(August, 1999) 484 UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT N.M. Oil Cons. DIV-Dist. 2 1301 W. Grand Avenue Artesia, NM 88210

Form approved OMB No. 1004-0136 Expires November 30, 2000

C15F

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. TYPE OF WORK: ☒ DRILL ☐ REENTER

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

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

3a. ADDRESS AND TELEPHONE NO.
20 NORTH BROADWAY, SUITE 1500, OKC, OK 73102

3b. TELEPHONE (Include area code).
(405) 235-3611

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements)**
At surface (O) 1900' FEL & 1300' FSL

At top proposed prod. zone

RECEIVED MAY 2002 OCD ARTESIA

5. LEASE DESIGNATION AND SERIAL NO.
NM-54856

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME
27986

8. FARM OR LEASE NAME, WELL NO.
Crow Flat "29" Fed. Com # 4

9. API WELL NO.
30-015-32319

10. FIELD AND POOL, OR WILDCAT
Crow Flat (Morrow)

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA
Sec. 29-T16S-R28E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
12 mile NE or Artesia, New Mexico

12. COUNTY OR PARISH
Eddy

13. STATE
New Mexico

15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT (Also to nearest drlg. unit line if any)	1500'	16. NO. OF ACRES IN LEASE	960.00	17. Spacing Unit dedicated to this well	~~160~~ 320
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	1950'	19. PROPOSED DEPTH	9800'	20. BLM/BIA Bond No. on file	Rotary
21. ELEVATIONS (Show whether DF, RT, GR, etc.)	3566' GR	22. APPROX. DATE WORK WILL START*	November 2001	23. Estimated duration	45 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the authorized officer.

Devon SFS proposes to drill a Morrow well to TD 9800'± 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
Exhibit #1 = Blowout Prevention Equipment
Exhibit #2 = Location and Elevation Plat
Exhibit #3 = Road Map and Topo Map
Exhibit #4 = Wells Within 1 Mile Radius
Exhibit #5 = Rotary Rig Layout
Exhibit #6 = Casing Design
H_2S Operating Plan
Archeological clearance report

The undersigned accepts all applicable terms, conditions, stipulations and restrictions concerning operations conducted on the leased land or portions thereof, as described above

Bond Coverage: Nationwide
BLM Bond #: UT-1194

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

Karst Controlled Water Basin

25. Signature	Name (Printed/Typed)	Date
Title: Sr. Operations Engineer	Jim Linville	4/16/02
Approved by (signature) /S/ JOE G. LARA	Name (Printed/Typed) /S/ JOE G. LARA	Date MAY 29 2002
Title ACTING FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

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, are attached.

APPROVAL FOR 1 YEAR

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction

*(Instructions on reverse)

DRILLING PROGRAM

Attached to Form 3160-3
Devon SFS Operating, Inc.
CROW FLAT 29 FEDERAL COM # 4
(O) 1900' FEL & 1300' FSL, Section 29, T-16-S, R-28-E
Eddy County, New Mexico

1. Geologic Name of Surface Formation

   Alluvium

2. Estimated Tops of Important Geologic Markers

Premier	1800'
Abo	5300'
Wolfcamp	6500'
Atoka	8900'
Morrow	9200'
Mississippian	9600'
TD	±9,800'

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:	None expected in area
Gas:	Morrow @ 9200' – 9,600'

   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 2000' 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 7000'.

4. Casing Progr: ım

INTERVALS	LI NGTH	CASING	BURST PSI	COLLAPSE PSI	TENSION LBS	TORQUE FT-LBS
Surface						
0 - 500'	500'	13 3/8" 48# H-40 STC	1730	740	322M	3220
Intermediate						
0 – 2000'	:000'	8 5/8" 32# J-55 STC	3930	2530	372M	4020
Production						
0 - 1700'	.700'	5 1/2" 17# L-80 LTC	7740	5359	338M	3410
1700' - 7500'	;800'	5 ½" 17# J-55 LTC	5320	4680	247M	2390
7500' - 9800'	?300'	5 1/2" 17# L-80 LTC	7740	6290	338M	3410

Cementing P ogram

HOLE SIZE	DEPTH	CEMENT	YIELD CF/SX	% EXCESS	TOC	WOC HRS
Surface						
17 ½"	500'	**Lead:** 250 sxs lite + 2% CACL2 +1/4#/sx celloflk (12.7#/gal)	1.88	100	Surf.	18
		Tail: 200 sxs Cl "C" + 2% CaCl2 + 1/4#/sx celloflk (14.8#/gal)	1.35			
Intermediate						
12 ¼"	2000'	**Lead:** 350 sxs lite + 5% +1/4#/sx celloflk (12.7#/gal)	2.1	100	Surf.	12
		Tail: 200 sxs Cl "C" + 2% CaCl2 + 1/4#/sx celloflk (14.8#/gal)	1.35			
Production						
7 7/8"	9800'	**Lead:** 650 sx Class H w/3% KCl + 1% FL-25 + .1% sodium metasillicate + 5#/sx gilsonite + ¼#/sx celloflake + .003 gal/sx FP-13L	1.6	30	7000'	24

The cement \ olumes for the 5 1/2" casing will be revised pending the caliper measuremen : from the open hole logs.

5. Minimum Spe cifications for Pressure Control

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of a (3M system) double ram type (3000 psi WP) preventer and a bag-type (Hydril) preventer (3000 psi WP). Both units will be hydraulically operated and the ram type preventer will be equipped with blind rams on top and 5 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 brine with starch mud systems. Depths of systems are as follows.

Depth	Type	Weight (ppg)	Viscosity (1/sec)	Water Loss (cc)
0' – 2000'	Fresh Water	8.5	40	No control
2000' – 5200'	Fresh Water	8.5	40	No control
5200' – 8800'	Cut Brine	9.0	35-40	No control
8800' – TD	CutBrine/Starch	9.2 – 9.8	38-40	6 - 10

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. 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 138 degrees and maximum bottom hole pressure is 4(15 psi. No Hydrogen sulfide or other hazardous gases or fluids have been encountered, reported or are known to exist at this depth in this area. 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 in November 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.

SURFACE USE AND OPERATING PLAN

Attached to Form 3160-3
CROW FLAT 29 FE)ERAL COM # 4
(O) 1900' FEL & 130(' FSL, Section 29, T-16-S, R-28-E

Eddy County, New M(xico

1. Existing Roac s

   A. The well s te and elevation plat for the proposed **CROW FLAT 29 FEDERAL COM # 4** are reflected on Exhibit #2.

   B. All roads i nto the location are depicted in Exhibit #3. New construction from the existir g lease road will be used to access the location. New construction will confor n to the specifications outlined in Item #2 below.

   C. Directions to location: From Jct. Hwy 82 & Co. Road 202, go North & North East on C O. Rd. 202 4.1 miles to a lease road Lt at a pipeline metering station; th ence go Northwest on lease road along pipelines for 0.1 mile to a lease roa(rt; thence go Northerly on lease road 2.6 miles, then continue on lease roa(easterly & northeasterly 0.7 mile to proposed lease road.

2. Proposed Ac :ess Road

   Exhibit #3 sh)ws the existing lease road. Access to this location will require the construction of about [illegible]' of proposed access road. All new construction will adhere to the following.

   A. The maxi num width of the road will be 15'. It will be crowned and made of 6" of rolle l and compacted caliche. Water will be deflected, as necessary, to avoid acc mulation and prevent surface erosion.

   B. Surface n aterial will be native caliche. This material will be obtained from a BLM appr)ved pit nearest in proximity to the location. The average grade will be appro> imately 1%.

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

3. Location of E :isting Wells

Exhibit #4 sh ws all existing wells within a one-mile radius of the proposed CROW FLAT 29 FEDERAL COM # 4.

4. Location of E :isting and/or Proposed Facilities

A. In the eve it the well is found productive, the necessary production equipment will be ins alled at the well site.

B. If the well is productive, rehabilitation plans are as follows.

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

2) Calich e from unused portions of the drilling pad will be removed. The origina topsoil from the well site will be returned to the location. The drill site wi then be contoured to the original natural state.

5. Location and Type of Water Supply

The CROW F LAT 29 FEDERAL COM # 4 will be drilled using a combination of brine and fre h water mud systems (outlined in Drilling Program). The water will be obtained f om commercial sources and will be transported over the existing and propose 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 Rotary rig layout is shown on Exhibit #5. 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 s deemed commercially productive, the reserve pit will be restored as describ ed in 10 (A) within 120 days subsequent to the completion date. Caliche fr m 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 neces ;ary to operate
the well. "hese unused areas of the drilling pad will be contoured, as close as possibl e, to match the original topography.

11. Surface Own ership

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

Road routes have been approved by the BLM.

The surface l ocation will be restored as directed by the BLM.

12. Other Inform ation

A. The proje ct area is located in shallow sandy loams with Ogallala gravels and exposure of limestone caliche. Vegetation in the area consists of little leaf sumac, ac acia, grass, and creosote..

B. There is n o permanent water in the immediate area.

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

D. A Cultural Resources Examination will be completed and forwarded to the BLM offic e 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.

Jim L. Linville, Jr.
Senior Operations Engineer

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

(405) 228-4281 (office)
(405) 330-4151 (home)

Don Mayberry
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 , 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: 10/15/01
Jim L. Linville, Jr.
Senior Operations Engineer

Attachment to Exhibit #1
NOTES REGARDING BLOWOUT PREVENTERS
Devon SFS Operating, Inc.
CROW FLAT 29 FEDERAL COM # 4
(O) 1900' FEL & 1300' FSL, Section 29, T-16-S, R-28-E
Eddy County, New Mexico

1. Drilling nipple wil 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 prevente r and all associated fittings will be in operable condition to withstand a minir num 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 ›e available on the rotary rig floor at all times.

6. All choke lines w ll be anchored to prevent movement.

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

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

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

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

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

MINIMUM BLOWOUT PREVENTER REQUIREMEI

3,000 psi Working Pressure

3 MWP

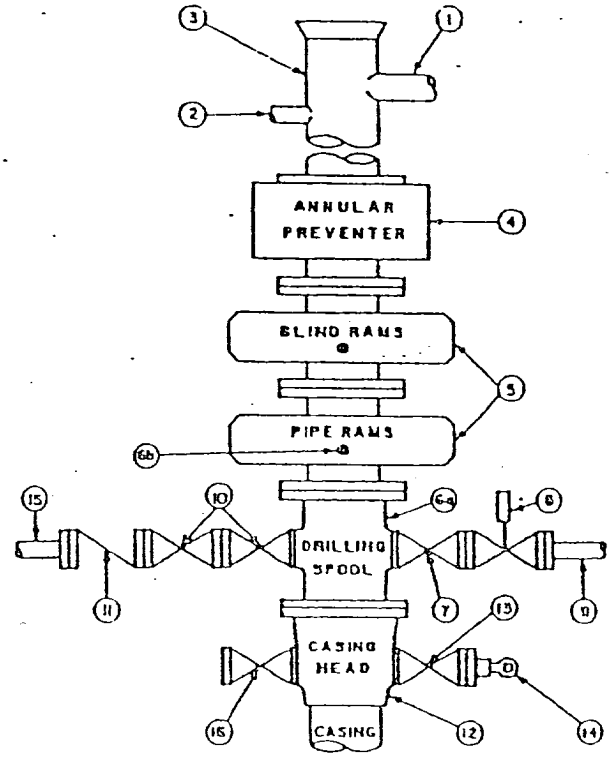
EXHIBIT # 1

STACK RE OUIREMENTS

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 hydr ulically operated rams			
6a	Drilling spool with 2" min. ki line and 3" min choke line outlets			
		or		
6b	2" min. kill line and 3" min. hoke line outlets in ram. (Alternate to a above.)			
7	Valve	Gate ☐ Plug ☐	3-1/8"	
8	Gate valve—power operatec		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 ma nifold			2"

OI TIONAL			
16	Flanged valve	1-13/16"	

CONFIGURATION A



CONTRACTOR'S OPTION TO FU RNISH:

1. All equipment and connection: above bradenhead or casinghead. W rking pressure of preventers to be 3, 000 psi, minimum.
2. Automatic accumulator (80 ga: on, minimum) capable of closing E OP in 30 seconds or less and, holding tl em closed against full rated working pres ure.
3. BOP controls, to be located ne ar driller's position.
4. Kelly equipped with Kelly cock
5. Inside blowout preventer or it equivalent on derrick floor at a l times with proper threads to fit pipe eing used.
6. Kelly saver-sub equipped with rubber casing protector at all times.
7. Plug type blowout preventer te stor.
8. Extra set pipe rams to fit drill p pe in use on location at all times.
9. Type RX ring gaskets in place of Type R.

MEC TO FURNISH:

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

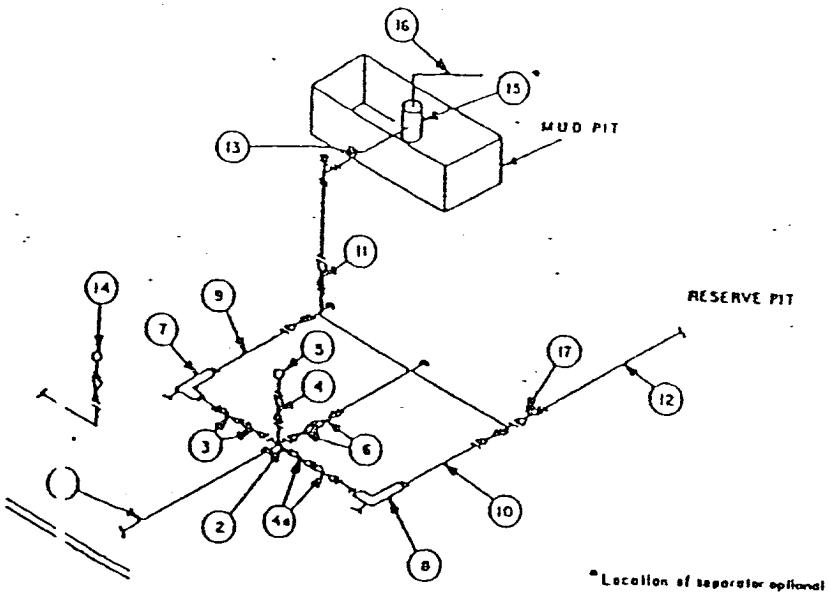
GENERAL NOTES:

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

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

3 MWP - 5 MWP - 10 MWP



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

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240

DISTRICT II
811 South First, Artesia, NM 88210

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

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, New Mexico 87504-2088

Form C-102
Revised March 17, 1999

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
	75720	Crow Flats Morrow

Property Code	Property Name	Well Number
28029	CROW FLAT "29" FEDERAL	4

OGRID No.	Operator Name	Elevation
20305	DEVON SFS OPERATING, INC	3566

Surface Location

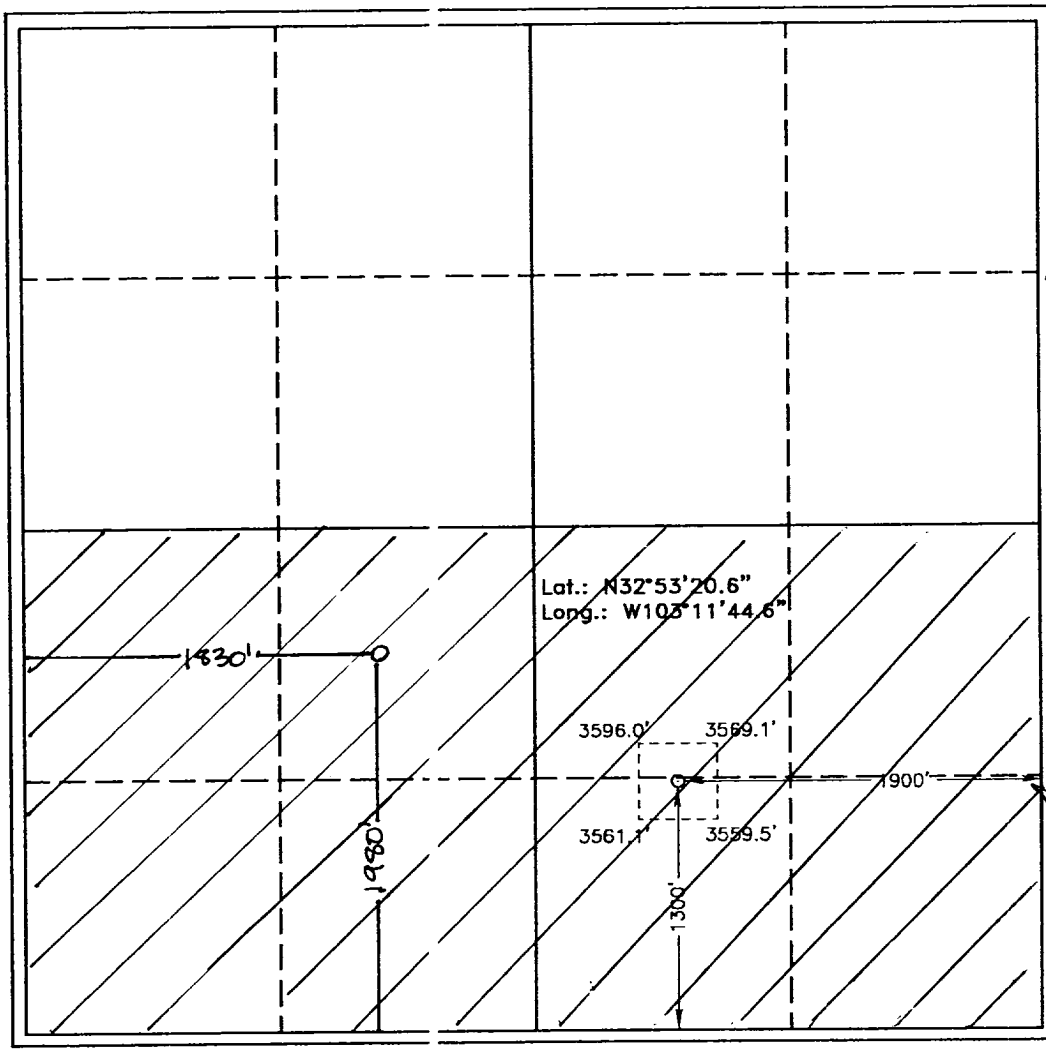
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	29	16 S	28 E		1300	SOUTH	1900	EAST	EDDY

Bottom Hole Location If Different From Surface

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

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
160	Infill		

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



OPERATOR CERTIFICATION

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

Signature

Jim L. Linville, Jr
Printed Name

Sr. Operations Engineer
Title

10/15/01
Date

SURVEYOR CERTIFICATION

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

SEPTEMBER 20, 2001

Date Surveyed

Signature & Seal of Professional Surveyor

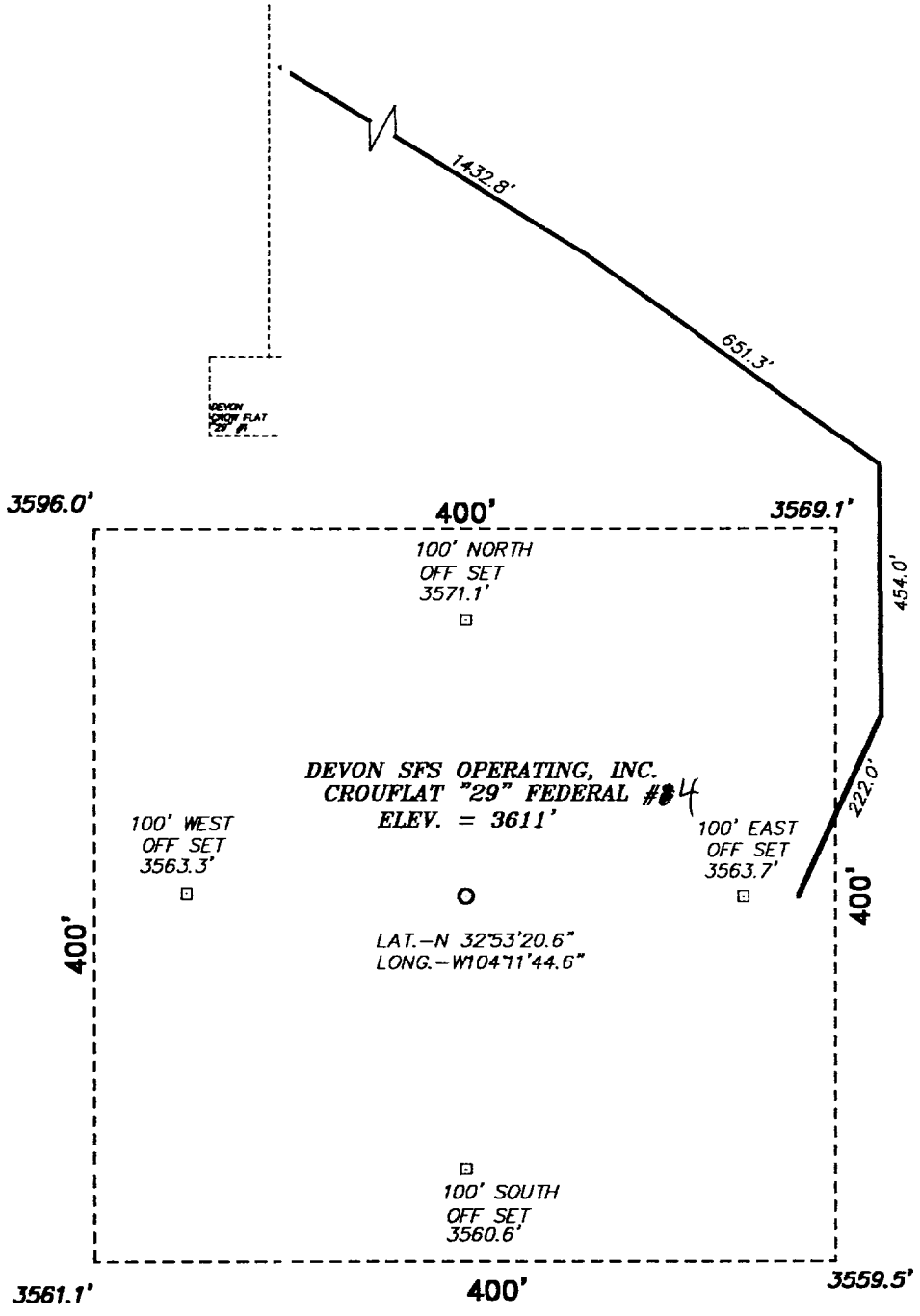
GARY L. JONES
NEW MEXICO
7977
REGISTERED PROFESSIONAL LAND SURVEYOR

W.O. No. 1872

Certificate No. Gary L. Jones 7977

JLP BASIN SURVEYS

SECTION 29, TOWNSHIP 16 SOUTH, RANGE 28 EAST, N.M.P.M.,
EDDY COUNTY, **NEW MEXICO.**



100 0 100 200 FEET

SCALE: 1" = 100'

Directions to Location:

FROM THE JUNCTION OF US HWY 82 & CO. RD. 202, GO NORTH & NORTH EAST ON 202 FOR 4.1 MILES TO A LEASE ROAD LT; THENCE NORTHWEST ON LEASE ROAD ALONG PIPELINES FOR 0.1 MILE TO A LEASE ROAD RT; THENCE NORTHERLY ON LEASE ROAD 2.6 MILES; THENCE CONTINUE ALONG LEASE ROAD EASTERLY AND NORTHEASTERLY FOR 0.7 MILE TO LEASE ROAD TO THE CROW FLATS "29" FED. #1 THEN SOUTH TO PROPOSED LEASE ROAD.

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

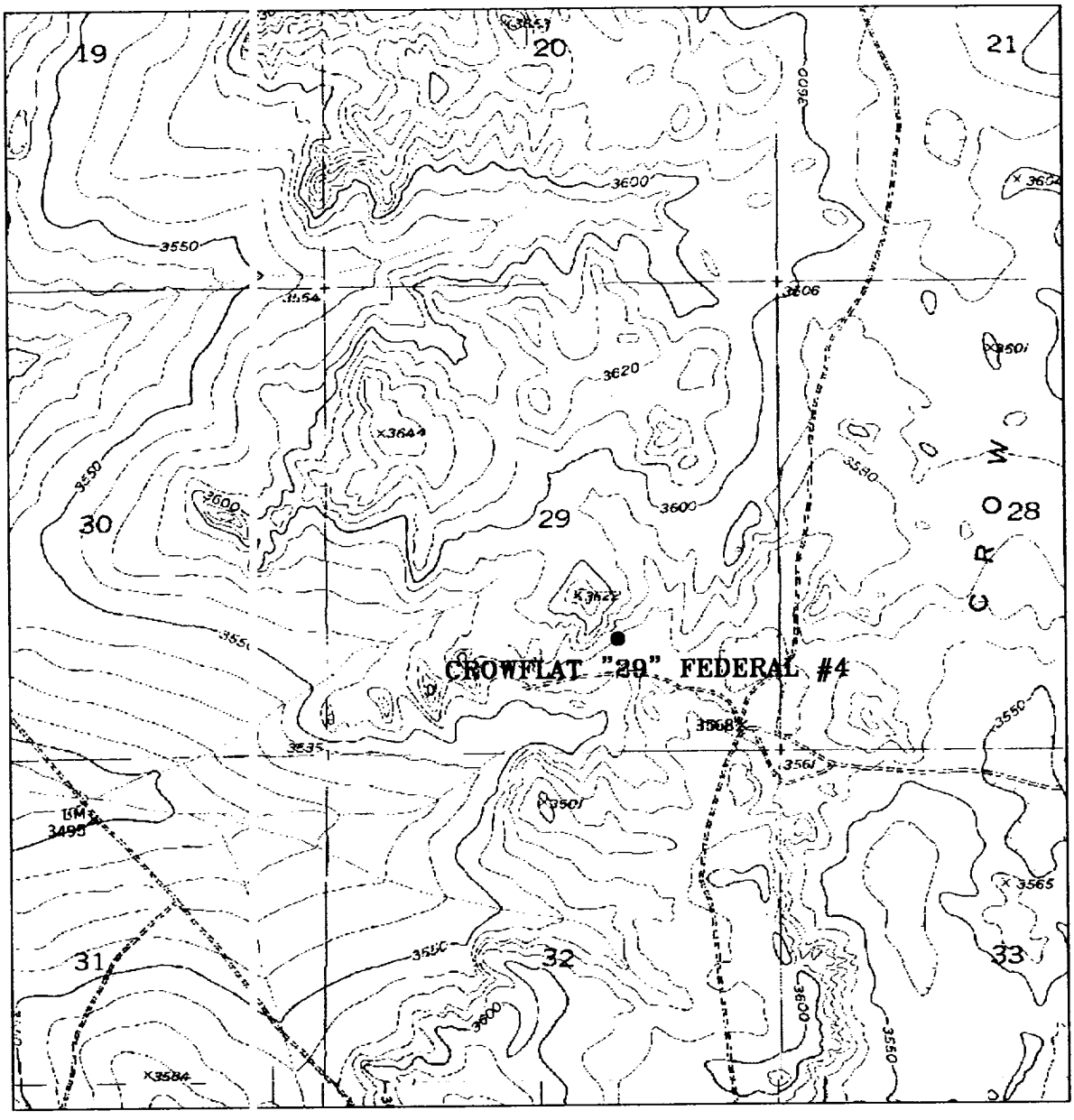
W.O. Number: 1872	Drawn By: JAMES PRESLEY
Date: 09/21/01	Disk: JLP #1 – CON1872A

DEVON SFS OPERATING, INC.

REF: CROW FLAT "29" FED. #4 / Well Pad Topo

CROW FLAT FEDERAL # 4 LOCATED 1300' FROM THE SOUTH LINE AND 1900' FROM THE EAST LINE OF SECTION 29, TOWNSHIP 16 SOUTH, RANGE 28 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 09/20/01	Sheet 1 of 1 Sheets



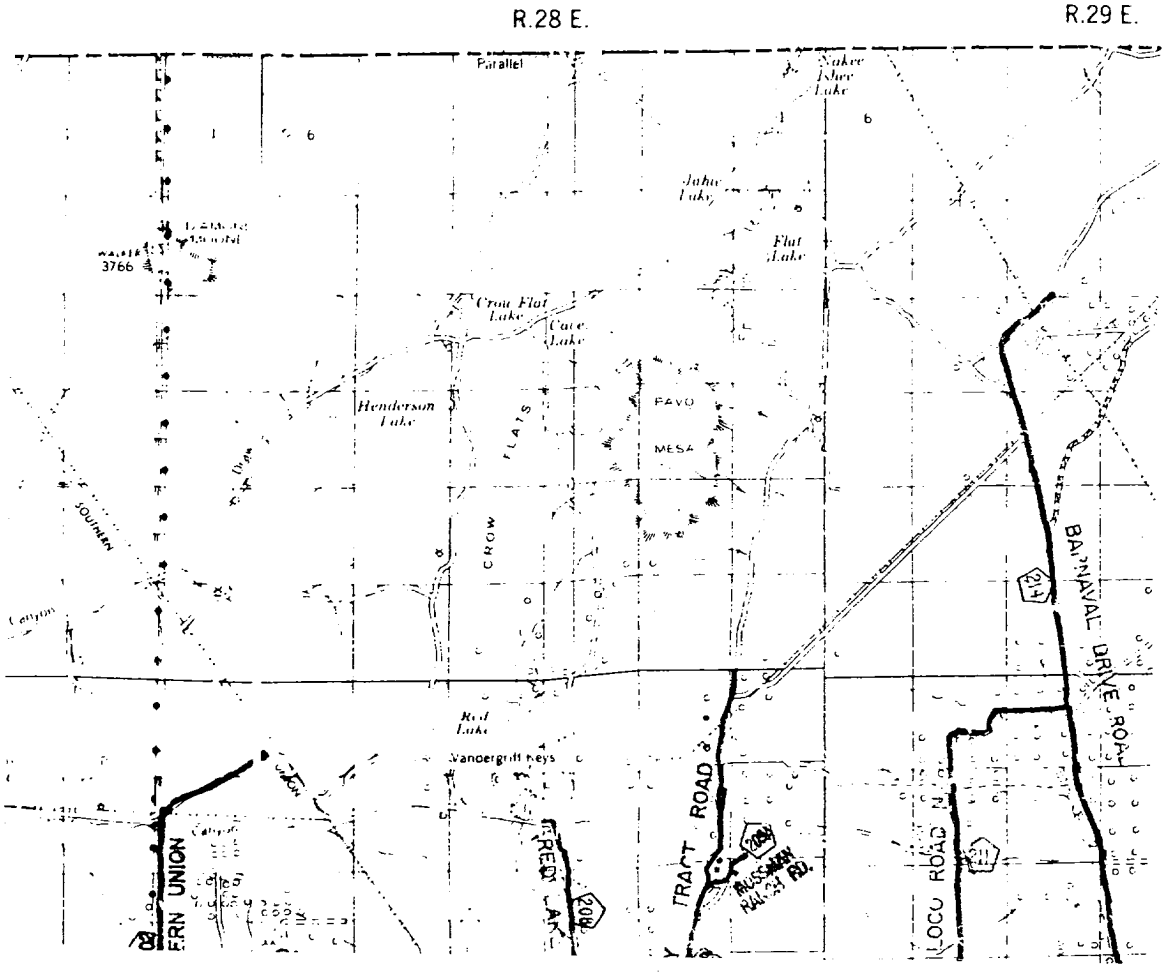
CROWFLAT "29" FEDERAL #4
Located at 1300' FSL and 1900' FEL
Section 29, Township 16 South, Range 28 East,
N.M.P.M., Eddy County, New Mexico.

basin surveys
focused on excellence in the oilfield
P.O. Box 1786
1120 N. West County Rd.
Hobbs, New Mexico 88241
(505) 393-7316 – Office
(505) 392-3074 – Fax
basinsurveys.com

W.O. Number:	187AA – JLP #1
Survey Date:	09/20/01
Scale:	1" = 2000'
Date:	09/21/01

DEVON SFS OPERATING, INC.

C O U N



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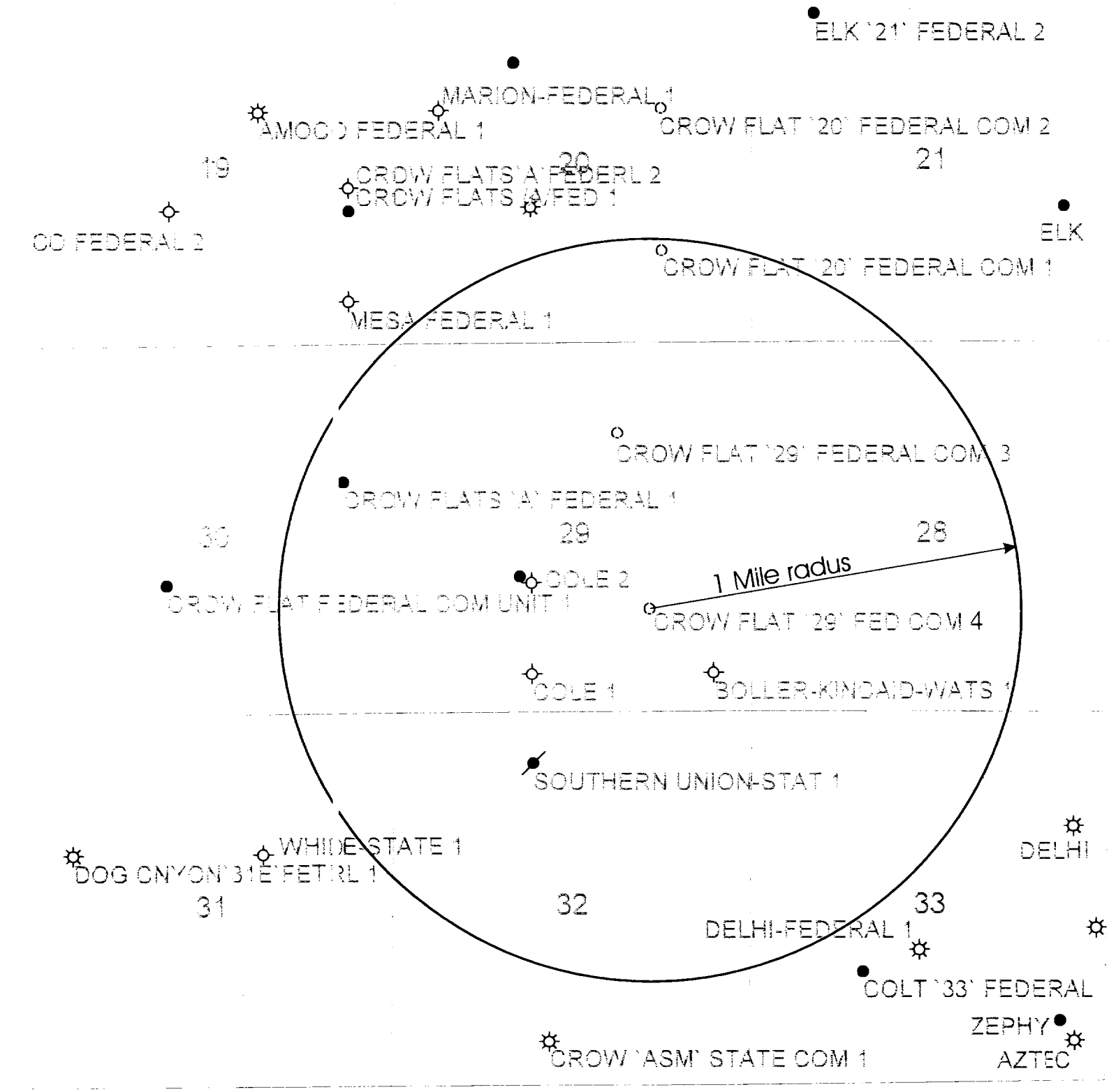
W.O. Number:	1872AA – JLP #1
Survey Date:	09/20/01
Scale:	1" = 2000'
Date:	09/21/01

DEVON SFS OPERATING, INC.

T 16 S - R 28 E



devon ENERGY CORPORATION

PERMIAN BASIN

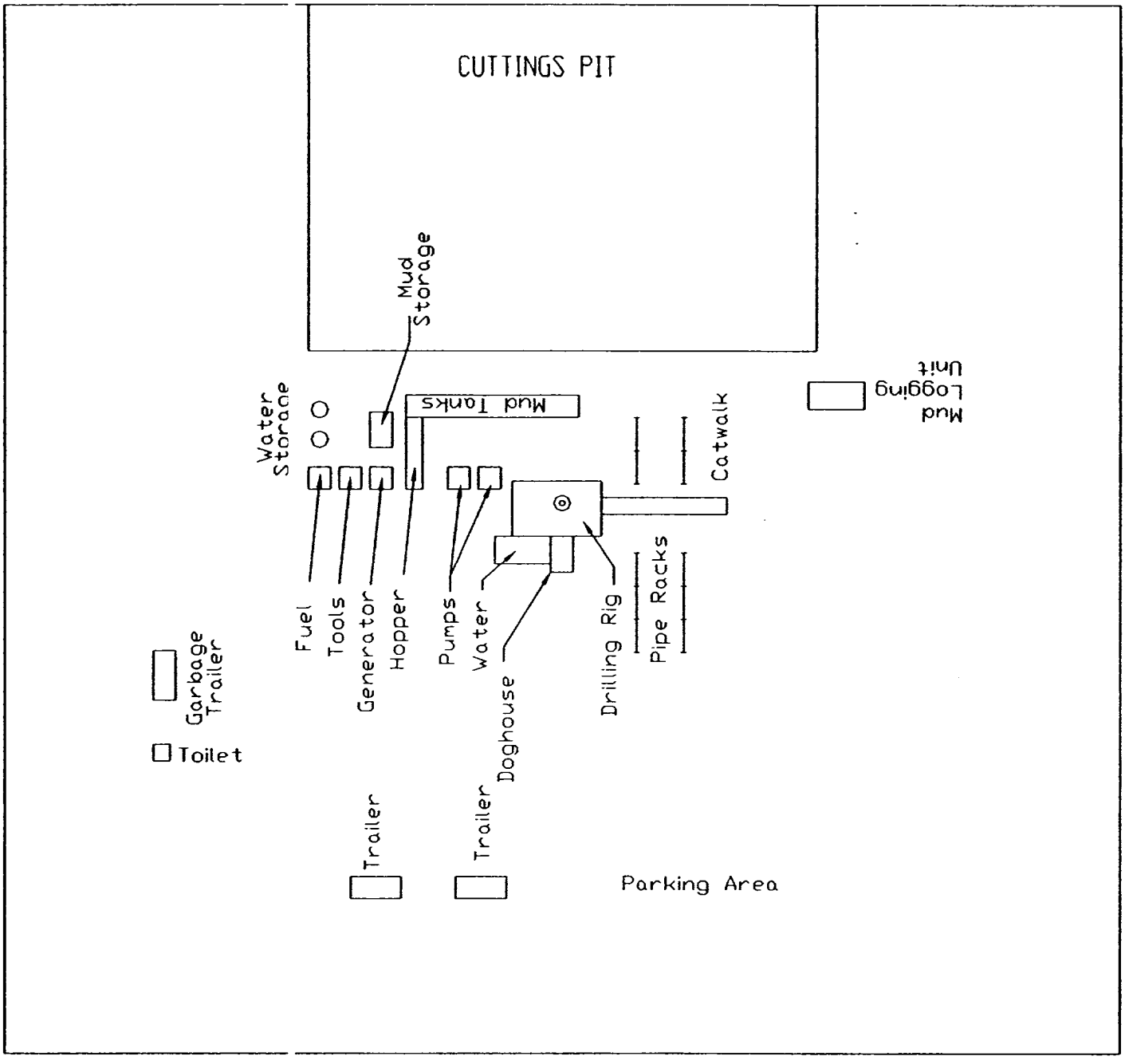
CROW FLAT AREA
Eddy County, New Mexico

Exhibit 4
Crow Flat 29 Fed Com 4
1 Mile Radius

Scale in Feet

0 2000 4000

9/2001 Crowflat 29 Fed Com 4.cdr



devon
SFS OPERATING INC.

CROW FLAT 29 FEDERAL 1
CHAVES COUNTY, NEW MEXICO

Drilling Pad
EXHIBIT 5

N

EXHIBIT 6

Well name:	**Crow Flat 29-4**
Operator:	**Devon Energy**
String type:	Surface
Location:	Eddy County, New Mexico

Design parameters:

Collapse
Mud weight: 9.000 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 809 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 869 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 buoyed weight.
Neutral point: 434 ft

Environment:
H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 82 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 500 ft

Non-directional string.

Re subsequent strings:
Next setting depth: 2,000 ft
Next mud weight: 10.100 ppg
Next setting BHP: 1,049 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 2,000 ft
Injection pressure 2,000 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	500	13.375	48.00	H-40	ST&C	500	500	12.59	6201

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	234	740	3.17	869	1730	1.99	20.8	322	15.45 J

Prepared by: Terry Henderson, Devon Energy
Date: September 14,2001
Oklahoma City, Oklahoma

Remarks:
Collapse is based on a vertical depth of 500 ft, a mud weight of 9 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.

Well name:	**Crow Flat 29-4**
Operator:	**Devon Energy**
String type:	Intermediate
Location:	Eddy County, New Mexico

Design parameters:

Collapse
Mud weight: 10.100 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 4,760 psi
Internal gradient: 0.319 psi/ft
Calculated BHP 7,398 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 buoyed weight.
Neutral point: 1,700 ft

Environment:
H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 103 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 1,000 ft

Non-directional string.

Re subsequent strings:
Next setting depth: 9,800 ft
Next mud weight: 9.600 ppg
Next setting BHP: 4,887 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 9,800 ft
Injection pressure 9,800 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	2000	8.625	32.00	J-55	ST&C	2000	2000	7.875	15958

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	1049	2530	2.41	2398	3930	1.64	54.4	372	6.84 J

Prepared by: Terry Henderson, Devon Energy

Date: September 28,2001
Oklahoma City, Oklahoma

Remarks:
Collapse is based on a vertical depth of 2000 ft, a mud weight of 10.1 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.

Well name:	**Crow Flat 29-4**
Operator:	**Devon Energy**
String type:	Production
Location:	Eddy County, New Mexico

Design parameters:

Collapse
Mud weight: 10.100 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 3,966 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 5,142 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: 8,299 ft

Estimated cost: 47,814 ($)

Environment:
H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 212 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 1,000 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	1700	5.5	17.00	L-80	LT&C	1700	1700	4.767	10771
2	5800	5.5	17.00	J-55	LT&C	7500	7500	4.767	22470
1	2300	5.5	17.00	L-80	LT&C	9800	9800	4.767	14573

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	892	5359	6.01	4170	7740	1.86	166.6	338	2.03 J
2	3935	4680	1.19	4866	5320	1.09	137.7	247	1.79 J
1	5142	6290	1.22	5142	7740	1.51	39.1	338	8.64 J

Prepared by: Terry Henderson, Devon Energy
Date: September 14,2001
Oklahoma City, Oklahoma

Remarks:
Collapse is based on a vertical depth of 9800 ft, a mud weight of 10.1 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.

EXHIBIT # 7

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 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 Cor trol Equipment

(a) I ouble ram BOP with a properly sized closing unit and pipe rams to a :commodate all pipe sizes in use.

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

2. H2S Dete ction And Monitoring Equipment

(a) T hree (3) H2S detection monitors will be placed in service at the l ocation. One monitor will be placed near the bell nipple on the rig f oor; one will be placed at the rig substructure; and, one will be at the v orking mud pits or shale shaker. This monitoring system will have v arning lights and audible alarms that will alert personnel when H2S l evels reach 10 ppm.

(b) C ne (1) Sensidyne Pump with the appropriate detection tubes will also b : available to perform spot checks for H2S concentrations in any r mote or isolated areas.

3. Protective Equipment For Essential Personnel

Protective eq uipment will consist of the following:

(a) F ur (4) - five minute escape packs located at strategic points around th : rig.

(b) T vo (2) - thirty minute rescue packs to be located at the designated b iefing areas.

4. Visual Wa ning System

Visual warni g system will consist of the following:

(a) T vo wind direction indicators.

(b) O e condition / warning sign which will be posted on the road - p oviding direct access to the location. The sign will contain lettering o sufficient size to be readable at a reasonable distance from the in mediate location. The sign will inform the public that a hydrogen s lfide 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.

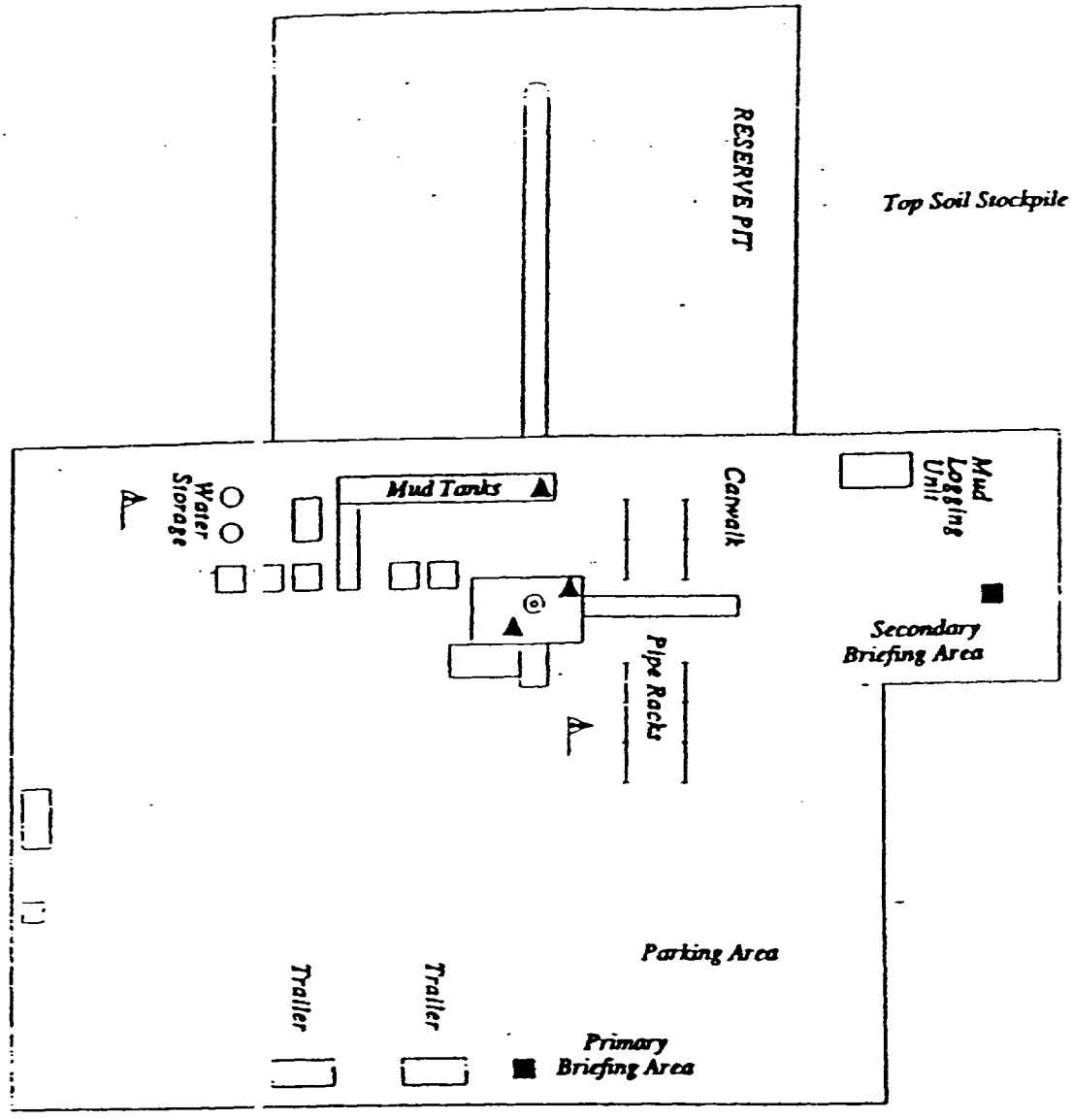
7. Communication

(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.

EXHIBIT #



▲ 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

Prevailing Wind

N

devon

WEST RED LAKE AREA

EDDY COUNTY, NEW MEXICO

H2S PLAN

Scale in Feet

25 0 25 50 75 100

File O:\...\H2S-Plan 9/95

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Colorado State Office
2850 Youngfield Street
Lakewood, Colorado 80215-7076

IN REPLY REFER TO:
3106
COC15976 et al.

November 22, 2000

NOTICE

Devon Energy Production Company, L. P. :
20 N. Broadway, Suite 1500 :
Oklahoma City, OK 73102 :

Oil and Gas Leases

Merger Recognized

Acceptable evidence has been received in this office concerning the merger of Devon Energy Corporation (NV) and PennzEnergy Exploration and Production Company, LLC with and into Devon Energy Production Company, L.P., with Devon Energy Production Company, L.P. as the surviving entity.

For our purposes, the merger is recognized effective January 20, 2000 the date the Secretary of State of Colorado certified the merger.

The oil and gas lease files identified on the exhibit, supplied by your office, have been noted as to the merger. We have not abstracted the lease files to determine if the entity affected by the merger holds an interest in the leases identified nor have we attempted to identify leases where the entity is the operator on the ground maintaining no vested record title or operating interests. Minerals Management Service and all applicable Bureau of Land Management State Offices of this merger by a copy of this notice. If additional documentation for changes of operator are required by our Field Offices, you will be contacted by them.

If you have any questions regarding this correspondence, you may contact me at (303) 239-3768, or FAX (303) 239-3799.

Martha L. Maxwell

Martha L. Maxwell, Land Law Examiner
Fluid Minerals Adjudication

Enclosure
Lease Exhibit