N.M. Oil Cons. DIV-Dist. 2
1301 W. Grand Avenue
Artesia, NM 88210

Form 3160-3
(April 2004)

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No. **NM-71752**

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER

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. 30651
Rifleman 6 H Federal Com 2

2. Name of Operator **Devon Energy Production Company, LP** 6137

9. API Well No. 30-015-34255

3a. Address **20 North Broadway, Oklahoma City, Oklahoma 73102-8260**

3b. Phone No. *(include area code)* **405-552-8198**

10. Field and Pool, or Exploratory **Happy Valley; Morrow** 78060

RECEIVED
AUG 01 2005
OCD-ARTESIA

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface **1830 FNL & 1575 FEL**
At proposed prod. zone **1830 FNL & 1575 FEL**

11. Sec., T. R. M. or Blk. and Survey or Area **Sec 6, T22S R26E**

14. Distance in miles and direction from nearest town or post office*
Approximately 3 miles West of Carlsbad, New Mexico

12. County or Parish **Eddy County**

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 **518.15 acres**

17. Spacing Unit dedicated to this well **320 acres**

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.

19. Proposed Depth **11,600**

20. BLM/BIA Bond No. on file

21. Elevations (Show whether DF, KDB, RT, GL, etc.) **3414' GL**

22. Approximate date work will start* **07/01/2005**

23. Estimated duration **45 days**

24. Attachments

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

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

25. Signature — Name *(Printed/Typed)* **Norvella Adams** — Date **05/24/2005**

Title **Sr. Staff Eng. Tech**

Approved by *(Signature)* /s/ Joe G. Lara — Name *(Printed/Typed)* /s/ Joe G. Lara — Date JUL 29 2005

Title ACTING FIELD MANAGER — Office CARLSBAD FIELD OFFICE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

APPROVAL FOR 1 YEAR

Title 18 U.S.C. Section 1001 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.

**(Instructions on page 2)*

CARLSBAD CONTROLLED WATER BASIN

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

Witness Surface &
Intermediate Casing

Additional Operator Remarks:

Devon Energy Production Company, LP proposes to drill a Morrow well to 11,600' for commercial quantities of oil and gas. . If the well is deemed noncommercial, the wellbore will be plugged and abandoned per Federal regulations. Programs to adhere to onshore oil and gas regulations are outlined in the following exhibits and attachments.

Directions: From the junction of State Hwy 524 and Co. Rd. 427, go west for 1.7 mile to Co. Rd. 427A; then northwest for 1.4 to proposed lease road.

Dr., Hobbs, NM 88240

ICT II
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
	78060	Happy Valley; Morrow

Property Code	Property Name	Well Number
	RIFLEMAN "6H" FEDERAL COM	2

OGRID No.	Operator Name	Elevation
6137	DEVON ENERGY PRODUCTION CO., L.P.	3414'

Surface Location

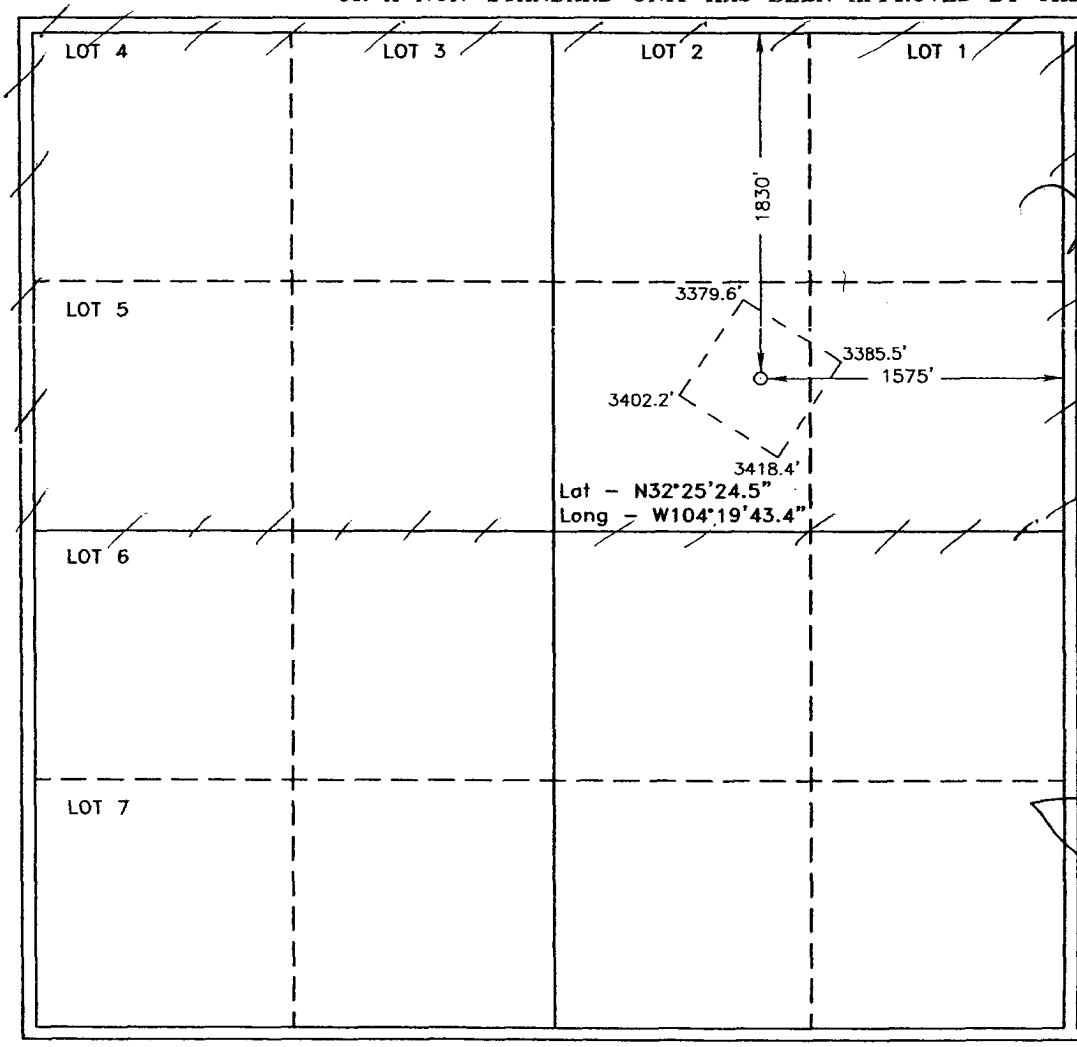
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	6	22 S	26 E		1830	NORTH	1575	EAST	EDDY

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.
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.

Signature

Norvella Adams
Printed Name

Sr. Staff Eng. Tech.
Title

May 3, 2005
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.

APRIL 4, 2005
Date Surveyed

Signature & Seal of Professional Surveyor

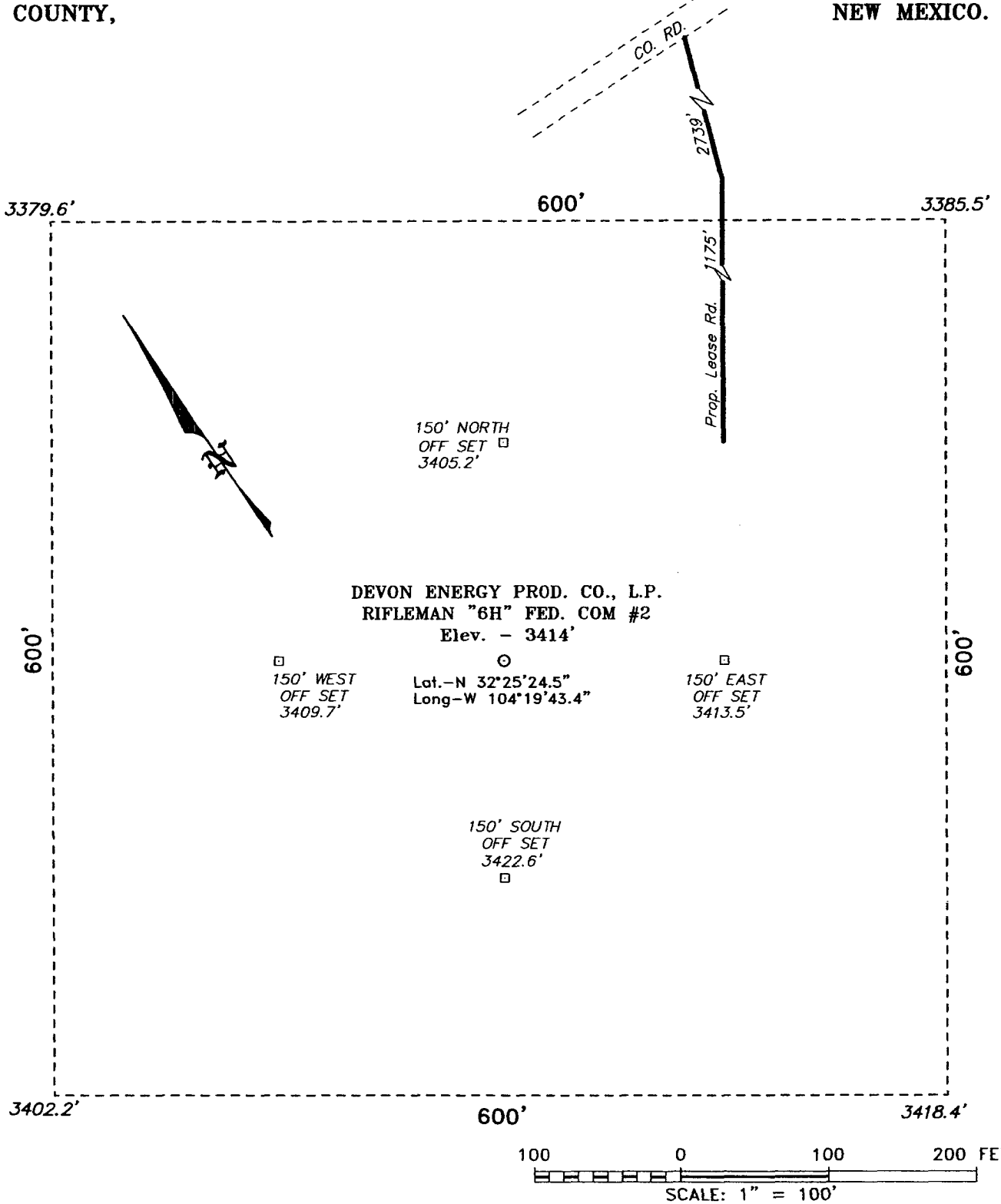
GARY L. JONES NEW MEXICO 7977 REGISTERED PROFESSIONAL LAND SURVEYOR

W.O. No. 5182

Certificate No. Gary L. Jones 7977

BASIN SURVEYS

TION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



Directions to Location:

FROM THE JUNCTION OF STATE HWY 524 AND CO. RD. 427, GO WEST FOR 1.7 MILE TO CO. RD. 427A; THENCE NORTHWEST FOR 1.4 TO PROPOSED LEASE ROAD.

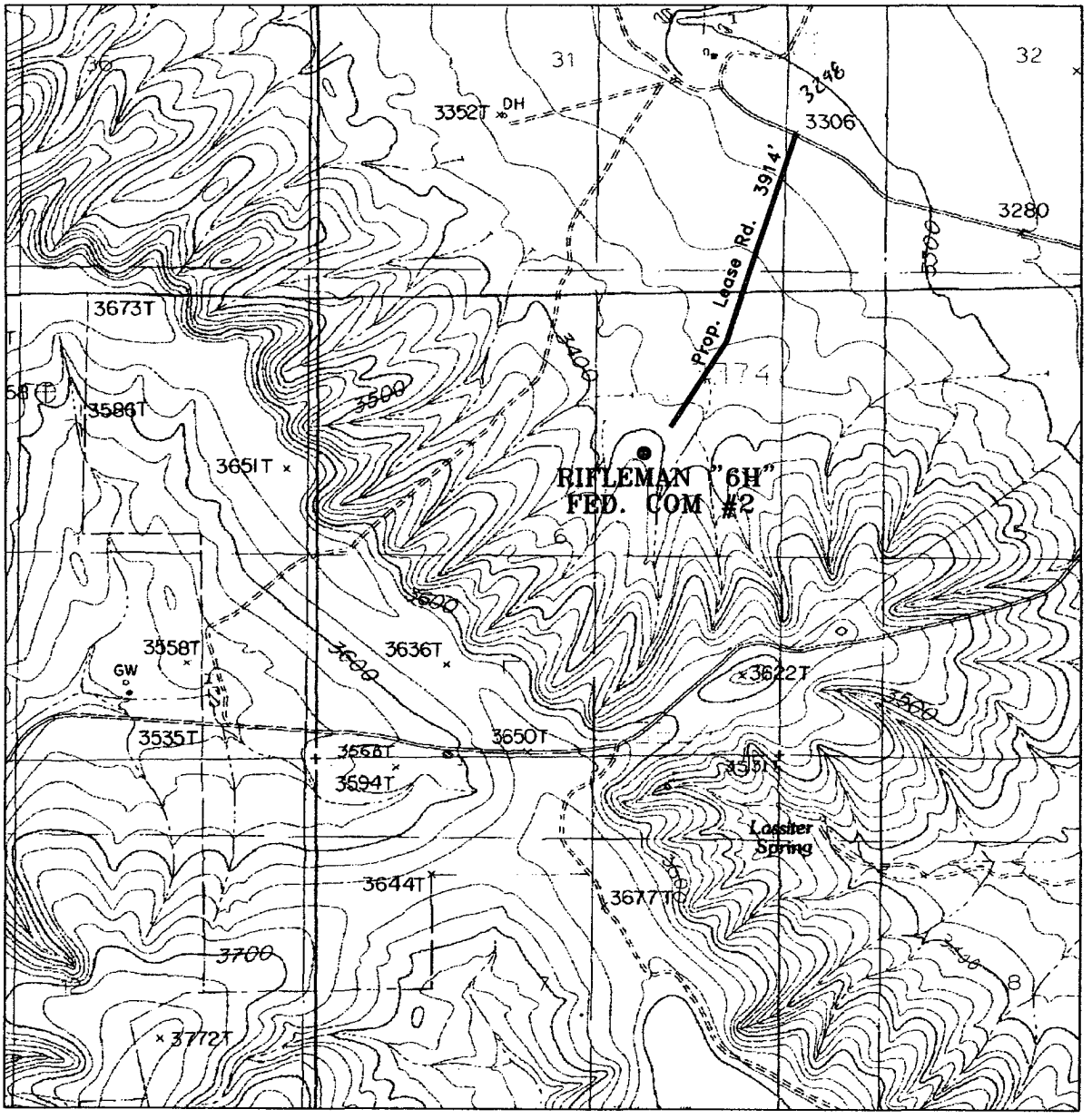
DEVON ENERGY PROD. CO., L.P.

REF: RIFLEMAN "6H" FED. COM No. 2 / Well Pad Topo

THE RIFLEMAN "6H" FED. COM No. 2 LOCATED 1830' FROM THE NORTH LINE AND 1575' FROM THE EAST LINE OF SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

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

W.O. Number: 5182	Drawn By: K. GOAD		
Date: 04-06-2005	Disk: KJG CD#4 - 5182A.DWG	Survey Date: 04-04-2005	Sheet 1 of 1 Sheets



RIFLEMAN "6H" FED. COM #2

Located at 1830' FNL and 1575' FEL
Section 6, Township 22 South, Range 26 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: 5182AA - KJG #1
Survey Date: 04-04-2005
Scale: 1" = 2000'
Date: 04-05-2005

DEVON ENERGY PROD. CO., L.P.

DRILLING PROGRAM

Devon Energy Production Company, LP
Rifleman 6 H Federal Com 2
Surface Location: 1830 FNL & 1575 FEL, Unit G,Sec 6-T22S-R26E, Eddy, NM
Bottom Hole Location: 1830 FNL & 1575 FEL, Unit G,Sec 6-T22S-R26E,Eddy,NM

1. Geologic Name of Surface Formation

Quaternery Aeolian Deposits

2. Estimated Tops of Geologic Markers

Seven Rivers	500'	Strawn Lm	9,810'
Capitan	630'	Atoka	10,230'
Delaware Sd	2,435'	U. Mrrw Clastics	10,960'
Bone Spring Lm	4,900'	M. Mrrw Oolitic Lm	11,035'
1st Bone Spring Sd	6,150'	L. Mrrw Shale Mkr.	11,285'
2nd Bone Spring Sd	6,650'	Barnett Shale	11,410'
3rd Bone Spring Sd	8,025'	TD	11,600'
Wolfcamp Lm	8,275'		
Canyon Lm	9,150'		

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

Canyon	Fresh Water
Delaware, Wolfcamp	Oil
Canyon, Strawn, Atoka, Morrow	Gas

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 9 5/8" casing at 2,400' and circulating cement back to surface. The oil and gas intervals will be isolated by setting 5 1/2" casing at TD and bringing cement top to approximately 1,900'.

4. Casing Program

Hole Size	Interval	Casing OD	Weight, ppf	Grade	Type	
26"	0–500'	20"	94#	H-40	BT&C	WITNESS
12 1/4"	0–2400'	9 5/8"	36#	J-55	ST&C	WITNESS
8 3/4"	0–11,600'	5 ½"	17#	HCP-110	LT&C	

Cementing Program

20" Surface Casing:	Cement to surface -- Lead: 660 sx 35:65 Poz: Class C with 2% $CaCl_2$, + 1/4 lb/sx Cello Flake + 6 % Bentonite. Tail: 250 sx Class C with 2% $CaCl_2$+ 1/4 lb/sx Cello Flake.
9 5/8" Intermediate Casing:	Cement to surface – 1st Lead: 200 sx 35:65 Poz:Class C with 5% NaCl + 1/4 lb/sx Cello Flake + 10#/sx LCM-1 + 6 % Bentonite. 2nd Lead: 580 sx 35:65 Poz:Class C with 5% NaCl, + 1/4 lb/sx Cello Flake + 6% Bentonite. Tail with 250 sx Class C + 2% $CaCl_2$.
5 1/2" Production Casing:	Cement to 1900' – Stage 1: 750 sx 15:61 Poz:Class C CSE-2 3% KCl + 1% EC-1 + 1/4 lb/sx Cello Flake + 0.4% CD-32 + 5#/sx LCM-1 + 0.6% FL-25 + 0.6% FL-52 + 0.1% Sodium Metasilicate. Stage 2: 1825 sx 60:40 Poz Class H + 2% NaCl + 0.75% BA-10 + 0.15% R-3 + ¼ lb/sx Cello Flake + 2 #/sx Kol Seal + 4% MPA-1.

The cement volumes for the 5 1/2" casing will be revised pending the caliper measurement from the open hole logs.

5. Pressure Control Equipment

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of a (5M system) double ram type (5000 psi WP) preventer and a bag-type (Hydril) preventer (5000 psi WP). Both units will be hydraulically operated and the ram type preventer will be equipped with blind rams on top and 4 1/2" drill pipe rams on bottom. Both BOP's will be installed on the 20" surface casing and utilized continuously until total depth is reached. **All BOP's and associated equipment will be tested to 1000 psi with the rig pump before drilling out the 20" casing shoe (70% of 94#, H-40 casing).** Prior to drilling out the 9 5/8" casing shoe, the BOP's and Hydril will be tested per BLM Drilling Operations Onshore 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 5000 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' – 500'	Fresh Water	8.6-9.4	32 – 34	No control
500' – 4,500'	Fresh Water	8.4-8.5	28 – 29	No control
4,500'–9,700'	Cut Brine	8.8 – 9.5	34 – 42	No control
9,700'-11,600'	Cut Brine	9.2 – 10.2	31 – 38	8 – 12

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

7. Auxiliary Well Control and Monitoring Equipment

A. A kelly cock will be in the drill string at all times.
B. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.
C. Hydrogen Sulfide detection equipment will be in operation from drilling out 9 5/8" casing shoe until the 5 1/2" casing is cemented. Breathing equipment will be on location upon drilling the 9 5/8" shoe until total depth is reached.

8. 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 — Dual Laterolog-Micro Laterolog with SP and Gamma Ray. Compensated Neutron – Z Density log with Gamma Ray and Caliper.
    ii. Total Depth to Surface — Compensated Neutron with Gamma Ray
    iii. No coring program is planned

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.

9. Potential Hazards

No abnormal pressures or temperatures are expected. There is no known presence of H2S in this area. If H2S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. 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 2900 psi and Estimated BHT 130^0.

10. Anticipated Starting Date and Duration of Operations

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 AND OPERATING PLAN

Devon Energy Production Company, LP
Rifleman 6 H Federal Com 2
Surface Location: 1830 FNL & 1575 FEL, Unit G,Sec 6-T22S-R26E, Eddy, NM
Bottom Hole Location: 1830 FNL & 1575 FEL, Unit G,Sec 6-T22S-R26E,Eddy,NM

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
c. Directions to location: From junction of State Hwy 524 and Co. Rd. 427, go west for 1.7 mile to Co. Rd. 427A; then northwest for 1.4 to proposed lease road.

2. Access Road

a. Exhibit #3 shows the existing lease road. Approximately 1175' of new access road will be required. It 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.

4. Proposed Facilities

a. In the event the well is found productive, a tank battery would be constructed.
    i. The well will be operated by means of an electric prime mover. Electric power poles will be set along the side of the access road.
b. The tank battery, all connections and all lines will adhere to API standards.
c. If the well is productive, rehabilitation plans are as follows:
    i. The reserve pit will be closed pursuant to NMOCD rules and guidelines.
    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.

5. 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.

Attachment to Exhibit #1
NOTES REGARDING BLOWOUT PREVENTERS
Devon Energy Production Company, LP
Rifleman 6 H Federal Com 2
Surface Location: 1830 FNL & 1575 FEL, Unit G,Sec 6-T22S-R26E, Eddy, NM
Bottom Hole Location: 1830 FNL & 1575 FEL, Unit G,Sec 6-T22S-R26E,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 5000 psi working pressure.

4. All fittings will be flanged.

5. A full bore safety valve tested to a minimum 5000 psi WP with proper thread connections will be available on the rotary rig floor at all times.

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

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

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

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

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

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

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.:	**NMNM-71752**
Legal Description of Land:	**320 acres 6-T22S-R26E**
Formation(s):	**Morrow**
Bond Coverage:	**Nationwide**
BLM Bond File No.:	**CO-1104**
Authorized Signature:	**Norvella Adams**
Title:	**Sr. Staff Engineering Technician**
Date:	5/25/05

20 North Broadway, Suite 1500
Oklahoma City, OK 73102-8260

(405) 552-8137 (office)
(405) 245-3471 (cell)

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: May 25, 2005

Norvella Adams
Sr. Staff Engineering Technician

devon

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

Hydrogen Sulfide (H_2S) Contingency Plan

For

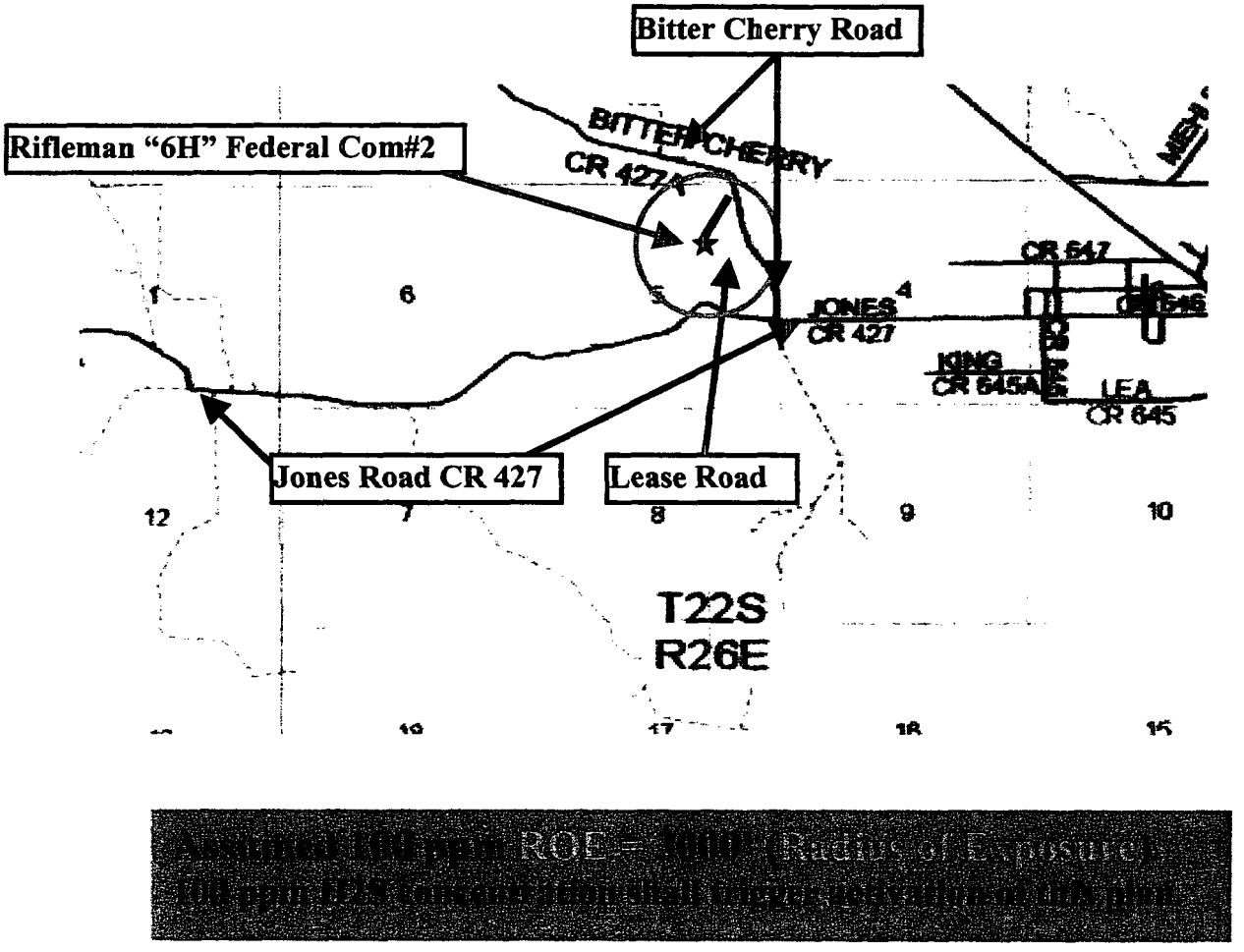
Rifleman 6H Federal Com # 2

1830'FNL & 1575' FEL,
Sec-6, T-22S R-26E

Eddy County NM

Rifleman 6H Federal Com # 2

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.



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

Escape

Crews shall escape upwind of escaping gas in the event of an emergency release of gas. Escape can be facilitated East on lease road to Bitter Cherry road. Crews should then move North or South outside of the shown ROE. Provision should then be made to block both directions of Bitter Cherry Road and both directions of Jones Road so as not to allow anyone traversing into a hazardous area. The blockade should be at a safe distance outside of the ROE There are no homes or buildings in the ROE.

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
Mike Myers	(505) 513-0782	(505) 748-0187	(505) 395-3020
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

Emergency Services

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

Give GPS position:

Flight For Life - Lubbock, TX	(806) 743-9911
Aerocare - Lubbock, TX	(806) 747-8923
Med Flight Air Amb - Albuquerque, NM	(505) 842-4433
Lifeguard Air Med Svc. Albuquerque, NM	(505) 272-3115

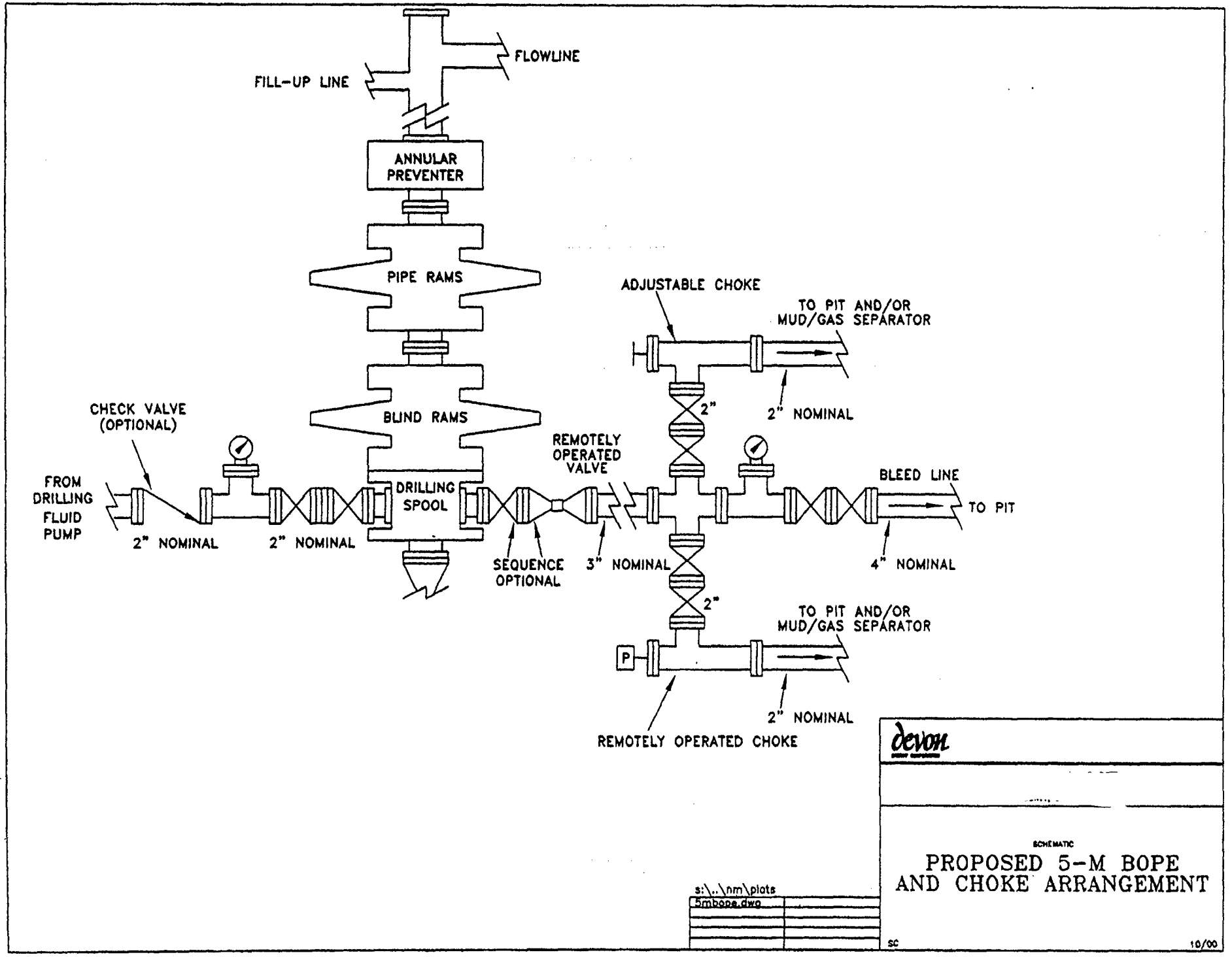
Prepared in conjunction with
Wade Rohloff of;

Compliance Services

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

1. If H2S is present in this area the following will apply.
2. 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.
3. 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.
4. 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
5. 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.
6. Well Control Equipment
   a. See Exhibit "E" & "E-1"
7. 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.
8. 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.
9. 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.



devon

SCHEMATIC

PROPOSED 5-M BOPE AND CHOKE ARRANGEMENT

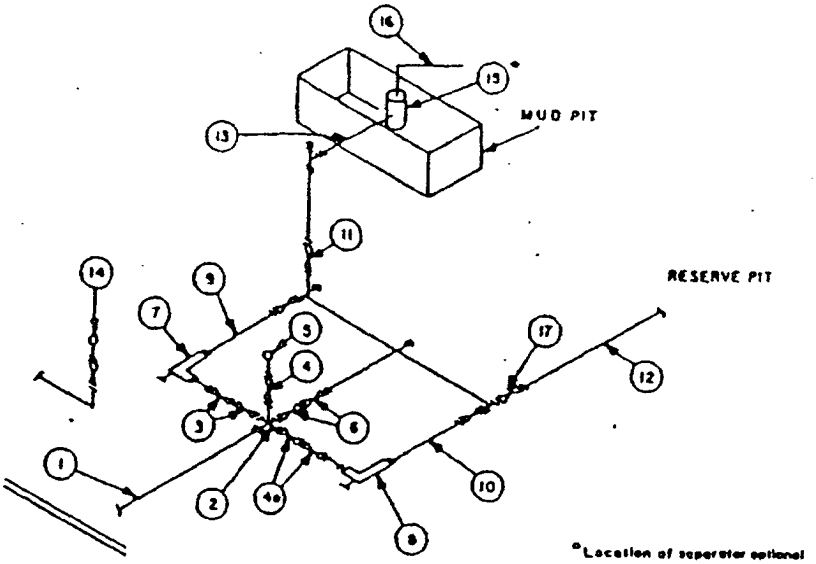
s:\..\nm\plots
5mbope.dwg

SC

10/00

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

3 MWP - 5 MWP - 10 MWP



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.

SPECIAL DRILLING STIPULATIONS

THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN

Operator's Name DEVON ENERGY PRODUCTION CO LP Well Name & No. 2-RIFLEMAN 6 H FEDERAL COM
Location 1830 F N L & 1575 F E L Sec. 6, T. 22 S, R 26 E.
Lease No. NM-71752 County EDDY State New Mexico

The Special stipulations check marked below are applicable to the above described well and approval of this application to drill is conditioned upon compliance with such stipulations in addition to the General Requirements. The permittee should be familiar with the General Requirements, a copy of which is available from a Bureau of Land Management office. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE STIPULATIONS PURSUANT TO TITLE 43 CRF 3165.3 AND 3165.4.

This permit is valid for a period of one year from the date of approval or until lease expiration or termination whichever is shorter.

I. SPECIAL ENVIRONMENT REQUIREMENTS

( ) Lesser Prairie Chicken (stips attached)
( ) San Simon Swale (stips attached)
( ) Flood plain (stips attached)
( ) Other

II. ON LEASE - SURFACE REQUIREMENTS PRIOR TO DRILLING

(✓) The BLM will monitor construction of this drill site. Notify the (✓) Carlsbad Field Office at (505) 234-5972 ( ) Hobbs Office (505) 393-3612, at least 3 working days prior to commencing construction.

(✓) Roads and the drill pad for this well must be surfaced with 4 inches of compacted caliche upon completion of well and it is determined to be a producer.

( ) All topsoil and vegetation encountered during the construction of the drill site area will be stockpiled and made available for resurfacing of the disturbed area after completion of the drilling operation. Topsoil on the subject location is approximately _____inches in depth. Approximately _____cubic yards of topsoil material will be stockpiled for reclamation.

(✓) Other. V-Door West (Pits South)

III. WELL COMPLETION REQUIREMENTS

( ) A Communlitization Agreement covering the acreage dedicated to the well must be filed for approval with the BLM. The effective date of the agreement must be prior to any sales.

(x) Surface Restoration: If the well is a producer, the ~~reserve~~ cutting pit(s) will be backfilled when dry, and cut-and-fill slopes will be reduced to a slope of 3:1 or less. All areas of the pad not necessary for production must be re-contoured to resemble the original contours of the surrounding terrain, and topsoil must be re-distributed and re-seeded with a drill equipped with a depth indicator (set at depth of ½ inch) with the following seed mixture, in pounds of Pure Live Seed (PLS), per acre.

( ) A. Seed Mixture 1 (Loamy Sites)
Side Oats Grama (*Bouteloua curtipendula*) 5.0
Sand Dropseed (*Sporobolus cryptandrus*) 1.0

( ) B. Seed Mixture 2 (Sandy Sites)
Sand Dropseed (*Sporobolus crptandrus)* 1.0
Sand Lovegrass (*Eragostis trichodes*) 1.0
Plains Bristlegrass (*Setaria magrostachya*) 2.0

(✓) C. Seed Mixture 3 (Shallow Sites)
Side oats Grama (*Boute curtipendula*) 1.0

( ) D. Seed Mixture 4 (Gypsum Sites)
Alkali Sacaton (*Sporobollud airoides*) 1.0
Four-Wing Saltbush (*Atriplex canescens*) 5.0

( ) OTHER SEE ATTACHED SEED MIXTURE

Seeding should be done either late in the fall (September 15 - November 15, before freeze up, or early as possible the following spring to take advantage of available ground moisture.

(✓) Other.

See Attached Cave/Karst Stips

Painting Stipulations-
All above ground structures will be low profile (less than 7') and painted flat non-reflective Shale Green (5Y 4/2)

RESERVE PIT CONSTRUCTION STANDARDS

The ~~reserve~~ Cuttings pit shall be constructed entirely in cut material and lined with 12 ~~6~~ mil plastic. Mineral material extracted from within the boundary of the APD during construction of the well pad and reserve pits and be used for the construction of this well pad and its immediate access road only, as long as that portion of the access road it is use on remains on-lease. Removal of any additional material from this location for construction or improvement of other well pads and other access or lease roads must first be purchased from BLM.

Reclamation: Reclamation of this type of deep pit will consist of pushing the pit walls into the pit when sufficiently dry to support track equipment. The pit liner is NOT TO BE RUPTURED to facilitate drying; a ten month period after completion of the well is allowed for drying of the pit contents.
The pit area must be contoured to the natural terrain with all contaminated drilling mud buried with at least 3 feet of clean soil. The reclaimed area will then be seeded as specified in this permit.

OPTIONAL PIT CONSTRUCTION STANDARDS

The reserve pit may be constructed in predominantly fill material if:

(1) Lined as specified above and

(2) A temporary or emergency pit may be constructed immediately adjacent to the reserve pit as long as the pit remains within the APD boundary. Mineral material removed from this pit may be used for the construction of this well pad only and its immediate access road, as long as that portion of the access road the material is used on remains on-lease. Removal of any material from the APD boundary for use on other well locations or roads must first be purchased from BLM.

Reclamation of the reserve pit consists of bulldozing all reserve pit contents and contaminants into the borrow pit and covering with a minimum of 3 feet of clean soil material. The entire area must be recontoured, all trash removed, and reseeded as specified in this permit.

CULTURAL

Whether or not an archaeological survey has been completed and notwithstanding that operations are being conducted as approved, the lessee/operator/grantee shall notify the BLM immediately if previously unidentified cultural resources are observed during surface disturbing operations. From the time of the observation, the lessee/operator/grantee shall avoid operations that will result in disturbance to these cultural resources until directed to processed by BLM.

TRASH PIT STIPS

All trash, junk, and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

Cave and Karst Resources
Conditions of Approval
For
Devon Energy
Rifleman 6 H Fed Com. #2
1830 FNL, 1575 FEL, Sec 06, T22S, R26E

Surface Mitigation

1. A closed mud system or steel tanks will be used for the drilling fluids.
2. Cuttings Pit Reclamation:
    a. All fluids will be vacuumed off,
    b. Contact Paul Evans with the BLM prior to reserve pit reclamation
    c. The pit liner WILL NOT BE RUPTURED to facilitate drying,
    d. A ten month period after completion of the well is allowed for drying of the pit contents.
    e. After drying, another 20 mil liner will be placed over the mud to cap the pit.
    f. The pit walls will be pushed in and the area covered with at least three feet of soil.

3. Any tank batteries will be bermed and be large enough to contain any spills that may occur. Tank batteries will be lined with a permanent 12 mil plastic liner.

Subsurface Mitigation

The following stipulations will be applied to protect cave/karst resources and ground water concerns.

1. Rotary drilling techniques in cave or karst areas will include the use of fresh water as a circulating medium in zones where caves or karst are expected. Below those zones, the operator may use whatever drilling fluid is approved in the drilling plan.
2. All casing will meet or exceed National Association of Corrosion Engineers specifications pertaining to the geology of the location and be run to American Petroleum Institute and BLM standards.
3. A cave protection casing will be required. The cave-protection casing string would be set at the base of the Capitan or at the deepest known cave-bearing zone as determined by drilling. See attached diagram as an example.
4. All casing strings will be cemented to the surface.
5. **Regardless of the type of drilling machinery used, if a bit drops of four feet or more and circulation losses greater than 75 percent occur simultaneously while drilling in any cave-bearing zone, drilling operations will immediately stop and the BLM will be notified by the Operator. In the event that such an incident occurs contact Jim Goodbar at 505 234-5929 or 505 236-1016 after hours and Jim Amos at (505) 234-5909 or 706-2775. The BLM will assess the consequences of the situation and work with Operator on corrective actions to resolve the problem. If corrective actions fail, the well will be plugged.**

    Any corrective actions proposed to resolve problems related to bit drops or lost circulation will require BLM concurrence prior to implementation. A decision on how to proceed will be reached within 24 hours of notification.

6. Any blasting will be a phased and time delayed.

7. Upon well abandonment the well bore will be cemented completely from the base of the cave bearing zone to the surface.

Monitoring Production Operations

1. Annual pressure tests will be performed by the Operator on all casing annuli. If the test results indicated a casing failure, remedial actions approved by the BLM will be undertaken to correct the problem.

Record Keeping

1. The Operator will track customary drilling activities, including the rate of penetration, pump pressure, weight on bit, bit drops, percent of mud returns, and presence of absence of cuttings returning to the surface. As part of customary record keeping, each detectable void or sudden increase in the rate of penetration not attributable to a change in the formation type should be documented and evaluated as it is encountered.
2. The BLM may review data held by companies on wells drilled in cave or karst areas, to gain information about impacts to caves and karst. This information will be used to categorize lost-circulation zones on the basis of depth, relative volume, and severity, and to evaluate and compare the relative success or failure of different remedies attempted to combat lost-circulation problems while drilling and cementing casing in these zones. This information also will be used to update information about the occurrence of cave and karst features. Information concerning cave resources gathered during drilling will be submitted and be retained by the BLM in accordance with The Carlsbad Field Office Cave Management Plan and the regulations implementing the Federal Cave Resources Protection Act.

WELLBORE SCHEMATIC

"CAVE PROTECTION"

NO VOID **VOID**

1. Set conductor casing.

2. Set surface casing, cement and circulate.

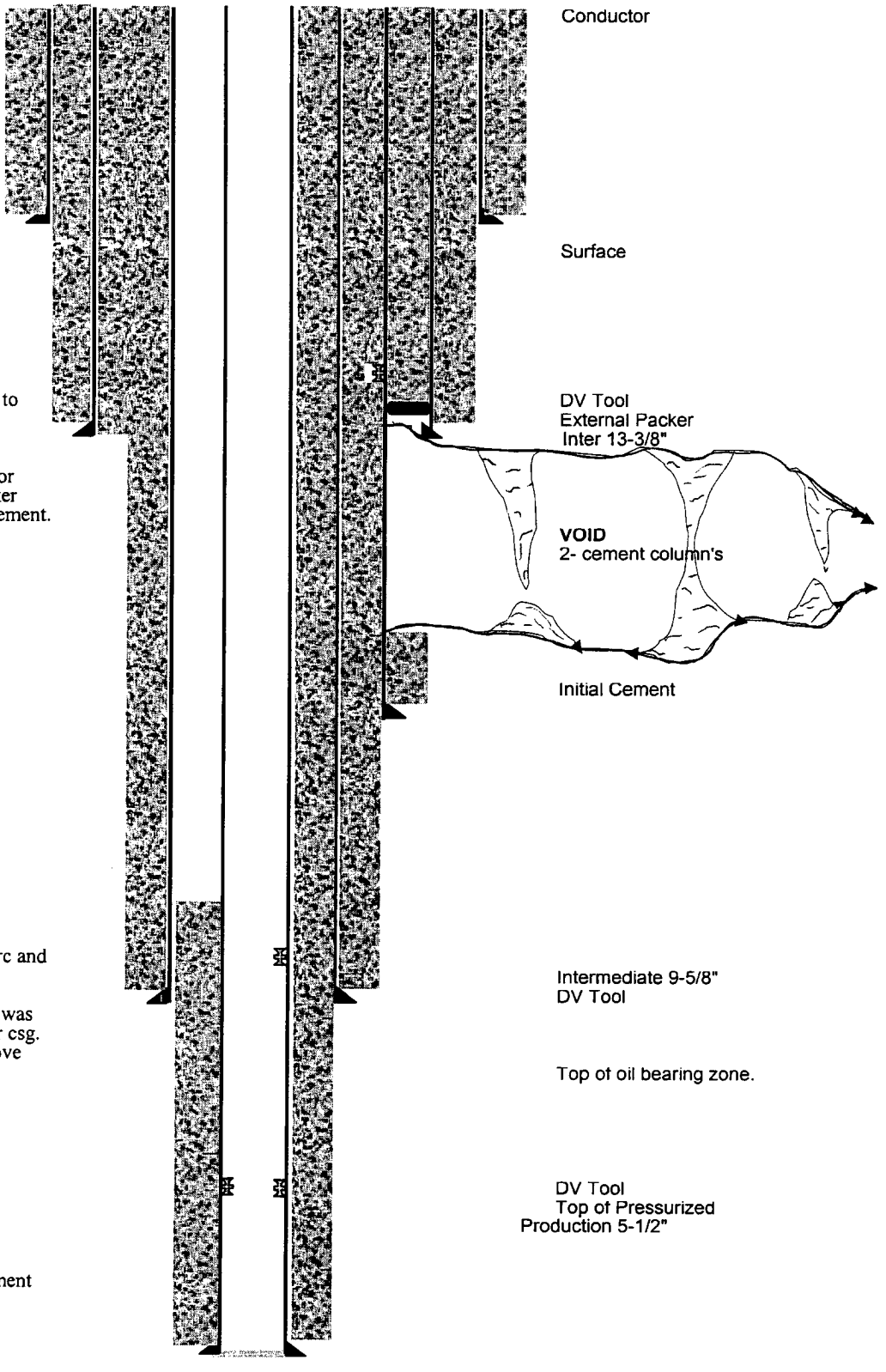
3. Drill inter hole. If no void, drill to depth and cement to surface.

4. If void encountered, ream hole for 13-3/8" casing. Place external packer above void. DV tool above pkr. Cement. Open DV tool, circ cement.

5. Drill inter hole to depth, case, circ and cement

6. Drill prod hole to depth. If void was encountered during drilling 1st Inter csg. Cmt, circulate or tie-back 200 ft above DV tool on 1st Inter csg.

7. If no void, prod csg to depth, cement and tie-back 200 ft into Inter csg.



CONDITIONS OF APPROVAL - DRILLING

Operator's Name:	**Devon Energy Production Company, L.P.**
Well Name & No.	**Rifleman 6 Federal Com #2**
Location:	**1830' FNL, 1575' FEL, Section 6, T. 22 S., R. 26 E., Eddy County, New Mexico**
Lease:	**NM-71752**

I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 for wells in Eddy County in sufficient time for a representative to witness:

   A. Well spud

   B. Cementing casing: **20** inch **9-5/8** inch **5-1/2** inch

   C. BOP tests

2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

3. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15-day time frame.

4. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

5. A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.

II. CASING:

1. The **20** inch surface casing shall be set at **approximately 500 feet and cement circulated to the surface.** If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing is **to be circulated to the surface**.

3. The minimum required fill of cement behind the **5-1/2** inch production casing is ~~**to reach at least 500 feet above the top of the uppermost hydrocarbon productive interval.**~~ Circulate to Surface. JC

III. PRESSURE CONTROL:

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the **20** inch surface casing shoe and shall be tested as follows. Any equipment failing to test satisfactorily shall be repaired or replaced.

2. Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be **5000** psi.

3. A variance to test the BOP's to 1000 psi with the rig pumps before drilling out the 20 inch surface casing shoe is granted. The BOP's and related equipment will be tested to the specifications required by Onshore Order No. 2 before drilling out the 9-5/8" intermediate casing shoe.

4. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.

- The tests shall be done by an independent service company.
- The results of the test shall be reported to the appropriate BLM office.
- Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
- Testing must be done in a safe workman-like manner. Hard line connections shall be required.

IV. DRILLING MUD:

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** formation, and shall be used until production casing is run and cemented. Monitoring equipment shall consist of the following:

- Recording pit level indicator to indicate volume gains and losses.
- Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.
- Flow-sensor on the flow-line to warn of abnormal mud returns from the well.

acs
6 16 2005

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

August 3, 2005
Devon Energy Production Company, L.P.
20 North Broadway
Oklahoma City, OK 73102-8260
Attn: Norvella

RE: Devon Energy Production Company, L.P.,: Rifleman 6H Federal Com. # 2, located in Unit H (1830' FNL & 1575' FEL) of Section 6, Township 22 South Range 26 East Eddy County, New Mexico. 30-015-34255

Dear Norvella,

In regards with the conditions for approval of the above captioned well, the New Mexico Oil Conservation Division (NMOCD) will require the following:
This is for Devon Energy Production Company, L.P., to take samples from the flow line of the drilling mud every 100' in order to determine the chloride levels from the surface casing setting depth of @ 500' to the projected 9 5/8" intermediate casing setting depth of @ 2400'. Please note that we are aware that lost circulation in drilling of the reef may occur and the collection of samples may not be possible at times.
In addition, said well with a 'fresh water mud' system from surface to the setting depth of @ 2400' as stated in your APD.
The results of this data are to be submitted to the NMOCD and the Bureau of Land Management.
Please call our office if you have any questions regarding this matter.

Respectfully yours,

Bryan G. Arrant
PES

CC:
Well File