Form 3160-3
(December 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE* (See other instructions on reverse side)

N.M. Oil Cons. Division
811 S. 1ST ST.
ARTESIA, NM 88210-2834

Form approved.

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK: DRILL ☒ DEEPEN ☐

b. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ Other ____ SINGLE ZONE ☐ MULTIPLE ZONE ☐

2. NAME OF OPERATOR
DEVON ENERGY CORPORATION (NEVADA)

3. ADDRESS AND TELEPHONE NO.
20 N. BROADWAY, SUITE 1500, OKC, OK 73102 (405) 235-3611

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface 710' FNL & 660' FEL, Unit A, Section 23, T23S, R31E, Eddy County, NM

At top proposed prod. zone (Same)

R-111-P POTASH

5. LEASE DESIGNATION AND SERIAL NO.
NM-NM0405444

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
N/A

7. UNIT AGREEMENT NAME
N/A

8. FARM OR LEASE NAME, WELL NO.
Todd "23A" Federal #29

9. API WELL NO.
30-015- 31881

10. FIELD AND POOL, OR WILDCAT
~~Undesignated~~ (Wolfcamp) Bone Spring

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA
Unit A
Section 23-T23S-R31E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
35 miles WNW of Jal, New Mexico

12. COUNTY OR PARISH: Eddy County

13. STATE: New Mexico

15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line if any): 660'

16. NO. OF ACRES IN LEASE: 1320.00

17. NO. OF ACRES ASSIGNED TO THIS WELL: 40.00

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.:

19. PROPOSED DEPTH: ~~12,000'~~ 8450'

20. ROTARY OR CABLE TOOLS*: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3486' GR

22. APPROX. DATE WORK WILL START*: First quarter, 1999

RECEIVED
2001
OCD - ARTESIA

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	H-40 13 3/8"	48# WITNESS	850'	500 sx Poz C + 200 sx Class C
12 1/4"	J-55 ~~8.~~ 9 5/8"	~~32 40#~~ WITNESS	4400'	1400 sx Poz C + 200 sx Class C
7 7/8"	~~L-80~~ J-55 5 1/2"	~~17# & 20#~~ 15.5#	~~12,000'~~ 8450' DV Tool +/- 5500'	Stg #1: 250 sx Class H Stg #2: 420 sx Class C

Devon Energy proposes to drill to approximately 12,000' to test the Wolfcamp for commercial quantities of oil. If the Wolfcamp is deemed non-commercial, the wellbore will be plugged and abandoned as per Federal regulations. Programs to adhere to onshore oil and gas regulations are outlined in the following exhibits and attachments.

CARLSBAD CONTROLLED WATER BASIN

Drilling Program
Surface Use and Operating Plan
Exhibits #1 = Blowout Prevention Equipment
Exhibit #2 = Location and Elevation Plat
Exhibits #3 = Road Map and Topo Map
Exhibit #4 = Wells Within 1 Mile Radius
Exhibits #5 = Production Facilities Plat
Exhibit #6 = Rotary Rig Layout
Exhibit #7 = Casing Design
Archaeological Clearance Report

The undersigned accepts all applicable terms, conditions, stipulations and restrictions concerning operations conducted on the leased land or portions thereof, as described below
Lease #: NM-NM0405444
Legal Description: All of Section 23-T23S-R31E, Eddy Cnty, NM

Bond Coverage: Nationwide
BLM Bond #: CO-1104

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED Candace R. Graham TITLE Candace R. Graham, Engineering Technician DATE January 29, 1999

*(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

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

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY (ORIG. SGD.) M. J. CHÁVEZ TITLE STATE DIRECTOR DATE 2/9/01

See Instructions On Reverse Side

APPROVED FOR 1 YEAR

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
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS ATTACHED

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
Ene. Minerals, and Natural Resources De tment

EXHIBIT # 2

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
		SAND DUNES (WOLFCAMP)

4 Property Code	5 Property Name	6 Well Number
	TODD "23 A" FEDERAL	29

7 OGRID No.	8 Operator Name	9 Elevation
6137	DEVON ENERGY CORPORATION (NEVADA)	3486'

10 SURFACE LOCATION

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
A	23	23 SOUTH	31 EAST, N.M.P.M.		710'	NORTH	660'	EAST	EDDY

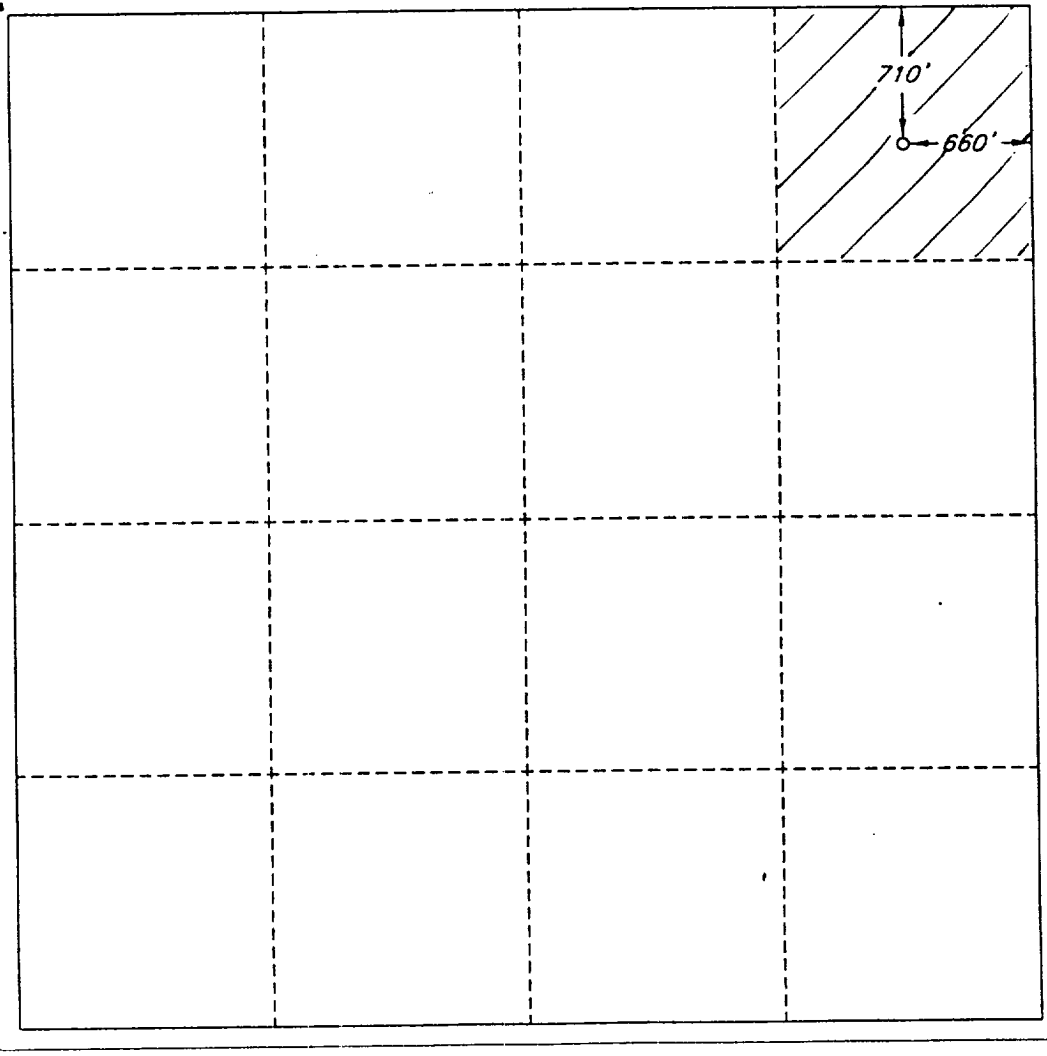
11 BOTTOM HOLE LOCATION IF DIFFERENT FROM SURFACE

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	13 Joint or Infill	14 Consolidation Code	15 Order No.
40			

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

16



OPERATOR CERTIFICATION

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: April 8, 1999

SURVEYOR CERTIFICATION

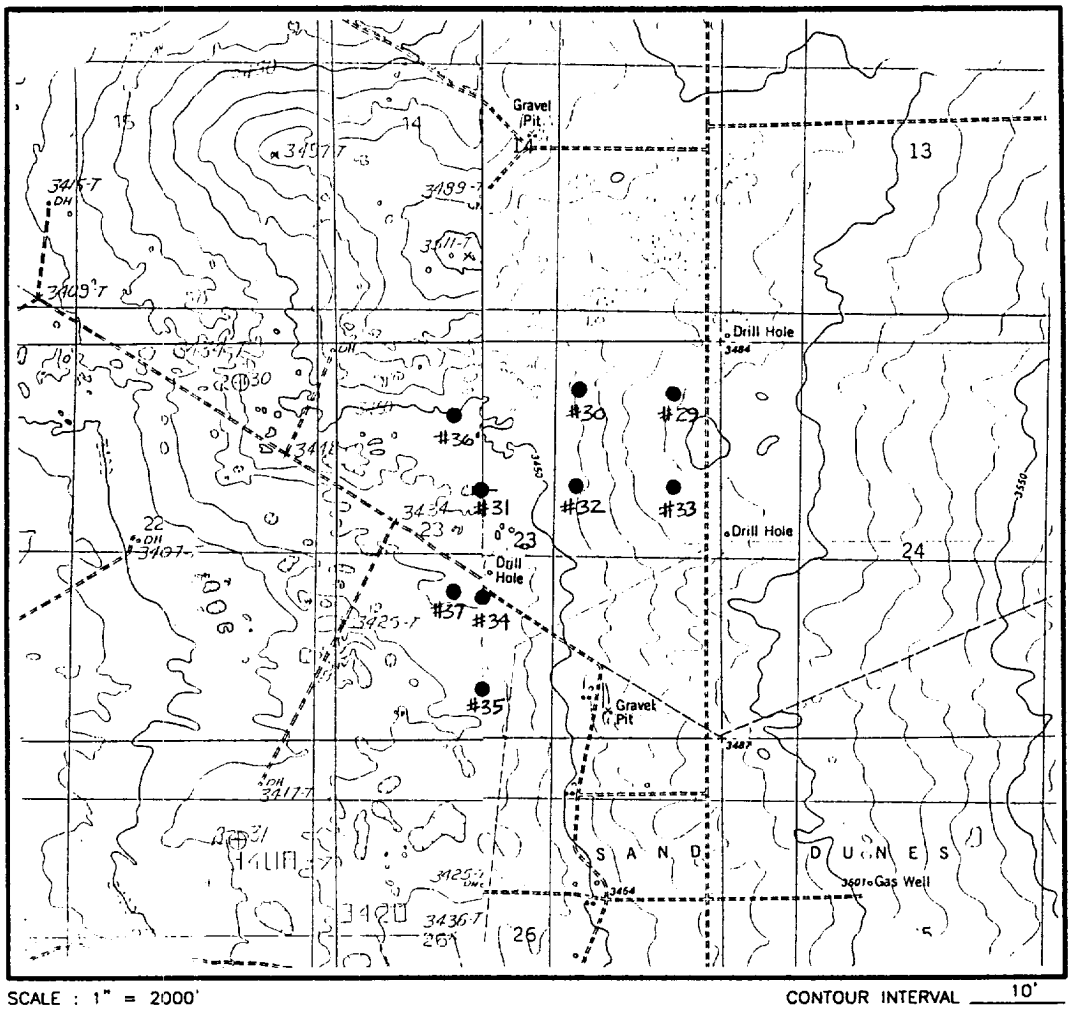
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date of Survey: MARCH 26, 1999
Signature and Seal of Professional Surveyor: ROGER M. ROBBINS, NEW MEXICO, 12128, REGISTERED PROFESSIONAL SURVEYOR

Certificate No. ROGER M. ROBBINS P.S. #12128

JOB #62796 / 48 SE / V.H.B.

LOCA N & ELEVATION VERIFICATION



SCALE : 1" = 2000'

CONTOUR INTERVAL 10'

SECTION 23 TWP 23-S RGE 31-E

SURVEY NEW MEXICO PRINCIPAL MERIDIAN

COUNTY EDDY STATE NM

OPERATOR **DEVON ENERGY CORP. (NEVADA)**

U.S.G.S. TOPOGRAPHIC MAP

LOS MEDANOS & BOOTLEG RIDGE

NAME	LOCATION	ELEVATION	LAT.	LONG.
TODD "23A" FED. #29	710' FNL & 660' FEL	3486'	N 32°17'42.8"	W 103°44'31.8"
TODD "23B" FED. #30	660' FNL & 1930' FEL	3464'	N 32°17'43.3"	W 103°44'46.6"
TODD "23F" FED. #31	1980' FNL & 2030' FWL	3441'	N 32°17'30.3"	W 103°45'02.0"
TODD "23G" FED. #32	1930' FNL & 1980' FEL	3460'	N 32°17'30.8"	W 103°44'47.2"
TODD "23H" FED. #33	1980' FNL & 660' FEL	3486'	N 32°17'30.2"	W 103°44'31.6"
TODD "23K" FED. #34	1880' FSL & 2030' FWL	3440'	N 32°17'16.2"	W 103°45'02.0"
TODD "23N" FED. #35	660' FSL & 2030' FWL	3429'	N 32°17'04.2"	W 103°45'02.0"
TODD "23C" FED. #36	1000' FNL & 1650' FWL	3449'	N 32°17'40.0"	W 103°45'06.4"
TODD "23K" FED. #37	1980' FSL & 1650' FWL	3434'	N 32°18'12.2"	W 103°45'06.4"

-N-

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

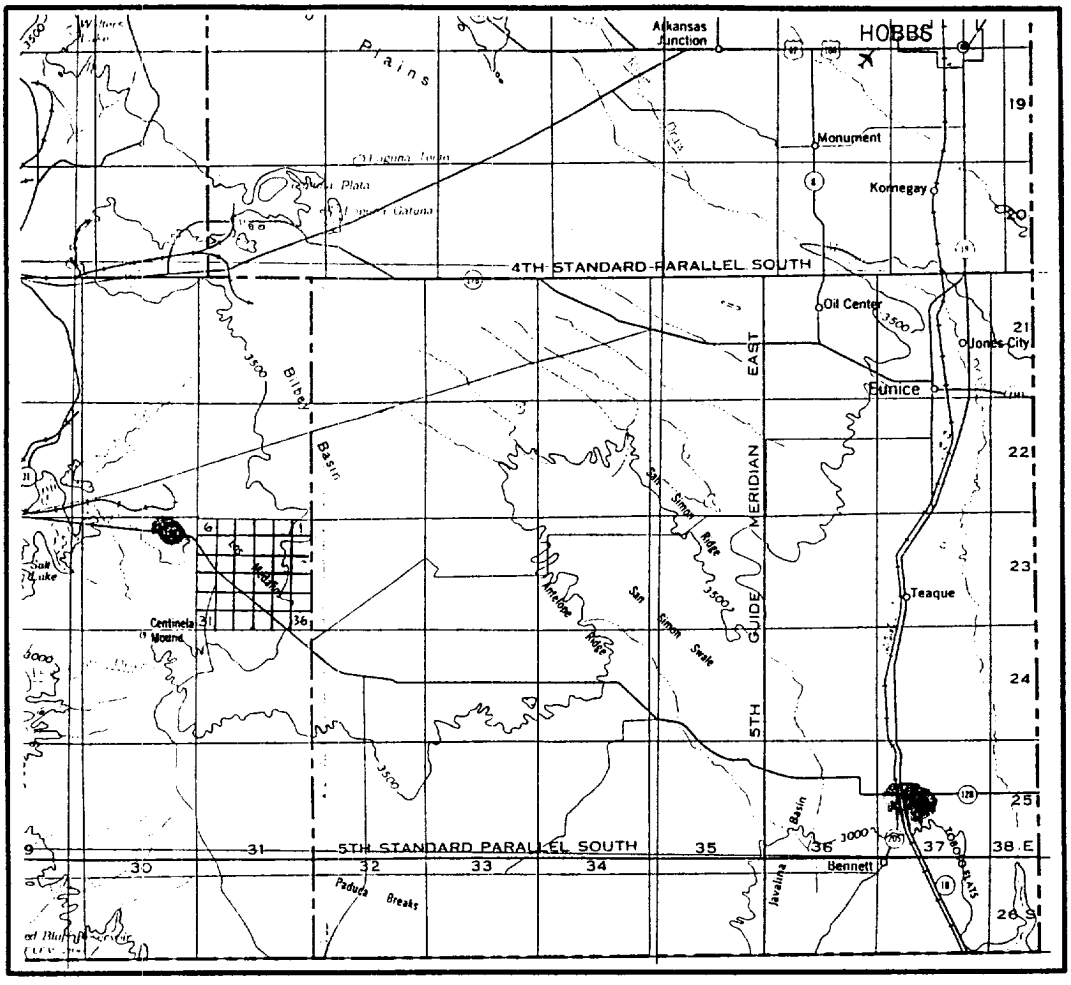
Surveying & Mapping for the Oil & Gas Industry

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**

LEASE TODD & BARCLAY

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.

-N-

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. HOBART
PAMPA, TX. 79065
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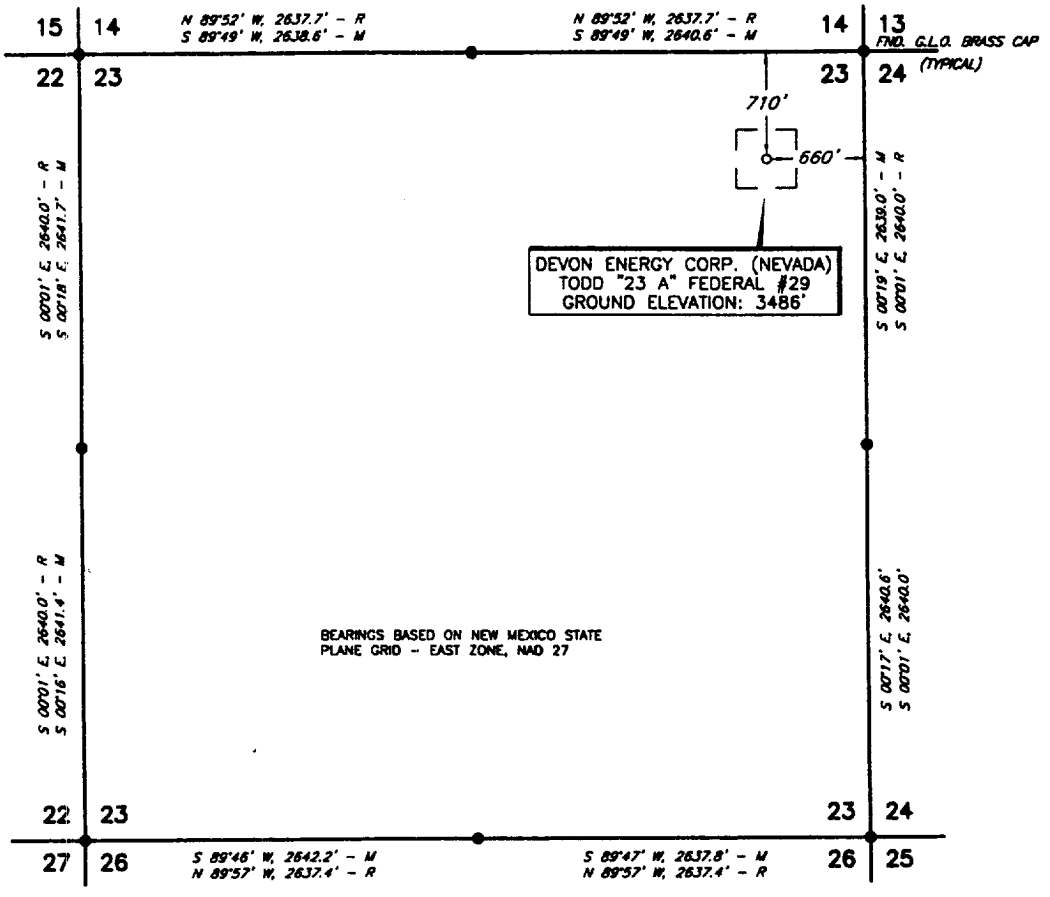
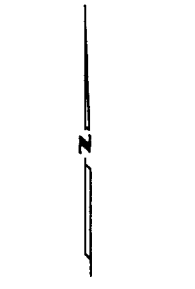
(800) 654-3219

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

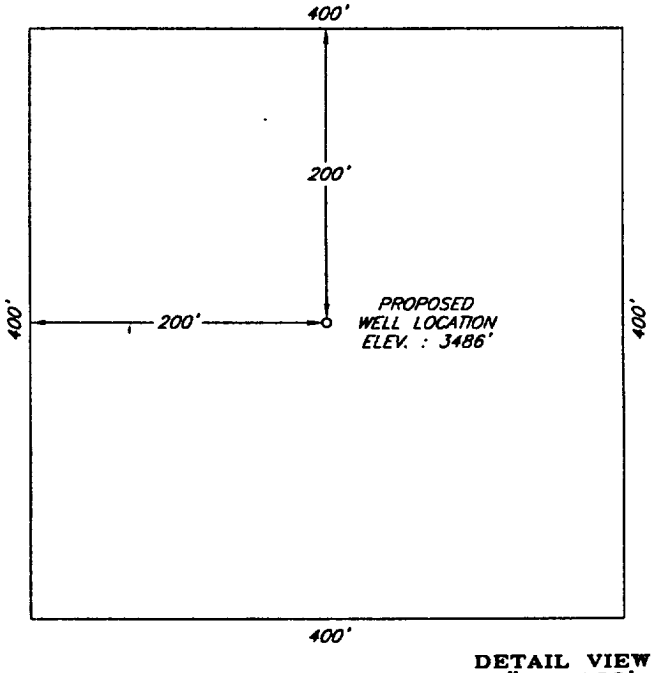
PLAT SHOWING PROPOSED
WELL LOCATION IN
SECTION 23, T-23-S, R-31-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO



-R=RECORD
-M=MEASURED



DATE OF FIELD WORK: MARCH 16, 1999



DETAIL VIEW
1" = 100'

I, ROGER M. ROBBINS, A PROFESSIONAL SURVEYOR IN THE STATE OF NEW MEXICO AND AUTHORIZED AGENT OF TOPOGRAPHIC LAND SURVEYORS, HEREBY CERTIFY THIS PLAT TO BE A TRUE REPRESENTATION OF A SURVEY PERFORMED IN THE FIELD UNDER MY SUPERVISION, THAT I AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND THAT THIS PLAT AND FIELD SURVEY UPON WHICH IT IS BASED MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO. (RULE 500.6 EASEMENT SURVEYING)

12128
REGISTERED PROFESSIONAL SURVEYOR

ROGER M. ROBBINS, P.S.

NO.	REVISION	DATE	BY

SURVEYED BY: D.Y.
DRAWN BY: V.H.B.
APPROVED BY: R.M.R.

DEVON ENERGY CORPORATION (NEVADA)

SURVEYING AND MAPPING BY
TOPOGRAPHIC LAND SURVEYORS
2903 N. BIG SPRING, MIDLAND, TEXAS 79705

SCALE: AS SHOWN
DATE: MARCH 16, 1999
JOB NO.: 62796-F
QUAD NO.: 47 SW
SHEET : 1 OF 1

DRILLING PROGRAM

Attached to Form 3160-3
Devon Energy Corporation (Nevada)
TODD "23A" FEDERAL #29
710' FNL & 660' FEL
Section 23-T23S-R31E, Unit A
Eddy County, New Mexico

1. Geologic Name of Surface Formation

   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.

4. Casing Program

Hole Size	Interval	Casing OD	Weight	Grade	Type
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 + 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 + 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 1st 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 2nd 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'± 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

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	Type	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	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.

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 "23A" FEDERAL #29
710' FNL & 660' FEL
Section 23-T23S-R31E, Unit A
Eddy County, New Mexico

1. Existing Roads

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 "23A" FEDERAL #29 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. Thence north approximately 4 miles on paved County Road 798 to existing Todd "23A" Federal #9 well pad and the proposed Todd "23A" Federal #29 location.

2. Proposed Access Road

Exhibit #3 shows the existing entry road to the proposed TODD "23A" FEDERAL #29 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 "23A" FEDERAL #29.

4. Location of Existing and/or Proposed Facilities

A. Devon Energy Corporation (Nevada) will build the tank battery on the Todd "23G" Federal #7 location in the SW NE of Section 23.

B. In the event the TODD "23A" FEDERAL #29 is found productive, the production equipment will be as follows.

1. Exhibit #5 shows the battery facility to be utilized by the TODD "23A" FEDERAL #29. 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 "23A" FEDERAL #29 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 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. Well Site Layout

A. The drill pad is shown on Exhibit #6. Approximate dimensions of the pad, pits and general location of the rig equipment are displayed. Top soil will be stored adjacent to the pad until reclamation efforts are undertaken. Only modest cuts will be necessary to build the pad which will be covered with 6" of compacted caliche.

B. No permanent living facilities are planned, but temporary trailers for the tool pusher, drilling foreman and mud logger may be on location throughout drilling operations.

C. The reserve pit will be lined using plastic sheeting of 5-7 mil thickness.

10. Plans for Restoration of Surface

A. After concluding the drilling and/or completion operations, if the well is found non-commercial, the caliche will be removed from the pad and transported to the original caliche pit or used for other drilling locations. The road will be reclaimed as directed

by the BLM. The reserve pit area will be broken out and leveled after drying to a condition where these efforts are feasible. The original top soil will again be returned to the pad and contoured, as close as possible, to the original topography.

B. The pit lining will be buried or hauled away in order to return the location and road to their pristine nature. All pits will be filled and location leveled, weather permitting, within 120 days after abandonment.

C. The location and road will be rehabilitated as recommended by the BLM.

D. The reserve pit will be fenced on three sides throughout drilling operations. After the rotary rig is removed, the reserve pit will be fenced on the fourth side to preclude endangering wildlife. The fencing will be in place until the pit is reclaimed.

E. If the well is deemed commercially productive, the reserve pit will be restored as described in 10 (A) within 120 days subsequent to the completion date. Caliche from areas of the pad site not required for operations will be reclaimed. The original top soil will be returned to the area of the drill pad not necessary to operate the well. These unused areas of the drill pad will be contoured, as close as possible, to match the original topography.

11. Surface Ownership

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

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

12. Other Information

A. The area surrounding the well site is grassland. The top soil is very sandy in nature. The vegetation is moderately sparse with native prairie grass, sagebrush, yucca and miscellaneous weeds.

B. There is no permanent or live water in the general proximity of the location.

C. A Cultural Resources Examination will be completed by Don Clifton Archaeological Consultant, and 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
District Engineer

DEVON ENERGY CORPORATION
20 North Broadway, Suite 1500
Oklahoma City, OK 73102-8260

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

Daryl Lowder
Superintendent

DEVON ENERGY CORPORATION
P. O. Box 250
Artesia, NM 88211-0250

(505) 748-3371 (office)
(505) 746-9280 (home)

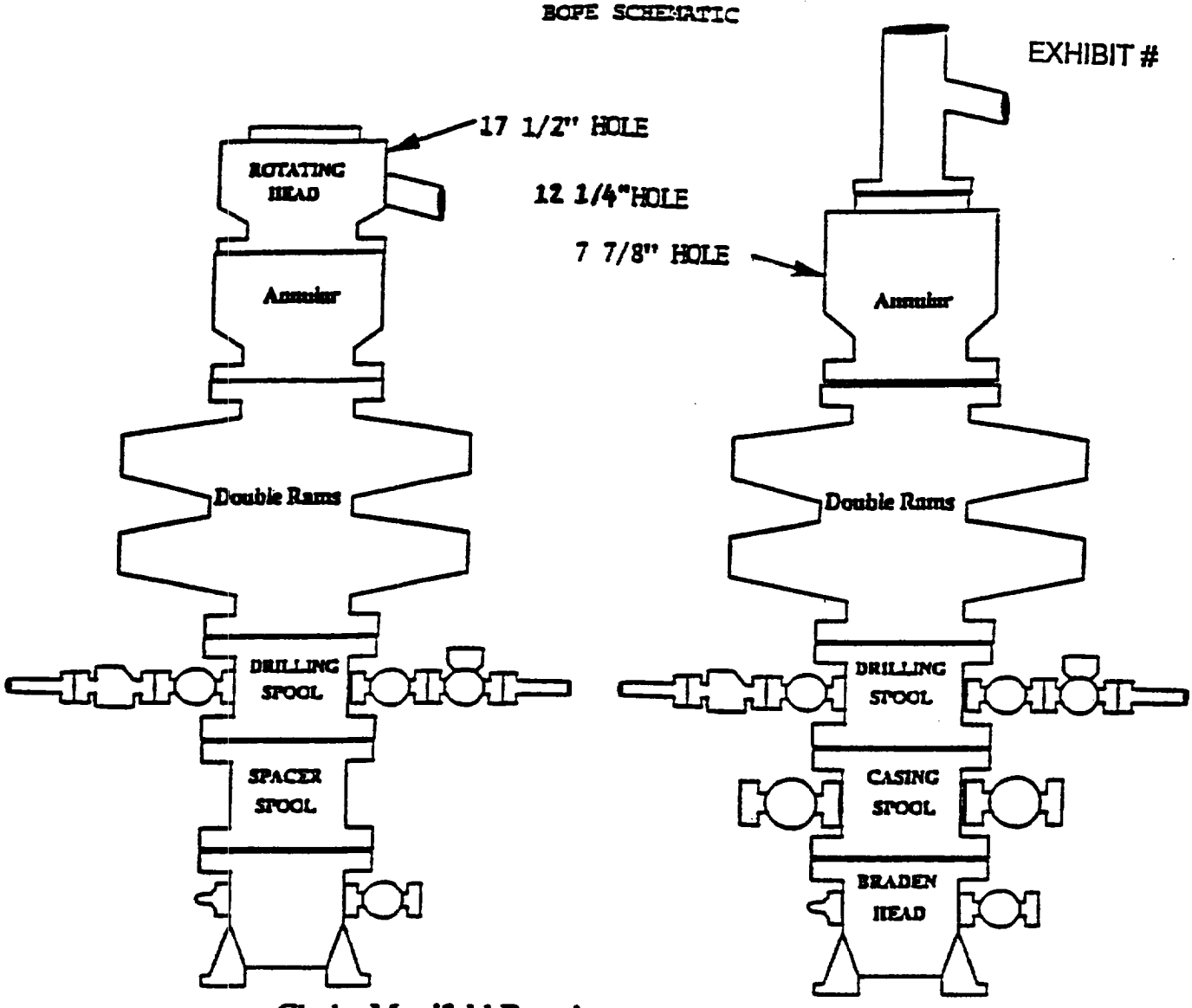
Certification

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.

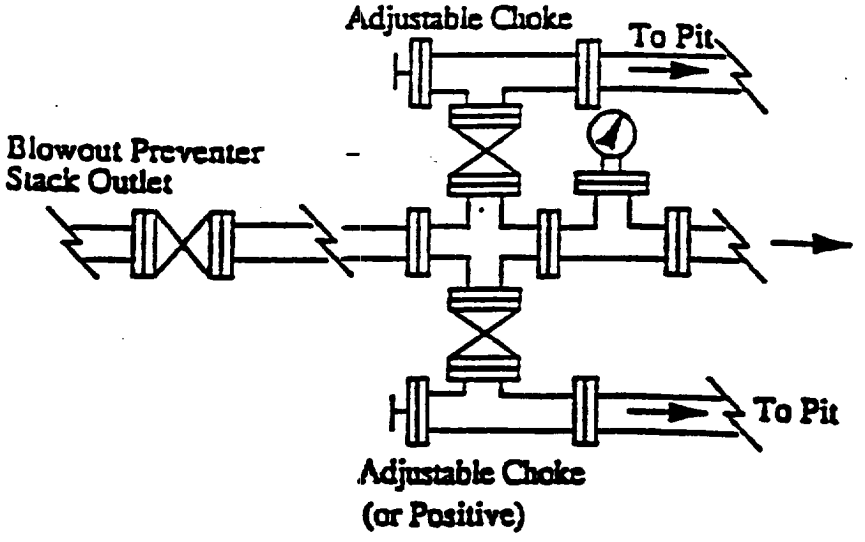
Signed: Candace R. Graham Date: 01-22-1999
Candace R. Graham
Engineering Technician

BOPE SCHEMATIC

EXHIBIT # 1



Choke Manifold Requirement (3000 psi WP)



Minimum 4" Nominal choke and kill lines

MINIMUM BLOWOUT PREVENTER REQUIREMENTS

3,000 psi Working Pressure

3 MWP

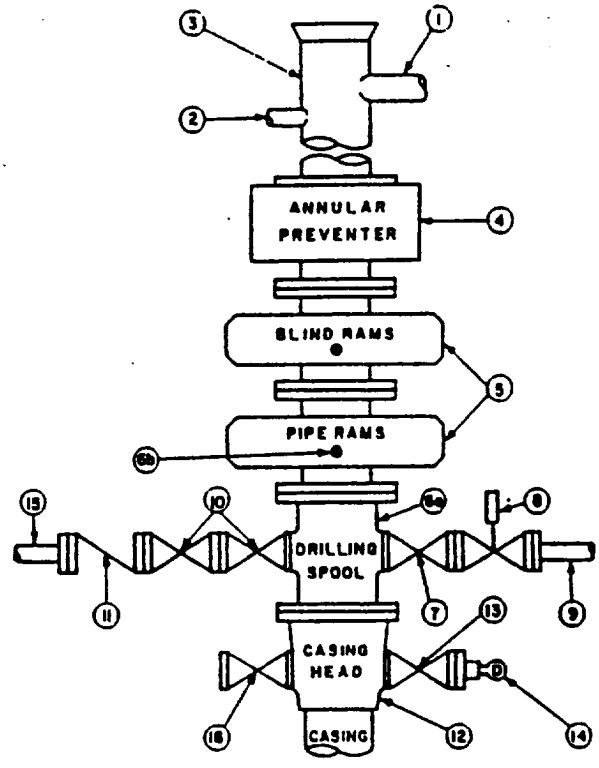
EXHIBIT # 1

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		
	—— or ——		
6b	2" min. kill line and 3" min. choke line outlets in ram. (Alternate to 6a above.)		
7	Valve Gate ☐ Plug ☐	3-1/8"	
8	Gate valve—power operated	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	Valve Gate ☐ Plug ☐	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"	

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 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:

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

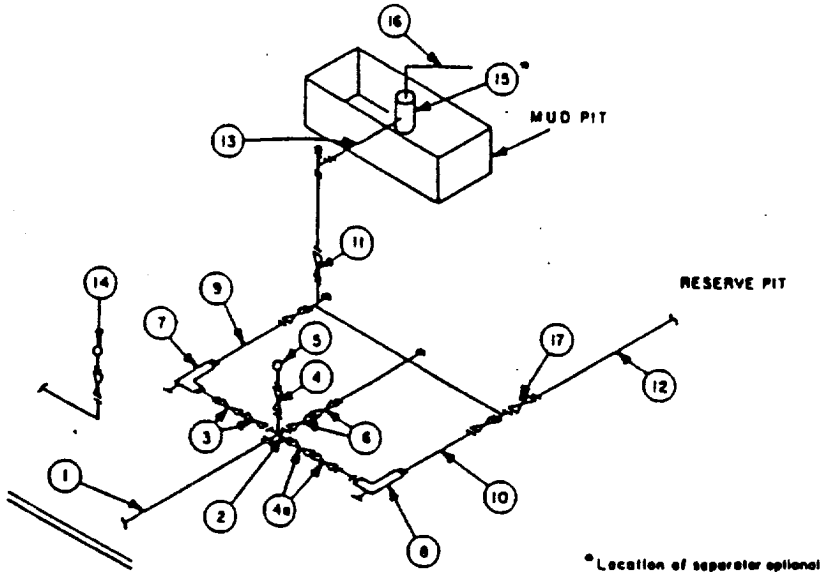
GENERAL NOTES:

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 choke. 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

EXHIBIT # 1



MINIMUM REQUIREMENTS										
		3,000 MWP			5,000 MWP			10,000 MWP		
No		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 ☐ 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 ☐ 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
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 ☐ 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			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 ☐ 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 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.

Attachment to Exhibit #1
NOTES REGARDING BLOWOUT PREVENTERS
Devon Energy Corporation (Nevada)
TODD "23A" FEDERAL #29
710' FNL & 660' FEL
Section 23-T23S-R31E, Unit A
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.

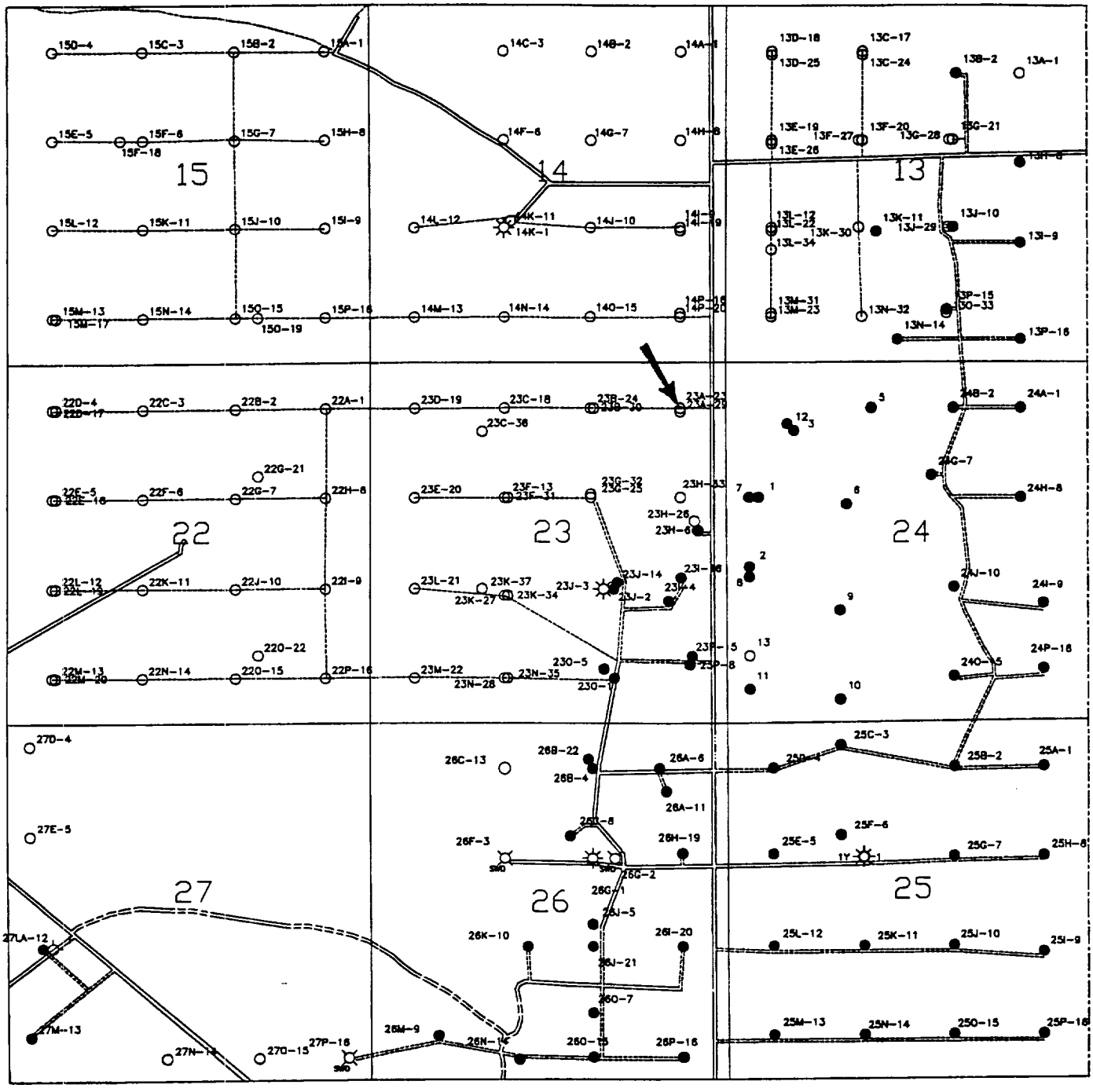
8. Will maintain a kelly cock attached to the kelly.

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.

R 31 E



N

devon

SAND DUNES FIELD

EDDY COUNTY, NEW MEXICO

TODD-23A FEDERAL-29

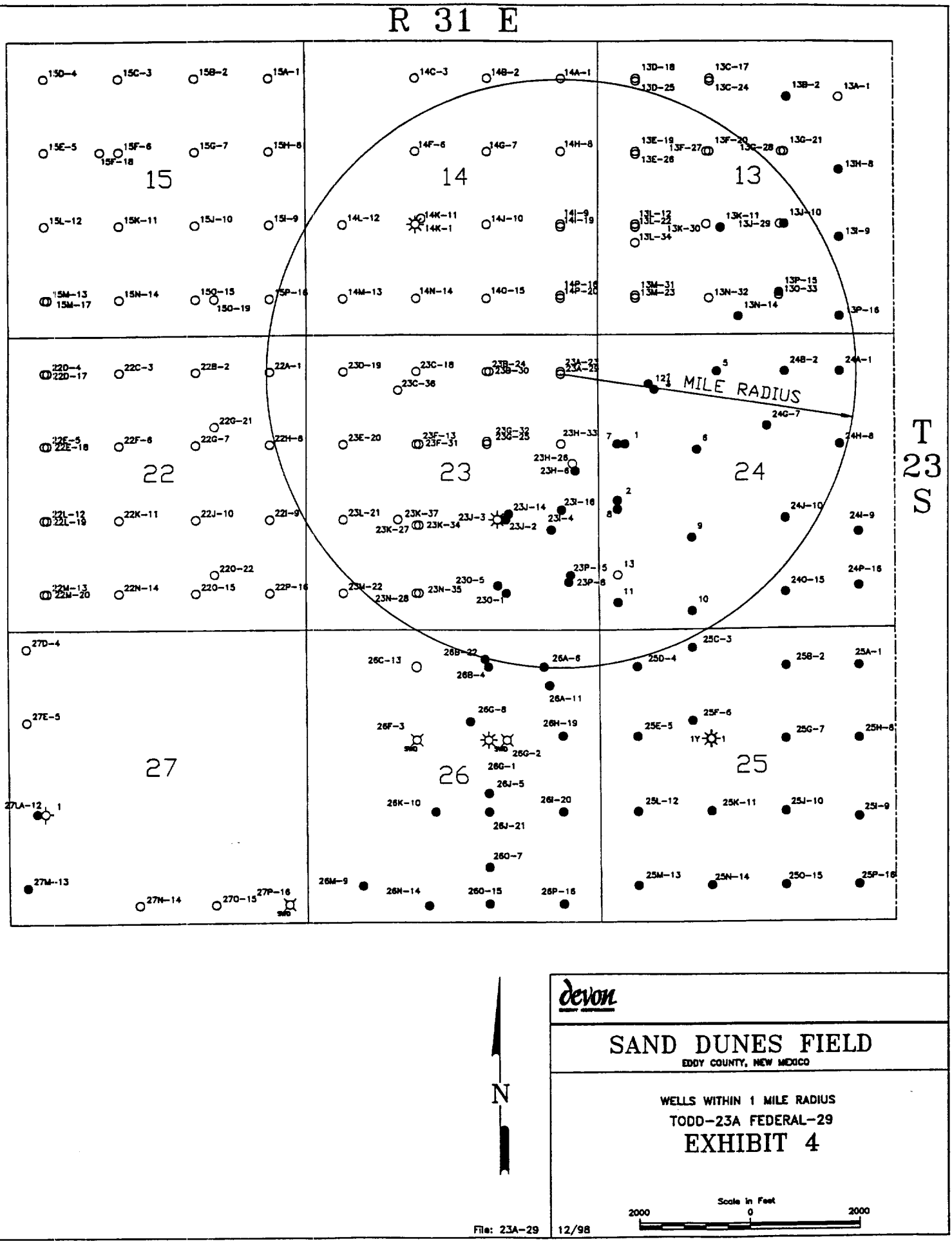
EXHIBIT 3

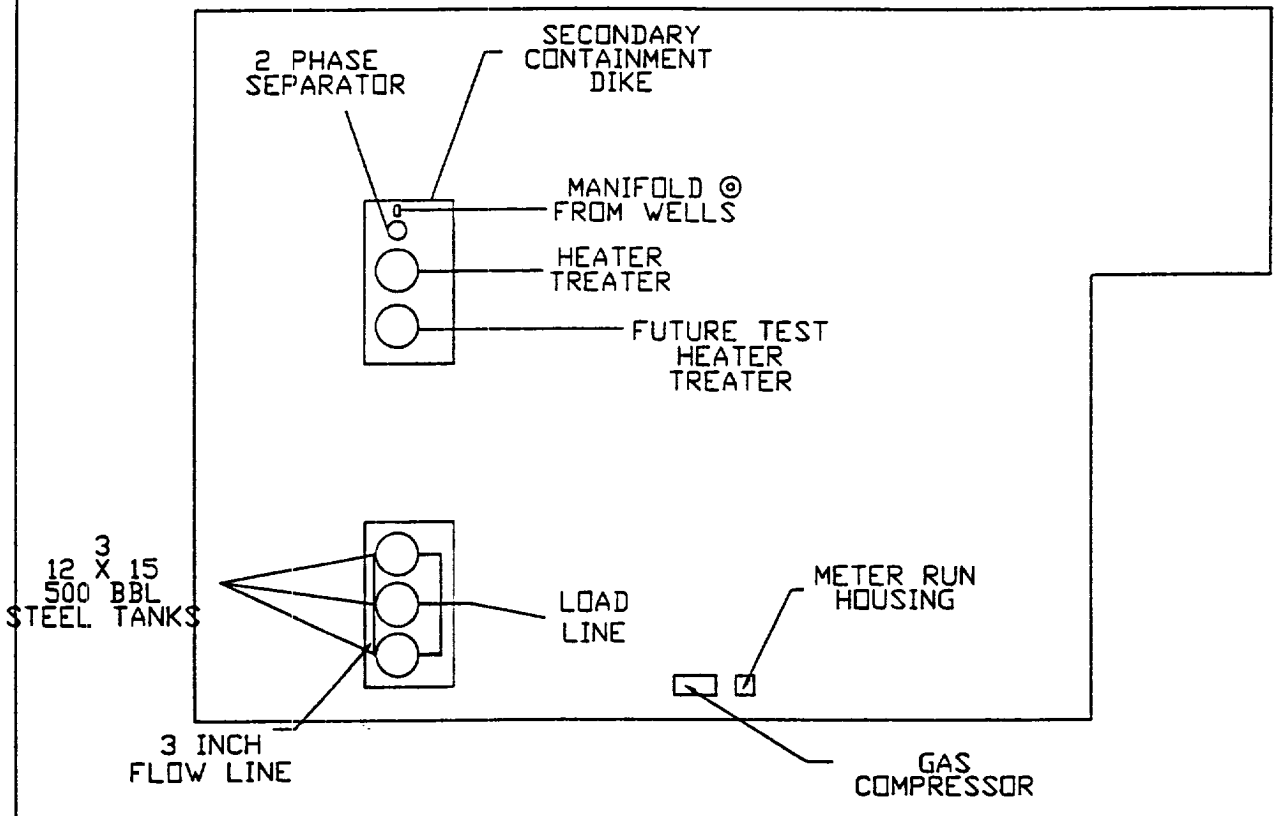
Scale in Feet

2000 0 2000

File: 23A-29

12/98


R 31 E
T 23 S
1 MILE RADIUS
15
14
13
22
23
24
27
26
25
N
devon
SAND DUNES FIELD
EDDY COUNTY, NEW MEXICO
WELLS WITHIN 1 MILE RADIUS
TODD-23A FEDERAL-29
EXHIBIT 4
Scale in Feet
2000
0
2000
File: 23A-29
12/98



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devon

SAND DUNES FIELD

EDDY COUNTY, NEW MEXICO

PRODUCTION FACILITIES LAYOUT AT

TODD 23 FEDERAL - WOLFCAMP BATTERY

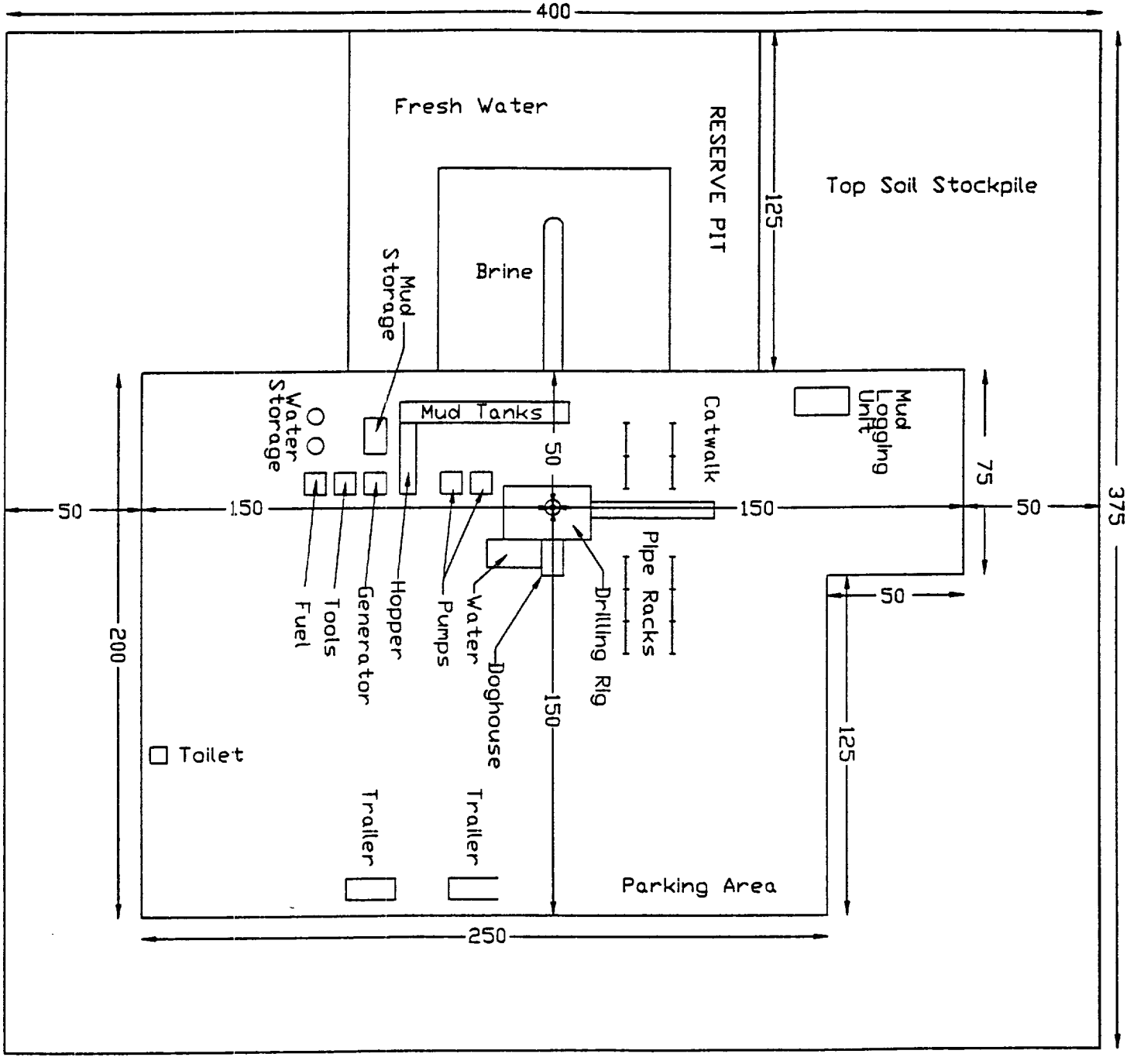
EXHIBIT 5

Scale in Feet

25 0 25 50 75 100

12/98

File: 23A-29



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File: 23A-29

devon

SAND DUNES FIELD

EDDY COUNTY, NEW MEXICO

DRILLING RIG LAYOUT

TODD 23 FEDERAL

EXHIBIT 6

Scale in Feet

25 0 25 50 75 100

12/98

Typical Well Surface

Well name:
Operator: Devon Energy Corporation (Nevada)
String type: Surface

Location: T23S, R31E, Eddy County, New Mexico

Design parameters:

Collapse
Mud weight: 8.500 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 468 psi
Internal gradient: 0.021 psi/ft
Calculated BHP 486 psi

Annular backup: 8.50 ppg

Minimum design factors:

Collapse:
Design factor 1.125

Burst:
Design factor 1.00

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: 744 ft

Environment:

H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 82 °F
Temperature gradient: 0.80 °F/100ft
Minimum section length: 850 ft
Minimum Drift: 2.559 in

Non-directional string.

Re subsequent strings:
Next setting depth: 4,400 ft
Next mud weight: 10.000 ppg
Next setting BHP: 2,286 psi
Fracture mud wt: 11.000 ppg
Fracture depth: 850 ft
Injection pressure 486 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	850	13.375	48.00	H-40	ST&C	850	850	12.59	79.8

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	375	740	1.97	468	1730	3.70	36	322	9.01 J

Prepared by: W. M. Frank
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 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.

Well name:	Typical Well Intermediate
Operator:	Devon Energy Corporation (Nevada)
String type:	Intermediate
Location:	T23S, R31E, Eddy County, New Mexico

Design parameters:

Collapse
Mud weight: 9.500 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 2,286 psi
Internal gradient: 0.000 psi/ft
Calculated BHP 2,286 psi

Annular backup: 10.00 ppg

Minimum design factors:

Collapse:
Design factor 1.125

Burst:
Design factor 1.00

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: 3,778 ft

Environment:
H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 110 °F
Temperature gradient: 0.80 °F/100ft
Minimum section length: 850 ft
Minimum Drift: 8.500 in

Non-directional string.

Re subsequent strings:
Next setting depth: 12,000 ft
Next mud weight: 9.500 ppg
Next setting BHP: 5,922 psi
Fracture mud wt: 10.000 ppg
Fracture depth: 4,400 ft
Injection pressure 2,286 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	4400	9.625	40.00	J-55	LT&C	4400	4400	8.75	350

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	2171	2570	1.18	2286	3950	1.73	151	520	3.44 J

Prepared by: W. M. Frank
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 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.

Well name:	Wolfcamp Well Production
Operator:	Devon Energy Corporation (Nevada)
String type:	Production
Location:	T23S, R31E, Eddy County, New Mexico

Design parameters:

Collapse
Mud weight: 9.500 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 5,922 psi
Internal gradient: 0.000 psi/ft
Calculated BHP 5,922 psi

Annular backup: 9.50 ppg

Packer fluid details:
Fluid density: 8.400 ppg
Packer depth: 11,500 ft

Minimum design factors:

Collapse:
Design factor 1.125

Burst:
Design factor 1.00

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: 10,481 ft

Environment:
H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 171 °F
Temperature gradient: 0.80 °F/100ft
Minimum section length: 850 ft

Non-directional string.

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)
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 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
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	99.99 J

Prepared by: W. M. Frank
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.

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,

Charlene

Charlene Newkirk
Lease Records Supervisor

encls

cc: Carolyn Wilson
McEldowney McWilliams

R I D E R

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 aggregate to the Obligee 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.

Devon Energy Corporation (Nevada)

ATTEST:

Asst. Secretary

By: MARVIN C. LUNDE, JR. Vice President

UNITED STATES FIDELITY AND GUARANTY COMPANY

By: _____

Marcia C. Brejda Attorney-in-fact