orm 3160-3 (December 1990)

# UNITED STATES SUBMIT IN TRIPLICATES DEPARTMENT OF THE INTERIOR COMPANY DIST. 2

Form approved.

	BUREAU OF LAN	D MANAGEMENTS (	01 W. Grand Av	enu <del>c</del> e d	ESIGNATION AND SERIAL	NO.	
AP	PLICATION FOR PERM			SHL & I	BHL: NM-NM070522A n, allottee or tribe n		
la TYPE OF WORK:	DRILL	DEEPEN 🛛	MEAGIN! I ARAI GOE	N/A	N, ALLUTTEE OR TRIBE N	ame	
					REEMENT NAME		
b. TYPE OF WELL:	GAS WELL Other	SINGLE ZONE	MULTIPLE T	N/A			
2 NAME OF OPERAT		<u>k.</u>		i i	R LEASE NAME, WELL NO.		
	DEVON ENERGY PRODU	CTION COMPANY, I		- INDIAN - 9.API WEI	BASIN "F25" FEDER	AL#1Y	
3. ADDRESS AND TEL		1500 OVC OV 7210	Wally Frank	1	10710		
4 LOCATION OF WEI	L (Report location clearly and in ac	cordance with any State re	Senior Ops. Engr		AND POOL, OR WILDCAT		
At surface 1500' I	FSL & 1500' FWL, Unit K, Sect	ion 25-T21S-R23E, Edd	y Cnty, NM	Indian B	asin (Morrow)		
At top proposed prod. zone 660' FSL & 2310' FWL, Unit N, Section 25-T21S-R23E, Eddy Cnty, NM					R.,M.,OR BLOCK AND SUR		
At top proposed prod.	zone 660 FSL & 2310 FWL, UI	iit N, Section 25-1215-K	23E, Eddy Chty, NM	BHL: U	SHL: Unit K, Section 25-T21S-R23E BHL: Unit N, Section 34-T21S-R23E		
14.DISTANCE IN MILES AND	DIRECTION FROM NEAREST TOWN OR	POST OFFICE*		12. COUN	12. COUNTY OR PARISH 25 13. STATE		
Approximately 30 mile	s NW of Carlsbad, NM		232425262726	Eddy Co	ounty	New Mexico	
15.DISTANCE FROM PROPO LOCATION TO NEAREST		16.NO. OF ACRES IN LEAS	E /AV 'A "A)	\	17.NO. OF ACRES ASS TO THIS WELL	IGNED	
PROPERTY OR LEASE L	ine, ft. 660'	640.00	\$ 10003	3	320.00		
(Also to nearest drlg. unit line 18.DISTANCE FROM PROPO	SED LOCATION*	19.PROPOSED DEPTH	100		20.ROTARY OR CABI	E TOOLS*	
TO NEAREST WELL, DRI OR APPLIED FOR, ON TI		10,000'	\ <u>∞</u> RFCEIVED		Rotary		
21.ELEVATIONS (Show wheth			OCD - ARTESIA	√O 22. A	PPROX. DATE WORK WILL	START*	
GL 3793'			OCD - ARTESIA		1, 2003		
			(2)	<u></u>			
SIZE OF HOLE	GRADE, SIZE OF CASING	PROPOSED CASING A WEIGHT PER FOOT	ND CEMENTING PROCEAM  SETTING DEPT	н	QUANTITY OF	CEMENT	
17 1/2"	13 3/8" existing	48#	217'		250 sx; TOC surface		
11"	J-55 8 5/8" existing	24#	1,800'		1875 sx ; TOC surfac	e	
8 3/4"	L-80 5 1/2"	17#	8,600'		400 sx; TOC 6000'	***************************************	
6 1/8"	liner L-80 4 1/2"	11.6#	8,500-10,000'	,	100 sx; TOC at TOL		
	es to deepen the Indian Basin "F2						
	s deemed noncommercial, the well ed in the following exhibits and att		abandoned per Federal regulation	ns. Programs	to adhere to onshore o	il and gas	
Drilling Program	· ·						
Surface Use and Oper	rating Plan at Prevention Equipment		he undersigned accepts all applic				
Exhibit #2 = Location			and restrictions concerning operations conducted on the leased land or: portions thereof, as described below.				
Exhibits #3 = Road M	Iap and Topo Map	Ĺ	egal Description:		.c ma.c p.c.p		
Exhibit #4 = Wells W Exhibits #5 = Produc		S	HL & BHL= NM-NM070522A; a	ADDDAN	// CIDIEAT	-	
Exhibit #6 = Rotary F	<b>0</b>		Bond Coverage: Nationwide CENTRAL PROPERTY.			U	
Exhibit #7 = Casing I H <sub>2</sub> S Operating Plan	Design	E	BLM Bond #: CO-1104  GENERAL REQUIREMENTS AND			NTS AND	
	anagement Reports (one each for p	oad and road)		SPECIAL	. STIPULATION	S ATTACHED	
	SCRIBE PROPOSED PROGRAM	·	a dive dete en procent productiv				
proposal is to drill or de	eepen directionally, give pertinent	data on subsurface locati	ions and measured and true verti	ical depths. G	ive blowout preventer	program, if any.	
24.							
_				40= 0=			
$\bigcirc$	ndace R. Irah	C	Candace R. Graham		5-3611 X4520		
SIGNED (a	neace R. Wah	TITLE E	ngineering Technician	DATE <u>Ma</u>	rch 14, 2003		
*(This space for Fede	ral or State office use)						
PERMIT NO			APPROVAL DATE	;			
Application approval does	not warrant or certify that the applicant						
thereon. CONDITIONS OF API			-		•		
	·			<b>(20)</b>	MAD O E	2002	
APPROVED BY(O	RIG. SGD.) ALEXIS C. SW	CBODA TITLEP	etroleum engine	ER DA	mar 25	ZUU3	
		See Instructions	s On Reverse Side				

# DRILLING PROGRAM - Attachment to Form 3160-3

Devon Energy Production Company, L.P.

Indian Basin "F25" Federal #1Y

SHL= 1500' FSL & 1500' FWL, Unit K; BHL= 660' FSL & 2310' FWL, Unit N Section 25-T21S-R23E, Eddy County, New Mexico

# Geologic Name of Surface Formation Quaternery Aeolian deposits

## 2. Estimated Tops of Important Geologic Markers

3.

0

San Andres	496'	Strawn	8,365'
Glorieta	2,075	Atoka	8,660'
Bone Spring	2,488'	Morrow	8,965'
3rd Bone Spring	5,920'	Barnett shale	9,440'
Wolfcamp	6,377'	ETD	10,000'
Cisco-Canyon	7.850'		

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

The estimated depths at which water, oil and gas will be encountered are as follows.

Water:

San Andres

Oil:

Glorieta, Yeso, Bone Spring

Gas:

Wolfcamp, Cisco-Canyon, Morrow

No other formations are expected to yield oil, gas or fresh water in measurable volumes.

The surface fresh water sands are protected by existing 13 3/8" casing at 217' with cement circulated to surface. The intermediate 8 5/8" casing was set at 1,800' with cement circulated to surface. Originally, in 1965, the production intervals were isolated by 5 1/2" casing set at 7567' with top of cement at 5,700'. In 1996 a 4 1/2" liner was cemented 7,238-7,870'. The current proposal, to deepen, will isolate the oil and gas intervals by running 5 1/2" casing to  $\pm 8,600$ ' (bringing the cement top to 6000' or 500' above the Wolfcamp) and by running 4 1/2" liner from 8,500' to total depth (bringing the cement top to approximately the top of the liner).

#### 4. <u>Casing Program</u> (See Exhibit 7)

Hole Size	<u>Interval</u>	Casing OD	Weight	<u>Grade</u>	<u>Type</u>
17 1/2"	0' -217'	13 3/8" existing	48#		_
11"	0' -1800'	8 5/8" existing	24#	J-55	
8 3/4"	0' -±8600'	5 1/2" proposed	17#	L-80	8rd LT&C
6 1/8"	8500-±10,000°	4 1/2" proposed	11.6#	L-80	8rd LT&C

#### **Cementing Program**

13 3/8" Surface Casing

-- Cemented to surface - 250 sx Incor Neat with 2% gel and 1/4#/sx Flocele.

(existing):

8 5/8" Intermediate Casing

(existing):

-- Cemented to surface -- 600 sx with 12% gel and  $\frac{1}{4}$ /sx Flocele + 950 sx 50/50

Pozmix with 4% gel and 1/4#/sx Flocele + 100 sx Regular Neat.

5 1/2" Production Casing

(proposed):

-- Cement to 6000' (or 500' above the Wolfcamp) - 400 sx 15/61/11 Pozmix/ Class C wth 5 lb/sx LCM-1, 2% CaCl<sub>2</sub>, 1% EC-1, 0.6% FL-25, 0.6% FL-52, 0.3%

CD-32, 0.3% Sodium Metasilicate and 1/4#/sx Celloflakes.

4 1/2" Liner (proposed):

-- Cement to 8500' (or top of liner) - 257 sx Class H with 0.6% FL-32, 0.3% CD-31, 1% EC-1 and 0.1% R-3.

# 5. Pressure Control Equipment

Exhibit 1A shows a 900 Series 3000 psi working pressure BOP consisting of an annular bag type preventor, middle blind rams and bottom pipe rams. The BOP will be nippled up on the 8 5/8" casing and tested to API specifications. The BOP will be operated at least once in each 24 hour period and the blind rams will be operated when drill pipe is out of hole on trips. Full opening stabbing valve and upper kelly cock will be utilized. Exhibit 1A also shows a hydraulically operated closing unit and a 2" 3000 psi choke manifold with dual adjustable chokes. No abnormal pressures or temperatures are expected.

### 6. Types and Characteristics of the Proposed Mud System

The hole will be drilled to total depth with fresh water/Dris-Pac mud systems at the following depths.

<u>Depth</u>	Type	Weight (ppg)	Viscosity (1/sec)	Water Loss (cc)
±5000-7300'	Fresh water mud system, add paper	8.5 - 8.7	29 – 40	No control
	to control seepage, Hi Vis sweeps			
7300' – TD	Fresh water/Dris-Pac mud system,	8.5 - 8.7	32 - 40	10 or less
	soda ash to control seepage, Hi Vis			
	sweeps to clean hole			

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 gas detection equipment (Compliance Package) will be in operation from drilling out 8 5/8" casing shoe until 5 1/2" casing is cemented.

# 8. Logging, Testing and Coring Program

- A. No drill stem tests or cores are planned at this time.
- B. The electric open hole logs will be run at the end of the 8 3/4" hole and at the end of the 6 1/8" hole. The logging program will be as follows.
  - a) Platform Express HALS with CNL-LDT from TD to base of the surface casing at 1,800' with NGT from TD to 6,000' and GR-Neutron through casing to surface.
  - b) FMI from TD to top of Cisco-Canyon (Devon geologist may revise this interval after seeing Platform Express log).
  - c) A mud logger may be rigged up on the hole at the discretion of the operator.

#### 9. Abnormal Pressures, Temperatures and Potential Hazards

No abnormal pressures or temperatures are foreseen. The anticipated bottom hole temperature at total depth is 185 degrees and maximum bottom hole pressure is 1000 psig. There is a known presence of hydrogen sulfide gas in this area. If hydrogen sulfide gas is encountered, the operator will comply with the provisions of Onshore Oil and Gas Order No. 6 (see the attached Hydrogen Sulfide Operations Plan). No major loss circulation intervals have been encountered in adjacent wells.

## 10. Anticipated Starting Date and Duration of Operations

A Cultural Resources examination has been completed by Southern New Mexical Archaeological Services, Inc., in Bent, New Mexico, as report #SNMAS-03NM-1032, and has been submitted to the BLM in Carlsbad, New Mexico. A clearance report for the lease road was submitted by Desert West Archaelogical Services, in 1997, as report DWAS-97-23-N.

This BLM office has performed the onsite inspection for the proposed pad site of this location. Road and location reconstruction will not be undertaken until approval has been received from the BLM. If approved, this well will be drilled as part of a development project. The spud date for the project is anticipated to be May 1, 2003. The drilling operations should require approximately 36 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.

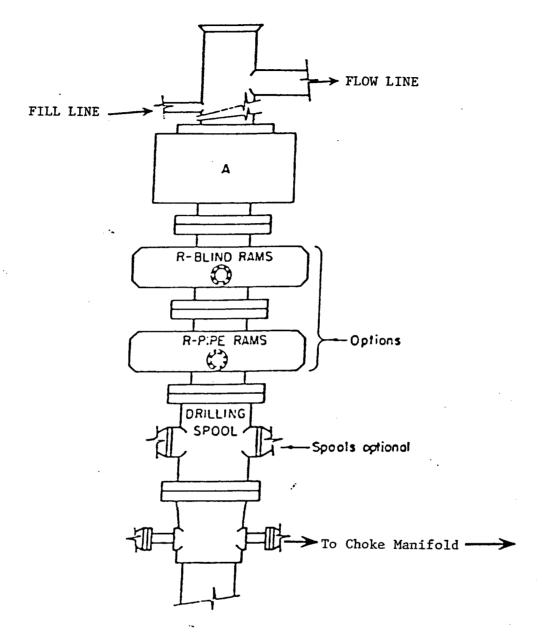
#### 11. Other Facets of Operations

The Morrow formation will be perforated and stimulated in order to establish production. The well will be swab tested and potentialed as a gas well.

# Attachment to Exhibit #1 NOTES REGARDING BLOWOUT PREVENTORS

Devon Energy Production Company, L.P.
Indian Basin "F25" Federal #1Y
SHL= 1500' FSL & 1500' FWL, Unit K; BHL= 660' FSL & 2310' FWL, Unit N
Section 25-T21S-R23E, 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 BOP 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.

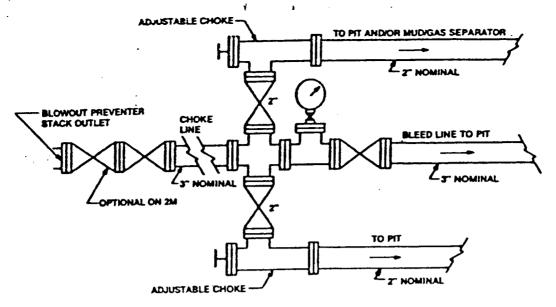


# ARRANGEMENT SRRA

900 Series 3000 PSI WP

# EXHIBIT 1A SKETCH OF BOP

DEVON ENERGY PRODUCTION COMPANY, L.P. INDIAN BASIN "F25" FEDERAL 1Y
Section K-25-T21S-R23E
Eddy Cnty, NM



Typical choke manifold assembly for 3M WP system

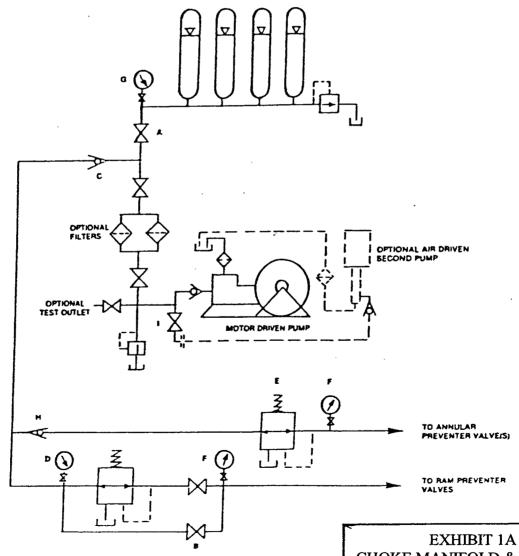


EXHIBIT 1A CHOKE MANIFOLD & CLOSING UNIT

DEVON ENERGY PRODUCTION COMPANY, L.P. INDIAN BASIN "F25" FEDERAL 1Y

Section K-25-T21S-R23E Eddy Cnty, NM

NE., MEXICO OIL CONSERVATION COMMISSION \*AMENDED Form C-102 Supersedes C-128 WELL LOCATION AND ACREAGE DEDICATION PLAT API 30-015-10710 All distances must be from the outer boundaries of the Section Operator Devon Energy Production Company, LP BHSIN Relph-Love Federal 25 "F25" FEDERAL #1Y Unit Letter Section Township T-21-8 P-23-E Rddy Actual Footage Location of Well: BHL: 660' FSL & 2310' FWL, Unit N, Sec. 25-T21S-R23E, Eddy Cnty, NJ L: 1500 South feet from the line and feet from the Ground Level Elev. Producing Formation Morrow Dedicated Acreage: -(Ur Fer Pent) Morrow 3793 Indian Basin (Upper=Penz) **1020** 320 1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below. 2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). 3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling. etc? Yes If answer is "yes," type of consolidation If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.). No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission. R-23-3 CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief. Position

> \*March 14, 2003 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 supervision, and that the same is true and correct to the best of my knowledge and belief.

November 1, 1965

Rainh Love

Date Surveyed

Company

October

۰۵

#1Y

15001

Surface hole location

Bottom hole location