

7030
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
N.M. DIV-Dist. 2
1301 W. Grand Avenue
Artesia, NM 88210
SUBMIT IN TRIPLICATE*
(See other instructions on back of this form)

Form approved.

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 ENERGY PRODUCTION COMPANY, L.P.

3. ADDRESS AND TELEPHONE NO.
20 N. BROADWAY, SUITE 1500, OKC, OK 73102 (405) 235-2611

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface 660' FNL & 1480' FWL, Unit C, Section 11-T22S-R27E, Eddy Cnty, NM

At top proposed prod. zone (same)

SUBJECT TO LIKE
APPROVAL BY STATE

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
Approximately 3 miles east of Carlsbad, New Mexico

15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT.
1480'
(Also to nearest drlg. unit line if any)

16. NO. OF ACRES IN LEASE
320.00

17. NO. OF ACRES ASSIGNED TO THIS WELL
320.00

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

19. PROPOSED DEPTH
12,250'

20. ROTARY OR CABLE TOOLS*
Rotary

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

GL 3099'

CARLSBAD CONTROLLED WATER BASIN

22. APPROX. DATE WORK WILL START*
November, 2003

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"	48.0	500'	460 sx (est TOC @ surface)
12 1/4"	J-55 9 5/8"	36.0	2,400'	795 sx (est TOC @ surface)
8 3/4"	HCP-110 5 1/2"	17.0	12,250'	787 sx (est TOC @ 4800')

Devon Energy proposes to drill to total depth 11,500'± 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
Exhibit #8 = H₂S 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 below:

Lease #: NM-NM64583

Legal Description: W/2 of Section 11-T22S-R27E

Bond Coverage: Nationwide

BLM Bond #: CO-1104

(Exhibit #9)

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.

SIGNED

TITLE

Gerald T. Pepper
Ops. Engr. Advisor

(405) 552-4513

DATE July 23, 2003

*(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:

ACTING

APPROVED BY /s/ Joe G. Lara

TITLE

FIELD MANAGER

DATE

28 AUG 2003

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

DRILLING PROGRAM

Attached to Form 3160-3
Devon Energy Production Company, L.P.
CHASE "11" FEDERAL COM. #2
660' FNL & 1480' FWL, Unit C, Section 11-T22S-R27E
Eddy County, New Mexico

1. Geologic Surface Formation - Sand
2. Estimated Tops of Important Geologic Markers

Delaware	2,220'
Bone Spring Lime	5,360'
Base Leonard	8,530'
Wolfcamp Pay	9,620'
Lower Wolfcamp Shale	9,850'
Strawn Lime	10,350'
Atoka	10,650'
Upper Morrow Clastics	11,275'
Middle Morrow Lime	11,500'
Lower Morrow Shale Mkr	11,700'
Barnett Shale	11,890'
TD	±12,250'

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 350' / or none expected

Oil: Bone Spring, Wolfcamp

Gas: Bone Spring, Wolfcamp, Morrow

No other formations are expected to yield oil, gas or fresh water in measurable volumes. If encountered, the surface fresh water sands will be protected by setting 13 3/8" casing at 500' and circulating cement back to surface. The intermediate intervals will be protected by setting 9 5/8" casing at 2,400' and circulating cement to surface. The production intervals will be isolated by setting 5 1/2" casing to total depth and circulating cement to approximately 4,800'.

4. Casing Program

<u>Hole Size</u>	<u>Interval</u>	<u>Casing OD</u>	<u>Weight, ppf</u>	<u>Grade</u>	<u>Type</u>
17 1/2"	0-500'	13 3/8"	48	H-40	ST&C
12 1/4"	0-2,400'	9 5/8"	36	J-55	ST&C
8 3/4"	0-12,250'±	5 1/2"	17	HCP-110	LT&C

Cementing Program

WITNESS

13 3/8" Surface Casing Cement to surface - with approximately 210 sx Poz/Class C
+ 250 sx Class C

9 5/8" Intermediate Casing Cement to surface - with approximately 545 sx Poz/Class C
+ 250 sx Class C

5 1/2" Production Casing Cement to ±4,800' - with approximately 787 sx Super C Modified
The cement volumes for the 5 1/2" casing will be revised 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 (5M system) double ram type (5000 psi WP) preventer and a bag-type (Hydril) preventer (5000 psi WP). Both units will be hydraulically operated and the ram type preventer will be equipped with blind rams on top and drill pipe rams on bottom. Both BOP's will be installed on the 9 5/8" surface casing and utilized continuously until total depth is reached. As per BLM Drilling Operations Order #2, prior to drilling out the 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 5000 psi WP rating.

6. Types and Characteristics of the Proposed Circulating Mud System

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

<u>Depth</u>	<u>Type</u>	<u>Weight (ppg)</u>	<u>Viscosity (1/sec)</u>	<u>Water Loss (cc)</u>
0' – 500'	Fresh water/paper	8.5-10	29 - 34	No control
500' – 2400'	Fresh wtr/paper/lime	8.4 – 10.5	28 - 34	No control
2400' – TD	Cut Brine/paper/lime/gel/ Dris-pac/soda ash/starch	8.4– 10.8	29 - 38	10.5 or less

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 the 9 5/8" casing shoe until the 5 1/2" casing is cemented.

8. Logging, Testing and Coring Program

- A. No cores or drill stem tests are planned at this time.
- B. The open hole electrical logging program will be as follows.

Schlumberger Platform Express Azimuthal Laterlog/MCFL/NGT and Three Detector Litho-Density Compensated Neutron/NGT logs from TD to base of surface casing.

A formation pressure testing tool and a formation imaging tool may be run.

- C. Any additional testing, deemed appropriate by Devon's geologist or engineer, 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 tests.

9. Abnormal Pressures, Temperatures and Potential Hazards

No abnormal pressures or temperatures are foreseen. The anticipated bottom hole temperature at total depth is 246 degrees and maximum bottom hole pressure is 6900 psig. Hydrogen sulfide gas may be encountered in this area. See attached Exhibit 8 "Hydrogen Sulfide Drilling Operations Plan". Lost circulation intervals have been encountered in adjacent wells.

10. Anticipated Starting Date and Duration of Operations

The Carlsbad, New Mexico, BLM office has performed the onsite inspection for the proposed pad site of this location.

A cultural resources examination has been performed by Southern New Mexico Archeological Resources, Inc., in Bent, New Mexico, as report no. SNMAS-03NM-11102 (see attached copy) and sent to the BLM in Carlsbad.

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 November, 2003. The drilling operation should require approximately 35 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.

11. Other Facets of Operations

After running casing a cement bond/gamma ray/collar log will be run.

The Morrow pay will be perforated and stimulated. The well will be swab tested and potentialized as a gas well.

SURFACE USE AND OPERATING PLAN

Attachment to Form 3160-3
Devon Energy Production Company, L.P.
CHASE "11" FEDERAL COM. #2
660' FNL & 1480' FWL, Unit C, Section 11-T22S-R27E
Eddy County, New Mexico

1. Existing Roads

The well site and elevation plat for the proposed Chase "11" Federal Com. #2 are reflected on Exhibit #2. This well was staked by John West Surveying in Hobbs, New Mexico.

- A. All roads into the location are depicted in Exhibit #3. Access to this location will require the construction of approximately 200' of new road from existing lease road. All new construction will conform to the specifications outlined in Item #2 below.
- B. Directions to location: From Carlsbad, New Mexico, at the junction of US Hwy 62-180 and Refinery Road, go southeast on Refinery Road for approximately 3.75 miles. The proposed Chase "11" Federal Com. #2 location is on the northeast side of the road.

2. Proposed Access Road

Exhibit #3 shows the proposed lease road. Access to this location will be from an existing lease road. All new construction will adhere to the following.

- A. The maximum width of the road will be 15'.
- B. 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.
- 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 less than 5%.
- 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 Chase "11" Federal Com. #2.

4. Location of Existing and/or Proposed Facilities

- A. In the event the well is found productive, a tank battery would be constructed.
 - 1. Exhibit #5 shows the battery facility to be utilized by the Chase "11" Federal Com. #2.
 - 2. The tank battery, all connections and all lines will adhere to API standards.
 - 3. The well may be operated by means of an electric prime mover. Electric power poles will be set along side of the access road.

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

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

5. Location and Type of Water Supply

The Chase "11" Federal Com. #2 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 at least 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 drill 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 road will be reclaimed. The reserve pit area will be broken out and leveled, after drying, to a condition where these efforts are feasible. The original top soil, if any, 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. All pits will be filled and location leveled, weather permitting, within 120 days after abandonment.

C. 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.

D. 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. 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.

Road routes have been approved and the surface location will be restored as directed by the BLM.

12. Other Information

A. The project is located in an area of gentle-undulating terrain.

Drainage is toward the Pecos River.

Regionally the slopes average 4° and the sediment consists of loose to slightly compact, grayish-brown, gravelly, sandy loam.

Vegetation of the Chihuahuan Desert Scrub consists of mesquite, creosote bush, broom snakeweed, and various grasses.

B. There is no permanent water in the immediate area.

- C. A cultural resources examination has been performed as report no. SNMAS-03NM-1102 (see attached copy) and sent to the BLM office in Carlsbad, New Mexico, by Southern New Mexico Archeological Resources, Inc., in Bent.

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 as follows.

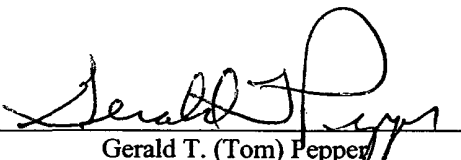
Tom Pepper
Operations Engineering Advisor
Devon Energy Production Company, L.P.
20 North Broadway, Suite 1500
Oklahoma City, Oklahoma 73102-8260
(405) 552-4513 (office)
(405) 203-2242 (cell)

Don Mayberry
Superintendent
Devon Energy Production Company, L.P.
Post Office Box 250
Artesia, New Mexico 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: _____

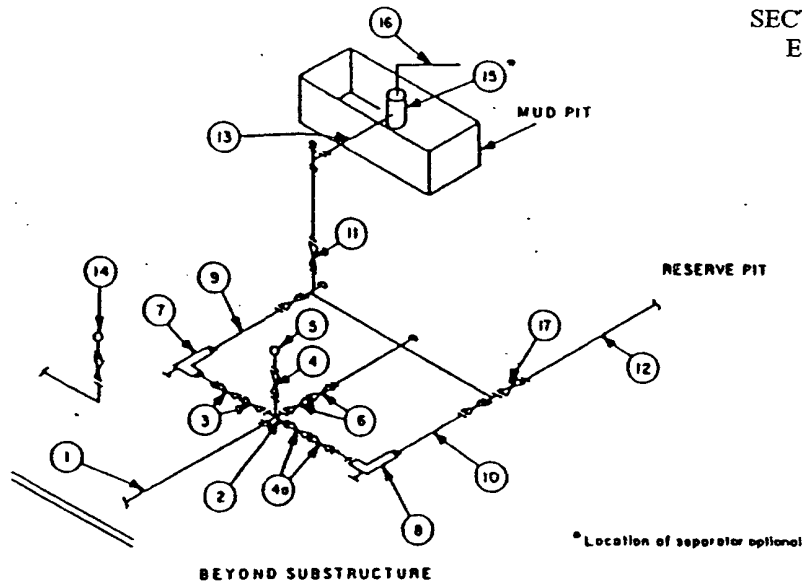

Gerald T. (Tom) Pepper
Operations Engineering Advisor

Date: July 23, 2003

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

3 MWP - 5 MWP - 10 MWP

**EXHIBIT 1
DEVON ENERGY PRODUCTION COMPANY, L.P.
CHASE "11" FEDERAL COM. #2
SECTION 11-T22S-R27E
EDDY CNTY, NM**



MINIMUM REQUIREMENTS										
No.		3,000 MWP			5,000 MWP			10,000 MWP		
		I.D.	NOMINAL	RATING	I.D.	NOMINAL	RATING	I.D.	NOMINAL	RATING
1	Line from drilling spool		3"	3,000		3"	5,000		3"	10,000
2	Cross 3"x3"x3"x2"			3,000			5,000			
	Cross 3"x3"x3"x3"									10,000
3	Valves(1) Gate <input type="checkbox"/> Plug <input type="checkbox"/> (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000
4	Valve Gate <input type="checkbox"/> Plug <input type="checkbox"/> (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 <input type="checkbox"/> Plug <input type="checkbox"/> (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 <input type="checkbox"/> Plug <input type="checkbox"/> (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 <input type="checkbox"/> Plug <input type="checkbox"/> (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"		10,000

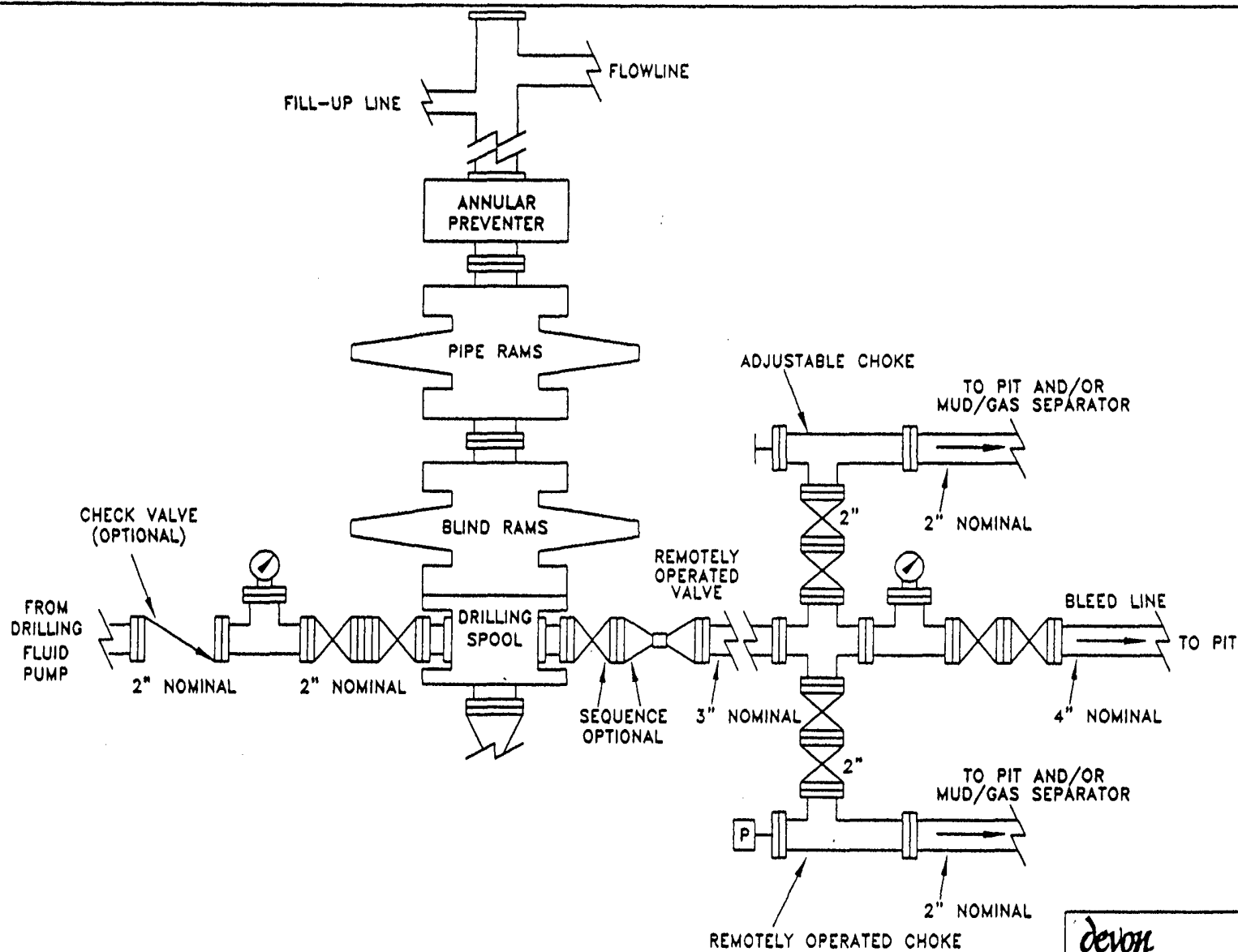
(1) Only one required in Class 3M.

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

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

EQUIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTIONS

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



devon
DRILLING SERVICES

EXHIBIT 1
 CHASE "11" FEDERAL COM. #2
 SECTION 11-T22S-R27E
 EDDY CNTY, NM

**PROPOSED 5-M BOPE
 AND CHOKE ARRANGEMENT**

s:\...nm\plats
 5mbope.dwg

SC

10/00

Attachment to Exhibit #1
NOTES REGARDING BLOWOUT PREVENTERS
Devon Energy Production Company, L.P.
CHASE "11" FEDERAL COM. #2
660' FNL & 1480' FWL, Unit C, Section 11-T22S-R27E
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 5000 psi working pressure.
4. All fittings will be flanged.
5. A full bore safety valve tested to a minimum 5000 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, N.M. 87504-2088

State of New Mexico
Energy, Minerals and Natural Resources Department

EXHIBIT 2

Form C-102
Revised February 10, 1984
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
		Carlsbad, East (Morrow)
Property Code 16666	Property Name CHASE "11" FEDERAL COM.	Well Number 2
OGRID No. 6137	Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.	Elevation 3099'

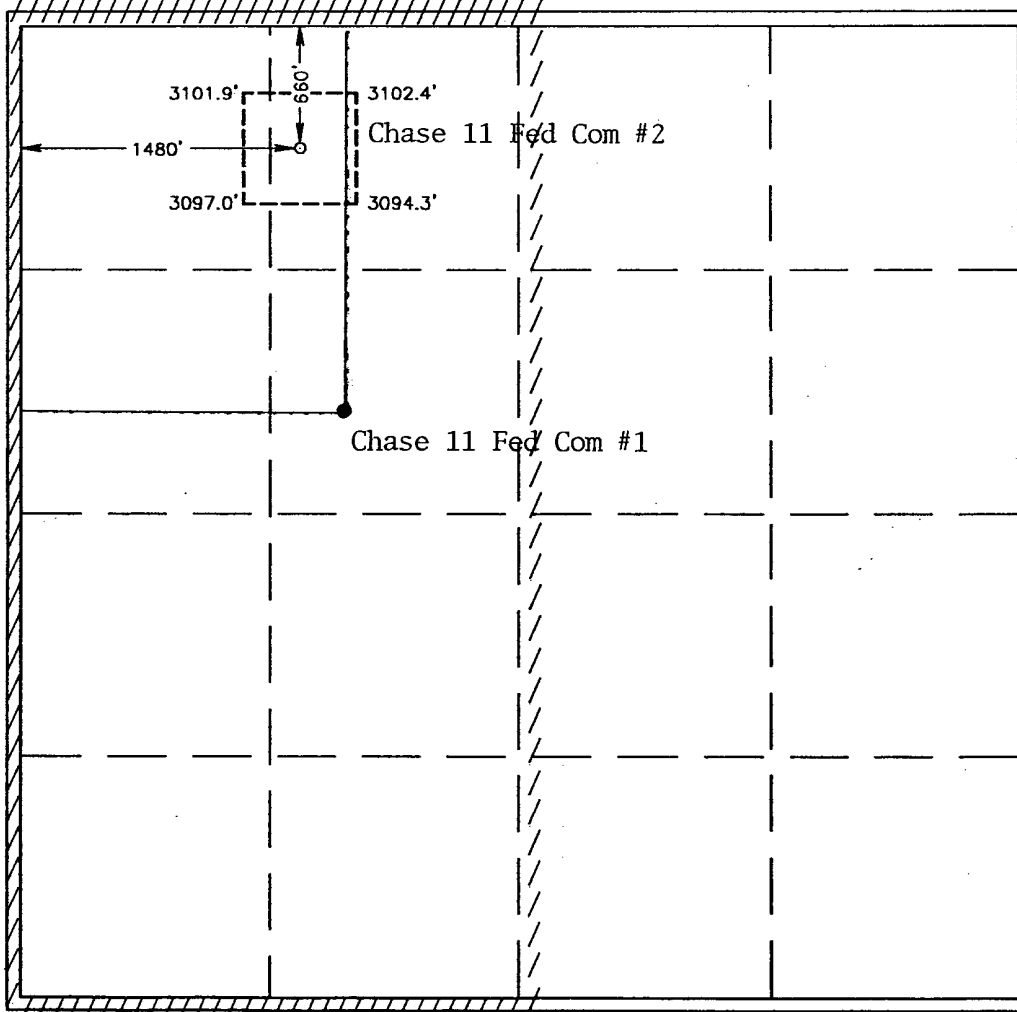
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	11	22-S	27-E		660'	NORTH	1480'	WEST	EDDY

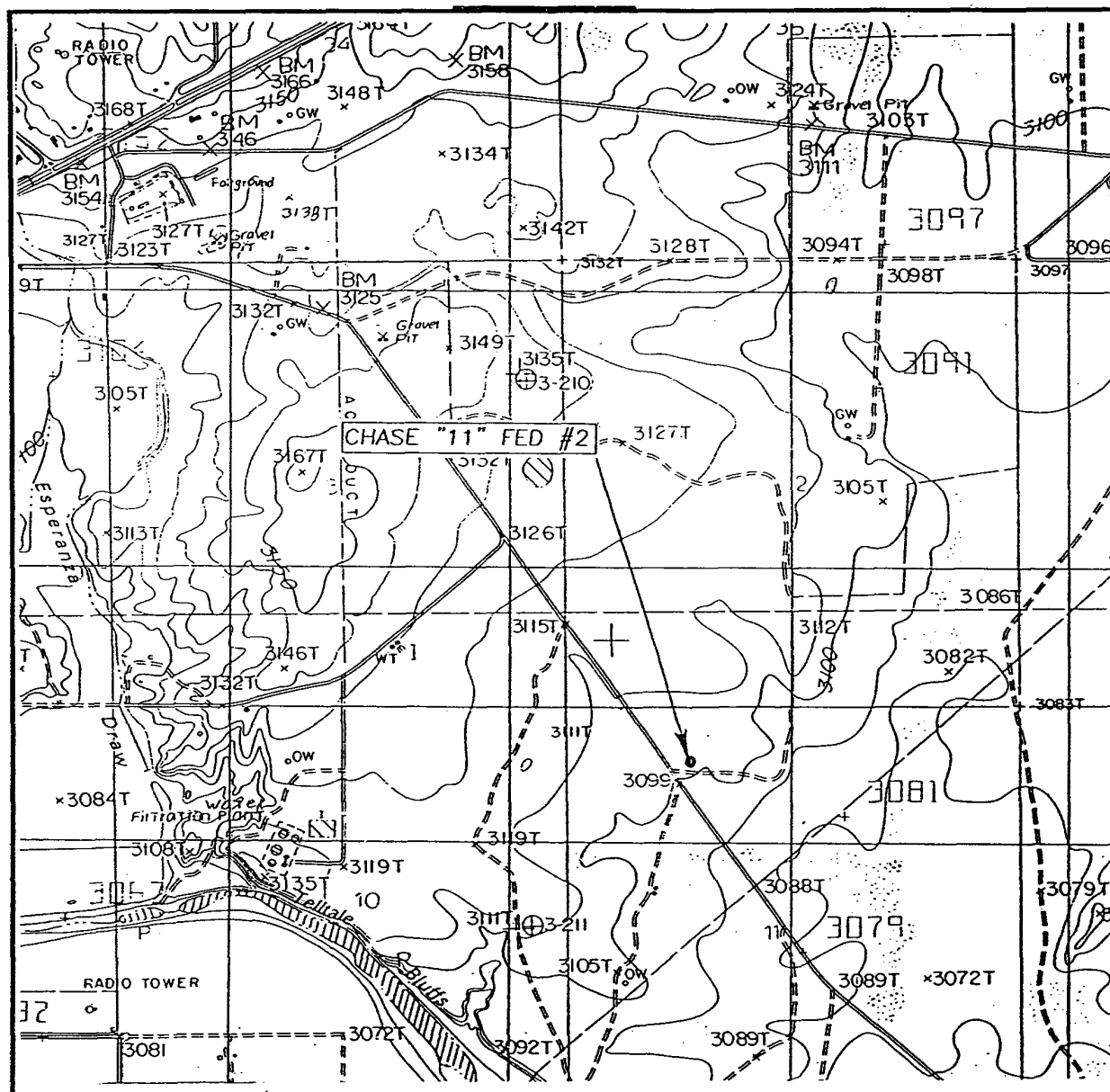
Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 320	Joint or Infill	Consolidation Code	Order No.						

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

	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Gerald T. Pepper</i> Signature Gerald T. (Tom) Pepper Printed Name Operations Engr. Advisor Title July 23, 2003 Date</p> <p>SURVEYOR CERTIFICATION</p> <p>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.</p> <p>MAY 05, 2003</p> <p>Date Surveyed Signature & Seal of Professional Surveyor <i>Ronald J. Edson</i> 03.11.0482 Certificate No. RONALD J. EDSON 3239 GARY EDSON 12641</p>
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LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'
CARLSBAD EAST, N.M.

SEC. 11 TWP. 22-S. RGE. 27-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 660' FNL & 1480' FWL

ELEVATION 3099'

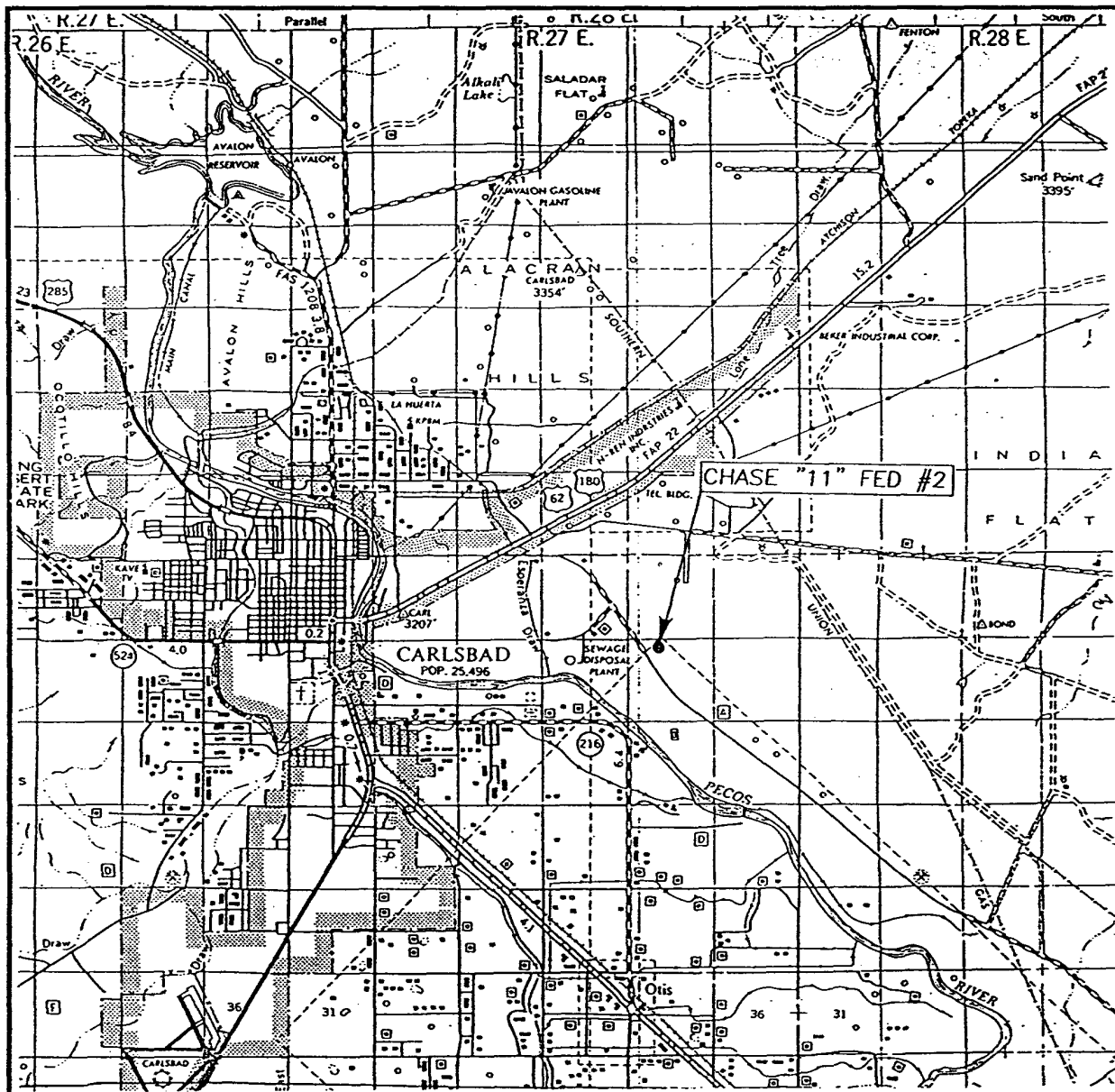
OPERATOR DEVON ENERGY PROD, CO. L.P.

LEASE CHASE "11" FEDERAL

U.S.G.S. TOPOGRAPHIC MAP
CARLSBAD EAST, N.M.

JOHN WEST SURVEYING
HOBBS, NEW MEXICO
(505) 393-3117

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 11 TWP. 22-S RGE. 27-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 660' FNL & 1480' FWL

ELEVATION 3099'

OPERATOR DEVON ENERGY PROD. CO. L.P.

LEASE CHASE "11" FEDERAL

JOHN WEST SURVEYING
 HOBBS, NEW MEXICO
 (505) 393-3117

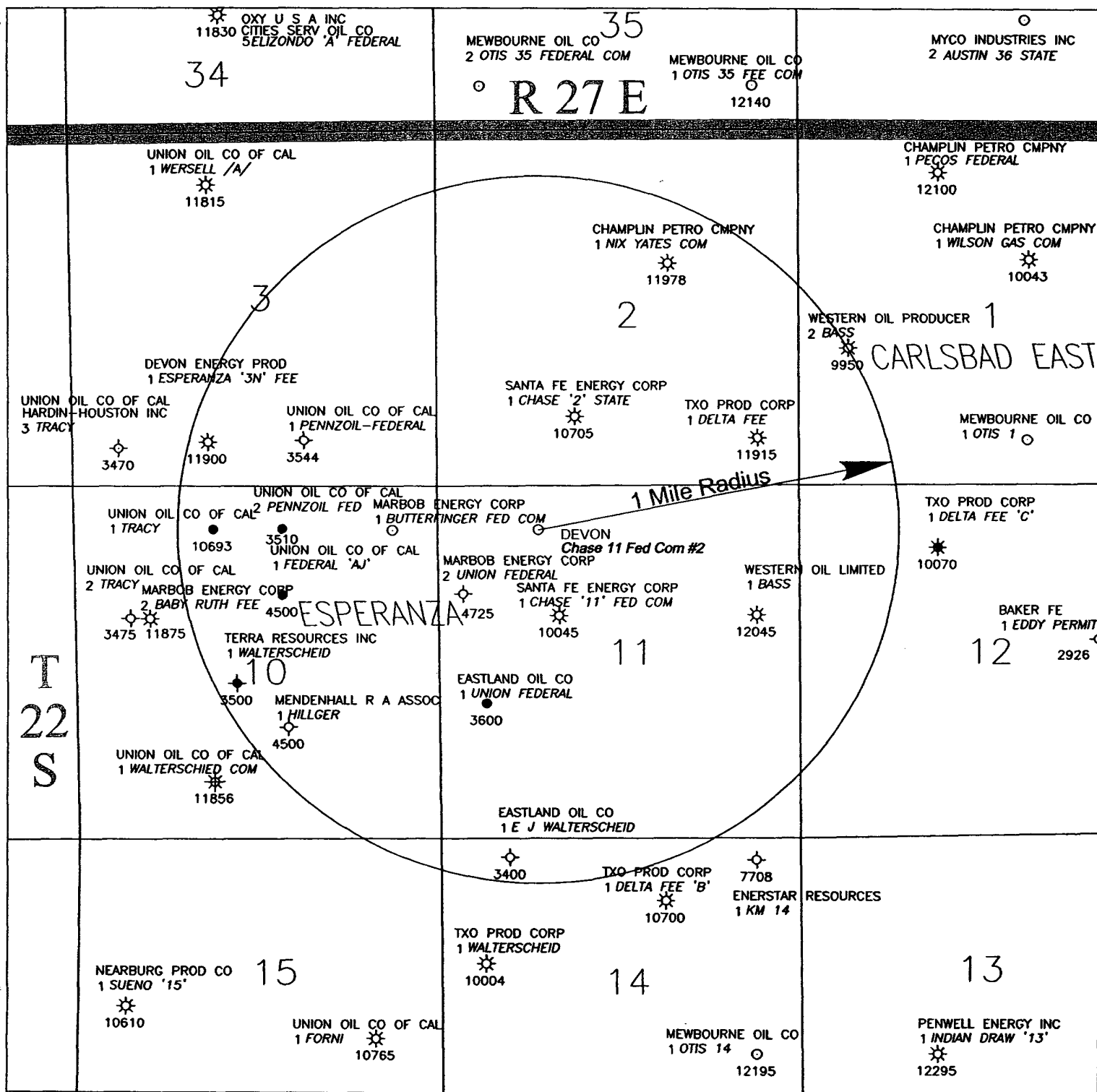


EXHIBIT 4

Carlsbad East Field
Eddy County, New Mexico

Chase "11" Federal Com. #2
Sec 11, T22S R27E
660' FNL & 1480' FWL

Scale: 1" = 2000'
Date: 6-07-03

0 1000' 2000' 3000' 4000'

Chase-11-Fed-Com-2.dwg

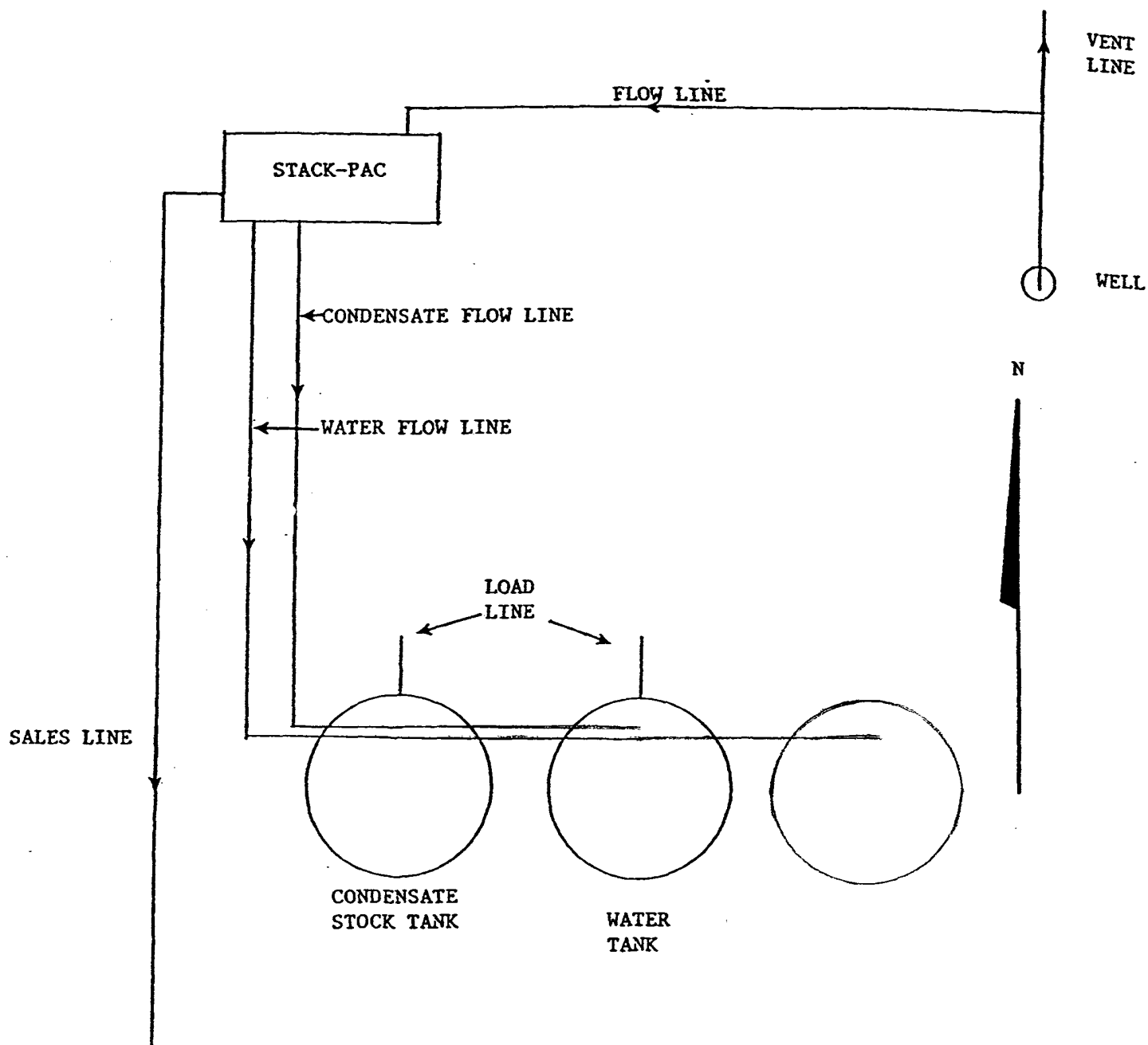


EXHIBIT 5
DEVON ENERGY PRODUCTION COMPANY, L.P.
CHASE "11" FEDERAL COM. #2
SECTION 11-T22S-R27E
EDDY CNTY, NM

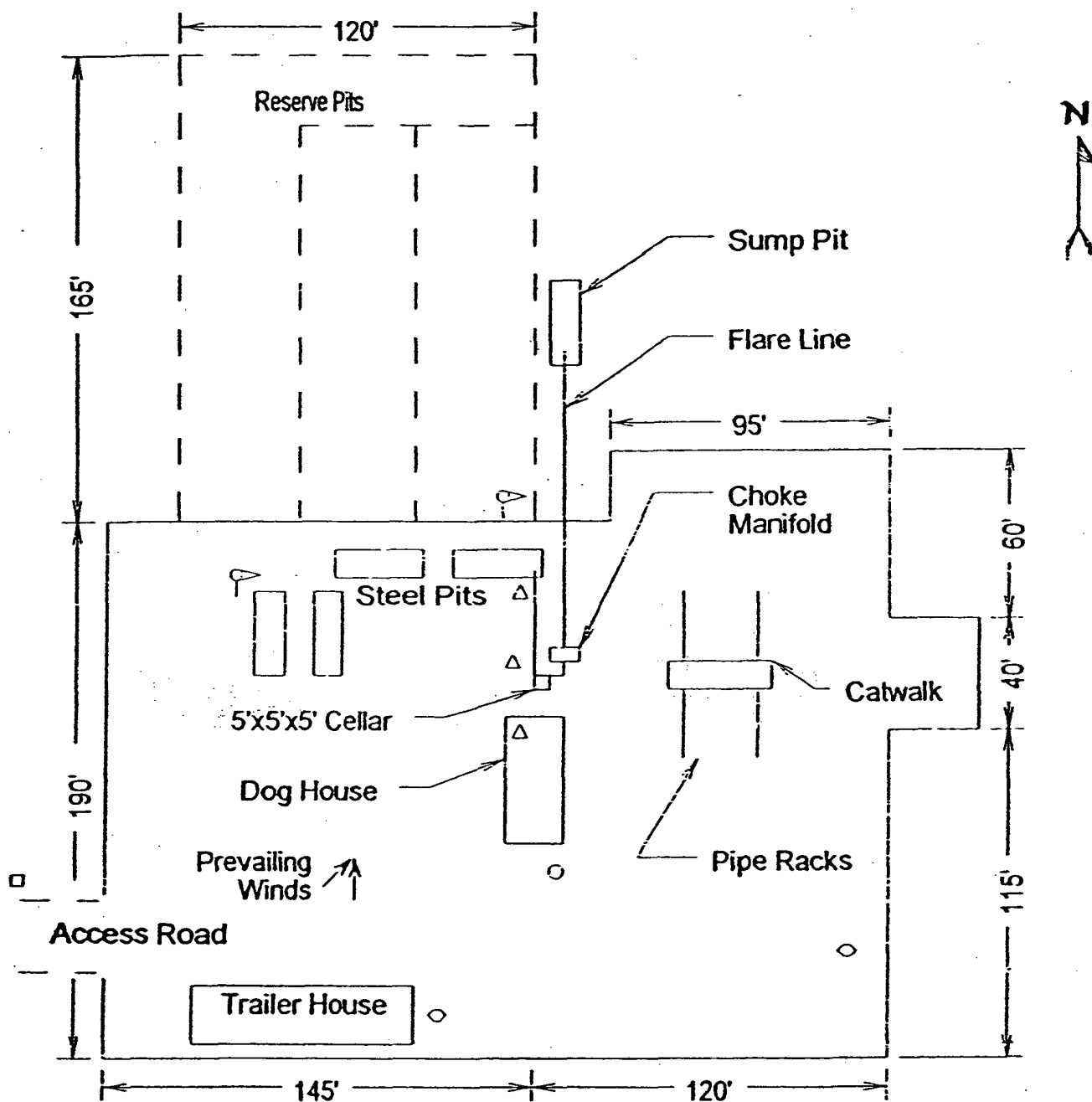


EXHIBIT 6
DEVON ENERGY PRODUCTION COMPANY, L.P.
CHASE "11" FEDERAL COM. #2
SECTION 11-T22S-R27E
EDDY CNTY, NM

Well name:	Chase 11 Fed 2 Alt
Operator:	Devon Energy
String type:	Surface
Location:	Sec 11-22S-27E, Eddy Co., New Mexico

Design parameters:**Collapse**

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

Minimum design factors:**Collapse:**

Design factor 1.125

Burst:

Design factor 1.00

Environment:

H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 82 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 500 ft
Minimum Drift: 2.250 in

Burst

Max anticipated surface pressure: 1,021 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 1,081 psi

Annular backup: 10.80 ppg

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: 427 ft

Non-directional string.

Re subsequent strings:

Next setting depth: 2,400 ft
Next mud weight: 10.500 ppg
Next setting BHP: 1,309 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 2,400 ft
Injection pressure 2,400 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	260	740	2.85	1021	1730	1.69	24	322	13.42 J

Prepared D. C. Jennings
by: Devon Energy

Date: May 15, 2003
Oklahoma City, Oklahoma

Remarks:

Collapse is based on a vertical depth of 500 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.

Well name:	Chase 11 Fed 2 Alt
Operator:	Devon Energy
String type:	Intermediate
Location:	Sec 11-22S-27E, Eddy Co., New Mexico

Design parameters:**Collapse**

Mud weight: 10.500 ppg
Design is based on evacuated pipe.

Minimum design factors:**Collapse:**

Design factor 1.125

Burst:

Design factor 1.00

Environment:

H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 109 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 500 ft
Minimum Drift: 8.750 in

Burst

Max anticipated surface pressure: 2,112 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 2,400 psi

Annular backup: 10.80 ppg

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: 2,027 ft

Non-directional string.

Re subsequent strings:

Next setting depth: 12,250 ft
Next mud weight: 10.800 ppg
Next setting BHP: 6,873 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 2,400 ft
Injection pressure 2,400 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	2400	9.625	36.00	J-55	ST&C	2400	2400	8.796	20861
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	1309	2020	1.54	2112	3520	1.67	86.4	394	4.56 J

Prepared D. C. Jennings
by: Devon Energy

Date: May 15, 2003
Oklahoma City, Oklahoma

Remarks:

Collapse is based on a vertical depth of 2400 ft, a mud weight of 10.5 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:	Chase 11 Fed 2 Alt
Operator:	Devon Energy
String type:	Production
Location:	Sec 11-22S-27E, Eddy Co., New Mexico

Design parameters:**Collapse**

Mud weight: 10.800 ppg
 Design is based on evacuated pipe.

Minimum design factors:**Collapse:**

Design factor 1.125

Burst:

Design factor 1.00

Environment:

H2S considered? No
 Surface temperature: 75 °F
 Bottom hole temperature: 246 °F
 Temperature gradient: 1.40 °F/100ft
 Minimum section length: 500 ft

Burst

Max anticipated surface pressure: 5,403 psi
 Internal gradient: 0.120 psi/ft
 Calculated BHP 6,873 psi
 Annular backup: 10.80 ppg

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)

Non-directional string.

Tension is based on air weight.

Neutral point: 10,244 ft

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	12250	5.5	17.00	HCP-110	LT&C	12250	12250	4.767	80688
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	6873	8580	1.25	5403	10640	1.97	208.3	445	2.14 J

Prepared D. C. Jennings
 by: Devon Energy

Date: May 15, 2003
 Oklahoma City, Oklahoma

Remarks:

Collapse is based on a vertical depth of 12250 ft, a mud weight of 10.8 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

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

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

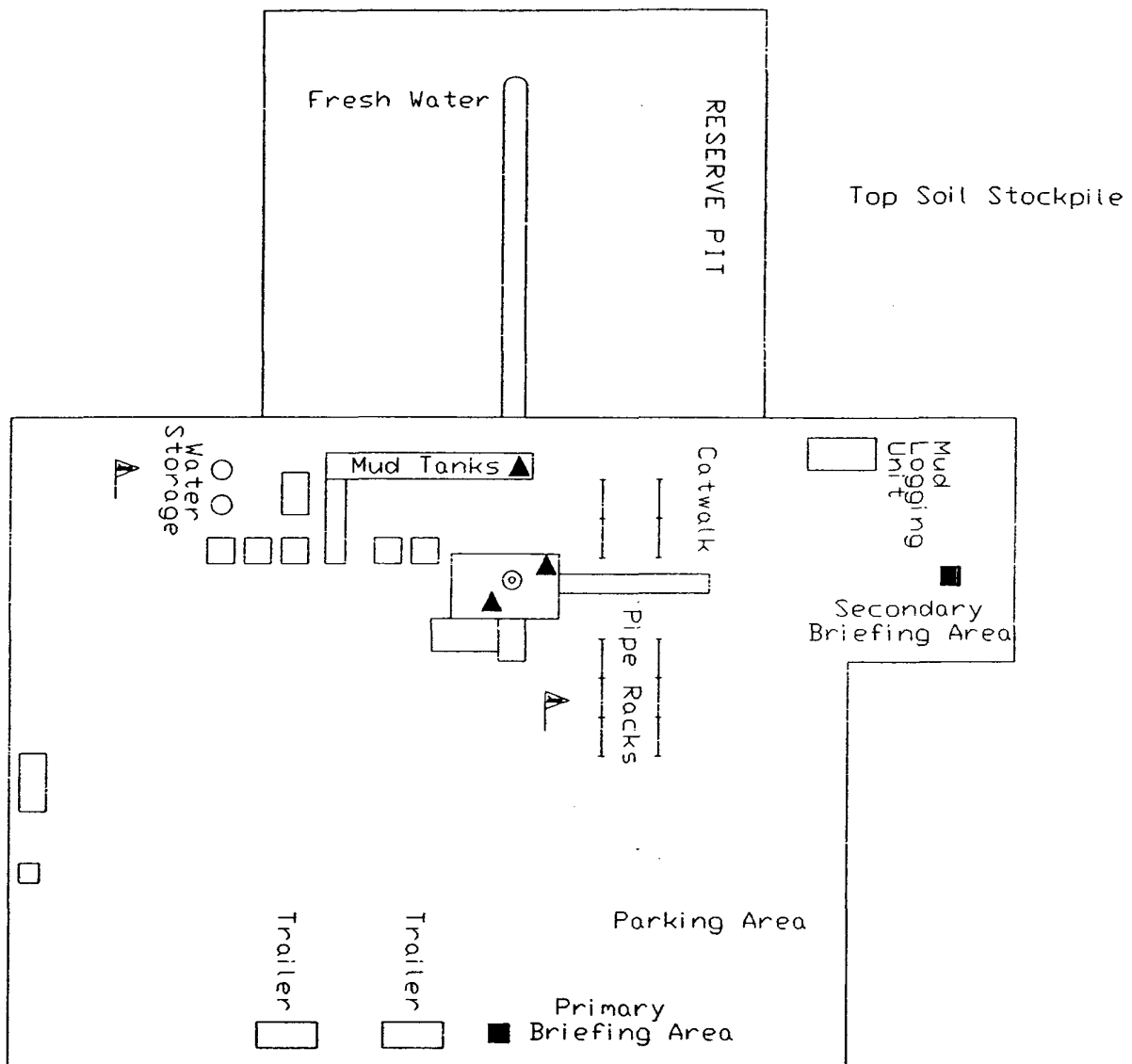
All drill strings, casings, tubing, wellhead, blowout preventers, drilling spools, kill lines, choke manifold and lines and valves shall be suitable for H₂S service.

7. Communication

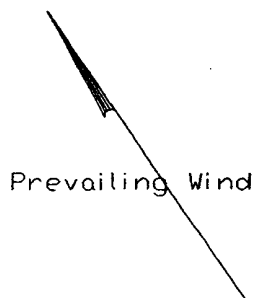
Cellular telephone communication will be available in company vehicles.

C. Diagram of Drilling Location

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



File: G:\NM\H2S-PLAN

devon
ENERGY CORPORATION

EXHIBIT 8
CHASE "11" FEDERAL COM. #2
SECTION 11-T22S-R27E
EDDY CNTY, NM

H2S PLAN

Scale in Feet
25 0 25 50 75 100

4/97



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

Bond #: CO-1104
Nationwide Oil & Gas
\$200,000

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

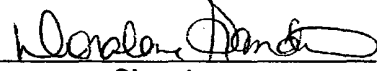
EXHIBIT 9
CHASE "11" FEDERAL COM. #2
SECTION 11-T22S-R27E
EDDY CNTY, NM

BLM Rel. 8-20 10/25/02

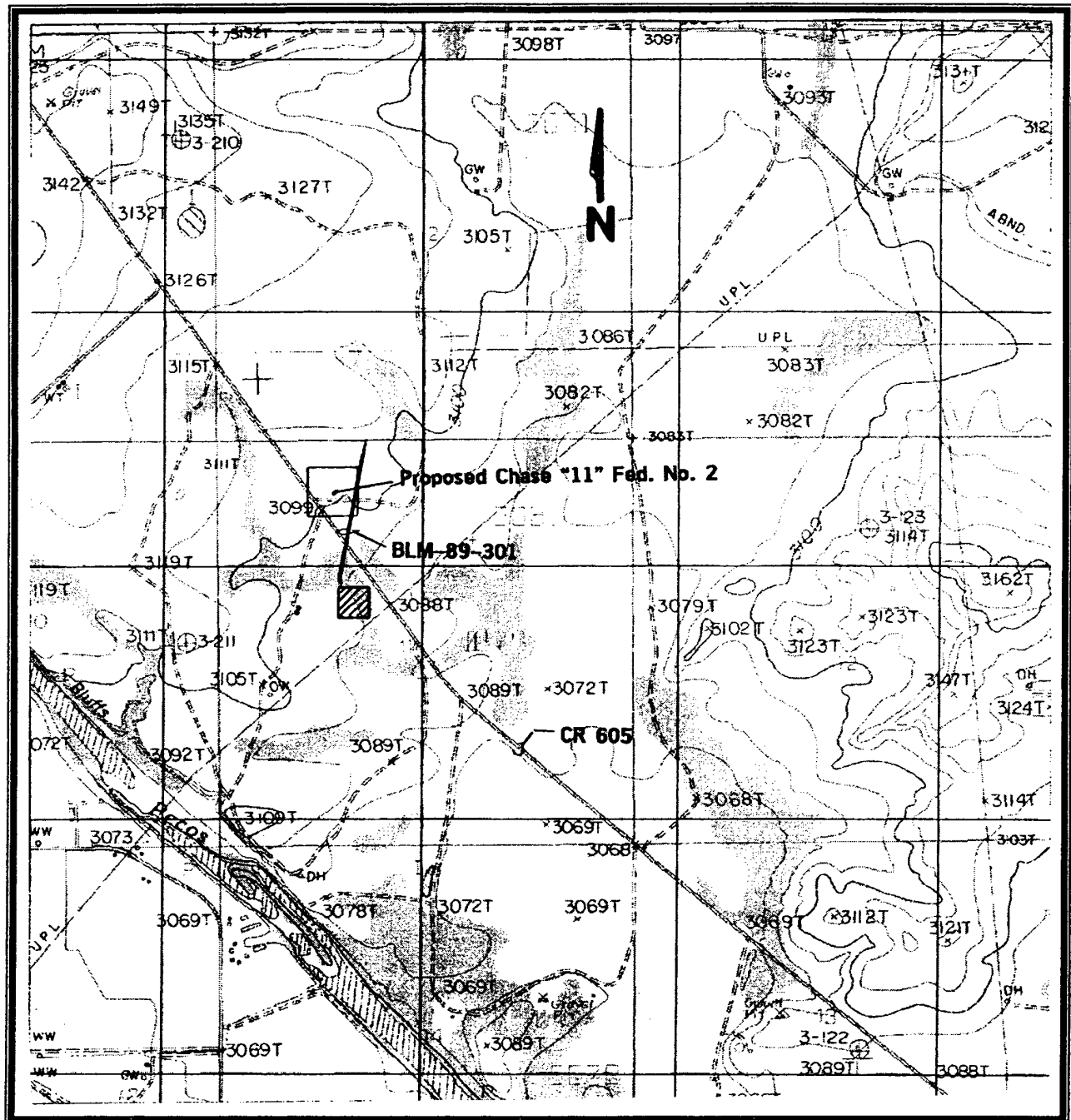
1. (For BLM Use) BLM Report No.		2. (For BLM Use) Reviewers Initials/Date _____ Accepted () Rejected ()		3. NMCRIS Number: 83641	
4. Type of Report:		Negative (yes)		Positive ()	
5. Title of Report: <p style="text-align: center;">A Class III Cultural Resource Inventory for The Chase "11" Federal Com. Number 2 Proposed Well Location Section 11, T.22S, R.27E, Eddy County, New Mexico</p> Author(s): Richard W. Walter					
6. Fieldwork Date(s): 16 May 2003			7. Report Date: 4 June 2003		
8. Consultant Name/Address: Southern New Mexico Archaeological Services, Inc. Address: Post Office Box 1, Bent, New Mexico 88314 Direct Charge: Joe Ben Sanders Field Personnel Name(s): Allen S. Rorex Phone Number: (505) 671-4797					
9. Cultural Resource Permit Number: 145-2920-03-L			10. Consultant Report Number: SNMAS-03NM-1102		
11. Customer Name: Devon Energy Production, Company, L.P. Responsible Individual: Candi Graham/BJ Cathy Address: Post Office Box 250 Artesia, NM 88210 Phone Number: (505) 748-3371			12. Customer Project Number:		
13. Land Status	BLM	State	Private	Other	Total
a. Area Surveyed (acres)	7.15				7.15
b. Area of Effect (acres)	3.7				3.7
14. Linear		Length: N/A		Width: N/A	
15. Location (Map[s] Attached) a. State: New Mexico b. County: Eddy c. BLM Office: Carlsbad d. Nearest City or Town: Carlsbad e. Legal Description: Well Pad: T.22S, R.27E, Sec(s): 11, E ½, NW ¼, NW ¼; E ½, NE ¼, NW ¼ f. Well Pad Footages: 660 ft FNL and 1,480 ft FWL g. USGS 7.5' Map Name(s), Date(S), and Code(s): Carlsbad East, NM, 1985, 32104-D2					

18. Management Summary (Recommendations): During the current survey, no cultural resources were encountered. Therefore, **archaeological clearance is recommended** for the proposed **Chase "11" Federal Com. Number 2 well location**, located in Section 11, T.22S, R.27E, **with no stipulations.**

19.
I certify the information provided above is correct and accurate and meets all applicable BLM Standards.

Responsible Archaeologists 
Signature
For, Allen S. Rorex
Field Supervisor

6/5/03
Date



**Figure 1: Survey Area for the Devon Energy Production Company, L.P.'s
Proposed Chase "11" Federal Com. Number 2 Well Location
Section 11, T.22S, R. 27E
USGS Carlsbad East, NM; (1984) 7.5' topo map
Eddy County, New Mexico**

Southern New Mexico Archeological Services, Inc.



**Devon Energy Corporation
20 North Broadway
Oklahoma City, Oklahoma 73102-8260**

Hydrogen Sulfide (H₂S) Contingency Plan

For

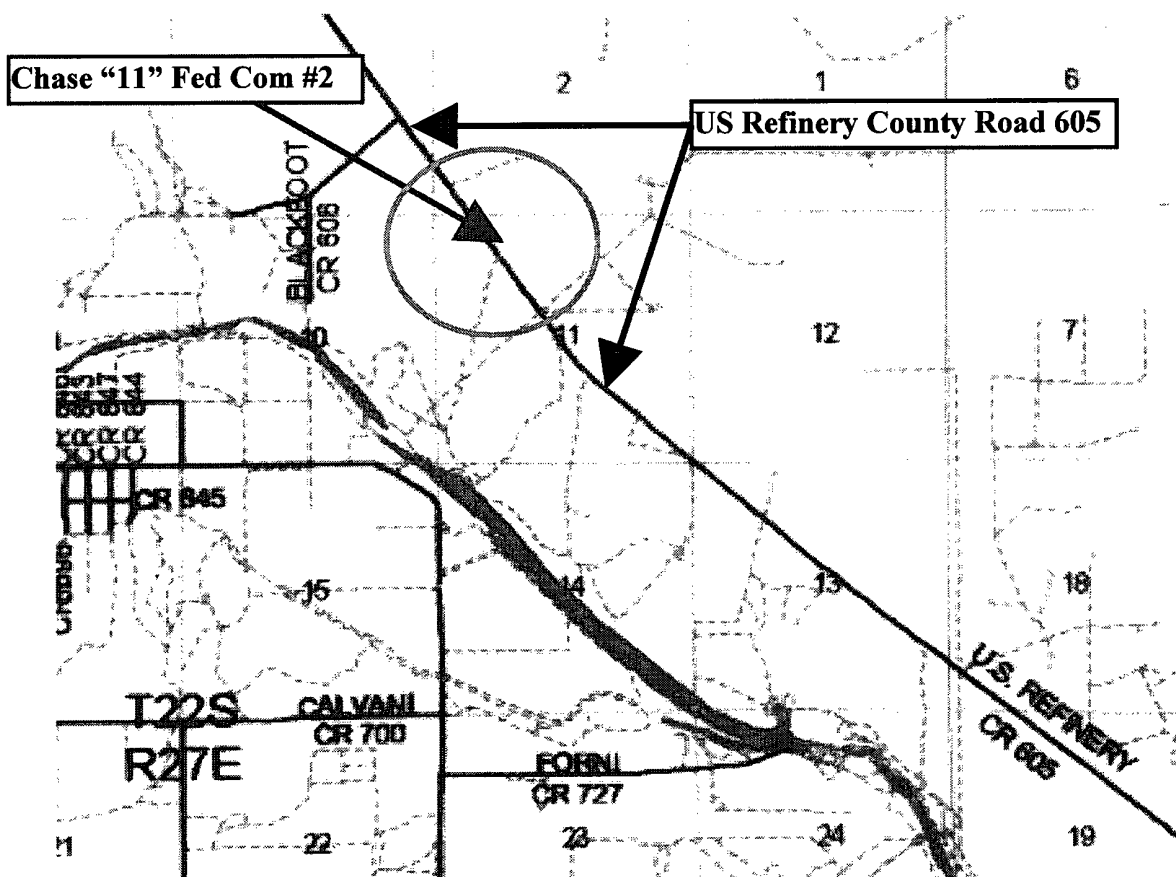
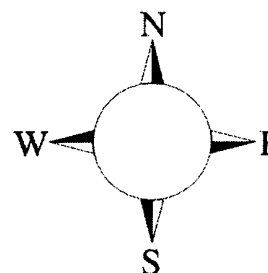
Chase “11” Fed Com # 2

**660’ FNL & 1480’ FWL,
Sec-11, T-22S R-27E**

Eddy County NM

Chase "11" Fed Com #2

This is an open drilling site. H₂S monitoring equipment and emergency response equipment will be used within 500' of zones known to contain H₂S, including warning signs, wind indicators and H₂S monitor.



Assumed 100 ppm ROE = 3000' (Radius of Exposure)
100 ppm H₂S concentration shall trigger activation of this plan.

Escape

Crews shall escape upwind of escaping gas in the event of an emergency release of gas. Escape can be facilitated north or south on county road 605 (US Refinery). Crews should then block entrance to the ROE in both directions so as not to allow anyone traversing into a hazardous area. There are no homes or buildings in or near the ROE.

Emergency Procedures

In the case of a release of gas containing H₂S, the first responder(s) must isolate the area and prevent entry by other persons into the 100 ppm ROE. Additionally the first responder(s) must evacuate any public places encompassed by the 100 ppm ROE. First responder(s) must take care not to injure themselves during this operation. Company and/or local officials must be contacted to aid in this operation. Evacuation of the public should be beyond the 100 ppm ROE.

All responders must have training in the detection of H₂S, measures for protection against the gas, equipment used for protection and emergency response. Additionally, responders must be equipped with H₂S monitors and air packs in order to control the release. Use the "buddy system" to ensure no injuries during the response.

Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO₂). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas

Characteristics of H₂S and SO₂

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H ₂ S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO ₂	2.21 Air = 1	2 ppm	N/A	1000 ppm

Contacting Authorities

Devon Energy Corp. personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available. The following call list of essential and potential responders has been prepared for use during a release. Devon Energy Corp. Company response must be in coordination with the State of New Mexico's 'Hazardous Materials Emergency Response Plan' (HMER)

Devon Energy Corp. Company Call List

<u>Artesia (505)</u>	<u>Cellular</u>	<u>Office</u>	<u>Home</u>
Foreman – BJ Cathey.....	390-5893	748-0176	887-6026
Asst. Foreman – Bobby Jones.....	748-7447	748-0176	746-3194
Cecil Thurmond	748-7180	748-0171	887-1479
David Purdy	(432)631-2969	(432)495-7279	(432)683-0735
Engineer – Tom Pepper	(405) 203-2242	(405) 552-4513 ...	(405) 728-8641

Agency Call List

Eddy County (505)

Artesia

State Police.....	746-2703
City Police.....	746-2703
Sheriff's Office	746-9888
Ambulance	911
Fire Department	746-2701
LEPC (Local Emergency Planning Committee)	746-2122
NMOCD.....	748-1283

Carlsbad

State Police.....	885-3137
City Police.....	885-2111
Sheriff's Office	887-7551
Ambulance	911
Fire Department	885-2111
LEPC (Local Emergency Planning Committee).....	887-3798
US Bureau of Land Management.....	887-6544

New Mexico Emergency Response Commission (Santa Fe)	(505)476-9600
24 HR	(505) 827-9126
National Emergency Response Center (Washington, DC)	...(800) 424-8802

Other

Boots & Coots IWC	1-800-256-9688 or (281) 931-8884
Cudd Pressure Control.....	(915) 699-0139 or (915) 563-3356
Halliburton	(505) 746-2757
B. J. Services.....	(505) 746-3569
Flight For Life -4000 24th St, Lubbock, TX	(806) 743-9911
Aerocare -Rr 3 Box 49f, Lubbock, TX	(806) 747-8923
Med Flight Air Amb 2301 Yale Blvd SE #D3, Albuq, NM	(505) 842-4433
S B Air Med Svc 2505 Clark Carr Loop SE, Albuq, NM	(505) 842-4949

Prepared in conjunction with
Wade Rohloff of;

