EC

OCD-ARTESIA

Form 3160-3
(August 1999)

FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

0185

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED
MAR - 3 2004
OCD-ARTESIA

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: ☒ DRILL ☐ REENTER	5. Lease Serial No. NMNM53218
	6. If Indian, Allottee or Tribe Name
	7. If Unit or CA Agreement, Name and No.
1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone	8. Lease Name and Well No. RIGHTHAND CANYON 35 FEDERAL 4
2. Name of Operator DEVON ENERGY PRODUCTION CO LP Contact: KAREN COTTOM E-Mail: karen.cottom@dvn.com	9. API Well No. 30-015-33290
3a. Address PO BOX 250 ARTESIA, NM 88211	3b. Phone No. (include area code) Ph: 405.228.7512 Fx: 405.552.4621
	10. Field and Pool, or Exploratory INDIAN BASIN UPPER PENN ASSOC
4. Location of Well *(Report location clearly and in accordance with any State requirements.*)* At surface SENW 2310FNL 1475FWL SUBJECT TO LIKE APPROVAL BY STATE At proposed prod. zone SWNW 2310FNL 660FWL	11. Sec., T., R., M., or Blk. and Survey or Area Sec 35 T21S R24E Mer NMP SME: BLM
14. Distance in miles and direction from nearest town or post office* 15 MILES WEST OF CARLSBAD NM	12. County or Parish EDDY / 13. State NM
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of Acres in Lease / 17. Spacing Unit dedicated to this well 330.00
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 8600 MD 8600 TVD / 20. BLM/BIA Bond No. on file
21. Elevations (Show whether DF, KB, RT, GL, etc. 3912 GL	22. Approximate date work will start 12/30/2003 / 23. Estimated duration 45 DAYS

CARLSBAD CONTROLLED WATER BASIN

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.

25. Signature	Name (Printed/Typed)	Date
(Electronic Submission)	KAREN COTTOM	12/02/2003

Title: ENGINEERING TECHNICIAN

Approved by (Signature)	Name (Printed/Typed)	Date
/s/ Joe G. Lara	/s/ Joe G. Lara	1 MAR 2004
Title: FIELD MANAGER	Office: CARLSBAD FIELD OFFICE	

Application approval does not warrant or certify 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 and Title 43 U.S.C. Section 1212, make 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.

Additional Operator Remarks (see next page)

Electronic Submission #25579 verified by the BLM Well Information System
For DEVON ENERGY PRODUCTION CO LP, sent to the Carlsbad
Committed to AFMSS for processing by LINDA ASKWIG on 12/02/2003 (04LA0136AE)

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

Witness Surface Casing.

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

Additional Operator Remarks:

Devon Energy proposes to drill a Penn oil well to TVD 8,600' for commercial quantities. If the well is deemed noncommercial, the well bore will be plugged and abandoned per Federal regulations. Programs to adhere to onshroe oil & gas regulations are outlined in the following exhibits and attachments.

DRILLING PROGRAM

Devon Energy Production Company, LP
Righthand Canyon 35 Federal #4
Surface Location: 2310' FNL & 1475' FWL, Unit F, Sec 35 T21S R24E, Eddy, NM
Bottom hole Location: 2310' FNL & 660' FWL, Unit E, sec 35 T21S R24E, Eddy, NM

1. Geologic Name of Surface Formation

a. Quaternery Aeolian Deposits

2. Estimated tops of gelolgical markers:

a.	San Andres	1,137'
b.	Glorieta/yeso	2,793'
c.	Bone Spring	3,095'
d.	Third Bone Spring	6,791'
e.	Wolfcamp	7,186'
f.	Cisco-Canyon	7,761'
g.	Top of dolomite	7,784'
h.	Base of dolomite	8,262'
i.	ETD	8,600'

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

a.	San Andres	Water
b.	Wolfcamp, Cisco, Canyon	Oil/Egas

4. Casing Program:

Hole Size	Interval	OD Csg	Weight	Collar	Grade
25"	0' –40'	20"	Na	Na	Conductor
12 ¼"	0' – 1,600'	9 5/8"	36#	ST&C	J-55
8 ¾"	0' – 8,600'	7"	23	LT&C	L-80/J55/ HCL80

5. Cement & Setting Depth:

a. 20"	Conductor	Set 40' of 20" conductor and cement to surface with Redi-mix
b. 9 5/8"	Surface	Set 1600' of 9 5/8", 36#, H-40 ST&C casing. Cement with 400 sx of Class C 35:65 Poz + 2% CaCl + ¼# Celoflakes/sx + 3#/sx of Kolseal, + 6% Bentonite, tail in with 200 sx of Class C cement + 2% Cacl, + ¼# Celoflakes/sx. Circulate cement to surface.
c. 7"	Production	Set 8,600' of 7" casing as follows 1200' of 7", 23#, HLC-80 LT&C, 7400' of 7" 23# L8 LT&C casing. Cement with 200 sx of Class C 15:61:11 Super Mod C + 600 sx 60/40/ Poz Class C + 700 sx 60/40/ Poz Class C, The cement volumes for the 7" casing will be revised pending the caliper measurement from open hole logs
DV Tools @ ±4000' & ±7,625'		

6. **Pressure Control Equipment:**
The blowout preventor equipment (BOP) shown in Exhibit #1 will consist of a (3M system) double ram type (3000 psi WP) preventor and a bag-type (Hydril) preventor (3000 psi WP). Both units will be hydraulically operated and the ram type preventor will be equipped with blind rams on top and 4 1/2" drill pipe rams on bottom. Both BOP's will be installed on the 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 9 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.

7. **Proposed Mud Circulation System**

Depth	Mud Wt.	Visc	Fluid Loss	Type System
0' – 1600'	8.5 – 8.7	29-34	NC	Air or Fresh Water
1600' – TD	8.4 – 9.0	29-40	10-15	FW mud or Dris-pac system

Sufficient mud materials will be kept on location at all times in order to combat lost circulation, or unexpected kicks. In order to run DST's, open hole logs, & casing the viscosity and/or water loss may have to be adjusted to meet these needs.

8. **Logging, Coring, and Testing Program:**
   a. Open hole logs: Dual Induction, SNP, LDT, MSFL, Gamma Ray, Caliper from TD to 1600'. Run Gamma Ray, neutron from 1600' to surface.
   b. Mud Logger may be rigged up on hole at the request of the opertor
   c. No cores or DST's are planned at this time.
   d. After running casing, cased hole Gamma Ray, Neutron Collar logs will be run from TD back to all possible productive zones

9. **Potential Hazards:**
   a. No abnormal pressures or temperatures are foreseen. The anticipated bottom hole temperature at total depth is 144 degrees and maximum bottom hole pressure is 4021 psig. Hydrogen sulfide gas may be encountered in this area. A hydrogen sulfide operations plan will be implemented prior to penetrating the Penn formation (see attached Hydrogen Sulfide Operatioins Plan). Lost circulation intervals have been encountered in the Cisco-Canyon zones in adjacent wells.

10. **Anticipated Starting Date and Duration of Operations:**
   a. Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 32 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flowlines in order to place well on production.

w/ prior sundry notice approval. TSC

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

1. All Company and Contract personnel admitted on location must be trained by a qualified H2S safety instructor to the following:
   a. Characteristics of H2S
   b. Physical effects and hazards
   c. Proper use of safety equipment and life support systems.
   d. Principle and operation of H2S detectors, warning system and briefing areas
   e. Evacuation procedures, routes and first aid.
   f. Proper use of 30 minute pressure demand air pack.

2. H2S Detection and Alarm System
   a. H2S detectors and audio alarm system to be located at bell nipple, end of blooie line (mud pit) and on derrick floor or doghouse.

3. Windsock and/or wind streamers
   a. Windsock at mud pit area should be high enough to be visible
   b. Windsock at briefing area should be high enough to be visible
   c. There should be a windsock at entrance to location

4. Condition Flags and Signs
   a. Warning Sign on access road to location
   b. Flags to be displayed on sign at entrance to location. Green flag, normal safe condition. Yellow flag indicates potential pressure and danger. Red flag, danger, H2S present in dangerous concentration. Only emergency personnel admitted to location.

5. Well Control Equipment
   a. See Exhibit "E" & "E-1"

6. Communication
   a. While working under masks chalkboards will be used for communication.
   b. Hand signals will be used where chalk board is inappropriate
   c. Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephones will be available at most drilling foreman's trailer or living quarters.

7. Drillstem Testing
   a. Exhausts will be watered
   b. Flare line will be equipped with an electric igniter or a propane pilot light in case gas reaches the surface.
   c. If the location is near to a dwelling a closed DST will be performed.

8. Drilling contractor supervisor will be required to be familiar with the effects H2S has on tubular goods and other mechanical equipment.
9. If H2S is encountered, mud system will be altered if necessary to maintain control or formation. A mud gas separator will be brought into service along with H2S scavengers if necessary.

SURFACE USE PLAN

Devon Energy Production Company, LP

Righthand Canyon 35 Federal #4

Surface Location: 2310' FNL & 1475' FWL, Unit F, Sec 35 T21S R24E, Eddy, NM

Bottom hole Location: 2310' FNL & 660' FWL, Unit E, sec 35 T21S R24E, Eddy, NM

1. **Existing Roads:**
   a. The well site and elevation plat for the proposed are reflected on Exhibit 2. The well was staked by Basin Surveys.
   b. All roads into the location are depicted on Exhibit 3.
   c. Directions to Location: From the junction of US Hwy 285 and State 137, go southwesterly on 137 for 6.4 miles to a lease road left; thence follow winding lease road for 2.2 miles to a cattle guard and lease road right. Proposed lease road is approx. 200' from cattle guard.
2. **Access Road**
   a. Exhibit #3 shows the existing and proposed roads. All new construction will adhere to the following.
   b. 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.
   c. 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%.
   d. No cattle guards, grates or fence cuts will be required. No turnouts are planned.
3. In the event the well is found productive, the necessary paperwork will be submitted to the BLM prior to producing the well.
4. **Methods of Handling Waste Material:**
   a. Drill cuttings will be disposed of in the reserve pits.
   b. All trash, junk and other waste material will be contained in trash cages or trash bins to prevent scattering. When the job is completed all contents will be removed and disposed of in an approved sanitary landfill.
   c. Salts remaining after completion of well will be picked up by the supplier, including broken sacks.
   d. Waste water from living quarters will be drained into hole with a minimum of 10'. These holes will be covered during drilling and will be back filled when the well is completed. A Porto-john will be provided for the rig crews. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete
   e. Remaining drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry enough to be broken out for further drying. If the drilling fluids do not evaporate in a reasonable time they will be hauled off by transports to a state approved disposal site. Later pits will be broken out to speed dry. Water produced during completion will be put in reserve pits. Oil and condensate produced will be put in a storage tank and sold.
5. **Well Site Layout**
   a. Exhibit D Shows the proposed well site layout.
   b. This exhibit indicated proposed location of reserve and sump pits and living facilities.
   c. Mud pits in the active circulating system will be steel pits & the reserve pits is proposed to be unlined unless subsurface condition encountered during pit construction indicate that lining is needed for lateral containment of fluids.

d. If needed, the reserve pit is to be lined with polyethylene. The pit liner will be6 mils thick. Pit liner will extend a minimum 2'00" over the reserve pits dikes where the liner will b anchored down.
e. The reserve pit will be fenced on three sides with four strands of barbed wire during drilling and completion phases. The fourth side will be fenced after all drilling operations have ceased. If the well is a producer, the reserve pit fence will be torn down. The reserve pit and those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements.

6. Other Information:

a. The soil is shallow, calcareous, grayish-brown, loose to slightly compact, stony silty loam overlying limestone bedrock; slopes consist primarily of limestone rock and small pockets of colluvium and alluvium.
b. The surface and minerals are owned by the US Government and is administered by the Bureau of Land Management. The surface is of limited use except for the grazing of livestock and the production of oil and gas.
c. An archaeological survey will be conducted of the well pad location and the results will be filed with the Bureau of Land Management in Carlsbad Field office.
d. There are no dwellings within 2 miles of location.

Operators Representative:

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

Robert Elliott
Operations Engineer Advisor

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

(405) 228-8609 (office)
(405) 323-4616 (Cellular)

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 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: December 1, 2003

Robert Elliott
Operations Engineer Advisor

Attachment to Exhibit #1
NOTES REGARDING BLOWOUT PREVENTERS
Devon Energy Production Company, LP
Righthand Canyon 35 Federal #4
Surface Location: 2310' FNL & 1475' FWL, Unit F, Sec 35 T21S R24E, Eddy, NM
Bottom hole Location: 2310' FNL & 660' FWL, Unit E, sec 35 T21S R24E, Eddy, NM

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 3000 psi working pressure.

4. All fittings will be flanged.

5. A full bore safety valve tested to a minimum 3000 psi WP with proper thread connections will be available on the rotary rig floor at all times.

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

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

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

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

10. Hydraulic floor control for blowout 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.

UNITED STATES DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Roswell Field Office
2909 West Second Street
Roswell, New Mexico 88201-1287

Statement Accepting Responsibility for Operations

Operator Name:	**Devon Energy Production Company, LP**
Street or Box:	**20 North Broadway, Suite 1500**
City, State:	**Oklahoma City, Oklahoma**
Zip Code:	**73102-8260**

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

Lease No.:	**NMNM53218**
Legal Description of Land:	**Sec 35 T21S R24E, except theW/2 SW/4.**
Formation(s):	**Penn**
Bond Coverage:	**Nationwide**
BLM Bond File No.:	**CO-1104**
Authorized Signature:	Robert P. Elliott **Robert Elliott**
Title:	**Operations Engineering Advisor**
Date:	12/1/03

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
	33685	INDIAN BASIN UPPER PENN ASSO

Property Code	Property Name	Well Number
	RIGHTHAND CANYON "35"	4

OGRID No.	Operator Name	Elevation
6137	DEVON ENERGY PRODUCTION CO., L.P.	3912'

Surface Location

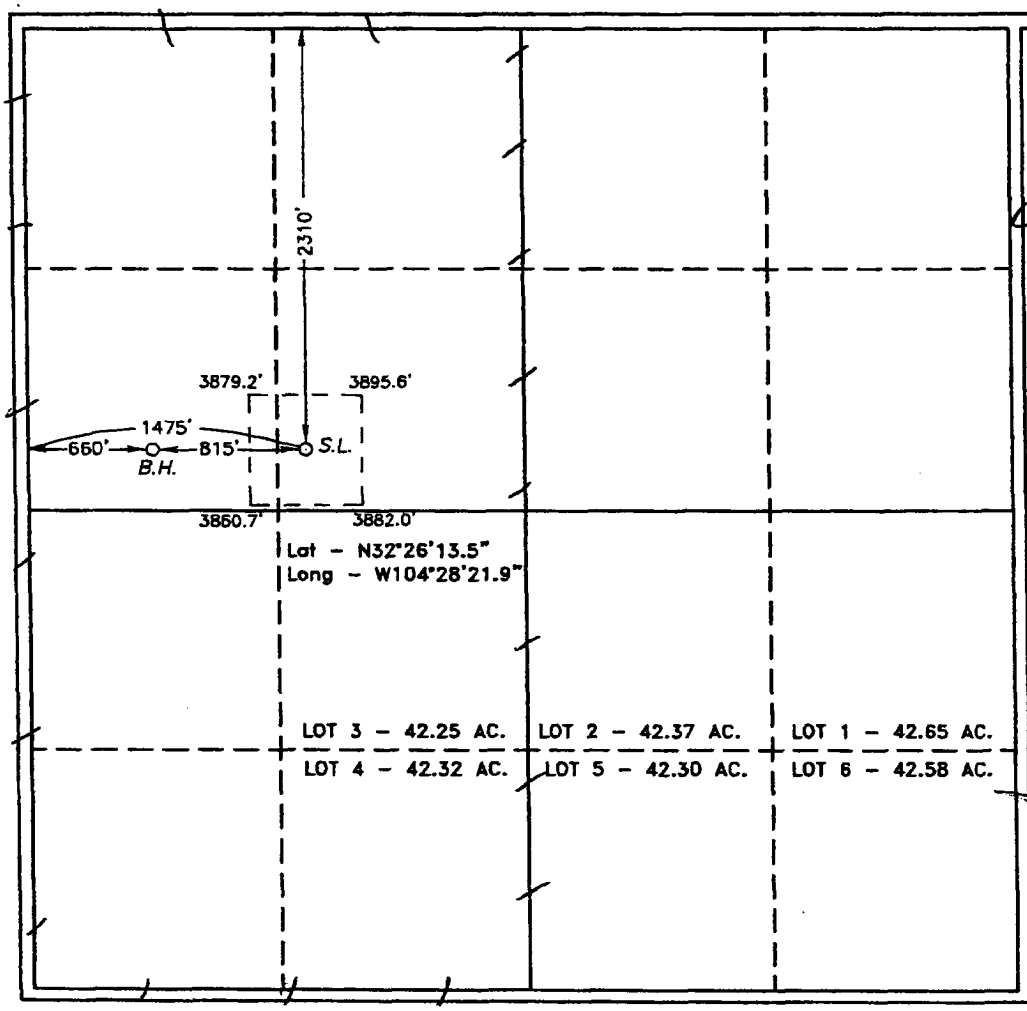
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
F	35	21 S	24 E		2310	NORTH	1475	WEST	EDDY

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
E	35	21 S	24 E		2310	NORTH	660	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
330			

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.

Karen Cottom
Signature

Karen Cottom
Printed Name

Operations Technician
Title

December 1, 2003
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.

NOVEMBER 20, 2003
Date Surveyed

GARY L. JONES
Signature & Seal of Professional Surveyor

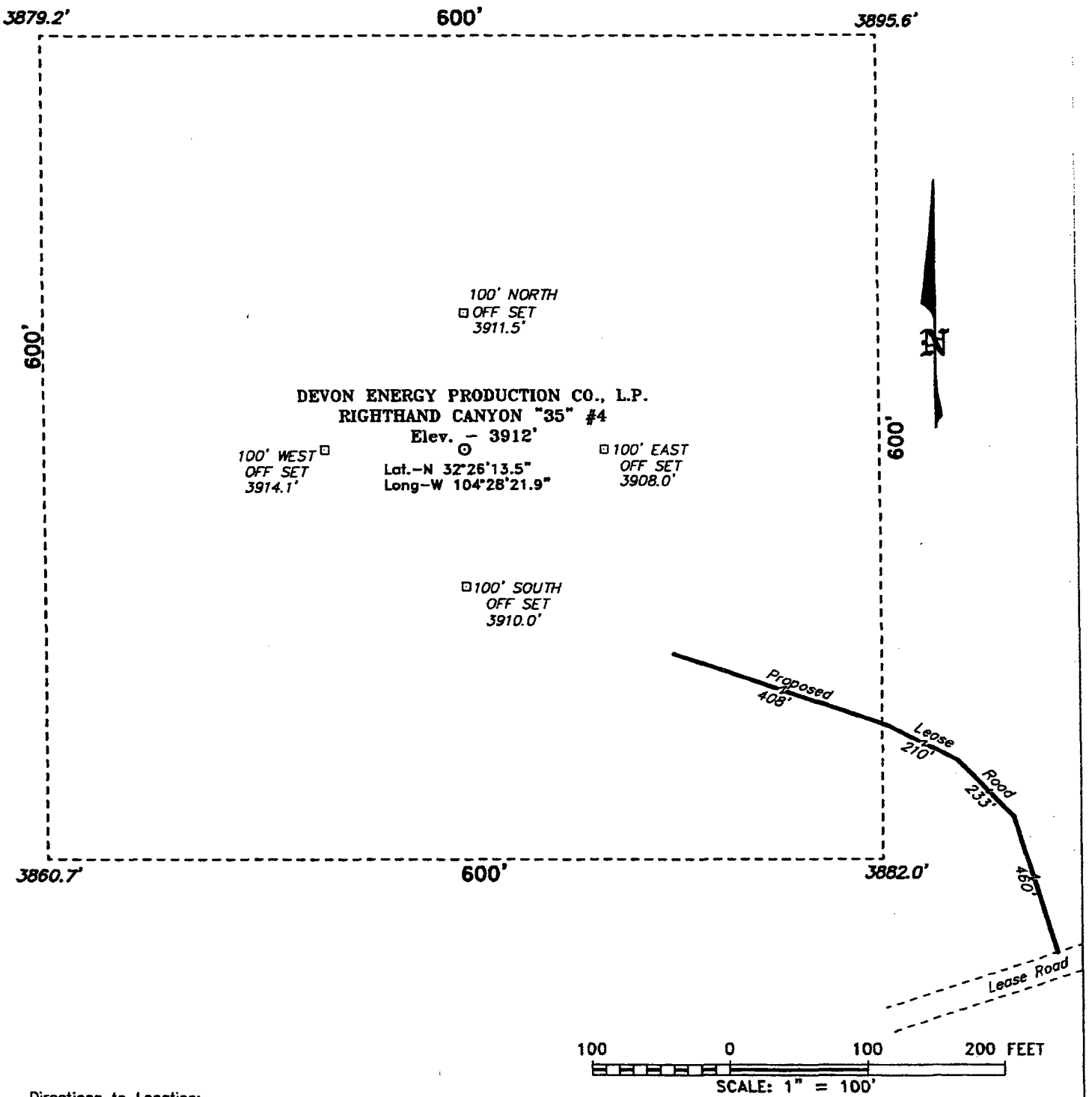
NEW MEXICO
7977
REGISTERED PROFESSIONAL LAND SURVEYOR

W.O. No. 3796

Certificate No. Gary L. Jones 7977

BASIN SURVEYS

SECTION 3, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M.,
EDDY COUNTY, **NEW MEXICO.**



Directions to Location:

FROM THE JUNCTION OF US HWY 285 AND STATE HWY 137, GO SOUTHWESTERLY ON 137 FOR 6.4 MILES TO A LEASE ROAD LEFT; THENCE FOLLOW WINDING LEASE ROAD FOR 2.2 MILES TO A CATTLE GUARD AND LEASE ROAD RIGHT. PROPOSED LEASE ROAD IS APPROX. 200' FROM CATTLE GUARD.

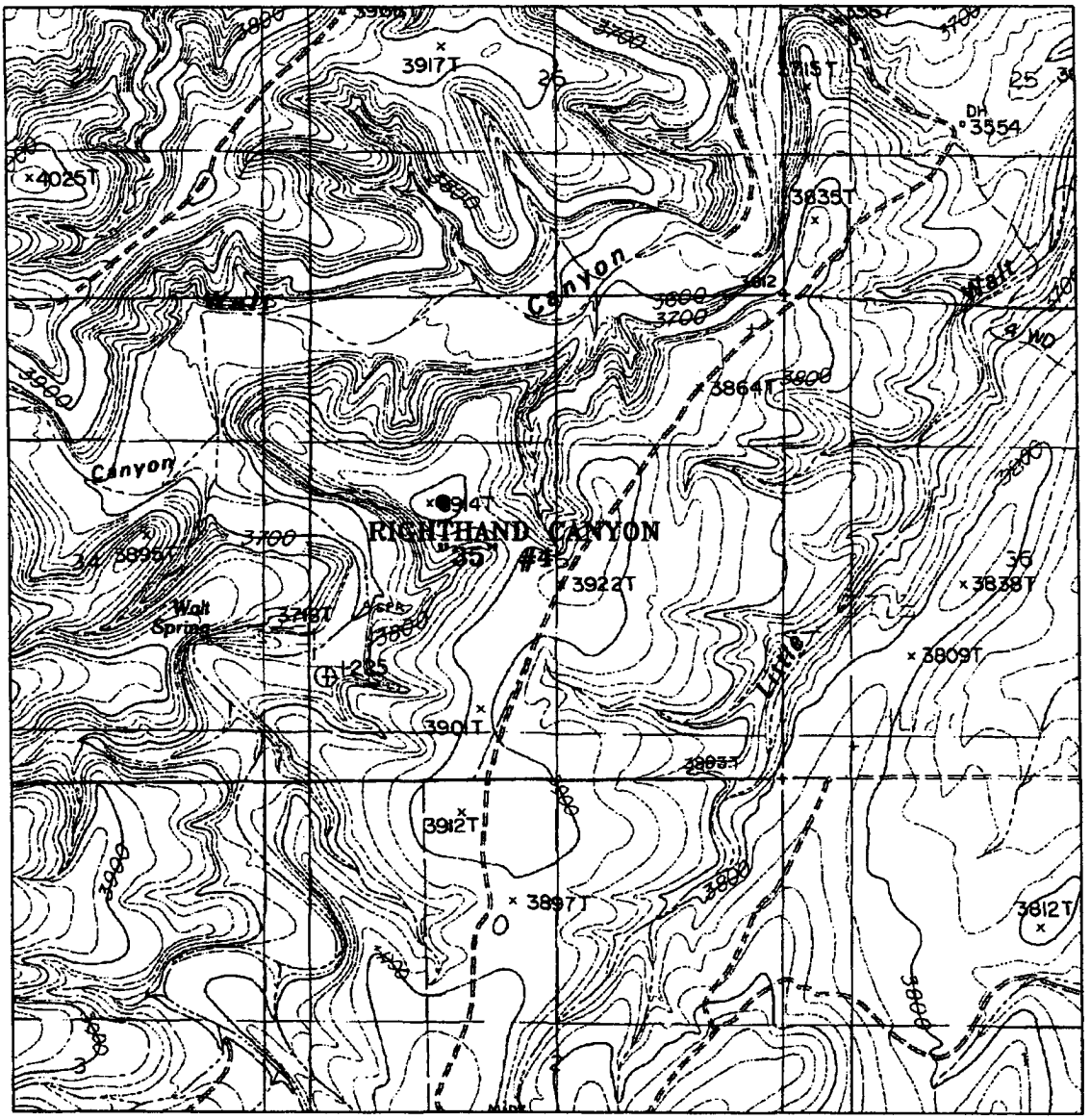
DEVON ENERGY PROD. CO., L.P.

REF: RIGHTHAND CANYON "35" No. 4 / Well Pad Topo

THE RIGHTHAND CANYON "35" No. 4 LOCATED 2310' FROM THE NORTH LINE AND 1475' FROM THE WEST LINE OF SECTION 35, TOWNSHIP 21 SOUTH, RANGE 24 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

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

W.O. Number: 3794	Drawn By: K. GOAD		
Date: 11-21-2003	Disk: KJG CD#4 - 3794A.DWG	Survey Date: 11-20-2003	Sheet 1 of 1 Sheets



RIGHTHAND CANYON "35" #4

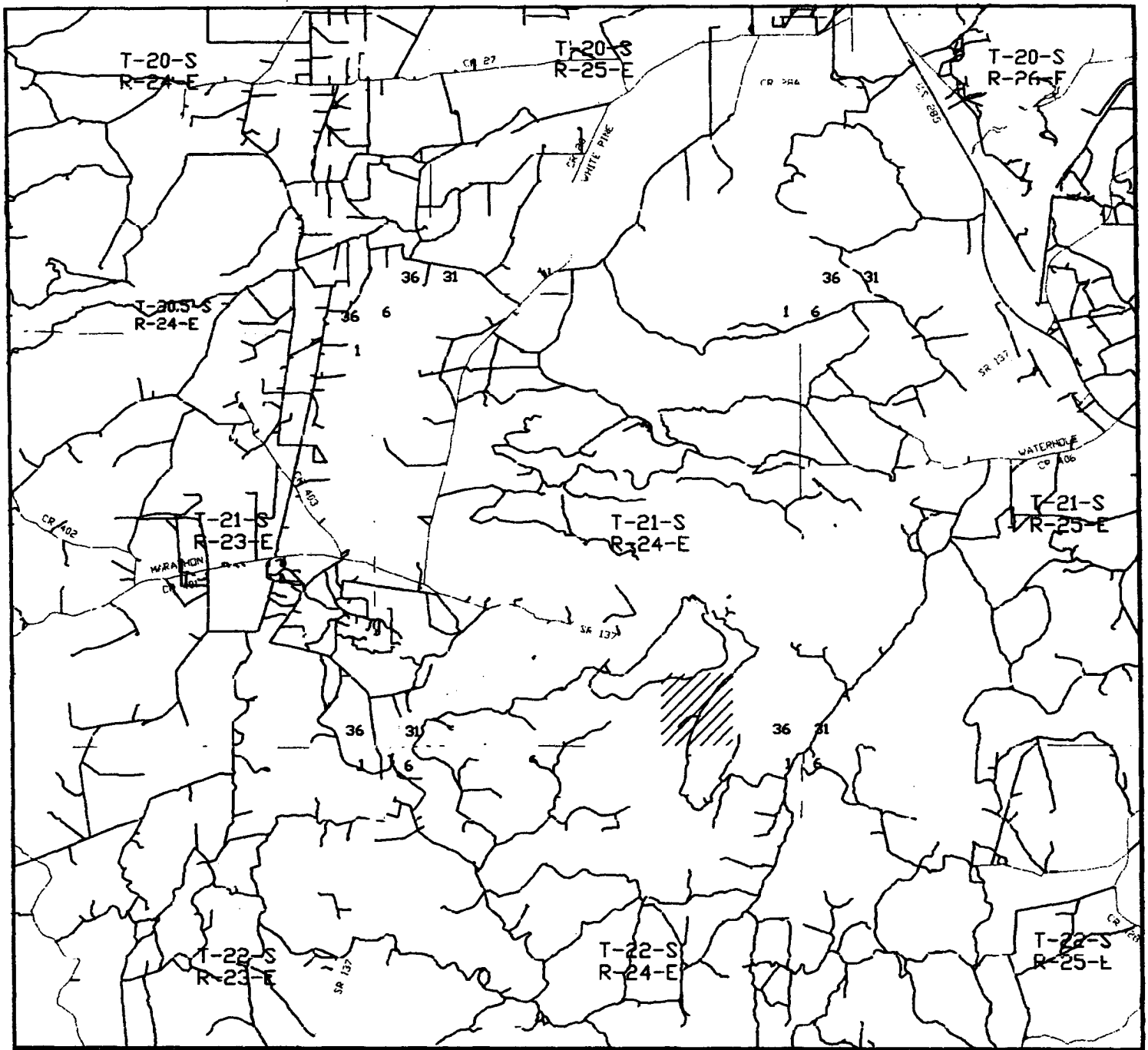
2310' FNL AND 1475' FWL
Section 35, Township 21 South, Range 24 East,
N.M.P.M., Eddy County, New Mexico.

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:	3794AA - KJG CD#4
Survey Date:	11-20-2003
Scale:	1" = 2000'
Date:	11-21-2003

DEVON ENERGY PROD. CO., L.P.



RIGHTHAND CANYON "35" #4
2310' FNL AND 1475' FWL
Section 35, Township 21 South, Range 24 East,
N.M.P.M., Eddy County, New Mexico.

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(505) 393-7316 - Office
(505) 392-3074 - Fax
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W.O. Number:	3794AA - KJG CD#4
Survey Date:	11-20-2003
Scale:	1" = 2000'
Date:	11-21-2003

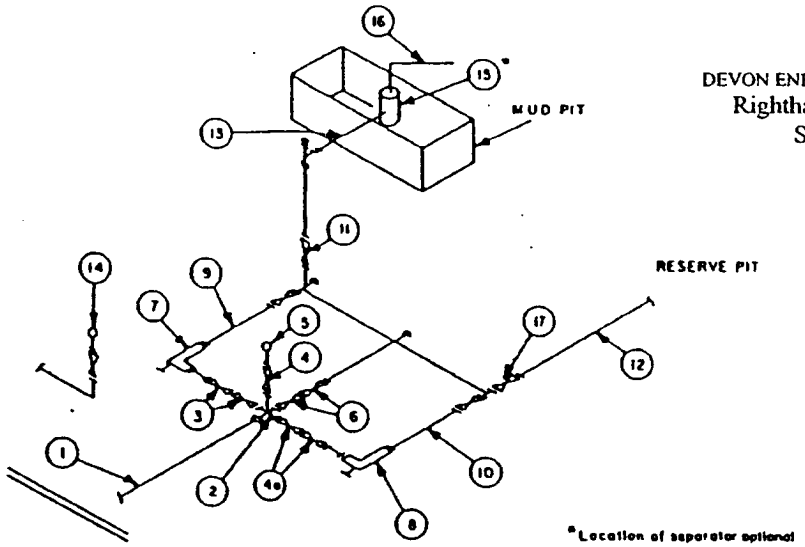
DEVON ENERGY PROD. CO., L.P.

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

3 MWP - 5 MWP - 10 MWP

EXHIBIT # 1

DEVON ENERGY PRODUCTION COMPANY, L.P.
Righthand Canyon "35" Federal # 4
Section 35-T21S-R24E
Eddy Cnty, NM



BEYOND SUBSTRUCTURE

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

(1) Only one required in Class 3M.

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

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

EQUIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTIONS

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

NIMUM BLOWOUT PREVENTER REQUIREMENTS

3,000 psi Working Pressure

3 MWP

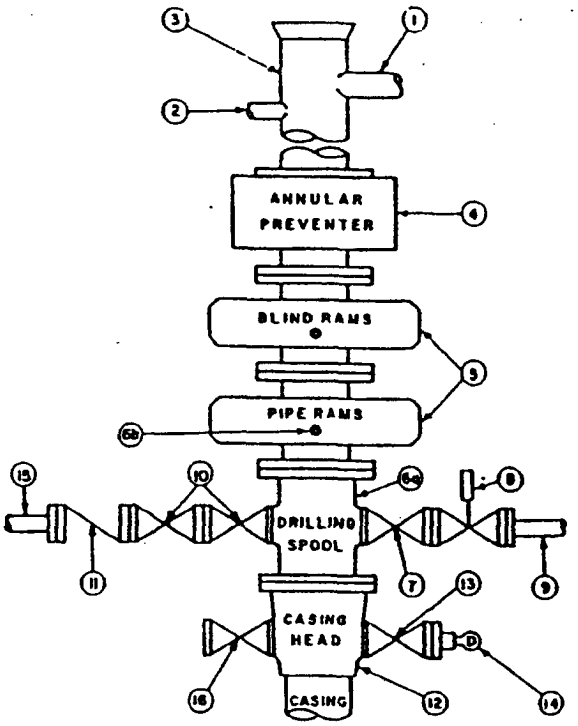
EXHIBIT # 1

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.

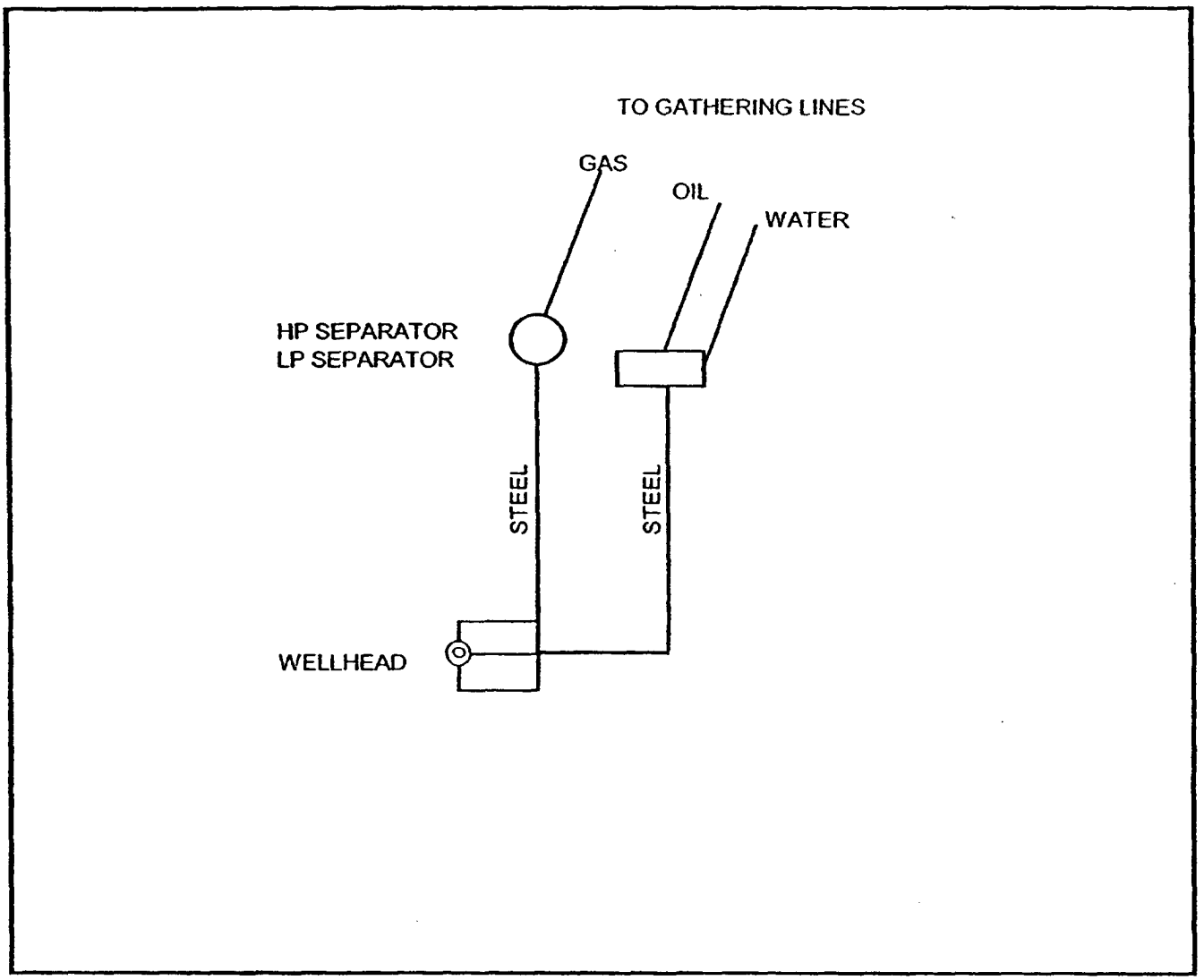
MEC TO FURNISH:

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

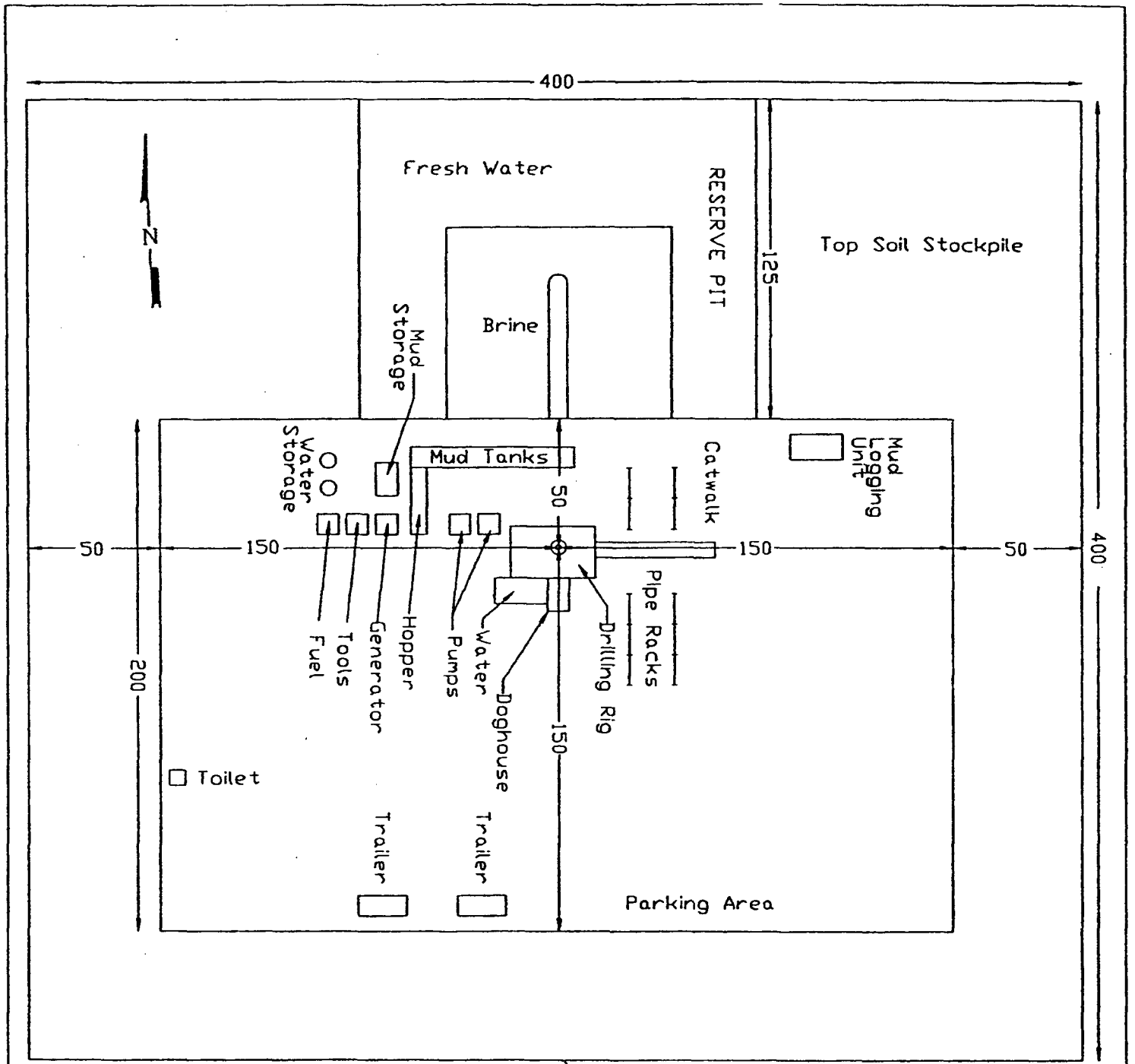
GENERAL NOTES:

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.

EXHIBIT 5



PRDUCTION FACILITIES SCHEMATIC
DEVON ENERGY PRODUCTION COMPANY, L.P.
Righthand Canyon "35" Federal #4
Section 35-T21S-R24E
Eddy Cnty, NM



devon

INDIAN BASIN AREA

EDDY COUNTY, NEW MEXICO

DRILLING RIG LAYOUT AND ELEVATIONS

RIGHTHAND CANYON "35" FEDERAL 4

EXHIBIT 6

8/98

EXHIBIT 7

Well name:	**Righthand Canyon 35 Fed Com #4**
Operator:	**Devon Energy Production Company L.P.**
String type:	Surface
Location:	Section 35-T21S-R24E

Design parameters:

Collapse
Mud weight: 8.500 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 914 psi
Internal gradient: 0.000 psi/ft
Calculated BHP 914 psi
Annular backup: 8.50 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: 1,399 ft

Environment:
H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 88 °F
Temperature gradient: 0.80 °F/100ft
Minimum section length: 1,000 ft
Minimum Drift: 8.750 in

Non-directional string.

Re subsequent strings:
Next setting depth: 8,600 ft
Next mud weight: 9.000 ppg
Next setting BHP: 4,021 psi
Fracture mud wt: 11.000 ppg
Fracture depth: 1,600 ft
Injection pressure 914 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	1600	9.625	36.00	J-55	ST&C	1600	1600	8.796	13908

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	706	2020	2.86	914	3520	3.85	57.6	394	6.84 J

Prepared by: D. C. Jennings, Devon Energy
Phone: (405) 228-8636
FAX: (405) 552-4621
Date: June 25,2003
Oklahoma City, Oklahoma

Remarks:
Collapse is based on a vertical depth of 1600 ft, a mud weight of 8.5 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.

EXHIBIT 7

Well name:	**Righthand Canyon 35 Fed Com #4**
Operator:	**Devon Energy Production Company L.P.**
String type:	Production
Location:	Section 35-T21S-R24E

Design parameters:

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

Burst
Max anticipated surface pressure: 4,021 psi
Internal gradient: 0.000 psi/ft
Calculated BHP 4,021 psi
Annular backup: 9.00 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: 7,526 ft

Estimated cost: 64,825 ($)

Environment:
H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 144 °F
Temperature gradient: 0.80 °F/100ft
Minimum section length: 1,000 ft

Directional Info - Build & Hold
Kick-off point 5000 ft
Departure at shoe: 990 ft
Maximum dogleg: 2 °/100ft
Inclination at shoe: 17.39 °

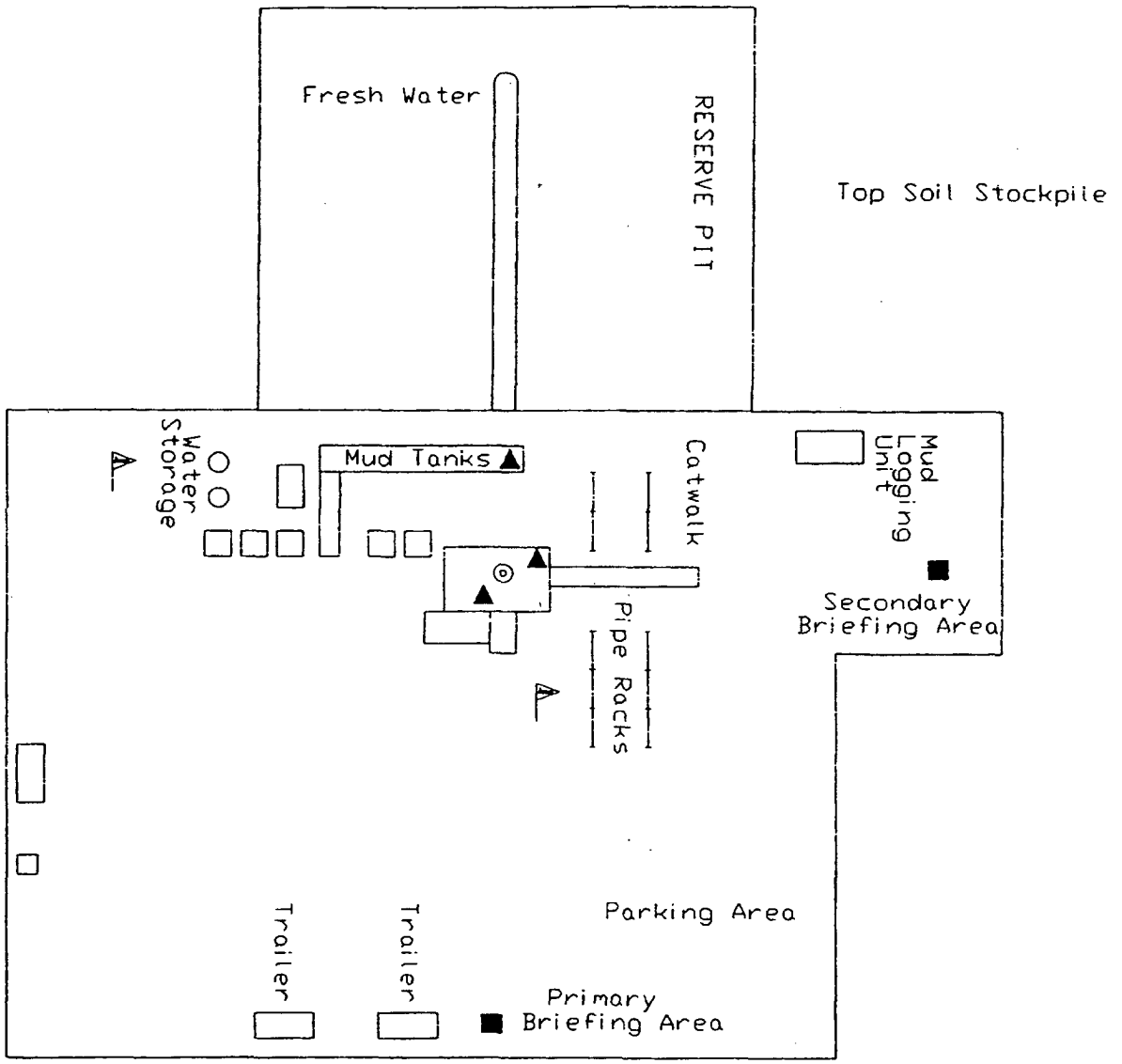
Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ($)
3	1000	7	23.00	HCL-80	LT&C	1000	1000	6.25	9709
2	4500	7	23.00	J-55	LT&C	5497	5500	6.25	23611
1	3245	7	23.00	HCL-80	LT&C	8600	8745	6.25	31504

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	468	4890	10.46	4021	6340	1.58	197.8	485	2.45 J
2	2570	2970	1.16	3553	4360	1.23	174.8	313	1.79 J
1	4021	5650	1.41	1451	6340	4.37	71.4	485	6.80 J

Prepared by: D. C. Jennings
Devon Energy
Phone: (405) 228-8636
FAX: (405) 552-4621
Date: June 25,2003
Oklahoma City, Oklahoma

Remarks:
Collapse is based on a vertical depth of 8600 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.
Collapse strength is (biaxially) derated for doglegs in directional wells by multiplying the tensile stress by the cross section area to calculate a



▲ 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

File: O:\\NM\H2S-PLAN

devon

EDDY COUNTY, NEW MEXICO

RIGHTHAND CANYON "35" FEDERAL 4

H2S PLAN

Scale in Feet

25 0 25 50 75 100

4/97

devon Energy Corp

2401 Pecos Ave
Artesia NM 88210

Hydrogen Sulfide (H_2S) Contingency Plan

For

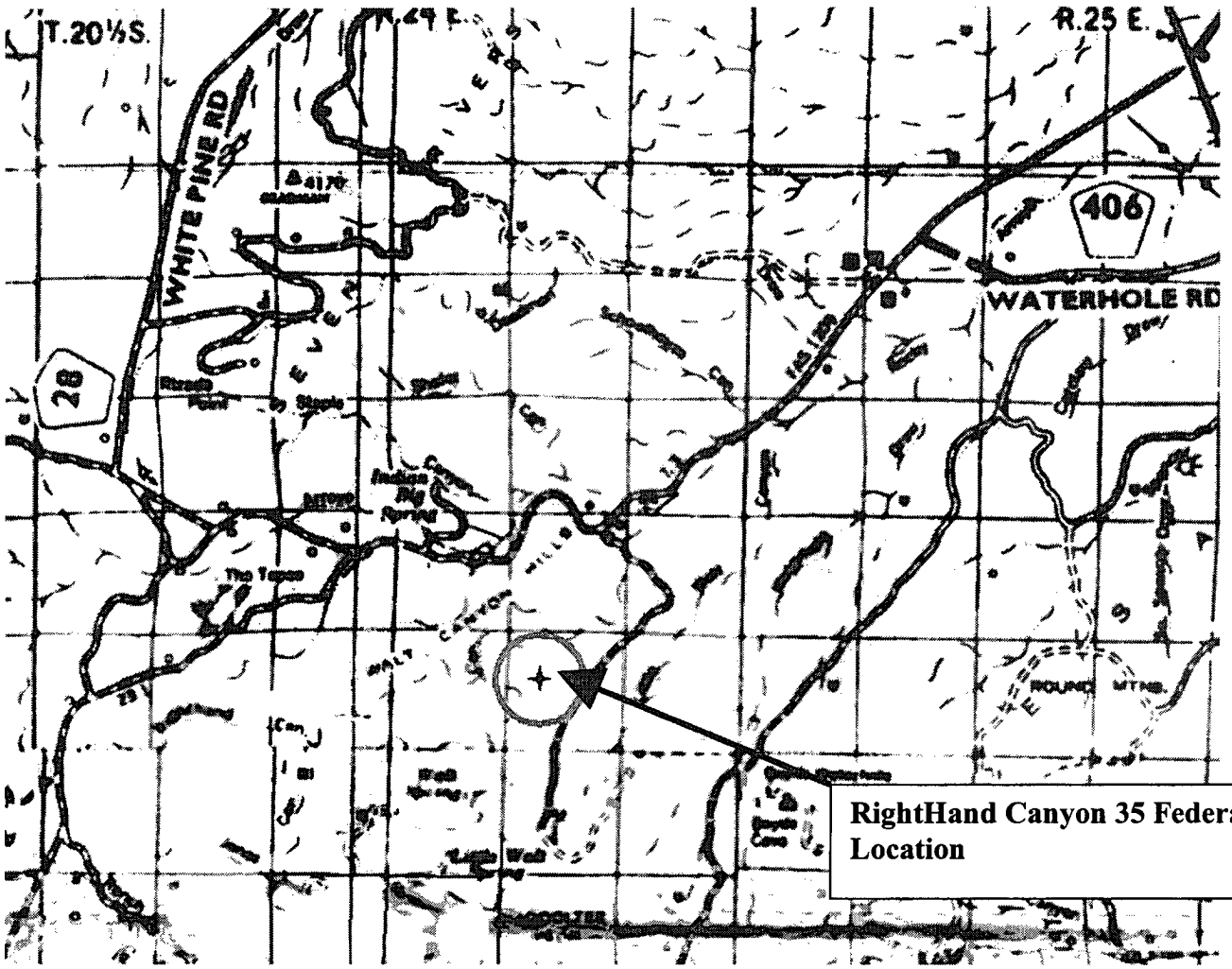
Righthand Canyon 35 Federal #4

2310 FNL & 1475 FWL,
Unit E, Sec-35 T-21S R-24E

Eddy County NM

Righthand Canyon 35 Federal #4

This is an open drilling site. H_2S monitoring equipment and emergency response equipment will be used within 500' of zones known to contain H_2S, including warning signs, wind indicators and H_2S monitor.



RightHand Canyon 35 Federal # 4 Location

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

Emergency Procedures

In the case of a release of gas containing H_2S, 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 H_2S, measures for protection against the gas, equipment used for protection and emergency response. Additionally, responders must be equipped with H_2S 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 (SO_2). 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 H_2S and SO_2

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentr-ation
Hydrogen Sulfide	H_2S	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

Artesia (505)	Cellular	Office	Home
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;

Compliance Services
PO Box 2791 Hobbs NM 88240 (505) 631-1561