

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTN. M. Oil Cons. Division
811 S. 1st St.
ARTESIA, NM 88210-2834
SUBMIT IN TRIPLICATE*
(See other instructions on
reverse side)

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK: DRILL ☒ DEEPEN ☐

1b. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ Other 637 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 **660' FSL & 2030' FWL, Unit N, Section 23, T23S, R31E, Eddy County, NM**

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 "23N" Federal #35

9. API WELL NO.
30-015- 32020

10. FIELD AND POOL, OR WILDCAT
Bone Spring

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

At top proposed prod. zone (Same)
R-111-P POTASH
Under James Ranch Bone Spring East

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

15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT.
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.
12,000' 8450'

19. PROPOSED DEPTH
12,000' 8450'

20. ROTARY OR CABLE TOOLS*
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
3429' GR

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

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#	850'	500 sx Poz C + 200 sx Class C
12 1/4"	J-55 8 5/8"	32#	4400'	1400 sx Poz C + 200 sx Class C
7 7/8"	J-55 L-80 5 1/2"	15.5# 17# & 20#	12,000' 8450'	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.

Drilling Program

Surface Use and Operating Plan

Exhibits #1 = Blowout Prevention Equipment

Exhibits #2 = Location and Elevation Plat

Exhibits #3 = Road Map and Topo Map

Exhibits #4 = Wells Within 1 Mile Radius

Exhibits #5 = Production Facilities Plat

Exhibit #6 = Rotary Rig Layout

Exhibit #7 = Casing Design

Archaeological Clearance Report

WITNESS
WITNESS

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.

SIGNED

Candace R. GrahamCandace R. Graham
TITLE Engineering TechnicianDATE 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

Richard A. Whitley TITLE Associate

DATE

9-11-01

See Instructions On Reverse Side

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

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

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

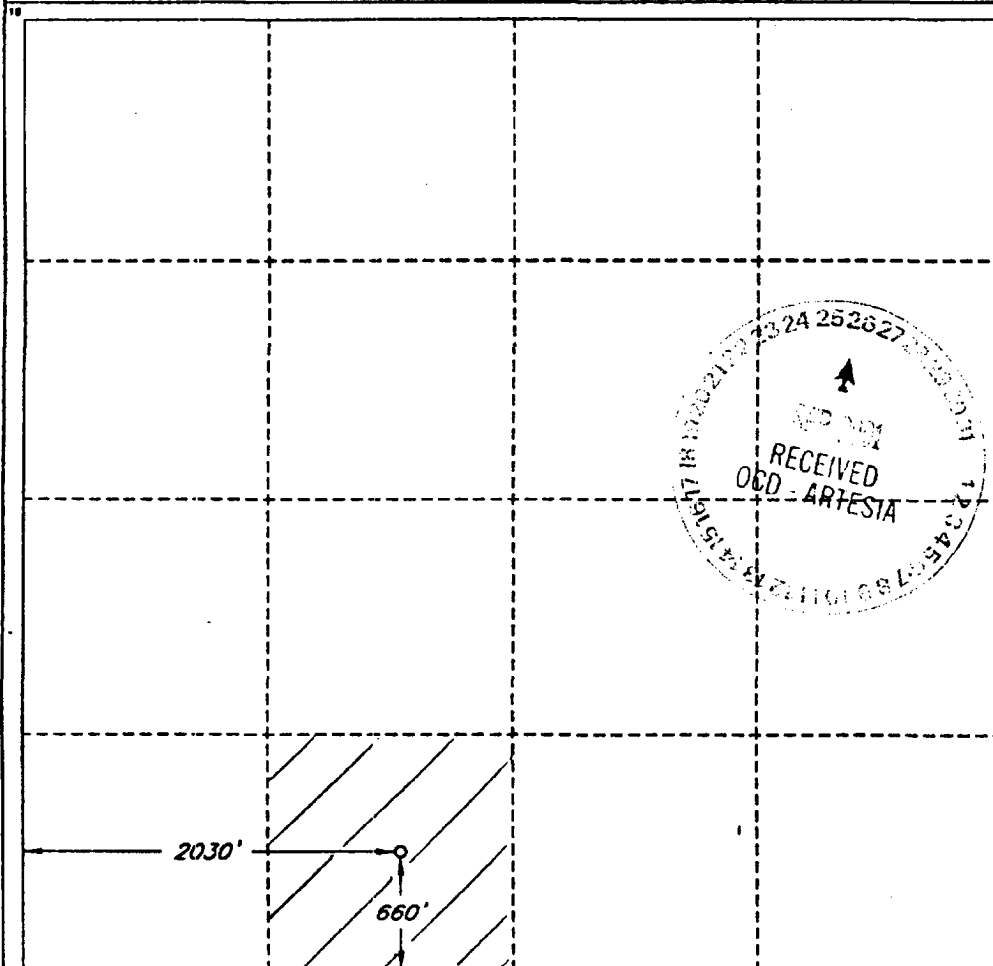
P. O. Box 2088
Santa Fe, New Mexico 87504-2088

☐ 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 TODD '23 N' FEDERAL						6 Well Number 35	
7 OGRID No. 6137		8 Operator Name DEVON ENERGY CORPORATION (NEVADA)						9 Elevation 3429'	
10 SURFACE LOCATION									
UL or lot no. N	Section 23	Township 23 SOUTH	Range 31 EAST, N.M.P.M.	Lot Ida	Feet from the 660'	North/South line SOUTH	Feet from the 2030'	East/West line WEST	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 40		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



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 10, 1999

Signature

Professional

Surveyor

NEW MEXICO

REGISTERED

12128

ROGER M. ROBERTS

CERTIFIED

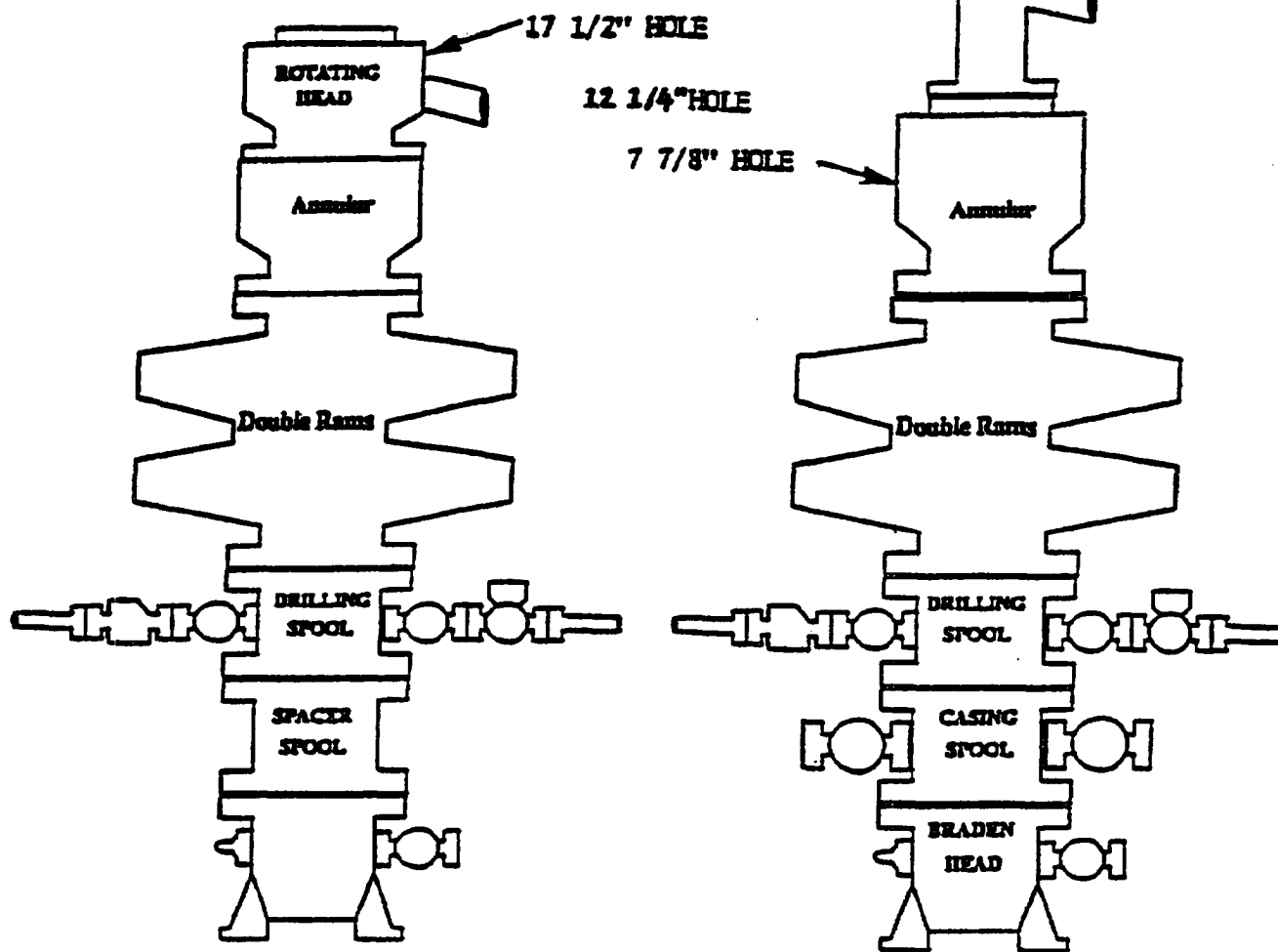
PROFESSIONAL

SURVEYOR

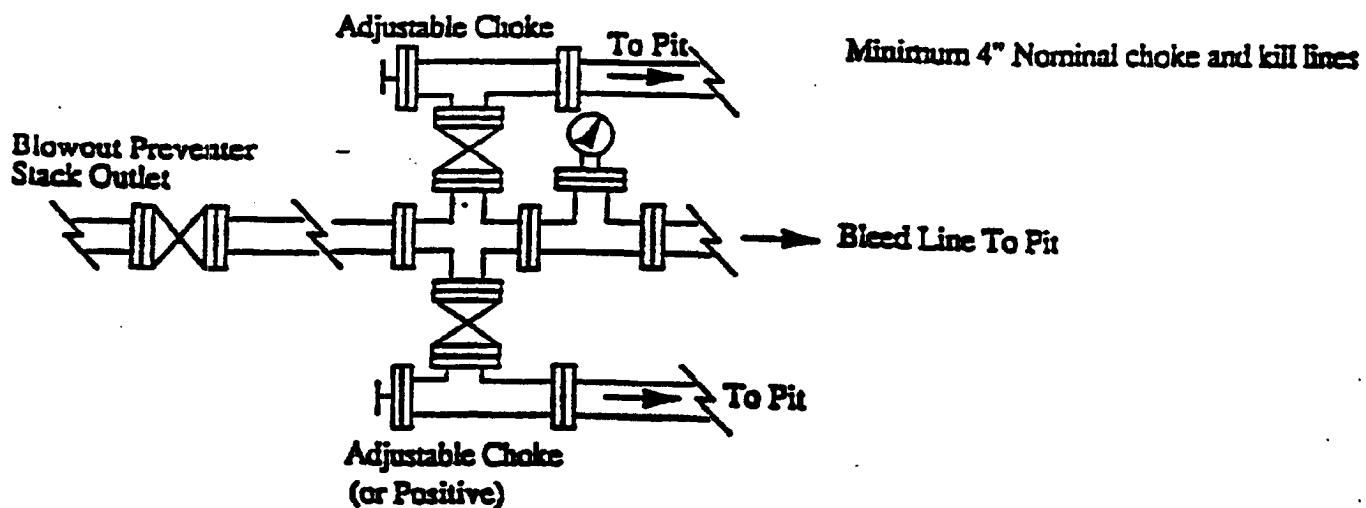
ROGER M. ROBERTS

S.S. #12128

JOB #62802 / 48 SE / V.H.B.



Choke Manifold Requirement (3000 psi WP)



MINIMUM BLOWOUT PREVENTER REQUIREMENTS

3,000 psi Working Pressure

3 MWP

EXHIBIT # 1

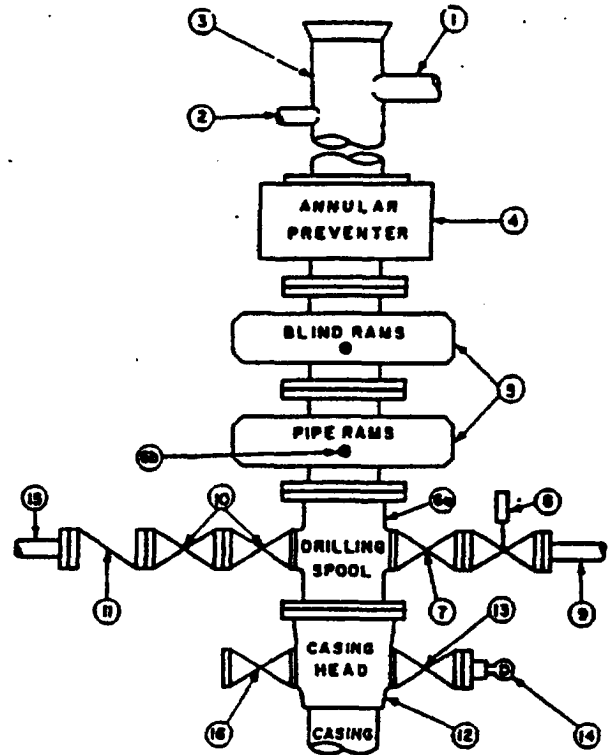
STACK REQUIREMENTS

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		
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:

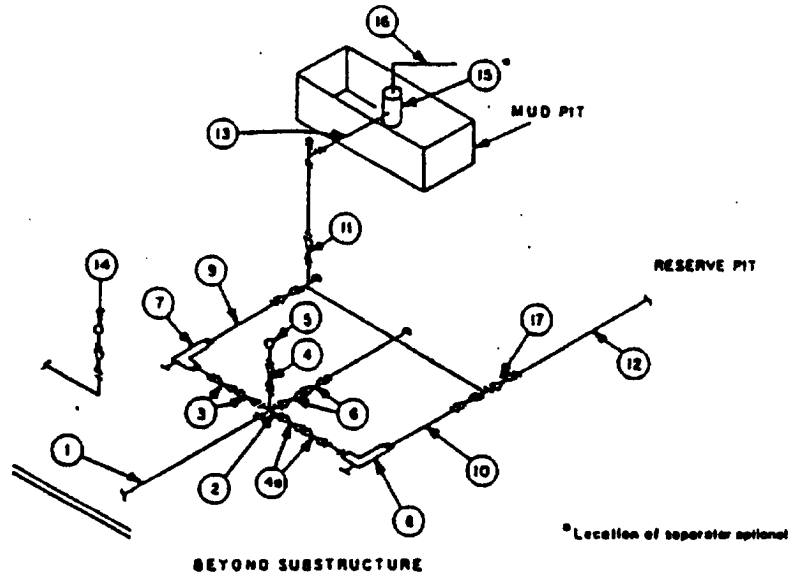
1. Deviations from this drawing may be made only with the express permission of MEC's Drilling Manager.
2. All connections, valves, fittings, piping, etc., subject to well or pump pressure must be flanged (suitable clamp connections acceptable) and have minimum working pressure equal to rated working pressure of preventers up through 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										
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.

**Attachment to Exhibit #1
NOTES REGARDING BLOWOUT PREVENTERS
Devon Energy Corporation (Nevada)
TODD "23N" FEDERAL #35
660' FSL & 2030' FWL
Section 23-T23S-R31E, Unit N
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.

DRILLING PROGRAM

Attached to Form 3160-3
Devon Energy Corporation (Nevada)
TODD "23N" FEDERAL #35
660' FSL & 2030' FWL
Section 23-T23S-R31E, Unit N
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

<u>Hole Size</u>	<u>Interval</u>	<u>Casing OD</u>	<u>Weight</u>	<u>Grade</u>	<u>Type</u>
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 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'± 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.

<u>Depth</u>	<u>Type</u>	<u>Weight (ppg)</u>	<u>Viscosity (1/sec)</u>	<u>Water Loss (cc/30 mins)</u>
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 "23N" FEDERAL #35
660' FSL & 2030' FWL
Section 23-T23S-R31E, Unit N
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 "23N" FEDERAL #35 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) on 798 and travel 2 miles. Then turn west (left) onto the Todd 26 Federal entry road and go approximately 0.3 mile to Todd 26 #2 SWD location. Then turn north (right) and travel approximately 0.6 mile to the Todd "23O" Federal #1 location. Then turn west (left) to the existing Todd "23N" Federal #11 well site and proposed TODD "23N" FEDERAL #35 location.

2. Proposed Access Road

Exhibit #3 shows the entry road to the proposed TODD "23N" FEDERAL #35 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 "23N" FEDERAL #35.

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 "23N" FEDERAL #35 is found productive, the production equipment will be as follows.

1. Exhibit #5 shows the battery facility to be utilized by the TODD "23N" FEDERAL #35. 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 "23N" FEDERAL #35 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

Daryl Lowder
Superintendent

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

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

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

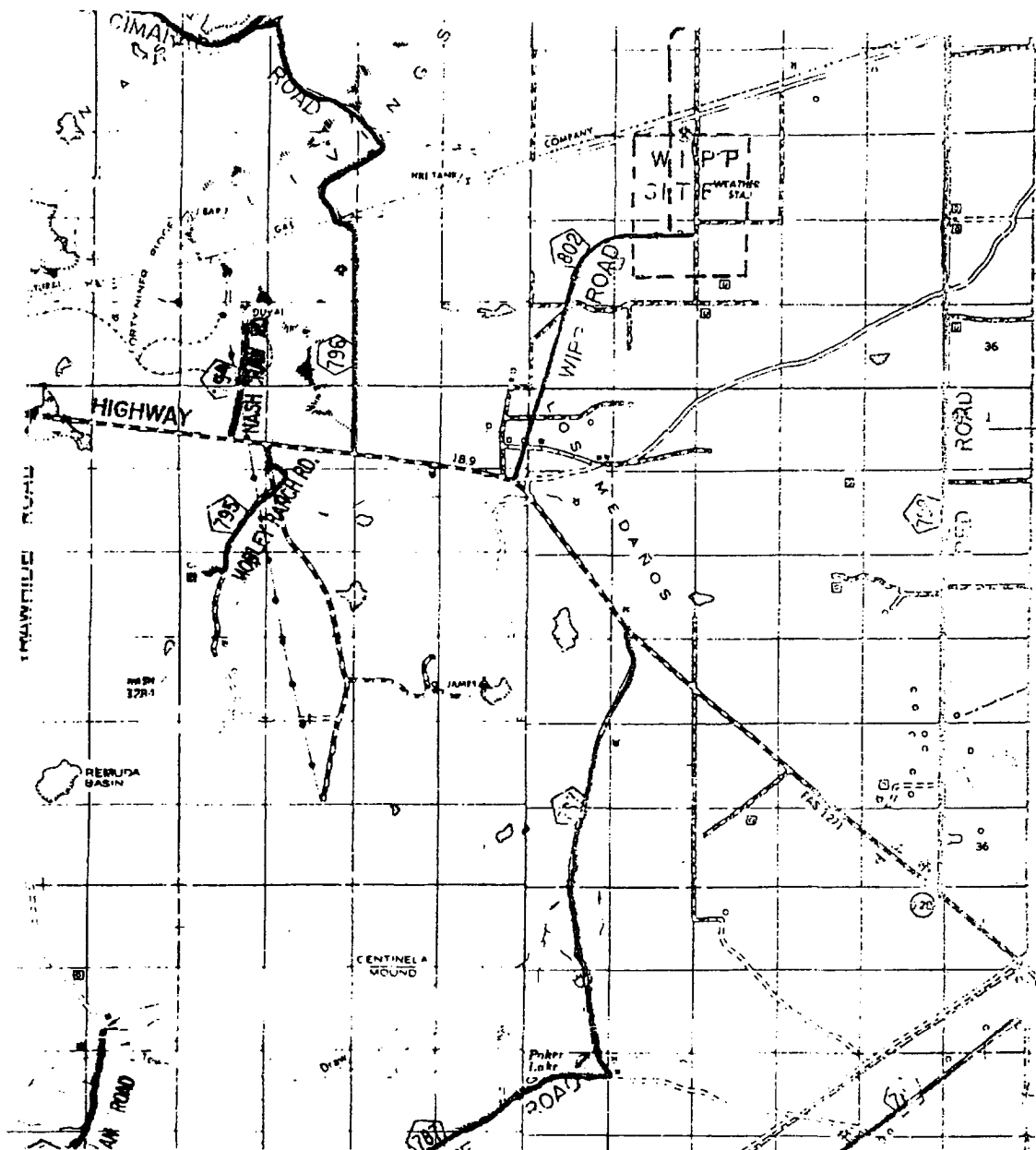
(505) 748-3371 (office)
(505) 746-9280 (home)

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
Candace R. Graham
Engineering Technician

Date: 01-29-1999



TODD "23N" FEDERAL. #35
 Located at 660' FSL and 2030' FWL
 Section 23, Township 23 South, Range 31 East,
 N.M.P.M., Eddy County, New Mexico.

basin
surveys
 focused on excellence
 in the oilfield

P.O. Box 1786
 1120 N. West County Rd.
 Hobbs, New Mexico 88241
 (505) 393-7316 - Office
 (505) 392-3074 - Fax
 basinsurveys.com

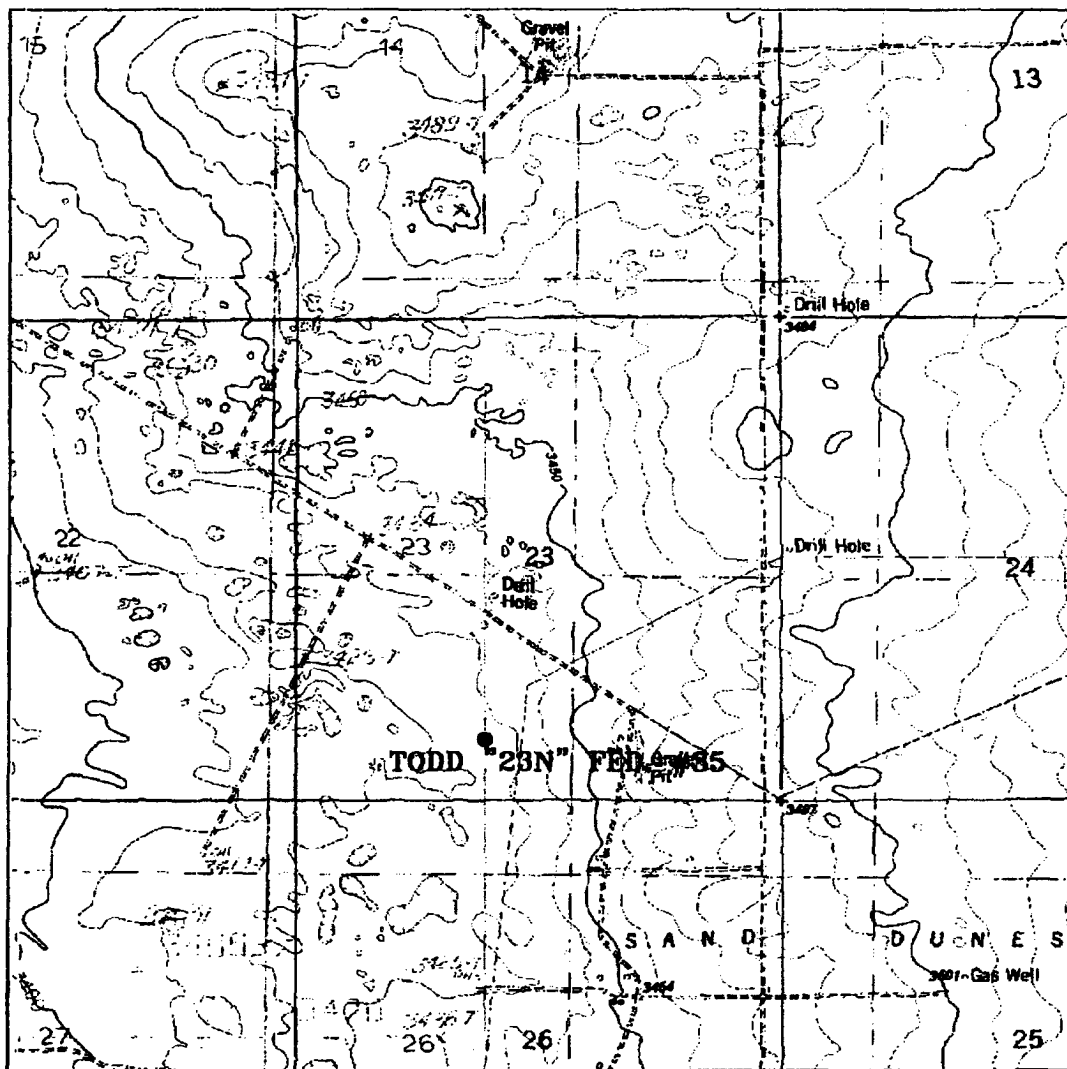
W.O. Number: 1629AA - KJG CD#4

Survey Date: 06-28-2001

Scale: 1" = 2 MILES

Date: 07-03-2001

DEVON ENERGY
PRODUCTION CO.,
L.P.



TODD "23N" FEDERAL. #35
 Located at 660' FSL and 2030' FWL
 Section 23, Township 23 South, Range 31 East,
 N.M.P.M., Eddy County, New Mexico.

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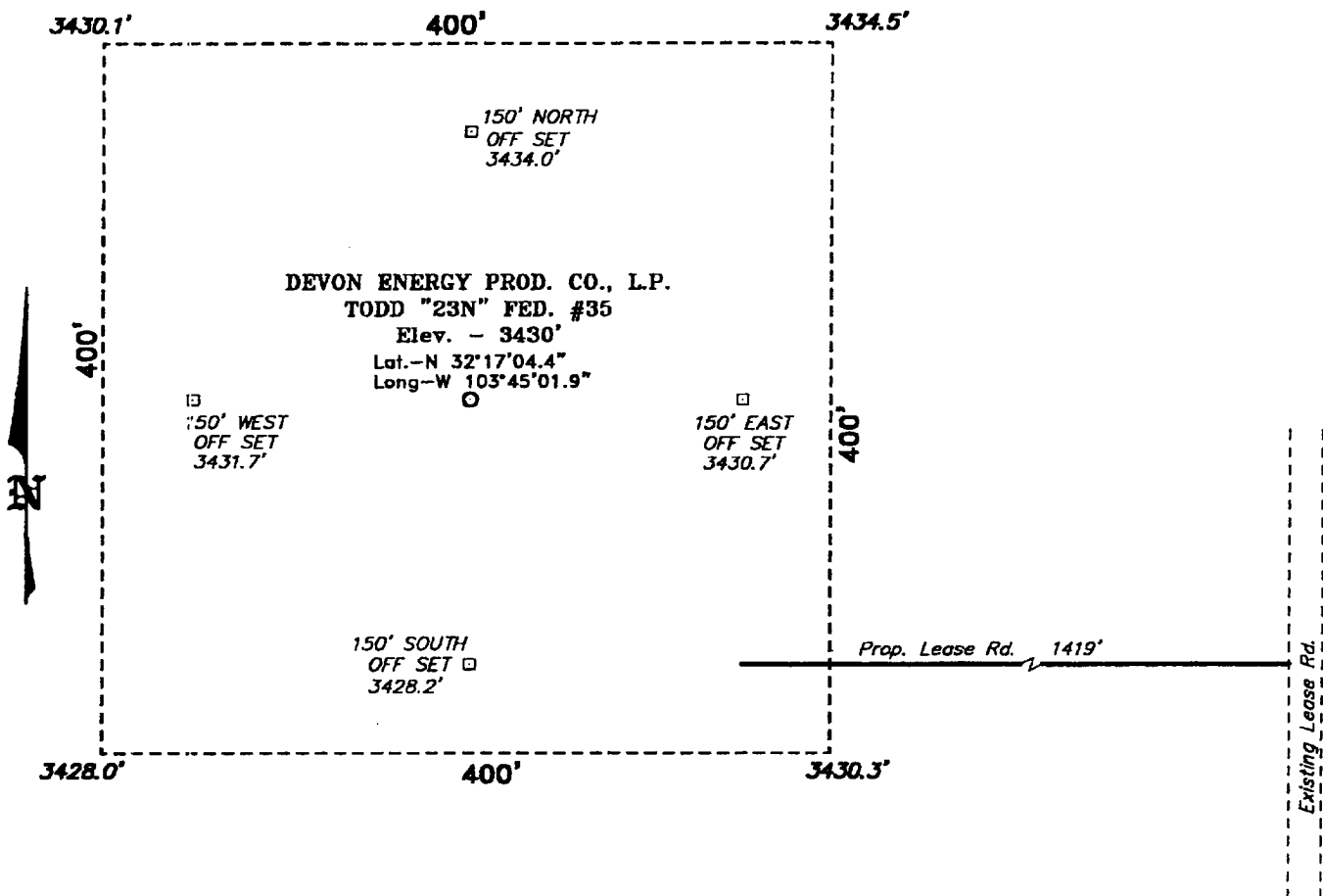
Survey Date: 06-28-2001

Scale: 1" = 2000'

Date: 07-03-2001

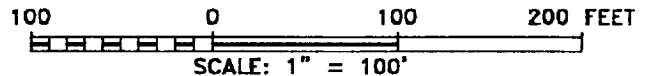
**DEVON ENERGY
 PRODUCTION CO.,
 L.P.**

**SECTION 23, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.**



Directions to location:

FROM THE JUNCTION OF STATE HWY 128 AND CO. RD. 787, GO SOUTHEAST ON STATE HWY 128 FOR APPROX. 5.0 MILES TO A LEASE ROAD; THENCE NORTH ON LEASE ROAD FOR APPROX. 2.0 MILES; THENCE WEST APPROX. 1700 FEET; THENCE NORTH AND NORTHWEST FOR APPROX. 0.5 MILE TO THE PROPOSED LEASE ROAD.



DEVON ENERGY PROD. CO., L.P.

REF: TODD "23N" FED. No. 35 / Well Pad Topo

THE TODD "23N" FED. No. 35 LOCATED 660' FROM THE SOUTH LINE AND 2030' FROM THE WEST LINE OF SECTION 23, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

BASIN SURVEYS P.O. BOX 1786 - HOBBS, NEW MEXICO

W.O. Number: 1629 Drawn By: **K. GOAD**

Date: 07-03-2001 Disk: KJG CD#4 - 1629A.DWG

Survey Date: 06-28-2001

Sheet 1 of 1 Sheets

DISTRICT I
1025 N. French Dr., Hobbs, NM 88240

DISTRICT II
811 South First, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Artesia, NM 87410

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised March 17, 1999

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
		SAND DUNES (BONE SPRINGS)
Property Code	Property Name	Well Number
	TODD "23N" FEDERAL	35
OGRID No.	Operator Name	Elevation
6137	DEVON ENERGY PRODUCTION CO., L.P.	3430'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	23	23 S	31 E		660	SOUTH	2030	WEST	EDDY

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
40									
Dedicated Acres	Joint or Infill	Consolidation Code	Order No.						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p></p> <p>Signature</p> <p>Karen Cotton</p> <p>Printed Name</p> <p>Engineering Technician</p> <p>Title</p> <p>July 24, 2001</p> <p>Date</p>
	<p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>June 28, 2001</p> <p>Date Surveyed</p> <p></p> <p>Signature</p> <p>GARY L. JONES</p> <p>Professional Surveyor</p> <p>NEW MEXICO</p> <p>17977</p> <p>W.O. No. 1629</p> <p>Certificate No. Gary L. Jones 7977</p> <p>Professional Land Surveyor</p>

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTES

FORM APPROVED
Budget Bureau No. 1004-0135
Expires March 31, 1993

clsf

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well
☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator
DEVON ENERGY PRODUCTION COMPANY, LP.

3. Address and Telephone No.
20 NORTH BROADWAY, SUITE 1500, OKLAHOMA CITY, OKLAHOMA 73102 (405) 235-3611

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
660' FSL & 2030 FWL, Sect 23-T23S-R31E, Unit "N"

5. Lease Designation and Serial No.
NM-0405444

6. If Indian, Allottee or Tribe Name
N/A

7. If Unit or CA, Agreement Designation

8. Well Name and No.
Todd 23N Federal #35

9. API Well No.
38-015-32020

10. Field and Pool, or Exploratory Area
Sand Dunes (Bone Springs)

11. County or Parish, State
Eddy County, NM

CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment	<input type="checkbox"/> Change of Plans
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input checked="" type="checkbox"/> Other Access Road Change	<input type="checkbox"/> Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

The original Application for Permit to Drill, Form 3160-3, was filed for Devon Energy Production Co., L.P. on 1/29/99 and to date has not received approval. Upon review of existing facilities the well access road has been changed. See attached plat. An archaeological survey report will be forwarded as soon as it is completed.

BLM Bond Number is CO-1104

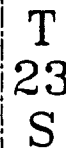


14. I hereby certify that the foregoing is true and correct

Signed Karen A. Cotton Title Engineering Technician Date July 24, 2001
(This space for Federal or State office use)

Approved by R. Richard A. Whitley Title Associate Date 9.18.01
Conditions of approval, if any:

R 31 E



EDDY COUNTY, NEW MEXICO

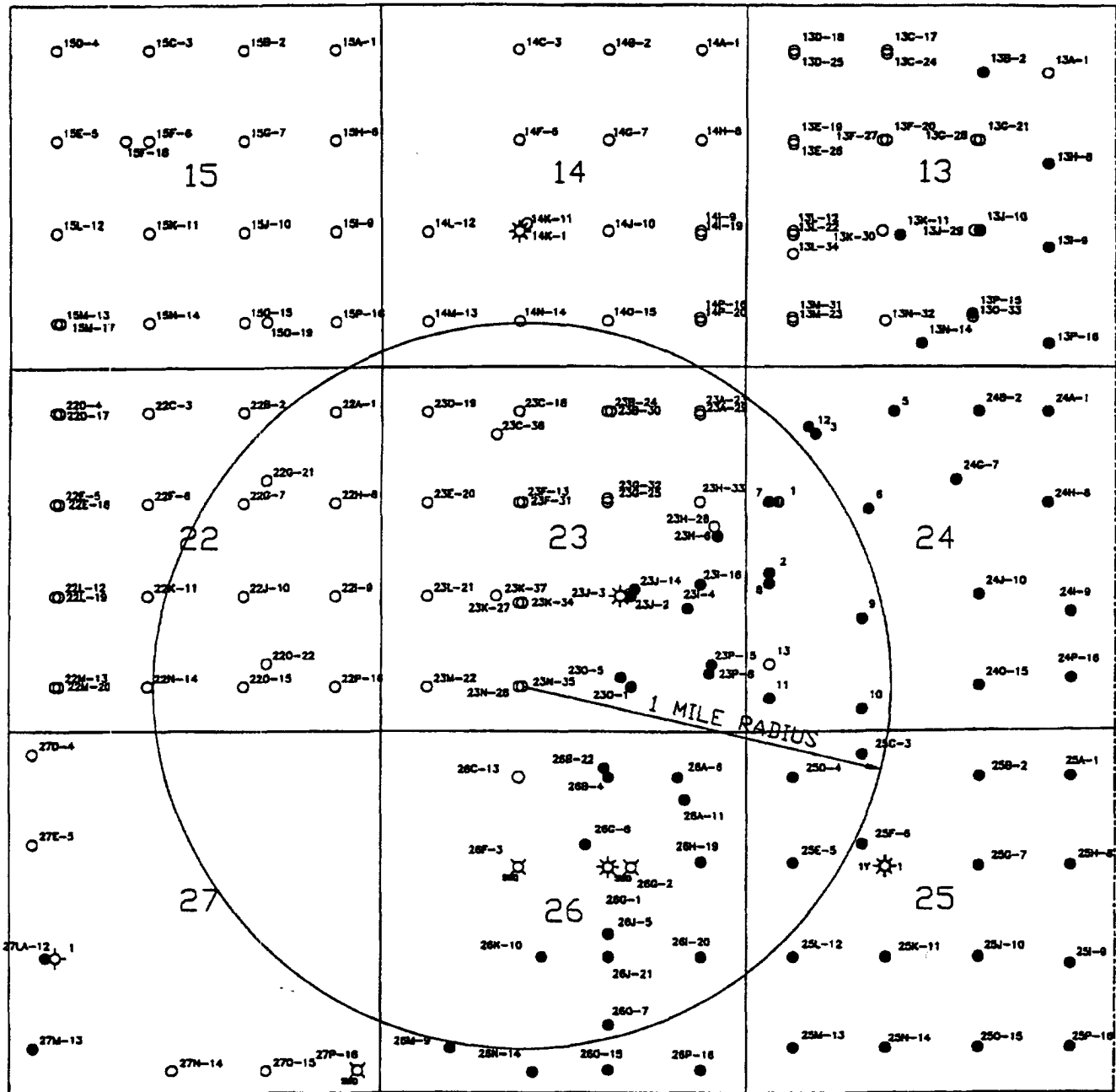
Scale in Feet

2000 0 2000

A horizontal scale bar with markings at 2000, 0, and 2000 feet. The bar is divided into segments by vertical tick marks. The leftmost segment is labeled '2000', the center point is labeled '0', and the rightmost segment is labeled '2000'. The bar is drawn with a double line, and the labels are in a bold, sans-serif font.

R 31 E

T
23
S

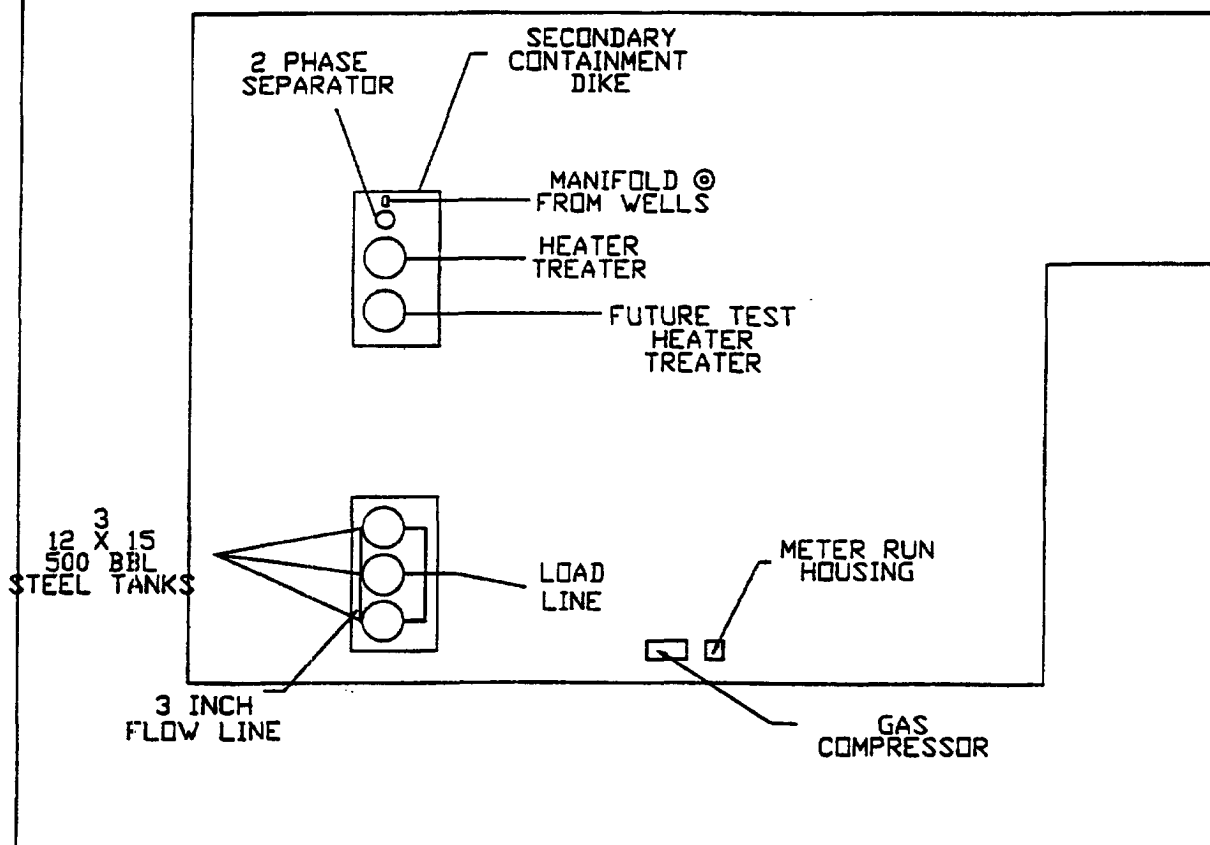


devon

SAND DUNES FIELD
EDDY COUNTY, NEW MEXICO

WELLS WITHIN 1 MILE RADIUS
TODD-23N FEDERAL-35
EXHIBIT 4





File 23A-29

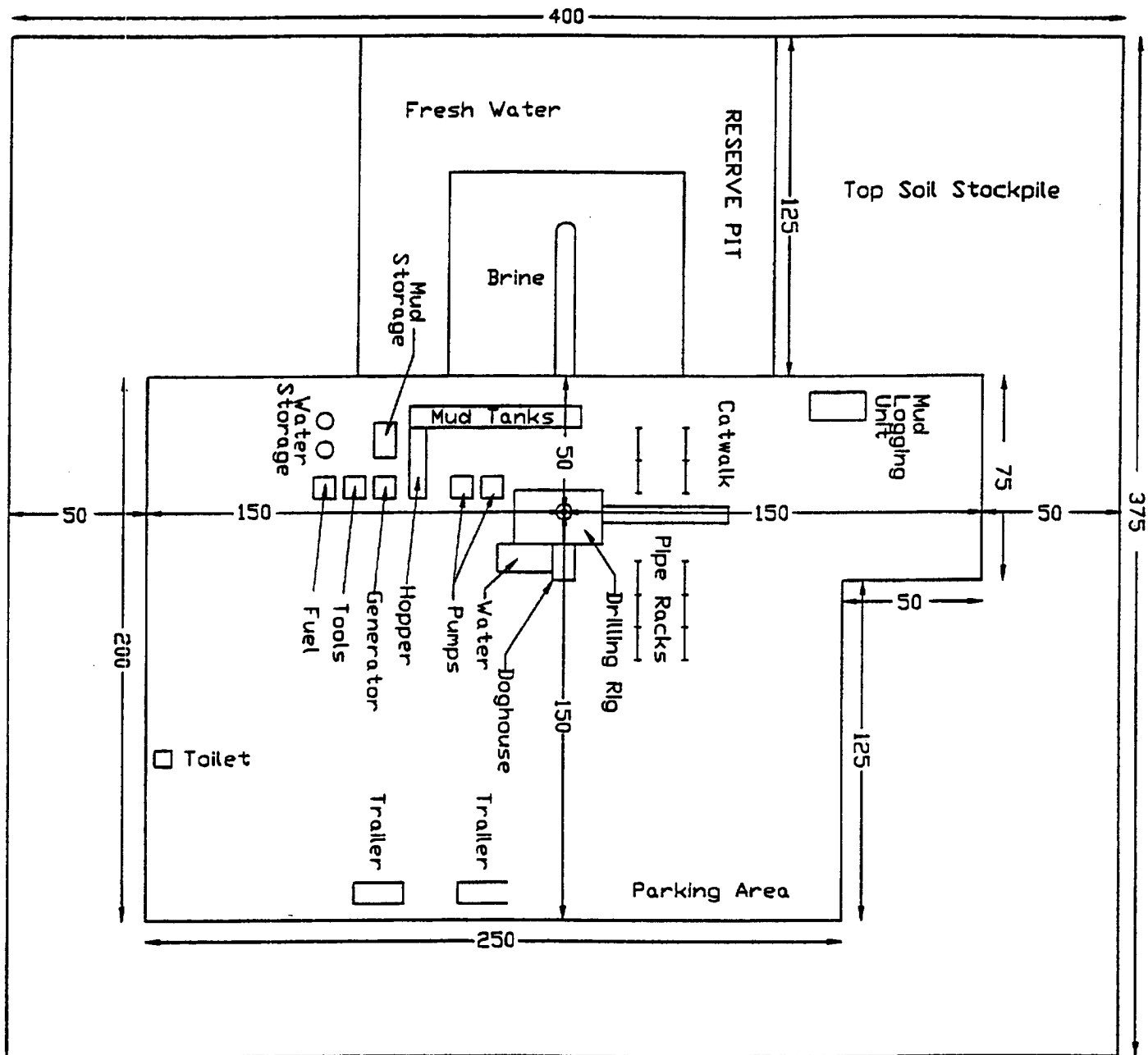
devon

SAND DUNES FIELD
EDDY COUNTY, NEW MEXICO

PRODUCTION FACILITIES LAYOUT AT
TODD 23 FEDERAL - WOLF CAMP BATTERY

EXHIBIT 5

Scale in Feet
0 25 50 75 100
12/98



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

Well name:		Typical Well Surface	
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.

Minimum design factors:
Collapse:

Design factor 1.125

Burst:

Design factor 1.00

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

Burst

Max anticipated surface pressure: 468 psi
Internal gradient: 0.021 psi/ft
Calculated BHP: 486 psi
Annular backup: 8.50 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: 744 ft

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.

Typical Well Intermediate

Well name:
 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.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

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

Burst

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

Annular backup: 10.00 ppg

Tension:

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

Tension is based on buoyed weight.
 Neutral point: 3,778 ft

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 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 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 & Kamler 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.

Minimum design factors:

Collapse:

Design factor 1.125

Environment:

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

Burst:

Design factor 1.00

Burst

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

Annular backup: 9.50 ppg

Tension:

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

Non-directional string.

Tension is based on buoyed weight.
 Neutral point: 10,481 ft

Packer fluid details:

Fluid density: 8.400 ppg
 Packer depth: 11,500 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)
2	10500	5.5	17.00	L-80	LT&C	10500	10500	4.787	381.8
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. 56-0130-11003-67

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 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 occurring
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:

Quinn Armstrong
Asst. Secretary

Devon Energy Corporation (Nevada)

By:

M. C. Lunde, Jr.
MARVIN C. LUNDE, JR.

Vice President

UNITED STATES FIDELITY AND GUARANTY COMPANY

By:

Marcia C. Brejda

Attorney-in-fact

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT—" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well
☐ Oil Well ☐ Gas Well ☒ Other Proposed oil well

2. Name of Operator
DEVON ENERGY CORPORATION (NEVADA)

3. Address and Telephone No.
20 NORTH BROADWAY, SUITE 1500, OKLAHOMA CITY, OKLAHOMA 73102 (405) 235-3611

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
660' FSL & 2030' FWL, Unit N, Section 23, T23S, R31E, Eddy County, NM

5. Lease Designation and Serial No.	NM-NM0405444
6. If Indian, Allottee or Tribe Name	N/A
7. If Unit or CA, Agreement Designation	N/A
8. Well Name and No.	Todd "23N" Federal #35
9. API Well No.	30-015-
10. Field and Pool, or Exploratory Area	Sand Dunes (Wolfcamp)
11. County or Parish, State	Eddy County, New Mexico

CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input checked="" type="checkbox"/> Other <u>additional APD attachments</u>
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

To complete our Application for Permit to Drill, attached please find a plat for this proposed location submitted as Exhibit 2 and a copy of the archeological clearance report for this area.



14. I hereby certify that the foregoing is true and correct

Signed Candace R. Graham
(This space for Federal or State office use)

Candace R. Graham

Title Engineering Technician

Date April 8, 1999

Approved by _____
Conditions of approval, if any:

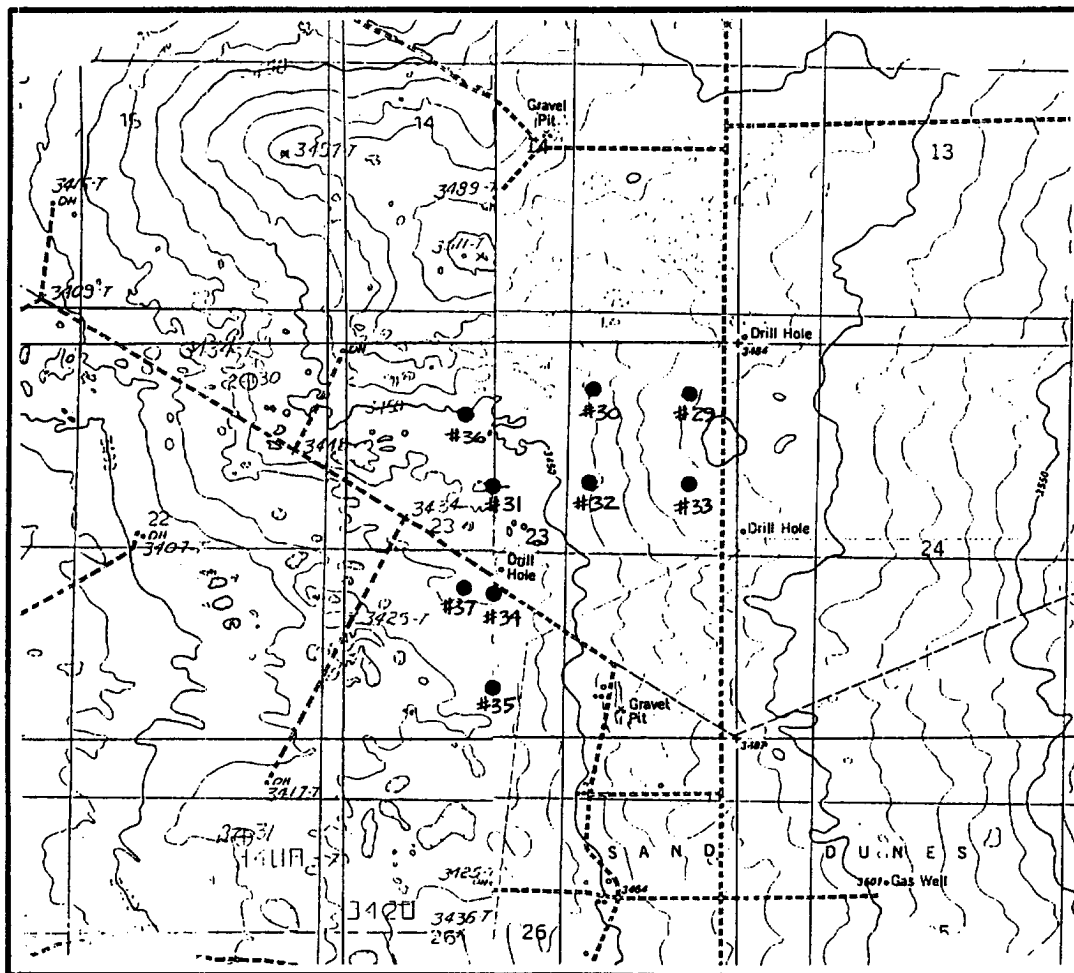
Title _____

Date _____

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 to any matter within its jurisdiction.

*See Instruction on Reverse Side

LOCA N & ELEVATION VERIFICATION P



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 & 1850' 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"

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

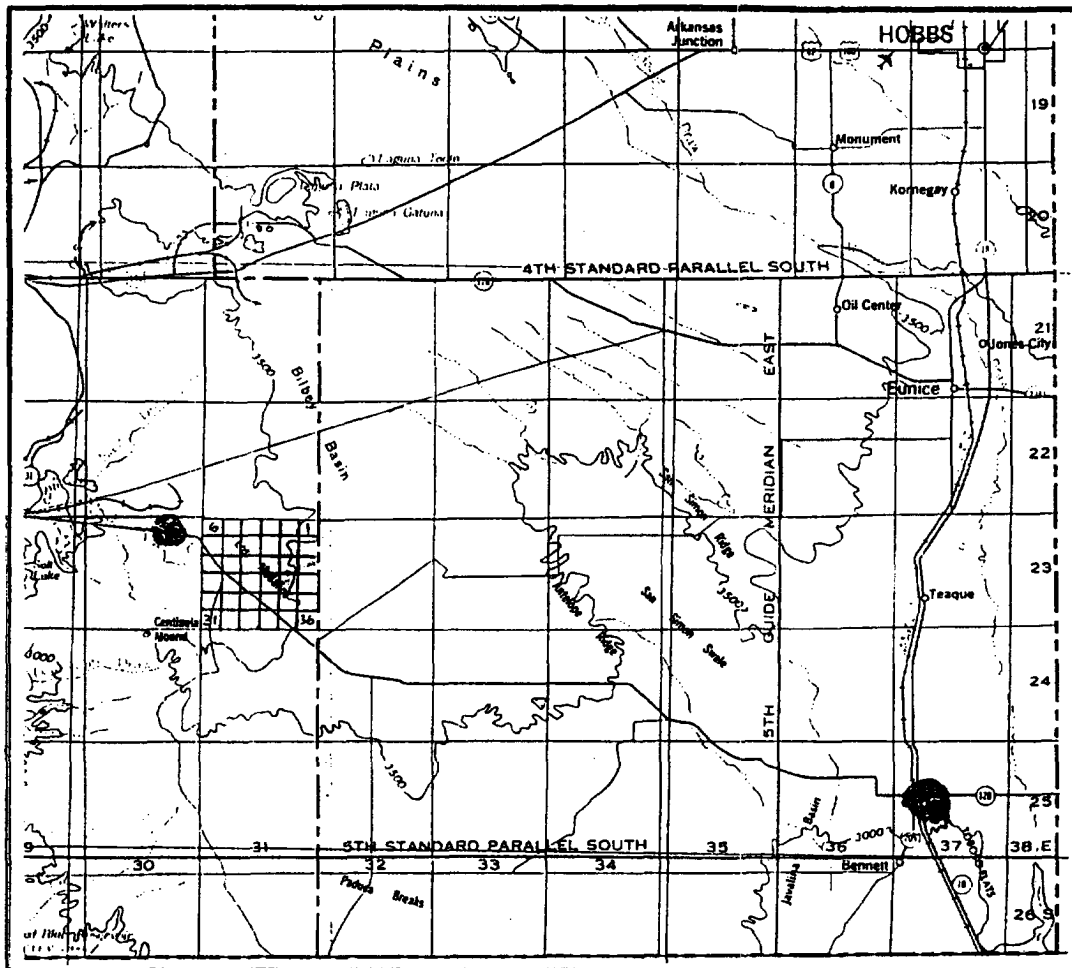
Surveying & Mapping for the Oil & Gas Industry

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.



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

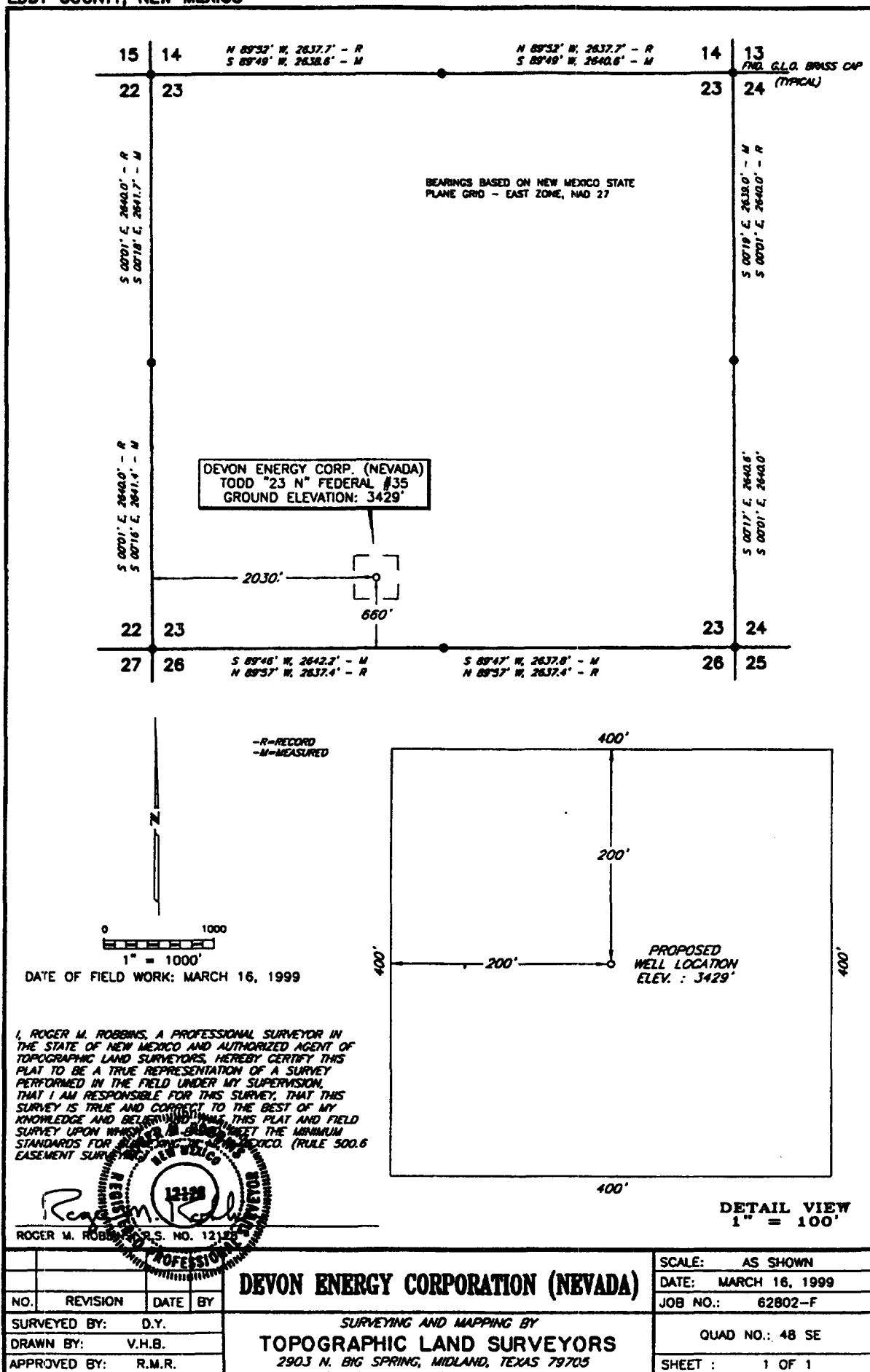
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PLAT SHOWING PROPOSED
WELL LOCATION IN
SECTION 23, T-23-S, R-31-E, N.M.P.M.
EDDY COUNTY, NEW MEXICO



Archaeological Clearance Report
for

23N-35

DEVON ENERGY CORPORATION

Todd "26" Federal Well No. 12
Todd "26" Federal Well No. 13 and Access Road
Todd "23" Federal Well No. 8 and Access Road
Todd "23" Federal Well No. 12
Todd "23" Federal Well No. 11 and Access Road

Prepared

By

Dr. J. Loring Haskell

Submitted

By

Dr. J. Loring Haskell
Principal Investigator
New Mexico Archaeological Services, Inc.
Carlsbad, New Mexico

29 June 1992

Permit No. 14-2920-92-M

Report Number: NMAS-1992-38-JE

ABSTRACT

New Mexico Archaeological Services, Inc., representing DEVON ENERGY CORPORATION, undertook five Class III surveys of Bureau of Land Management lands scheduled to be impacted by the construction of five drill locations and their associated access roads. Field work was conducted under clear, sunny conditions with moderate southwesterly winds throughout the morning and early afternoon. Each location will measure 400 X 400 ft (actual area surveyed 4.44 acres). The Todd "26" Federal Well No. 13 access road will measure 100 X 1250 ft (actual area surveyed 2.87 acres). The Todd "23" Federal Well No. 8 access road will measure 100 X 800 ft (actual area surveyed 1.84 acres). The Todd "23" Federal Well No. 11 access road will measure 100 X 1150 ft (actual area surveyed 2.64 acres). (The Todd "26" Federal Well No. 12 and the Todd "23" Federal Well No. 12 will be situated next to existing lease roads.) Total surveyed acreage 29.55 acres. They will be situated in Sections 26 and 23, T23S, R31E, NMPM, Eddy County, New Mexico. One isolated manifestation (IM) was recorded during the Todd "23" Federal Well No. 12 survey. No cultural properties were recorded during the Todd "26" Federal Well Nos. 12 and 13 surveys and the Todd "23" Well Nos. 8 and 11 surveys. Clearance is suggested for these locations.

Introduction

On 25 June 1992, New Mexico Archaeological Services, Inc., (NMAS), Carlsbad, (Permit Number: 14-2920-92-M), undertook for Devon Energy Corporation, five archaeological surveys of federal lands administered by the Bureau of Land Management in Eddy County, New Mexico. Reconnoitered areas will be impacted by the construction of five drill locations and three associated access roads. These surveys were undertaken by Dr. Haskell.

Survey Technique

For these investigations, DEVON ENERGY CORPORATION's proposed locations were reconnoitered for evidence of man's past activities by walking them in a series of 8.0 m wide, close interval (15° or less), zigzag transects. In addition, added zones extending 20 ft on each side of the staked 400 X 400 ft locations, and lying outside the bounds of their proposed work areas were reconnoitered by a similar means. Access roads were walked in two, 15 m wide transects. Lath is considered to be the center of the proposed roads. Methodologically, these procedures served to promote optimal conditions for the visual examination of the areas to be impacted by construction-related activities. Field work was conducted under clear, sunny conditions with moderate southwesterly winds throughout the morning and early afternoon. Ground visibility ranges between 75 and 85%. Field time 5½ hours.

Todd "26" Federal Well No. 12

Location

The proposed location will measure 400 X 400 ft (actual area surveyed 4.44 acres) on federal land and will be situated

1980 ft from the west line and 2310 ft from the north line.

Section 26, T23S, R31E, NMPM, Eddy County, NM

Thus it will be situated in the:

NE¼SW¼, Section 26, T23S, R31E, NMPM, Eddy County, NM

The proposed location will be situated immediately south of an existing well pad.

Map References: USGS BOOTLEG RIDGE QUADRANGLE, 7.5 Minute Series, 1984.
USDS LOS MEDANOS QUADRANGLE, 7.5 Minute Series, 1985, Prov., Ed.

Level of Previous Impact

The location is bordered by an old location on the north, a lease road on the northeast, two-track roads on the east and west and a fence.

Environmental Setting

DEVON ENERGY CORPORATION's proposed location will be situated on a gently sloping, aeolian-mantled, portion of South Plain. Low- to mid-sized, coppice dunes and closed, deflation basins are characteristic of the surface as a whole. Pedons fall within the Typic Torripsamment subgroup. The surface is subject to limited aeolian activity. Drainage is of an interior nature. Elevation is 3436 ft. Slope is 0.70°. Aspect is multiple (360°).

The scrub formation is made up of mesquite, plains yucca, sand sage, shinnery oak, javelina bush, spiny-leaf zinnia, gland-leaf dalea, range ratany, sand palafox, dune flat sedge, mat bluet, sand bur, sand muhly, poverty threeawn and mesa dropseed.

Cultural Resources

Prefield: 19 June 1992, Section 26 (no archaeological sites), T23S, R31E, Arita K. Slate.

No cultural properties were recorded during this survey. Their absence is due to an overall dearth of locally available siliceous lithic sources, shelter and potable water. Land usage, while continual during Late Archaic- and Eastern Jornada Mogollon times, was very ephemeral and transitory in character.

Recommendations

NMAS recommends clearance for DEVON ENERGY CORPORATION's proposed Todd "26" Federal Well No. 12 and suggests that work-related activities proceed in accordance with company plans (Fig. 1). Clearance, of course, is granted by the Bureau of Land Management. If cultural resources are encountered during construction, the BLM and NMAS should be notified immediately. Duned settings are notorious for covering and uncovering cultural properties.

Todd "26" Federal Well No. 13

Location

The proposed location will measure 400 X 400 ft (actual area surveyed 4.44 acres) on federal land and will be situated 1980 ft from the west line and 660 ft from the north line.

Section 26, T23S, R31E, NMPM, Eddy County, NM

Thus it will be situated in the:

NE¼NW¼, Section 26, T23S, R31E, NMPM, Eddy County, NM

The associated access road will measure approximately 100 X 1250 ft (actual area surveyed 2.87 acres) and will be situated in the:

NE¼NW¼, Section 26, T23S, R31E, NMPM, Eddy County, NM
NW¼NE¼, Section 26, T23S, R31E, NMPM, Eddy County, NM

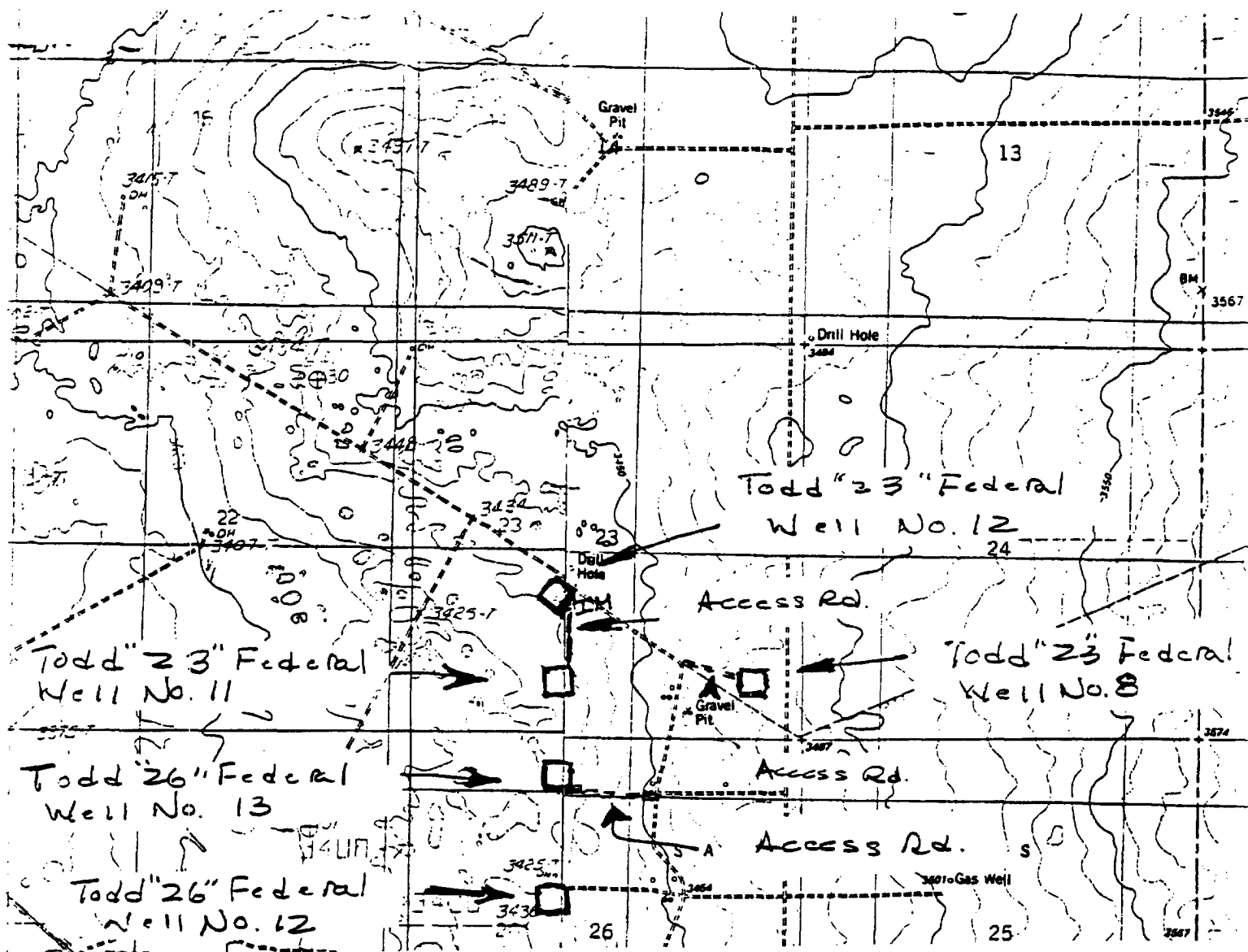
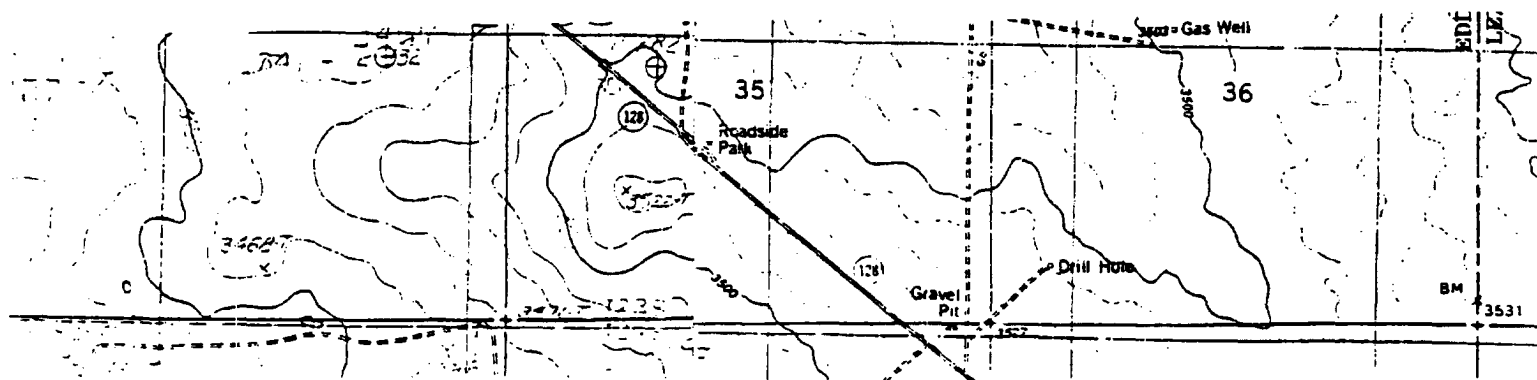


Fig. 1. USGS BOOTLEG RIDGE QUADRANGLE, 7.5 Minute Series, 1:24,000, 1985, Prov. Ed., and USGS LOS MEDANOS QUADRANGLE, 7.5 Minute Series, 1:24,000, 1985, Prov. Ed., showing DEVON ENERGY CORPORATION's proposed Todd "26" Federal Well No. 12, 1980' FWL, 2310' FNL, Todd "26" Federal Well No. 13, 1980' FWL, 660' FNL, and access road, Section 26, Todd "23" Federal Well No. 8, 760' FSL, 660' FEL, and access road, Todd "23" Federal Well No. 12, 1980' FWL, 1880' FSL, and Todd "23" Federal Well No. 11, 1980' FWL, 660' FSL, and access road, Section 23, T23S, R31E, NMPM, Eddy County, NM



Map References: USGS BOOTLEG RIDGE QUADRANGLE, 7.5 Minute
Series, 1984.
USGS LOS MEDANOS QUADRANGLE, 7.5 Minute
Series, 1985, Prov. Ed.

Level of Previous Impact

The proposed access road will cross two surface lines and a two-track road.

Environmental Setting

DEVON ENERGY CORPORATION's proposed location will be situated on an aeolian landform whose surface is marked by minor dune developement. Areal soils, dominated by the sand separate, are made up of loose, non-calcareous, coarse-grained, sandy loams and loamy sands. Peds fall within the Typic Torripsamment subgroup. Lithic inclusions are limited to occasional caliche gravels and cobbles. In general, the surface is subject to aeolian processes. Elevation is about 3422 ft. Slope is 0.65°. Aspect is multiple (360°). Drainage is internal and is tributary to a doline on the southwest.

The scrub formation is made up of sand sage, shinnery oak, mesquite, plains yucca, gland-leaf dalea, spotted bee-balm, sand palafox, sand flat sedge, widow's tears, Hartweg evening primrose, poverty threeawn, mesa dropseed, sand muhly and sand bur.

Cultural Resources

Prefield: 19 June 1992, Section 26 (no archaeological sites), T23S, R31E, Arita K. Slate.

No cultural properties were recorded during this survey. Their absence is due largely to an overall lack of siliceous lithic sources, less than adequate shelter and a perennial paucity

of potable water. Expected remains, should they occur, should be of the isolated type.

Recommendations

NMAS recommends clearance for DEVON ENERGY CORPORATION's proposed Todd "26" Federal Well No. 13 and its access road and suggests that work-related activities proceed in accordance with company plans (Fig. 1). Clearance, of course, is granted by the Bureau of Land Management. If cultural resources are encountered during construction, the BLM and NMAS should be notified immediately. Dune settings are notorious for covering and uncovering cultural properties.

Todd "123" Federal Well No. 8

Location

The proposed location will measure 400 X 400 ft (actual area surveyed 4.44 acres) on federal land and will be situated 760 ft from the south line and 660 ft from the east line.

Section 23, T23S, R31E, NMPM, Eddy County, NM

Thus it will be situated in the:

SE¼SE¼, Section 23, T23S, R31E, NMPM, Eddy County, NM

The associated access road will measure approximately 100 X 800 ft (actual area surveyed 1.84 acres) and will be situated in the:

SE¼SE¼, Section 23, T23S, R31E, NMPM, Eddy County, NM

SW¼SE¼, Section 23, T23S, R31E, NMPM, Eddy County, NM

Map Reference: USGS BOOTLEG RIDGE QUADRANGLE, 7.5 Minute Series, 1984.

Level of Previous Impact

The access road will cross a surface line. A pipeline crosses the east side of the location.

Environmental Setting

DEVON ENERGY CORPORATION's proposed location will be situated on an aeolian landform whose surface is marked by low, poorly developed, coppice-type, dunes and shallow deflation basins. Areal soils are made up of loose, non-calcareous, coarse-grained, sandy loams and loamy sands. Pedons fall within the Typic Torripsamment subgroup. Depositionally, the surface is colluvial aeolain with laterality being to the west-southwest. Taxonomically, peds fall within the Typic Torripsamment subgroup and an intergrade of it. Elevation is 3480 ft. Slope is 0.95°. Aspect is multiple (360°).

The grassland formation is composed of bush muhly, poverty threeawn, mesa dropseed, spiny-leaf zinnia, woolly paper plant, umbrella wort, flat sand sedge, widow's tears, cane cholla, Christmas cholla, pitaya, plains prickly pear, mesquite, shinnery oak, and plains yucca.

Cultural Resources

Prefield: 19 June 1992, Section 23 (no archaeological sites), T23S, R31E, Arita K. Slate.

No cultural resources were recorded during this survey. Albeit not encountered, expected cultural properties, should they occur, should include isolated, random occurrences of debitage, cores, small angular debris, projectile points, etc.

Recommendations

No cultural properties were recorded during the course of this survey. Albeit not encountered, expected cultural properties, should they occur, should include isolated, random occurrences of debitage, cores, small angular debris, projectile points, etc.

Recommendations

NMAS recommends clearance for DEVON ENERGY CORPORATION's proposed Todd "23" Federal Well No. 8 and its access road and suggests that work-related activities proceed in accordance with company plans (Fig. 1). Clearance, of course, is granted by the Bureau of Land Management. If cultural resources are encountered during construction, the BLM and NMAS should be notified immediately. Duned settings are notorious for covering and uncovering cultural properties.

Todd "23" Federal Well No. 12

Location

The proposed location will measure 400 X 400 ft (actual area surveyed 4.44 acres) on federal land and will be situated 1980 ft from the west line and 1880 ft from the south line.

Section 23, T23S, R31E, NMPM, Eddy County, NM

Thus it will be situated in the:

NE $\frac{1}{4}$ SW $\frac{1}{4}$, Section 23, T23S, R31E, NMPM, Eddy County, NM

The proposed location will be situated next to a pipeline road.

Map References: USGS BOOTLEG RIDGE QUADRANGLE, 7.5 Minute
Series, 1984.
USGS LOS MEDANOS QUADRANGLE, 7.5 Minute
Series, 1985, Prov. Ed.

Level of Previous Impact

The location is bordered by a pipeline and pipeline road.

Environmental Setting

DEVON ENERGY CORPORATION's proposed location will be situated on a duned landform. An isolated field of well-developed dunes occurs on the east and southeast. Microrelief ranges up to 3.25 m in height. Surficial deposits are universally dominated by the sand separate. Pedons are assignable to the Typic Torripsamment subgroup. Overall, the coeval surface is subject to aeolian processes. Elevation is 3435 ft. Slope is 0.50°. Aspect is multiple (360°). Drainage is internal owing to high soil permeability and porosity.

The mixed grassland/scrub formation is made up of mesa dropseed, poverty threeawn, sand bur, Warnock groundsel, gland-leaf dalea, spotted bee-balm, mat bluet, sand palafox, bindweed heliotrope, mesquite, shinnery oak, plains yucca, and sand sage.

Cultural Resources

Prefield: 19 June 1992, Section 23 (no archaeological sites), T23S, R31E, Arita K. Slate.

One isolated manifestation (IM) was recorded during this survey.

Isolated Manifestation (IM)

This IM, consisting of one piece of light gray, cryptocrystalline chert, small, angular debris, 39 X 30 X 21 mm, is situated in a hemispherically shaped, deflation basin at a point 185 ft south-

southeast of the center of the location. Associated plants include Hartweg evening primrose, gland-leaf dalea, and poverty threeawn. It is situated in the:

NW¼SE¼NE¼SW¼, Section 23, T23S, R31E, NMPM, Eddy County, NM
 Map Reference: USGS LOS MEDANOS QUADRANGLE, 7.5 Minute Series,
 1985, Prov. Ed.

Recommendations

NMAS recommends clearance for DEVON ENERGY CORPORATION's proposed Todd "23" Federal Well No. 12 and suggests that work-related activities proceed in accordance with company plans (Fig. 1). Clearance, of course, is granted by the Bureau of Land Management. If additional cultural resources are encountered during construction, the BLM and NMAS should be notified immediately. Duned settings are notorious for covering and uncovering cultural properties.

Todd "23" Federal Well No. 11

Location

The proposed location will measure 400 X 400 ft (actual area surveyed 4.44 acres) on federal land and will be situated 1980 ft from the west line and 660 ft from the south line.

Section 23, T23S, R31E, NMPM, Eddy County, NM

Thus it will be situated in the:

SE¼SW¼, Section 23, T23S, R31E, NMPM, Eddy County, NM

The associated access road will measure approximately 100 X 1150 ft (actual area surveyed 2.64 acres) and will be situated in the:

SE¼SW¼, Section 23, T23S, R31E, NMPM, Eddy County, NM
 NE¼SW¼, Section 23, T23S, R31E, NMPM, Eddy County, NM

Map References: USGS BOOTLEG RIDGE QUADRANGLE, 7.5 Minute Series,
 1984,
 USGS LOS MEDANOS QUADRANGLE, 7.5 Minute Series,
 1985, Prov. Ed.

Level of Previous Impact

The sites of the proposed location and access road have not been impacted by mechanical means.

Environmental Setting

DEVON ENERGY CORPORATION's proposed location will be situated on a very gently sloping landform which is coextensive with the northern rim area of an extensive doline. Overlain by an aeolian deposit, the surface is marked by a network of low, coppice-type dunes and an interconnected system of interdunal areas. Drainage is by sheetwash. Elevation is 3426 ft. Slope is 0.50°. Aspect is multiple (360°). Soils fall within the Typic Torripsamment subgroup. Drainage is internal.

The scrub formation is composed of mesquite, creosote bush, plains yucca, woolly paper plant, broom snakeweed, leather-leaf croton, bladder pod, plains prickly pear, mesa dropseed, plains brittle grass, bush muhly and poverty threeawn.

Cultural Resources

Prefield: 19 June 1992, section 23 (no archaeological sites), T23S, R31E, Arita K. Slate.

No cultural properties were recorded during this survey. Their absence is due to a dearth of locally available siliceous lithic sources, the openness of the landform itself and an extreme dearth of local water sources. Land usage, centered on hunting and gathering activities throughout prehistoric- and protohistoric-

times, was seasonal and transitory in nature.

Recommendations

NMAS recommends clearance for DEVON ENERGY CORPORATION's proposed Todd "23" Federal Well No. 11 and its access road and suggests that work-related activities proceed in accordance with company plans (Fig. 1). Clearance, of course, is granted by the Bureau of Land Management. If cultural resources are encountered during construction, the BLM and NMAS should be notified immediately. Duned settings are notorious for covering and uncovering cultural properties.