweet" C Lbs. Overpull.

	Length (feet)	Size (in.)	Weight (lb/ft)		e Joi	nt	Depth (feet)	Drift (in.)	Cost .
1	850	13-3/8	48.00	丑-4	0 STE	c	850	12.559	
	Load (psi)	Collapse Strgth (psi)	S.F.	Burst Load (psi)	Min Int Stryth (psi)	Yield S.F.			S.F.
1	397	740	1.864	850	1730	2.04	40.8	322	7.89 J

Prepared by : CHUCK HORSMAN, Oklahoma City, OK

Date : 06-04-1993

Remarks

Ninimum segment length for the 850 foot well is 800 feet.

Surface string:

Next string will set at 4,400 ft. with 10.00 ppg std (pore pressure of 2,286 psi.) The frac gradient of 1.000 at the casing seat results in an injection pressure of 850 psi. Effective BMP (for burst) is 850 psi.

NOTE: The design factors used in this casing string design are as shown above. As a general guideline, Lone Star Steel recommends using minimum design factors of 1.125 - Collapse (with evacuated casing), 1.0 - Burst, 1.8 - 8 Round Tension, 1.6 - Buttress Tension, and 1.5 - Body Yield. Collapse strength under axial tension was calculated based on the Westcott, Dunlop and Kamler curve. Engineering responsibility for use of this design will be that of the purchaser. Losts for this design are based on a 1990 pricing model. (Version 1.06)

DEVON EMERGY

Operator: DEVON ENERGY CORP Well Name: FEDERAL AREA ממסד Project ID: Location: T23S-R31E

Design Parameters: Design Factors: Nud weight (9.80 ppg) : 0.509 psi/ft Col Lepse : 1.125 Stat in surface pressure : 3487 psi Burst : 1.00 Internal gradient (burst) : 0.100 psi/ft 8 Round : 1.80 (4) Annular gradient (burst) : 0.000 psi/ft . Buttress : 9.89 (4) Tensile load is determined using air weight Body Yield : 1.50 (8) Service rating is "Sweet" Overpull O Lbs.

	Length (feet)	Size (in.)	Weight (lb/ft		€ Joi	nt	Depth (feet)	Drift (in.)	Cost .
1	4,400	8-5/8"	32.00	J-55	ST&C	3	4,400	7.875	
	Load (psi)	Collapse Stryth (psi)	S.F.	Burst Load (psi)	Min Int Strgth (psi)	Yield S.F.		Tension Stryth (kips)	S.F.
1	2240	2530	1.129	3527	3930	1.11	140.80	372	2.64 J

Prepared by : CHUCK HORSMAN, Oklahoma City, OK 06-04-1993

Date

Remarks

Minimum segment length for the 4,400 foot well is 800 feet.

Surface/Intermediate string:

Next string will set at 8,400 ft. with 9.00 ppg and (pore pressure of 3,927 psi.) The frac gradient of 1.000 at the casing seat results in an injection pressure of 4,400 psi. Effective BMP (for burst) is 3,527 psi.

The design factors used in this casing string design are as shown above. As a general guideline, Lone Star Steel recommends using minimum design factors of 1.125 - Collapse (with evacuated casing), 1.8 - Burst, 1.8 - 8 Round Tension, 1.6 - Buttress Tension, and 1.5 - Body Yield. Collapse strength under axial tension was calculated based on the Mestcott, Dunlop and Kemier curve. Engineering responsibility for use of this design will be that of the purchaser. Casts for this design are based on a 1990 pricing model. (Version 1.06)

DEVON ENERGY

Operator: DEVON ENERGY CORP	Well Hame: TODD FEDERAL AREA
Project ID:	Location: T23S-R31E

Design Parameters:	•		Design Factors:				
Mad weight (9.00 ppg)	: 0.468	pei/ft	Callepos	*	1.12	5	•
Shut in gurioce procesure	: 3216	pei	Burst		1.00		
·-		psi/ft	# Round	:	1.80		(J)
Annular gradient (burst)	: 0.000	pai/ft	Buttrees		9.49		យា
Tennile load is determined			Body Tield		1.50		(B)
Service rating is "Sweet"	•		Overpull				lbs.
oos manning oos Design fac	car for j	oine strangth a	meseded in design:				
_							
						_	

	Length (feet)	Size (in.)	Weight (lb/ft		e Joi		Depth (feet)	Drift (in.)	Cost
1 2 3	1,200 6,200 1,350	5-1/2* 5-1/2* 5-1/2*	17.00 15.50 17.00	J-5: J-5: J-5:	5 LT&	C	7,400	4.767 4.825 4.767	
	7 3	Collapse		Burst	Min Int		4	Tension	
	Load (psi)	Strgth (psi)	s.F.	Load (psi)	Stryth (psi)	S.F.	Load (kips)	Stryth (kips)	S.F.

Prepared by : TOM PEPPER, Oklahoma City, OK

Date : 07-10-1995

Remarks

Minimum segment length for the 8,750 foot well is 500 feet.

The mid gradient and bottom hole pressures (for burst) are 0.468 pmi/ft and

4,091 pai, respectively.

NOTE: The design factors used in this casing string design are as shown above. As a general guideline, Lone Star Steel recommends using minimum design factors of 1.125 - Chilapse (with evecuated casing), 1.0 - Burst, 1.8 - 8 Round Tension, 1.6 - Buttress Tension, and 1.5 - Body Field. Chilapse strength under exial tension was calculated based on the Mestcott, Dunlop and Remier curve. Engineering responsibility for use of this design will be that of the purchaser. Costs for this design are based on a 1990 pricing model. (Version 1.0G)

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:

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.

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.