devon
ENERGY CORPORATION

20 North Broadway, Suite 1500
Oklahoma City, Oklahoma 73102-8260

Telephone 405/235-3611
FAX 405/552-4550

OIL CONSERVATION DIVISION
'94 JUL 4 AM 8 50

June 7, 1994

Certified Mail No. P 005 347 015

State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division
Post Office Box 2088
Santa Fe, New Mexico 87504-2088

RE: East Shugart Unit #45
Non-Standard Location Approval

Gentlemen:

Devon Energy Corporation has determined our proposed East Shugart Unit #45, located 2550' FSL and 580' FWL of Section 35-T18S-R31E in Eddy County, is an unorthodox location. The APD was submitted with the location listed incorrectly as 2250' FSL. Enclosed is a plat of the East Shugart Unit showing the Unit's boundaries and the wells within; copy of Form 3160-3 with attachments and copy of corrected form C-102.

The East Shugart Unit is a federal unit (#14-08-0001-11572) and the proposed well is to be part of this active waterflood project. The wells offsetting the proposed location are owned and operated by Devon, therefore, no other notification is necessary.

If you have any questions, please contact the undersigned at (405) 235-3611, X4509.

Sincerely yours,

DEVON ENERGY CORPORATION (NEVADA)

E. L. Buttross Jr.

Mr. E.L. Buttross, Jr.
District Engineer

/cg
Enclosures
cc: Oil Conservation Division - Artesia, NM
Bureau of Land Management - Carlsbad, NM

R 31 E
T 18 S
T 19 S
28
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35
36
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1
WELCH 1 GULF 3966
FULLERTON 1 LITTLE B 3668
SHENANDOAH OIL 1 GULF 3927
SOUTHLAND HINKLE "F" 10 4500
SOUTHLAND HINKLE "F" 11 4240
PAN AM Greenwood 4 5250
WELCH Hinkle 5 3948
WELCH Hinkle 3 3960
SIETE SCOTTSDALE 1 4070
SIETE SCOTTSDALE FED 2 4503
WESTALL-MASK HINKLE/B/FED 8 4030
AMOCO GREENWOOD "D" CM 14 11875
VISA EXPL FED/26/4 3935
WESTALL-MASK HINKLE "B" FED 16 4224
WELCH 1 GULF 3935
PAN AM USA 1 5160
WELCH Hinkle 4 3945
KEOHANE Hinkle B-8 5188
WELCH HINKLE F-2 3979
PAN AM Greenwood 3 12,858
SIETE SCOTTSDALE FED 3 4500
GULF 2 FED-KEOHANE 5200
WESTALL-MASK HINKLE/B/FED 9 4150
WESTALL-MASK HINKLE "B" FED 15 4223
HONEYSUCKLE FED/26/3 4115
PAN AM GREENWOOD 5 5120
WELCH Hinkle F-8 3834
WELCH Hinkle F-6 3981
WESTALL Fed B-20 4500
MASK 1 LITTLE-FED 3952
AMOCO GREENWOOD 11950
AMOCO FED "F" 1 13101
CONTINENTAL GREENWOOD 6 12,052
HONEYSUCKLE FED/26/2 4085
WELCH Hinkle B-4 3939
WELCH Hinkle B-2 3925
WESTALL-MASK HINKLE/B/FED 13 4170
WELCH Fed 2 4051
WESTALL Fed B-4 3900
WESTALL Fed B-17 3910
WESTALL Fed B-10 3650
WESTALL Fed B-15 3564
WESTALL Fed B-2 3643
PAN AM GREENWOOD 1 13,446
WESTALL Hinkle B-1 3900
KSWD Hinkle B-1 4000
HONEYSUCKLE Fed 4102
BOYD HINKLE-FED B-3 2800
WESTALL-MASK HINKLE FED 11-B 4200
BOYD Fed 1 3960
WESTALL Hinkle B-5 3634
WESTALL Hinkle B-6 4493
PHILLIPS 1 SHUG A 4300
WESTALL Hinkle B-19 4200
WESTALL Hinkle B-18 4492
DEVON 3 4119
DEVON 4 2780
DEVON 5 4360
DEVON 52
DEVON 53
BOYD State 1 4100
WESTALL 1 PHILLIPS FED 3930
WESTALL HINKLE FED B-7 3935
TEXAS O&G 1 KOEHANE FED 12275
PHILLIPS 2 SHUG A 2900
WESTALL-MASK HINKLE "B" FED 21 4500
DEVON 54
DEVON 40 4013
PAN AM GREENWOOD 2 12,925
DEVON 15 4494
DEVON 14 3682
DEVON 13 3856
DEVON 44 4025
DEVON 6 4292
DEVON 7 3885
DEVON 8 3935
DEVON 35 4500
DEVON (YATES) 151
AMOCO GRNWD 1 11,800
DEVON 50
DEVON 9 3908
TEXACO State 1 4000
DEVON 12 3925
DEVON 11 3925
DEVON 10 3934
DEVON 56
DEVON 61
DEVON 45
DEVON 21 4013
DEVON 22 3945
DEVON 66
DEVON 36 4500
DEVON 37 4500
DEVON 67
DEVON 16 3885
DEVON 17 2742
DEVON 18 2839
DEVON 19 3427
DEVON 20 4088
WESTALL Hinkle B-14 4200
DEVON 58
DEVON 63
DEVON 59
DEVON 38 4500
DEVON 27 3675
DEVON 39
DEVON 51
DEVON 25 3898
DEVON 24 3520
AMOCO GREENWOOD 13 12,000
DEVON 65
DEVON 57
DEVON 23 4093
WESTALL-MASK HINKLE FED 12-B 4200
SHENANDOAH 1 SHUGART B 3420
SHENANDOAH 2 SHUGART B 3420
IVERSON & WELCH 4 SHUGART B 2805
DEVON 29 3612
DEVON 28 2675
DEVON 26 3625
DEVON 32 3978
CITIES SERV 1 WELCH 4500
SANFORD 1 CARPER-FED A 4145
DEVON 60
CARPER 30 2678
31 2665
PLEMONS Fed 2 3687
PLEMONS Fed 1 3850
METEX State 1 3685
JENNINGS State 1 3953
WESTALL State 2 3587
JENNINGS State 4 4150
WESTALL State A-6 11,970
DEVON 55
34
PLEMONS Fed 4 2670
PLEMONS Fed SY 3950
WESTALL State 2 4121
CITIES SERV 2 WELCH 3608
CARPER 5 WELCH-FED 3421
DEVON 64
CARPER DAY 3-A 2635
DEVON 62
PLEMONS Fed 7 3943
PLEMONS Fed 3 3918
WESTALL State 3 4500
PLEMONS Fed 8 4027
PLEMONS Fed 6 3943
WESTALL State B-4 4200
WESTALL State E6017-3 4200
WESTALL State 5 4300
CHERRY BROS 1 HEATHERSTONE-FED 3471
UNDERWOOD 1 BRUCE 4115
TEXACO FED B-1 4131
TEXACO Fed 1 3925
TEXACO Fed B-2 3879
CITIES SERVICE FED "R" 1 4259
FLAG-REDFERN STATE 2 4235
FLAG-REDFERN STATE 1 4200
COOK STATE 1 4206
COOK STATE 3 4296
PLEMONS AMOCO STATE 1 3903
FLAG-REDFERN LLANO FED 1 4250
FLAG-REDFERN STATE 4 4274
FLAG-REDFERN STATE 3 4233
COOK STATE 4 4300
COOK STATE 2-Y 4300
N
Devon ENERGY CORPORATION
EAST SHUGART UNIT
EDDY COUNTY, NEW MEXICO
EXHIBIT 3
Scale in Feet
1000 0 1000 2000 3000 4000
3/94

OPERATOR'S COPY

Form 3160-3
(December 1990)

SUBMIT IN PLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 1004-0136
Expires: December 31, 1991

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

5. LEASE DESIGNATION AND SERIAL NO.: NM 10190

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: NA

7. UNIT AGREEMENT NAME: Shugart

8. FARM OR LEASE NAME, WELL NO.: East Shugart Unit #45

9. API WELL NO.:

10. FIELD AND POOL, OR WILDCAT: Shugart

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Section 35-T18S-R31E

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

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

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

3. ADDRESS AND TELEPHONE NO.: (405) 552-4511
20 North Broadway Suite 1500 Oklahoma City, OK 73102

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 2250' FSL & 580' FWL
2550'
At proposed prod. zone: same

12. COUNTY OR PARISH: Eddy

13. STATE: NM

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: 15 ½ miles southeast of Loco Hills, NM.

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 300'

16. NO. OF ACRES IN LEASE: 560'

17. NO. OF ACRES ASSIGNED TO THIS WELL: 40

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: 450'

19. PROPOSED DEPTH: 4500'

20. ROTARY OR CABLE TOOLS: rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3631.2'

22. APPROX. DATE WORK WILL START*: February 1, 1994

23. 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", J-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 oil oil. If the Queen sand is deemed non-commercial, the wellbore will be plugge and abandoned per Federal regulations. Programs to adhere to onshore oil and gas regulation are outlined in the following exhibits and attachments.

Drilling Program
Surface Use and Operating Plan
Exhibits #1/#1-A = Blowout Prevention Equipment
Exhibit #2 = Location & Elevation Plat
Exhibit #3 = Planned Access Roads
Exhibit #4 = Wells Within One Mile Radius
Exhibit #5 = Production Facilities Plat
Exhibit #6 = Rotary Rig Layout
Exhibit #7 = Casing Design Program
Evidence of Bond Coverage
H_2S Operating Plan

Approval Subject to General Requirements and Special Stipulations

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 Randy Jackson TITLE Randy Jackson District Engineer DATE December 28, 1993

(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 Robert L. Manus TITLE AREA MANAGER DATE 2/18/94

*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.

Form 3160-5
(June 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

SUNDRY NOTICES AND REPORTS ON WELLS

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

SUBMIT IN TRIPLICATE

5. Lease Designation and Serial No.: NM 10190

6. If Indian, Allottee or Tribe Name: NA

7. If Unit or CA, Agreement Designation: East Shugart Unit

1. Type of Well: [X] Oil Well [ ] Gas Well [ ] Other

8. Well Name and No.: East Shugart Unit #45

2. Name of Operator: Devon Energy Corporation (Nevada)

9. API Well No.:

3. Address and Telephone No.: (405) 552-4511
20 north Broadway Suite 1500 Oklahoma City, OK 73102

10. Field and Pool, or Exploratory Area: Shugart (Y-SR-Q-G)

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
2550' FSL & 580' FWL (CORRECTED PLAT LOCATION)
Section 35-T18S-R31E

11. County or Parish, State: Eddy County, NM

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
[ ] Notice of Intent	[ ] Abandonment	[ ] Change of Plans
[X] Subsequent Report	[ ] Recompletion	[ ] New Construction
[ ] Final Abandonment Notice	[ ] Plugging Back	[ ] Non-Routine Fracturing
	[ ] Casing Repair	[ ] Water Shut-Off
	[ ] Altering Casing	[ ] Conversion to Injection
	[X] Other submittal of new plat with corected well site	[ ] Dispose Water

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

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

On 12/29/93, we submitted an APD to drill this newly staked well in our East Shugart Unit in Eddy County, NM. The location on the plat was used as the reference for the APD. The plat incorrectly stated the location of the well as 2250' FSL and 580' FWL. The well is actually staked 2550' FSL. This is the location approved during the onsite inspection performed by the BLM and the location that was arched. Jim Hunt of Pecos Archeological Services also used the incorrect location in his references. He has amended his report and submitted a corrected copy to your office. Enclosed is a signed copy of the corrected plat. Please make the appropriate changes to our APD.

RECEIVED
FEB 7 12 27 PM '94
070 FARMINGTON, NM

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

Signed Debby O'Donnell Title Debby O'Donnell Engineering Tech Date 2/3/94

(This space for Federal or State office use)

Approved by Richard L. Manus Title AREA MANAGER Date 2/18/94

Conditions of approval, if any:

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.

*See Instruction on Reverse Side

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 1980, Hobbs, NM 88240

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

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

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	45

Unit Letter	Section	Township	Range	County
L	35	18 SOUTH	31 EAST NMPM	EDDY

Actual Footage Location of Well:
2550 feet from the SOUTH line and 580 feet from the WEST line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
3631'	Queen Sand	Shugart (Y-SR-Q-G)	40 Acres

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

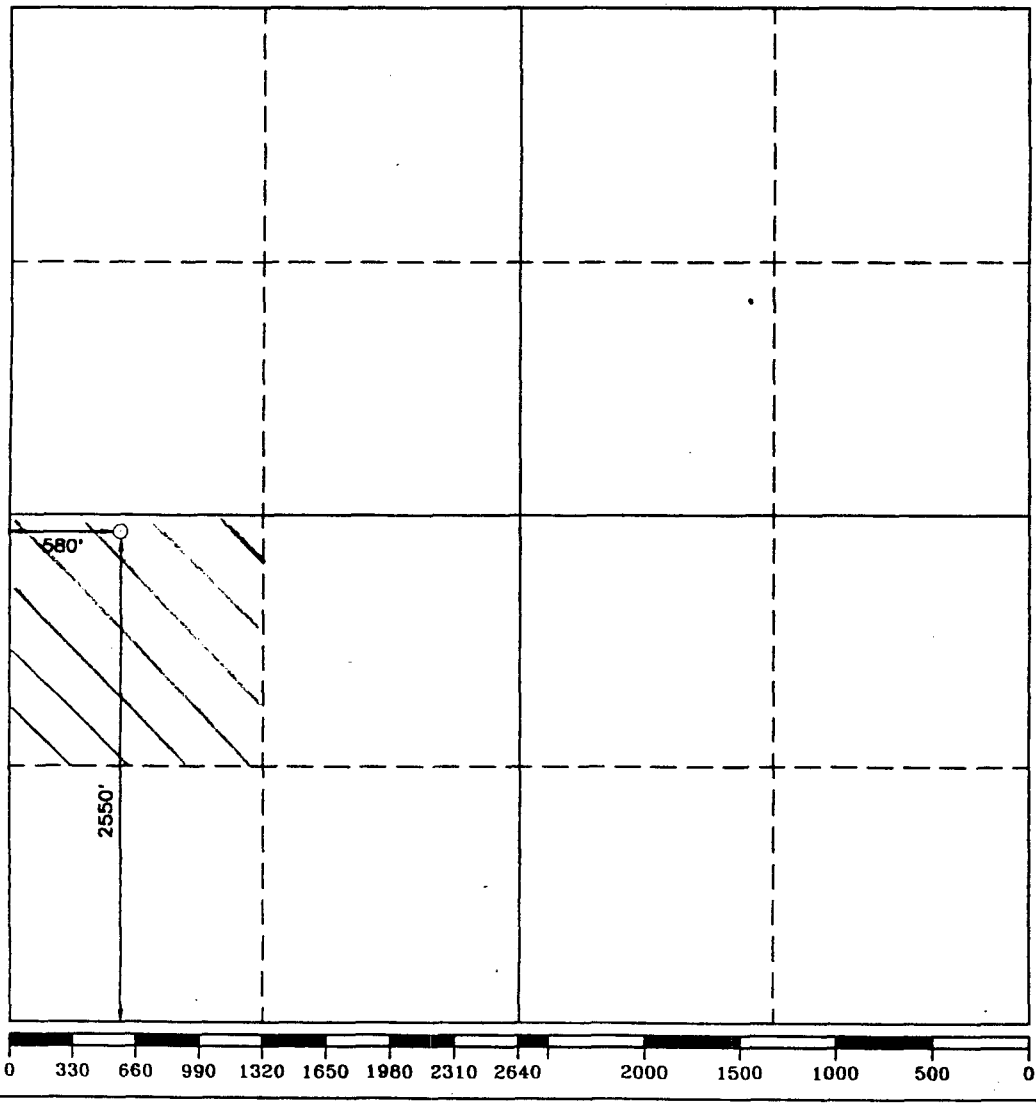
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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

Signature
Debby O'Donnell

Printed Name
Debby O'Donnell

Position
Engineering Technician

Company
Devon Energy Corporation Nevada

Date
February 3, 1994

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
JANUARY 27, 1994

Signature & Seal of Professional Surveyor

REGISTERED PROFESSIONAL SURVEYOR
No. 3239

Certificate No. JOHN W. WEST, 676
RONALD J. EIDSON, 3239
GARY L. JONES, 7977

94-11-0174

DRILLING PROGRAM

Attached to Form 3160-3
Devon Energy Corporation
East Shugart Unit #45
2250' FSL & 580' FWL
Section 35-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	Casing OD	Weight, Grade, Type
17 1/2"	0' - 40'	14"	Conductor, 0.30" wall
12 1/4"	0' - 950'	8 5/8"	24#, WC, ST&C, new R-3
7 7/8"	0' - TD (4500'±)	5 1/2"	15.5#, J-55, ST&C, new R-3

Cementing Program:

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

8 5/8" Surface Casing: Cemented to surface with 280 sks LITE (35% Poz: 65% Class C) + 6% gel + 2% CaCl2 + 1/4 lb/sk cellophane flakes
200 sks Class C + 2% CaCl2 + 1/4 lb/sk cellophane flakes.

5-1/2" Production: Cemented to surface with 550 sks LITE (35% Poz: 65% Class C) + 6% gel + 1/4 lb/sk cellophane flakes
500 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)	Water Loss (cc)
0' - 950'	Fresh Water	8.8	34-36	No control
950' - TD	Cut brine polymer	10.1	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:

A. No drill stem 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. Small quantities of hydrogen sulfide gas is associated with the Yates and Queen formations in this area. A hydrogen sulfide operations plan will be implemented prior to penetrating the Yates formation (see attached "Hydrogen Sulfide Operations Plan"). 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 November 23, 1993. Barry Hunt of that office has reviewed the proposed pad site for the location. A Cultural Resources Examination has been completed by Pecos Archaeological 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 February 1, 1994. 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.

SURFACE USE AND OPERATING PLAN

Attachment to Form 3160-3
Devon Energy Corporation
East Shugart Unit #45
2250' FSL & 580' FWL
Section 35-T18S-R31E
Eddy County, New Mexico

1. Existing Roads:

   A. The well site and elevation plat for the proposed East Shugart Unit #45 is 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: Turn right (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 2.0 miles east-northeast. Turn left (west) and go 500' (±). Turn left (south) into location.

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 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 East Shugart Unit #45. There are 65 oil wells, 5 gas wells, 1 plugged and abandoned well and 11 injection wells (82 total).

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:

1. The reserve pit will be back-filled after the contents of the pit are dry (within 120 days after completion, weather permitting).

2. Caliche from unused portions of the drill pad will be removed. The original topsoil from the well site 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 #45 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 earthen working pits 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 working pits and 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 a 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 tool pusher, drilling foreman and mud logger may be on location throughout drilling operations.

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

10. Plans for Restoration of Surface:

A. After concluding the drilling and/or completion operations, if the well is found non-commercial, the caliche will be removed from the pad and transported to the original caliche pit or used for other drilling locations. The road will be reclaimed as directed by the BLM. The reserve pit area will be broken out and leveled after drying to a condition where these efforts are feasible. The original top soil will again be returned to the pad and contoured, as close as possible, to the original topography.

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

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

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

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

11. Surface Ownership:

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

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) approximately 9.0 miles S/SE of the location.

C. A Cultural Resources Examination has been completed by Pecos Archaeological 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:

Randy Jackson	Danny Hokett
District Engineer	Production Foreman
20 North Broadway	422 West Main
Suite 1500	Suite F
Oklahoma City, OK 73102	Artesia, NM 88210
(405) 552-4560 (office)	(505) 748-3371 (office)
(405) 340-8939 (home)	(505) 748-9769 (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.

Date: December 28, 1993

Signed: Randy Jackson
Randy Jackson
District Engineer

Attachment to Exhibit #1
NOTES REGARDING BLOWOUT PREVENTORS
East Shugart Unit #45
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.

EXHIBIT #1

MINIMUM BLOWOUT PREVENTER REQUIREMENTS

3,000 psi Working Pressure

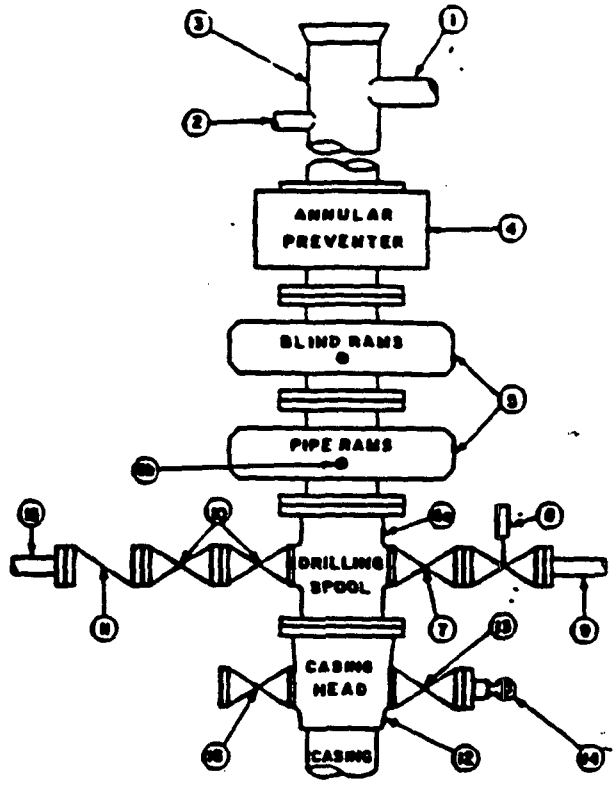
3 MWP

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 ☐ 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.

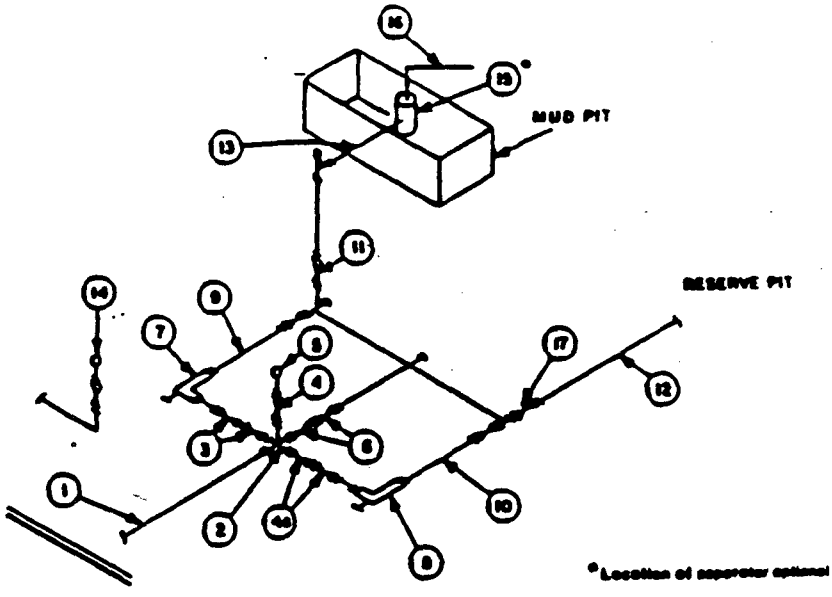
GENERAL NOTES:

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.

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 Seperator		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.

EXHIBIT #2

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

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

OIL CONSERVATION DIVISION

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

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	45

Unit Letter	Section	Township	Range	County
L	35	18 SOUTH	31 EAST NMPM	EDDY

Actual Footage Location of Well:
2250 feet from the SOUTH line and 580 feet from the WEST line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
3631.2'	Queen Sand	Shugart (Y-SR-Q-G)	40 Acres

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

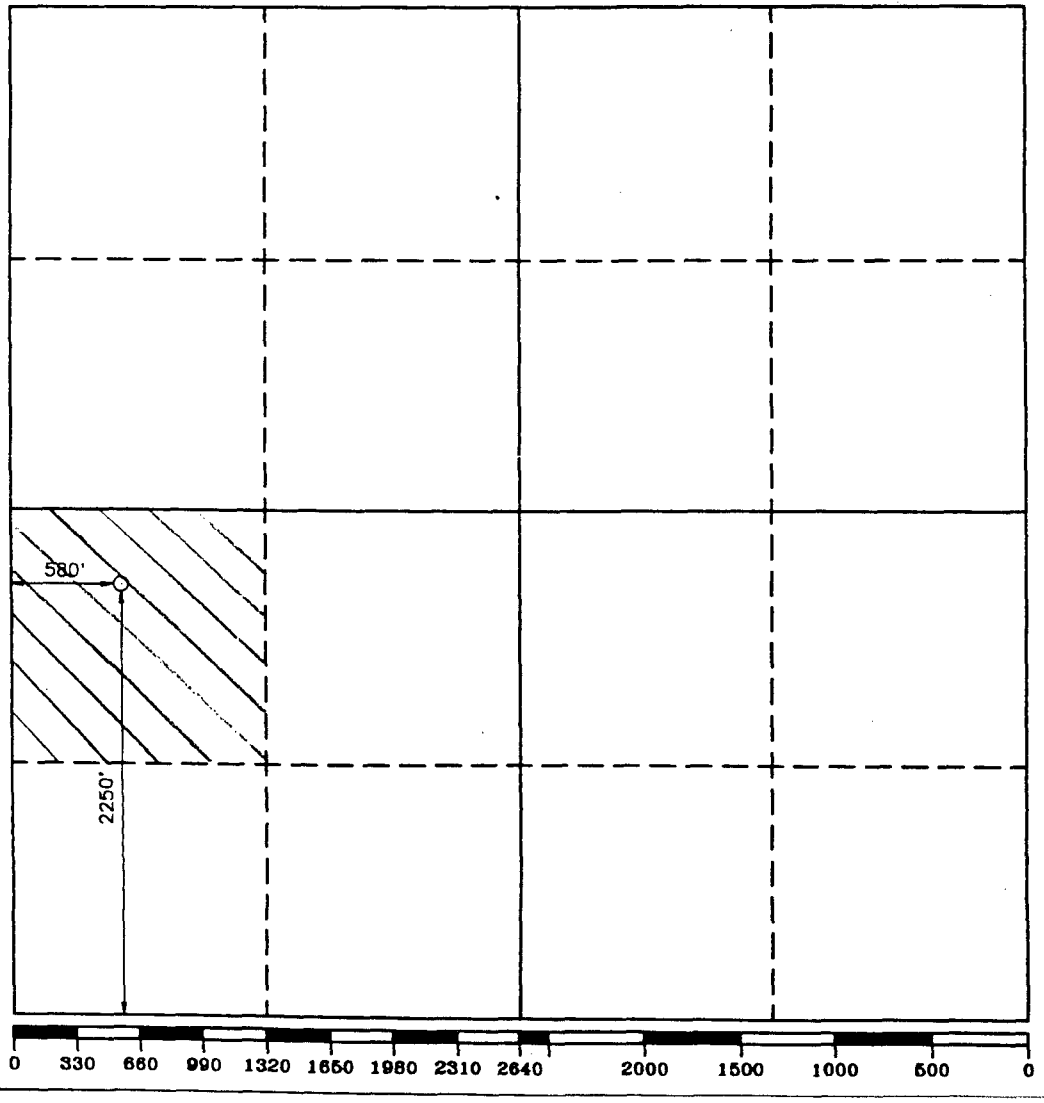
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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

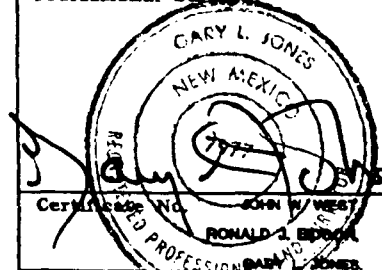
Signature: Randy Jackson
Printed Name: Randy Jackson
Position: District Engineer
Company: Devon Energy Corporation (Nevada)
Date: 12/21/93

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.

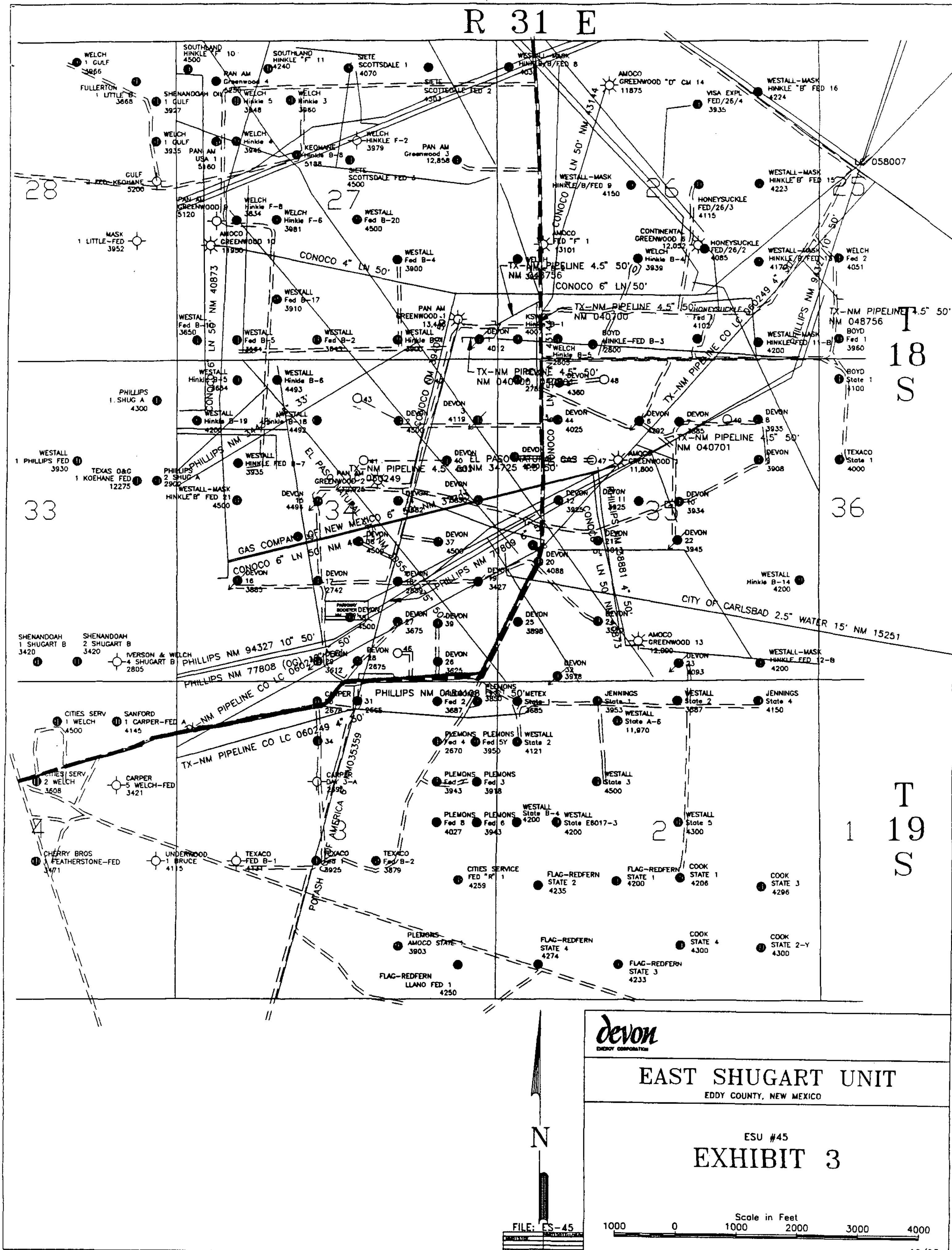
Date Surveyed: DECEMBER 6, 1993

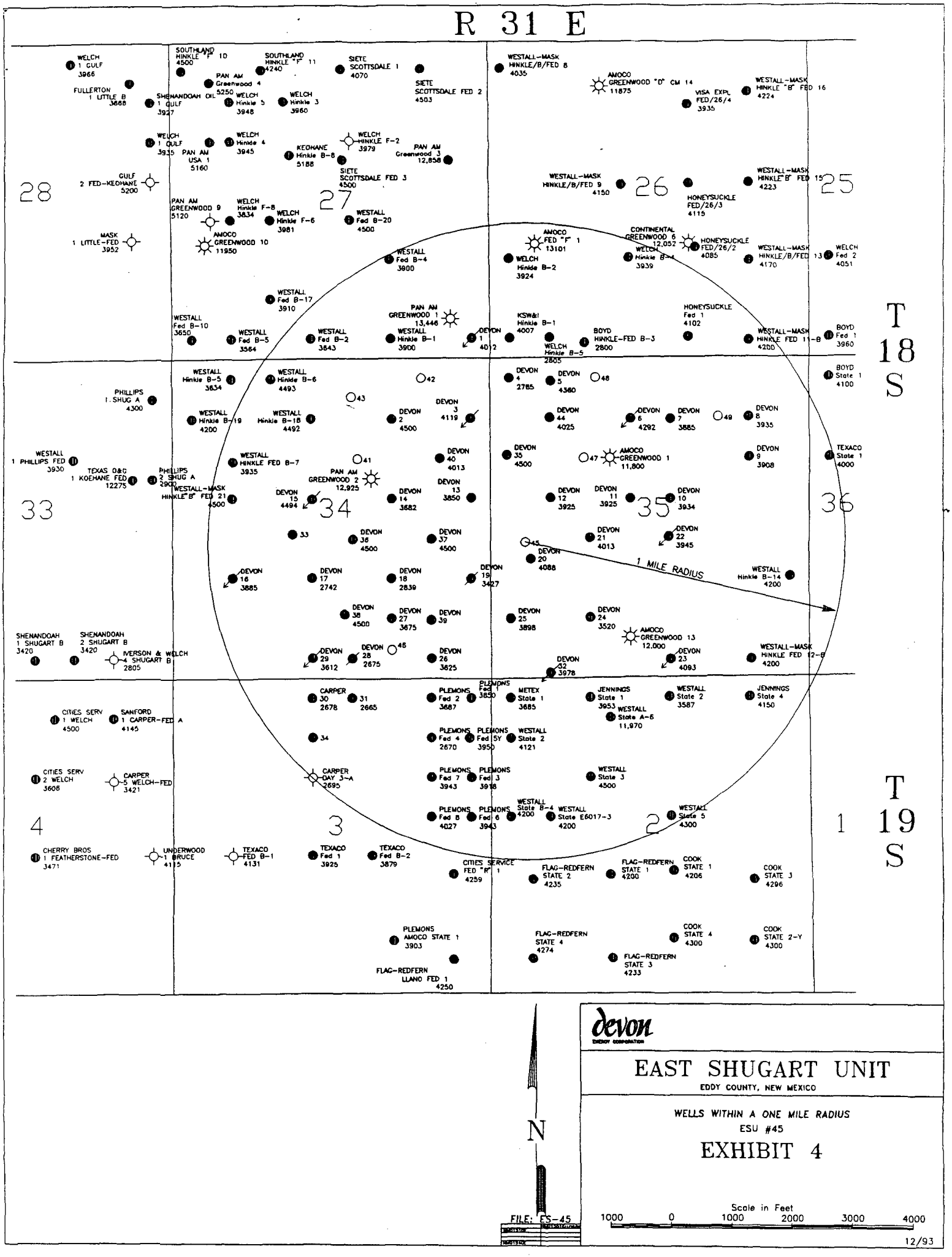
Signature & Seal of Professional Surveyor

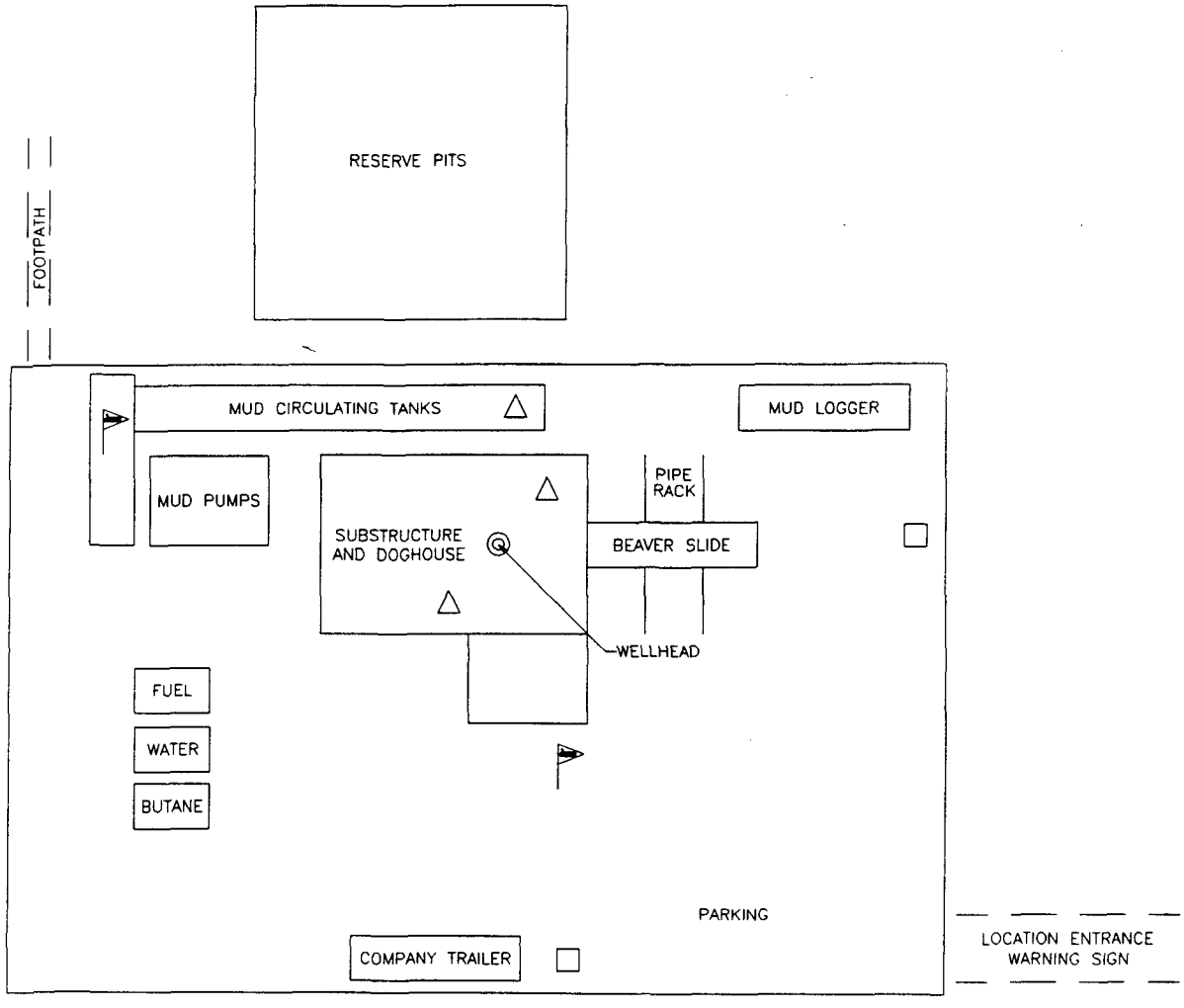


Certificate No. JOHN W. WEST 676
RONALD J. EIDSON 3239
GARY L. JONES 7977

93-11-2485


R 31 E
T 18 S
T 19 S
28
27
26
25
33
34
35
36
4
3
2
1
CONOCO 4" LN 50'
CONOCO 6" LN/50'
GAS COMPANY OF NEW MEXICO 6" NM 37
CONOCO 6" LN 50' NM 4
PHILLIPS NM 94327 10" 50'
PHILLIPS NM 77808 (OG)
TX-NM PIPELINE CO LC 060249 4" 50'
CITY OF CARLSBAD 2.5" WATER 15' NM 15251
TX-NM PIPELINE 4.5" 50' NM 040701
TX-NM PIPELINE 4.5" 50' NM 048756
POTASH OF AMERICA
N
devon
EAST SHUGART UNIT
EDDY COUNTY, NEW MEXICO
ESU #45
EXHIBIT 3
Scale in Feet
1000 0 1000 2000 3000 4000
FILE: ES-45
12/93


R 31 E
T 18 S
T 19 S
1 MILE RADIUS
N
FILE: ES-45
devon
ENERGY CORPORATION
EAST SHUGART UNIT
EDDY COUNTY, NEW MEXICO
WELLS WITHIN A ONE MILE RADIUS
ESU #45
EXHIBIT 4
Scale in Feet
1000 0 1000 2000 3000 4000
12/93



△ H2S MONITORS WITH ALARMS AT THE BELL NIPPLE, SUBSTRUCTURE, AND SHALE SHAKER

WIND DIRECTION INDICATORS

□ SAFE BRIEFING AREAS WITH CAUTION SIGNS AND PROTECTIVE BREATHING EQUIPMENT

N

FILE: ES-45

devon ENERGY CORPORATION

EAST SHUGART AREA

EDDY COUNTY, NEW MEXICO

ES - #45

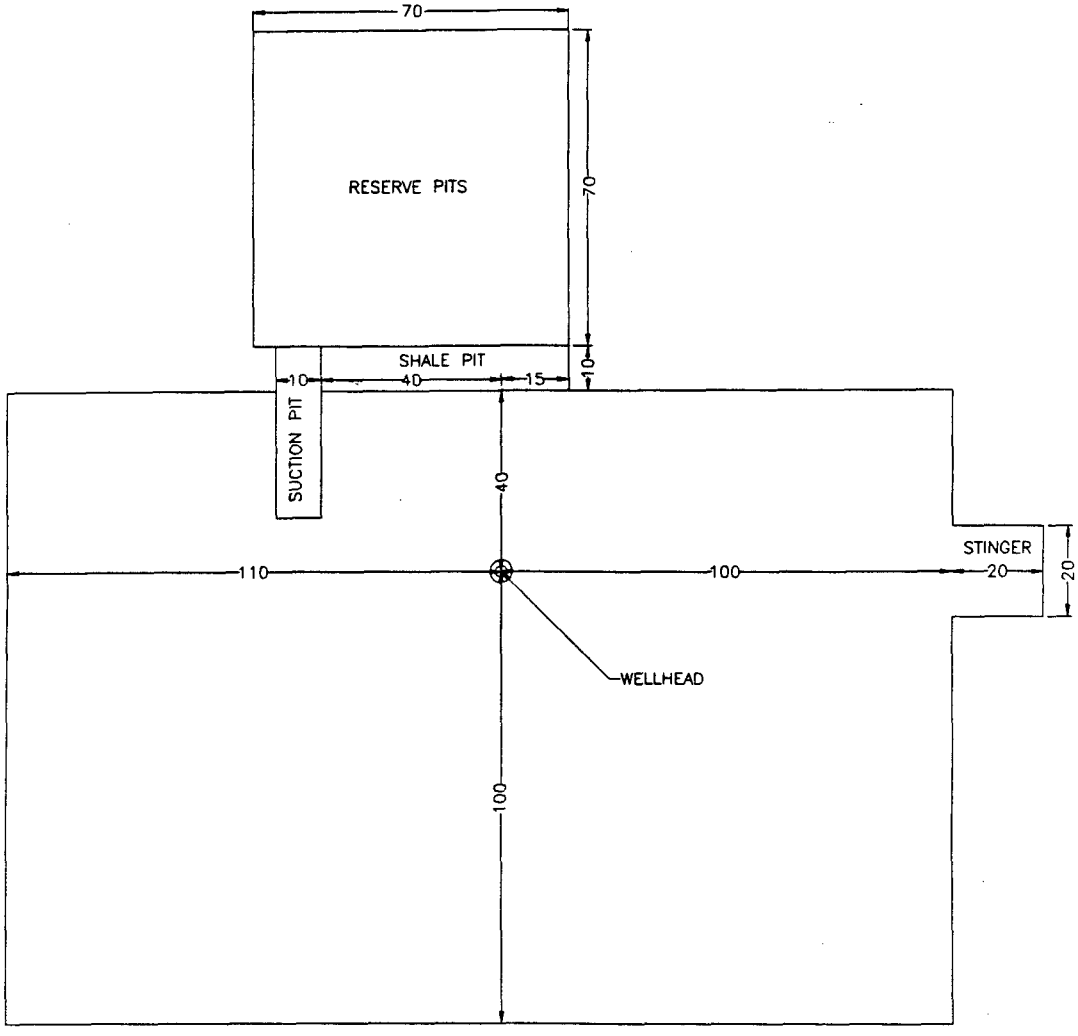
EXHIBIT 5

Scale in Feet

25 0 25 50 75 100

CH

12/93



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FILE: ES-45

devon
ENERGY CORPORATION

EAST SHUGART AREA

EDDY COUNTY, NEW MEXICO

DRILLING PAD FOR

ESU #45

EXHIBIT 6

Scale in Feet

25 0 25 50 75 100

CH

12/93

EXHIBIT #7

DEVON ENERGY

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

Design Parameters:

Mud weight (9.00 ppg) : 0.468 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	J-55	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	444	1370	3.086	950	2950	3.11	22.80	244	10.70 J

Prepared by : , Oklahoma City, OK
Date : 08-09-1993
Remarks :

Minimum segment length for the 950 foot well is 900 feet.
Surface string:
Next string will set at 4,500 ft. with 10.10 ppg mud (pore pressure of 2,361 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.
The minimum specified drift diameter is 7.972 in.

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 (10.10 ppg)	: 0.525	psi/ft
Shut in surface pressure	: 1911	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	4,500	5-1/2"	15.50	J-55	ST&C	4,500	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	2361	4040	1.711	2361	4810	2.04	69.75	202	2.90 J

Prepared by : , Oklahoma City, OK
Date : 08-09-1993
Remarks :

Minimum segment length for the 4,500 foot well is 1,500 feet.
The mud gradient and bottom hole pressures (for burst) are 0.525 psi/ft and 2,361 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 910-831-3277

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

DEVON ENERGY CORPORATION

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

A. Hydrogen Sulfide Training

All rig crews and company personnel will receive training from a qualified instructor in the following areas prior to penetrating any hydrogen sulfide bearing formations during drilling operations:

1. The hazards and characteristics of hydrogen sulfide (H2S).

2. The proper use and maintenance of the H2S safety equipment and of personal protective equipment to be utilized at the location such as H2S detection monitors, alarms and warning systems, and breathing equipment. Briefing areas and evacuation procedures will also be discussed and established.

3. Proper rescue techniques and procedures will be discussed and established.

In addition to the above, supervisory personnel will be trained in the prevention of oil and gas well blowouts in accordance with Minerals Management Service Standards Subpart - 0 - 250 - 212.

Prior to penetrating any known H2S bearing formation, H2S training will be provided at the rig sight for all rig crews and company personnel that have not previously received such training. This instruction will be provide by a qualified instructor with each individual being required to pass a 20 question test regarding H2S safety procedures. All contract personnel employed on an unscheduled basis will be required to have received appropriate H2S training.

This Hydrogen Sulfide Drilling And Operations Plan shall be available at the wellsite during drilling operations.

B. H2S Safety Equipment And Systems

All H2S safety equipment and systems will be installed, tested, and operational when drilling operations reaches a depth approximately 500' above any known or probable H2S bearing formation. The safety systems to be utilized during drilling operations are as follows:

1. Well Control Equipment

(a) Double ram BOP with a properly sized closing unit and pipe rams to accommodate all pipe sizes in use.

(b) A choke manifold with a minimum of one remote choke.

Note: BOP's will be in place prior to drilling out surface casing.

2. H2S Detection And Monitoring Equipment

(a) Three (3) H2S detection monitors will be placed in service at the location. One monitor will be placed near the bell nipple on the rig floor; one will be placed at the rig substructure; and, one will be at the working mud pits or shale shaker. This monitoring system will have warning lights and audible alarms that will alert personnel when H2S levels reach 20 ppm.

(b) One (1) Sensidyne Pump with the appropriate detection tubes will also be available to perform spot checks for H2S concentrations in any remote or isolated areas.

3. Protective Equipment For Essential Personnel

Protective equipment will consist of the following:

(a) Four (4) - five minute escape packs located at strategic points around the rig.

(b) Four (4) - thirty minute rescue packs to be located at the designated briefing areas.

(c) Breathing air cascade manifold system complete with 10 - 300 cubic feet air cylinders with four hose line work units.

4. Visual Warning System

Visual warning system will consist of the following:

(a) Two wind direction indicators.

(b) One condition / warning sign which will be posted on the road providing direct access to the location. The sign will contain lettering of sufficient size to be readable at a reasonable distance from the

immediate location. The sign will inform the public that a hydrogen sulfide gas environment could be encountered be at the location.

5. Mud Program

(a) The mud program has been designed to minimize the volume of H2S circulated to surface. Proper mud weight and safe drilling practices (for example, keeping the hole filled during trips) will minimize hazards when drilling in H2S bearing formations.

6. Metallurgy

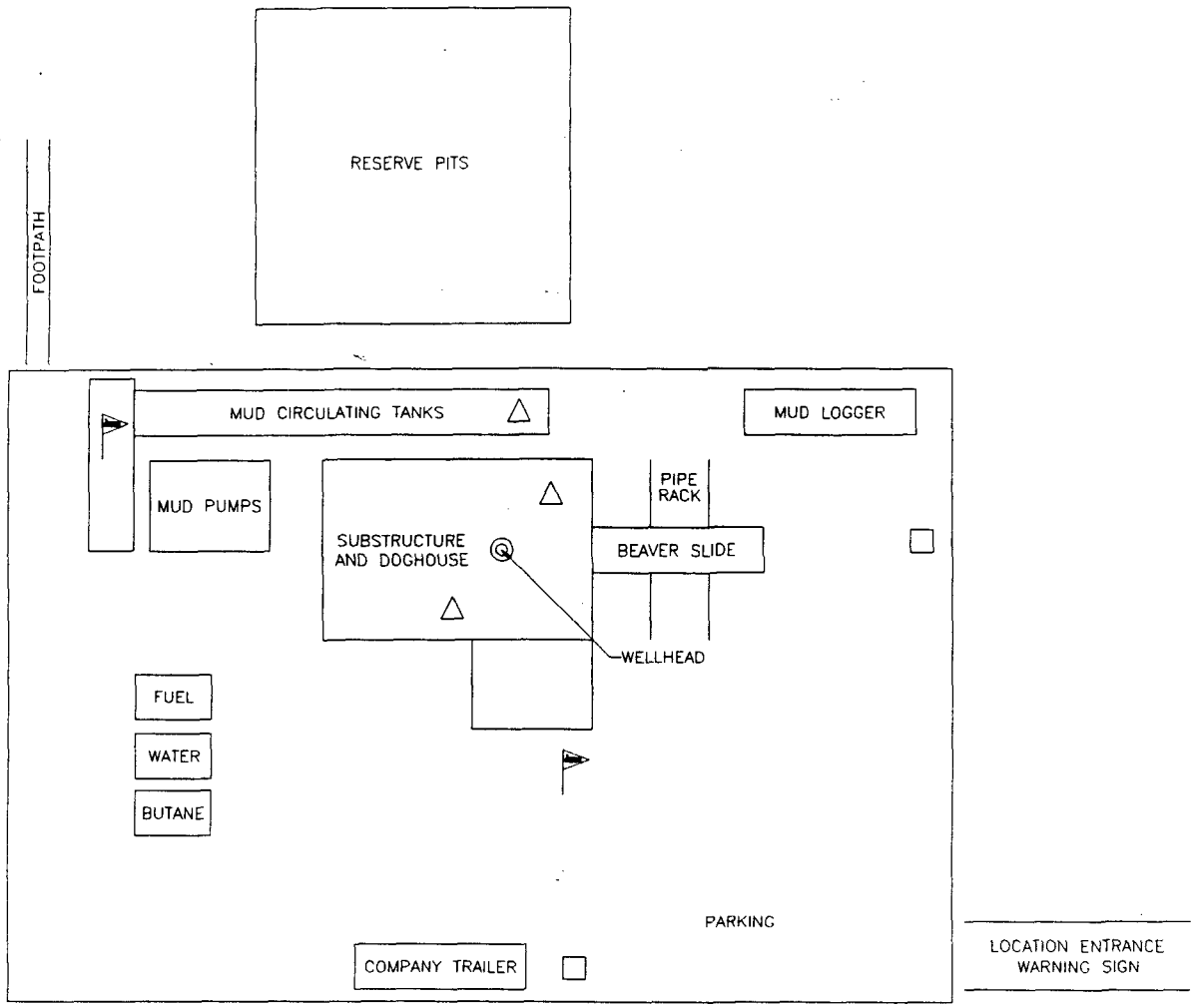
(a) All drill strings, casings, tubing, wellhead, blowout preventers, drilling spools, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.

7. Communication

(a) Two way radio and cellular telephone communication will be available in company vehicles.

C. Diagram Of Drilling Location

1. Attached is a diagram representing a typical location layout as well as the location of H2S monitors, briefing areas, and wind direction indicators.



△ H2S MONITORS WITH ALARMS AT THE BELL NIPPLE, SUBSTRUCTURE, AND SHALE SHAKER

WIND DIRECTION INDICATORS

□ SAFE BRIEFING AREAS WITH CAUTION SIGNS AND PROTECTIVE BREATHING EQUIPMENT

N

FILE: ES-45

devon
ENERGY CORPORATION

EAST SHUGART AREA

EDDY COUNTY, NEW MEXICO

ES - #45

H2S PLAN

Scale in Feet

25 0 25 50 75 100

CH

7/93

OPERATOR'S COPY

SPECIAL DRILLING STIPULATIONS

THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN:

OPERATORS NAME: DEVON ENERGY CORPORATION (NEVADA) LEASE NO.: NM-10190
LOCATION: 2550'/S & 580'/W, SEC. 35-T18S-R31E COUNTY: EDDY
WELL NAME & NO: NO. 45-EAST SHUGART UNIT

The special stipulations check marked below are applicable to the above described well and approval of this application to drill is conditioned upon compliance with such stipulations in addition to the General Conditions of Approval. The permittee should be familiar with the Onshore Order No. 2, a copy of which is available from a Bureau of Land Management office. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE REVIEW OF THESE STIPULATIONS PURSUANT TO TITLE 43 CFR 3165.3.

I. SPECIAL ENVIRONMENT REQUIREMENTS - Federal Surface

[ ] Lesser Prairie Chicken (Stips attached) [ ] San Simon Swale (Stips attached)
[ ] Floodplain (Stips attached) [ ] Other _____

II. ON LEASE - SURFACE REQUIREMENTS PRIOR TO DRILLING

[✓] The BLM will monitor construction on this drill site. Notify the ~~Roswell~~ Carlsbad Resource Area Office, BLM at least 3 working days prior to commencing construction at (505) 887-6544.

[✓] The drill pad and access road for this well must be surfaced with 6 inches of compacted gravel/caliche.

[ ] All topsoil and vegetation encountered during the construction of the drill site areas shall be stockpiled and made available for resurfacing of the disturbed areas after completion of the drilling operations. Topsoil on the subject location is approximately _____ inches in depth. Approximately _____ cubic yards of topsoil material shall be stockpiled for reclamation.

[ ] Other -

WELL COMPLETION REQUIREMENTS

[ ] A Communitization Agreement covering the acreage dedicated to the well must be filed for approval with the Bureau of Land Management. The effective date of the agreement must be prior to any sales.

[✓] Surface Restoration: If the well is a producer, the reserve pit(s) will be backfilled when dry, and cut-and-fill slopes will be reduced to a slope of 3:1 or less. All areas of the pads not necessary for production must be re-contoured to resemble the original contours of the surrounding terrain, and topsoil must be re-distributed and re-seeded with a drill equipped with a depth indicator (set at a depth of 1/2 inch) with the following seed mixture, in pounds of Pure Live Seed (PLS), per acre:

( ) A. Seed Mixture I (Loamy Sites)
Lehmann's lovegrass (*Eragrostis lehmanniana*) 1.0
Sideoats grama (*Bouteloua curtipendula*) 5.0
Sand dropseed (*Sporobolus cryptandrus*) 1.0

( ) B. Seed Mixture II (Sandy Sites)
Sand dropseed (*Sporobolus cryptandrus*) 1.0
Sand lovegrass (*Eragrostis trichodes*) 1.0
Plains bristlegrass (*Setaria macrostachya*) 2.0

( ) C. Seed Mixture III (Shallow Sites)
Sideoats grama (*Bouteloua curtipendula*) 7.0
Lehmann's lovegrass (*Eragrostis lehmanniana*) 1.0
or Boar's Lovegrass (E. Chloromalas)

(✓) Seed Mixture IV (Gypsum Sites)
Alkali Sacaton (*Sporobolus airoides*) 1.0
Four-Wing Saltbrush (Atriplex canescens) 5.0

Seeding should be done either late in the fall (September 15 - November 15.) or early as possible the following spring to take advantage of available ground moisture.

[X] Other - NONE

RESERVE PIT CONSTRUCTION STANDARDS

The reserve pit shall be constructed entirely in cut material and lined with 6 mil plastic.

Mineral material extracted during construction of the reserve pit may be used for development of the pad and access road as needed. Removal of any additional material on location must be purchased from BLM.

Reclamation: Reclamation of this type of deep pit will consist of pushing the pit walls into the pit when sufficiently dry to support track equipment. The pit liner is NOT TO BE RUPTURED to facilitate drying; a ten month period after completion of the well is allowed for drying of the pit contents.

The pit area must be contoured to the natural terrain with all contaminated drilling mud buried with at least 3 feet of clean soil. The reclaimed area will then be seeded as specified in this permit.

OPTIONAL PIT CONSTRUCTION STANDARDS

The reserve pit may be constructed in predominantly fill material if:

1) Lined as specified above and,

2) A borrow/caliche/gravel pit can be constructed immediately adjacent to the reserve pit and is capable of containing all reserve pit contents. The mineral material removed in the process can be used for pad and access road construction. However, a material sales contract must be purchased from BLM prior to removal of the material.

Reclamation of the reserve pit consists of bulldozing all reserve pit contents and contaminants into the borrow pit and covering with a minimum of 3 feet of clean soil material. The entire area must be recontoured, all trash removed, and reseeded as specified in this permit.

CULTURAL

Whether or not an archaeological survey has been completed and notwithstanding that operations are being conducted as approved, the lessee/operator/grantee shall notify the BLM immediately if previously unidentified cultural resources are observed during surface disturbing operations. From the time of the observation, the lessee/operator/grantee shall avoid operations that will result in disturbance to these cultural resources until directed to proceed by BLM.

TRASH PIT STIPS

All trash, junk and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN

OPERATORS NAME DEVON ENERGY CORPORATION (NEVADA) WELL NO. & NAME NO. 45-EAST SHUGART UNIT
LOCATION 2550'/ F S L & 580'/ F W L SEC. 35, T. 18S., R. 31E.
LEASE NO. NM-10190 - EDDY COUNTY NEW MEXICO

The special stipulations check marked below are applicable to the above described well and approval of this application to drill is conditioned upon compliance with such stipulations in addition to the General Requirements. The permittee should be familiar with the General Requirements, a copy of which is available from a Bureau of Land Management office. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE STIPULATIONS PURSUANT TO TITLE 43 CFR 3165.3 and 3165.4.

Capitan Controlled Water Basin

DRILLING OPERATIONS REQUIREMENTS

The Bureau of Land Management office is to be notified at (505) 887-6544, in sufficient time for a representative to witness:

(✓) 1. Spudding (✓) 2. Cement casing 8 5/8 inch 5 1/2 inch ___ inch

( ) 3. BOP tests ( ) Other Whenever a casing string is cemented in the R-111-P potash area, cement shall be allowed to stand a minimum of twelve (12) hours under pressure and a total of twenty-four (24) hours before drilling the plug or initiating tests.

CASING

(✓) 8 5/8" surface casing should be set AT ≈ 950' (below GROUNDWATER) and cement circulated to the surface. If cement does not circulate to the surface, this BLM office will be notified and a temperature survey or cement bond log will be run to verify the top of the cement. Remedial cementing will be done prior to drilling out of that string.

( ) Minimum required fill of cement behind the N/A intermediate casing is to _____

(✓) Minimum required fill of cement behind the 5 1/2" production casing is to TIE BACK TO ± 200' INTO SURFACE CASING.

PRESSURE CONTROL

(✓) Before drilling below the 8 5/8" casing, the blowout preventer assembly will consist of a minimum of:

(✓) One Annular Preventer, OR (✓) Two RAM-Type Preventers (✓) Other KELLY COCK/ STABBING VALVE.

(✓) After setting the 8 5/8" casing string, and before drilling into the YATES Formation, the blowout preventers and related control equipment shall be pressure-tested as described in General Requirements. Any equipment failing to test satisfactorily will be repaired or replaced.

( ) The test will be conducted by an independent service company.
(✓) The results of the test will be reported to the appropriate BLM office.
( ) The Bureau of Land Management office is to be notified in sufficient time for a representative to witness the test.

( ) Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, will be installed and operating before drilling into the _____ Formation, and will be used until production casing is run and cemented. Monitoring equipment will consist of the following:

( ) 1. A recording pit level indicator to determine pit volume gains and losses.
( ) 2. A mud-volume measuring device for accurately determining mud volume necessary to fill the hole on trips.
( ) 3. A flow-sensor on the flow-line to warn of any abnormal mud returns from the well.

( ) A Hydrogen Sulfide Contingency Plan will be approved by this BLM office before drilling below the _____ Formation. A copy of the plan will be posed at the drilling site.

( ) Other Gamma-Ray/Neutron logs shall be run from the base of the Salado formation to the surface; cable speed not to exceed 30 feet per minute.