Form 3160-3
(December 1990)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN TRIPLICATE* (See other instructions on reverse side)

Form approved. 951 476

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK: DRILL ☒ DEEPEN ☐

b. TYPE OF WELL: OIL WELL ☐ GAS WELL ☒ Other ____ SINGLE ZONE ☐ MULTIPLE ZONE ☐

2. NAME OF OPERATOR
DEVON SFS OPERATING, INC. 20305

3. ADDRESS AND TELEPHONE NO.
20 N. BROADWAY, SUITE 1500, OKC, OK 73102 (405) 235-3611

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface **1980' FNL & 660' FEL Unit H**

At top proposed prod. zone (same)

5. LEASE DESIGNATION AND SERIAL NO.
NM-98824

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

7. UNIT AGREEMENT NAME
N/A 28024

8. FARM OR LEASE NAME, WELL NO.
Power "31" Federal #3

9. API WELL NO.
30-015- 31806

10. FIELD AND POOL, OR WILDCAT
Cedar Lake (Morrow Gas)

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA
Section 31-T17S-R31E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
Approximately 6 miles East and 2 miles South of Loco Hills, New Mexico

12. COUNTY OR PARISH: **Eddy County** 13. STATE: **NM**

15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line if any): **660'**

16. NO. OF ACRES IN LEASE: **306.56**

17. NO. OF ACRES ASSIGNED TO THIS WELL: **306.56**

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

19. PROPOSED DEPTH: **12,000'**

20. ROTARY OR CABLE TOOLS*: **Rotary**

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
GL=3,719'

22. APPROX. DATE WORK WILL START*
March 1, 2001

RECEIVED
OCD - ARTESIA

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING		WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	H-40	13-3/8"	48#	~~595'~~ 375'	897 sxs (est TOC @ surface)
12-1/4"	J-55	8-5/8"	32#	3920'	2,150 sxs (est TOC @ surface)
7-7/8"	S-95 & N-80	5-1/2"	17#	12,000'	713 sxs (est TOC @ 7,900')

[SEE STIPS]

Devon SFS Operating, Inc. proposes to drill a Morrow well to TD 11,800'± for commercial quantities of gas. If the well is deemed noncommercial, the well bore 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 Program
Surface Use and Operating Plan
Exhibits #1 = Blowout Prevention Equipment
Exhibit #2 = Location and Elevation Plat
Exhibits #3 = Road Map and Topo Map
Exhibit #4 = Wells Within 1 Mile Radius
Exhibits #5 = Production Facilities Plat
Exhibit #6 = Rotary Rig Layout
Exhibit #7 = Casing Design
H_2S Operating Plan

The undersigned accepts all applicable terms, conditions, stipulations and restrictions concerning operations conducted on the leased land or: portions thereof, as described below
Lease #: NM-98824
Legal Description: Section. 31-T17S-R31E
Bond Coverage: Statewide in CO., NM, UT & WY
BLM Bond No.: UT1195

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.

SIGNED Charles H Carleton Charles H. Carleton TITLE Sr. Engineering Technician DATE February 15, 2001

*(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY /s/ LESLIE A. THEISS TITLE _____ DATE MAY 29 2001

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

APPROVAL FOR 1 YEAR

SURFACE USE AND OPERATING PLAN

POWER "31" FEDERAL #3
1980' FNL & 660' FEL
Section 31-T17S-R31E
Eddy County, New Mexico

1. Existing Roads

   A. The well site and elevation plat for the proposed Power "31" Federal #3 are reflected on Exhibit #2. This well was staked by Basin Surveys in Hobbs, NM.

   B. All roads into the location are depicted in Exhibit #3. New construction from the existing lease road will be used to access the location. New construction will conform to the specifications outlined in Item #2 below.

   C. Directions to location: From Jct. Hwy 82 & Hwy 31, go South on Hwy 31 1.2 mile to a lease road right; thence take lease road West 1.1 miles to a point ±500' North of location.

2. Proposed Access Road

   Exhibit #3 shows the existing lease road. Access to this location will require the construction of about 1,502' of proposed access road. All new construction will adhere to the following.

   A. The maximum width of the road will be 15'. It will be crowned and made of 6" of rolled and compacted caliche. Water will be deflected, as necessary, to avoid accumulation and prevent surface erosion.

   B. Surface material will be native caliche. This material will be obtained from a BLM approved pit nearest in proximity to the location. The average grade will be approximately 1%.

   C. No cattle guards, grates or fence cuts will be required. No turnouts are planned.

3. Location of Existing Wells

   Exhibit #4 shows all existing wells within a one-mile radius of the proposed Power "31" Federal #3.

4. Location of Existing and/or Proposed Facilities

A. In the event the well is found productive, a tank battery would be constructed at the well site.

1) Exhibit #5 shows the battery facility to be utilized by the Power "31" Federal #3.

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

B. 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 drilling pad will be removed. The original topsoil from the well site will be returned to the location. The drill site will then be contoured to the original natural state.

5. Location and Type of Water Supply

The Power "31" Federal #3 will be drilled using a combination of brine and fresh water mud systems (outlined in Drilling Program). The water will be obtained from commercial sources and will be transported over the existing and proposed roads. No water well will be drilled on the location.

6. Source of Construction Materials

All caliche utilized for the drilling pad and proposed access road will be obtained from an existing BLM approved pit. All roads will be constructed of 6" rolled and compacted caliche.

7. Methods of Handling Water Disposal

A. Drill cuttings will be disposed into the reserve pit.

B. Drilling fluids will be contained in steel mud tanks. The reserve pit will contain excess drilling fluid or fluid from the well during drilling, cementing and completion operations. The reserve pit will be an earthen pit roughly 125' x 125' x 6', or smaller, in size.

C. The reserve pit will be fenced on three sides throughout drilling operations and will be totally isolated upon removal of the rotary rig. The pit will be lined using a 5-7 mil plastic to minimize loss of drilling fluids and saturation of the ground with brine water used during drilling.

D. Water produced from the well during completion operations will be disposed into a steel tank or reserve pit, if volumes prove excessive. After placing the well on production through the production facilities, all water will be collected in tanks. Produced oil will be separated into steel stock tanks until sold.

E. A portable chemical toilet will be available on the location for human waste during the drilling operations.

F. Garbage, trash and waste paper produced during drilling operations will be collected in a contained trailer and disposed at an approved landfill. All waste material will be contained to prevent scattering by the wind. All water, fluids, salt or other chemicals will be disposed into the reserve pit. No toxic waste or hazardous chemicals will be generated by this operation.

G. All waste material will be removed within 30 days after the well is either completed or abandoned. The reserve pit will be completely fenced until it has dried. At the point the reserve pit is found sufficiently dry, it will be backfilled and reclaimed as per BLM specifications. Only the portion of the drilling pad used by the production equipment (pumping unit and tank battery) will remain in use. If the well is deemed non-commercial only a dry hole marker will remain.

8. Ancillary Facilities

No permanent campsite or other facilities will be constructed as a result of this well.

9. Well Site Layout

A. The drilling pad is shown on Exhibit #6. Approximate dimensions of the pad, pits and general location of the rig equipment are displayed. Top soil will be stored adjacent to the pad until reclamation efforts are undertaken. Only modest cuts will be necessary to build the pad which will be covered with 6" of compacted caliche.

B. No permanent living facilities are planned, but temporary trailers for the tool pusher, drilling foreman and mud logger may be on location throughout drilling operations.

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

10. Plans for Restoration of Surface

A. After concluding the drilling and/or completion operations, if the well is found non-commercial, the caliche will be removed from the pad and transported to the original caliche pit or used for other drilling locations. The road will be reclaimed as directed by the BLM. The reserve pit area will be broken out and leveled after drying to a condition where these efforts are feasible. The original top soil will 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 drilling pad not necessary to operate the well. These unused areas of the drilling 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 project area is located on a dunal plain with loose tan sands with few exposures. The vegetation is shinoak, sandsage, mesquite, yucca, and various grasses. Wildlife consists of deer, coyotes, rabbits, rodents, reptiles, quail, dove and occasional water fowl.

B. There is permanent water (Nakee Ishee Lake) approximately 17 miles W/NW of the location. There is potential water (Cedar Lake Draw) West of the location.

C. Land use is for oil and gas production, grazing and hunting.

D. A Cultural Resources Examination will be completed by Southern New Mexico Archaeological Services, Inc. and forwarded to the BLM office in Carlsbad, New Mexico.

13. Lessee's and Operator's Representative

The Devon Energy Production Company, L.P. representatives responsible for ensuring compliance of the surface use plan are listed below.

William M. Greenlees, P.E.
Operations Engineering Advisor

Devon Energy Production Company, L.P.
20 North Broadway, Suite 1500
Oklahoma City, OK 73102-8260

(405) 552-8194 (office)
(405) 840-0533 (home)

Don Mayberry
Production Superintendent

Devon Energy Production Company, L.P.
Post Office Box 250
Artesia, NM 88211-0250

(505) 748-3371 (office)
(505) 746-4945 (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 Production Company, L.P. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Signed: _____ Date: February 15, 2001

William M. Greenlees, P.E.
Operations Engineering Advisor

DRILLING PROGRAM

POWER "31" FEDERAL #3
1980' FNL & 660' FEL
Section 31-T17S-R31E
Eddy County, New Mexico

1. Geologic Name of Surface Formation

   Permian

2. Estimated Tops of Important Geologic Markers

Rustler	395'
Salado	620'
Tansil	1,546'
Yates	1,707'
Seven Rivers	2,069'
Queen	2,744'
Grayburg	3,155'
San Andres	3,607'
Glorietta	5,120'
Tubb	6,620'
Abo	7,820'
Wolfcamp	8,420'
Penn Sand	9'470'
Strawn	10,420'
Atoka	10,920'
Morrow Clastics	11,270'
Chester Lime	11,520'
Mississippi Lime	11,720'
TD	±12,000'

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'

Oil: Seven Rivers - Abo

Gas: Wolfcamp - TD

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 3,920' and circulating cement back to surface. The oil and gas intervals will be isolated by setting 5 1/2" casing at TD and bringing cement top to approximately 7,900'.

4. Casing Program:

Hole Size	Interval	Casing OD	Weight, ppf	Grade	Type
17 1/2"	0–595'	13 3/8"	48#	H-40	ST&C
12 1/4"	0–3,920'	8 5/8"	32#	J-55	LT&C
7 7/8"	0–12,000'±	5 1/2"	17#	S-95 / N-80	LT&C

Casing Cementing Program:

13 3/8" Surface Casing:	Lead Slurry: 647 sxs 35:65 Poz Class C with 6% Bentonite, 2% $CaCl_2$ and 1/4 lb/sx Cello Flake. Tail Slurry: 250 sxs Class C with 2% $CaCl_2$ and 1/4 lb/sx Cello Flake. Cement to be circulated to surface.
8 5/8" Intermediate Casing:	Lead Slurry: 1,700 sxs 35:65 Poz Class C with 4% Bentonite, 5% $NaCl_2$, and 1/4 lb/sx Cello Flake. Tail Slurry: 450 sxs Class C with 10% A-10B, 5% $NaCl_2$ and 1/4 lb/sx Cello Flake. Cement to be circulated to surface.
5 1/2" Production Casing:	Lead Slurry: 563 sxs 15:61:11 Poz Class C CSE with 2% KCl_2, 0.6% FL-25, 0.6% FL-52, 0.3% CD-32, 2 lbs/sx EC-1, 5 lbs/sx LCM-1 and 1/4 lb/sx Cello Flake. Tail Slurry: 150 sxs Class H with 3% KCl_2, 1% FL-25, 0.1% SMS. Cement to 7,900'.

The above cement volumes are subject to revision pending the caliper measurement from the open hole logs.

5. Minimum Specifications for Pressure Control

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of a (3M system) double ram type (3,000 psi WP) preventer and a bag-type (Hydril) preventer (3,000 psi WP). Both units will be hydraulically operated and the ram type preventer will be equipped with blind rams on top and 4 1/2" drill pipe rams on bottom. Both BOP's will be installed on the 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 3,000 psi WP rating.

6. Types and Characteristics of the Proposed Mud System

The well will be drilled to total depth brine with starch mud systems. Depths of systems are as follows.

Depth	Type	Weight (ppg)	Viscosity (1/sec)	Water Loss (cc)
0' – 595'	Fresh Water	8.4	34 – 36	No control
595' – 3,920'	Brine	9.8 - 10.2	28 – 30	No control
3,920' – 10,420'	Cut Brine	8.8 – 9.2	30 – 32	No control
10,420' – TD	Starch / mud	9.2 – 9.8	32 – 36	8 - 12

The necessary mud products for weight addition and fluid loss control will be on location at all times.

7. Auxiliary Well Control and Monitoring Equipment

A. A kelly cock will be in the drill string at all times.

B. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.

C. Hydrogen Sulfide detection equipment (Compliance Package) will be in operation from drilling out 13 3/8" casing shoe until TD.

8. Logging, Testing and Coring Program

A. Drill stem tests may be run on potential pay interval.

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

1) DLL/MSFL/GR from total depth to base of intermediate casing.

2) CNL/LDT/GR from total depth to base of intermediate casing with CNL/GR 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 180 degrees and maximum bottom hole pressure is 5,500 psig. Hydrogen sulfide gas is associated with the Grayburg/San Andres formation in this area. A hydrogen sulfide operations plan will be implemented prior to drilling out from under the intermediate casing string (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

Road and location preparation will not be undertaken until approval has been received from the BLM. If approved, this well will be drilled as part of a development project. The anticipated spud date for the project is March 1, 2001. The drilling operation should require approximately 45 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.

MINIMUM BLOWOUT PREVENTER REQUIR NTS

3,000 psi Working Pressure

3 MWP

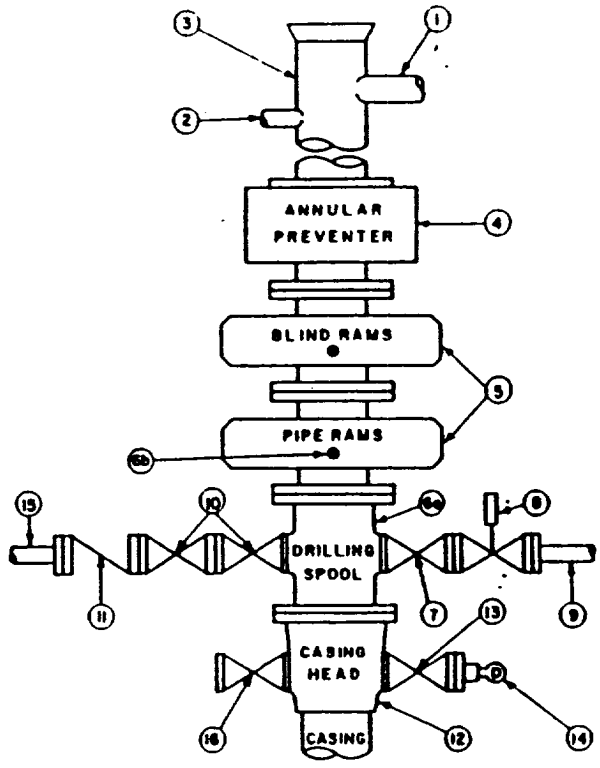
EXHIBIT #1

STACK REQUIREMENTS

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

OPTIONAL			
16	Flanged valve	1-13/16"	

CONFIGURATION A



CONTRACTOR'S OPTION TO FURNISH:

1. All equipment and connections above bradenhead or casinghead. Working pressure of preventers to be 3,000 psi, minimum.
2. Automatic accumulator (80 gallon, minimum) capable of closing BOP in 30 seconds or less and, holding them closed against full rated working pressure.
3. BOP controls, to be located near drillers position.
4. Kelly equipped with Kelly cock.
5. Inside blowout prevventer or its equivalent on derrick floor at all times with proper threads to fit pipe being used.
6. Kelly saver-sub equipped with rubber casing protector at all times.
7. Plug type blowout preventer tester.
8. Extra set pipe rams to fit drill pipe in use on location at all times.
9. Type RX ring gaskets in place of Type R.

MEC TO FURNISH:

1. Bradenhead or casinghead and side valves.
2. Wear bushing, if required.

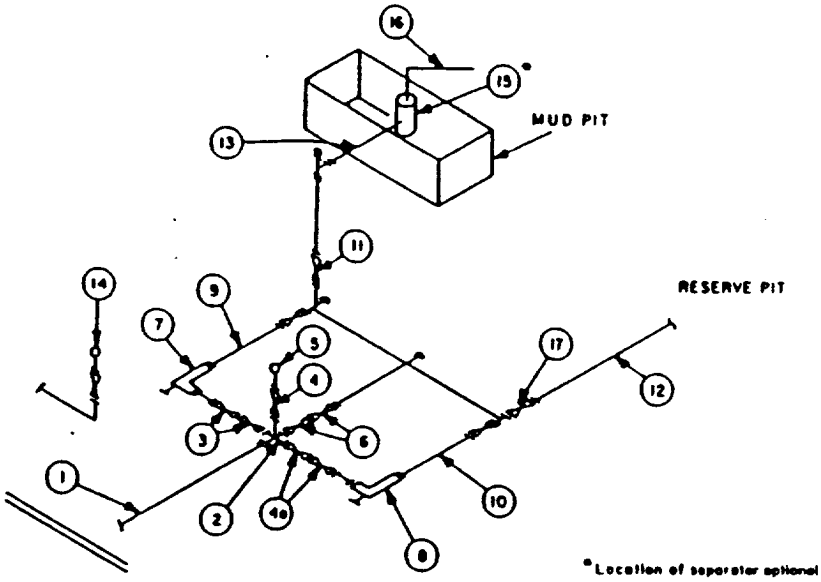
GENERAL NOTES:

1. Deviations from this drawing may be made only with the express permission of MEC's Drilling Manager.
2. All connections, valves, fittings, piping, etc., subject to well or pump pressure must be flanged (suitable clamp connections acceptable) and have minimum working pressure equal to rated working pressure of preventers up through choke. Valves must be full opening and suitable for high pressure mud service.
3. Controls to be of standard design and each marked, showing opening and closing position.
4. Chokes will be positioned so as not to hamper or delay changing of choke beans. Replaceable parts for adjustable choke, other bean sizes, retainers, and choke wrenches to be conveniently located for immediate use.
5. All valves to be equipped with handwheels or handles ready for immediate use.
6. Choke lines must be suitably anchored.
7. Handwheels and extensions to be connected and ready for use.
8. Valves adjacent to drilling spool to be kept open. Use outside valves except for emergency.
9. All seamless steel control piping (3000 psi working pressure) to have flexible joints to avoid stress. Hoses will be permitted.
10. Casinghead connections shall not be used except in case of emergency.
11. Do not use kill line for routine fill-up operations.

MINIMUM CHOKE MANIFOLD
3,000, 5,000 and 10,000 PSI Working Press.

EXHIBIT #1-A

3 MWP - 5 MWP - 10 MWP



MINIMUM REQUIREMENTS										
		3,000 MWP			5,000 MWP			10,000 MWP		
No		I.D.	NOMINAL	RATING	I.D.	NOMINAL	RATING	I.D.	NOMINAL	RATING
1	Line from drilling spool		3"	3,000		3"	5,000		3"	10,000
2	Cross 3"x3"x3"x2"			3,000			5,000			
	Cross 3"x3"x3"x3"									10,000
3	Valves(1) Gate ☐ Plug ☐(2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000
4	Valve Gate ☐ Plug ☐(2)	1-13/16"		3,000	1-13/16"		5,000	1-13/16"		10,000
4a	Valves(1)	2-1/16"		3,000	2-1/16"		5,000	3-1/8"		10,000
5	Pressure Gauge			3,000			5,000			10,000
6	Valves Gate ☐ Plug ☐(2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000
7	Adjustable Choke(3)	2"		3,000	2"		5,000	2"		10,000
8	Adjustable Choke	1"		3,000	1"		5,000	2"		10,000
9	Line		3"	3,000		3"	5,000		3"	10,000
10	Line		2"	3,000		2"	5,000		3"	10,000
11	Valves Gate ☐ Plug ☐(2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000
12	Lines		3"	1,000		3"	1,000		3"	2,000
13	Lines		3"	1,000		3"	1,000		3"	2,000
14	Remote reading compound standpipe pressure gauge			3,000			5,000			10,000
15	Gas Separator		2'x5'			2'x5'			2'x5'	
16	Line		4"	1,000		4"	1,000		4"	2,000
17	Valves Gate ☐ Plug ☐(2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000

(1) Only one required in Class 3M.

(2) Gate valves only shall be used for Class 10M.

(3) Remote operated hydraulic choke required on 5,000 psi and 10,000 psi for drilling.

EQUIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTIONS

1. All connections in choke manifold shall be welded, studded, flanged or Cameron clamp of comparable rating.
2. All flanges shall be API 6B or 6BX and ring gaskets shall be API RX or BX. Use only BX for 10 MWP.
3. All lines shall be securely anchored.
4. Chokes shall be equipped with tungsten carbide seats and needles, and replacements shall be available.
5. Choke manifold pressure and standpipe pressure gauges shall be available at the choke manifold to assist in regulating chokes. As an alternate with automatic chokes, a choke manifold pressure gauge shall be located on the rig floor in conjunction with the standpipe pressure gauge.
6. Line from drilling spool to choke manifold should be as straight as possible. Lines downstream from chokes shall make turns by large bends or 90° bends using bull plugged tees.
7. Discharge lines from chokes, choke bypass and from top of gas separator should vent as far as practical from the well.

Attachment to Exhibit #1

NOTES REGARDING BLOWOUT PREVENTERS

POWER "31" FEDERAL #3
1980' FNL & 660' FEL
Section 31-T17S-R31E
Eddy County, New Mexico

1. Drilling nipple will be constructed so it can be removed mechanically without the aid of a welder. The minimum internal diameter will equal BOP bore.

2. Wear ring will be properly installed in head.

3. Blowout preventer and all associated fittings will be in operable condition to withstand a minimum 3,000 psi working pressure.

4. All fittings will be flanged.

5. A full bore safety valve tested to a minimum 3,000 psi WP with proper thread connections will be available on the rotary rig floor at all times.

6. All choke lines will be anchored to prevent movement.

7. All BOP equipment will be equal to or larger in bore than the internal diameter of the last casing string.

8. Will maintain a kelly cock attached to the kelly.

9. Hand wheels and wrenches will be properly installed and tested for safe operation.

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

11. All BOP equipment will meet API standards and include a minimum 40 gallon accumulator having two independent means of power to initiate closing operation.

DISTRICT I
P. O. Box 1980
Hobbs, NM 88241-1980

DISTRICT II
P. O. Drawer DD
Artesia, NM 88211-0719

DISTRICT III
1000 Rio Brazos Rd.
Aztec, NM 87410

DISTRICT IV
P. O. Box 2088
Santa Fe, NM 87507-2088

State of New Mexico
Energy, Minerals, and Natural Resources Department

Form C-102
Revised 02-10-94

Instructions on back

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
		Cedar Lake (Morrow Gas)

[4] Property Code	[5] Property Name	[6] Well Number
	POWER '31' FEDERAL	3

[7] OGRID No.	[8] Operator Name	[9] Elevation
20305	DEVON S.F.S. OPERATING, INC.	3719'

[10] SURFACE LOCATION

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
H	31	17 SOUTH	31 EAST, N.M.P.M.		1980'	NORTH	660'	EAST	EDDY

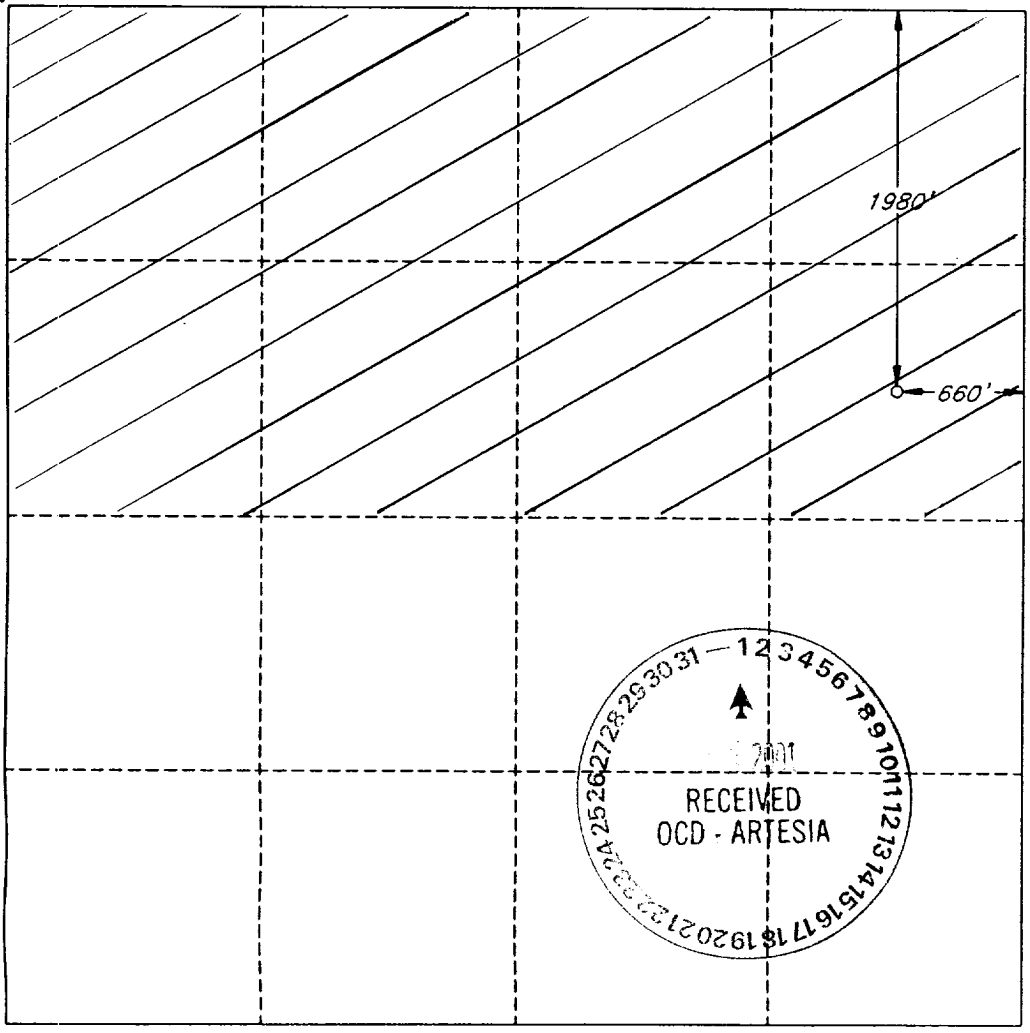
"BOTTOM HOLE LOCATION IF DIFFERENT FROM SURFACE

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
306.56			

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

[16]



OPERATOR CERTIFICATION

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

Signature: Charles H Carleton

Printed Name: Charles H. Carleton

Title: Sr. Engineering Technician

Date: January 30, 2001

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Date of Survey: JANUARY 12, 2001

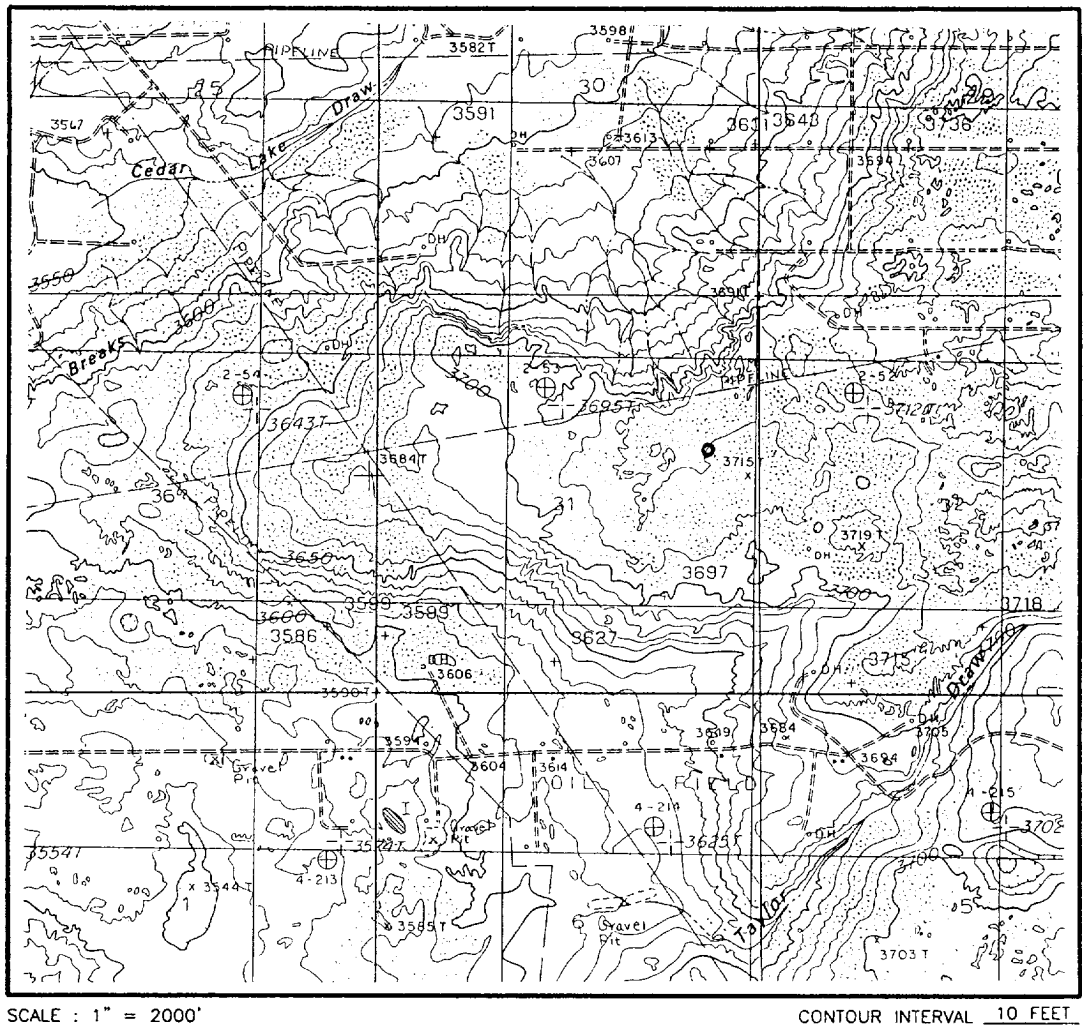
Signature and Seal of Professional Surveyor

V. L. Bezner 1-16-01

Certificate No.
V. L. BEZNER R.P.S. #7920

JOB #73882 / 98 SW / J.C.P.

LOCATION & ELEVATION VERIFICATION MAP



SCALE : 1" = 2000'

CONTOUR INTERVAL 10 FEET

SECTION 31 TWP 17-S RGE 31-E

SURVEY NEW MEXICO PRINCIPAL MERIDIAN

COUNTY EDDY STATE NM

DESCRIPTION 1980' FNL & 660' FEL

ELEVATION 3719'

OPERATOR **DEVON S.F.S. OPERATING, INC.**

LEASE POWER "31" FEDERAL #3

U.S.G.S. TOPOGRAPHIC MAP

LOCO HILLS, NEW MEXICO

SCALED LAT. N 32°47'34"

LONG. W 103°54'07

N

This location has been very carefully staked on the ground according to the best official survey records, maps, and other data available to us.

Review this plat and notify us immediately of any possible discrepancy.

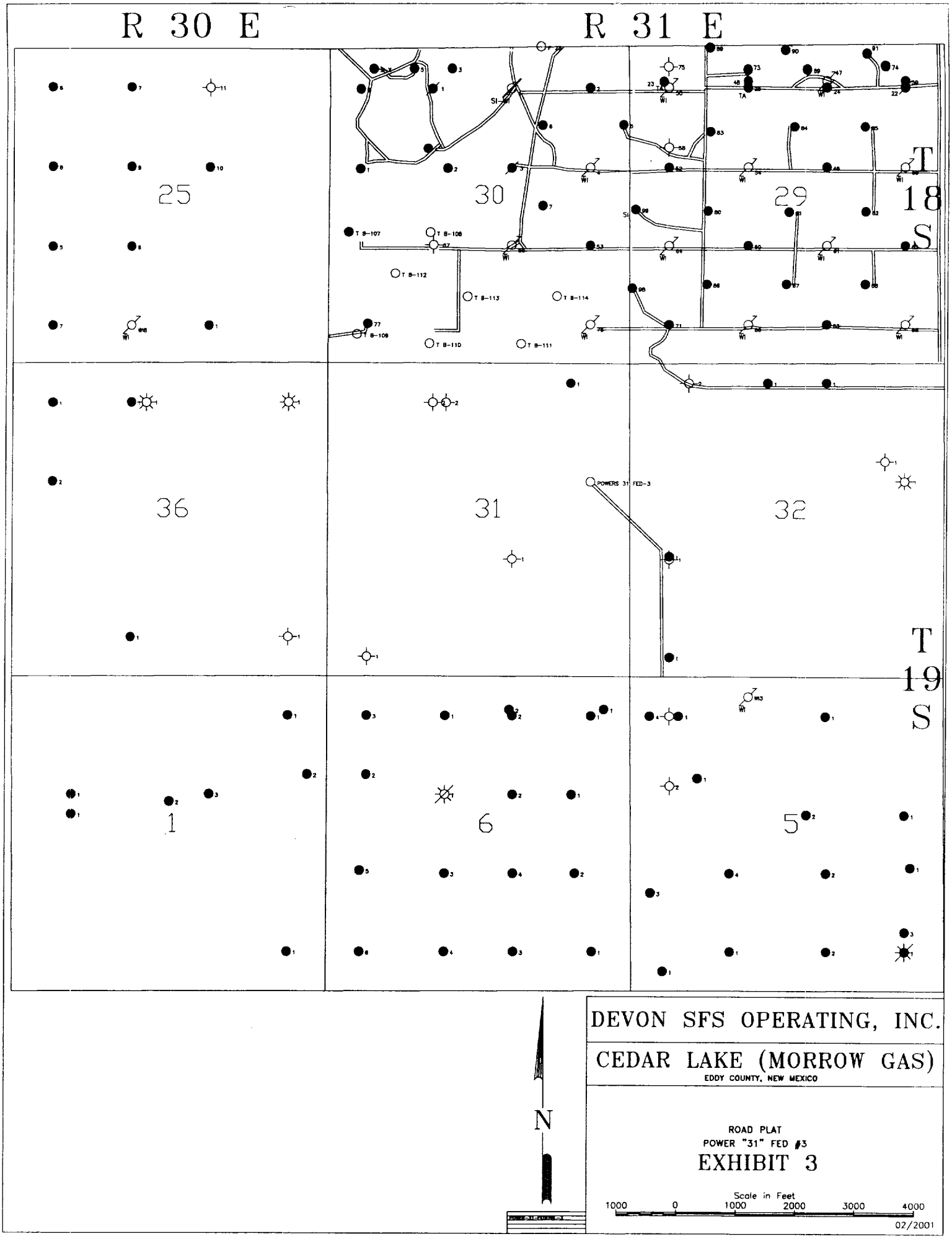
TOPOGRAPHIC LAND SURVEYORS

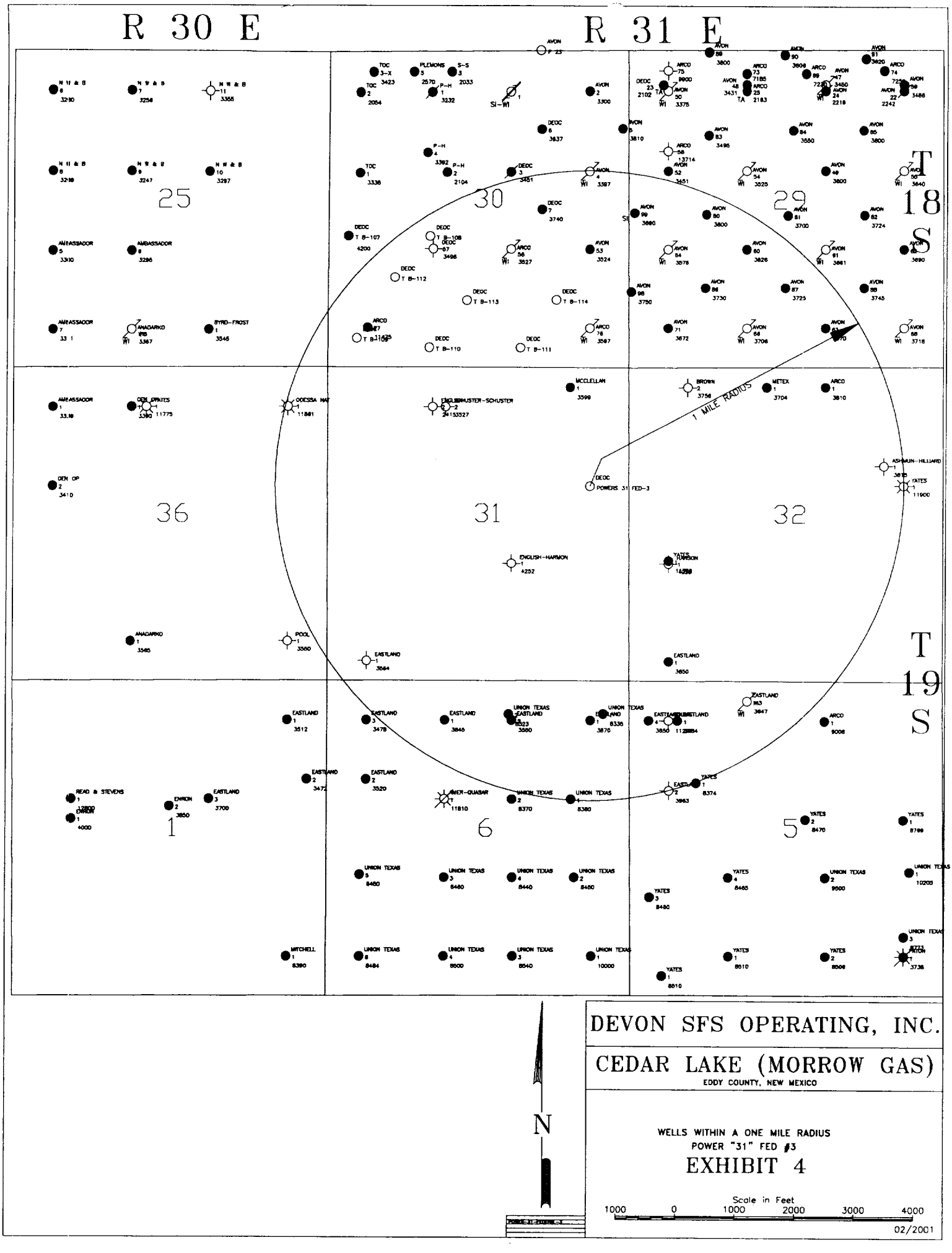
Surveying & Mapping for the Oil & Gas Industry

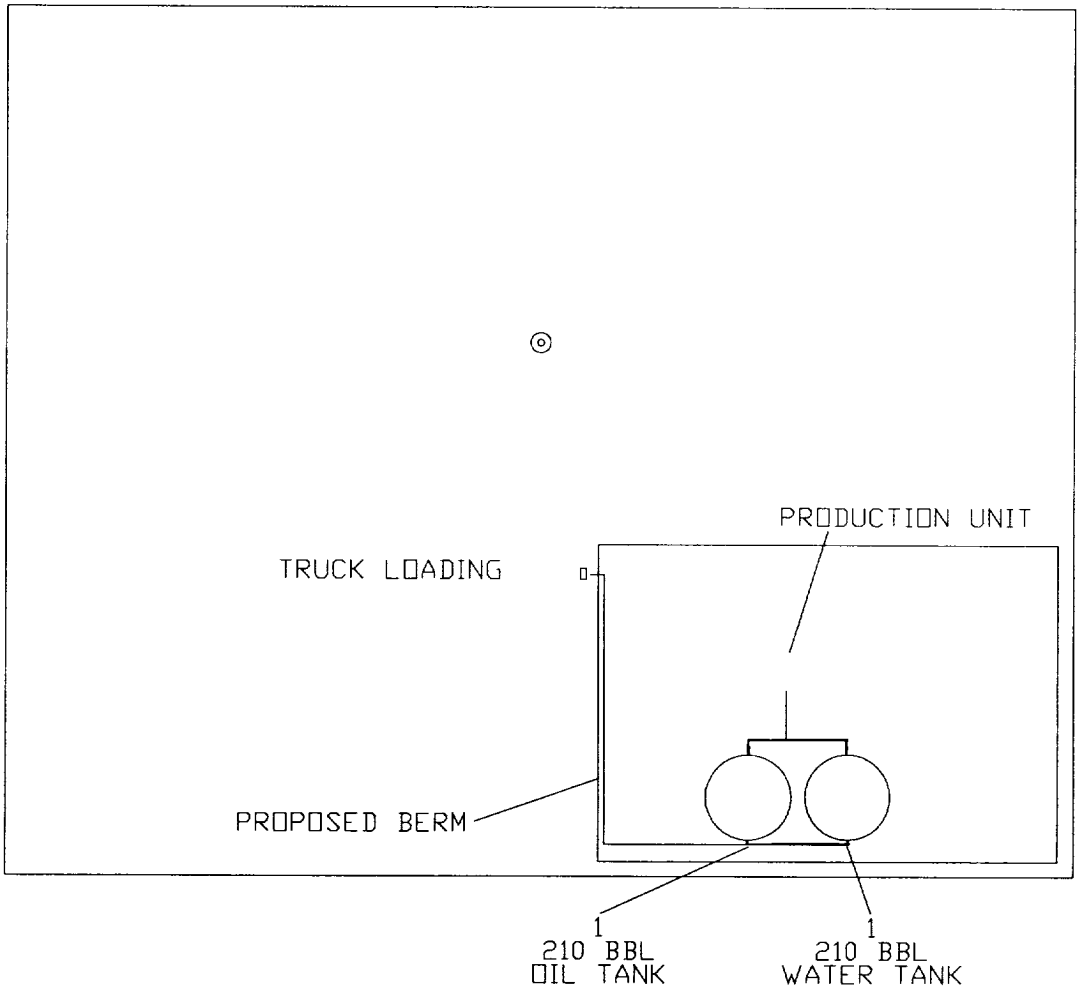
1307 N. HOBART
PAMPA, TX. 79065
(800) 658-6382

6709 N. CLASSEN BLVD.
OKLAHOMA CITY, OK. 73116
(800) 654-3219

2903 N. BIG SPRING
MIDLAND, TX. 79705
(800) 767-1653


R 30 E
R 31 E
T 18 S
T 19 S
25
30
29
36
31
32
1
6
5
POWERS 31 FED-3
T B-107
T B-108
T B-112
T B-113
T B-114
T B-109
T B-110
T B-111
N
DEVON SFS OPERATING, INC.
CEDAR LAKE (MORROW GAS)
EDDY COUNTY, NEW MEXICO
ROAD PLAT
POWER "31" FED #3
EXHIBIT 3
Scale in Feet
1000 0 1000 2000 3000 4000
02/2001


R 30 E
R 31 E
T 18 S
T 19 S
25
30
29
36
31
32
1
6
5
1 MILE RADIUS
POWERS 31 FED-3
N
DEVON SFS OPERATING, INC.
CEDAR LAKE (MORROW GAS)
EDDY COUNTY, NEW MEXICO
WELLS WITHIN A ONE MILE RADIUS
POWER "31" FED #3
EXHIBIT 4
Scale in Feet
1000 0 1000 2000 3000 4000
02/2001



N

DEVON SFS OPERATING, INC.

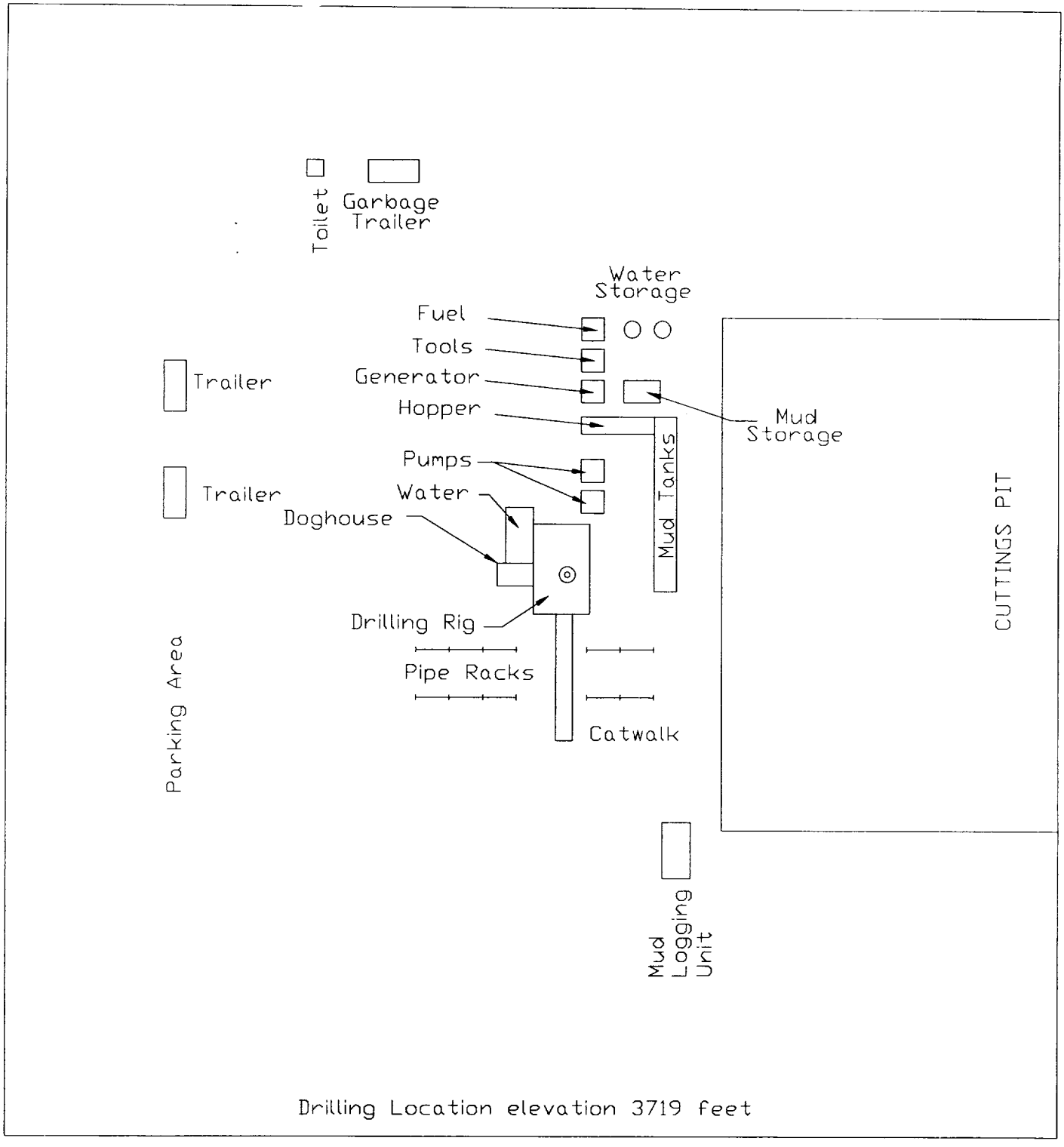
CEDAR LAKE (MORROW GAS)

EDDY COUNTY, NEW MEXICO

EXHIBIT #5
PROPOSED TANK BATTERY
Sec 31 - T17S - R31E

FILE: POWER-31-FEDERAL-3

02/2001



N

DEVON SFS OPERATING, INC.

CEDAR LAKE (MORROW GAS)

EDDY COUNTY, NEW MEXICO

DRILLING PAD FOR

POWERS "31" FED #3

EXHIBIT 6

FILE: POWERS-13-FEDERAL-3 | EB | 02/2001

Well name: **Power "31" Fed #3**
Operator: **Devon SFS Operating, Inc.**
String type: Surface

Design parameters:

Collapse
Mud weight: 8.300 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 1,286 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 1,357 psi

No backup mud specified.

Minimum design factors:

Collapse:
Design factor 1.125

Burst:
Design factor 1.00

Tension:
8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.60 (B)

Tension is based on air weight.
Neutral point: 523 ft

Environment:
H2S considered? No
Surface temperature: 60 °F
Bottom hole temperature: 67 °F
Temperature gradient: 1.10 °F/100ft
Minimum section length: 575 ft

Non-directional string.

Re subsequent strings:
Next setting depth: 3,700 ft
Next mud weight: 9.000 ppg
Next setting BHP: 1,730 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 3,700 ft
Injection pressure 3,700 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ($)
1	595	13.375	48.00	H-40	ST&C	595	595	12.59	7379

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	257	740	2.88	1357	1730	1.27	28.6	322	11.27 J

Date: February 15,2001
Devon Energy Oklahoma City, Oklahoma

Remarks:
Collapse is based on a vertical depth of 595 ft, a mud weight of 8.3 ppg The casing is considered to be evacuated for collapse purposes.
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name: **Power "31" Fed #3**
Operator: **Devon SFS Operating, Inc.**
String type: Intermediate

Design parameters:

Collapse
Mud weight: 10.000 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 2,700 psi
Internal gradient: 0.291 psi/ft
Calculated BHP 3,839 psi
Annular backup: 8.33 ppg

Minimum design factors:

Collapse:
Design factor 1.125

Burst:
Design factor 1.00

Tension:
8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.60 (B)

Tension is based on air weight.
Neutral point: 3,338 ft

Environment:
H2S considered? No
Surface temperature: 60 °F
Bottom hole temperature: 103 °F
Temperature gradient: 1.10 °F/100ft
Minimum section length: 600 ft

Non-directional string.

Re subsequent strings:
Next setting depth: 11,800 ft
Next mud weight: 10.000 ppg
Next setting BHP: 6,130 psi
Fracture mud wt: 15.000 ppg
Fracture depth: 11,800 ft
Injection pressure 9,195 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ($)
1	3920	8.625	32.00	J-55	LT&C	3920	3920	7.875	31590

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	2036	2530	1.24	2700	3930	1.46	125.4	417	3.32 J

Date: February 15,2001
Devon Energy Oklahoma City, Oklahoma

Remarks:
Collapse is based on a vertical depth of 3920 ft, a mud weight of 10 ppg The casing is considered to be evacuated for collapse purposes.
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Well name: **Power "31" Fed #3**
Operator: **Devon SFS Operating, Inc.**
String type: Production

Design parameters:

Collapse
Mud weight: 10.000 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 4,295 psi
Internal gradient: 0.162 psi/ft
Calculated BHP 6,233 psi

No backup mud specified.

Minimum design factors:

Collapse:
Design factor 1.125

Burst:
Design factor 1.00

Tension:
8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.60 (B)

Tension is based on air weight.
Neutral point: 10,179 ft

Estimated cost: 69,460 ($)

Environment:
H2S considered? No
Surface temperature: 60 °F
Bottom hole temperature: 192 °F
Temperature gradient: 1.10 °F/100ft
Minimum section length: 600 ft

Non-directional string.

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ($)
3	600	5.5	17.00	S-95	LT&C	600	600	4.767	3881
2	9800	5.5	17.00	N-80	LT&C	10400	10400	4.767	55237
1	1599	5.5	17.00	S-95	LT&C	11999	11999	4.767	10342

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
3	312	6979	22.39	4392	9190	2.09	204	392	1.92 J
2	5403	6173	1.14	5975	7740	1.30	193.8	348	1.80 J
1	6233	8580	1.38	6233	9190	1.47	27.2	392	14.42 J

Devon Energy

Date: February 15,2001
Oklahoma City, Oklahoma

Remarks:
Collapse is based on a vertical depth of 11999 ft, a mud weight of 10 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

DEVON ENERGY CORPORATION (Nevada)

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 required at the rig sight for all rig crews and company personnel that have not previously received such training. This instruction will be provided 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 reach 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.

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 10 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) Two (2) - thirty minute rescue packs to be located at the designated briefing areas.

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 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

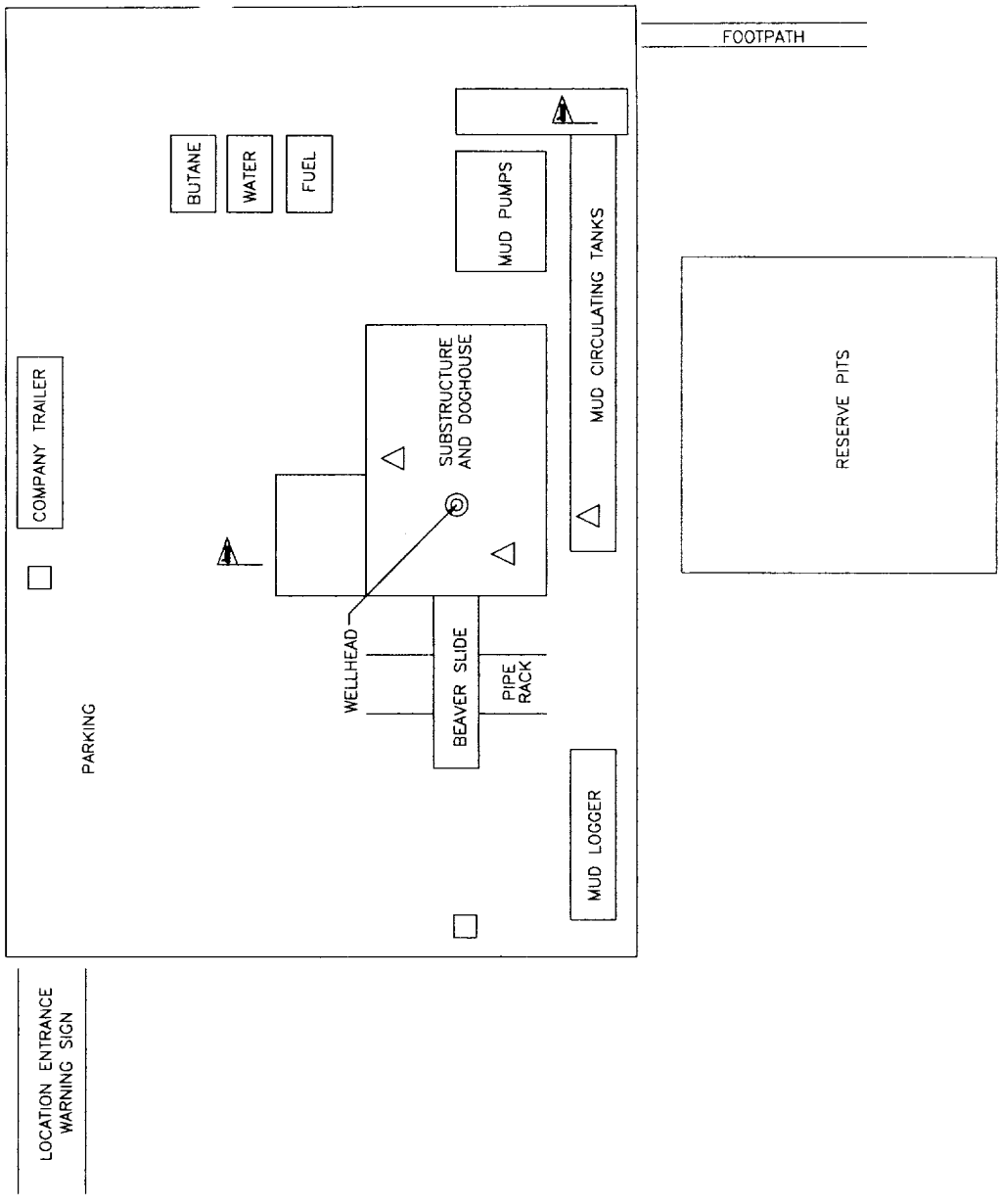
(a) All drill strings, casings, tubing, wellhead, blowout preventers, drilling spools, kill lines, choke manifold and lines, and valves shall be suitable for H2S service.

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

DEVON SFS OPERATING, INC.

CEDAR LAKE (MORROW GAS)

EDDY COUNTY, NEW MEXICO

POWER "31" FED #3

H2S PLAN

FILE: POWER-31 FEDERAL-3 EB 02/2001