

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
811 South First, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
2040 South Pacheco  
Santa Fe, NM 87505

Form C-101  
Revised March 17, 1999

Submit to appropriate District Office  
State Lease - 6 Copies  
Fee Lease - 5 Copies

☐ AMENDED REPORT

**APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE**

<sup>1</sup> Operator Name and Address Devon Energy Production Company, L.P. 20 N. Broadway, Suite 1500, Oklahoma City, OK 73102-8260 Walter M. Frank, Senior Operations Engineer, 405-552-4595		<sup>2</sup> OGRID Number 6137
<sup>4</sup> Property Code 28633	<sup>5</sup> Property Name Penlon "221" State	<sup>3</sup> API Number 30-015-31960
		<sup>6</sup> Well No. 1Y

**<sup>7</sup> Surface Location**

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	22	20S	27E		1953'	south	670'	east	EDDY, NM

**<sup>8</sup> Proposed 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
<sup>9</sup> Proposed Pool 1 AVALON (MORROW)					<sup>10</sup> Proposed Pool 2				

<sup>11</sup> Work Type Code N	<sup>12</sup> Well Type Code G	<sup>13</sup> Cable/Rotary R	<sup>14</sup> Lease Type Code S	<sup>15</sup> Ground Level Elevation GL 3276'
<sup>16</sup> Multiple	<sup>17</sup> Proposed Depth 11,200'	<sup>18</sup> Formation Morrow	<sup>19</sup> Contractor Patterson Drlg #5	<sup>20</sup> Spud Date 05/01/2001

**<sup>21</sup> Proposed Casing and Cement Program**

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17 1/2"	13 3/8"	48# H-40 ST&C	500'	475	surface
12 1/4"	8 5/8"	32# J-55 LT&C	2,200'	1000	surface
8 3/4"	5 1/2"	17# L-80 & 15.5# J-55	11,200'	1100	6500'

<sup>22</sup> Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone.  
Describe the blowout prevention program, if any. Use additional sheets if necessary.

Devon plans to drill this well to a total depth of 11,200 feet and complete it as a Morrow development well. If it is deemed non-commercial then it will be plugged and abandoned in accordance with the rules and regulations established by the New Mexico OCD. Blowout prevention equipment will be installed while drilling the intermediate and production holes. Attached are C102 plat, maps, BOP equipment and casing design sheets, H2S plan, and Proof of bond.

Fresh Water to @ 2200'

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief. Signature: Candace R. Graham Printed Name: Candace R. Graham X4520 Title: Engineering Tech. Date: 08/10/2001		OIL CONSERVATION DIVISION Approved by: ORIGINAL SIGNED BY TIM W. GUM Title: DISTRICT II SUPERVISOR Approval Date: AUG 17 2001 Expiration Date: AUG 17 2002 Conditions of Approval: Attached <input type="checkbox"/> NOTIFY OCD SPUD & TIME TO WITNESS CEMENTING OF 8 5/8" CASING STRING	
Phone: (405)235-3611			

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

**DISTRICT II**  
P. O. Drawer DD  
Artesia, NM 88211-0719

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

**DISTRICT IV**  
P. O. Box 2088  
Santa Fe, NM 87507-2088

State of New Mexico  
Energy, Minerals, and Natural Resources Department

Form C-102  
Revised 02-10-94

Instructions on back

Submit to the Appropriate  
District Office  
State Lease - 4 copies  
Fee Lease - 3 copies

# OIL CONSERVATION DIVISION

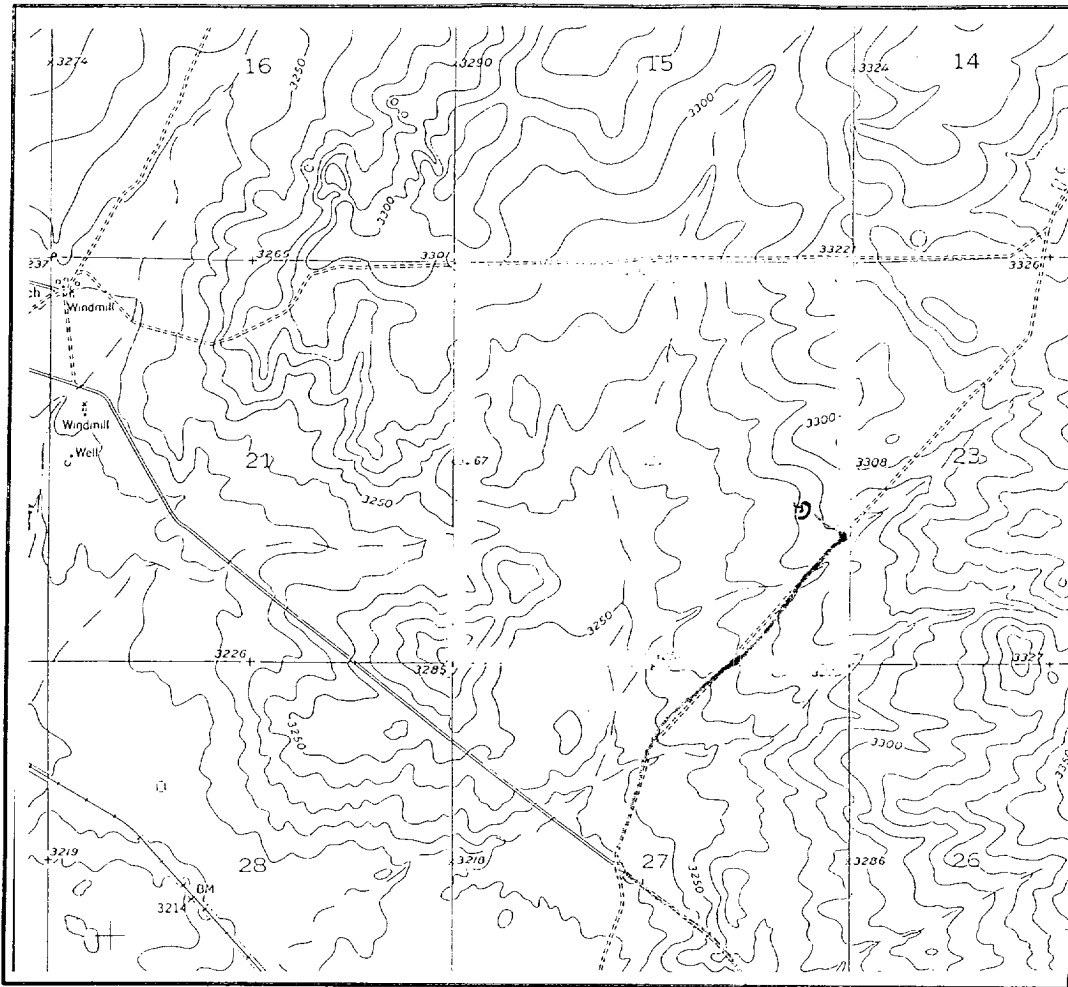
P. O. Box 2088  
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number		2 Pool Code		3 Pool Name Avalon (Morrow)					
4 Property Code		5 Property Name PENLON '22I' STATE						6 Well Number 1 Y	
7 OGRID No. 6137		8 Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.						9 Elevation 3276'	
10 SURFACE LOCATION									
UL or lot no. 1	Section 22	Township 20 SOUTH	Range 27 EAST, N.M.P.M.	Lot Ida	Feet from the 1953'	North/South line SOUTH	Feet from the 670'	East/West line EAST	County EDDY
"BOTTOM HOLE LOCATION IF DIFFERENT FROM SURFACE									
UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
12 Dedicated Acres 320		13 Joint or Infill		14 Consolidation Code		15 Order No.			
NO ALLOWABLE WELL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION									
						<b>OPERATOR CERTIFICATION</b> I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.			
						Signature Candace R. Graham			
						Printed Name Candace R. Graham			
						Title Engineering Tech.			
						Date 08-10-2001			
						<b>SURVEYOR CERTIFICATION</b> 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 belief.			
						Date of Survey MAY 21 2001			
						Signature and Seal of Professional Surveyor 			
						Certificate No. V. L. BEZNER P.S. #7920			
						JOB #76580 / 75 SE / V.H.B.			

# LOCATION & ELEVATION VERIFICATION MAP



SCALE : 1" = 2000'

CONTOUR INTERVAL 10'

SECTION 22 TWP 20-S RGE 27-E

SURVEY NEW MEXICO PRINCIPAL MERIDIAN

COUNTY EDDY STATE NM

DESCRIPTION 1953' FSL & 670' FEL

ELEVATION 3276

OPERATOR DEVON ENERGY PRODUCTION COMPANY, L.P.

LEASE PENLON "221" STATE #1Y

U.S.G.S. TOPOGRAPHIC MAP

LAKE McMILLAN SOUTH, NEW MEXICO

SCALED LAT. N 32°33'25"

LONG. W 104°15'43"



This location has been very carefully staked on the ground according to the best official survey records, maps, and other data available to us.

Review this plot and notify us immediately of any possible discrepancy.

## TOPOGRAPHIC LAND SURVEYORS

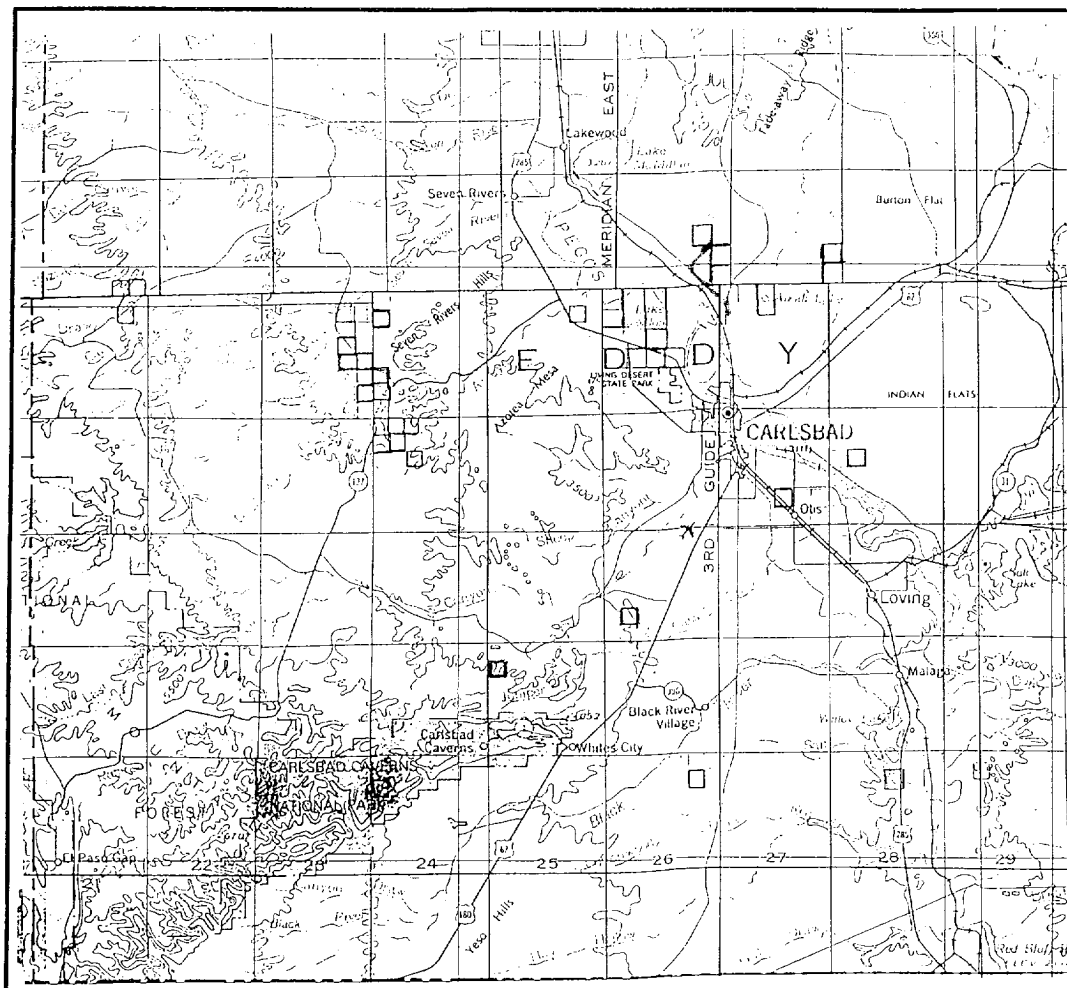
*Surveying & Mapping for the Oil & Gas Industry*

1307 N. HOBART  
PAMPA, TX. 79065  
(800) 658-6382

6709 N. CLASSEN BLVD.  
OKLAHOMA CITY, OK. 73116  
(800) 654-3219

2903 N. BIG SPRING  
MIDLAND, TX. 79705  
(800) 767-1653

# VICINITY MAP



SECTION 22 TWP 20-S RGE 27-E  
 SURVEY NEW MEXICO PRINCIPAL MERIDIAN  
 COUNTY EDDY STATE NM  
 DESCRIPTION 1953' FSL & 670' FEL

OPERATOR DEVON ENERGY PRODUCTION COMPANY, L.P.  
 LEASE PENLON "221" STATE #1Y

DISTANCE & DIRECTION FROM NORTH LOOP & COUNTY  
ROAD 206 NORTH OF CARLSBAD, GO NORTHERLY 1.9  
MILES ON PAVED COUNTY ROAD 206, THENCE NORTH-  
WESTERLY 3.0 MILES ON PAVED COUTNY ROAD 34,  
THENCE NORTHEAST 0.8 MILE ON LEASE ROAD &  
ABANDONED LEASE ROAD TO A POINT ±550' SOUTHEAST  
OF LOCATION.



This location has been very carefully staked on the ground according to the best official survey records, maps, and other data available to us.  
 Review this plat and notify us immediately of any possible discrepancy.

## TOPOGRAPHIC LAND SURVEYORS

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# MINIMUM BLOWOUT PREVENTER REQUIREMENTS

3,000 psi Working Pressure

3 MWP

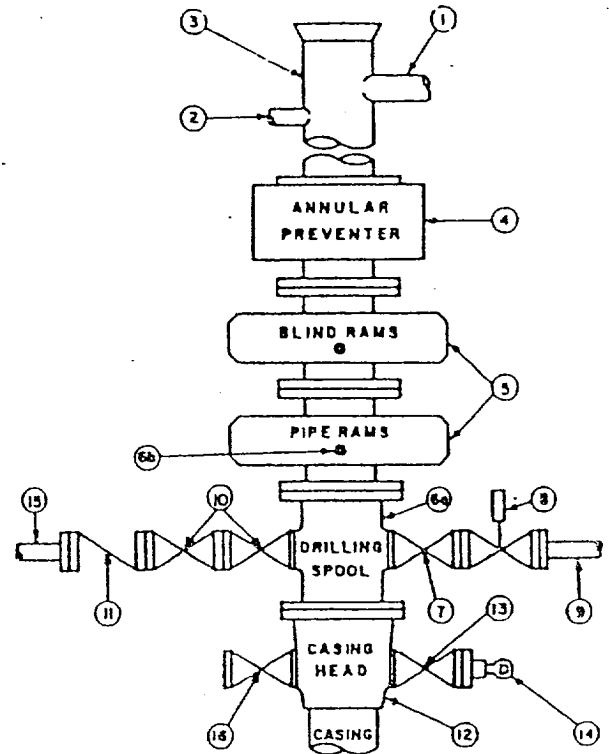
## STACK REQUIREMENTS

No.	Item	Min. I.D.	Min. Nominal
1	Flowline		
2	Fill up line		2"
3	Drilling nipple		
4	Annular preventer		
5	Two single or one dual hydraulically operated rams		
6a	Drilling spool with 2" min. kill line and 3" min choke line outlets		
6b	2" min. kill line and 3" min. choke line outlets in ram. (Alternate to 6a above.)		
7	Valve Gate <input type="checkbox"/> Plug <input type="checkbox"/>	3-1/8"	
8	Gate valve—power operated	3-1/8"	
9	Line to choke manifold		3"
10	Valves Gate <input type="checkbox"/> Plug <input type="checkbox"/>	2-1/16"	
11	Check valve	2-1/16"	
12	Casing head		
13	Valve Gate <input type="checkbox"/> Plug <input type="checkbox"/>	1-13/16"	
14	Pressure gauge with needle valve		
15	Kill line to rig mud pump manifold		2"

## OPTIONAL

16	Flanged valve	1-13/16"	
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CONFIGURATION A



## CONTRACTOR'S OPTION TO FURNISH:

1. All equipment and connections above bradenhead or casinghead. Working pressure of preventers to be 3,000 psi, minimum.
2. Automatic accumulator (80 gallon, 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.
5. Inside blowout preventer 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:

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

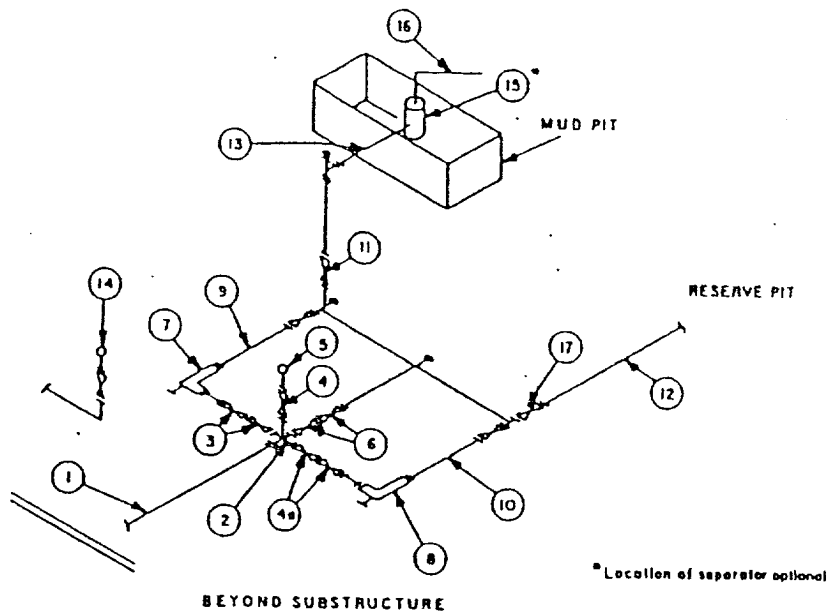
## GENERAL NOTES:

1. 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 chokes. Valves must be full opening and suitable for high pressure mud service.
3. 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 beans. Replaceable parts for adjustable choke, other bean sizes, retainers, and choke wrenches to be conveniently located for immediate use.
5. All valves to be equipped with handwheels or handles ready for immediate use.
6. Choke lines must be suitably anchored.

7. Handwheels and extensions to be connected and ready for use.
8. Valves adjacent to drilling spool to be kept open. Use outside valves except for emergency.
9. 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.

**MINIMUM CHOKE MANIFOLD**  
3,000, 5,000 and 10,000 PSI Working Pressure

3 MWP - 5 MWP - 10 MWP



MINIMUM REQUIREMENTS										
No.		3,000 MWP			5,000 MWP			10,000 MWP		
		I.D.	NOMINAL	RATING	I.D.	NOMINAL	RATING	I.D.	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 <input type="checkbox"/> Plug <input type="checkbox"/> (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000
4	Valve Gate <input type="checkbox"/> Plug <input type="checkbox"/> (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 <input type="checkbox"/> Plug <input type="checkbox"/> (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		2"	3,000		2"	5,000		3"	10,000
11	Valves Gate <input type="checkbox"/> Plug <input type="checkbox"/> (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			10,000
15	Gas Separator		2'x5'			2'x5'			2'x5'	
16	Line		4"	1,000		4"	1,000		4"	2,000
17	Valves Gate <input type="checkbox"/> Plug <input type="checkbox"/> (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

- All connections in choke manifold shall be welded, studded, flanged or Cameron clamp of comparable rating.
- All flanges shall be API 6B or 6BX and ring gaskets shall be API RX or BX. Use only BX for 10 MWP.
- All lines shall be securely anchored.
- 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.
- 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 bull plugged tees.
- Discharge lines from chokes, choke bypass and from top of gas separator should vent as far as practical from the well.

Well name:	<b>Penlon State #1Y</b>
Operator:	Devon Energy Production Company, L.P.
String type:	Surface
Location:	Secion 22, T20S, R27E

**Design parameters:**
**Collapse**

Mud weight: 8.400 ppg  
Design is based on evacuated pipe.

**Minimum design factors:**
**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
Surface temperature: 75 °F  
Bottom hole temperature: 80 °F  
Temperature gradient: 1.00 °F/100ft  
Minimum section length: 500 ft  
Minimum Drift: 2.559 in

**Burst**

Max anticipated surface pressure: 260 psi  
Internal gradient: 0.000 psi/ft  
Calculated BHP 260 psi  
  
Annular backup: 8.40 ppg

**Tension:**

8 Round STC: 1.80 (J)  
8 Round LTC: 1.80 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.50 (B)

Non-directional string.

Tension is based on buoyed weight.  
Neutral point: 438 ft

**Re subsequent strings:**

Next setting depth: 2,200 ft  
Next mud weight: 8.400 ppg  
Next setting BHP: 960 psi  
Fracture mud wt: 10.000 ppg  
Fracture depth: 500 ft  
Injection pressure 260 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	500	13.375	48.00	H-40	ST&C	500	500	12.59	46.9
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	218	740	3.39	260	1730	6.66	21	322	15.31 J

Prepared W.M. Frank  
by: Devon Energy

Phone: (405) 552-4595  
FAX: (405) 552-4621

Date: July 7, 2000  
Oklahoma City, Oklahoma

**Remarks:**

Collapse is based on a vertical depth of 500 ft, a mud weight of 8.4 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

*Engineering responsibility for use of this design will be that of the purchaser.*

Well name: **Penlon State #1Y**  
 Operator: **Devon Energy Production Company, L.P.**  
 String type: **Intermediate**  
 Location: **Section 22, T20S, R27E**

**Design parameters:**

**Collapse**

Mud weight: 8.400 ppg  
 Design is based on evacuated pipe.

**Minimum design factors:**

**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
 Surface temperature: 75 °F  
 Bottom hole temperature: 97 °F  
 Temperature gradient: 1.00 °F/100ft  
 Minimum section length: 500 ft  
 Minimum Drift: 2.559 in

**Burst**

Max anticipated surface pressure: 1,143 psi  
 Internal gradient: 0.000 psi/ft  
 Calculated BHP 1,143 psi

Annular backup: 8.40 ppg

**Tension:**

8 Round STC: 1.80 (J)  
 8 Round LTC: 1.80 (J)  
 Buttress: 1.60 (J)  
 Premium: 1.50 (J)  
 Body yield: 1.50 (B)

Tension is based on buoyed weight.  
 Neutral point: 1,925 ft

Non-directional string.

**Re subsequent strings:**

Next setting depth: 11,500 ft  
 Next mud weight: 9.800 ppg  
 Next setting BHP: 5,855 psi  
 Fracture mud wt: 10.000 ppg  
 Fracture depth: 2,200 ft  
 Injection pressure 1,143 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	2200	8.625	32.00	J-55	LT&C	2200	2200	7.875	139.8
Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	960	2530	2.64	1143	3930	3.44	62	417	6.77 J

Prepared W.M. Frank  
 by: Devon Energy

Phone: (405) 552-4595  
 FAX: (405) 552-4621

Date: July 7,2000  
 Oklahoma City, Oklahoma

**Remarks:**

Collapse is based on a vertical depth of 2200 ft, a mud weight of 8.4 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

*Engineering responsibility for use of this design will be that of the purchaser.*



Well name:	<b>Penlon State #1Y</b>
Operator:	Devon Energy Production Company, L.P.
String type:	Production
Location:	Secion 22, T20S, R27E

**Design parameters:**
**Collapse**

Mud weight: 6.800 ppg  
Design is based on evacuated pipe.

**Minimum design factors:**
**Collapse:**

Design factor 1.125

**Burst:**

Design factor 1.00

**Environment:**

H2S considered? No  
Surface temperature: 75 °F  
Bottom hole temperature: 165 °F  
Temperature gradient: 0.80 °F/100ft  
Minimum section length: 500 ft

**Burst**

Max anticipated surface pressure: 3,956 psi  
Internal gradient: 0.000 psi/ft  
Calculated BHP 3,956 psi  
  
Annular backup: 9.60 ppg

**Tension:**

8 Round STC: 1.80 (J)  
8 Round LTC: 1.80 (J)  
Buttress: 1.60 (J)  
Premium: 1.50 (J)  
Body yield: 1.50 (B)

Non-directional string.

Packer fluid details:  
Fluid density: 8.400 ppg  
Packer depth: 10,500 ft

Tension is based on buoyed weight.  
Neutral point: 10,106 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
3	2500	5.5	17.00	L-80	LT&C	2500	2500	4.767	86.2
2	6500	5.5	15.50	J-55	LT&C	9000	9000	4.825	203.8
1	2200	5.5	17.00	L-80	LT&C	11200	11200	4.767	75.8

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
3	883	5624	6.37	3956	7740	1.96	162	338	2.09 J
2	3179	3957	1.24	3800	4810	1.27	120	217	1.82 J
1	3956	6290	1.59	3395	7740	2.28	19	338	17.98 J

Prepared by: W.M. Frank  
Devon Energy

Phone: (405) 552-4595  
FAX: (405) 552-4621

Date: July 7, 2000  
Oklahoma City, Oklahoma

**Remarks:**

Collapse is based on a vertical depth of 11200 ft, a mud weight of 6.8 ppg. The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

# **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 (H<sub>2</sub>S).
2. The proper use and maintenance of the H<sub>2</sub>S safety equipment and of personal protective equipment to be utilized at the location such as H<sub>2</sub>S 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 H<sub>2</sub>S bearing formation, H<sub>2</sub>S 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 H<sub>2</sub>S safety procedures. All contract personnel employed on an unscheduled basis will be required to have received appropriate H<sub>2</sub>S training.

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

### **B. H<sub>2</sub>S Safety Equipment And Systems**

All H<sub>2</sub>S safety equipment and systems will be installed, tested, and operational when drilling operations reach a depth approximately 500' above any known or probable H<sub>2</sub>S 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 H<sub>2</sub>S circulated to surface. Proper mud weight and safe drilling practices (for example, keeping the hole filled during trips) will minimize hazards when drilling in H<sub>2</sub>S bearing formations.

6. Metallurgy

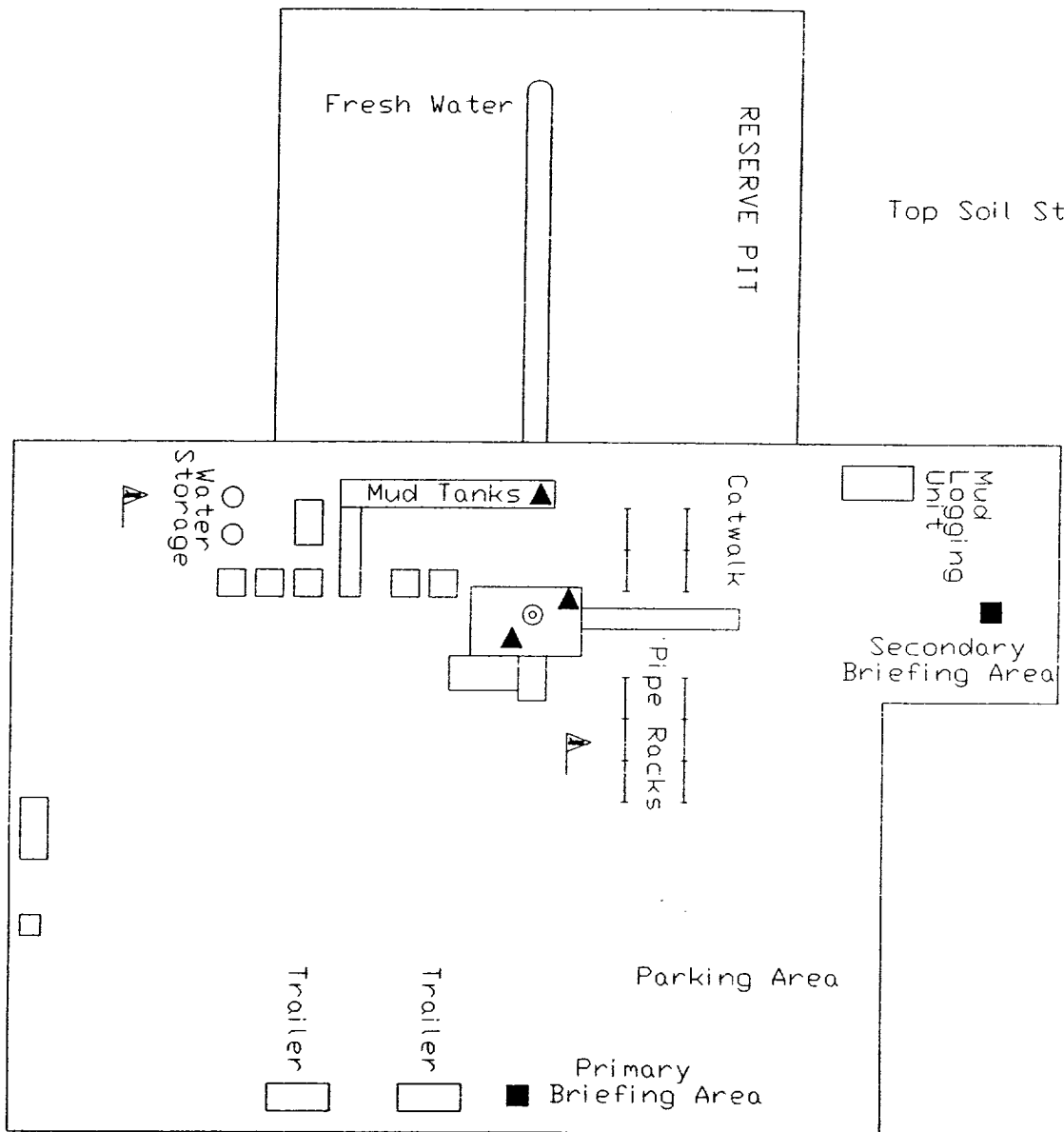
All drill strings, casings, tubing, wellhead, blowout preventers, drilling spools, kill lines, choke manifold and lines and valves shall be suitable for H<sub>2</sub>S service.

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 H<sub>2</sub>S monitors, briefing areas and wind direction indicators.



- ▲ H2S MONITORS WITH ALARMS AT THE BELL NIPPLE, SUBSTRUCTURE, AND SHALE SHAKER
- ▲ WIND DIRECTION INDICATORS
- SAFE BRIEFING AREAS WITH CAUTION SIGNS AND PROTECTIVE BREATHING EQUIPMENT



File: Q:\NM\H2S-PLAN

**devon**  
ENERGY CORPORATION

---

EDDY COUNTY, NEW MEXICO

---

**H2S PLAN**

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Scale in Feet

25    0    25    50    75    100

4/97

State of New Mexico  
ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT  
Santa Fe, New Mexico 87505



October 21, 1993

BRUCE KING  
GOVERNOR

ANITA LOCKWOOD  
CABINET SECRETARY

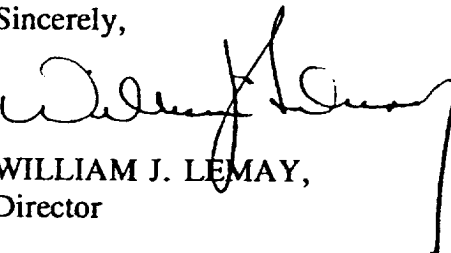
Devon Energy Corporation (Nevada)  
1500 Mid-America Tower  
20 N. Broadway  
Oklahoma City, Ok. 73102

Re: \$50,000 Blanket Plugging Bond  
Devon Energy Corporation (Nevada), Principal  
Aetna Casualty & Surety Company, Surety  
Bond No. 30 S 100753026-11

Gentlemen:

The Oil Conservation Division hereby approves the above-referenced plugging bond effective October 15, 1993.

Sincerely,



WILLIAM J. LEMAY,  
Director

dr/

cc: Oil Conservation Division  
Hobbs, Artesia, Aztec

Hilb, Rogal and Hamilton Co.  
125 Park avenue  
Oklahoma City, Ok. 73102

**RECEIVED**

VILLARON BUREAU - 408 Galisteo

Forestry and Resources Conservation Division  
P.O. Box 1948 87504-1948  
827-5830

Park and Recreation Division  
P.O. Box 1147 87504-1147  
827-7465  
OCT 25 1993

2040 South Pacheco

Office of the Secretary  
827-5950

Administrative Services  
827-5925

Energy Conservation & Management  
827-5900

Mining and Minerals  
827-5970

LAND OFFICE BUILDING - 310 Old Santa Fe Trail

Oil Conservation Division  
P.O. Box 2088 87504-2088  
827-5800

LAND DEPARTMENT

STATE OF NEW MEXICO  
\$50,000.00 BLANKET PLUGGING BOND

BOND NO. 30 S 100753026-11

(For the use of Surety Company)

Replaces USF&G 56-0130-11003-82-1

Note: File with Oil Conservation Commission, P. O. Box 2088, Santa Fe 87501

KNOW ALL MEN BY THESE PRESENTS:

That Devon Energy Corporation (Nevada)  
(a corporation organized in the State of Nevada, (An individual) (a partnership)  
Oklahoma City, State of Oklahoma, with its principal office in the city of  
the State of New Mexico), as PRINCIPAL, and Aetna Casualty & Surety Company, and authorized to do business in  
corporation organized and existing under the laws of the State of Connecticut, and authorized  
to do business in the State of New Mexico, as SURETY, are held firmly bound unto the State of New Mexico, for the use  
and benefit of the Oil Conservation Commission of New Mexico pursuant to Section 65-3-11, New Mexico Statutes  
Annotated, 1953 Compilation, as amended, in the sum of Fifty Thousand Dollars (\$50,000.00) lawful money of the United  
States, for the payment of which, well and truly to be made, said PRINCIPAL and SURETY hereby bind themselves, their  
successors and assigns, jointly and severally, firmly by these presents.

The conditions of this obligation are such that:

WHEREAS, The above principal has heretofore or may hereafter enter into oil and gas leases, or carbon dioxide (CO<sub>2</sub>) gas leases, or  
helium gas leases with the State of New Mexico; and

WHEREAS, The above principal has heretofore or may hereafter enter into oil and gas leases, or carbon dioxide (CO<sub>2</sub>) gas leases, or  
helium gas leases on lands patented by the United States of America to private individuals, and on lands otherwise owned by private  
individuals; and

WHEREAS, The above principal, individually, or in association with one or more other parties, has commenced or may commence  
the drilling of wells to prospect for and produce oil or gas, or carbon dioxide (CO<sub>2</sub>) gas or helium gas, or does own or may acquire, own or  
operate such well, or such wells started by others on land embraced in said State oil and gas leases, or carbon dioxide (CO<sub>2</sub>) gas leases, or  
helium gas leases, and on land patented by the United States of America to private individuals, and on land otherwise owned by private  
individuals, the identification and location of said well being expressly waived by both principal and surety hereto.

NOW, THEREFORE, If the above bounden principal and surety or either of them or their successors or assigns, or any of them, shall  
plug all of said wells when dry or when abandoned in accordance with the rules, regulations, and orders of the Oil Conservation Commission  
of New Mexico in such way as to confine the oil, gas, and water in the strata in which they are found, and to prevent them from escaping into  
other strata;

THEN, THEREFORE, This obligation shall be null and void; otherwise and in default of complete compliance with any and all of said  
obligations, the same shall remain in full force and effect.

PROVIDED, HOWEVER, That thirty (30) days after receipt by the Oil Conservation Commission of New Mexico of written notice of  
cancellation from the surety, the obligation of the surety hereunder shall terminate as to property or wells acquired, drilled, or started after  
said thirty (30) day period but shall continue in effect, notwithstanding said notice, as to property or wells theretofore acquired, drilled or  
started.