

NM OIL CONS. COMMISSION STATES
DRAWER DEPARTMENT OF THE INTERIOR
ARTESIA, NM 88220 LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input checked="" type="checkbox"/>		5. LEASE DESIGNATION AND SERIAL NO. NM 10191	
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/>		6. IF INDIAN, ALLOTTEE OR TRIBE NAME NA	
2. NAME OF OPERATOR Devon Energy Corporation (Nevada) Attn: Debby O'Donnell		7. UNIT AGREEMENT NAME Shugart	
3. ADDRESS AND TELEPHONE NO. 20 North Broadway Ste 1500 New Orleans, LA 70102		8. NAME OR LEASE NAME WELL NO. 3493 East Shugart Unit #66	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.) At surface 2300' FSL & 425' FWL		9. AP WELL NO. 30-015-27955	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* 15 1/2 miles southeast of Loco Hills, NM.		10. FIELD AND POOL, OR WILDCAT Shugart (Y-SR-Q-G)	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any) 425'		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA 56439	
16. NO. OF ACRES IN LEASE 400		12. COUNTY OR PARISH 13. STATE Eddy NM	
17. DISTANCE FROM PROPOSED* LOCATION TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 200'		14. NO. OF ACRES ASSIGNED TO THIS WELL 40	
18. PROPOSED DEPTH 4500'		15. ROTARY OR CABLE TOOLS rotary	
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3619'		22. APPROX. DATE WORK WILL START* May 1, 1994	

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	14"		40'	cmt with readi-mix to surface
12 1/4"	8 5/8", K-55	24 ppf	950'	280 sx Lite + 200 sx Class C
7 7/8"	5 1/2", J-55	15.5 ppf	4500'	550 sx Lite + 500 sx Class C

* We plan to circulate cement to surface on all casing strings.

Devon Energy proposes to drill to 4500'± to test the Queen Sand formation for commercial quantities of oil. If the Queen is deemed non-commercial, the wellbore will be plugged and abandoned per Federal regulations. Programs to adhere to onshore oil and gas regulations are outlined in the following exhibits and attachments.

Drilling ProgramSurface Use and Operating Plan

Exhibits #1/1-A = Blowout Prevention Equipment

Exhibit #2 = Location and Elevation Plat

Exhibit #3/3-A = Road Map and Topo Map

Exhibit #4 = Wells Within 1 Mile Radius

Exhibit #5 = Production Facilities Plat

Exhibit #6 = Rotary Rig Layout

Exhibit #7 = Casing Design

H₂S Operating Plan

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 10191

Legal Description: Section 34-T18S-R31E

Formation: Queen Sand

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 prevention program, if any.

SIGNED E. L. Buttross, Jr. TITLE District Engineer DATE March 17, 1994

(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 enable the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY Scott Powers (acting) AREA MANAGER

TITLE _____

DATE MAY 9 1994

*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.

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

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT I

P.O. Box 1880, Hobbs, NM 88240

DISTRICT II

P.O. Drawer 100, Artesia, NM 88210

DISTRICT III

1000 Rio Brueas Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

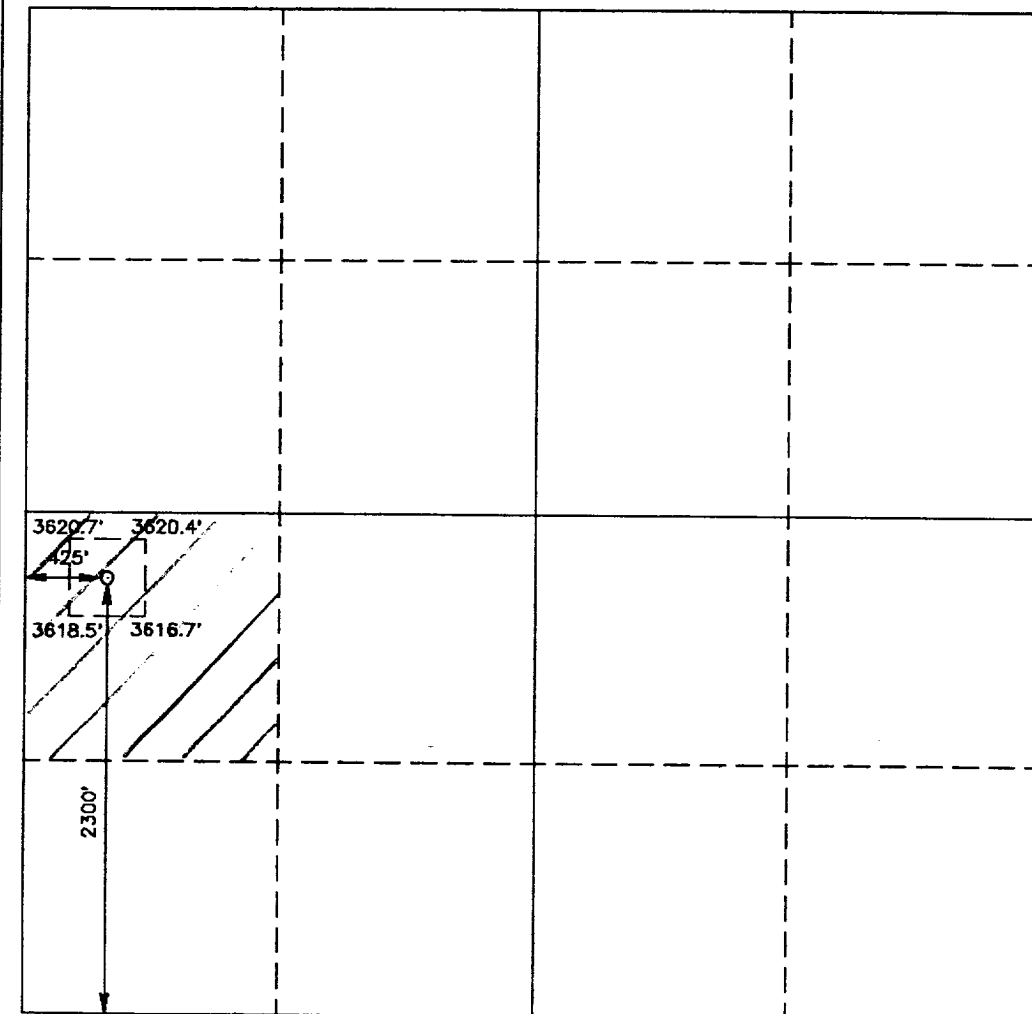
All Distances must be from the outer boundaries of the section

Operator DEVON ENERGY CORPORATION			Lease EAST SHUGART UNIT		Well No. 66
Unit Letter L	Section 34	Township 18 SOUTH	Range 31 EAST	County EDDY	
Actual Footage Location of Well:					
2300 feet from the SOUTH line and		425 feet from the WEST line			
Ground Level Elev. 3619'	Producing Formation Queen Sand	Pool Shugart (Y-SR-Q-G)	Dedicated Acreage: 40 Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?
☐ Yes ☐ No If answer is "yes" type of consolidation _____

If answer is "no" list of owners and tract descriptions which have actually been consolidated. (Use reverse side of this form necessary.)

No allowable will be assigned to the well unit all interests have been consolidated (by communitization, unitization, forced-pooling, otherwise) or until a non-standard unit, eliminating such interest, 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

E. L. Buttross, Jr.

Printed Name

E. L. Buttross, Jr.

Position

District Engineer

Company Devon Energy Corporation (Nevada)

Date

3/11/94

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 knowledge and belief.

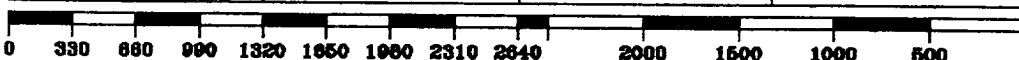
Date Surveyed

JANUARY 28, 1994

Signature & Seal of Professional Surveyor

[Signature]
 Certificate No. **JOHN W. WEST, 676**
RONALD J. EDSON, 3238
GARY L. JONES, 7977

84-11-0194B



MINIMUM BLOWOUT PREVENTER REQUIREMENTS

3,000 psi Working Pressure

3 MWP

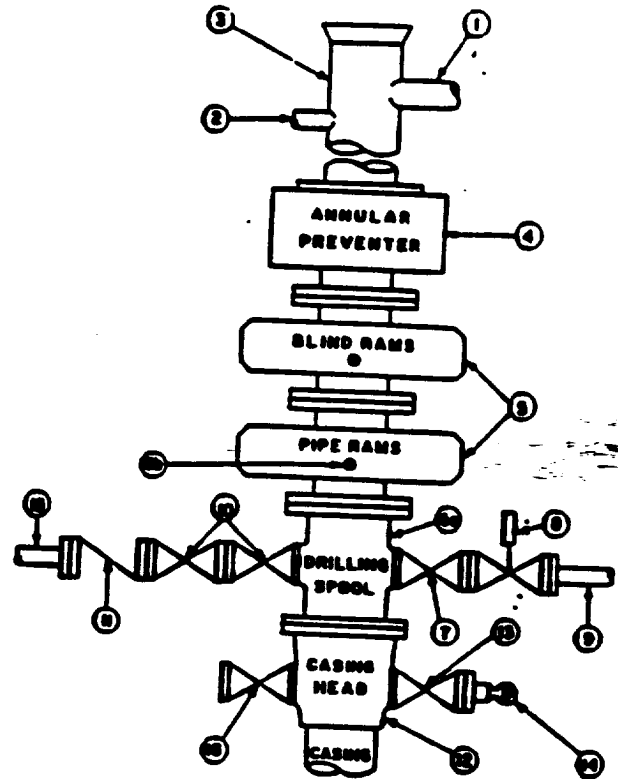
STACK REQUIREMENTS

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

OPTIONAL

16	Flanged valve	1-13/16"
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CONFIGURATION A



CONTRACTOR'S OPTION TO FURNISH:

1. All equipment and connections above bradenhead or casinghead. Working pressure of preventers to be 3,000 psi, minimum.
2. Automatic accumulator (50 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 sever-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.

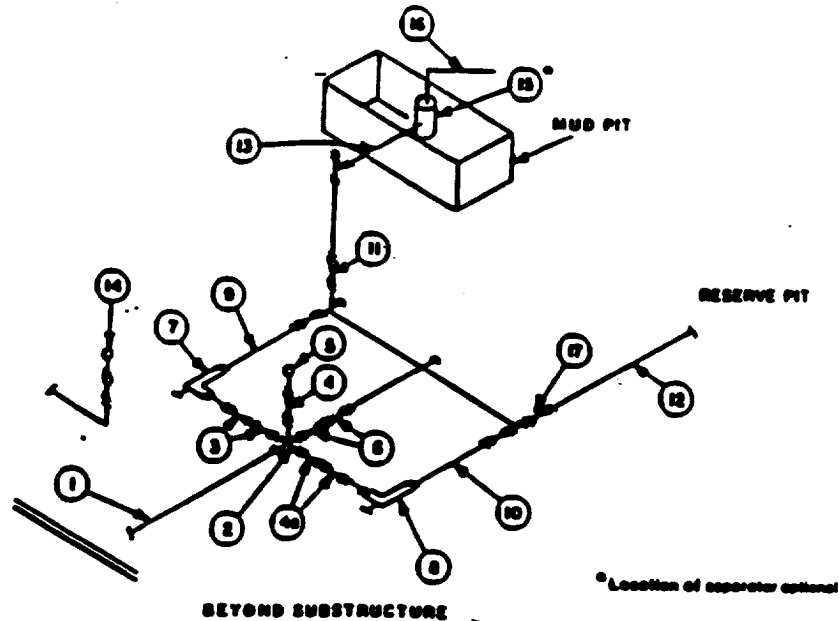
7. Handwheels and extensions to be connected and ready for use.
8. Valves adjacent to drilling spool to be kept open. Use outside valves except for emergency.
9. All seamless steel control piping (3000 psi working pressure) to have flexible joints to avoid stress. Hoses will be permitted.
10. Casinghead connections shall not be used except in case of emergency.
11. Do not use kill line for routine fill-up operations.

Attachment to Exhibit #1
NOTES REGARDING BLOWOUT PREVENTORS
East Shugart Unit #66
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 preventor 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 preventor 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.

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

3 MWP • 5 MWP • 10 MWP



MINIMUM REQUIREMENTS										
No.		3,000 MWP			5,000 MWP			10,000 MWP		
		I.D.	NOMINAL	RATING	I.D.	NOMINAL	RATING	I.D.	NOMINAL	RATING
1	Line from drilling spool		3"	3,000		3"	5,000		3"	10,000
2	Cross 3"x3"x3"x2"			3,000			5,000		3"	10,000
	Cross 3"x3"x3"x3"						5,000			
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"		
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

- 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.

NM OIL CONS. COMMISSION

DRAWER DD

ARTESIA, NM 88210 SURFACE USE AND OPERATING PLAN

RECEIVED

MAR 26 11 37 AM '94

CARL
APEN

ONE
TWO

Attachment to Form 3160-3

Devon Energy Corporation

East Shugart Unit #57

375' FSL & 1950' FWL

Section 35-T18S-R31E

Eddy County, New Mexico

RECEIVED

MAY 13 '94

O. C. D.
ARTESIA, OFFICE

1. Existing Roads:

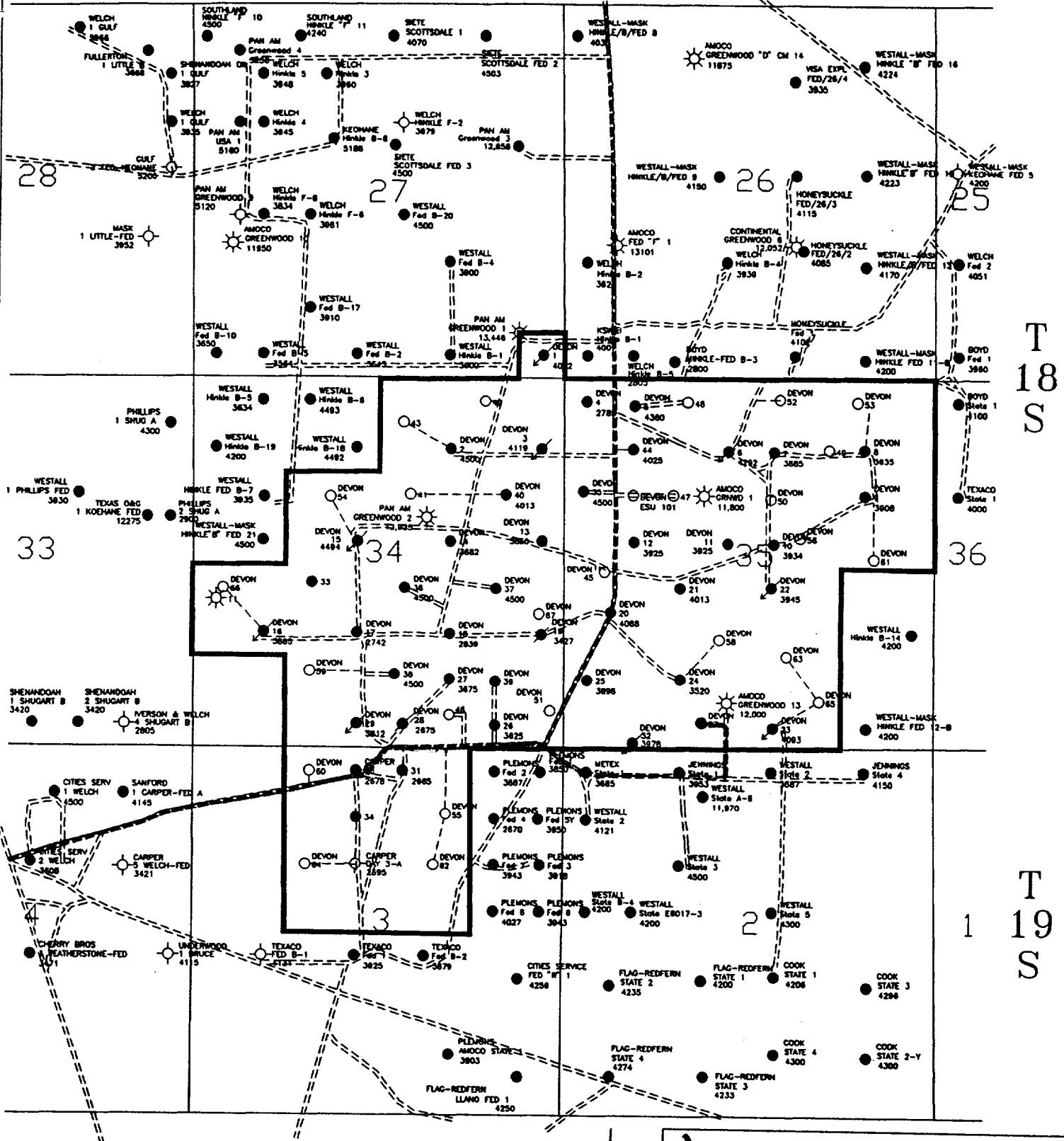
- A. The well site and elevation plat for the proposed East Shugart Unit #57 are reflected on Exhibit #2. It was staked by John West Engineering of Hobbs, New Mexico.
- B. All roads into the location are depicted in Exhibit #3. County Road #249 will be used to access the location. No upgrades to roads other than the access into location from the lease road will be necessary.
- C. Directions to location: From Hobbs, NM take Highway 62/180 and go approximately 20 miles to Highway 529. Turn northwest onto Highway 529 and go 35 miles to Highway 82. Go west on Highway 82 for 0.4 mile. Turn left (south) off Highway 82 onto County Road 222 and go approximately 8.2 miles through the cattle guard to County Road 249. Turn left (east) and go approximately 1.5 miles east-northeast on County Road 249. Turn right (east) onto lease road and go 0.5 mile. Turn left (north) and go 700'. Turn left (west) and go 300' to location.

2. Proposed Access Road:

Exhibit #3 shows the 300' (\pm) of new access road to be constructed from the lease road. 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.

R 31 E



devon
ENERGY CORPORATION

EAST SHUGART UNIT

EDDY COUNTY, NEW MEXICO

EXHIBIT 3

Scale in Feet

Scale in Feet

1000 0 1000 2000 3000 4000