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 South 1st Street
ARTESIA, NM 88210-2834

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK: DRILL ☒ DEEPEN ☐

b. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ Other ___ 6137 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 1980' FNL & 1980' FEL, Unit G, Section 13-T23S-R31E, Eddy County, NM

At top proposed prod. zone (Same)

RECEIVED
OCD - ARTESIA

5. LEASE DESIGNATION AND SERIAL NO.
NM-NM0404441

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

7. UNIT AGREEMENT NAME
N/A 13998

8. FARM OR LEASE NAME, WELL NO.
Todd "13G" Federal #21

9. API WELL NO.
30-015- 31514

10. FIELD AND POOL, OR WILDCAT
Sand Dunes (Cherry Canyon)

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA
Unit G
Section 13-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

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: 1440.00

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 D: 6400'

20. ROTARY OR CABLE TOOLS*: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): GL 3513'

22. DX. DATE WORK WILL START*: arter, 1999

R 111 P

Notify OCD spud & time to witness cementing of ALL CASING STRINGS

SECRETARY'S POTASH R-111-P POTASH CARLSBAD CONTROLLED WATER BASIN

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8" H-40	48#	850'	WITNESS 00 sx Class C
11"	8 5/8" J-55	32#	4300'	WITNESS + 200 sx Class C
7 7/8"	5 1/2" J-55	15.5#	6400' DV Tool +/- 5500'	Stg #1: 250 sx Class H Lite Stg #2: 500 sx Poz H.

Devon Energy proposes to drill to approximately 6400' to test the Cherry Canyon for commercial quantities of oil. If the Cherry Canyon 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
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

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

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-NM0404441
Legal Description: N/2, SW/4, Sec. 13-T23S-R31E, Eddy Cnty, NM

Bond Coverage: Nationwide
BLM Bond #: CO-1104

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 Engineering Technician DATE January 22, 1999

Candace R. Graham

***(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 /s/ Richard A. Whitley TITLE Assoc STATE Dir DATE 12-5-00

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

DRILLING PROGRAM

Attached to Form 3160-3
Devon Energy Corporation (Nevada)
TODD "13G" FEDERAL #21
1980' FNL & 1980' FEL
Section 13-T23S-R31E, Unit G
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	3960'
Bell Canyon	4440'
Cherry Canyon	5680'
Total Depth	6400'

3. Estimated Depths of Possible Fresh Water-, Oil-, or Gas-Bearing Formations

Upper Permian Sands	<800' fresh water
Delaware (Cherry Canyon)	6020' 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 8 5/8" casing at 4300' and circulating cement to surface. The Delaware intervals will be isolated by setting 5 1/2" casing to total depth and bringing the cement top to approximately 100' above the base of the 8 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
11"	0-4300'	8 5/8"	32#	J-55	ST&C, new R-3
7 7/8"	0'-TD (6400'±)	5 1/2"	15.5#	J-55	LT&C, new R-3

Cementing Program

20" Conductor Casing	Cement with Redi-mix to surface.
13 3/8" Surface Casing	Cement to surface using 450 sx Poz (35% Poz, 65% Class C, 6% gel) with 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
8 5/8" Intermediate Casing	Cement to surface using 1600 sx Poz (35% Poz, 65% Class C, 6% gel, 15% salt) with 1/4 lb/sx Cellophane flakes + 200 sx Class C with 2% $CaCl_2$, 1/4 lb/sx Cellophane flakes
5 1/2" Production Casing with DV tool at ±5500'	Cement 1st stage with 250 sx Silica Lite (Class H) with 3% salt, 0.6% FL additive, 1/4 lb/sx Cellophane flakes Cement 2nd stage with 500 sx Poz (35% Poz, 65% Class H, 6% gel) with 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 100' above the base of the 8 5/8" casing.

5. Minimum Specifications for Pressure Control

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of a (3M system) double ram type (3000 psi WP) preventer and a bag-type (Hydril) preventer (3000 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 8 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 driller's 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
850-4300'	Brine water	10.0	28	No control
4300'-TD	Cut brine polymer	8.8	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 when drilling out the 13 3/8" casing shoe and will remain so until the 8 5/8" casing is cemented. Breathing equipment will be on location upon drilling out the 13 3/8" shoe until total depth is reached.

8. Logging, Testing and Coring Program

A. Drill stem tests will be based on geological sample shows.

B. The open hole electrical logging program will be as follows.

TD to intermediate casing: gamma ray, caliper, induction, neutron & density.

TD to surface: gamma ray & neutron.

C. Sidewall coring 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 log evaluation, geological sample shows and drill stem tests.

9. Abnormal Pressures, Temperatures and Potential Hazards

No abnormal pressures or temperatures are foreseen. The anticipated bottom hole temperature at total depth is 115 degrees and maximum bottom hole pressure is 1300 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 was performed by Pecos Archeological Consultants and submitted to BLM office in Carlsbad in 1993 as report #93236.

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 is in the first quarter of 1999. The drilling operation should require approximately 12 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 "13G" FEDERAL #21
1980' FNL & 1980' FEL
Section 13-T23S-R31E, Unit G
Eddy County, New Mexico

1. Existing Roads

A. The well site and elevation plat for the proposed TODD "13G" FEDERAL #21 are reflected on Exhibit #2. This well was staked by Basin Surveys in Hobbs, NM.

B. All roads into the location are depicted in Exhibit #3. County Road #798 will be used to access the location. No upgrades to roads are planned other than the access into location.

C. Directions to location: Travel west-northwest from Jal, NM approximately 35 miles on State Hwy 128 to County Road 798, just into Eddy County from Lea County. Turn north (right) on County Road 798 and travel 3.75 miles. Then turn east (right) onto the lease road and go approximately 0.8 mile. Then turn north (left), go approximately 0.05 mile, turn west (left) to the TODD "13G" FEDERAL #21 proposed location.

2. Proposed Access Road

Exhibit #3 shows the approximate 200' of new access road to be constructed from the existing lease road into location. It will be constructed as follows.

A. The maximum width of the road will be fifteen (15) feet.

B. It will be crowned and made of 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 wells within a one-mile radius of the proposed TODD "13G" FEDERAL #21.

4. Location of Existing and/or Proposed Facilities

A. Devon Energy Corporation (Nevada) will operate Cherry Canyon production facilities on this lease in SE NW of Section 13.

B. In the event the well is found productive, the production equipment will be as follows.

a. Exhibit #5 shows the battery facility to be utilized by the TODD "13G" FEDERAL #21.

b. The tank battery, all connections and all lines will adhere to API standards.

c. The well will be operated by means of an electric motor.

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 "13G" FEDERAL #21 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 4300'.

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. If 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. After drying to a condition where these efforts are feasible, the reserve pit area will be broken out and leveled. 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 mesquite, sand sage, Christmas cholla, desert seepweed, spiny-leaf zinnia, broom snakeweed, Warnock groundsel, mat bluet, gland-leaf dalea, Hall's panic, mesa dropseed, plains brittle grass, hairy grama and poverty threeawn.

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

C. A Cultural Resources Examination was completed by Pecos Archaeological Consultants and submitted to BLM office in Carlsbad in 1993 as report #93236.

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.

Wally Frank
District Engineer

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

(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

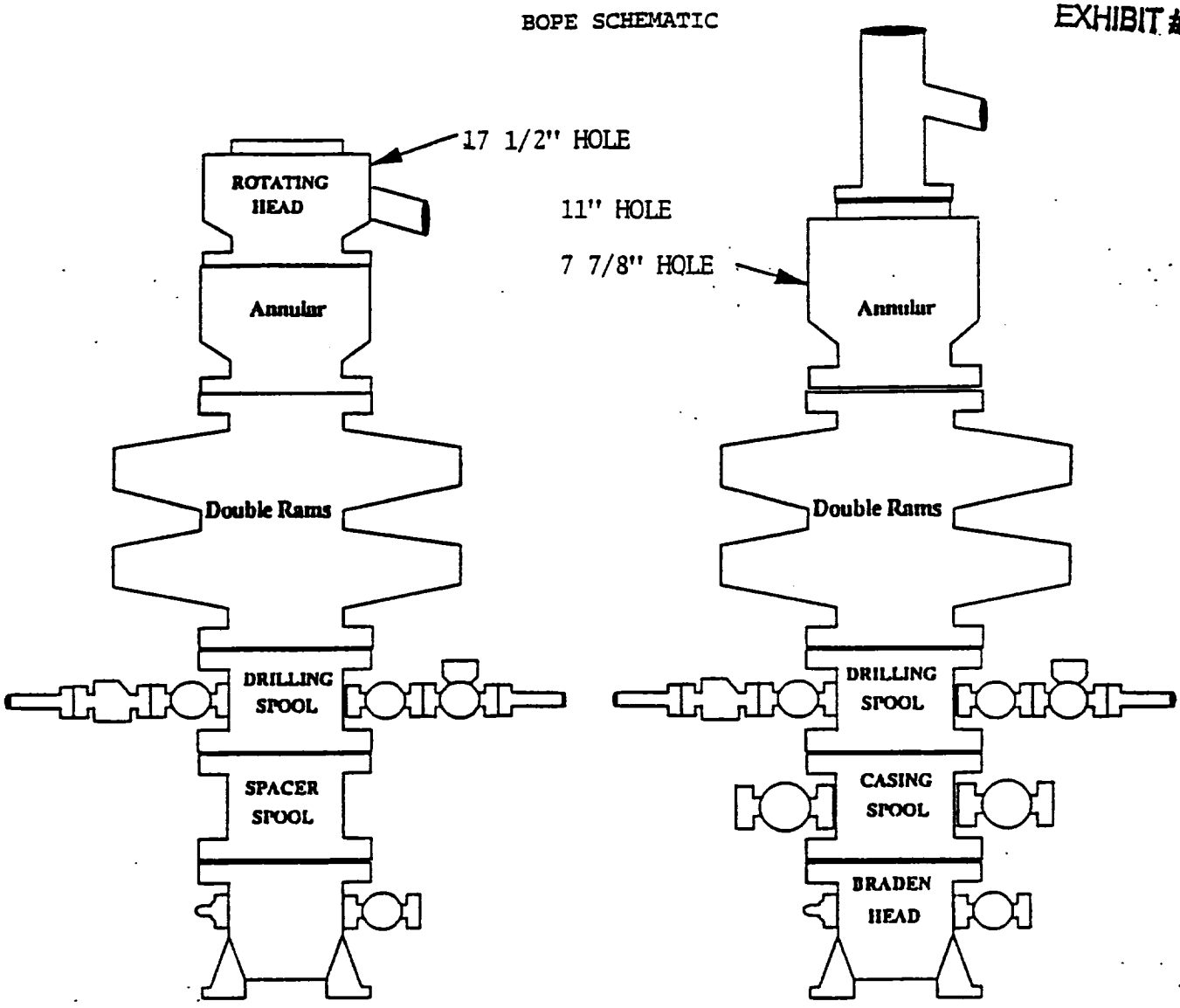
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access road; that I am familiar with the conditions that presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated 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

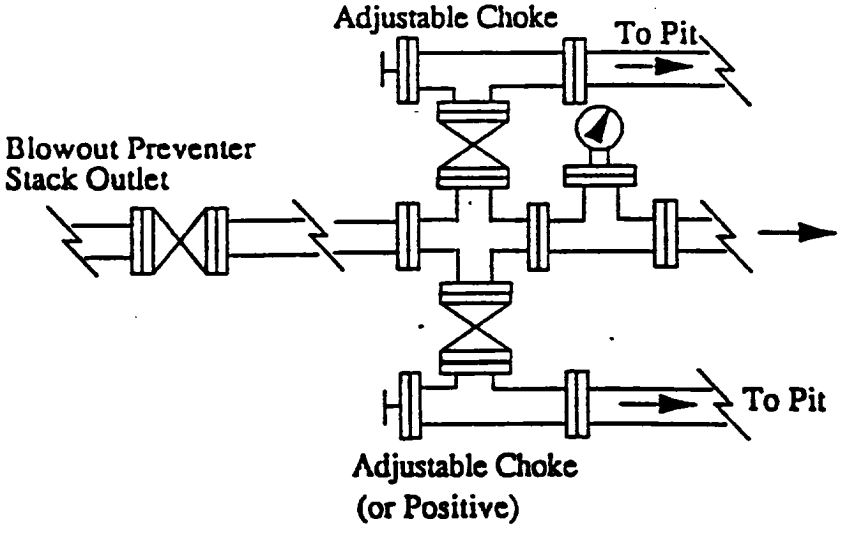
Candace R. Graham
Engineering Tech.

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

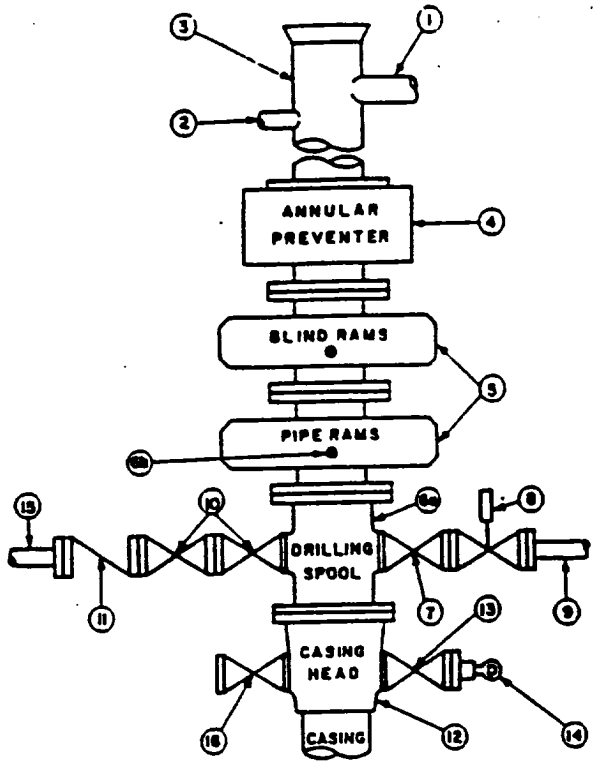
EXHIBIT # 1

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.

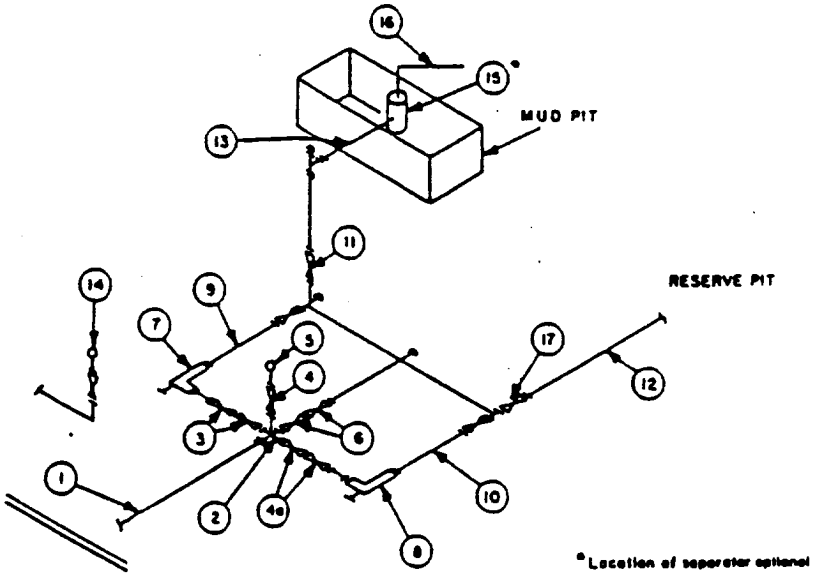
GENERAL NOTES:

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 "13G" FEDERAL #21
1980' FNL & 1980' FEL
Section 13-T23S-R31E, Unit G
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.

EXH. T# 2

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

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

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994
Instruction on back
Submit to 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

API Number	Pool Code	Pool Name
		SAND DUNES (CHERRY CANYON)

Property Code	Property Name	Well Number
	TODD "13G" FEDERAL	21

OGRID No.	Operator Name	Elevation
6137	DEVON ENERGY CORPORATION (NEVADA)	3513'

Surface Location

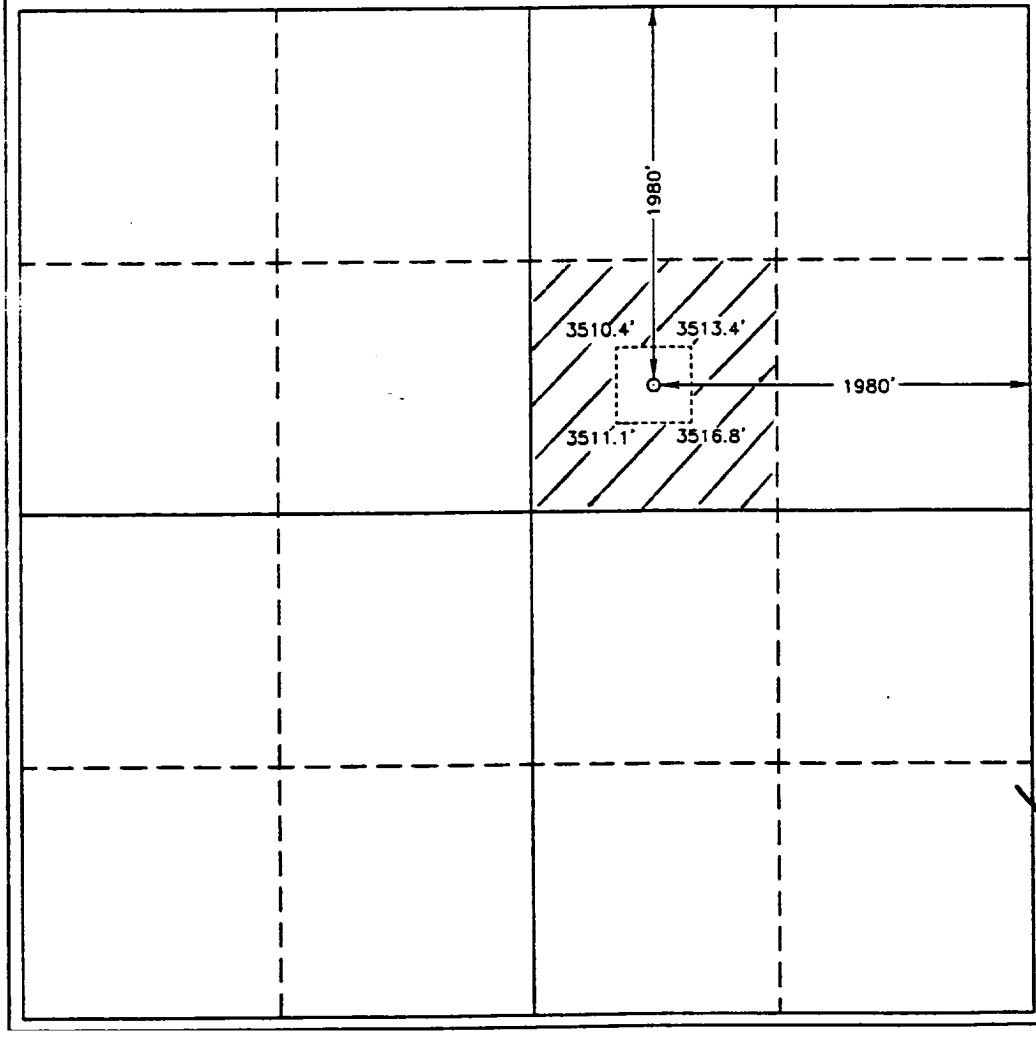
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	13	23 S	31 E		1980	NORTH	1980	EAST	EDDY

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

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
40			

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



OPERATOR CERTIFICATION

I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.

Candace R. Graham
Signature

Candace R. Graham
Printed Name

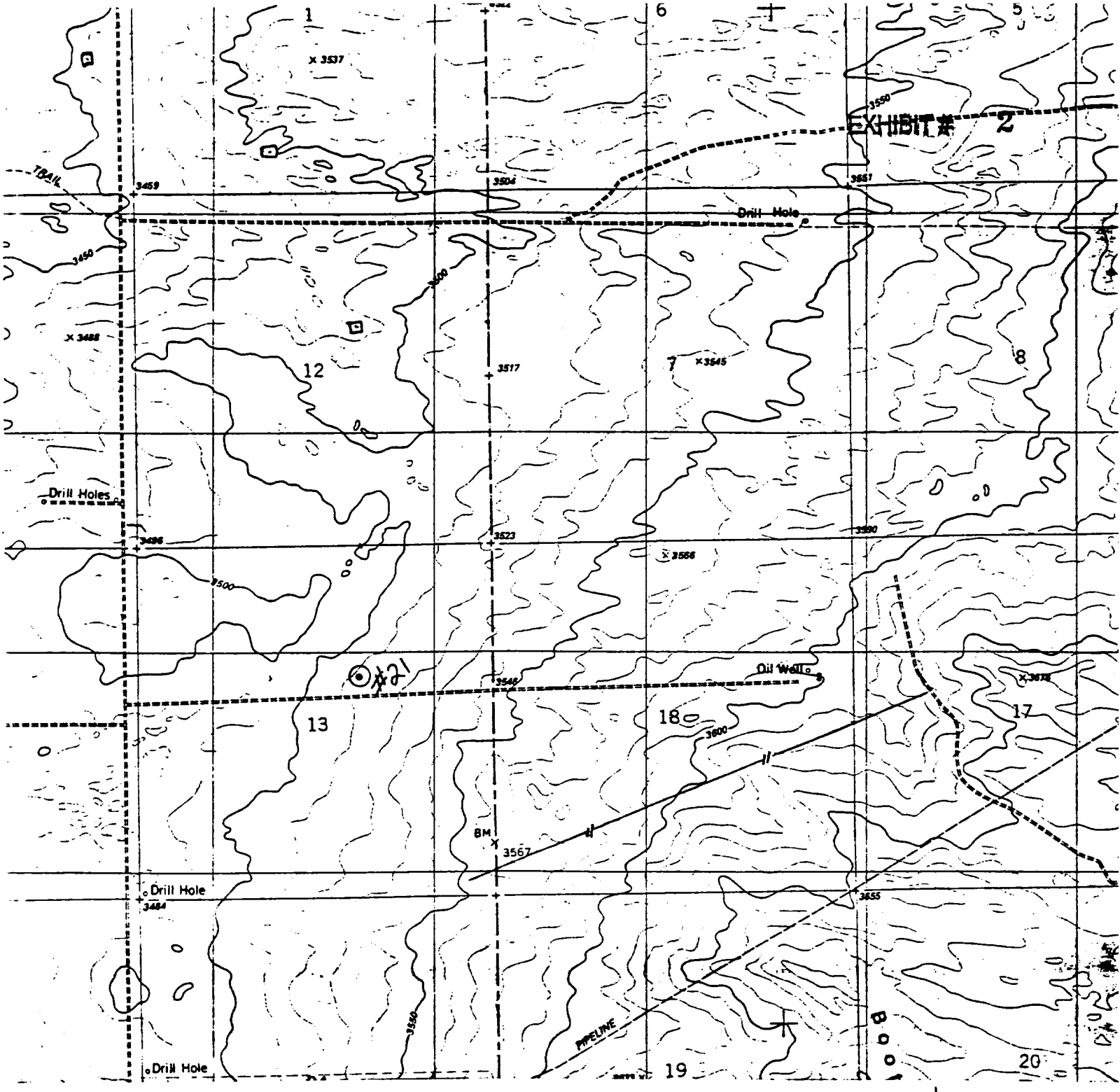
Engineering Tech.
Title

January 22, 1999
Date

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 supervison, and that the same is true and correct to the best of my belief.

October 13, 1998
Date Surveyed JONES
Signature & Seal of Professional Surveyor
NEW MEXICO 7977 REGISTERED PROFESSIONAL SURVEYOR
W.O. No. 8960a
Certificate No. Gary L. Jones 7977
BASIN SURVEYS



DEVON ENERGY CORP.
TODD "13G" FEDERAL #21
1980' FNL & 1980' FEL
Sec. 13, T-23-S, R-31-E,
Eddy County, New Mexico.

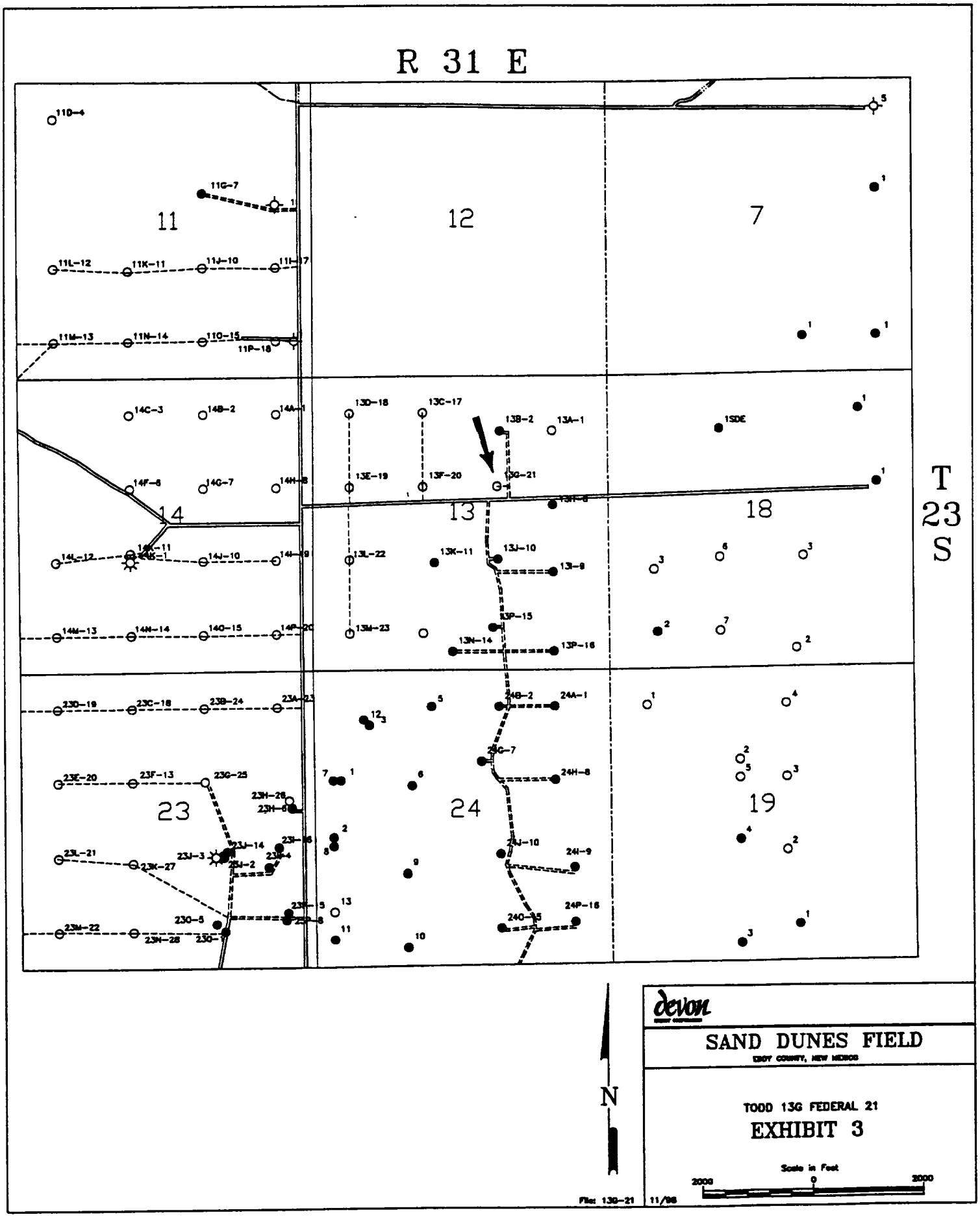
N

SCALE: 1"=2000'

2000' 0 2000' 4000 Feet

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

Survey Date: 10-13-98 | Sheet 1 of 1 Sheets


R 31 E
T 23 S
11
12
7
14
13
18
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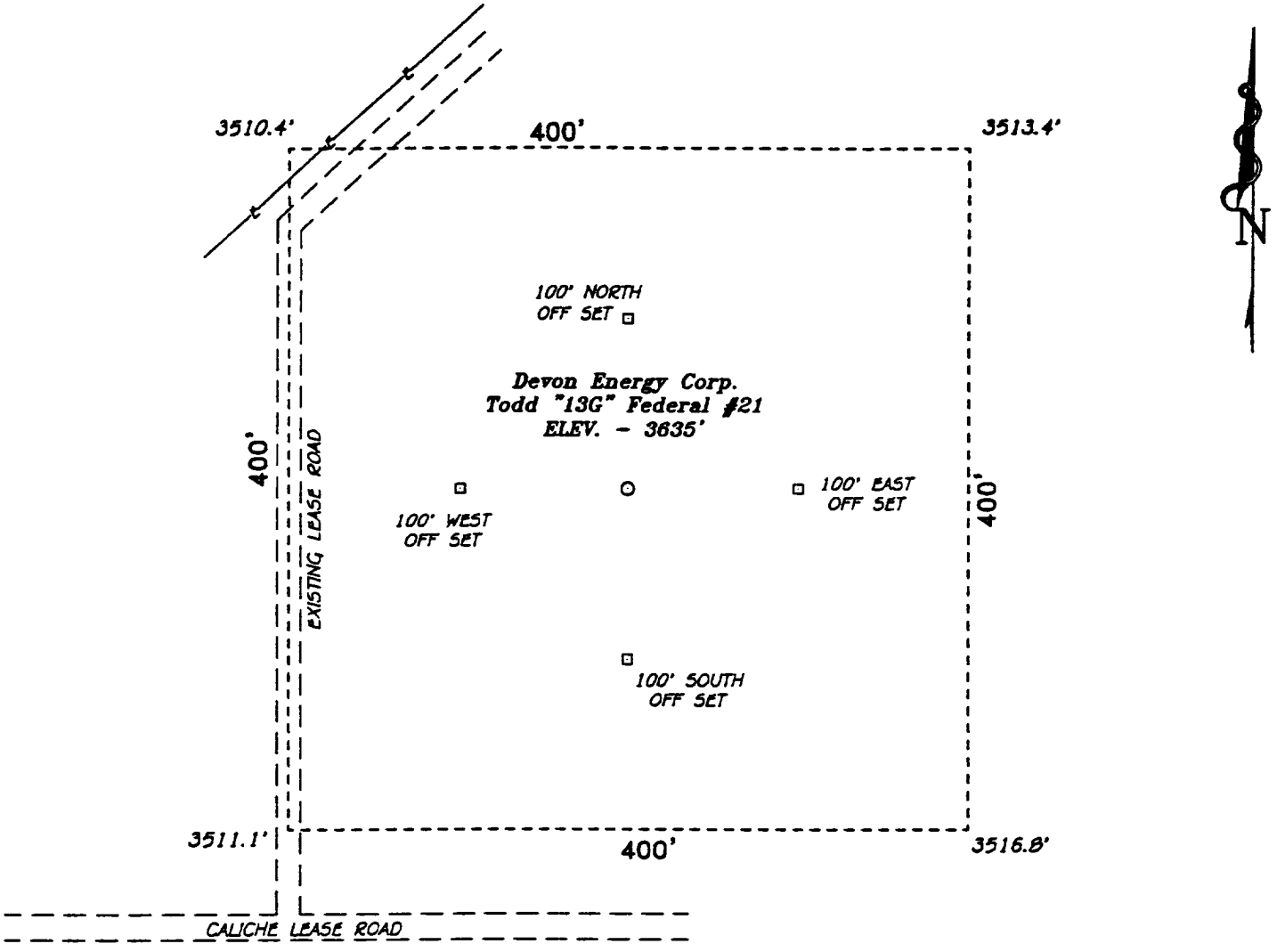
24
19
N
devon
SAND DUNES FIELD
EDDY COUNTY, NEW MEXICO
TODD 13G FEDERAL 21
EXHIBIT 3
Scale in Feet
2000
0
2000
File: 13G-21
11/98

SECTION 13, TOWNSHIP 23 SOUTH, RANGE 31 EAST, N.M.P.M.,

EDDY COUNTY, NEW MEXICO.



100 0 100 200 FEET

SCALE: 1" = 100'

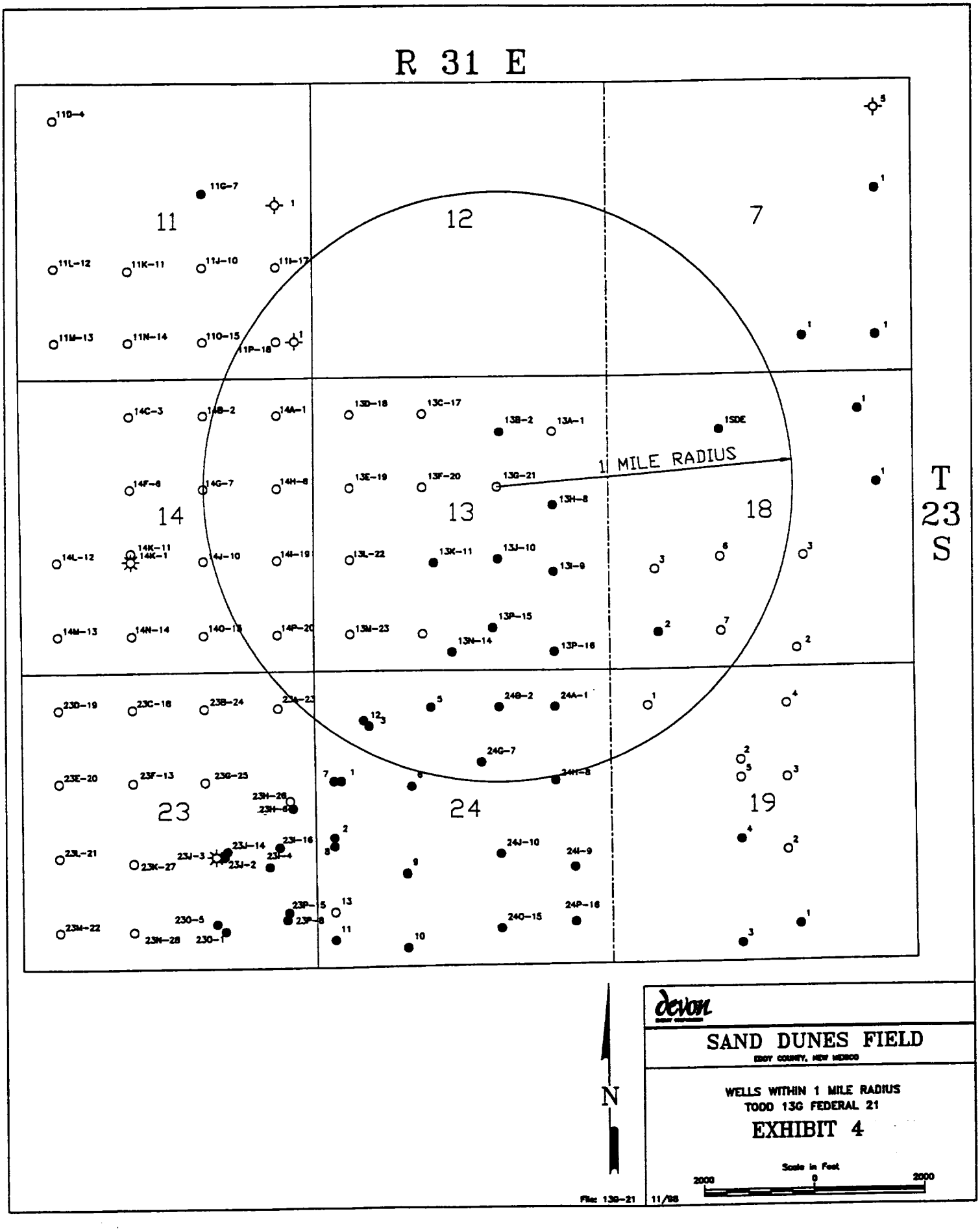
Devon Energy Corp.

REF: Todd "13G" Federal No. 21 / Well Pad Topo

THE TODD "13G" FED. No. 21 LOCATED 1980' FROM THE NORTH LINE AND 1980' FROM THE EAST LINE OF SECTION 13, 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: 8459	Drawn By: K. GOAD		
Date: 10-14-98	Disk: KJG #119 – 8459A.DWG	Survey Date: 10-13-98	Sheet 1 of 1 Sheets


R 31 E
T 23 S
1 MILE RADIUS
11
12
7
14
13
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23
24
19
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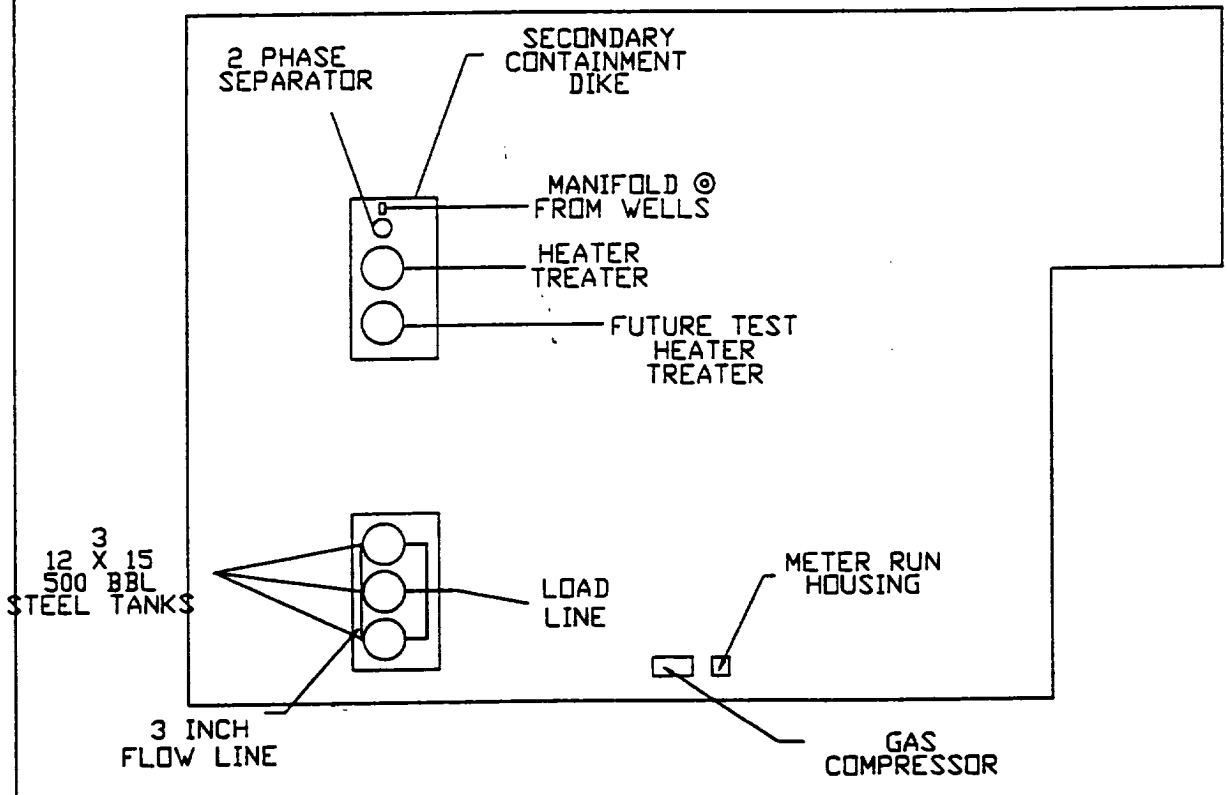
devon
SAND DUNES FIELD
EDDY COUNTY, NEW MEXICO
WELLS WITHIN 1 MILE RADIUS
TODD 13G FEDERAL 21
EXHIBIT 4
Scale in Feet
2000
0
2000
File: 13G-21
11/98



N

devon

SAND DUNES FIELD

EDDY COUNTY, NEW MEXICO

PRODUCTION FACILITIES LAYOUT AT

TODD 13 FEDERAL – CHERRY CANYON BATTERY

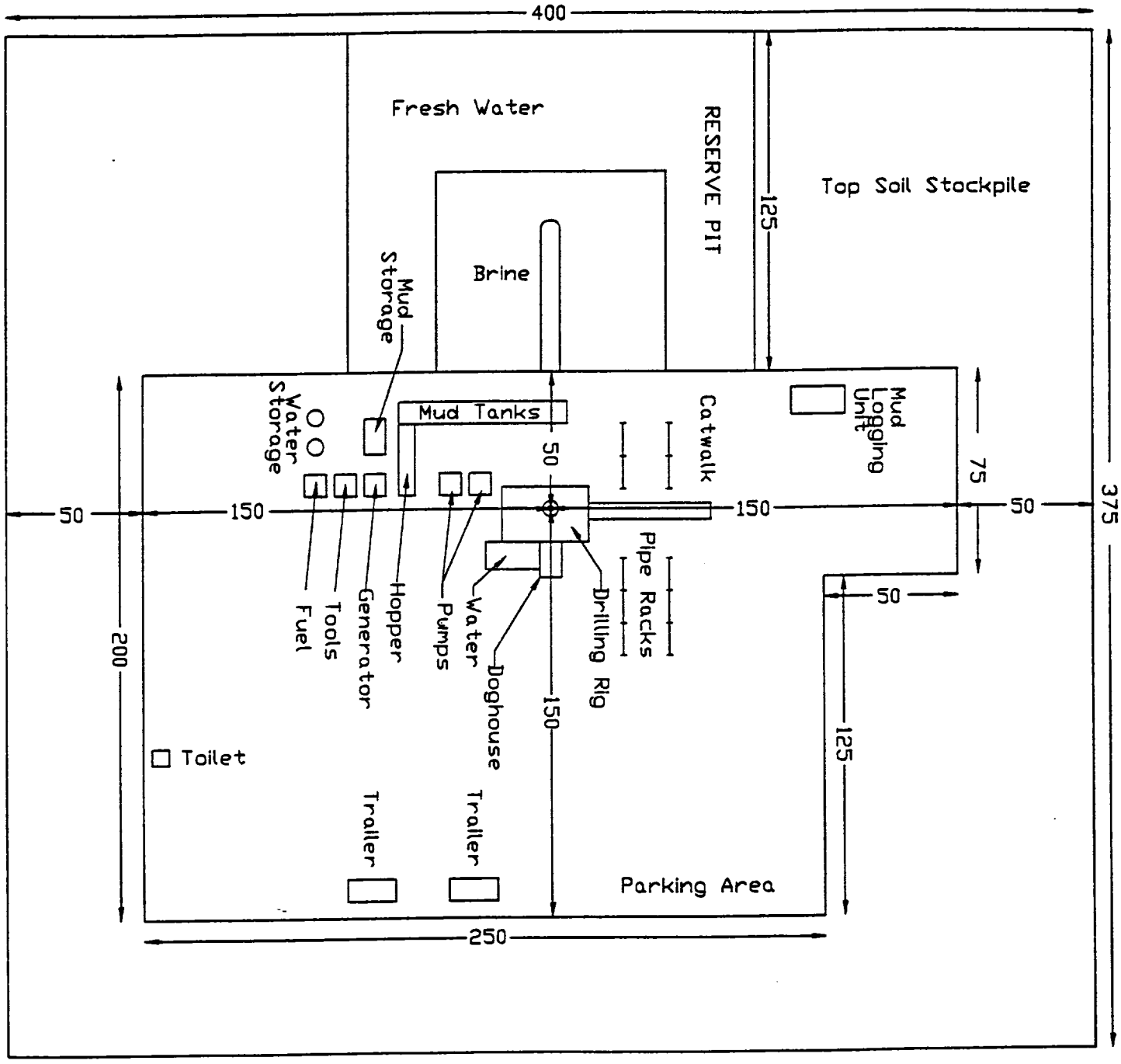
EXHIBIT 5

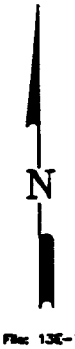
Scale in Feet

25 0 25 50 75 100

11/98

File: 13C-19





File: 13E-19

devon

SAND DUNES FIELD

EDDY COUNTY, NEW MEXICO

DRILLING RIG LAYOUT AND ELEVATIONS

TODD 13 FEDERAL

EXHIBIT 6

Scale in Feet

25 0 25 50 75 100

12/93

E .IBIT # 7

DEVON ENERGY

Operator: DEVON ENERGY CORP	Well Name: TODD FEDERAL
Project ID:	Location: EDDY COUNTY, NEW MEXI

Design Parameters:

Mud weight (9.00 ppg) : 0.468 psi/ft
Shut in surface pressure : 383 psi
Internal gradient (burst) : 0.100 psi/ft
Annular gradient (burst) : 0.000 psi/ft
Tensile load is determined using buoyed weight
Service rating is "Sweet"

Design Factors:

Collapse : 1.125
Burst : 1.00
8 Round : 1.80 (J)
Buttress : 1.60 (J)
Body Yield : 1.50 (B)
Overpull : 0 lbs.

	Length (feet)	Size (in.)	Weight (lb/ft)	Grade	Joint	Depth (feet)	Drift (in.)	Cost
1	850	13-3/8	48.00	H-40	ST&C	850	12.559	

	Collapse Load (psi)	Collapse Strgth (psi)	S.F.	Burst Load (psi)	Min Int Yield Strgth (psi)	S.F.	Tension Load (kips)	Tension Strgth (kips)	S.F.
1	397	740	1.864	468	1730	3.70	35.19	322	9.15 J

Prepared by : PEPPER, Oklahoma City, OK
Date : 10-02-1995
Remarks :

SURFACE PIPE

Minimum segment length for the 850 foot well is 800 feet.

Surface string:

Next string will set at 4,300 ft. with 10.00 ppg mud (pore pressure of 2,234 psi.) The frac gradient of 0.550 at the casing seat results in an injection pressure of 468 psi. Effective BHP (for burst) is 468 psi.

NOTE: The design factors used in this casing string design are as shown above. As a general guideline, Lone Star Steel recommends using minimum design factors of 1.125 - Collapse (with evacuated casing), 1.0 - Burst, 1.8 - 8 Round Tension, 1.6 - Buttress Tension, and 1.5 - Body Yield. Collapse strength under axial tension was calculated based on the Westcott, Dunlop and Kemler curve. Engineering responsibility for use of this design will be that of the purchaser. Costs for this design are based on a 1990 pricing model. (Version 1.00)

EXHIBIT # 7

DEVON ENERGY

Operator: DEVON ENERGY CORP	Well Name: TODD FEDERAL
Project ID:	Location: EDDY COUNTY, NEW MEXI

Design Parameters:

Mud weight (10.00 ppg) : 0.519 psi/ft
Shut in surface pressure : 1935 psi
Internal gradient (burst) : 0.100 psi/ft
Annular gradient (burst) : 0.000 psi/ft
Tensile load is determined using buoyed weight
Service rating is "Sweet"

Design Factors:

Collapse : 1.125
Burst : 1.00
8 Round : 1.80 (J)
Buttress : 1.60 (J)
Body Yield : 1.50 (B)
Overpull : 0 lbs.

	Length (feet)	Size (in.)	Weight (lb/ft)	Grade	Joint	Depth (feet)	Drift (in.)	Cost
1	4,300	8-5/8"	32.00	J-55	ST&C	4,300	7.875	

	Collapse Load (psi)	Collapse Strgth (psi)	S.F.	Burst Load (psi)	Min Int Yield Strgth (psi)	S.F.	Tension Load (kips)	Tension Strgth (kips)	S.F.
1	2234	2530	1.132	2365	3930	1.66	116.56	372	3.19 J

Prepared by : PEPPER, Oklahoma City, OK
Date : 10-02-1995
Remarks :

INTERMEDIATE STRING

Minimum segment length for the 4,300 foot well is 800 feet.

Surface/Intermediate string:

Next string will set at 6,400 ft. with 9.00 ppg mud (pore pressure of 2,992 psi.) The frac gradient of 0.550 at the casing seat results in an injection pressure of 2,365 psi. Effective BHP (for burst) is 2,365 psi.

NOTE: The design factors used in this casing string design are as shown above. As a general guideline, Lone Star Steel recommends using minimum design factors of 1.125 - Collapse (with evacuated casing), 1.0 - Burst, 1.8 - 8 Round Tension, 1.6 - Buttress Tension, and 1.5 - Body Yield. Collapse strength under axial tension was calculated based on the Westcott, Dunlop and Kemler curve. Engineering responsibility for use of this design will be that of the purchaser.

Costs for this design are based on a 1990 pricing model. (Version 1.0G)

EXHIBIT # 7

DEVON ENERGY

Operator: DEVON ENERGY CORP	Well Name: TODD FEDERAL
Project ID:	Location: EDDY COUNTY, NEW MEXI

Design Parameters:

Mud weight (9.00 ppg) : 0.468 psi/ft
Shut in surface pressure : 2352 psi
Internal gradient (burst) : 0.100 psi/ft
Annular gradient (burst) : 0.000 psi/ft
Tensile load is determined using buoyed weight
Service rating is "Sweet"

Design Factors:

Collapse : 1.125
Burst : 1.00
8 Round : 1.80 (J)
Buttress : 1.60 (J)
Body Yield : 1.50 (B)
Overpull : 0 lbs.

	Length (feet)	Size (in.)	Weight (lb/ft)	Grade	Joint	Depth (feet)	Drift (in.)	Cost
1	6,400	5-1/2"	15.50	J-55	LT&C	6,400	4.825	

	Collapse Load (psi)	Collapse Strgth (psi)	S.F.	Burst Load (psi)	Min Int Yield Strgth (psi)	S.F.	Tension Load (kips)	Tension Strgth (kips)	S.F.
1	2992	4040	1.350	2992	4810	1.61	85.55	217	2.54 J

Prepared by : PEPPER, Oklahoma City, OK
Date : 10-02-1995
Remarks :

LONG STRING
Minimum segment length for the 6,400 foot well is 800 feet.
The mud gradient and bottom hole pressures (for burst) are 0.468 psi/ft and 2,992 psi, respectively.

NOTE: The design factors used in this casing string design are as shown above. As a general guideline, Lone Star Steel recommends using minimum design factors of 1.125 - Collapse (with evacuated casing), 1.0 - Burst, 1.8 - 8 Round Tension, 1.6 - Buttress Tension, and 1.5 - Body Yield. Collapse strength under axial tension was calculated based on the Westcott, Dunlop and Kemler curve. Engineering responsibility for use of this design will be that of the purchaser. Costs for this design are based on a 1990 pricing model. (Version 1.0G)

DEVON
ENERGY
CORPORATION

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

405/235-3611
TWX 910-831-327

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:

By: MARVIN C. LONDE, JR. Vice President

UNITED STATES FIDELITY AND GUARANTY COMPANY

By: _____

Marcia C. Brejda Attorney-in-fact

** Please Note **

Please accept the attached archaeological clearance report for the

TODD "13G" FEDERAL #21

1980' FNL & 1980' FEL
Section 13-T23S-R31E, Unit G
Eddy County, New Mexico

as archeological clearance was obtained for this proposed well site in 1993 as the Todd "13G" Federal #7.

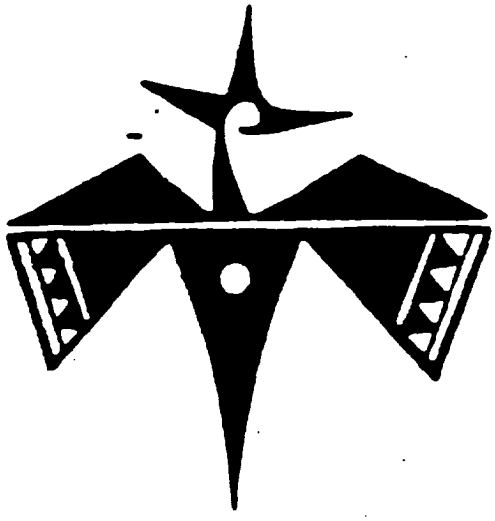
PECOS

ARCHEOLOGICAL

CONSULTANTS

P.O. BOX 1771

CARLSBAD, NM 88221



Archeological Inventory Report for
Devon Energy Corporation's
East Shugart Unit No.s 45, 46, 47, 48, 49, Todd "13C" # 3, Todd "13D" # 4, Todd "13E" # 5, Todd "13F" # 6, Todd "13G" #7, Todd "13J" # 10, Todd "13K" # 11, Todd "13N" # 14, Todd "27L" # 12 Drill Locations and Attendant Access Roads and Section 26 Tank Battery Expansion
Situated on Public Lands in Eddy County, N.M.
Report No. 93236

Archeological Inventory Report for Devon Energy Corporation's East Shugart Unit No.s 45, 46, 47, 48, 49, Todd "13C" # 3, Todd "13D" # 4, Todd "13E" # 5, Todd "13F" # 6, Todd "13G" #7, Todd "13J" # 10, Todd "13K" # 11, Todd "13N" # 14, Todd "27L" # 12 Drill Locations and Attendant Access Roads and Section 26 Tank Battery Expansion Situated on Public Lands in Eddy County, N.M.

Report No. 93236

prepared by
James E. Hunt

submitted by
Pecos Archeological Consultants
P.O. Box 1771, Carlsbad, N.M., 88221
December 16, 1993
BLM Cultural Use Permit No. 6-2920-91-L
State Blanket Survey Permit No. 92-024

ABSTRACT

On December 1, 8, 1993, Pecos Archeological Consultants (BLM Cultural Use Permit No. 6-2920-91-L, State Blanket Survey Permit No. 92-024) undertook an archeological inventory for a tank battery expansion, 14 drill locations and access roads scheduled to be impacted by Devon Energy Corporation. This project will be situated on public lands in Eddy County, New Mexico. These lands occur in sections 34, 35, T18S, R31E, sections 13, 26, 27, T23S, R31E, NMPM, Eddy County, N.M. A total of 71.43 acres of federal surface ownership were investigated during this project, which was conducted in 16 man-hours by James E. Hunt and Robert J. Martin. No cultural resources were recorded during this project. Due to the limited nature of the cultural remains within the impact zone, Pecos Archeological Consultants recommending clearance for this project, as planned.

INTRODUCTION

On November 30, 1993, Pecos Archeological Consultants was requested by Ms. Debby O'Donnell, Devon Energy Corporation, to perform the archeological survey for a tank battery, 14 drill locations and access roads scheduled to be constructed on public land in Eddy County, New Mexico. This land is administered by the Bureau of Land Management and federal law stipulates that an intensive archeological inventory be performed to identify what cultural resources might be affected by such activity prior to granting clearance to the project. Therefore, Pecos Archeological Consultants undertook this survey on December 1 and 8, 1993. Fieldwork for this project was performed by James E. Hunt and Robert J. Martin. The following is a report of the field activities and findings resulting from the survey.

SURVEY METHODOLGY

Pecos Archeological Consultants conducted this survey by physically examining the entire 400 X 400 ft impact zone which will result from the planned construction. Pedestrian inspection along parallel transects was accomplished across the staked drill location. These transects were spaced 15 meters apart; however, established transects were departed from to examine nearby areas of high site probability. All prominent deflations and denuded areas were given special attention. Additionally, all attendant easements (if any) were surveyed in two parallel transects spaced 15 meters apart. This project was conducted on one sunny day. Surface visiblity in the region, which, due to floral cover, ranged between 15-35% of the ground under dry soil conditions, made this the most practical methodology for effectively sampling the impact zone which will result from this project as planned.

ENVIRONMENT

The project area will be located east of Carlsbad, N.M., on the Querecho Plains. This undulating landform is characterized by stabilized sand dunes which range from 1-2 meters in height. These dunes are interspersed with deflation basins which have been formed by aeolian action. Local soils in the region consist of loamy sands which belong to the Kermit-Berino association. These soils are drained internally. Elevation in the project area is between 3300 ft and 3800 ft above sea level.

These plains are part of an environmental zone called the Lower Sonoran Life Zone. The most common plant varieties in the region are shin oak (Quercus havardii), mesquite (Prosopis juliflora), plains yucca (Yucca glauca), broom snakeweed (Gutierrezia sarothrae) and various grasses. Some of the common faunal types in area are mule deer (Odocoileus heminonus), pronghorn antelope (Antilocapra americana), jackrabbit (Lepus sp.), cottontail rabbit (Silvilagus sp.), coyote (Canis latrans), as well as other small mammals, birds and reptiles. Bison (Bison bison) also ranged in the region prior to their near-extinction in the nineteenth century.

LOCATIONAL DATA

Devon Energy Corporation's drill location, designated the East Shugart Unit # 45, will measure 400 ft X 400 ft, or 3.6 acres. It will be situated 2250 ft from the south line and 580 ft from the west line, in the NW1/4 SW1/4, section 35, T18S, R31E, NMPM, Eddy Co., N.M.

The access road which wil be constructed to this location will measure 100 ft X 200 ft or 0.45 acre. It will be situated in the:
NW1/4 SW1/4, section 35, T18S, R31E, NMPM, Eddy Co., N.M.

The East Shugart Unit # 46 will measure 400 ft X 400 ft or 3.6 acres. It will be situated 330 ft from the south line and 1650 ft from the east line, in the: SW1/4 SE1/4, section 34, T18S, R31E, NMPM, Eddy Co., N.M.

The access road to this location will measure 100 ft X 200 ft or 0.45 acre. It will be situated in the:
SW1/4 SE1/4, section 34, T18S, R31E, NMPM, Eddy Co., N.M.

The East Shugart Unit # 47 will measure 400 ft X 400 ft or 3.6 acres. It will be situated 1650 ft from the north line and 1650 ft from the west line, in the: SE1/4 NW1/4, section 35, T18S, R31E, NMPM, Eddy Co., N.M.

The access road that will be constructed to this location will measure 100 ft X 700 ft or 1.6 acres. It will be located in the:
SE1/4 NW1/4, section 35, T18S, R31E, NMPM, Eddy Co., N.M.
SW1/4 NW1/4, section 35, T18S, R31E, NMPM, Eddy Co., N.M.

The East Shugart Unit # 48 will measure 400 ft X 400 ft or 3.6 acres. It will be situated 330 ft from the north line and 1750 from the west line, in the: NE1/4 NW1/4, section 35, T18S, R31E, NMPM, Eddy Co., N.M.

The access road to this location will measure 100 ft X 300 ft or 0.68 acre. It will be situated in the:
NE1/4 NW1/4, section 35, T18S, R31E, NMPM, Eddy Co., N.M.

The East Shugart Unit # 49 will measure 400 ft X 400 ft or 3.6 acres. It will be located 990 ft from the north line and 1650 ft from the east line, in the: NW1/4 NE1/4, section 35, T18S, R31E, NMPM, Eddy Co., N.M.

The Todd "13C" Federal No. 3 will measure 400 ft X 400 ft or 3.6 acres. It will be situated 660 ft from the north line and 1980 ft from the west line, in the: NE1/4 NW1/4, section 13, T23S, R31E, NMPM, Eddy Co., N.M.

The access road to this location will measure 100 ft X 900 ft or 2.06 acres. It will be situated in the:
NE1/4 NW1/4, section 13, T23S, R31E, NMPM, Eddy Co., N.M.
SE1/4 NW1/4, section 13, T23S, R31E, NMPM, Eddy Co., N.M.

The Todd "13D" Federal No. 4 will measure 400 ft X 400 ft or 3.6 acres. It will be situated 660 ft from the north line and 660 ft from the west line, in the: NW1/4 NW1/4, section 13, T23S, R31E, NMPM, Eddy Co., N.M.

The access road to this location will measure 100 ft X 900 ft or 2.06 acres. It will be situated in the:

NW1/4 NW1/4, section 13, T23S, R31E, NMPM, Eddy Co., N.M.
NE1/4 NW1/4, section 13, T23S, R31E, NMPM, Eddy Co., N.M.

The Todd "13E" Federal No. 5 will measure 400 ft X 400 ft or 3.6 acres. It will be situated 1650 ft from the north line and 990 ft from the west line, in the: SW1/4 NW1/4, section 13, T23S, R31E, NMPM, Eddy Co., N.M.

The access road to this well will measure 100 ft X 500 ft or 1.14 acres. It will be situated in the:
SW1/4 NW1/4, section 13, T23S, R31E, NMPM, Eddy Co., N.M.

The Todd "13F" Federal No. 6 will measure 400 ft X 400 ft or 3.6 acres. It will be situated 1980 ft from the north line and 1980 ft from the west line, in the: SE1/4 NW1/4, section 13, T23S, R31E, NMPM, Eddy Co., N.M.

The access road which will be constructed to this location will measure 100 ft X 200 ft, or 0.45 acre. It will be situated in the: SE1/4 NW1/4, section 13, T23S, R31E, NMPM, Eddy Co., N.M.

The Todd "13G" Federal No. 7 will measure 400 ft X 400 ft or 3.6 acres. It will be situated 1980 ft from the north line and 1980 ft from the east line, in the:
SW1/4 NE1/4, section 13, T23S, R31E, NMPM, Eddy Co., N.M.

The access road to this location will measure 100 ft X 200 ft or 0.45 acres. It will be situated in the:
SW1/4 NW1/4, section 13, T23S, R31E, NMPM, Eddy Co., N.M.

The Todd "13J" Federal No. 10 will measure 400 ft X 400 ft or 3.6 acres. It will be located 1980 ft from the south line and 1980 ft from the east line, in the: NW1/4 SE1/4, section 13, T23S, R31E, NMPM, Eddy Co., N.M.

The access road to this location will measure 100 ft X 400 ft or 0.91 acre. It will be situated in the:
NW1/4 SE1/4, section 13, T23S, R31E, NMPM, Eddy Co., N.M.

The Todd "13K" Federal No. 11 will measure 400 ft X 400 ft, or 3.6 acres. It will be situated 1920 ft from the south line and 2180 ft from the west line, in the: NE1/4 SW1/4, section 13, T23S, R31E, NMPM, Eddy Co., N.M.

The access road to this well will measure 100 ft X 400 ft or 0.91 acre. It will be situated in the:
NE1/4 SW1/4, section 13, T23S, R31E, NMPM, Eddy Co., N.M.
NW1/4 SE1/4, section 13, T23S, R31E, NMPM, Eddy Co., N.M.

The Todd "13N" Federal No. 14 will measure 400 ft X 400 ft or 3.6 acres. It will be situated 1220 ft from the south line and 2450 ft from the west line, in the: SE1/4 SW1/4, section 13, T23S, R31E, NMPM, Eddy Co., N.M.

The access road to this well will measure 100 ft X 1600 ft or 3.67 acres. It will be situated in the:

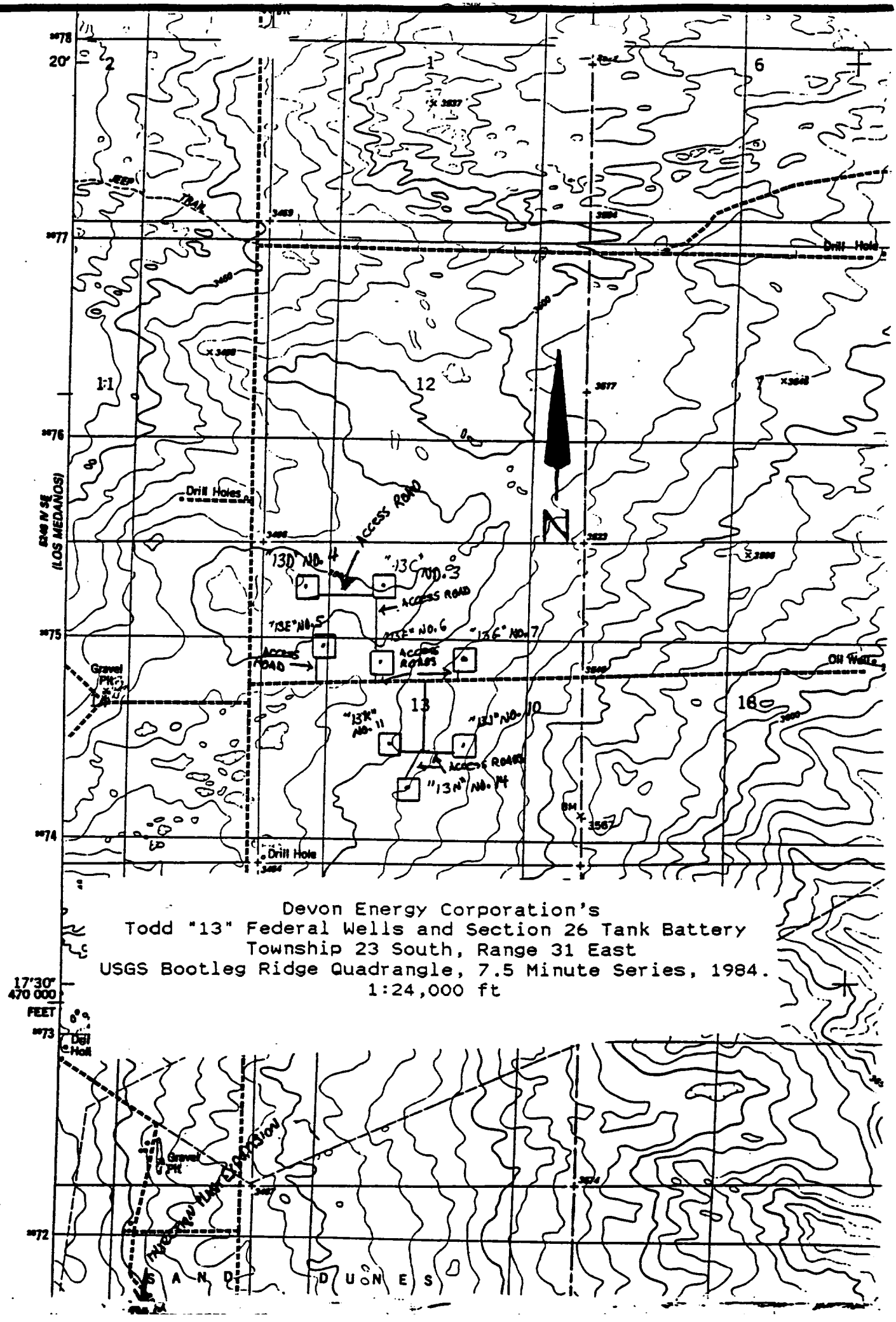
SE1/4 SW1/4, section 13, T23S, R31E, NMPM, Eddy Co., N.M.
NE1/4 SW1/4, section 13, T23S, R31E, NMPM, Eddy Co., N.M.
NW1/4 SE1/4, section 13, T23S, R31E, NMPM, Eddy Co., N.M.
SW1/4 NE1/4, section 13, T23S, R31E, NMPM, Eddy Co., N.M.

The Todd "27L" Federal No. 12 Will measure 400 ft X 400 ft or 3.6 acres. It will be situated 1980 ft from the south line and 510 ft from the west line, in the: NW1/4 SW1/4, section 27, T23S, R31E, NMPM, Eddy Co., N.M.

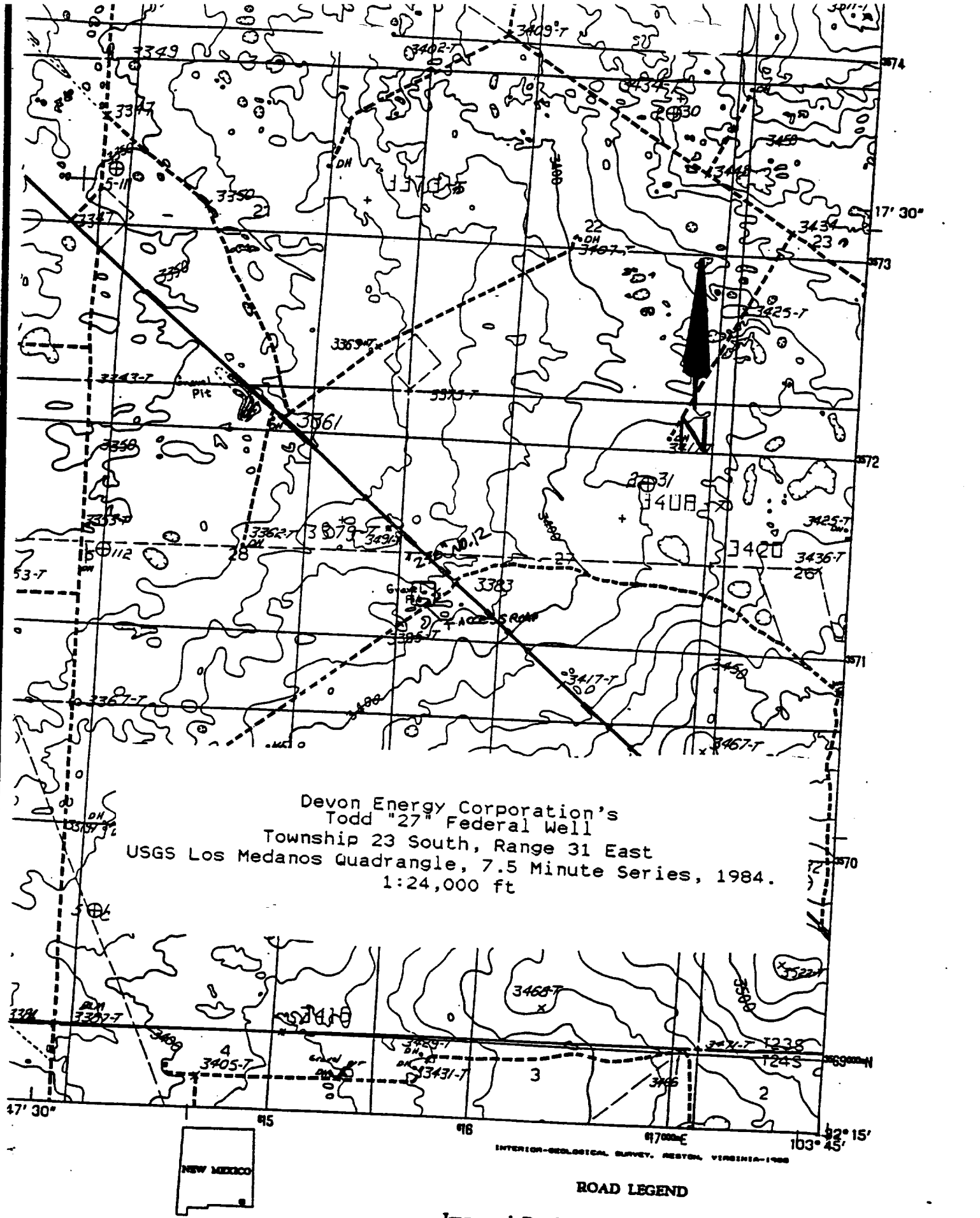
The access road to this well will measure 100 ft X 400 ft or 0.91 acre. it will be situated in the: NW1/4 SW1/4, section 27, T23S, R31E, NMPM, Eddy Co., N.M.

The section 26 Tank Battery will measure 355 ft X 550 ft or 5.19 acres. It will be situated in the: SW1/4 NE1/4, section 26, T23S, R31E, NMPM, Eddy Co., N.M.

Map Reference: USGS Los Medanos Quadrangle, 7.5 Minute Series, 1984.
USGS Bootleg Ridge Quadrangle, 7.5 Minute Series, 1984.
USGS Greenwood Lake Quadrangle, 7.5 Minute Series, 1985.



Devon Energy Corporation's
Todd "13" Federal Wells and Section 26 Tank Battery
Township 23 South, Range 31 East
USGS Bootleg Ridge Quadrangle, 7.5 Minute Series, 1984.
1:24,000 ft



Devon Energy Corporation's
Todd "27" Federal Well
Township 23 South, Range 31 East
USGS Los Medanos Quadrangle, 7.5 Minute Series, 1984.
1:24,000 ft

INTERIOR-GEOLOGICAL SURVEY, RESTON, VIRGINIA-1988

QUADRANGLE LOCATION

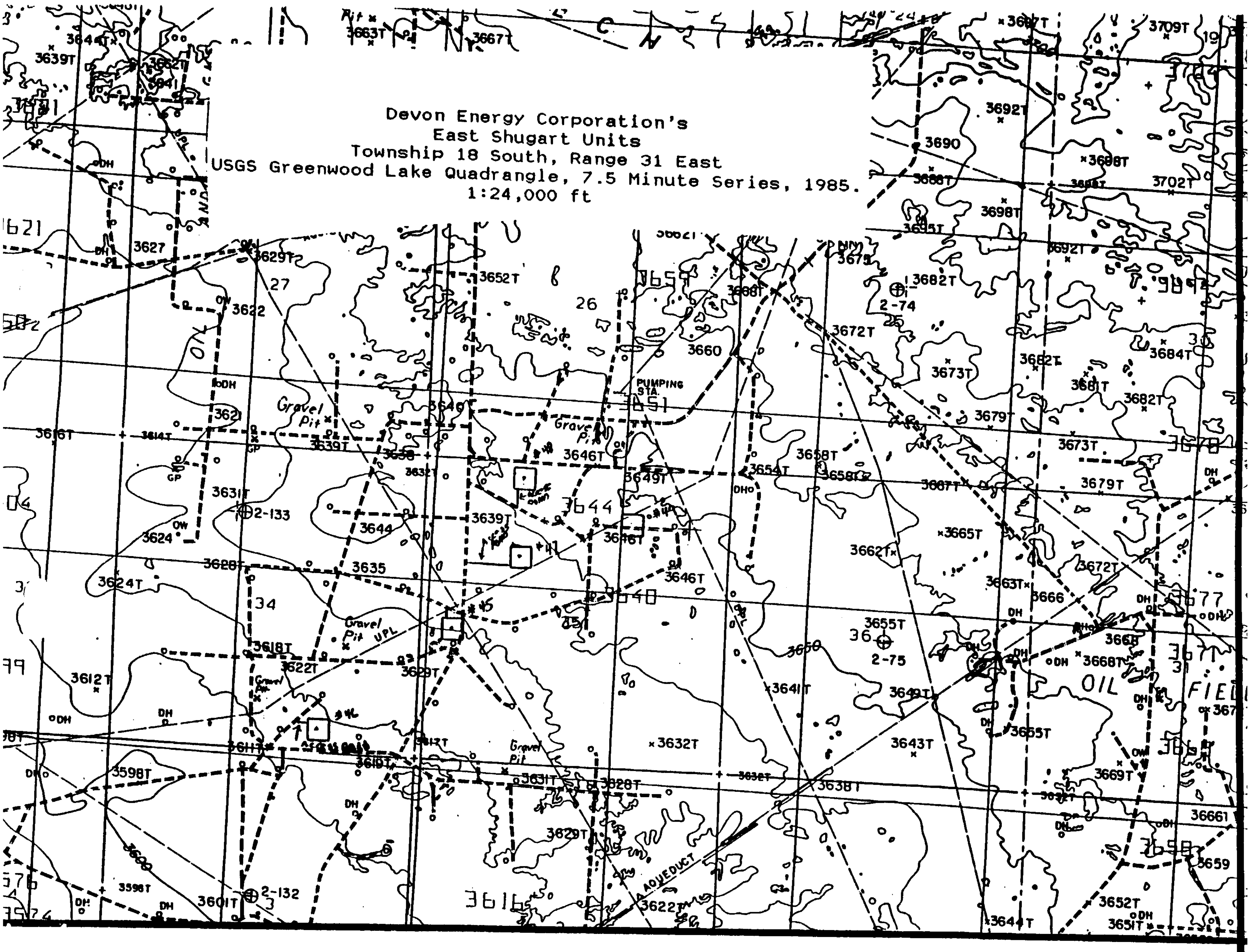
1	2	3

1 Tower Hill Ranch
2 Livingston Ridge
3 The Divide

ROAD LEGEND

Improved Road
Unimproved Road
Trail
Interstate Route
U.S. Route
State Route

Devon Energy Corporation's
East Shugart Units
Township 18 South, Range 31 East
USGS Greenwood Lake Quadrangle, 7.5 Minute Series, 1985.
1:24,000 ft



ARCHEOLOGICAL RESOURCES

On December 1, 1993, Pecos Archeological Consultants performed a literature search to determine if any archeological sites had already been recorded in the vicinity of the project area. Current BLM files and the National Register of Historic Places were consulted in this endeavor. Three previously-recorded sites were found to occur in the project area. These are:

Field Site No. PAC/Ed-298

LA 60927

NM-06-4950

None of these sites were encountered during this survey

Observed Archeological Manifestations:

No cultural resources were recorded during this cultural inventory.

RECOMMENDATIONS

Due to the limited nature of cultural resources in the project area, Pecos Archeological Consultants is recommending clearance for this project, as planned. This recommendation is based on a surface inspection of the proposed impact zone; should additional, subsurface remains be present in the project area, they would not be detected without extensive test excavation. Of course, final clearance for this project must be granted by the appropriate government agency.