OCD-ARTESIA

Form 3160-3 EC
(August 1999)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT 0350

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: ☒ DRILL ☐ REENTER	5. Lease Serial No. NMNM97133
	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. BLACKJACK 1 FED 2
2. Name of Operator DEVON ENERGY PRODUCTION CO L P Contact: LINDA GUTHRIE E-Mail: linda.guthrie@dvn.com	9. API Well No. 30-015-33383
3a. Address 20 NORTH BROADWAY SUITE 1500 OKLAHOMA CITY, OK 73102	3b. Phone No. (include area code) Ph: 405.228.8209 Fx: 405.552.1319
	10. Field and Pool, or Exploratory WILDCAT Sand Dunes; Del. South
4. Location of Well *(Report location clearly and in accordance with any State requirements.*)* At surface NWSE 1980FSL 1980FEL At proposed prod. zone	11. Sec., T., R., M., or Blk. and Survey or Area Sec 1 T24S R30E Mer NMP SME: BLM
14. Distance in miles and direction from nearest town or post office* APPROXIMATELY 15 MILES EAST OF LOVING 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 639.00 / 17. Spacing Unit dedicated to this well 40.00
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 8300 MD / 20. BLM/BIA Bond No. on file
21. Elevations (Show whether DF, KB, RT, GL, etc. 3449 GL	22. Approximate date work will start 03/01/2004 / 23. Estimated duration 30 DAYS

RECEIVED
APR 0 1 2004
OCD-ARTESIA

24. Attachments CARLSBAD 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.

25. Signature	Name (Printed/Typed)	Date
(Electronic Submission)	LINDA GUTHRIE	02/03/2004

Title: OPERATIONS ASSOCIATE

Approved by (Signature)	Name (Printed/Typed)	Date
/s/ Linda S. C. Rundell	/s/ Linda S. C. Rundell	MAR 25 2004
Title: STATE DIRECTOR	Office: NM STATE 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 #27368 verified by the BLM Well Information System
For DEVON ENERGY PRODUCTION CO L P, sent to the Carlsbad
Committed to AFMSS for processing by LINDA ASKWIG on 02/03/2004 (04LA0106AE)

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

Witness Surface & Intermediate Casing

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

Additional Operator Remarks:

Devon Energy proposes to drill to approximately 8300' to test the Bone Spring for commercial quantities of oil. If the Delaware is deemed non-commercial, the wellbore will be plugged and abandoned as per Federal regulations. Programs to adhere to onshore oil and gas regulations are outlines in the following exhibits and attachments.

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
		Wildcat - Bone Spring

Property Code	Property Name	Well Number
	BLACKJACK "1" FEDERAL	2

OGRID No.	Operator Name	Elevation
6137	DEVON ENERGY PRODUCTION COMPANY LP	3449'

Surface Location

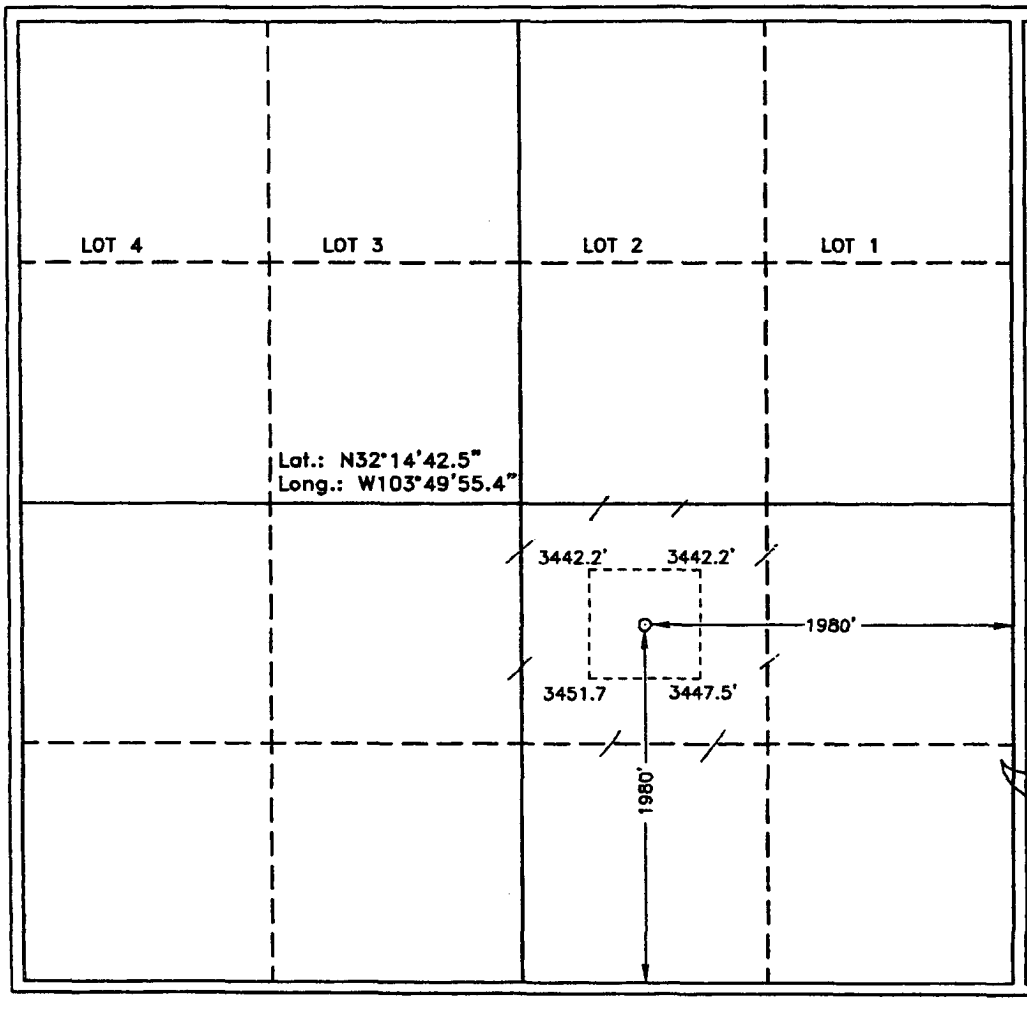
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
J	1	24 S	30 E		1980	SOUTH	1980	EAST	EDDY

Bottom Hole Location If Different From Surface

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

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
40			

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



OPERATOR CERTIFICATION

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

Signature: Linda B Guthrie

Printed Name: Linda B Guthrie

Title: Operations Associate

Date: 01/29/04

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.

JANUARY 26, 2004

Date Surveyed

Signature & Seal of Professional Surveyor

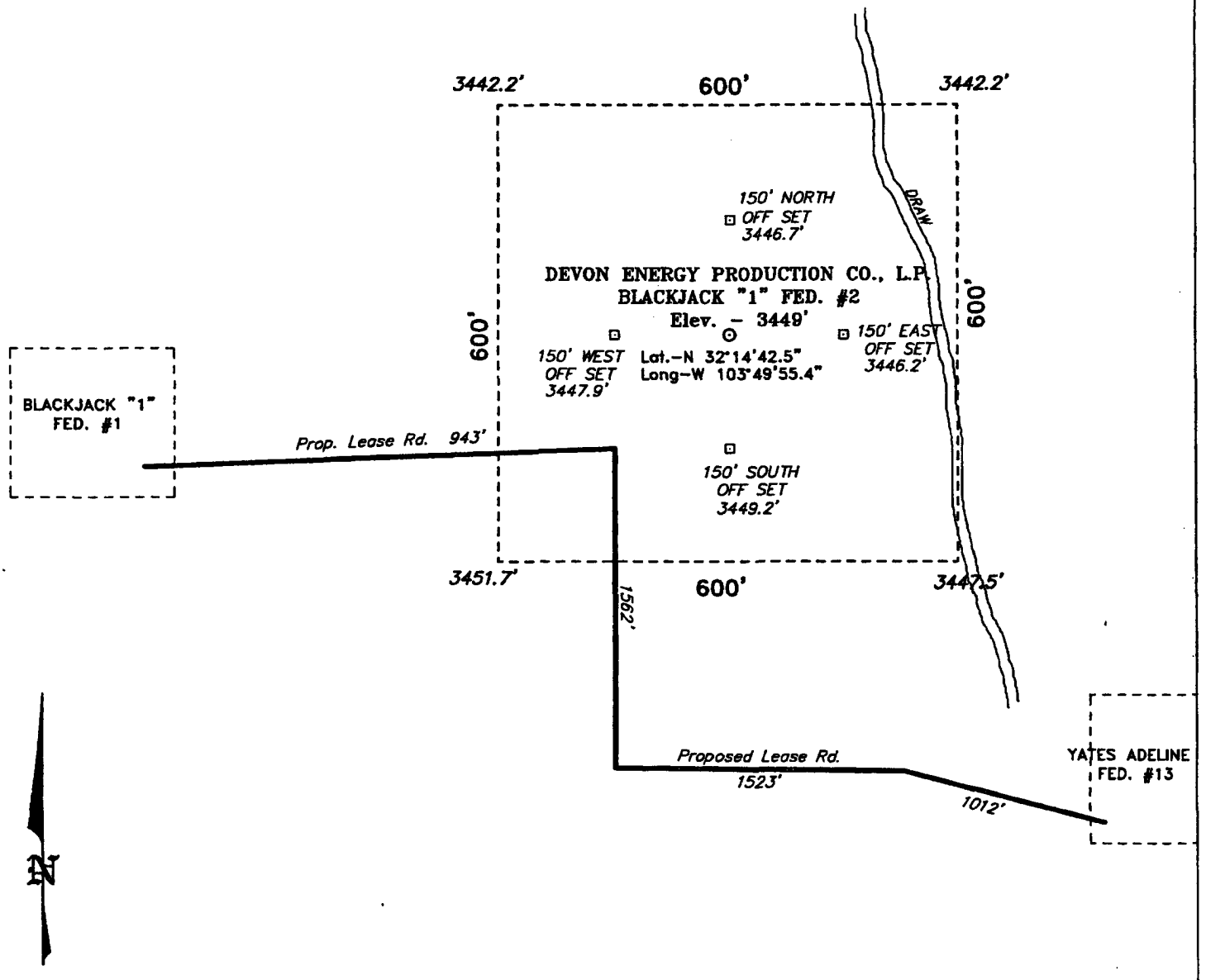
NEW MEXICO 7977 REGISTERED PROFESSIONAL LAND SURVEYOR

W.O. No. 3953

Certificate No. Gary L. Jones 7977

BASIN SURVEYS

SECTION 1, TOWNSHIP 24 SOUTH, RANGE 30 EAST, N.M.P.M.,
EDDY COUNTY, **NEW MEXICO.**



Directions to Location:

FROM THE JUNCTION OF STATE HWY 128 AND CO. RD. 787, GO SOUTH ON 787 FOR 4.1 MILES; THENEC WEST ON LEASE ROAD FOR 0.5 MILE TO THE YATES ADELINE FED. #13 AND PROPOSED LEASE ROAD TO THE BLACKJACK "1" FED. #2.

200 0 200 400 FEET

SCALE: 1" = 200'

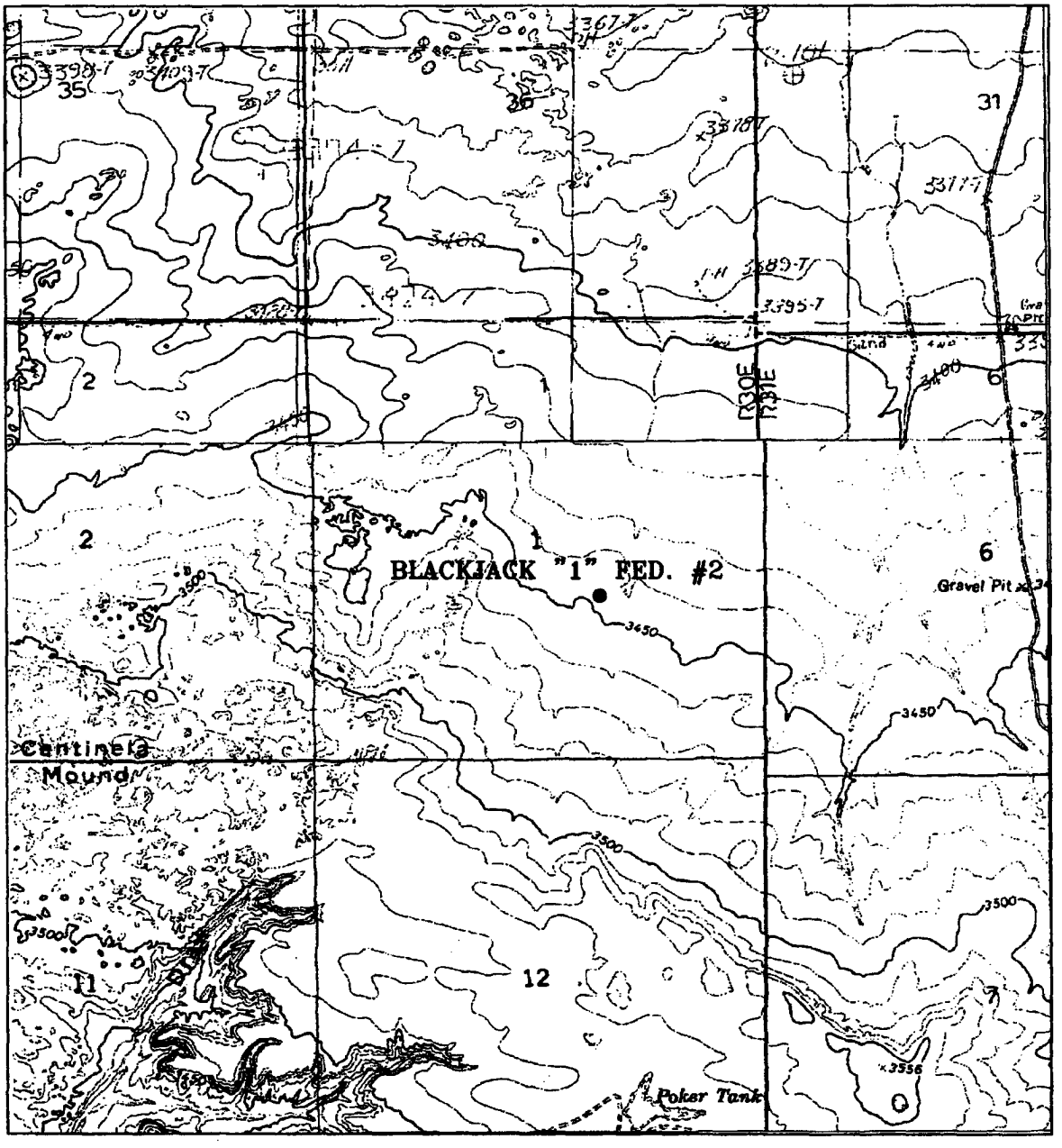
DEVON ENERGY PROD. CO., L.P.

REF: BLACKJACK "1" FED. No. 2 / Well Pad Topo

THE BLACKJACK "1" FED. No. 2 LOCATED 1980' FROM THE SOUTH LINE AND 1980' FROM THE EAST LINE OF SECTION 1, TOWNSHIP 24 SOUTH, RANGE 30 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

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

W.O. Number: 3953	Drawn By: K. GOAD		
Date: 01-27-2004	Disk: KJG CD#4 - 3953A.DWG	Survey Date: 01-26-2004	Sheet 1 of 1 Sheets

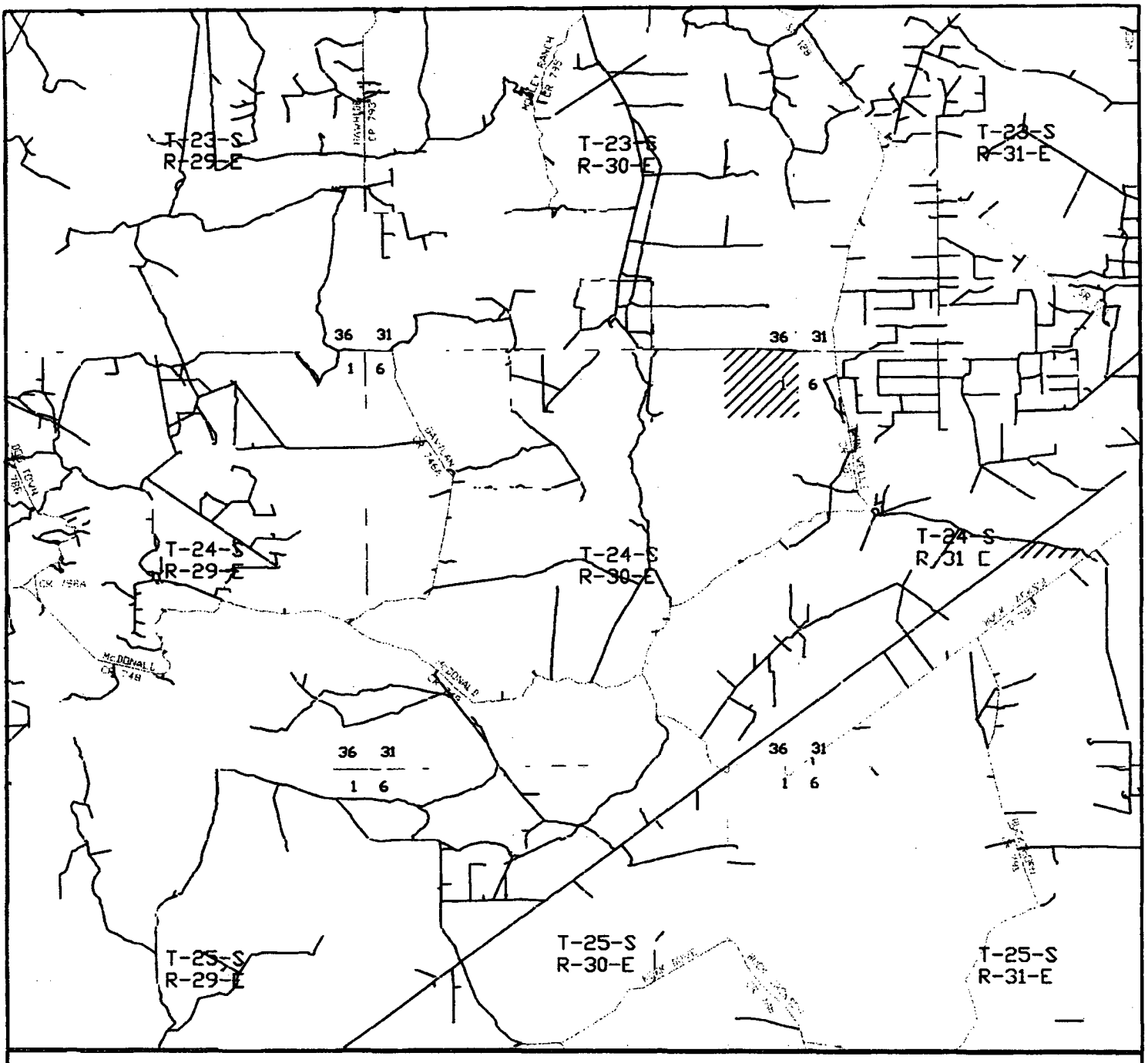


BLACKJACK "1" FEDERAL #2
Located at 1980' FSL and 1980' FEL
Section 1, Township 24 South, Range 30 East,
N.M.P.M., Eddy County, New Mexico.

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:	3953AA - KJG #1
Survey Date:	01-26-2004
Scale:	1" = 2000'
Date:	01-27-2004

DEVON ENERGY PRODUCTION COMPANY LP.



BLACKJACK "1" FEDERAL #2
Located at 1980' FSL and 1980' FEL
Section 1, Township 24 South, Range 30 East,
N.M.P.M., Eddy County, New Mexico.

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

W.O. Number:	3953AA - KJG #1
Survey Date:	01-26-2004
Scale:	1" = 2 MILES
Date:	01-27-2004

DEVON ENERGY PRODUCTION COMPANY LP.

DRILLING PROGRAM

Devon Energy Production Company, LP
Blackjack "1" Federal 2
Surface Location: 1980' FSL & 1980' FEL, Unit J, Sec 1 T24S R30E, Eddy, NM
Bottom hole Location: 1980' FSL & 1980' FEL, Unit J, Sec 1 T24S R30E, Eddy, NM

1. Geologic Name of Surface Formation

a. Quaternary Aeolian Deposits

2. Estimated tops of geological markers:

a.	Lamar	4000'
b.	Delaware	4100'
c.	Cherry Canyon	5100'
d.	Bone Spring	8100'
e.	Total Depth	8300'

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

a.	Delaware	4100'	Oil
b.	Cherry Canyon	5100'	Oil
c.	Bone Spring	8100'	Oil

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 13 3/8" casing at 680' and circulating cement back to surface. Potash and salt will be protected by setting 8 5/8" casing at 4000' and circulating cement to surface.

4. Casing Program:

Hole Size	Interval	OD Csg	Weight	Collar	Grade
25"	0' –40'	20"	NA	NA	Conductor
17 ½"	0' – 680'	13 3/8"	48#	ST&C	H-40
11"	0' – 4000'	8 5/8"	32#	ST&C	J55
7 7/8"	0' – 8300'	5 ½"	15.5# & 17#	LT&C	J55

5. Cement Program:

a.	20"	Conductor	Cement with ready-mix to surface.
b.	13 3/8"	Surface	Cement to surface with 500 sx Class C +2% CaCl2
c.	8 5/8"	Intermediate	Cement to surface with 1000 sxs Class C lite + additives followed by 200 sx Class w/2%CaCl2 + 1/4"#/sx celloflk
d.	5 ½"	Production	Cement with 500 sx Class H followed by 300 sx Class C neat

The above cement volumes could be revised pending the caliper measurement from the open hole logs. The top of cement is designed to reach approximately 500' above the uppermost perforation.

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 ½" drill pipe rams on bottom. The drilling head will be installed on the 13 3/8" surface casing and utilized continuously until total depth is reached. All BOP's and associated equipment will be tested to **1200 psi with the rig pump before drilling out the 13 3/8" casing shoe (70% of 48#, H-40 casing).** Prior to drilling out the 8 5/8" casing shoe, the BOP's and Hydril will be tested as per BLM Drilling Operations Order #2.

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' – 680'	8.6-9.0	27-32	NC	Fresh Water
680' – 4000'	9.7 – 10.2	28-32	NC	Brine
4000'-8000'	8.4 - 8.6	28-30	NC	FW/Cut Brine
8000' – TD	8.4 – 9.0	29-32	10-15 cc	Gel

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

8. **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 will be in operation after drilling out the 13 3/8" casing shoe until the 5 1/2" casing is cemented. Breathing equipment will be on location upon drilling the 13 3/8" shoe until total depth is reached.

9. **Logging, Coring, and Testing Program:**
   a. Drill stem tests will be based on geological sample shows.
   b. The open hole electrical logging program will be:
      i. Total Depth to Intermediate Casing and Gamma Ray. Compensated Neutron Dual Laterolog-Micro Laterolog with SP Density log with Gamma Ray and Caliper.
      ii. Total Depth to Surface Compensated Neutron with Gamma Ray
      iii. No coring program is planned
      iv. Additional testing will be initiated subsequent to setting the 5 ½" production casing. Specific intervals will be targeted based on log evaluation, geological sample shows and drill stem tests.

10. Potential Hazards:

No abnormal pressures or temperatures are expected. There is no known presence of H2S in this area from the surface to the TD of the well. If H2S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. See attached gas analysis for the Pure Gold 17 C #3. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 3500 psi and Estimated BHT 135°.

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 flow lines in order to place well on production.

SURFACE USE PLAN
Devon Energy Production Company, LP
Blackjack "1" Federal 2
Surface Location: 1980' FSL & 1980' FEL, Unit J, Sec 1 T24S R30E, Eddy, NM
Bottom hole Location: 1980' FSL & 1980' FEL, Unit J, Sec 1 T24S R30E, Eddy, NM

1. **Existing Roads:**
   a. The well site and elevation plat for the proposed well 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 State Hwy 128 and County Rd. 787, go south on 787 for 4.1 miles; then west on lease road for 0.5 mile to the Yates Adeline Federal #13 and then northwest on proposed lease road to the Blackjack "1" Federal #2.
2. **Access Road**
   a. Exhibit #2 shows the existing lease road. Approximately 4097' of new access road for the Blackjack "1" Federal #2 will be constructed as follows:
   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. **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.
   b. 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.
   c. The tank batter, all connections and all lines will adhere to API standards.
   d. If the well is productive, rehabilitation plans are as follows:
      i. The reserve pit will be back-filled after the contents of the pit are dry (within 120 days after completion, weather permitting).
      ii. 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.
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. The supplier, including broken sacks, will pick up salts remaining after completion of well.
   d. Wastewater 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 indicates the proposed location of reserve and sump pits and living facilities.
   c. Mud pits in the active circulating system will be steel pits & the reserve pit is proposed to be unlined unless subsurface conditions 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 be 6 mils thick. Pit liner will extend a minimum 2'00" over the reserve pits dikes where the liner will be 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. Topography consists of San Dunes with a slight dip Westward toward the Pecos River. Vegetation consists of Mesquite, Shinnery Oak, Snakeweed, and Native grasses. No wildlife was observed but it is likely that deer, rabbits, coyotes, and rodents traverse the area.
   b. The surface and minerals are owned by the US Government and 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. A Cultural Resources Examination will be completed by Southern New Mexico Archaeological Services, Inc. and forwarded to the BLM office in Carlsbad, New Mexico.
   d. There are no dwellings within 1 mile of location.

Operators Representative:

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

James Blount
Operations Engineer Advisor

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

(405) 228-4301 (office)
(405) 834-9207 (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: Linda Guthrie Date: February 2, 2004

Linda Guthrie
Operations Associate

Attachment to Exhibit #1
NOTES REGARDING BLOWOUT PREVENTERS
Devon Energy Production Company, LP
Blackjack "1" Federal 2
Surface Location: 1980' FSL & 1980' FEL, Unit J, Sec 1 T24S R30E, Eddy, NM
Bottom hole Location: 1980' FSL & 1980' FEL, Unit J, Sec 1 T24S R30E, 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.:	**NMNM97133**
Legal Description of Land:	**40 acres 1-T24S-R30E**
Formation(s):	**Bone Spring**
Bond Coverage:	**Nationwide**
BLM Bond File No.:	**CO-1104**
Authorized Signature:	Linda Guthrie **Linda Guthrie**
Title:	**Operations Associate**
Date:	02/02/04

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. Drill stem 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.
   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.

Well name:	**Blackjack 1 Fed 1 & 2**
Operator:	**Devon Energy**
String type:	Surface
Location:	New Mexico

Design parameters:

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

Burst
Max anticipated surface pressure: 332 psi
Internal gradient: 0.433 psi/ft
Calculated BHP 627 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: 590 ft

Environment:
H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 85 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 620 ft

Non-directional string.

Re subsequent strings:
Next setting depth: 3,840 ft
Next mud weight: 10.000 ppg
Next setting BHP: 1,995 psi
Fracture mud wt: 15.000 ppg
Fracture depth: 3,840 ft
Injection pressure 2,992 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	680	13.375	48.00	H-40	ST&C	680	680	12.59	8433

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	318	740	2.33	627	1730	2.76	32.6	322	9.87 J

Devon Energy

Date: January 30,2004
Oklahoma City, Oklahoma

Remarks:
Collapse is based on a vertical depth of 680 ft, a mud weight of 9 ppg The casing is considered to be evacuated for collapse purposes.
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

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

Well name:	**Blackjack 1 Fed 1 & 2**
Operator:	**Devon Energy**
String type:	Intermediate
Location:	New Mexico

Design parameters:

Collapse
Mud weight: 10.200 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 387 psi
Internal gradient: 0.433 psi/ft
Calculated BHP 2,119 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: 3,394 ft

Environment:
H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 131 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 620 ft

Non-directional string.

Re subsequent strings:
Next setting depth: 7,860 ft
Next mud weight: 9.200 ppg
Next setting BHP: 3,756 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 4,000 ft
Injection pressure 4,000 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ($)
1	4000	8.625	32.00	J-55	LT&C	4000	4000	7.875	32234

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	2119	2530	1.19	2119	3930	1.85	128	417	3.26 J

Devon Energy

Date: January 30,2004
Oklahoma City, Oklahoma

Remarks:
Collapse is based on a vertical depth of 4000 ft, a mud weight of 10.2 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:	**Blackjack 1 Fed 1 & 2**
Operator:	**Devon Energy**
String type:	Production
Location:	New Mexico

Design parameters:

Collapse

Mud weight: 9.200 ppg
Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: 373 psi
Internal gradient: 0.433 psi/ft
Calculated BHP 3,967 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: 7,123 ft

Estimated cost: 29,857 ($)

Environment:

H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 191 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 620 ft

Non-directional string.

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ($)
3	500	5.5	17.00	J-55	LT&C	500	500	4.767	1937
2	6700	5.5	15.50	J-55	LT&C	7200	7200	4.825	23658
1	1100	5.5	17.00	J-55	LT&C	8300	8300	4.767	4262

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	239	3893	16.29	589	5320	9.03	131.1	247	1.88 J
2	3441	3959	1.15	3490	4810	1.38	122.6	217	1.77 J
1	3967	4910	1.24	3967	5320	1.34	18.7	247	13.21 J

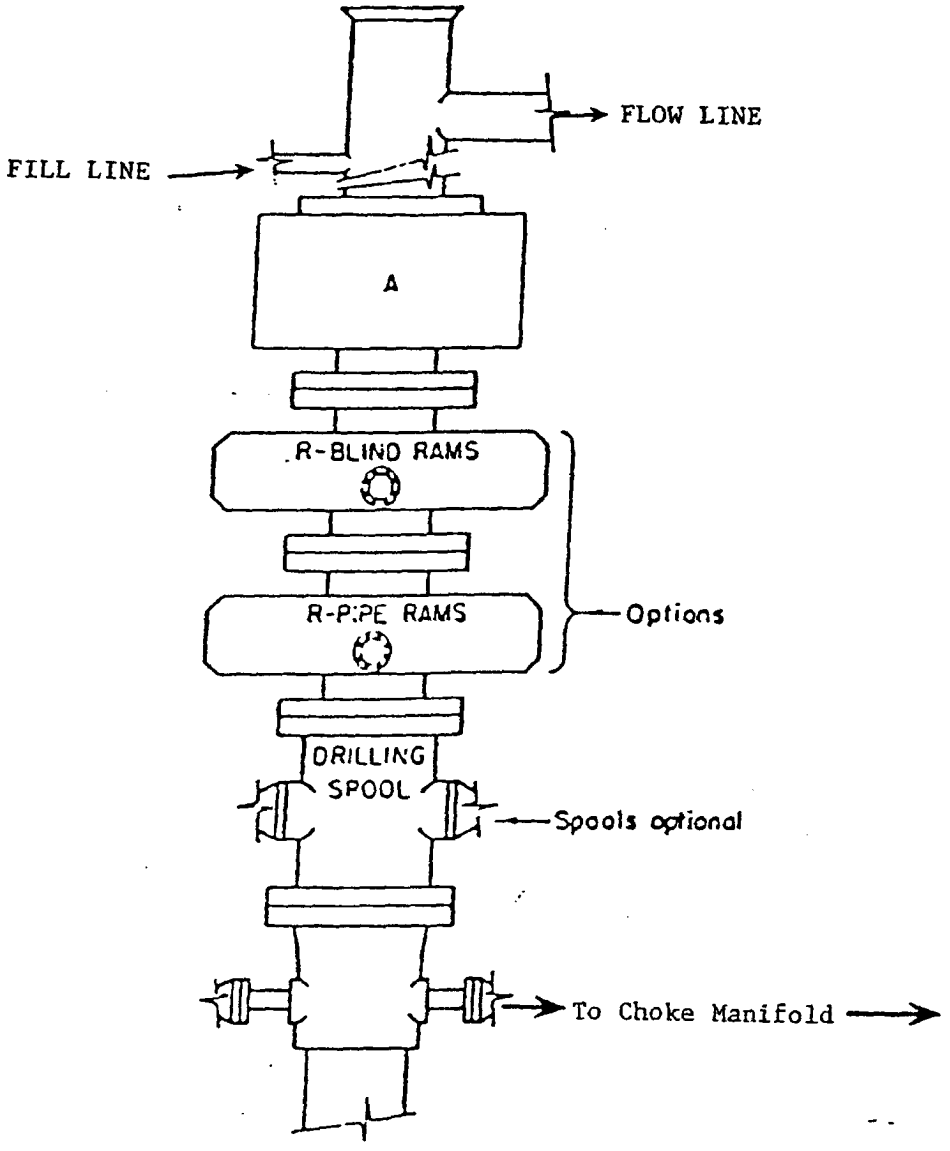
Devon Energy

Date: February 2,2004
Oklahoma City, Oklahoma

Remarks:
Collapse is based on a vertical depth of 8300 ft, a mud weight of 9.2 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.



ARRANGEMENT SRRA

900 Series
3000 PSI WP

EXHIBIT "E"
SKETCH OF B.O.P. TO BE USED ON

BLACK JACK "1" FEDERAL #2
UNIT J SECTION 1
T24S-R30E EDDY CO. NM

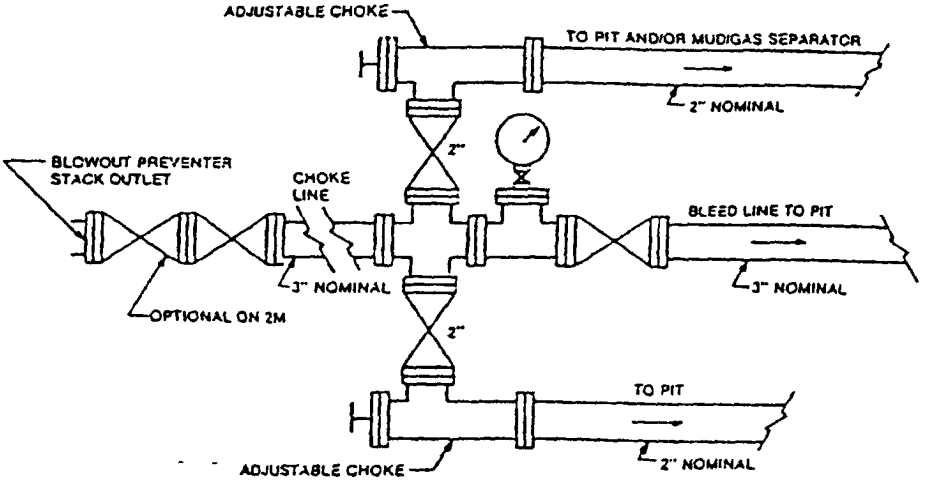


FIGURE K-1. Typical choke manifold assembly for 2M and 3M rated working pressure service — surface installation.

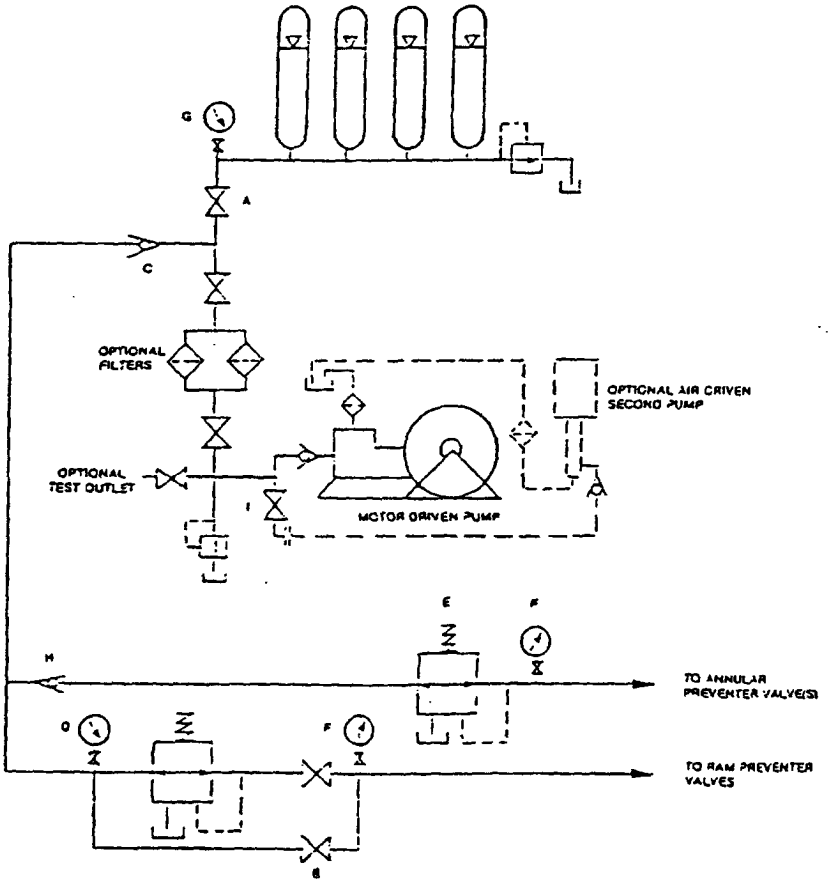
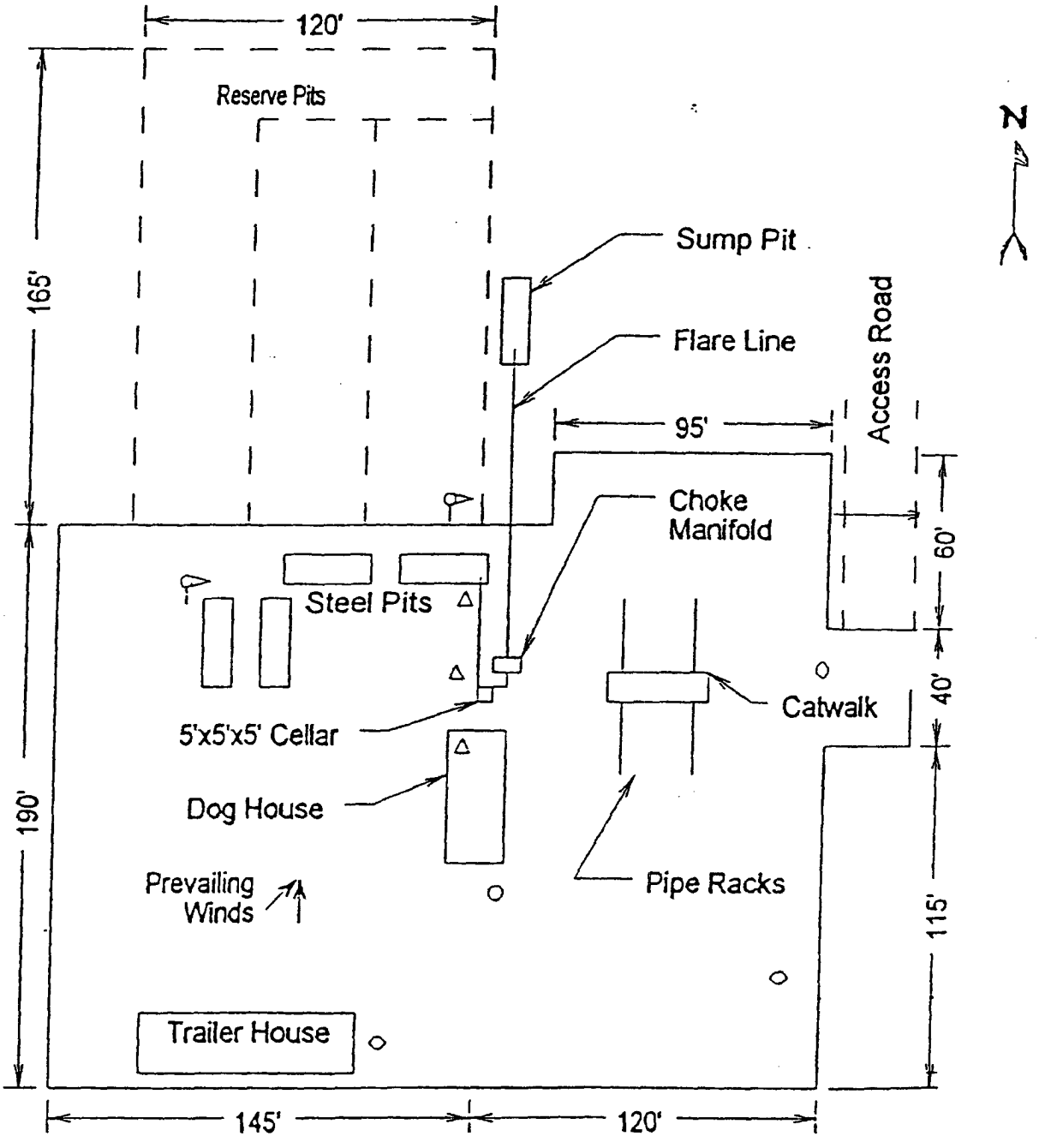


FIGURE K6-1. The schematic sketch of an accumulator system shows required and optional components.

EXHIBIT "E-1"
CHOKE MANIFOLD & CLOSING UNIT

BLACK JACK "1" FEDERAL 2
UNIT J SECTION 1
T24S-R30E EDDY CO. NM



- Wind Direction Indicators (wind sock or streamers)
- △ H2S Monitors (alarms at bell nipple and shale shaker)
- ◇ Briefing Areas
- ○ Remote BOP Closing Unit
- □ Sign and Condition Flags

EXHIBIT "D"
RIG LAY OUT PLAT

BLACK JACK "1" FEDERAL #2
UNIT J SECTION 1
T24S-R30E EDDY CO. NM

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

RECEIVED

2004 APR 8 AM 7 41

STATE LAND OFFICE
SANTE FE, N.M.

BILL RICHARDSON
Governor

Joanna Prukop
Cabinet Secretary
Acting Director
Oil Conservation Division

New Mexico State Land Office
Oil, Gas and Minerals Division
310 Old Santa Fe Trail
P.O. Box 1148
Santa Fe, N.M. 87504-1148
Attn: Joe Mraz or To Whom It May Concern

RE: APPLICATION FOR PERMIT TO DRILL IN POTASH AREA

OPERATOR:	**Devon Energy Production Company, L.P.**
LEASE NAME:	**Blackjack '1' Federal # 2**
LOCATION:	**SEC. 1, TOWNSHIP 24 SOUTH, RANGE 30 EAST, 1980' FSL & 1980' FEL EDDY COUNTY, NM, NMPM**

RECEIVED
APR 12 2004
OCD-ARTESIA

PROPOSED DEPTH: 8300'.
Dear Mr. Joe Mraz or To Whom It May Concern,

The application for permit to drill identified above has been filed with this office of the New Mexico Oil Conservation Division. Pursuit to the provisions of Oil Conservation Division Order R-111-P, please advise this office whether or not this application is within an established Life-of Mine Reserve area filed with and approved by your office. If not, please advise whether it is within the buffer zone established by this order.
Thank you for your assistance.

Sincerely,

Bryan G. Arrant

Bryan G. Arrant
PES, District II Artesia NMOCD

JRm
4-8-04

In LMR	**Yes_____**	**No X**
In Buffer Zone	**Yes_____**	**No X**

Comments:

Signature: _____ **Date:** 4/8/04

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor

Joanna Prukop
Cabinet Secretary
Acting Director
Oil Conservation Division

Bureau of Land Management
620 East Greene St.
Carlsbad, NM 88220-6292
Attn: Craig Cranston or To Whom It May Concern

RECEIVED
APR 1 2 2004
OCD-ARTESIA

RE: APPLICATION FOR PERMIT TO DRILL IN POTASH AREA

OPERATOR: **Devon Energy Production Company, L.P.**
LEASE NAME: **Blackjack '1' Federal #2**
LOCATION: **SEC. 1 TOWNSHIP 24 SOUTH, RANGE 30 EAST, 1980' FSL & 1980' FEL EDDY COUNTY, NM, NMPM**

PROPOSED DEPTH: 8300'.
Dear Craig or To Whom It May Concern,

The application for permit to drill identified above has been filed with this office of the New Mexico Oil Conservation Division. Pursuit to the provisions of Oil Conservation Division Order R-111-P, please advise this office whether or not this application is within an established Life-of Mine Reserve area filed with and approved by your office. If not, please advise whether it is within the buffer zone established by this order.
Thank you for your assistance.

Sincerely,

Bryan G. Arrant

Bryan G. Arrant
PES, District II Artesia NMOCD

In LMR	**Yes_____**	**No** X
In Buffer Zone	**Yes_____**	**No** X

Comments:

Signature: Craig Cranston BLM **Date:** 4-8-07