Form 3160-3
(August, 1999)

L-21

DEP

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

New Mexico Oil Conservation Division, District I
1625 N. French Drive
Hobbs, NM 88240

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a TYPE OF WORK: ☒ DRILL ☐ REENTER

0028

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

2. NAME OF OPERATOR
DEVON ENERGY PRODUCTION COMPANY, L.P.

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 **1550' FSL & 1550 FEL**

At top proposed prod. zone 1550' FSL & 1550 FEL

J

5. LEASE DESIGNATION AND SERIAL NO.
NM68820

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME, WELL NO.
Paloma Blanco 19 Federal Com #2

9. API WELL NO.
30-025-36487

10. FIELD AND POOL, OR WILDCAT
Bell Lake (Morrow), Mid

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA
Sec 19- T23S R34E, Unit J

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*	12. COUNTY OR PARISH	13. STATE
20 miles west of Jal, New Mexico	Lea	NM

15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line if any)	16. NO. OF ACRES IN LEASE	17. Spacing Unit dedicated to this well
1550'	320.00	320
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.	**19. PROPOSED DEPTH**	**20. BLM/BIA Bond No. on file**
	14,000'	CO-1104
21. ELEVATIONS (Show whether DF, RT, GR, etc.)	**22. APPROX. DATE WORK WILL START***	**23. Estimated duration**
	October 15, 2003	55 days

24. Attachments

Capitan Controlled Water Basin

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.

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 = **Production Facilities Plat**
Exhibit #6 = Rotary Rig Layout
Exhibit #7 = 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 #: CO-1104

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

OPER. OGRID NO. 6137
PROPERTY NO. 30877
POOL CODE 72000
EFF. DATE 11-19-03
API NO. 30-025-36487

25. Signature	Name (Printed/Typed)	Date
Karen Cottom	KAREN COTTOM	September 8, 2003
Title: OPERATIONS TECHNICIAN		

Approved by (signature)	Name (Printed/Typed)	Date
/S/ JOE G. LARA	/S/ JOE G. LARA	NOV 17 2003
Title: 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)

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
30-025-36487	~~71960~~ 72000	BELL LAKE MORROW ~~SOUTH GAS~~ Mid.

Property Code	Property Name	Well Number
30877	PALOMA BLANCO "19" FEDERAL COM	2

OGRID No.	Operator Name	Elevation
6137	DEVON ENERGY PRODUCTION CO., L.P.	3560'

Surface Location

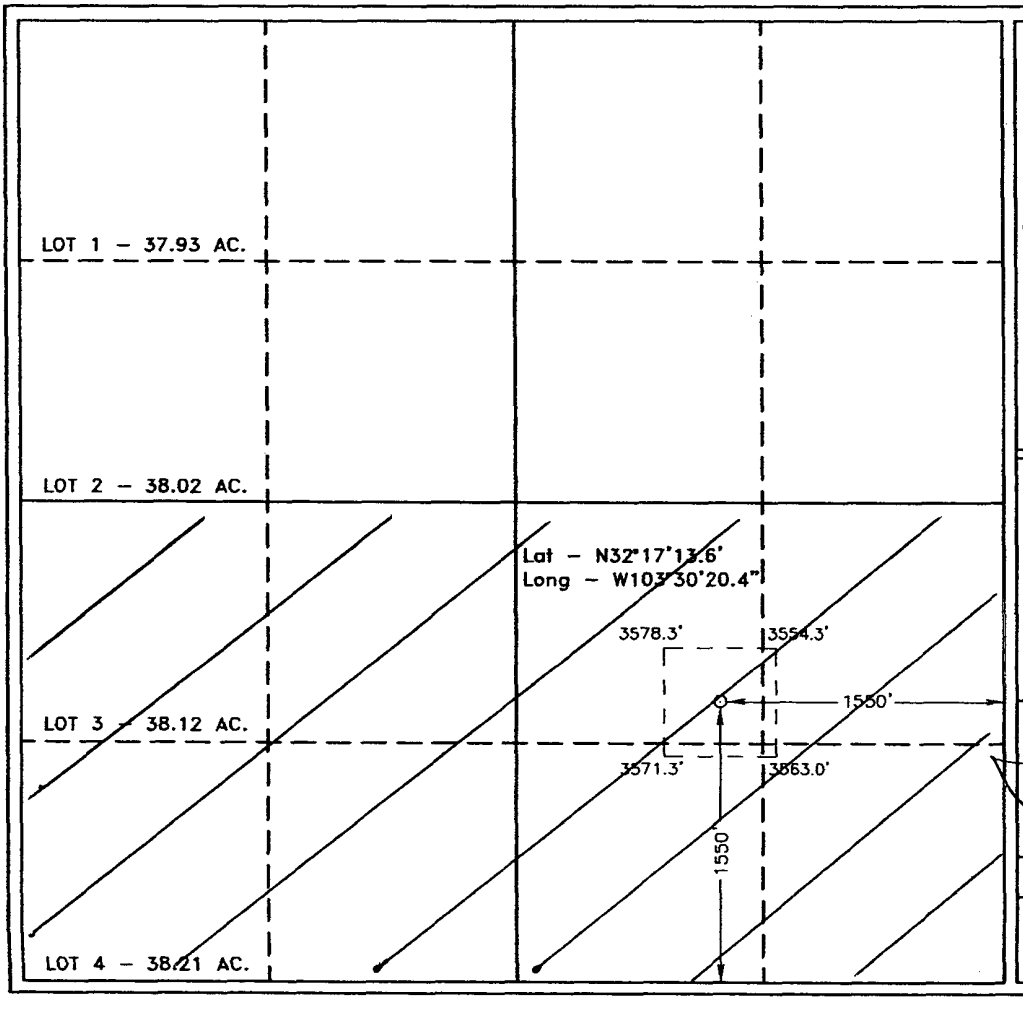
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	19	23 S	34 E		1550	SOUTH	1550	EAST	LEA

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.
320			

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

September 3, 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.

AUGUST 18, 2003
Date Surveyed

Signature & Seal of Professional Surveyor

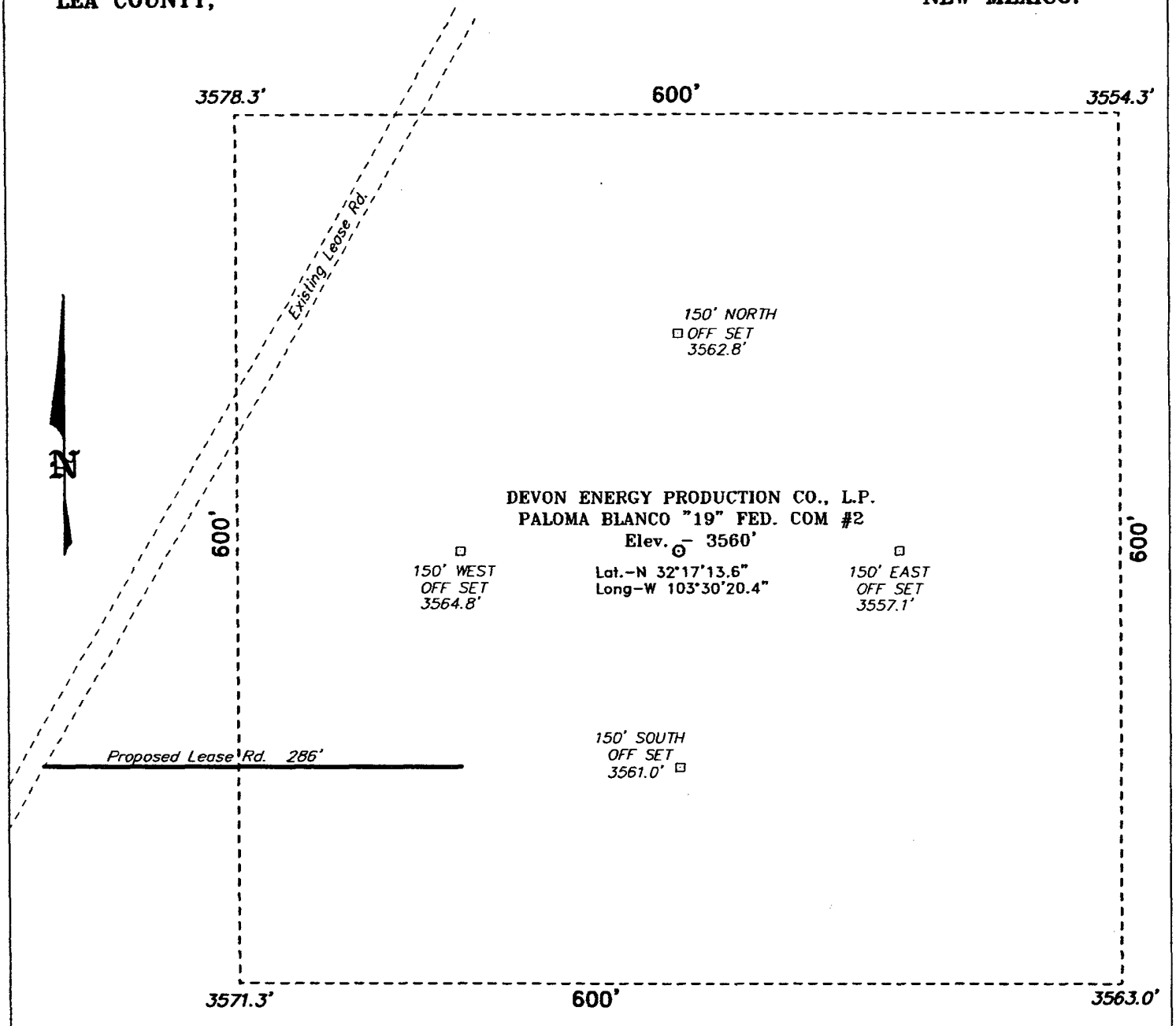
GARY L. JONES
NEW MEXICO
7977
REGISTERED PROFESSIONAL LAND SURVEYOR

W.O. No. 3536

Certificate No. Gary L. Jones 7977

BASIN SURVEYS

SECTION 19, TOWNSHIP 23 SOUTH, RANGE 34 EAST, N.M.P.M.,
LEA COUNTY, **NEW MEXICO.**



100 0 100 200 FEET

SCALE: 1" = 100'

Directions to Location:

FROM THE JUNCTION OF CO. RD. E-21 & STATE HWY 128, GO NORTH ON DELAWARE BASIN ROAD FOR 5.0 MILES TO LEASE ROAD; THENCE EAST ON LEASE ROAD FOR 0.1 MILE; THENCE NORTH ON LEASE ROAD FOR 0.25 MILE TO A POINT ON THE PROPOSED WELL PAD.

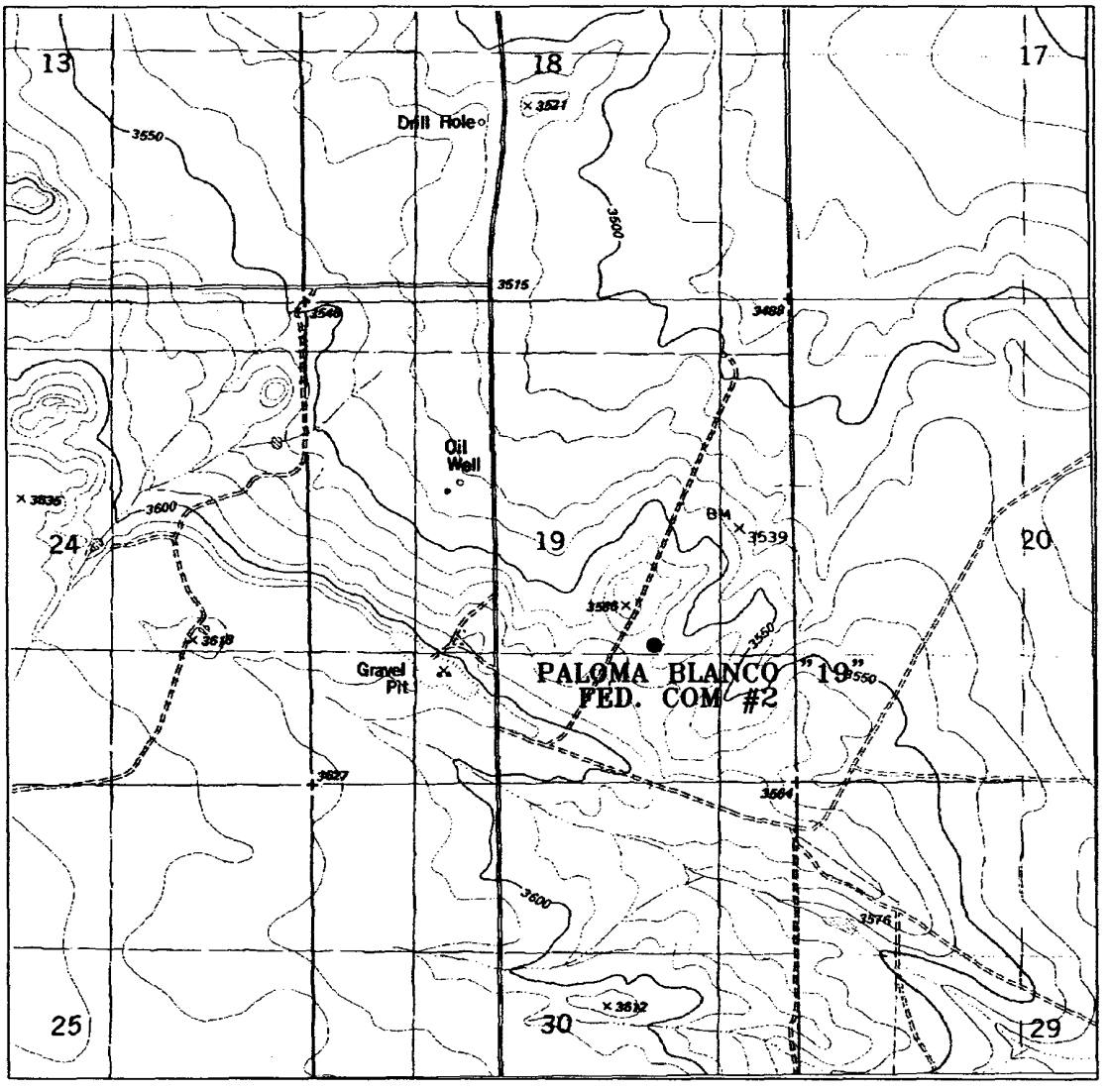
DEVON ENERGY PROD. CO., L.P.

REF: PALOMA BLANCO "19" FED. COM No. 2 / Well Pad Topo

THE PALOMA BLANCO "19" FED. COM No. 2 LOCATED 1550' FROM THE SOUTH LINE AND 1550' FROM THE EAST LINE OF SECTION 19, TOWNSHIP 23 SOUTH, RANGE 34 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO.

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

W.O. Number: 3536	Drawn By: K. GOAD		
Date: 08-19-2003	Disk: KJG CD#4 - 3536A.DWG	Survey Date: 08-18-2003	Sheet 1 of 1 Sheets



PALOMA BLANCO "19" FEDERAL COM #2

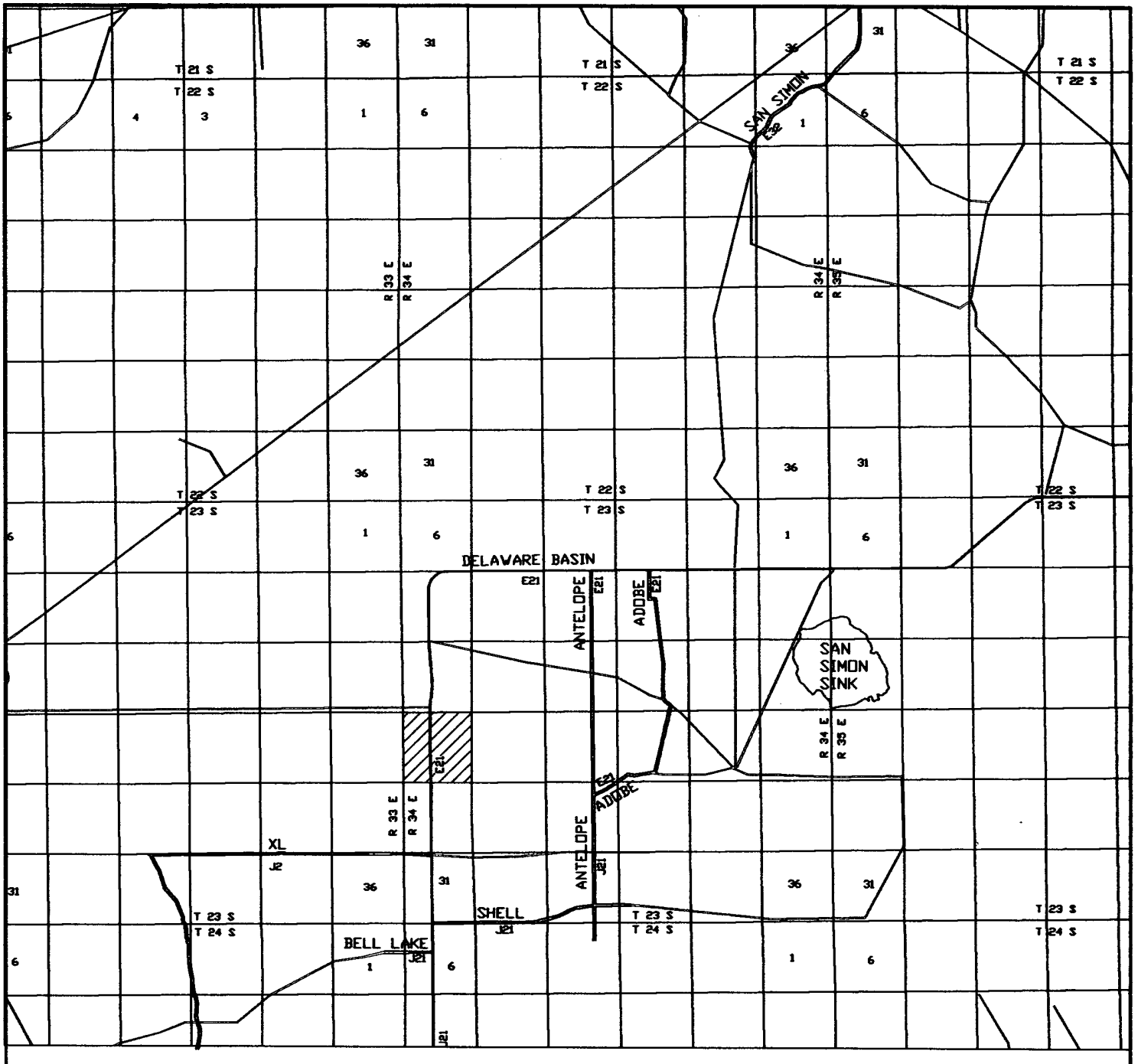
1550' FSL AND 1550' FEL
Section 19, Township 23 South, Range 34 East,
N.M.P.M., Lea County, New Mexico.

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:	3536AA - KJG CD#4
Survey Date:	08-18-2003
Scale:	1" = 2000'
Date:	08-19-2003

DEVON ENERGY PROD. CO., L.P.



PALOMA BLANCO "19" FEDERAL COM #2
1550' FSL AND 1550' FEL
Section 19, Township 23 South, Range 34 East, N.M.P.M., Lea County, New Mexico.

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(505) 393-7316 - Office
(505) 392-3074 - Fax
basinsurveys.com

W.O. Number:	3536AA - KJG CD#4
Survey Date:	08-18-2003
Scale:	1" = 2 MILES
Date:	08-19-2003

DEVON ENERGY PROD. CO., L.P.

DRILLING PROGRAM

Attached to Form 3160-3
Devon Energy Production Company, LP
PALOMA BLANCO 19 FEDERAL COM #2
(J) 1550' FSL & 1550' FEL, Section 19, T-23-S, R-34-E
Lea County, New Mexico

1. Geologic Name of Surface Formation

   Alluvium

2. Estimated Tops of Important Geologic Markers

Rustler	1,050'
Salt	4,454'
Delaware	5,000'
Bone Spring	8,600'
Wolfcamp	10,600'
Strawn	11,900'
Atoka	12,300'
Morrow	12,900'
TD	14,000'

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

   The estimated depths at which water, oil and gas will be encountered are as follows.

Water:	None expected in area
Oil	Bone Spring @ 9,100'
Gas:	Upper Morrow @ 13,100'

PALOMA BLANCO 19 FEDERAL COM #2
DRILLING PLAN
PAGE 2
4. Casing Program

INTERVALS	LENGTH	CASING
Surface 0 – 1075'	1075	13 3/8" 48# H-40 STC
Intermediate 0 – 5000'	5000'	9 5/8" 40#N-80 & HCK-55 LT&C
Production 0 – 11800'	11800	7" 26# HCP-110 LTC
Liner 11800 – 14000'		4 1/2" 13.5# P-110 LTC

Cementing Program

HOLE SIZE	DEPTH	CEMENT	TOC	WOC HRS
Surface 17 ½"	1075'	**Lead:** 350 sxs 35/65 POZ + 6% gel + 1/4#/sx celloflk (12.7#/gal) **Tail:** 200 sxs Cl "C" + 2% CaCl2	Surf.	12
Intermediate 12 ¼"	5000'	**Lead:** 1200 sxs 50/50 POZ + 10% gel 5% salt +1/4#/sx celloflk (12.7#/gal)	Surf.	12
Production 8 3/4"	11,800	**Lead:** 300 sx Light **Tail:** 300 sx Class H	6000	24
Liner 6 1/8"	11,800 – 14,000	**Cmt w/250 sx Class H**		

The cement volumes for the 4 1/2" liner 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 A Blow-out Preventer (5,000/10,000 PSI working pressure) consisting of double ram type preventor and bag type preventer. Units will be hydraulically operated. See Exhibit #2 for Choke Manifold and Closing Unit. Blind rams on top, pipe rams on bottom to correspond with size of drill pipe in use. BOP will be tested as well as choke manifold. BOP will be worked at least once each day while drilling & blind ram will be worked on trips when no drill pipe is in hole. Full opening stabbing valve and upper Kelly cock will be utilized. Anticipated BHP 8000 psi and 190° BHT.

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 8000 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 Brine	10	28-30	No control
5200' – 12,000'	Cut Brine	9.0 – 9.2	28-30	No control
12,000' – TD	Cut Brine/Starch	9.8 – 13	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 4 1/2" production liner. 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 190 degrees and maximum bottom hole pressure is 8000 psi. No Hydrogen sulfide or other hazardous gases or fluids have been encountered, reported See Strips 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 September 15, 2003. The drilling operation should require approximately 55 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
PALOMA BLANCO 19 FEDERAL COM #2
(J) 1550' FSL & 1550' FEL, Section 19, T-23-S, R-34-E

Eddy County, New Mexico

1. Existing Roads

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

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

   C. Directions to location: From the junction of Co. Rd. E-21 & State Hwy 128, go North on Delaware Basin Road for 5.0 miles to lease road; thence east on lease road for 0.1 mil; thence north on lease road for 0.25 mile to a point on the proposed well pad.

2. Proposed Access Road

   Exhibit #3 shows the existing lease road. Access to this location will require the construction of about 286' of proposed access road. All new construction will adhere to the following.

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

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

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

3. Location of Existing and/or Proposed Facilities

A. In the event the well is found productive, a tank battery would be constructed and the necessary production equipment will be installed at the well site.

1) If necessary, the well will be operated by means of an electric prime mover. Electric power poles will be set along side of the access road. If pwr Sundry Approval

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

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

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

2) The original topsoil from the well site will be returned to the location. The drill site will then be contoured as close as possible to the original state.

5. Location and Type of Water Supply

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

6. Source of Construction Materials

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

7. Methods of Handling Water Disposal

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

B. Drilling fluids will be contained in steel mud tanks. The reserve pit will contain excess drilling fluid or fluid from the well during drilling, cementing and completion operations. The reserve pit will be an earthen pit roughly 150' x 150' x 8', or smaller, in size.

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

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

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

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

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

8. Ancillary Facilities

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

9. Well Site Layout

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

11. Surface Ownership

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

Road routes have been approved by the BLM.

The surface location will be restored as directed by the BLM.

12. Other Information

A. The project area is located in a relatively flat area. The top soil at the wellsite is sandy. Vegetation in the area is moderately sparse, with prairie grasses, some mesquite bushes, and shinnery oak. No wildlife was observed but it is likely that deer, rabbits, coyotes, and rodents traverse the area.

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

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

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

13. Lessee's and Operator's Representative

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

Bill Greenlees
Operations Engineering Advisor

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

(405) 552-8194 (office)
(405) 203-7778 (cell)

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: September 8, 2003
Bill Greenlees
Operations Engineering Advisor

Attachment to Exhibit #1
NOTES REGARDING BLOWOUT PREVENTERS
Devon Energy Production Company, LP
PALOMA BLANCO 19 FEDERAL COM #2
(J) 1550' FSL & 1550' FEL, Section 19, T-23-S, R-34-E
Lea 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 5000/10000 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.

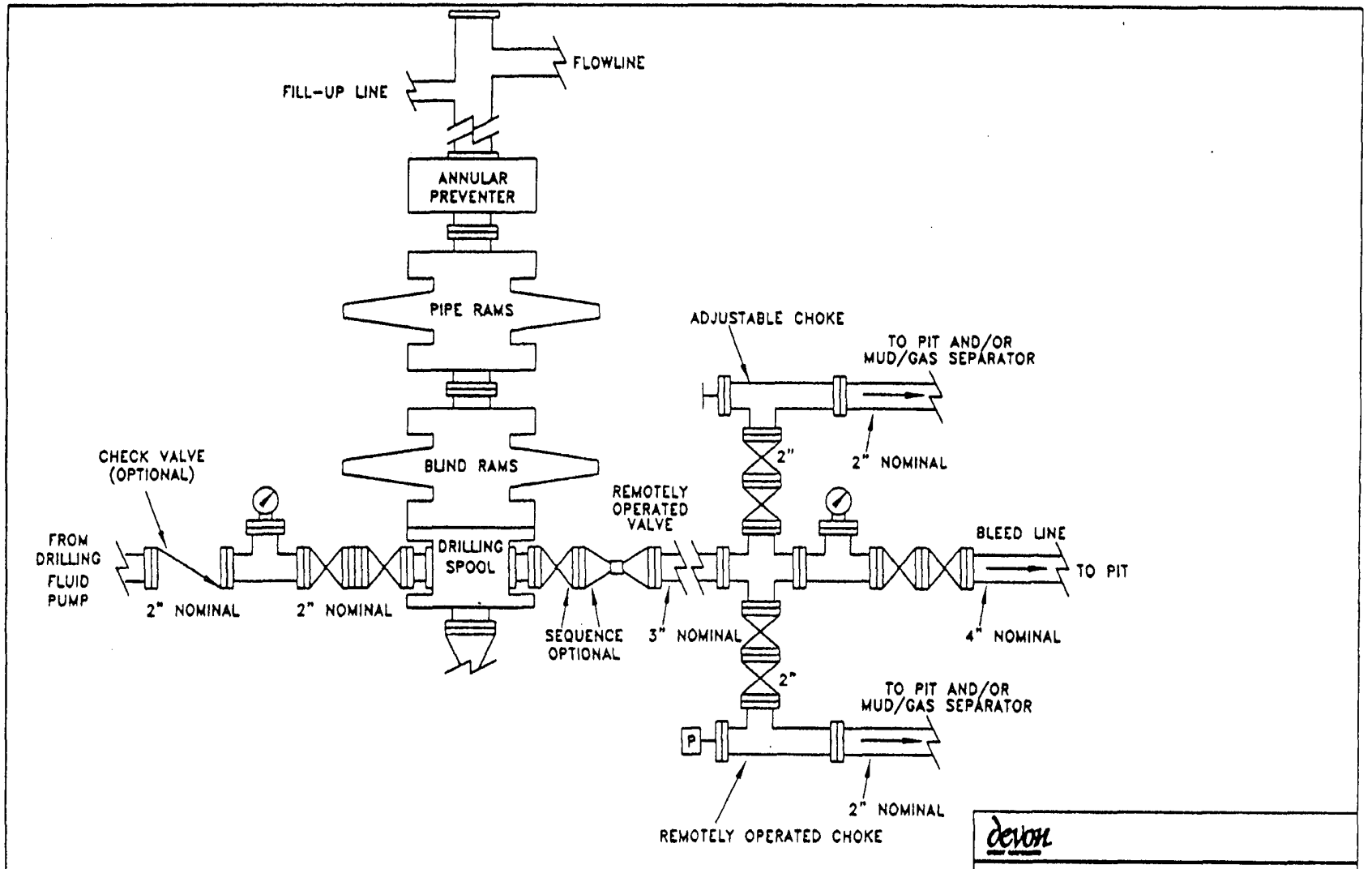
UNITED STATES DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Roswell Field Office
2909 West Second Street
Roswell, New Mexico 88201-1287

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.:	**NMNM68820**
Legal Description of Land:	**320 acres 19-T23S-R34E**
Formation(s):	**Bell Lake (Morrow)**
Bond Coverage:	**Nationwide**
BLM Bond File No.:	**CO1104**
Authorized Signature:	**Bill Greenlees**
Title:	**Operations Engineering Advisor**
Date:	September 8, 2003



devon

AREA NAME

COUNTY, STATE

SCHEMATIC

PROPOSED 5-M BOPE AND CHOKE ARRANGEMENT

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

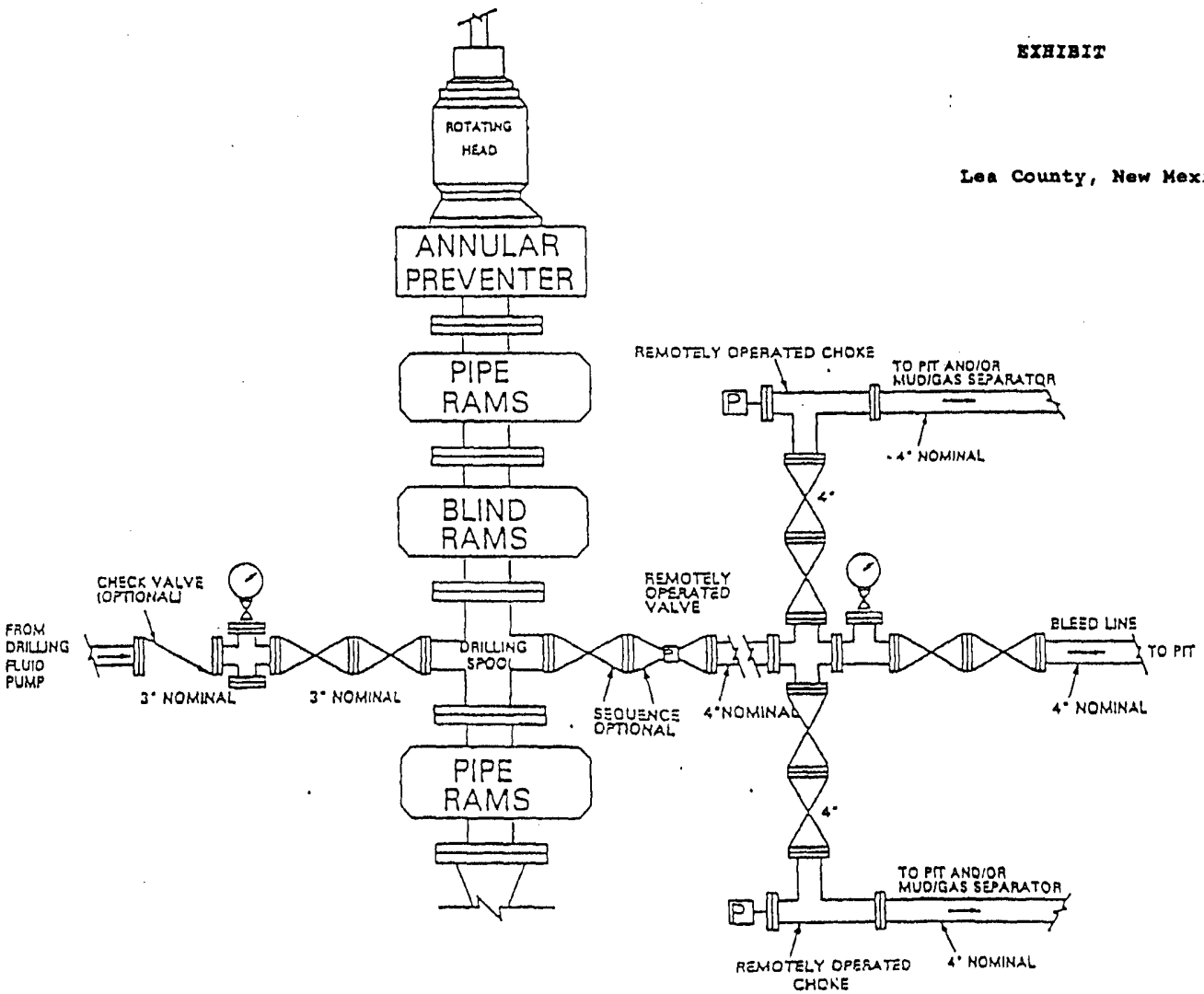
SC

10/00

PROPOSED 10-M BOPE AND CHOKE ARRANGEMENT

EXHIBIT

Lea County, New Mexico



Well name:	**Paloma Blanco 19**
Operator:	**Devon Energy**
String type:	Surface
Location:	New Mexico

Design parameters:

Collapse

Mud weight: 8.800 ppg
Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: 500 psi
Internal gradient: 0.080 psi/ft
Calculated BHP 586 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: 937 ft

Environment:

H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 90 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 1,000 ft
Minimum Drift: 2.250 in

Non-directional string.

Re subsequent strings:

Next setting depth: 5,000 ft
Next mud weight: 10.000 ppg
Next setting BHP: 2,597 psi
Fracture mud wt: 10.500 ppg
Fracture depth: 1,075 ft
Injection pressure 586 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	1075	13.375	48.00	H-40	ST&C	1075	1075	12.59	13332

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	491	740	1.51	586	1730	2.95	51.6	322	6.24 J

Devon Energy

Date: June 4,2002
Oklahoma City, Oklahoma

Remarks:
Collapse is based on a vertical depth of 1075 ft, a mud weight of 8.8 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.

Well name:	**Paloma Blanco 19-**
Operator:	**Devon Energy**
String type:	Intermediate
Location:	New Mexico

Design parameters:

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

Burst
Max anticipated surface pressure: 1,390 psi
Internal gradient: 0.268 psi/ft
Calculated BHP 2,727 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: 4,256 ft

Estimated cost: 62,357 ($)

Environment:
H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 145 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 1,000 ft

Non-directional string.

Re subsequent strings:
Next setting depth: 11,800 ft
Next mud weight: 10.000 ppg
Next setting BHP: 6,130 psi
Fracture mud wt: 10.500 ppg
Fracture depth: 5,000 ft
Injection pressure 2,727 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 ($)
2	2000	9.625	40.00	N-80	LT&C	2000	2000	8.75	25450
1	3000	9.625	40.00	HCK-55	LT&C	5000	5000	8.75	36907

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
2	1039	2960	2.85	1925	5750	2.99	200	737	3.68 J
1	2597	4230	1.63	2727	3950	1.45	120	630	5.25 B

Devon Energy

Date: June 4,2002
Oklahoma City, Oklahoma

Remarks:
Collapse is based on a vertical depth of 5000 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:	**Paloma Blanco 19**
Operator:	**Devon Energy**
String type:	Production
Location:	New Mexico

Design parameters:

Collapse

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

Burst

Max anticipated surface pressure: 1,061 psi
Internal gradient: 0.430 psi/ft
Calculated BHP 6,130 psi

No backup mud specified.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Tension:

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

Tension is based on air weight.
Neutral point: 10,020 ft

Environment:

H2S considered?	No
Surface temperature:	75 °F
Bottom hole temperature:	240 °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 ($)
1	11800	7	26.00	HCP-110	LT&C	11800	11800	6.151	122661

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	6130	7800	1.27	6130	9950	1.62	306.8	693	2.26 J

Devon Energy

Date: June 4,2002
Oklahoma City, Oklahoma

Remarks:
Collapse is based on a vertical depth of 11800 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:	**Paloma Blanco 19**
Operator:	**Devon Energy**
String type:	Liner: Production
Location:	New Mexico

Design parameters:

Collapse

Mud weight: 11.500 ppg

Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: 2,350 psi

Internal gradient: 0.430 psi/ft

Calculated BHP 8,364 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: 13,627 ft

Environment:

H2S considered?	No
Surface temperature:	75 °F
Bottom hole temperature:	271 °F
Temperature gradient:	1.40 °F/100ft
Minimum section length:	1,000 ft

Liner top: 11,800 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 ($)
1	2200	4.5	13.50	P-110	LT&C	14000	14000	3.795	12327

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	8364	10680	1.28	8364	12410	1.48	29.7	338	11.38 J

Devon Energy

Date: June 4,2002

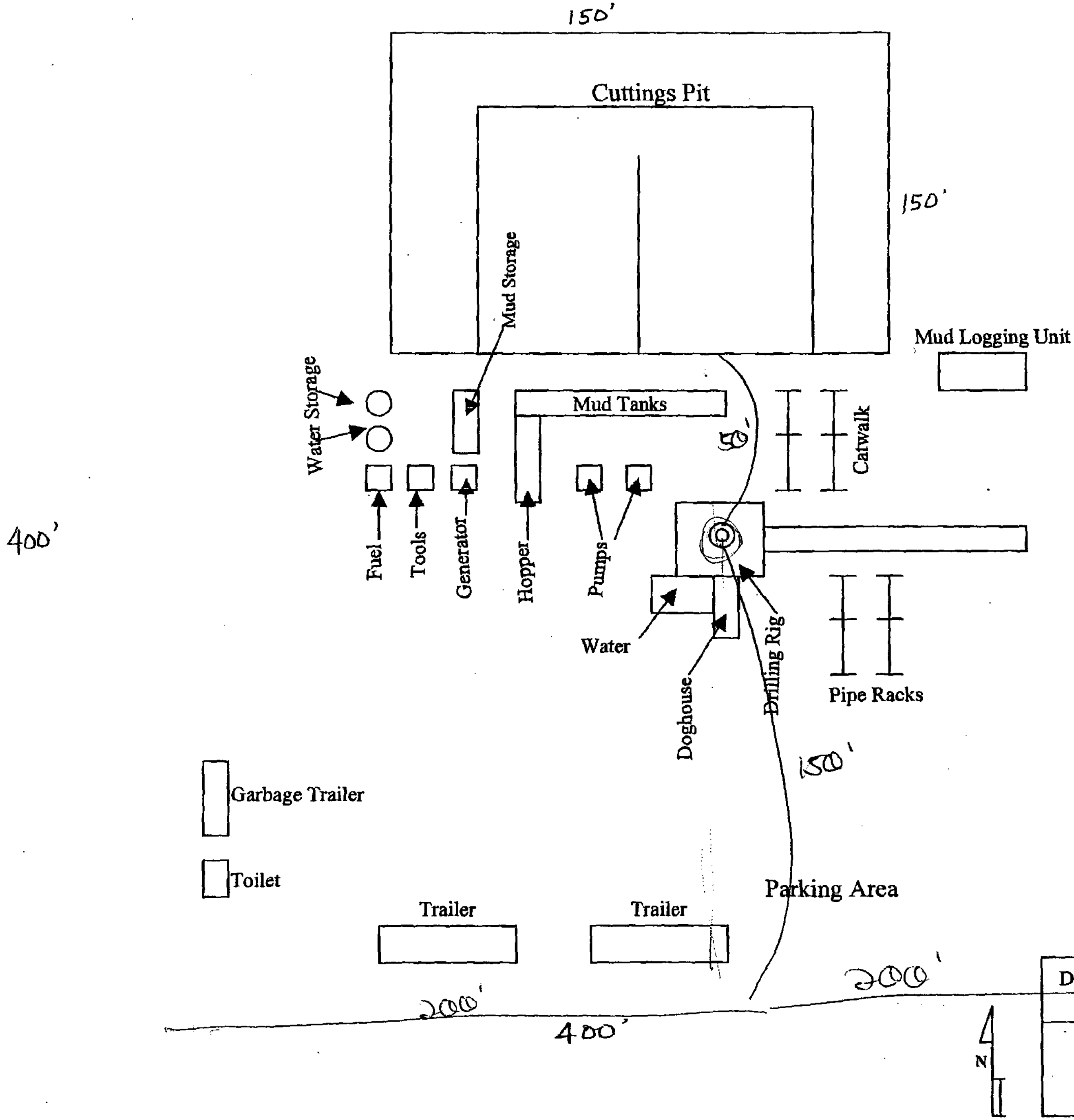
Oklahoma City, Oklahoma

Remarks:

For this liner string, the top is rounded to the nearest 100 ft.Collapse is based on a vertical depth of 14000 ft, a mud weight of 11.5 ppg The 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.



All w/in 400'² per conv Karen Cottam on 11/12/03. -TSO

Devon Energy Production Company, LP
Amoco 19-5

Drilling Pad
Exhibit #