| Form 3160-3 (December 1990) | DEPARTME | | INTERIC | SUBMIT IN (See other ins reverse side) | *LICATE* as on | | Form approved. | |
|---|---|--|---|---|--|--|---|-----------------------|
| | BUREAUC |)FLAND MANAG | | | | | SIGNATION AND SERIAL | .NO. |
| AP | PLICATION FOR | PERMIT TO DI | RILL OR DE | EPEN | | I-NM0- | 404441 ALLOTTEE OR TRIBE N | AME |
| la TYPE OF WORK: | | DEEPEN | | | N/: | 4 | EEMENT NAME | |
| L TYPE OF WELL: | GAS [77] | | SINGLE | MULTIPLE Zone | N/e | | | |
| 2 NAME OF OPERATO | Other | | ZONE | 20NE | | | LEASE NAME, WELL NO | |
| 2 NAME OF SPERATO | DEVON ENERGY C | ORPORATION (N | EVADA) | | | dd "14I PI WELL | P" Federal #16 | |
| 3. ADDRESS AND TEL | 20 N. BROADWAY, | | | | 30- | 015- | D POOL OR WILDCAT | |
| 4. LOCATION OF WEL At surface 710' FS | L (Report location clearly a L & 660' FEL, Unit P, | nd in accordance with Section 14. T23S, R31 | any State require E. Eddy Count | ements)* ty, NM | | | (Welfcamp) | VEY OR AREA |
| At top proposed prod. 2 | cone (Same) | | | | | it P ction 14 | -T23S-R31E | |
| 14.DISTANCE IN MILES AND | DIRECTION FROM NEAREST | TOWN OR POST OFFICE* | | | 12. | COUNTY | OR PARISH | 13. STATE |
| 35 miles WNW of Jal, | New Mexico | | | | Ed | l dy Cou | inty | New Mexico |
| IS.DISTANCE FROM PROPOS LOCATION TO NEAREST PROPERTY OR LEASE LE | | 16.NO. OF AC | RES IN LEASE | | | | 17.NO. OF ACRES AS TO THIS WELL | SIGNED |
| (Also to nearest drlg unit line | if anv) | 19.PROPOSE | DEPTH | | | | 40.00 20.ROTARY OR CAB | LE TOOLS* |
| 18.DISTANCE FROM PROPOS TO NEAREST WELL, DRI | LLING, COMPLETED, | 12.000' | | _ | | | Rotary | |
| OR APPLIED FOR, ON TH 21.ELEVATIONS (Show whether | | 12,000 | | · · · · · · | | 22. APP | ROX. DATE WORK WILL | . START* |
| | | | | | | First | quarter, 1999 | |
| | | PROPOSED | CASING AND O | EMENTING PROGE | LAM | | | |
| SIZE OF HOLE | GRADE. SIZE OF CASIN | G WEIGH | IT PER FOOT | SETTIN | G DEPTH | | QUANTITY OF | |
| 17 1/2" | H-40 13 3/8" | | 8# | MITHESS | 850' | | 500 sx Poz C + 200 sz | |
| 12 1/4" | J-55 9 5/8" | | 0# & 20# | WITHESS | 4400' | | 1400 sx Poz C + 200 Stg #1: 250 sx Class | |
| 7 7/8'' | L-80 5 1/2" | 1/# | & 20# | DV 2 | Tool +/- 5500' | 1 | Stg #2: 420 sx Clas | |
| wellbore will be plug and attachments. Drilling Program Surface Use and Ope Exhibits #1 = Blowo Exhibits #2 = Locatio Exhibits #3 = Road M Exhibit #4 = Wells W Exhibits #5 = Produc Exhibit #6 = Rotary Exhibit #7 = Casing Archaeological Clears | ut Prevention Equipment n and Elevation Plat Map and Topo Map Vithin 1 Mile Radius tion Facilities Plat Rig Layout Design | Federal regulations. | Programs to add The un and re portio Lease Legal Bond BLM is to deepen, giv | here to onshore oil and indersigned accepts all estrictions concerning on thereof, as describe #: NM-NM0404441 Description: S/2 Sect Coverage: Nationwid Bond #: CO-1104 | applicable tem operations con d below ion 14-T23S-F e E E E E E | ns are o ms. con ducted CMA AL AL AL | ditions. stipulations on the leased land or ddy Cnty. NM SUBJECT TO REQUIREMEN STPULATION osed new productive |) ISAND ATTACHI |
| | ndace R.L | Iraham | | ace R. Graham leering <u>Technician</u> | DATE | Jan | 1ary 25, 1999 | |
| *(This space for Feder | ral or State office use) | | | | | | | |
| PERMIT NO. | not warrant or certify that the | anniagus baile land | aquitable title to al | APPROVAL I | DATE | | the applicant to conduc | t operations |
| Application approval does a thereon. CONDITIONS OF APP | | | | | | | | |
| APPROVED BY HIC | G. SGD. M. J. CH | IÁVEZ TI | TLE | Reverse Side | | DAT | E | |
| <u></u> | | See | Instructions On | Reverse Side | | | APPERDUS | |

Title 18 U.S.C. Section 1001, makes 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

APPROVAL SUBJECT TO DEMERAL RECEIRED EN 13 AT D SPECIAL STPULATIONS ATTACHE

) Ja

DISTRICT I F. 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

State of New Mexico Minerals, and Natural Resources Der tment Ener

XHIBIT#

2 Form C-102 Revised 02-10-94 Form C-102

Instructions on back

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

AMENDED REPORT

OIL CONSERVATION DIVISION P. 0. Box 2088 Santa Fe, New Mexico 87504-2088

Santa Fe, NM 87507-2088 WELL LOCATION AND ACREAGE DEDICATION PLAT

| API Number | ² Pool Code | Pool Name SAND DUNES (WOLFCAMF) | |
|--------------------------|--------------------------------------|--|---|
| • Property Code > P | Property Name TODD | '14 P' FEDERAL | • Well Number 16 |
| 'OGRID No. • 0 | Deventor Name DEVON ENERG | Y CORPORATION (NEVADA) | * Elevation 3475' |
| | " SURFA | ACE LOCATION | |
| •• | SOUTH 31 EAST, N.M.P.M. | t Ida Feet from the North/South line Feet from the 710' SOUTH 660' | East/West line County EAST EDDY |
| | | N IF DIFFERENT FROM SURFACE | |
| UL or lot no. Section To | 'ownship Range Lo | ot Ida Feet from the North/South line Feet from the | East/West line County |
| | or Infill 14 Consolidation Code 15 C | Order No. | <u> </u> |
| 40 NO ALLOW | VABLE WELL BE ASSIGNED TO T | THIS COMPLETION UNTIL ALL INTERESTS HA | VE BEEN ION |
| | | OPERATO / hereby cer contained her to the best of Signature Candace Printed Name Candace Title Engineer Date April 6, SURVEYO / hereby docation sh plotted from surveys m my super | R CERTIFICATION tify that the information rein is true and complete (my knowledge and belief. R. Graham ring Tech. 1999 R CERTIFICATION certify that the well rown on this plat was in field notes of actual ade by me or under vision, and that the we and correct to the |
| | | 710' Signature + Profession | 12128 ROMINATION S. #1212 88 / 47 SW / V.H.E. |



These locations have 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

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 11, | 13, 14, 15, 22 & 23 TWP 23-S RGE 31-E |
|-------------|---------------------------------------|
| SURVEY | NEW MEXICO PRINCIPAL MERIDIAN |
| COUNTY | EDDY STATE NM |

OPERATOR DEVON ENERGY CORPORATION

DISTANCE & DIRECTION ______FROM_THE_JCT. OF S.H. 128 & CO. RD. 798, 34.0 MILES WEST OF JAL, GO NORTH 2.1 MILES ON CO. RD. 798 TO THE SOUTHEAST CORNER OF SECTION 23



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

Surveying & Mapping for the Oil & Gas Industry

1307 N. HOBAR⁷ PAMPA, TX. 79065 (8C0) 658-6382 6709 N. CLASSEN BLVD. OKLAHOMA CITY, OK. 73116 (800) 654-3219 2903 N. BIG SPRING MIDLAND, TX. 79705 (800) 767-1653



DRILLING PROGRAM

Attached to Form 3160-3 Devon Energy Corporation (Nevada) TODD "14P" FEDERAL #16 710' FSL & 660' FEL Section 14-T23S-R31E, Unit P Eddy County, New Mexico

1. <u>Geologic Name of Surface Formation</u>

Permian

2. Estimated Tops of Important Geologic Markers

| Rustler | 800' |
|-------------------|--------|
| Top of Salt | 1100' |
| Base of Salt | 3900' |
| Bell Canyon | 4400' |
| Cherry Canyon | 5600' |
| Brushy Canyon | 7000' |
| Bone Spring Lime | 8300' |
| Third Bone Spring | 10700` |
| Wolfcamp | 11600' |
| Total Depth | 12000' |

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 |
| Third Bone Spring | 10700' | oil |
| Wolfcamp | 11600' | 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 9 5/8" casing at 4400' and circulating cement to surface. The lower producing intervals will be isolated by setting 5 1/2" casing to total depth and circulating cement above the base of the 9 5/8" casing.

TODD "14P" FEDERAL #16 Drilling Program Page 2

4. <u>Casing Program</u>

| Hole Size | Interval | Casing OD | <u>Weight</u> | <u>Grade</u> | Tvpe |
|-----------|------------------|-----------|---------------|--------------|---------------|
| 30" | 0-40' | 20" | | Conductor | 0.30" wall |
| 17 1/2" | 0-850' | 13 3/8" | 48# | H-40 | ST&C, new R-3 |
| 12 1/4" | 0-4400' | 9 5/8" | 40# | J-55 | ST&C, new R-3 |
| 7 7/8" | 0'-TD (12,000'±) | 5 1/2" | 17# & 20# | L-80 | 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) with 6% Bentonite, 2% CaCl ₂ and 1/4 lb/sx Cellophane flakes \pm 200 sx Class C with 2% CaCl ₂ and 1/4 lb/sx Cellophane flakes. |
| 9 5/8" Intermediate Casing | Cement to surface using 1400 sx Poz (35% Poz, 65% Class C) with 6% Bentonite, 3% NaCl ₂ and 1/4 lb/sx Cellophane flakes \pm 200 sx Class C with 2% CaCl ₂ and 1/4 lb/sx Cellophane flakes. |
| 5 1/2" Production Casing with DV tool at ± 5500 ' | Cement 1 st stage with 250 sx Class H with 12lbs/sx BA-0, 2#/sx NaCl ₂ , 0.5% FL-52, 0.25% CD-32 and 1/4 lb/sx Cellophane flakes. Cement 2 nd stage with 420 sks Class C with 4% Bentonite, 6.5% NaCl ₂ and 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 9 5/8" casing seat at 4400'.

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

TODD "14P" FEDERAL #16 Drilling Program Page 3

out the 13 3/8" casing shoe (70% of 48# H-40 casing). Prior to drilling out the 9 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.

| Depth | Tvpe | Weight (ppg) | Viscosity (1/sec) | Water Loss (cc/30 mins) |
|-----------|---------------------|--------------|-------------------|-------------------------|
| 0-850' | Fresh water | 8.8 | 34-36 | No control |
| 850-4400' | Brine water | 10.0 | 28 | No control |
| 4400°-TD | Brine water polymer | r 10.0 | 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 from drilling out the 9 5/8" casing shoe until the 5 1/2" casing is cemented.

TODD "14P" FEDERAL #16 Drilling Program Page 4

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 will be based on geological sample shows.
- D. Additional testing will be initiated subsequent to setting the 5 1/2" production casing. Specific intervals will be targeted based on geological sample shows, drill stem tests log evaluation and core analysis.

9. Abnormal Pressures, Temperatures and Potential Hazards

No abnormal pressures or temperatures are foreseen. The anticipated bottom hole temperature at total depth is approximately 175 degrees and maximum bottom hole pressure is approximately 3500 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 first 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 "14P" FEDERAL #16 710' FSL & 660' FEL Section 14-T23S-R31E, Unit P Eddy County, New Mexico

1. <u>Existing Roads</u>

- A. This location will be staked by John West Surveying, Co. of Hobbs, New Mexico and the well site and elevation plat for the proposed TODD "14P" FEDERAL #16 will be submitted as Exhibit #2.
- 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) and travel approximately 3 miles on paved County Road 798, thence then turn west (left) onto the lease road and go approximately .01 mile to TODD "14P" FEDERAL #16 proposed location.

2. Proposed Access Road

Exhibit #3 shows the existing entry road to the proposed TODD "14P" FEDERAL #16 location. If necessary any additional road construction will be as follows.

- A. The maximum width of the road will be fifteen (15) feet.
- B. It will be crowned and made of six (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%.

- 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 & proposed wells within a one-mile radius of the proposed TODD "14P" FEDERAL #16.

4. Location of Existing and/or Proposed Facilities

- A. Devon Energy Corporation (Nevada) will build the tank battery on the Todd "14P" Federal #16 location in the SE SE of Section 14.
- B. In the event the TODD "14P" FEDERAL #16 is found productive, the production equipment will be as follows.
 - Exhibit #5 shows the battery facility to be utilized by the TODD "14P" FEDERAL #16. This facility may be upgraded to include one or two additional 500 barrel tanks.
 - 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. Power poles will be set along the access road right-of-way.
- C. If the well is productive, rehabilitation plans are as follows.
 - a) The reserve pit will be back-filled after the contents of the pit are dry (within 120 days after completion, weather permitting).
 - b) Caliche from unused portions of the drill pad will be removed. The original top soil from the well site will be returned to the location. The drill site will then be contoured to the original natural state.

5. Location and Type of Water Supply

The TODD "14P" FEDERAL #16 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. <u>Source of Construction Materials</u>

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 4400'.
- 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. <u>Well Site Layout</u>

- 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 noncommercial, 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 a copy forwarded to the BLM office in Carlsbad, New Mexico.

13. Lessee's and Operator's Representative

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

| Walter Frank | Daryl Lowder |
|-------------------------------|--------------------------|
| District Engineer | Superintendent |
| DEVON ENERGY CORPORATION | DEVON ENERGY CORPORATION |
| 20 North Broadway, Suite 1500 | P. O. Box 250 |
| Oklahoma City, OK 73102-8260 | Artesia, NM 88211-0250 |
| (405) 552-4595 (office) | (505) 748-3371 (office) |
| (405) 364-3504 (home) | (505) 746-9280 (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: Candace

Candace R. Graham Engineering Technician

nam Date: 01-25-1999





3,000 psi Working Pressure

3 MWP

STACK REQUIREMENTS

| No. | llem | | Min, I.D. | Min. Nominal |
|-----|---|------------------|--------------|-----------------|
| 1 | Flowline | | | |
| 2 | Fill up line | | ļ | 2* |
| З | Drilling nipple | | | |
| 4 | Annular preventer | | | |
| 5 | Two single or one dual I operated rams | nydraulically | | |
| 6a | Drilling spool with 2" mi 3" min choke line outlet | | | |
| 6b | 2" min. kill line and 3" r outlets in ram. (Alternat | nin, choke line | | |
| 7 | Valve | Gale 🗆 Plug 🗅 | 3-1/8" | |
| 8 | Gate valve-power ope | rated | 3-1/8* | |
| 9 | Line to choke manifold | | | 3" |
| 10 | Valves | Gate 🗅 Plug 🗅 | 2-1/16* | |
| 11 | Check valve | | 2-1/16* | |
| 12 | Casing head | | | |
| 13 | Vaive | Gate 🗆 Plug 🗆 | 1-13/16" | |
| 14 | Pressure gauge with ne | edie valve | | |
| 15 | Kill line to rig mud pum | | | 2* |

| A total |
|------------------------|
| |
| |
| ANNULAR PREVENTER 4 |
| |
| |
| SLIND RAMS |
| |
| PIPE RAWS |
| |
| |
| |
| |
| |
| HEAD HEAD |
| |
| |

CONFIGURATION

 \square

| 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.
- 3.BOP controls, to be located near drillers position.
- 4.Kelly equipped with Kelly cock.
- 5.Inside blowout prevventer or its equivalent on derrick floor at all times with proper threads to fit pipe being used.
- 6.Kelly saver-sub equipped with rubber casing protector at all times.
- 7.Plug type blowout preventer tester.
- 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 Dritting 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.
- 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.
- All valves to be equipped with handwheels or handles ready for immediate use.
- 6. Choka lines must be suitably anchored.

- 7.Handwheels and extensions to be connected and ready for use.
- Vaives 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.

EXHIBIT# 1.

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

3 MWP - 5 MWP - 10 MWP

EXHIBIT

| (1) | HUG PIT |
|-----|---------------------------------|
| | (1) RESERVE PIT |
| | |
| | • Location of separater ephanal |

BEYOND SUBSTRUCTURE

| | | | MIND | NUM REQU | REMENTS | 5 | | | | | |
|----|-------------------------------|-----------|---------|----------|----------|-----------|--------|----------|------------|--------|--|
| | | 3,000 MWP | | | | 5,000 MWP | | | 10,000 MWP | | |
| | | 1.0 | NOMINAL | RATING | 1.D. | NOMINAL | RATING | FD. | NOMINAL | RATING | |
| Na | Line from drilling spool | | 3- | 3,000 | | 3- | 5,000 | | 3. | 10,000 | |
| | Cross 3"x3"x3"x2" | | | 3,000 | | | 5,000 | | | | |
| 2 | Cross 3*x3*x3*x3* | | | | | | | | | 10,000 | |
| 3 | Valves(1) Gate C Plug C(2) | 3-1/8" | | 3,000 | 3-1/8* | | 5,000 | 3-1/8* | | 10,000 | |
| 4 | Valve Gate G 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 | 1 | 1 | 3,000 | | | 5,000 | | | 10,000 | |
| 5 | Gate C Valves Plug [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 | |
| | Adjustable Choke | 1- | | 3,000 | 1. | | 5,000 | 2* | | 10,000 | |
| | Line | | 3- | 3,000 | | 3- | 5,000 | | 3* | 10,000 | |
| 10 | Lins | | 2" | 3,000 | | 2- | 5,000 | | 3- | 10,000 | |
| 11 | Valves Gate [] Plug [](2) | J-1/8* | | 3,000 | 3-1/8* | | 5,000 | 3-1/8* | | 10,000 | |
| 12 | | | 3. | 1,000 | | 3. | 1,000 | | 3* | 2,000 | |
| 13 | | | 3. | 1,000 | 1 | 3- | 1,000 | · | 31 | 2,000 | |
| 14 | Bemote reading compound | | | 3.000 | | | 5,000 | ŀ | | 10,000 | |
| 15 | _ | | 2'x5' | | | 2'x5' | | | 2'x5' | | |
| 16 | | _ | 4* | 1,000 | | 4* | 1,000 | | 4* | 2,000 | |
| 17 | Gate | 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 6B or 6BX and ring gaskets shall be API RX or BX. Use only BX for 10 MWP.
- 3. All lines shall be securely anchored.
- 4. Chokes shall be equipped with tungsten carbide seats and needles, and replacements shall be available.
- 5. 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 bull plugged tees.
- 7. Discharge lines from chokes, choke bypass and from top of gas separator should vent as far as practical from the well.

¥ 1

Attachment to Exhibit #1 NOTES REGARDING BLOWOUT PREVENTERS Devon Energy Corporation (Nevada) TODD "14P" FEDERAL #16 710' FSL & 660' FEL Section 14-T23S-R31E, Unit P 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.







| String type: Surface Location: T23S, R31E, Eddy County, New Mexico Cesign parameters: Minimum design factors: Environment: Collapse H2S considered? No Mud weight 8.500 ppg Design factor 1.125 Surface temperature: 75 °F Design is based on evacuated pipe. Design factor 1.125 Surface temperature: 82 °F Temperature gradient: 0.80 °F Minimum beight: 850 ft Burst: Design factor 1.00 Minimum Drift: 2.559 in Burst: Design factor 1.00 Non-directional string. Max anticipated surface 468 psi 8 Round STC: 1.80 (J) | Weil name: | | Typical We | Il Surface | | | | |
|--|---------------------------|--|---------------------------------------|----------------------|--|--|--|--|
| Design parameters: Minimum design factors: Environment: Collapse Collapse: H2S considered? No Mud weight: 8.500 ppg Design factor 1.125 Surface temperature: 75 °F Design is based on evacuated pipe. Design factor 1.125 Surface temperature: 82 °F Temperature gradient: 0.80 °F Minimum section length: 850 ft Burst: Design factor 1.00 Max anticipated surface pressure: 468 psi Internal gradient: 0.021 psi/ft Tension: Non-directional string. Calculated BHP 486 psi 8 Round STC: 1.80 (J) | · . | Devon Energy Corporation (Nevada) Surface | | | | | | |
| Collapse Collapse: H2S considered? No Mud weight 8.500 ppg Design factor 1.125 Surface temperature: 75 °F Design is based on evacuated pipe. Design factor 1.125 Surface temperature: 75 °F Burst: Design factor 1.125 Surface temperature: 82 °F Max anticipated surface Burst: Design factor 1.00 Max anticipated surface pressure: 468 psi Tension: Non-directional string. Internal gradient: 0.021 psi/ft Tension: 1.80 (J) Non-directional string. | Location: T2: | T23S, R31E, Eddy County, New Mexico | | | | | | |
| Mud weight: 8.500 ppg Design factor 1.125 Surface temperature: 75 °F Design is based on evacuated pipe. Besign factor 1.125 Surface temperature: 82 °F Temperature gradient: 0.80 °F Temperature gradient: 0.80 °F Minimum section length: 850 ft Burst: Design factor 1.00 Bu | | ters: | · · · · · · · · · · · · · · · · · · · | 1 factors: | | | | |
| Burst: Minimum Drift: 2.559 in Burst: Design factor 1.00 Burst: Max anticipated surface 1.00 max anticipated surface 468 psi Internal gradient: 0.021 psi/ft Tension: Calculated BHP 486 psi 8 Round STC: 1.80 (J) | Mud weight | | | 1.125 | Surface temperature: 75 °F Bottom hole temperature: 82 °F Temperature gradient: 0.80 °F/100f | | | |
| Max anticipated surface pressure: 468 psi Internal gradient: 0.021 psi/ft Tension: Non-directional string. Calculated BHP 486 psi 8 Round STC: 1.80 (J) | lurst | | | 1.00 | | | | |
| Calculated BHP 486 psi 8 Round STC: 1.80 (J) | Max anticipated pressure: | 468 psi | •! | | | | | |
| | | | | 1.80 (J) 1.80 (J) | Non-directional string. | | | |

1.60 (J)

1.50 (J)

1.50 (B)

. 744 ft Re subsequent strings:

Next mud weight.

Next setting BHP:

Fracture mud wt:

Injection pressure

Fracture depth:

Next setting depth:

8.50 ppg

Buttress:

Premium:

Body yield:

Neutral point:

| Run | Segment | | Nominal | | End | True Vert | Measured | Drift | Internai |
|-----|----------------|-------------------|--------------------|---------------|-------------------|------------------|----------------|--------------------|-------------------|
| Seq | Length (ft) | Size (in) | Weight (Ibs/ft) | Grade | Finish | Depth (ft) | Depth (ft) | Diameter (in) | Capacity (ft³) |
| 1 | 850 | 13.375 | 48.00 | H-40 | ST&C | 850 | 850 | 12.59 | 79.8 |
| Run | Collapse | Collapse | Collapse | Burst | Burst | Burst | Tension | Tension | Tension |
| Seq | Load (psi) | Strength (psi) | Design Factor | Load (psi) | Strength (psi) | Design Factor | Load (Kips) | Strength (Kips) | Design Factor |
| 1 | 375 | 740 | 1.97 | 468 | 1730 | 3.70 | 36 | 322 | 9.01 J |

Tension is based on buoyed weight.

• ...

Prepared W. M. Frank by: Devon Energy Phone: (405) 552-4595 FAX: (405) 552-4621 Date: November 24,1998 Oklahoma City, Oklahoma

Remarks:

Annular backup:

Collapse is based on a vertical depth of 850 ft, a mud weight of 8.5 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.

EXHIBIT # 7

4,400 ft

10.000 ppg

2,286 psi 11.000 ppg

850 ft

486 psi

| Devon Energy Corpo Intermediate | Typical Well Intermediat ration (Nevada) | te | |
|------------------------------------|---|------------|--|
| T23S, R31E, Eddy Cou | unty, New Mexico | | |
| motors. | Minimum design factors: | Envimoment | |

| Design parameters: <u>Collapse</u> Mud weight: 9.500 ppg Design is based on evacuated pipe. | | | <u>Collapse</u> | Minimum design factors: <u>Collapse:</u> Design factor 1.125 | | | Environment: H2S considered? No Surface temperature: 75 °F Bottom hole temperature: 110 °F Temperature gradient: 0.80 °F/1001 | | |
|--|---|-----------------------|---------------------------|--|------------------------|----------------------------------|---|--------------------------------------|---|
| | · . | | | <u>Burst:</u> Design fa | ctor | 1.00 | Minimum Di | ection length: rift | 850 ft 8.500 in |
| P | anticipated ressure: nal gradient | | 2,286 psi 0.000 psi/ft | Tension: | | | Non-directio | nal string. | |
| Calc | ulated BHP | - | 2,286 psi | 8 Round S 8 Round L Buttress: | | 1.80 (J) 1.80 (J) 1.60 (J) | | , i.e. eug/ | |
| 7440 | | | · • • • • • • • • • | Premium: Body yield | | 1.50 (J) 1.50 (B) | 1 | uent strings: ting depth: | 12.000 ft |
| | | | | Tension is Neutral po | s based on bu bint | oyed weight. 3,778 ft | Next mu Next set Fracture Fracture | id weight: ting 3HP: e mud wt: | 9.500 ppg 5,922 psi 10.000 ppg 4,400 ft 2,286 psi |
| Run | Segment | | Nominal | | End | True Vert | Measured | Drift | Internal |
| Seq | Length (ft) | Size (in) | Weight (lbs/ft) | Grade | Finish | Depth (ft) | Depth (ft) | Diameter (in) | Capacity (ft³) |
| 1 | 4400 | 9.625 | 40.00 | J-55 | LT&C | 4400 | 4400 | 8.75 | 350 |
| Run | Collapse | Collapse | Collapse | Burst | Burst | Burst | Tension | Tension | Tension |
| Seq | Load | Strength | Design | Load | Strength | Design | Load | Strength | Design |
| 1 | (psi) 2171 | (psi) 2570 | Factor 1.18 | (psi) 2286 | (psi) 3950 | Factor 1.73 | (Kips) 151 | (Kips) 520 | Sactor 3.44 J |

Prepared W. M. Frank

by: Devon Energy

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

Date: November 24,1998 Oklahoma City, Oklahoma

Remarks:

Weil name:

String type:

Operator:

Location:

Collapse is based on a vertical depth of 4400 ft, a mud weight of 9.5 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.

EXHIBIT # 7

| Weil name: Operator: String type: | Productio | | | II Production | | |
|---|--------------|---------------------------|---|----------------------------------|---|---------------------|
| Location: | TZ3S, R3 | 1E, Eddy County | , New Mexico | | | |
| Design para | meters: | | Minimum desig <u>Collapse</u> : | n factors: | Environment: H2S considered? No | |
| Mud weight: 9.500 ppg Design is based on evacuated pipe. | | | Design factor 1.125 | | Surface temperature: 75 °F Bottom hole temperature: 171 °F | '1 "F 10 "F/100f |
| lurst | | | <u>Burst:</u> Design factor | 1.00 | | |
| | ated surface | 9 | | | | |
| pressure | : | 5,922 psi | — . | | | |
| Internal gra Caiculated | | 0.000 psi/ft 5,922 psi | <u>Tension:</u> 8 Round STC: 8 Round LTC: | 1.80 (J) 1.80 (J) | Non-directional string. | |
| Annular bac | ckup: | 9.50 ppg | Buttress: Premium: Body yield: | 1.60 (J) 1.50 (J) 1.50 (B) | | |
| Packer fluid Fluid densit | | 8.400 ppg | Tension is based o Neutral point: | on buoyed weight. 10,481 ft | | |

8.400 ppg 11,500 ft Packer depth:

| Run | Segment | | Nominal | | End | True Vert | Measured | Drift | Internal |
|-----|----------------|--------------------------|--------------------|-------|----------|---------------|---------------|------------------|--------------------------------|
| Seq | Length (ft) | Siz e (in) | Weight (Ibs/ft) | Grade | Finish | Depth (ft) | Depth (ft) | Diameter (in) | Capacity (ft ²) |
| 2 | 10500 | 5.5 | 17.00 | L-80 | LT&C | 10500 | 10500 | 4.767 | 361.8 |
| 1 | 1500 | 5.5 | 20.00 | L-80 | LT&C | 12000 | 12000 | 4.653 | 60.7 |
| Run | Collapse | Collapse | Collapse | Burst | Burst | Burst | Tension | Tension | Tension |
| Seq | Load | Strength | Design | Load | Strength | Design | Load | Strength | Design |
| • | (psi) | (psi) | Factor | (psi) | (psi) | Factor | (Kips) | (Kips) | Factor |
| 2 | 5182 | 6290 | 1.21 | 5922 | 7740 | 1.31 | 178 | 338 | 1.89 J |
| 1 | 5922 | 8830 | 1.49 | 5322. | 9190 | 1.73 | 0 | 416 | 1 ee.ee |

Prepared W. M. Frank by: Devon Energy Phone: (405) 552-4595 FAX: (405) 552-4621

Date: November 24,1998 Oklahoma City, Oklahoma

Remarks: Collapse is based on a vertical depth of 12000 ft, a mud weight of 9.5 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.

EXHIBIT# 7

DEVON ENERGY CORPORATION 1500 Mid-America Tower 20 North Broadway Oklahoma City, Oklahoma 73102-8260

.

405/235-3611 TWX 910-831-3277

May 5, 1989

State of New Mexico Oil & Gas Conservation Commission State Capitol Building Santa Fe, NM 87504

> Re: Blanket Plugging Bond State of New Mexico No. 56-0130-11003-87

Gentlemen:

Devon Energy Corporation formerly Devon Corporation has changed its name to Devon Energy Corporation (Nevada). In this regard, enclosed is a Rider for the referenced bond to include both company names. Please amend your records.

Very truly yours,

allere

Charlene Newkirk Lease Records Supervisor

encls

cc: Carolyn Wilson McEldowney McWilliams

RIDER

To be attached to and become a part of Bond No. 56-0130-11003-87-1 issued by the United States Fidelity and Guaranty Company, on behalf of Devon Energy Corporation as Principal, and in favor of State of New Mexico as Obligee, in the penalty of Fifty thousand and no/100 - -----Dollars (\$ 50,000.00) for Blanket plugging bond It is hereby understood and agreed that effective on the

February 10, 1989 the Principal in this bond shall be Devon Energy Corporation (Nevada)

However, the liability of the Surety in the argregate to the Oblinee for any and all defaults of the Principal, whether occuring before or after or partly before and partly after this rider become effective, shall in no event exceed the penalty stated in the bond.

Signed, Sealed, and Dated this 3rd day of March 1989.

| ATTEST | | Devon Energy Corporation (Nevada) |
|--------|---------------|--|
| Burger | ameting | MARVIN C. LUNDE, JR. By: Vice President |
| act-c | UNITED STATES | FIDELITY AND GUARANTY COMPANY |

By:

Marcia C. Brejda

Attorney-in-fact