Form 3160-3
(December 1990) NM OIL CONS. COMMISSION

30-015-27430

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0136

Expires: December 31, 1991

Drawer DD
Artesia, NM 88210

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ]

b. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] OTHER SINGLE ZONE [X] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR: Devon Energy Corporation (Nevada)

3. ADDRESS AND TELEPHONE NO.: 20 North Broadway Suite 1500 Oklahoma City, OK 73102 (405) 235-3611

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 990' FSL & 990' FEL
At proposed prod. zone: same

5. LEASE DESIGNATION AND SERIAL NO.: NM10193
6. IF INDIAN, ALLOTTEE OR TRIBE NAME: NA
7. UNIT AGREEMENT NAME: East Shugart Unit
8. FARM OR LEASE NAME, WELL NO.: East Shugart Unit #39
9. API WELL NO.:
10. FIELD AND POOL, OR WILDCAT: Shugart
11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Unit P Section 34-T18S-R31E
12. COUNTY OR PARISH: Eddy
13. STATE: NM

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 15½ miles southeast of Loco Hills, New Mexico

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)	16. NO. OF ACRES IN LEASE	17. NO. OF ACRES ASSIGNED TO THIS WELL
990'	80	40
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. ROTARY OR CABLE TOOLS**
660'	4400'	rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3619'
22. APPROX. DATE WORK WILL START*: April 30, 1993

23. PROPOSED CASING AND CEMENTING PROGRAM *

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
25"	20"		40'	cement with ready-mix to surface
11"	8 5/8" WC50	24 ppf	950'	200 sx LITE + 100 sx Class C
7 7/8"	5 1/2" J-55	15.5 ppf	4400'	150 sx LITE + 375 sx Class C

* We plan to circulate cement to surface on all three strings (conductor, surface and longstring).

Devon Energy proposes to drill to approxiamtely 4400' to test the Yates and Queen sands for commercial quantities of oil. If the Yates and Queen are 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 Plan
Surface Use and Operating Plan
Exhibit #1 and #1-A = Blowout Prevention Equipment
Exhibit #2 = Location and Elevation Plat
Exhibit #3 = Planned Access Roads
Exhibit #4 = Wells Within a One Mile Radius
Exhibit #5 = Production Facilities Plat
Exhibit #6 = Rotary Rig Layout
Exhibit #7 = Casing Design Program
Evidence of Bond Coverage

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

NSL-10-5-7-93 WFX

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 Charles W. Horsman TITLE District Engineer DATE 2/26/93

(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:

(ORIG. SGD.) RICHARD L. MANUS AREA MANAGER

APPROVED BY _____ TITLE _____ DATE 5/3/93

*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.

INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated, on all types of lands and leases for appropriate action by either a Federal or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office.

ITEM 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable State or Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on this reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal or State agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective production zone.

ITEM 22: Consult applicable Federal or State regulations, or appropriate officials, concerning approval of the proposal before operations are started.

NOTICE

The Privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR Part 3160.

PRINCIPAL PURPOSE: The information is to be used to process and evaluate your application for permit to drill or deepen an oil or gas well.

ROUTINE USES: (1) The analysis of the applicant's proposal to discover and extract the Federal or Indian resources encountered. (2) The review of procedures and equipment and the projected impact on the land involved. (3) The evaluation of the effects of proposed operation on surface and subsurface water and other environmental impacts. (4)(5) Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions, as well as routine regulatory responsibility.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if the operator elects to initiate drilling operation on an oil and gas lease.

BURDEN HOURS STATEMENT

Public reporting burden for this form is estimated to average 30 minutes per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management, (Alternate) Bureau Clearance Officer, (WO-771), 1849 C Street, N.W., Washington, D.C. 20240, and the Office of Management and Budget, Paperwork Reduction Project (1004-0136), Washington, D.C. 20503.

The Paperwork Reduction Act of 1980 (44 U.S.C. 3501 et seq) requires us to inform you that:

This information is being collected to allow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases.

This information will be used to analyze and approve applications.

Response to this request is mandatory only if the operator elects to initiate drilling operations on an oil and gas lease.

*U.S. GPO: 1991-573-016/26050

District Office
State Lease - 4 copies
Fee Lease - 3 copies

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

Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

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

Form C-102
Revised 1-1-89

EXHIBIT #2

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator	Lease	Well No.
Devon Energy Corporation	East Shugart Unit	39

Unit Letter	Section	Township	Range	County
P	34	18 South	31 East NMPM	Eddy

Actual Footage Location of Well:
990 feet from the South line and 990 feet from the East line

Ground level Elev.	Producing Formation	Pool	Dedicated Acreage:
3619	Yates and Queen Sands	Shugart	40 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

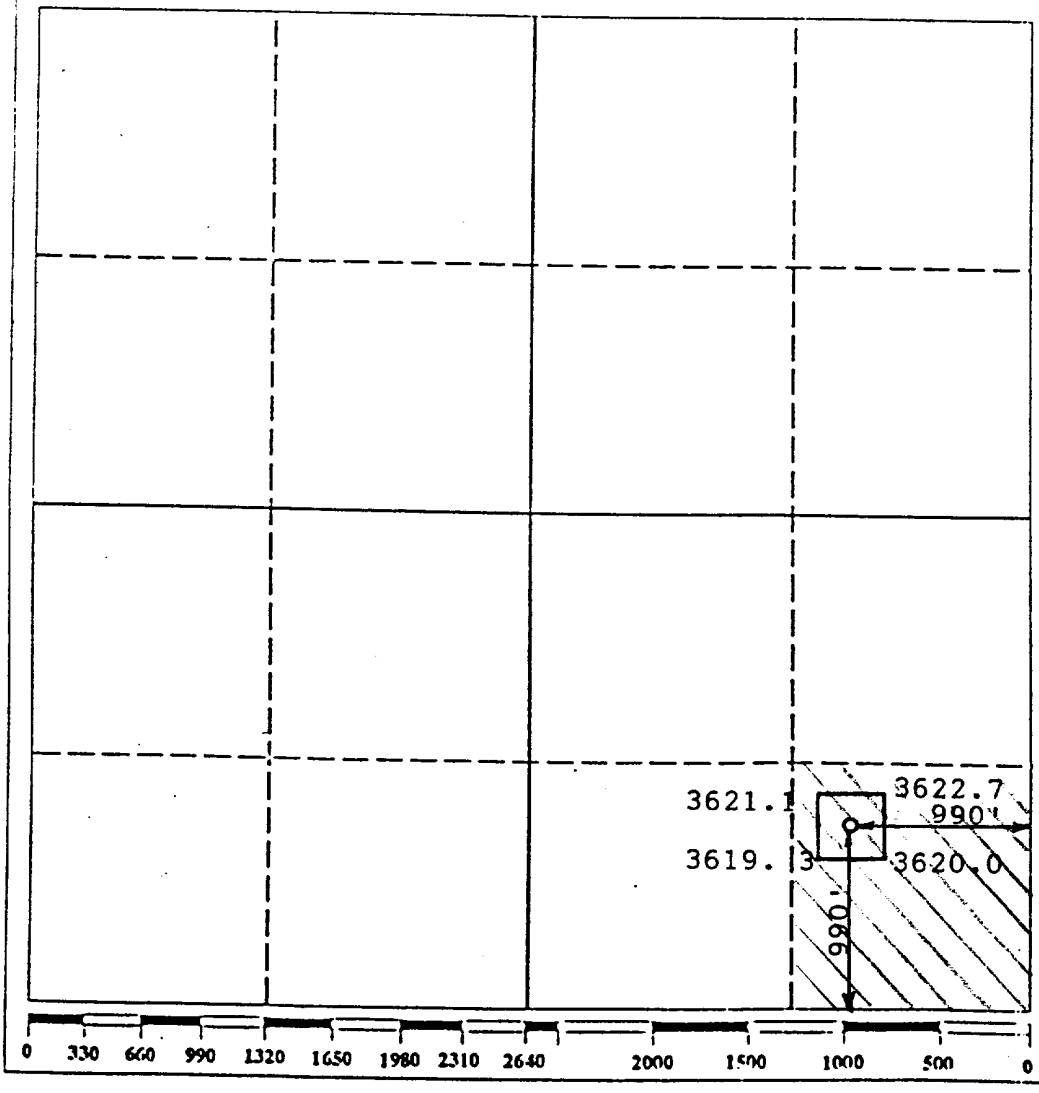
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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 the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary. _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or 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 in true and complete to the best of my knowledge and belief.

Signature

Printed Name
Charles W. Horsman

Position
District Engineer

Company Devon Energy Corporation (Nevada)

Date
January 15, 1993

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 knowledge and belief.

Date Surveyed
July 2[illegible], 1992

Signature & Seal of Professional Surveyor
P. [illegible] Dickson

NEW MEXICO 8112 REGISTERED PROFESSIONAL LAND SURVEYOR

Certificate No.
8112

MINIMUM BLOWOUT PREVENTER REQUIREMENTS

3,000 psi Working Pressure

3 MWP

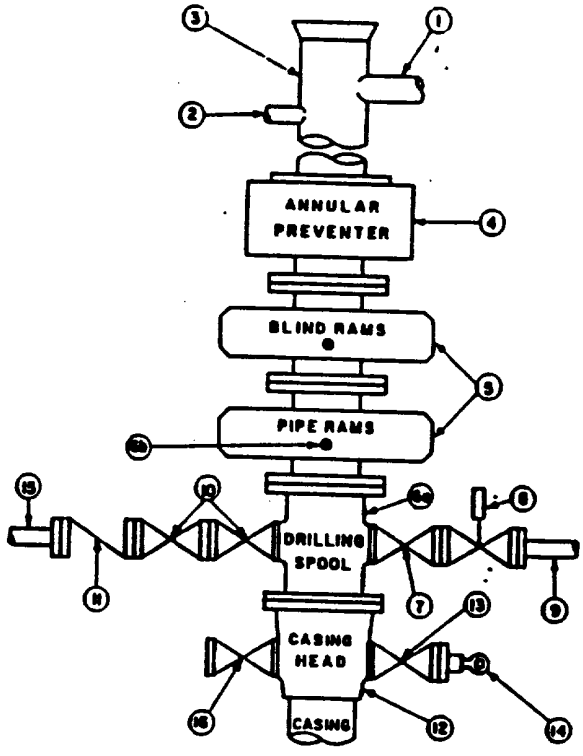
East Shugart Unit #39
Eddy County, New Mexico
Exhibit #1

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.

Attachment to Exhibit #1
NOTES REGARDING BLOWOUT PREVENTORS
East Shugart Unit #39
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 BOPE 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 W.P. 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.

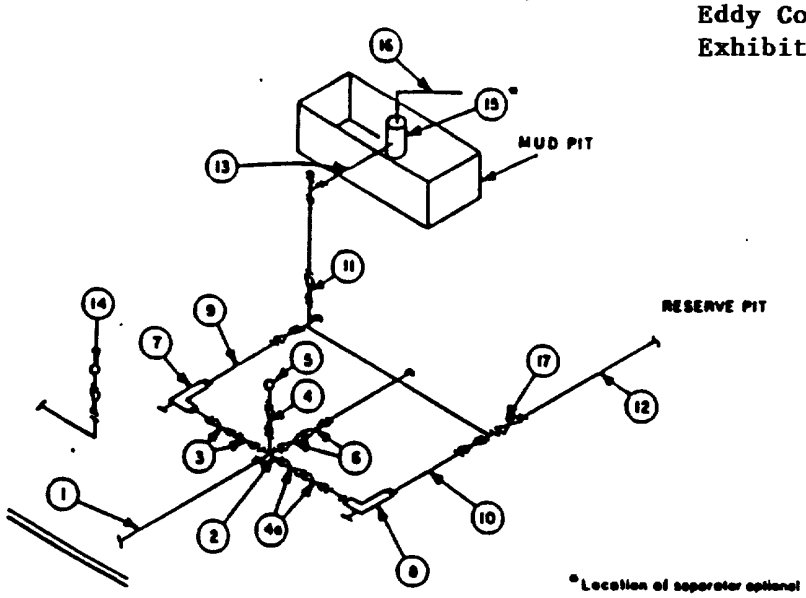
10. Hydraulic floor control for blowout preventor will be located as near in proximity to driller's controls as possible.

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.

East Shugart Unit #39
Eddy County, New Mexico
Exhibit #1-A

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

3 MWP - 5 MWP - 10 MWP



BEYOND SUBSTRUCTURE

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.

SURFACE USE AND OPERATING PLAN

Attachment to Form 3160-3
Devon Energy Corporation
East Shugart Unit #39
990' FSL & 990' FEL
Section 34-T18S-R31E
Eddy County, New Mexico

1. Existing Roads:

   A. The well site and elevation plat for the proposed East Shugart Unit #39 is reflected on Exhibit #2. It was staked by P. R. Patton and Associates, Roswell, 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 County Road #249 will be necessary.

   C. Directions to location: Turn right (south) off Highway 82 onto County Road 222 and go approximately 8.2 miles through the cattleguard to 2nd Westall Road or County Road 249. Turn left (east) and go approximately 1.5 miles to the East Shugart Battery. The proposed East Shugart Unit #39 is approximately 1700 feet southwest of the battery.

2. Proposed Access Road:

   Exhibit #3 shows the new access road to be constructed from County Road #249. 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 cattleguards, 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 East Shugart Unit #39. There are 67 total wells which include 31 active Yates/Queen/Seven Rivers/Grayburg producers, 15 active Queen producers, 2 active Penn producers, 11 inactive wells, 1 inactive Penn well, 6 water injection wells and 1 plugged and abandoned well. A list of the wells is depicted on Exhibit #4 attachment.

4. Location of Existing and/or Proposed Facilities:

A. Devon Energy Corporation operates one production facility in this unit in Section 35. It is as follows:

(3) Heater Treaters & Tank Battery (NW SW)

Water Injection Plant and (2) Water Tanks

B. In the event the well is found productive, it will be added to the central production facility (refer to Exhibit #5).

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

D. 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 topsoil from the wellsite will returned to the location. The drill site will then be contoured to the original natural state.

5. Location and Type of Water Supply:

The East Shugart Unit #39 will be drilled using a combination of brine and fresh water mud systems (outlined in Drilling Program). The water will be obtained from the existing water line presently supplying fresh water to the unit. Additionally, produced salt water from lease gathering tanks may be used. 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 a existing BLM approved pit. 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 and the reserve pit. 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 70' x 70' x 5', 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.

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 and injected into the water injection system. 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) 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 is 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 toolpusher, 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 wellsite is owned by the Bureau of Land Management.

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.

B. There is permanent water (Laguna Plata) 8.5 miles southeast of the location.

C. A Cultural Resources Examination has been completed by Archaeological Survey Consultants and forwarded to the Carlsbad, New Mexico BLM office. The report references no cultural areas on either the access road or drilling pad.

13. Lessees's and Operator's Representative:

The Devon Energy Corporation representatives responsible for assuring compliance of the surface use plan are:

Chuck Horsman	Dan Talley
District Engineer	Production Foreman
20 North Broadway	422 West Main
Suite 1500	Suite F
Oklahoma City, OK 73102	Artesia, NM 88210
(405) 552-4508 (office)	(505) 748-3371 (office)
(405) 348-5964 (home)	(505) 748-3671 (home)

Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access road; that I an 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.

Date: 2/25/93 Signed: Charles W. Horsman

Charles W. Horsman
District Engineer

DRILLING PROGRAM

Attached to Form 3160-3
Devon Energy Corporation
East Shugart Unit #39
990' FSL & 990' FEL
Section 34-T18S-R31E
Eddy County, New Mexico

1. Geologic Name of Surface Formation:

   Permian

2. Estimated Tops of Important Geologic Markers:

Yates	2,300'
Queen	3,300'
Grayburg	4,000'
San Andres	4,400'

3. Estimated Depths of Anticipated Fresh Water, Oil or Gas:

   The estimated depths at which water, oil and gas will be encountered are as follows:

   Water: Random fresh water from surface to approximately 300' and a water injection interval at 3,200'.

   Oil: Yates at 2,300' and Queen at 3,200'.

   Gas: None anticipated.

   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 8 5/8" casing at 950' and circulating cement back to surface. The Yates and Queen intervals will be isolated by setting 5-1/2" casing to total depth and circulating cement to surface.

4. Casing Program:

Hole Size	Interval	Csg OD	Weight, Grade, Type
25"	0-40'	20"	Conductor, 0.30" wall
11"	0-950'	8-5/8"	24#, WC, ST&C, New, R-3
7-7/8"	0-TD	5-1/2"	15.5# J-55, LT&C, New R-3

Casing Program:

20" Conductor Casing: Cemented with ready-mix to surface.

8 5/8" Surface Casing: Cemented to surface with 200 sks 35:65 (Poz:Class C) + 6% gel + 2% CaCl2 + 1/4 lb/sk cellophane flakes and 100 sks Class C + 2% CaCl2 + 1/4 lb/sk cellophane flakes.

5-1/2" Production: Cemented to surface with 150 sks 35:65 (Poz:Class C) + 6% gel + 1/4 lb/sk cellophane flakes and 375 sks Class C + 4% gel + 1/4 lb/sk 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 surface.

5. Minimum Specifications for Pressure Control:

The blowout preventor equipment (BOP) shown in Exhibit #1 will consist of a (3M system) double ram type (3000 psi WP) preventor and a bag-type (Hydril) preventor (3000 psi WP). Both units will be hydraulically operated and the ram type preventor 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 8 5/8" surface casing and utilized continuously until total depth is reached. As per BLM Drilling Operations Order #2, prior to drilling out the 8-5/8" casing shoe, the BOP's and Hydril will be function tested.

Pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These functional tests will be documented on the daily drillers log. A 2" kill line and 3" choke line will be incorporated in the drilling spool below the ram-type BOP. Other accessory BOP equipment will include a kelly cock, floor safety valve, choke lines and choke manifold having 3000 psi WP rating.

6. Types and Characteristics of the Proposed Mud System:

The well will be drilled to total depth using brine, cut brine and polymer mud systems. Depths of systems are as follows:

Depth	Type	Weight (ppg)	Viscosity (1/sec)	Waterloss (cc)
0-950'	Fresh Water	8.8	34-36	No Control
950-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.

8. Logging, Testing and Coring Program:

1 A. No drillstem tests are planned.

B. The open hole electrical logging program will be:

CNL/FDC/LDT/GR from T.D. to 2,300'
DLL/MSFL/GR from TD to surface

C. No coring program is planned.

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.

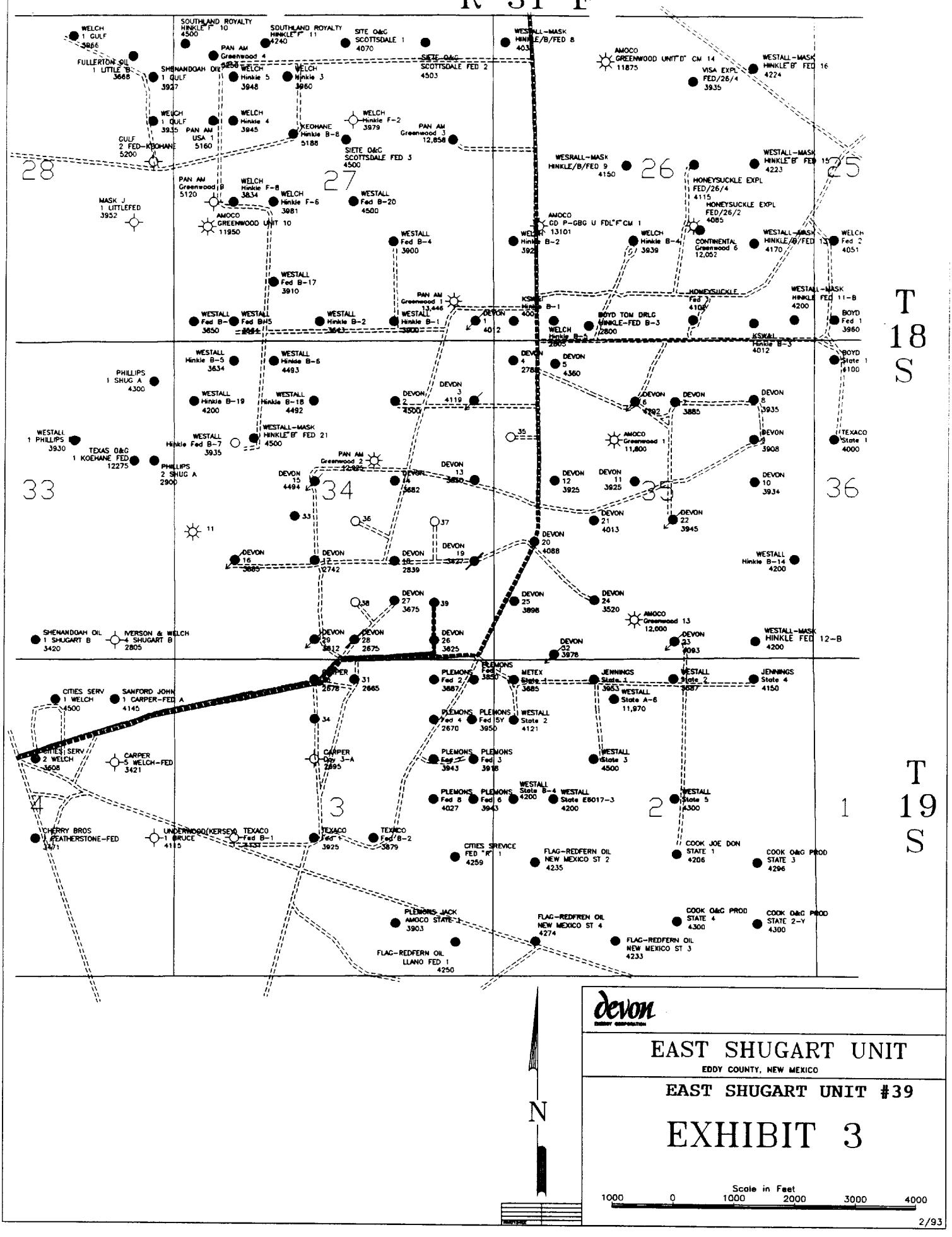
9. Abnormal Pressures, Temperatures and Potential Hazards:

No abnormal pressures or temperatures are foreseen. The anticipated bottom hole temperature at total depth is 104 degrees and maximum bottom hole pressure is 800 psig. No hydrogen sulfide gas has been reported or is known to exist at these depths in this area. No major loss circulation intervals have been encountered in adjacent wells.

10. Anticipated Starting Date and Duration of Operations:

Notice of Staking (NOS) was sent to the Carlsbad, New Mexico BLM office on January 15, 1993. Barry Hunt of that office has reviewed the proposed pad site for the location. A Cultural Resources Examination has been completed by Archaeological Survey Consultants and a copy forwarded to the Carlsbad, New Mexico BLM office.

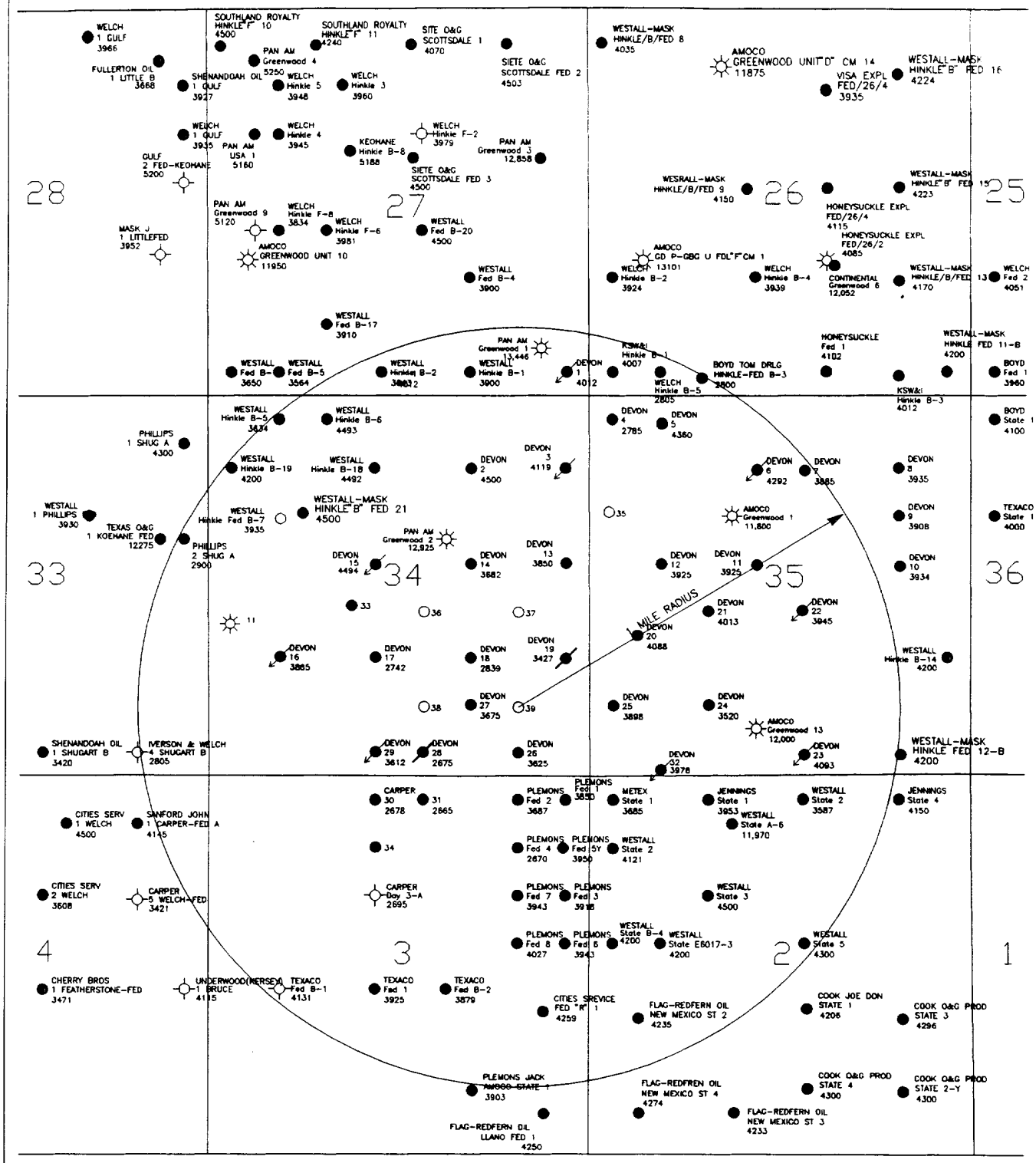
Road and location preparation will not be undertaken until approval has been received from the BLM. The anticipated spud date is approximately April 15, 1993. The drilling operation should require approximately 10 days. If the well is deemed productive, completion operations will require, at minimum, an additional 30 days of testing to ascertain whether permanent production facilities will be constructed.


R 31 E
T 18 S
T 19 S
N
devon
EAST SHUGART UNIT
EDDY COUNTY, NEW MEXICO
EAST SHUGART UNIT #39
EXHIBIT 3
Scale in Feet
1000 0 1000 2000 3000 4000
2/93

R 31 E

T 18 S

T 19 S



N

devon ENERGY CORPORATION

EAST SHUGART UNIT

EDDY COUNTY, NEW MEXICO

EAST SHUGART NO. 39

EXHIBIT 4

Scale in Feet

0 1000 2000 3000 4000

FILE: NM01510E

FILE: NM01520E

B BIDDY

9/92

EXHIBIT 4

ATTACHMENT

ESU #39 - STATUS OF WELLS WITHIN 1 MILE

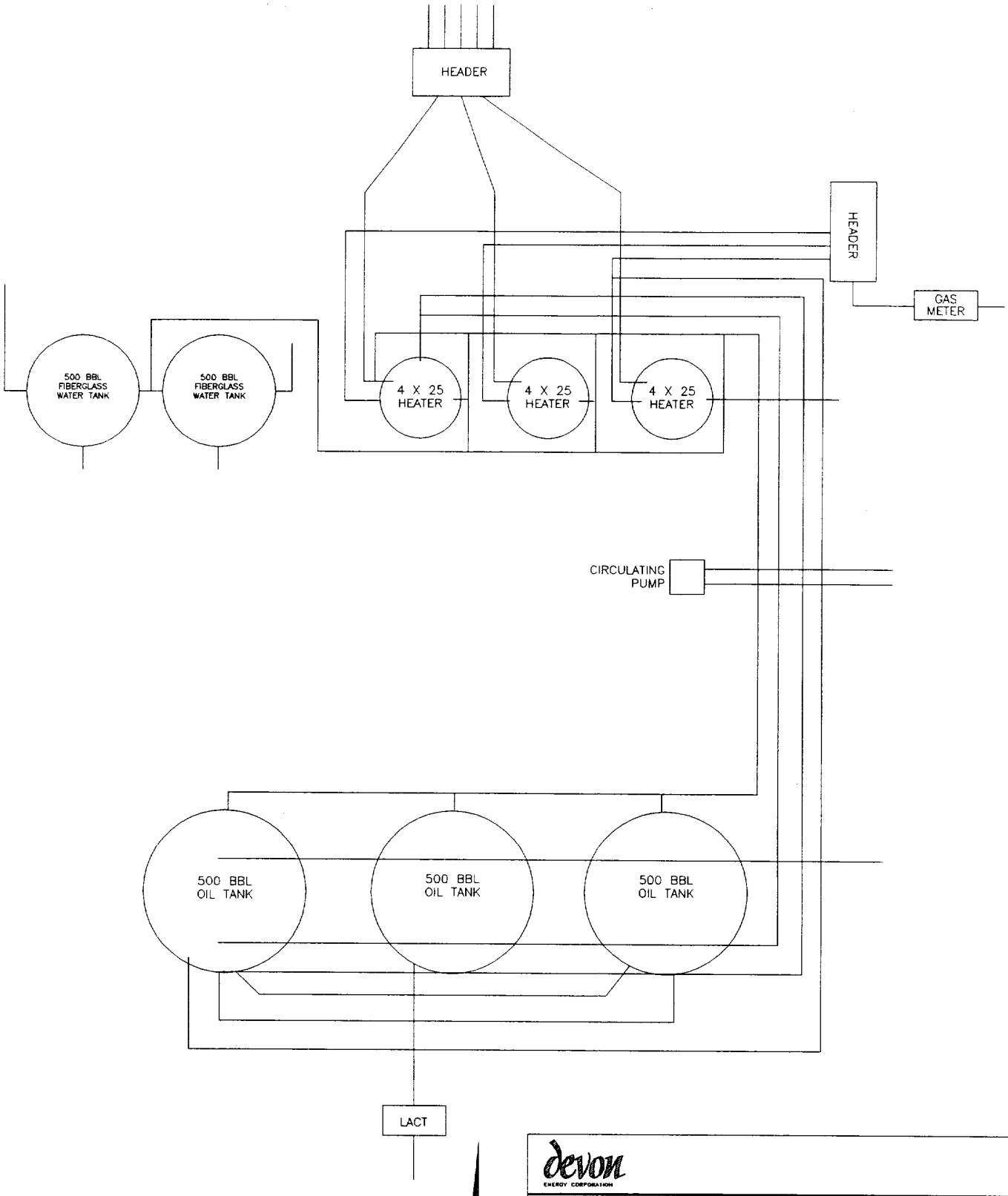
990 FSL & 990 FEL, Section 34-18S-31E, Eddy County, New Mexico

WELL NAME	SPOT LOC	SEC	COMP DATE	TD	STATUS	PRODUCTIVE HORIZON
18S-31E						
HINKLE #1B (TOM BOYD DRLG)	SWSWSW	26	4/57	4007	ACTIVE	YTS, QN, 7RVRS, GRYBRG
HINKLE #5B (TOM BOYD DRLG)	SESWSW	26	6/61	2805	ACTIVE	YTS, QN, 7RVRS, GRYBRG
ESU #1 (HINKLE 3B)	SESESE	27	2/58	4012	INJECTOR	
HINKLE FED #B-1 (MASK)	SESWSE	27	3/73	3900	ACTIVE	YTS, QN, 7RVRS, GRYBRG
HINKLE FED #B-2 (MASK)	SESESW	27	4/74	3643	ACTIVE	YTS, QN, 7RVRS, GRYBRG
GREENWOOD UNIT #1 (PAN AM)	SESE	27	2/57	13446	ACTIVE	PENN/SIL DEV
SHUG A-2 (PHILLIPS)	E2SENE	33	10/77	2900	ACTIVE	YTS, QN, 7RVRS, GRYBRG
ESU #2 (HINKLE 14A)	SENWNE	34	8/59	4500	ACTIVE	QUEEN
ESU #3 (HINKLE 13A)	SENENE	34	11/58	4117	INJECTOR	
ESU #13 (HINKLE 6A)	SESENE	34	4/57	3853	ACTIVE	QUEEN
ESU #14 (HINKLE 11A)	SESWNE	34	5/58	3862	ACTIVE	QUEEN
ESU #15 (HINKLE 5B)	SESENW	34	1/59	4494	INJECTOR	
ESU #16 (HINKLE 6B)	SENWSW	34	10/59	3885	INJECTOR	
ESU #17 (HINKLE 2B)	SENESW	34	10/69	3925	ACTIVE	QUEEN
ESU #18 (HINKLE 2A)	SENWSE	34	2/59	3571	ACTIVE	QUEEN
ESU #19 (HINKLE 3A)	SENESE	34	1/57	3870	INACTIVE	
ESU #26 (HINKLE 2A)	SWSESE	34	12/40	3625	ACTIVE	QUEEN
ESU #27 (CARPER-HINKLE #3)	NESWSE	34	8/52	3845	ACTIVE	QUEEN
ESU #28 (HINKLE A1)	SWSWSE	34	9/40	2678	INACTIVE	
ESU #29 (HINKLE 1B)	SESESW	34	7/59	3612	INJECTOR	
GREENWOOD UNIT #2	SWNE	34	1/58	12925	INACTIVE	PENN
HINKLE B-19 (WESTALL)	SWNWNW	34	11/83	4200	ACTIVE	YTS, QN, 7RVRS, GRYBRG
HINKLE B-6 (WESTALL)	NWNENW	34	1/76	4493	ACTIVE	YTS, QN, 7RVRS, GRYBRG
HINKLE B-18 (WESTALL)	SENENW	34	11/82	4492	ACTIVE	YTS, QN, 7RVRS, GRYBRG
HINKLE B-5 (WESTALL)	NENWNW	34	9/75	3634	ACTIVE	YTS, QN, 7RVRS, GRYBRG
HINKLE B-7 (WESTALL)	NESWNW	34	10/76	3935	ACTIVE	YTS, QN, 7RVRS, GRYBRG
HINKLE B-21 (WESTALL)	SWSWNW	34	9/91	4500	ACTIVE	YTS, QN, 7RVRS, GRYBRG
ESU #4 (HINKLE 7A)	NWNWNW	35	5/86	2785	ACTIVE	QUEEN
ESU #5 (HINKLE 15A)	NENWNW	35	7/89	4360	ACTIVE	QUEEN
ESU #6 (HINKLE 12A)	SENENW	35	1/59	4294	INACTIVE	
ESU #7 (HINKLE 2)	SWNWNE	35	2/58	3885	ACTIVE	QUEEN
ESU #10 (HINKLE B 1-35)	SWSWNE	35	5/57	3935	INACTIVE	
ESU #11 (HINKLE 10A)	SESENW	35	5/58	3925	ACTIVE	QUEEN
ESU #12 (HINKLE 9A)	SESWNW	35	9/57	3923	INACTIVE	
ESU #20 (HINKLE 1A)	NWSW	35	5/38	4088	ACTIVE	QUEEN
ESU #21 (HINKLE 8A)	NWNESW	35	8/57	4013	INACTIVE	
ESU #23 (HINKLE 7B)	SWSWSE	35	3/60	4104	INACTIVE	
ESU #24 (HINKLE 5A)	NWSESW	35	2/57	3520	INACTIVE	

EXHIBIT 4

ATTACHMENT

WELL NAME	SPOT LOC	SEC	COMP DATE	TD	STATUS	PRODUCTIVE HORIZON
18S-31E						
ESU #25 (HINKLE 4A)	NWSWSW	35	7/56	3905	ACTIVE	QUEEN
ESU #32	S2SESWSW	35	10/69	3981	INJECTOR	
GREENWOOD UNIT FED "A" COM #1	N2SENW	35	6/79	11800	ACTIVE	PENN
GREENWOOD PGU FED #1 (AMOCO)	SESW	35	2/80	12000	INACTIVE	
19S-31E						
STATE E-6017 #2 (WESTALL & MASK)	SWNWNW	2	5/61	4121	ACTIVE	YTS, QN, 7RVRS, GRYBRG
STATE #1 (MASK & JENNINGS)	NWNENW	2	6/59	3953	ACTIVE	YTS, QN, 7RVRS, GRYBRG
STATE #6 (WESTALL & MASK)	NENW	2	12/82	11970	ACTIVE	YTS, QN, 7RVRS, GRYBRG
STATE #1 (KEOHANE & WESTALL)	NWNWNW	2		3685	P&A	
STATE #4-B (MASK)	SWSWNW	2	8/83	4200	ACTIVE	YTS, QN, 7RVRS, GRYBRG
STATE #3 (JENNINGS)	NWSENW	2	10/60	4500	ACTIVE	YTS, QN, 7RVRS, GRYBRG
STATE E6017 #3 (MASK)	SESWNW	2	7/80	4200	ACTIVE	YTS, QN, 7RVRS, GRYBRG
STATE #2 (MASK & JENNINGS)	NWNWNE	2	11/59	3587	ACTIVE	YTS, QN, 7RVRS, GRYBRG
STATE #5 (MASK)	SWSWNE	2	12/76	4300	ACTIVE	YTS, QN, 7RVRS, GRYBRG
NEW MEXICO STATE #1 (KERR MCGEE)	NESW	2	2/79	4257	ACTIVE	YTS, QN, 7RVRS, GRYBRG
NEW MEXICO STATE #2 (KERR MCGEE)	NWSW	2	11/79	4235	ACTIVE	YTS, QN, 7RVRS, GRYBRG
ESU #30 (McFADDEN	NENENW	3	9/69	2676	INACTIVE	
ESU #31 (DAY-McFADDEN #4)	NWNWNE	3	4/89	4368	ACTIVE	QUEEN
ESU #34	SENENW	3	3/91	4000	ACTIVE	QUEEN
MCFADDEN #1 (JACK PLEMONS)	NENENE	3	1/75	3850	ACTIVE	YTS, QN, 7RVRS, GRYBRG
MCFADDEN #2 (JACK PLEMONS)	NWNENE	3	10/75	3687	ACTIVE	YTS, QN, 7RVRS, GRYBRG
MCFADDEN #4 (JACK PLEMONS)	SWNENE	3	2/82	2670	ACTIVE	YTS, QN, 7RVRS, GRYBRG
McFADDEN FED 5-Y (PLEMONS)	SENENE	3	4/83	3950	ACTIVE	YTS, QN, 7RVRS, GRYBRG
McFADDEN FED 3 (PLEMONS)	NESENE	3	4/62	3918	ACTIVE	YTS, QN, 7RVRS, GRYBRG
McFADDEN FED 7 (PLEMONS)	NWSENE	3	10/83	3952	ACTIVE	YTS, QN, 7RVRS, GRYBRG
McFADDEN FED 8 (PLEMONS)	SWSENE	3	4/86	4027	ACTIVE	YTS, QN, 7RVRS, GRYBRG
McFADDEN FED 6 (PLEMONS)	SESENE	3	8/82	3943	ACTIVE	YTS, QN, 7RVRS, GRYBRG
FEDERAL R-1 (OXY)	NESE	3	3/82	4259	ACTIVE	YTS, QN, 7RVRS, GRYBRG
HANSON FED #1 (TEXACO)	NENESW	3	12/59	3925	INACTIVE	
HANSON FED #2 (TEXACO)	N2NWSE	3	3/60	3900	ACTIVE	YTS, QN, 7RVRS, GRYBRG



devon ENERGY CORPORATION

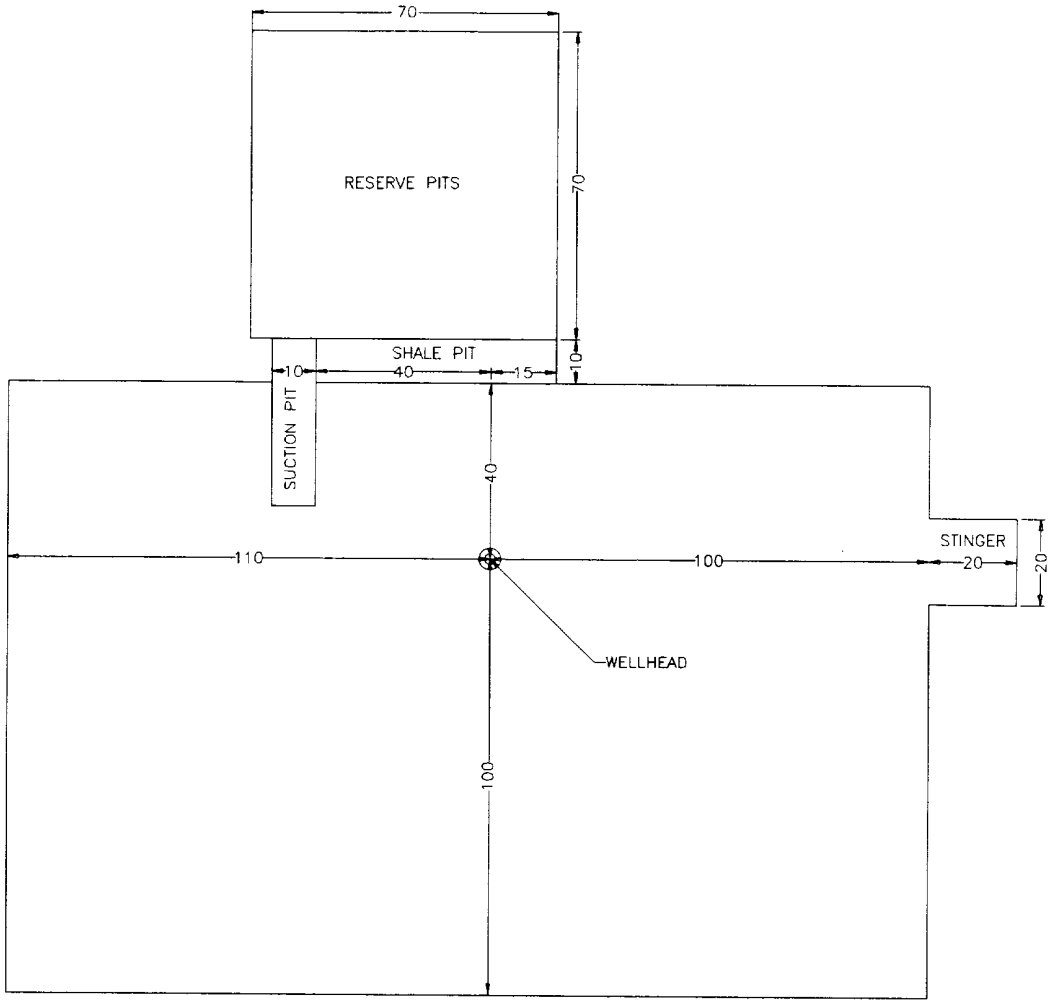
EAST SHUGART AREA

EDDY COUNTY, NEW MEXICO

EXHIBIT #5
EAST SHUGART TANK BATTERY
Sec 35 - T18S - R31E

FILE: ESBATT

2/93



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FILE: ES-39

devon
ENERGY CORPORATION

EAST SHUGART AREA

EDDY COUNTY, NEW MEXICO

DRILLING PAD FOR
ESU #39

EXHIBIT 6

Scale in Feet
25 0 25 50 75 100

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2/93

EXHIBIT #7

DEVON ENERGY

Operator: DEVON ENERGY CORP	Well Name: EAST SHUGART UNIT
Project ID:	Location:

Design Parameters:

Mud weight (9.20 ppg) : 0.478 psi/ft
Shut in surface pressure : 855 psi
Internal gradient (burst) : 0.100 psi/ft
Annular gradient (burst) : 0.000 psi/ft
Tensile load is determined using air 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	950	8-5/8"	24.00	WC-50	ST&C	950	7.972	

	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	454	1330	2.930	950	2700	2.84	22.80	224	9.82 J

Prepared by : , Oklahoma City, OK
Date : 02-23-1993
Remarks :

Minimum segment length for the 950 foot well is 100 feet.
Surface string:
Next string will set at 4,400 ft. with 9.10 ppg mud (pore pressure of 2,080 psi.) The frac gradient of 1.000 at the casing seat results in an injection pressure of 950 psi. Effective BHP (for burst) is 950 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: EAST SHUGART UNIT
Project ID:	Location:

Design Parameters:

Mud weight (9.20 ppg) : 0.478 psi/ft
Shut in surface pressure : 1663 psi
Internal gradient (burst) : 0.100 psi/ft
Annular gradient (burst) : 0.000 psi/ft
Tensile load is determined using air 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	4,400	5-1/2"	15.50	J-55	ST&C	4,400	4.825	

	Collapse Load (psi)	Collapse Strgth (psi)	Collapse S.F.	Burst Load (psi)	Min Int Yield Strgth (psi)	Burst S.F.	Tension Load (kips)	Tension Strgth (kips)	Tension S.F.
1	2103	4040	1.921	2103	4810	2.29	68.20	202	2.96 J

Prepared by : , Oklahoma City, OK
Date : 02-25-1993
Remarks :

Minimum segment length for the 4,400 foot well is 1,500 feet.
The mud gradient and bottom hole pressures (for burst) are 0.478 psi/ft and 2,103 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)

JUN 2 9 1989
Land

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

June 14, 1989

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

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

Attention: Charlene Newkirk

Re: $50,000 Blanket Plugging Bond
Devon Energy Corporation, Principal
Bond No. 56-0130-11003-82-1

Dear Ms. Newkirk:

The Oil Conservation Division hereby acknowledges receipt of and approves the rider to the above-captioned bond changing the name of principal as follows:

DEVON ENERGY CORPORATION (NEVADA)

Sincerely,

WILLIAM J. LEMAY,
Director

dr/

cc: Oil Conservation Division
Hobbs, Artesia, Aztec

DEVON
ENERGY
CORPORATION

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

405/235-3611
TWX 910-831-3277

May 5, 1989

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

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

Gentlemen:

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

Very truly yours,

Charlene

Charlene Newkirk
Lease Records Supervisor

encls

cc: Carolyn Wilson
McEldowney McWilliams

R I D E R

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

It is hereby understood and agreed that effective on the February 10, 1989 the Principal in this bond shall be Devon Energy Corporation (Nevada)

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

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

Devon Energy Corporation (Nevada)

ATTEST:

Asst. Secretary

By: MARVIN C. LUNDE, JR.
Vice President

UNITED STATES FIDELITY AND GUARANTY COMPANY

By: _____

Marcia C. Brejda Attorney-in-fact