

SEP 19 2007

OCD-ARTESIA

1134

593

Form 3160-3  
(April 2004)

OCD-ARTESIA

HIGH CAVEKARST

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB No 1004-0137  
Expires March 31, 2007


## APPLICATION FOR PERMIT TO DRILL OR REENTER

1a Type of work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5 Lease Serial No <b>NMLC-065478-B</b>
1b Type of Well <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6 If Indian, Allottee or Tribe Name
2 Name of Operator <b>Devon Energy Production Company, LP</b>		7 If Unit or CA Agreement, Name and No
3a Address <b>20 North Broadway Oklahoma City, Oklahoma 73102-8260</b>		8 Lease Name and Well No <b>Falcon 3 G Federal 9</b>
3b Phone No (include area code) <b>405-552-8198</b>		9 API Well No <b>30-015-35808</b>
4 Location of Well (Report location clearly and in accordance with any State requirements *) At surface <b>SWNE Lot G 2110 FNL 2310 FEL</b> At proposed prod zone <b>SWNE Lot G 2110 FNL 2310 FEL</b>		10. Field and Pool, or Exploratory <b>Red Lake; Glorieta-Yeso</b>
11. Sec, T R, M or Blk and Survey or Area <b>Roswell Controlled Water Basin Sec. 3 18S 27E, Unit G</b>		
14 Distance in miles and direction from nearest town or post office* <b>Approximately 10 miles southeast of Artesia, New Mexico</b>		12. County or Parish <b>Eddy County</b>
13. State <b>NM</b>		
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 <b>642.88</b>	17 Spacing Unit dedicated to this well <b>40 acres</b>
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft	19 Proposed Depth <b>4000 MD</b>	20 BLM/BIA Bond No on file <b>CO-1104</b>
21 Elevations (Show whether DF, KDB, RT, GL, etc) <b>3565' GL</b>	22 Approximate date work will start* <b>09/01/2007</b>	23 Estimated duration <b>45 days</b>

## 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  | 4 Bond to cover the operations unless covered by an existing bond on file (see Item 20 above)     |
| 2 A Drilling Plan   | 5 Operator certification  |
| 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) | 6 Such other site specific information and/or plans as may be required by the authorized officer. |

25 Signature 	Name (Printed/Typed) <b>Norvella Adams</b>	Date <b>07/24/2007</b>
Title <b>Sr. Staff Eng. Tech</b>		

Approved by (Signature) <b>/s/ James Stovall</b>	Name (Printed/Typed) <b>/s/ James Stovall</b>	Date <b>SEP 14 2007</b>
Title <b>FIELD MANAGER</b>	Office <b>CARLSBAD FIELD OFFICE</b>	

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 TWO YEARS

Title 18 USC 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)

SEE ATTACHED FOR  
CONDITIONS OF APPROVALAPPROVAL SUBJECT TO  
GENERAL REQUIREMENTS  
AND SPECIAL STIPULATIONS  
ATTACHEDIf earthen pits are used in  
association with the drilling of this  
well, an OCD pit permit must be  
obtained prior to pit construction.

DISTRICT I  
1625 N. French Dr., Hobbs, NM 88240

DISTRICT II  
1301 W. Grand Avenue, Artesia, NM 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

Form C-102  
Revised October 12, 2005

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 96836	Pool Name Red Lake; Glorieta-Yeso, NE
Property Code 36741	Property Name FALCON 3G FEDERAL	Well Number 9
OGRID No. 6137	Operator Name DEVON ENERGY PRODUCTION COMPANY LP	Elevation 3565'

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	3	18 S	27 E		2110	NORTH	2310	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 40	Joint or Infill	Consolidation Code	Order No.						

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

	<p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or released mineral interest in the land including the proposed bottom hole location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Norvella Adams</i> 7/24/07 Signature Date</p> <p>Norvella Adams Printed Name</p> <p><b>SURVEYOR CERTIFICATION</b></p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>JUL 23 2007 Date Surveyed</p> <p><i>Gary L. Jones</i> Signature Professional Surveyor 7977</p> <p>7977 Certificate No. Gary L. Jones</p> <p>BASIN SURVEYS</p>
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**Additional Operator Remarks:**

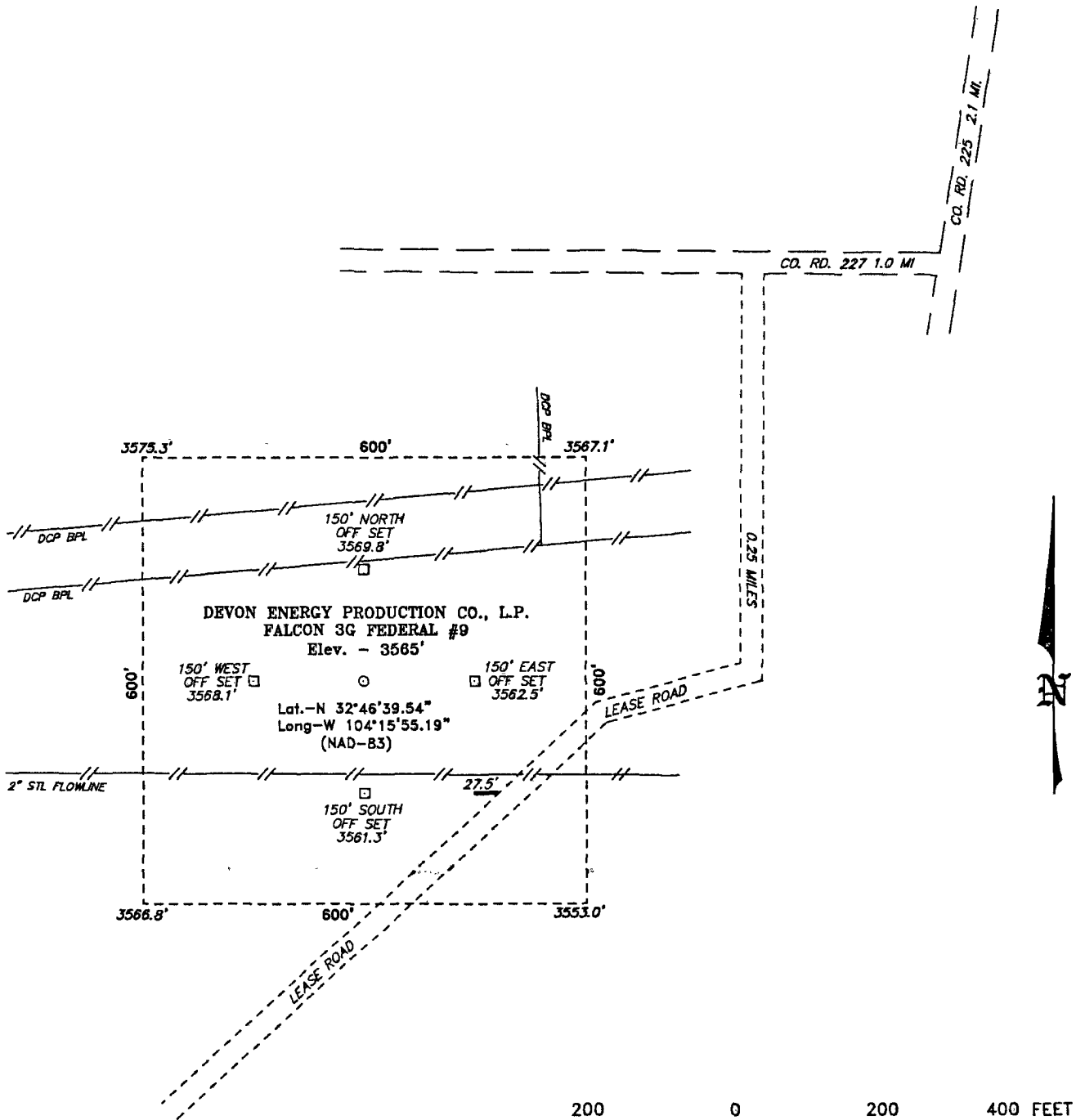
Devon Energy Production Company, LP proposes to drill a San Andres, Glorieta Yeso well per the approved Master Drilling and Surface Use Plan and Attachment A for the Red Lake Field Area to 4000' TD for commercial quantities of oil and gas. If the well is deemed noncommercial, the well bore will be plugged and abandoned per Federal regulations.

Directions: From the junction of US Hwy 82 and Co. Rd. 204 (Hilltop), go south on Co. Rd. 204 for 0.2 miles to Co. Rd. 225 (Empire), on Co. Rd 225 go southwest 2.1 miles to Co. Rd. 227 (Little Diamond), on Co. Rd. 227 go west 1.0 miles to lease road, on lease road go south winding westerly for 0.25 miles to proposed location.

Please see attached MDSUP and Attachment A.

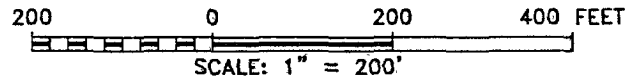
Devon intends to lay flowlines from the Falcon 3 G Federal 9 well to the existing Falcon Battery.

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



Directions to Location:

FROM THE JUNCTION OF US HWY 82 AND CO. RD. 204 (HILLTOP), GO SOUTH ON CO. RD. 204 FOR 0.2 MILES TO CO. RD. 225 (EMPIRE), ON CO. RD. 225 GO SOUTHWEST 2.1 MILES TO CO. RD. 227 (LITTLE DIAMOND), ON CO. RD. 227 GO WEST 1.0 MILES TO LEASE ROAD, ON LEASE ROAD GO SOUTH WINDING WESTERLY FOR 0.25 MILES TO PROPOSED LOCATION.



**DEVON ENERGY PROD. CO., L.P.**

REF: FALCON 3G FEDERAL #9 / WELL PAD TOPO

THE FALCON 3G FEDERAL #9 LOCATED 2110'

FROM THE NORTH LINE AND 2310' FROM THE EAST LINE OF  
SECTION 3, TOWNSHIP 18 SOUTH, RANGE 27 EAST,

N.M.P.M., EDDY COUNTY, NEW MEXICO.

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

W.O. Number: 18279 Drawn By: J. M. SMALL

Date: 07-05-2007 Disk: 18279W JMS

Survey Date: 07-03-2007

Sheet 1 of 1 Sheets

**MASTER DRILLING PROGRAM**  
**RED LAKE FIELD**  
**Devon Energy Production Company, LP**  
**Revised 8/02/07**

**1. Geologic Name of Surface Formation**

a. Permian

**2. Estimated Tops of Geological Markers & Depths of Anticipated Fresh Water, Oil or Gas:**

a. Queen	879'	Water
b. Grayburg	1330'	Oil
c. San Andres	1610'	Oil
d. Glorieta-Yeso	2960'	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 8 5/8" casing at approximately 1150' and circulating cement back to surface. A shallower setting depth may be required to prevent the surface casing from being set through the Premier Sand. The Grayburg and San Andres intervals will be isolated by setting 5 1/2" casing to total depth (4000'+/-) and circulating cement to surface.

**Casing Program:**

<u>Hole</u> <u>Size</u>	<u>Hole</u> <u>Interval</u>	<u>OD Csg</u>	<u>Casing</u> <u>Interval</u>	<u>Weight</u>	<u>Collar</u>	<u>Grade</u>
12 1/4"	0' - 1150'	8 5/8"	0' - 1150'	24#	ST&C	J-55
7 7/8"	0' - 4000'	5 1/2"	0' - 4000'	15.5#	ST&C	J-55

**Design Parameter Factors:**

<u>Casing Size</u>	<u>Collapse Design</u> <u>Factor</u>	<u>Burst Design</u> <u>Factor</u>	<u>Tension Design</u> <u>Factor</u>
8 5/8"	2.61	2.57	8.84
5 1/2"	2.05	2.44	3.26

**3. Cement Program:**

a. 8 5/8"	Surface	Cement to surface with Lead; 475 sx (35:65) Poz Classs C cement + 2% bwoc CaCl <sub>2</sub> + 0.125 lbs/sx Cello Flake + 6% bwoc Bentonite; 12.80 ppg, 1.83 cf/sx, 9.76 gps. Tail with 250 sx Class C cement + 2% bwoc CaCl <sub>2</sub> + 0.125 lbs/sx Cello Flake; 14.8 ppg, 1.35 cf/sx, 6.35 gps.
b. 5 1/2"	Production	Cement to surface with Lead; 180 sx (35:65) Poz Class C cement + 5% bwow NaCl + 0.125 lbs/sx Cello Flake + 6% bwoc Bentonite; 12.7 ppg, 1.94 cf/sx, 10.51 gps. Tail with 510 sx (60:40) Poz Class C cement + 5% bwow Sodium Chloride + 0.75% bwoc BA-

10 + 0.125 lbs/sx Cello Flake + 0.4% bwoc Sodium Metasilicate +  
4% bwoc MPA-1. 13.8 ppg, 1.37 cf/sx, 6.33 gps.

The above cement volumes could be revised pending the caliper measurement from the open hole logs. The top of cement is designed to reach to surface. All casing is new and API approved.

4. **Pressure Control Equipment:**

The blowout preventor equipment (BOP) shown in Exhibit #1 will consist of either a single annular preventor or a double ram type preventor (2000 psi WP). The unit will be hydraulically operated and will be equipped with either a single annular preventor or a set of double rams (blind rams and 4 1/2" drill pipe ram). The BOP will be installed on the 8 5/8" surface casing and utilized continuously until total depth is reached. Prior to drilling out the 8 5/8" casing shoe, the BOP's and Hydril will be tested with the rig pump to 1000 psi.

see COA →  
The BOP system will be function tested 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 driller's log. A 2" kill line and 3" choke line will be incorporated in the drilling spool below the BOP. Other accessory BOP equipment will include a Kelly cock, floor safety valve, choke lines and choke manifold.

5. **Proposed Mud Circulation System**

<u>Depth</u>	<u>Mud Wt.</u>	<u>Visc</u>	<u>Fluid Loss</u>	<u>Type System</u>
0' - 1150'	8.5 - 9.4	32-34	NC	Fresh Water
1150' - TD	10.0-10.2	28-32	NC	Fresh Water/Cut Brine

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

6. **Auxiliary Well Control and Monitoring Equipment:**

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

7. **Logging, Coring, and Testing Program:**

- Drill stem tests will be based on geological sample shows.
- If a drill stem test is anticipated; a procedure, equipment to be used and safety measures will be provided via sundry notice to the BLM.
- The open hole electrical logging program will be:
  - Total Depth to Intermediate Casing  
and Gamma Ray. Compensated Neutron - Z Density log with Gamma Ray and Caliper.
  - Total Depth to Surface  
Compensated Neutron with Gamma Ray
  - No coring program is planned

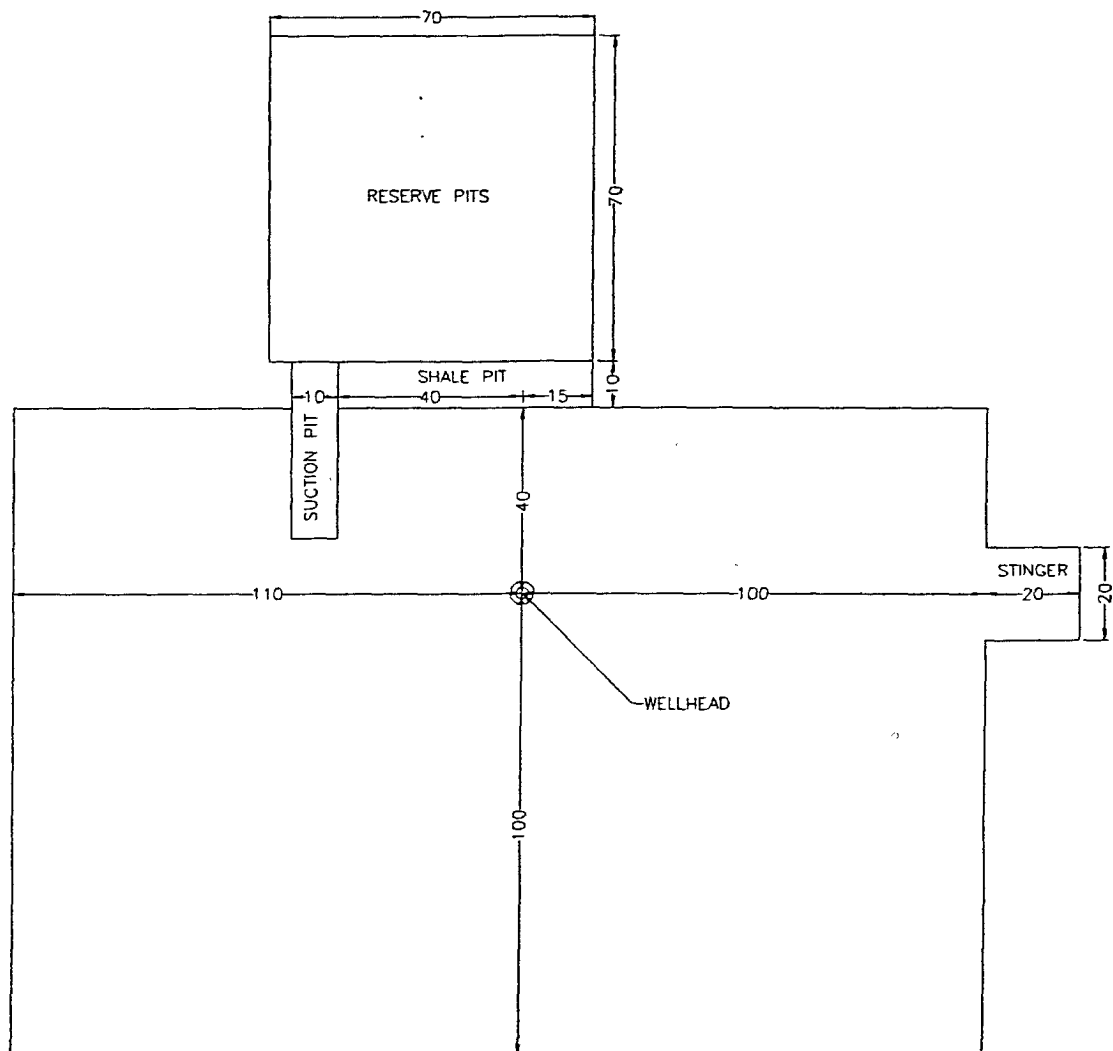
- iv. Additional testing will be initiated subsequent to setting the 5 ½" production casing. Specific intervals will be targeted based on log evaluation, geological sample shows and drill stem tests.

**8. Potential Hazards:**

- a. No abnormal pressures or temperatures are expected. If H<sub>2</sub>S 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 800 psi and Estimated BHT 90° F.

**9. 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 10-15 days. If the well is deemed productive, completion operations will require, at minimum, an additional 30 days of testing to ascertain whether the well will be connected to an existing or new production facility.



FILE:

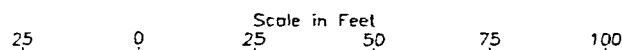


## WEST RED LAKE AREA

EDDY COUNTY, NEW MEXICO

DRILLING PAD

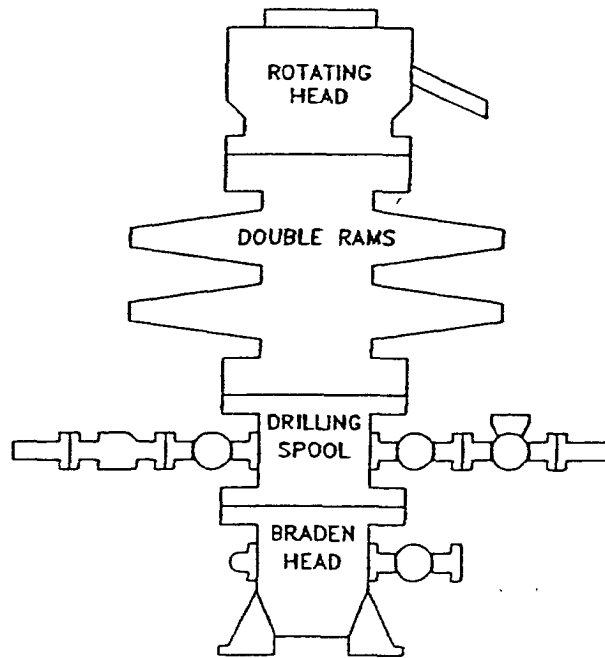
### EXHIBIT 5



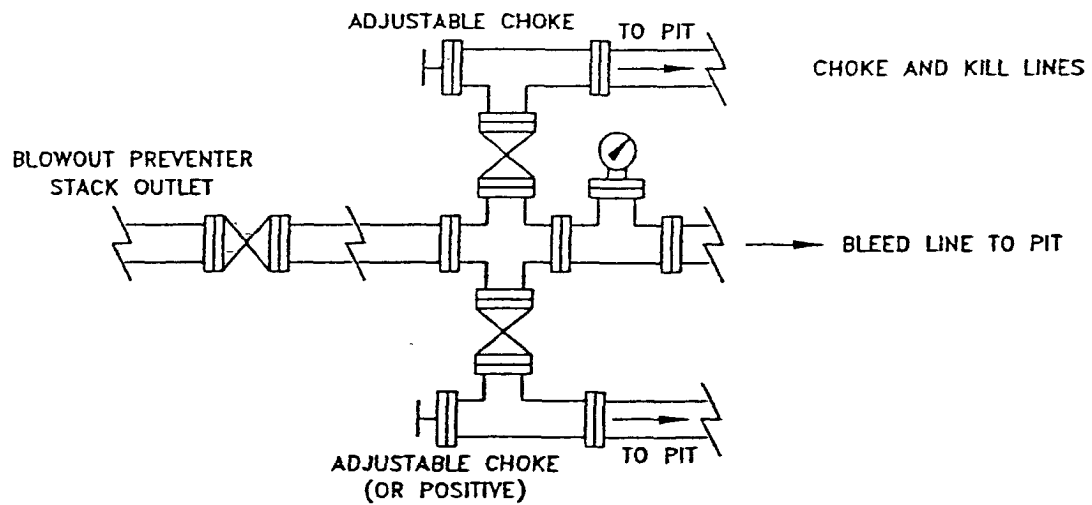
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## CHOKE MANIFOLD REQUIREMENT (2000 psi WP)



**devon**  
ENERGY SERVICES

**WEST RED LAKE AREA**  
EDDY COUNTY, NEW MEXICO

SCHEMATIC  
**BLOWOUT PREVENTOR**  
(2000 PSI WORKING WP)

Q:\PROJECTS\EXPANDED

WRLBOP	

CB

8/98



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

# **Hydrogen Sulfide (H<sub>2</sub>S) Contingency Plan**

**For**

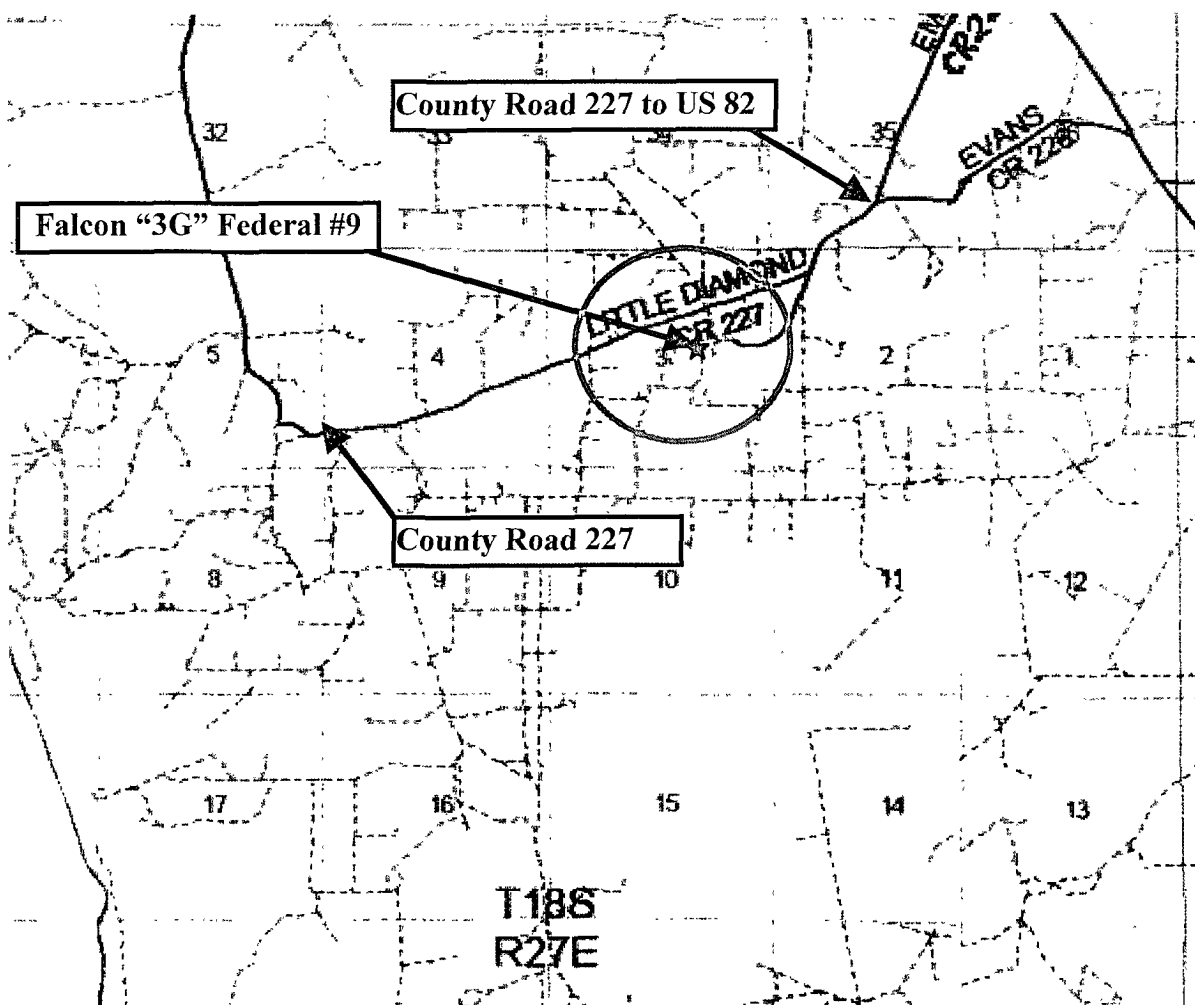
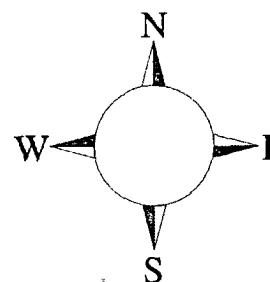
**Falcon “3G” Federal #9**

**2110’ FNL & 2310’ FEL,  
Sec-3, T-18S R-27E**

**Eddy County NM**

## Falcon "3G" Federal #9

This is an open drilling site. H<sub>2</sub>S monitoring equipment and emergency response equipment will be used within 500' of zones known to contain H<sub>2</sub>S, including warning signs, wind indicators and H<sub>2</sub>S monitor.



Assumed 100 ppm ROE = 3000' (Radius of Exposure)  
100 ppm H<sub>2</sub>S 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 northeast or southwest on county road 227. Drivers in both directions of county road 227 must be flagged and stopped so as to prevent traversing into a hazardous area. There is an office building in or near the ROE. That must be considered for evacuation in the event of an emergency release of gas. **Immediate response** should include the evacuation of any person(s) potentially affected by toxic or flammable gasses. Evacuation of the downwind areas should occur first. Perimeter monitoring should then be established to ensure safe areas.

## Emergency Procedures

In the case of a release of gas containing H<sub>2</sub>S, 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<sub>2</sub>S, measures for protection against the gas, equipment used for protection and emergency response. Additionally, responders must be equipped with H<sub>2</sub>S 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<sub>2</sub>). 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<sub>2</sub>S and SO<sub>2</sub>

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

## Contacting Authorities

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

## Devon Energy Corp. Company Call List

<u>Artesia (505)</u>	<u>Cellular</u>	<u>Office</u>	<u>Home</u>
Foreman – Robert Bell.....	748-7448 .....	748-0178 .....	746-2991
Asst. Foreman –Tommy Polly	748-5290 .....	748-0165 .....	748-2846
Joe Johnston.....	513-0630 .....	748-0171 .....	627-6917
Linda Berryman .....	513-0534 .....	748-0177 .....	628-1864
Engineer – Marcos Ortiz.....	(405) 317-0666....	(405) 552-8152 ...	(405) 381-4350

## Agency Call List

<u>Eddy</u>	<u>Artesia</u>	
<u>County</u>	State Police .....	746-2703
<u>(505)</u>	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
	<b>Carlsbad</b>	
	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
<i>Give</i>	Flight For Life - Lubbock, TX .....	(806) 743-9911
<i>GPS</i>	Aerocare - Lubbock, TX .....	(806) 747-8923
<i>position:</i>	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;



SIMPSON BATTERY NW/NW OF SEC 15  
EVEREST BATTERY SE/SW OF SEC 14

- 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. All flow 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.
5. **Location and Types of Water Supply:**  
This location will be drilled using a combination of water mud systems (outlined in the Drilling Program). The water will be obtained from commercial water stations in the area and hauled to location by transport truck using the existing and proposed roads shown in the C-102. On occasion, water will be obtained from a pre-existing water well, running a pump directly to the drill rig. In these cases where a poly pipeline is used to transport water for drilling purposes, proper authorizations will be secured. If a poly pipeline is used, the size, distance, and map showing route will be provided to the BLM via sundry notice.
6. **Construction Materials:**  
All caliche utilized for the drilling pad and proposed access road will be obtained from an existing BLM approved pit or from prevailing deposits found under the location. All roads will be constructed of 6" rolled and compacted caliche. Will use BLM recommended use of extra caliche from other locations close by for roads, if available.
7. **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. 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.
  - f. Disposal of fluids to be transported by the following companies:
    - i. American Production Service Inc, Odessa TX
    - ii. Gandy Corporation, Lovington NM
    - iii. I & W Inc, Loco Hill NM
    - iv. Jims Water Service of Co Inc, Denver CO

8. **Ancillary Facilities:** No campsite or other facilities will be constructed as a result of this well.
9. **Well Site Layout**
  - a. Exhibit 5 shows the proposed well site layout with dimensions of the pad layout.
  - b. This exhibit indicated proposed location of reserve and sump pits and living facilities.
  - c. Mud pits in the active circulating system will be steel pits & the reserve pit will be lined.
  - 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 to preclude endangering wildlife.
10. **Plans for Surface Reclamation:**
  - 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 again be returned to the pad and contoured, as close as possible, to the original topography. The pits will be closed per OCD compliance regulations.
  - 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. If the well is a producer, the reserve pit fence will be torn down after the pit contents have dried. The reserve pit and those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements.
  - 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 drill pad not necessary to operate the well. These unused areas of the drill pad will be contoured, as close as possible, to match the original topography.
11. **Surface Ownership**
  - a. The surface is owned by the US Government and is administered by the Bureau of Land Management. The surface is multiple use with the primary uses of the region for the grazing of livestock and the production of oil and gas.
  - b. The proposed road routes and the surface location will be restored as directed by the BLM.
12. **Other Information:**
  - a. The area surrounding the well site is grassland. The topsoil is very sandy in nature. The vegetation is moderately sparse with native prairie grass, sagebrush, yucca, and miscellaneous weeds. No wildlife was observed but it is likely that deer, rabbits, coyotes, and rodents traverse the area.
  - b. There is no permanent or live water in the general proximity of the location.

- c. There are no dwellings within 2 miles of location.
- 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. Bond Coverage:**

Bond Coverage is Nationwide; Bond # is CO-1104

**Operators Representative:**

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

Marcos Ortiz  
Operations Engineer

Joe Johnston  
Superintendent

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

Devon Energy Production Company, L.P.  
Post Office Box 250  
Artesia, NM 88211-0250

(405) 552-8152 (office)  
(405) 317-0666 (cellular)

(505) 748-0630 (office)  
(505) 513-0630 (cellular)

**Certification**

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access road proposed herein; that I am familiar with the conditions that presently exist; that I have full knowledge of State and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or Devon Energy Production Company, L.P. am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

I hereby also certify that I, or Devon Energy Production Company, L.P. have made a good faith effort to provide the surface owner with a copy of the Surface Use Plan of Operations and any Conditions of Approval that are attached to the APD.

Executed this 2nd day of August, 2007.

Printed Name: Norvella Adams

Signed Name: 

Position Title: Senior Staff Engineering Technician

Address: 20 North Broadway, OKC OK 73102

Telephone: (405) 552-8198

E-mail: norvella.adams@dvn.com



# **Conditions of Approval Cave and Karst**

EA#: NM-520-07-1134

Lease #: LC-065478B

**Devon Energy Production Company L.P.  
Falcon 3G Fed. #9**

## **Cave/Karst Surface Mitigation**

The following stipulations will be applied to minimize impacts during construction, drilling and production.

### **Berming:**

Any tank batteries will be constructed and bermed large enough to contain any spills that may occur.

Bermed areas will be lined with rip-stop padding to prevent tears or punctures in liners and lined with a permanent 20 mil plastic liner.

## **Cave/Karst Subsurface Mitigation**

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

### **Rotary Drilling with Fresh Water:**

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 features are expected. Use depth to the deepest expected fresh water as listed in the geologist report.

### **Casing:**

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.

### **Lost Circulation:**

ALL lost circulation zones from the surface to the base of the cave occurrence zone will be logged and reported.

Regardless of the type of drilling machinery used, if a void (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. The BLM will assess the consequences of the situation and work with operator on corrective actions to resolve the problem.

**Abandonment Cementing:**

Upon well abandonment the well bore will be cemented completely from 100 feet below the bottom of the cave bearing zone to the surface.

**Record Keeping:**

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.

## CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Devon Energy Production Company, LP  
Well Name & No. 9-Falcon 3 G Federal  
Location: 2110' FNL, 2310' FEL, Sec. 3, T18S, R27E, Eddy County, NM  
Lease: NMLC-065478-B

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### I. DRILLING OPERATIONS REQUIREMENTS:

- A. The Bureau of Land Management (BLM) is to be notified a minimum of 2 hours in advance for a representative to witness:
1. Spudding well
  2. Setting and/or Cementing of all casing strings
  3. BOPE tests
- Eddy County call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822
- B. **Although Hydrogen Sulfide (H<sub>2</sub>S) has not been reported in this section, it has been reported in surrounding sections and is always a potential hazard.**
- C. 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.

### II. CASING:

- A. The 8.625 inch surface casing shall be set at approximately 1150 feet and cemented to the surface.
1. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
  2. Wait on cement (WOC) time for a primary cement job will be a minimum of 12 hours for a non-water basin, 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
  3. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
  4. **If cement falls back, remedial action will be done prior to drilling out that string.**

**Possible lost circulation in the Grayburg and San Andres formations.  
High cave/karst area.**

- B. The minimum required fill of cement behind the 5-1/2 inch production casing is cement shall circulate to the surface. If cement does not circulate see A.1 thru 4.
- C. If hardband drill pipe is rotated inside casing; returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

### **III. PRESSURE CONTROL:**

- A.** All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec 17.
- B.** Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M) PSI**.
- C.** The appropriate BLM office shall be notified a minimum of 2 hours in advance for a representative to witness the tests.
  - 1. The tests shall be done by an independent service company.
  - 2. The results of the test shall be reported to the appropriate BLM office.
  - 3. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
  - 4. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.

**Engineer on call phone (after hours): Carlsbad - 505-706-2779**

**WWI 082807**