

Oil Cons.
N.M. Dist. 2
SUBMIT IN TRIPLICATE*
Other instructions on
reverse side
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
301 W. Grand Avenue
Alhambra, NM 88210

Form approved.
Budget Bureau No. 1004-0136
Expires August 31, 1985

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK DRILL <input checked="" type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/>			5. LEASE DESIGNATION AND SERIAL NO. NMLC029338A	
b. TYPE OF WELL OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>			6. IF INDIAN, ALLOTTEE OR TRIBE NAME	
2. NAME OF OPERATOR BURNETT OIL CO., INC (817/332-5108) 3080			7. UNIT AGREEMENT NAME 2388	
3. ADDRESS OF OPERATOR 801 CHERRY STREET, SUITE 1500, FORT WORTH, TEXAS 76102			8. FARM OR LEASE NAME GISSLER A	
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)* At surface UNIT J, 2310' FSL, 2310' FEL At proposed prod. zone SAME AS SURFACE			9. WELL NO. #19 (API# 30-015- 32835)	
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE* APPROXIMATELY 6 MILES EAST OF LOCO HILLS, NEW MEXICO			10. FIELD AND POOL, OR WILDCAT CEDAR LAKE YESO	
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)		330'	16. NO. OF ACRES IN LEASE 600	17. NO. OF ACRES ASSIGNED TO THIS WELL 40
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.		330'	19. PROPOSED DEPTH 5250'	20. ROTARY OR CABLE TOOLS ROTARY
21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3696' GR ROSWELL CONTROLLED WATER BASIN			22. APPROX. DATE WORK WILL START* JUNE 12, 2003	

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24#	500'	+/- 400 Sks (Circ. to Surface)
7 7/8"	5 1/2"	15.50#	5200'	+/- 1500 Sks in 2 Stages

(If water flows are encountered
cementing program may vary.)

Circ. Prod. Casing per 10CD.

A 12 1/4" hole will be drilled to Rustler Anhydrite. We will set 8 5/8" casing @ this depth & cement to surface. After a 18 hour cement wait, casing & BOP will be tested before drill out of the shoe. A 7 7/8" hole will be drilled to approx. 5200' to effectively test the Cedar Lake Yeso interval. The 5 1/2" casing will be run and set @ TD and cemented to 600' above highest potential producing horizon(approx. 2100'). We will perforate and treat productive intervals as recommended by service company.

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED Stefany Plandorff TITLE PETROLEUM ENGINEER

(This space for Federal or State office use)

PERMIT NO.

/s/ Noe Gonzalez

ACTING FIELD MANAGER

APPROVED BY
CONDITIONS OF APPROVAL, IF ANY:

DATE 06 JUN 2003

APPROVAL FOR 1 YEAR

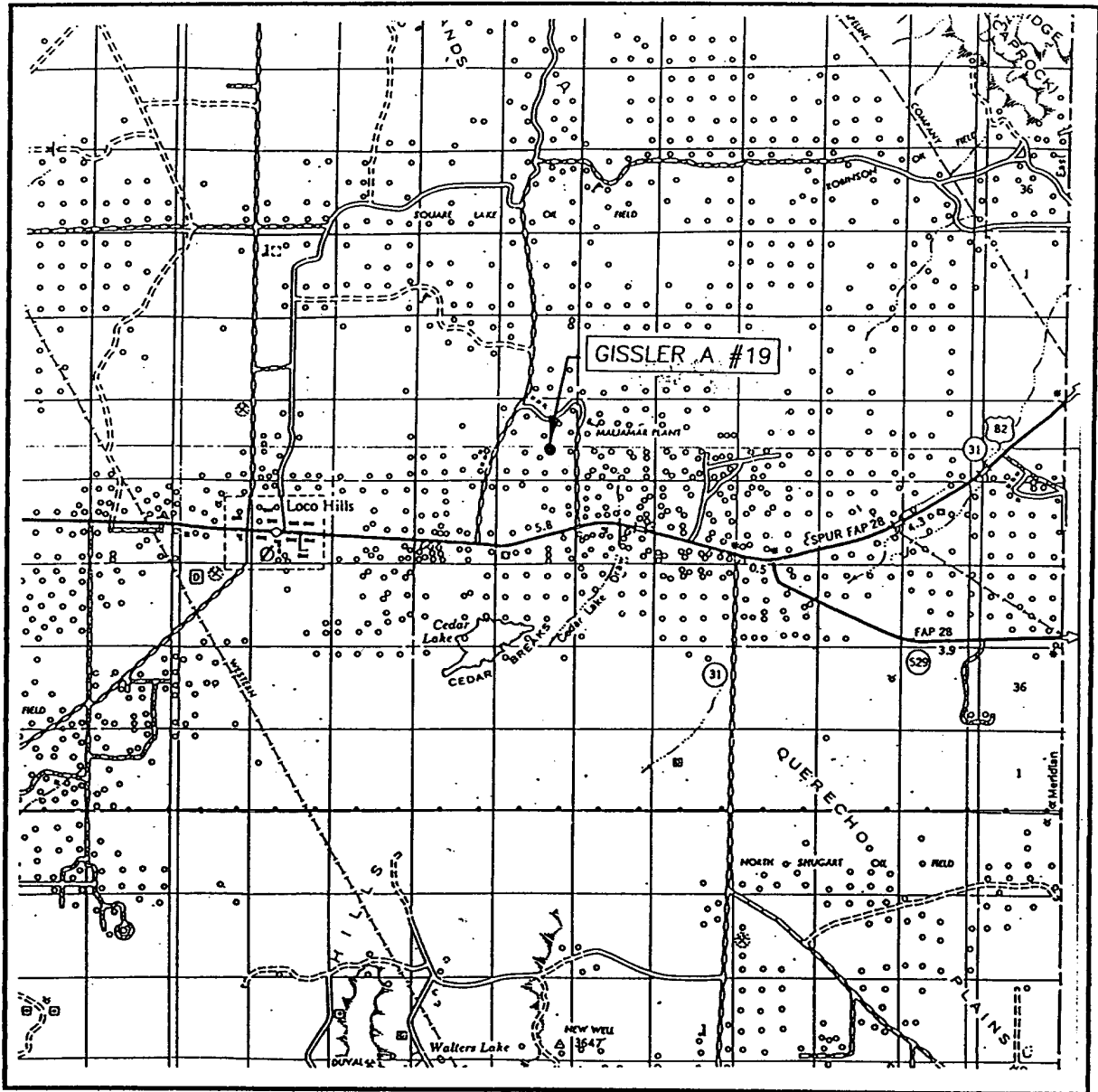
*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Certificate No. RONALD V. EIDSON 3239
ERRY EIDSON 12641

GISSLER A #19
EXHIBIT B

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 14 TWP. 17-S RGE. 30-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 2310' FSL & 2310' FEL

ELEVATION 3696'

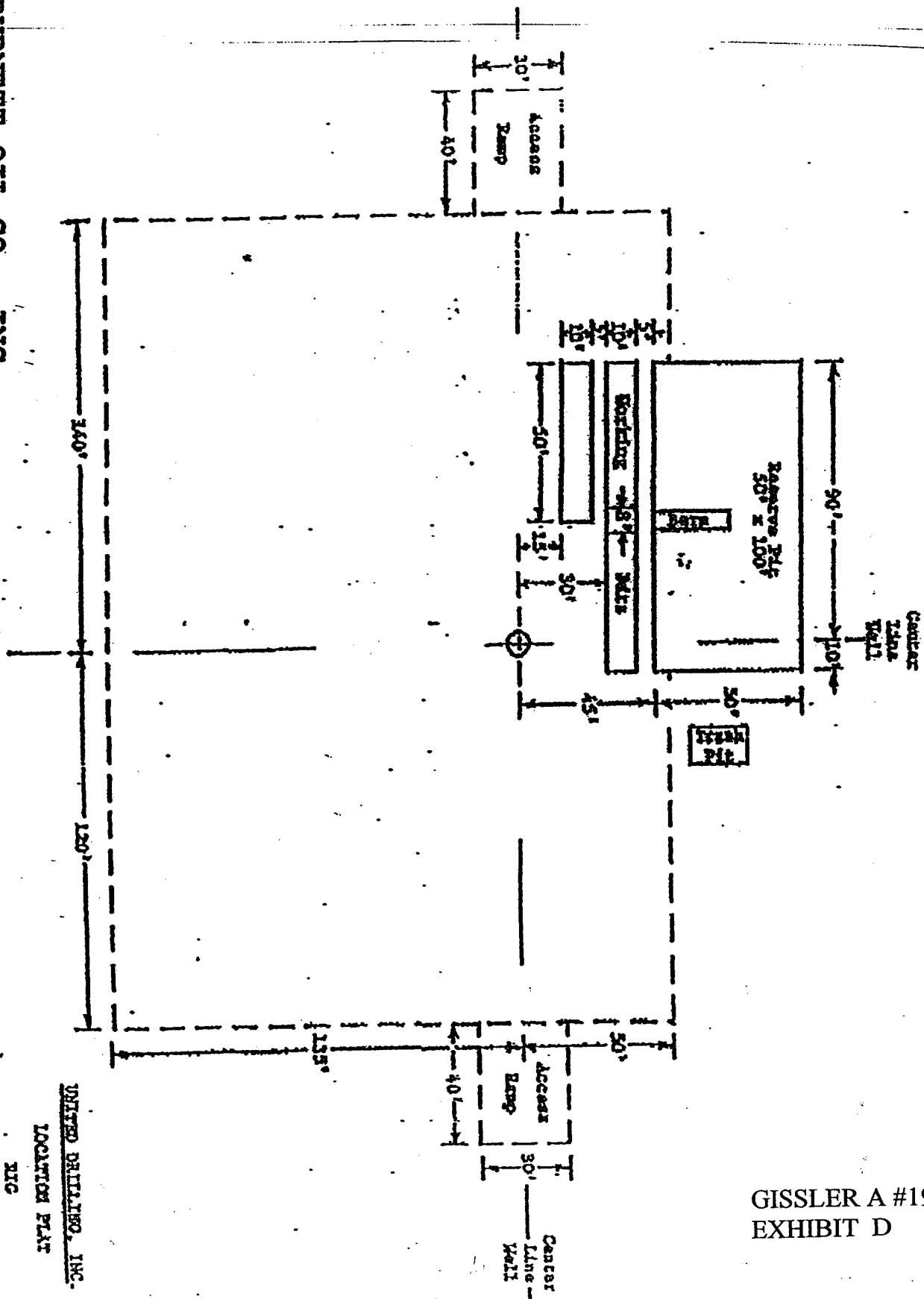
OPERATOR BURNETT OIL COMPANY

LEASE GISSLER A

JOHN WEST SURVEYING
HOBBS, NEW MEXICO
(505) 393-3117

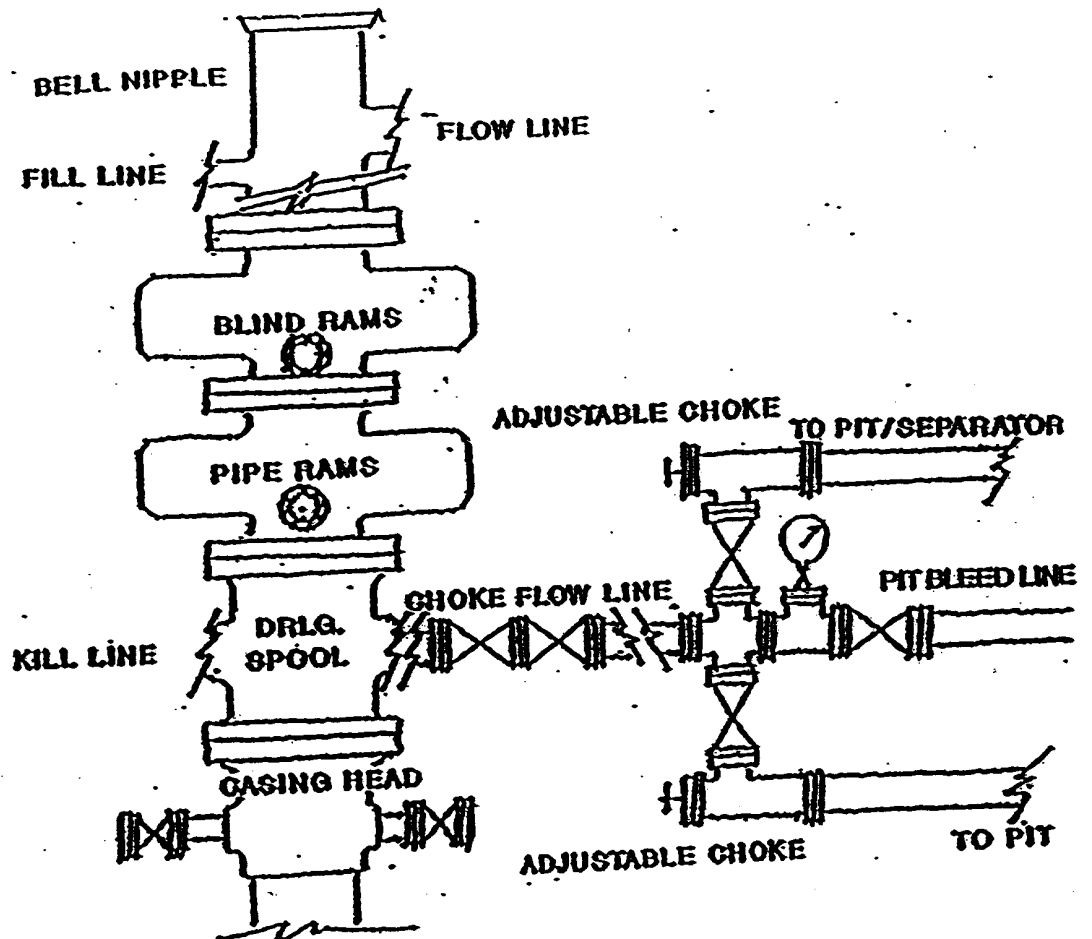
GISSLER A #19
EXHIBIT C

BURNETT OIL CO., INC.
PROPOSED DRILL SITE LAYOUT



GISSLER A #19
EXHIBIT D

UNITED DRILLING, INC.
LOCATION PLAT
XIC
Scale: 1"=40'



BURNETT OIL CO., INC.

**BLOWOUT PREVENTER &
CHOKE MANIFOLD DIAGRAM
2000 PSI WORKING PRESSURE
SERIES 600 FLANGES**

**GISSLER A #19
EXHIBIT E**



DRILLING PLAN

BURNETT OIL CO., INC.
LEASE NO.NMLC 029338A
GISSLER A LEASE, WELL NO.19
UNIT LETTER J
2310' FSL, 2310' FEL
SECTION 14, TOWNSHIP 17 SOUTH, RANGE 30 EAST
EDDY COUNTY, NEW MEXICO

(A) DRILLING PROGRAM

(1) Estimated tops of geologic markers:

Alluvium.....Surface
Anhydrite.....223'
Salt.....423'
Base Salt.....1163'
Yates.....1320'
Seven Rivers.....1604'
Grayburg.....2610'
San Andres.....2975'
Glorieta.....4470'

(2) Estimated depths of producing formations:

Fresh water.....None
Saltwater flows..(?)*
Oil and Gas.....1604'**,2610'**

* As waterflows, if any, are encountered, their depth will be recorded, and drilling will continue to total depth. Multiple stage cementers will be placed in the production casing string to enable us to confine the waterflows to their respective depths by cementing.

** Oil and gas bearing zones, if any, will be determined by log analysis, and will be confined by cementing; subsequently perforated, stimulated and produced in a conventional manner.

(3) Blowout Preventer Specifications:

A 2000 PSI Double Ram unit with hydraulic closing equipment. (See Exhibit E schematic). The preventer will be tested before drilling out below surface pipe setting depth. The exact description of the preventer and related equipment will depend on the successful contractor, who has not yet been selected. No high pressure hydrocarbon zones are anticipated.

(4) Supplementary drilling equipment information:

Not available at this time.

(5) Supplementary casing program information:

- a. Surface casing: Surface casing will consist of new 8-5/8" OD 24# J-55 ST&C R3 pipe and will be run into a 12-1/4" hole with notched Texas Pattern shoe on bottom, insert float valve in first collar, Two(2) centralizers around shoe joint and first collar. Bottom 3 joints will be thread locked. Setting depth will be +/- 475' in the Rustler Anhydrite, depending on where a suitable casing seat can be found. Cement will be circulated back to the surface. Initial cement volume will be calculated to be 100% excess of the calculated annular volume between the 8-5/8" casing and the hole. **If circulation of cement to the surface is not achieved due to lost circulation, we would like permission (without having to call BLM) to fill this annular space using sufficient rat hole mix to bring cement to surface per BLM specifications.** Eighteen(18) WOC time will be allowed as per NMOCD. Casing will be tested to 1000 PSI before drilling out.
 - b. Production casing: Production casing will consist of new 5-1/2" OD 15.50# J55 R3 8rd LT&C pipe being run to total depth with float shoe on bottom, float collar in first collar, centralizers throughout intervals and above and below any multiple stage cementers, and being cemented with sufficient volume to bring top of cement 600' above the top of the highest potential producing horizon. If water flow is encountered, we will cement from TD back to the stage cementer, open stage cementer, cement from stage enter with sufficient volume of Class C or equivalent to bring cement up to at least 600' above the highest potential producing horizon, then balancing hydrostatic weight of the cement by adjusting the flow of water to surface through the 5-1/2" casing, enabling the 2nd stage of cement to set up. Casing will be shut in after twelve(12) hours. If there is no flow of water to surface around the 5-1/2" casing, we will cement the water flow proper through the stage cementer with +/- 900 sacks. In case the 2nd stage is not successful in shutting off any annular flow, we will repeat the 2nd stage until successful. After drilling out and testing the casing to 2000 PSI, a cement bond log will be run to evaluate the cement job.
- (6) Mud program: Native mud (red beds and shale) will be used to total depth. The surface hole will be drilled with fresh water and lost circulation materials as needed. The remaining hole will be drilled with brine water with necessary additives.
- (7) Logging program: If no water flow(s) are encountered, we will run Neutron Litho density-DLL logs. If water flow(s) are encountered, no open hole logging will be attempted, and after casing is set, cased hole GR/CN logs will be run. No other testing or coring is anticipated.

- (8) Abnormal pressures or hazards: No abnormal pressures or potential hazards are anticipated. The maximum anticipated bottom hole pressure is 1000#. The maximum anticipated bottom hole temperature is 91°F.
- (9) Other facets of the operation to be pointed out:
None.

(B) HYDROGEN SULFIDE DRILLING PROGRAM

(1) Hydrogen Sulfide Training

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

- a. The hazards and characteristics of Hydrogen Sulfide (H₂S).
- b. The proper use and maintenance of personal protective equipment and life support systems.
- c. The proper use of H₂S detectors, alarms, warning systems, briefing areas, evacuation procedures and prevailing wind.
- d. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

- a. The effects of H₂S on metal components. If high tensile tubulars are to be used, personnel will be trained in their special maintenance requirements.
- b. Corrective action and shut-in procedures when drilling or reworking a well, blowout prevention and well control procedures.
- c. The contents and requirements of the H₂S Drilling Operations Plan and the Public Protection Plan (if applicable.)

There will be an initial training session just prior to encountering a known or probable H₂S zone (within 3 days or 500 feet) and weekly H₂S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H₂S Drilling Operations Plan and the Public Protection Plan (if applicable). This plan shall be available at the wellsite. All personnel will be required to carry documentation that they have received the proper training.

(2) H2S SAFETY EQUIPMENT AND SYSTEMS

Note: all H2S safety equipment and systems will be installed, tested and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonably expected to contain H2S.

a. Well Control Equipment:

1. Choke manifold with a minimum of one remote-controlled choke.
2. Blind rams and pipe rams to accommodate all pipe sizes with a properly sized closing unit.

b. Protective equipment for essential personnel:

1. Mark II Surviveair (or equivalent) 30 minute units located in the dog house and at the primary briefing area(to be determined.)

c. H2S detection and monitoring equipment:

1. Three(3) portable H2S monitors positioned on location for best coverage and response. These units have warning lights and audible sirens when H2S levels of 20 PPM are reached.

d. Visual warning systems:

1. Wind direction indicators will be positioned for maximum visibility.
2. Caution/Danger signs shall be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at reasonable distance from the immediate location. Bilingual signs will be used when appropriate.

e. Mud program:

1. The mud program has been designed to minimize the volume of H2S circulated to the surface. Proper mud weight, safe drilling practices and the use of H2S scavengers will minimize hazards when penetrating H2S bearing zones.

f. Metallurgy:

1. All drill strings, casings, tubing, wellheads, BOPS , drilling spools, kill lines, choke manifold, valves and lines will be suitable for H2S service.
2. All elastomers used for packing and seals shall be H2S trim.

g. Communication:

1. Cellular Telephone and/or 2-way radio will be provided at wellsite.
2. Landline telephone is located in field office.

h. Well testing:

1. Drill stem testing may be done in this well bore. Completion testing, if required, will be conducted under the same applicable H2S guidelines that were used in drilling.

(C) SURFACE USE PROGRAM

- (1) Existing roads: Exhibits A, B and C show maps of the general area. From Loco Hills, New Mexico, go east on U.S. Highway 82 approximately 3.9 miles. Turn north on County road 220 and go approximately 1 mile. Turn west onto lease road and follow to the location.
- (2) Access roads to be constructed: This location will require approx. 800' of additional lease road from and existing lease road into the well pad. See Exhibit A.
- (3) Location of existing wells: See Exhibit A.
- (4) Location of existing or proposed production facilities:
See Exhibit A for location of existing Gissler A2 production facility on the lease. We propose to above ground commingle this Cedar Lake, Yeso production with the approved existing Yeso & Grayburg production by laying approximately 1500' of new flowline from this well pad along the new access roadway and existing flowline & roadway route to the existing Gissler A2 Tank Battery.
- (5) Location and type of water supply: All water to be used in drilling the well will be brine or fresh water trucked from Loco Hills, New Mexico or fresh or produced water furnished by our waterflood facilities.

- (6) Construction materials: Construction material will be caliche which may be available at the proposed location. If not available on location or road, caliche will be hauled from nearest approved caliche pit.
- (7) Methods of handling waste disposal: Drill cuttings will be disposed of in the lined reserve drilling pit. Auxiliary emergency water containment pits may be necessitated by large volume water flows and these pits, which will hold only water, will not be lined. All drilling fluids will be allowed to evaporate after drilling is completed, at which time pits will be back filled, leveled and reseeded. Trash, waste paper, garbage and junk will be placed in a portable screened trash container on location. All trash and debris will be transported to an authorized disposal station within 30 days following completion activities. Oil and/or water produced during testing operations will be stored in steel tanks until either sold or disposed of through one of our approved disposal methods.
- (8) Ancillary Facilities: There are no planned ancillary facilities.
- (9) Well site layout: Exhibit D shows the relative location and dimensions of the drilling pad and related components. Only minor differences, if any, in length and/or width of the drilling pad are anticipated, depending on which drilling contractor is selected to drill the well. Only minor leveling of the drilling site is anticipated.
- (10) Plans for restoration of the surface:
 - (a) After drilling and successful completion operations are finished, all equipment and other materials not required for normal production operations will be removed. Pits will be backfilled, leveled and re-seeded. Well site will be left in a neat condition.
 - (b) Any unguarded pits containing fluid will be fence until backfilled.
 - (c) After abandonment of the well, surface restoration will be in accordance with regulations of the SMA. Pits will be backfilled and location will be cleaned. The pit area, well pad and all unneeded access roads will be ripped to promote revegetation. Rehabilitation should be accomplished within 90 days after abandonment.
- (11) Surface ownership: All lands are Federal.

- (12) Other information: The topography of the area is relatively flat, with small hills and sand dunes. The soil is fine, deep sand underlain by caliche. Vegetation cover is generally sparse and consists of mesquite, yucca, oak shinnery and sparse native grasses. Wildlife in the area is typical of that of semi-arid lands and includes coyotes, rabbits, rodents, reptiles, dove and quail. There are no ponds, streams or residences in the area. There is intermittent cattle grazing and hunting in the area; however, the principal land use is for oil and gas production. An archaeological clearance report will be sent to you by a BLM approved archaeological service.
- (13) Operator's representative: Our field representative responsible for compliance with the approved surface use and operations plan is:

Mr. Bobby Claborn, District Supt.
P.O. Box 188
Loco Hills, New Mexico 88255
Office phone: 505-677-2313
Home phone: 505-396-1550
Cellular phone: 505-746-7979

I hereby certify that I, or persons under my direct supervision have inspected the drill site and access route; that I am familiar with the conditions that currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and that the work associated with operations proposed herein will be performed by Burnett Oil Co., Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Date: March 24, 2003

By: Sterling P. Randolph
Sterling P. Randolph
Petroleum Engineer



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Roswell Field Office
2909 West Second Street
Roswell, New Mexico 88201

IN REPLY REFER TO:

JUN 05 2003

Devon Energy Production Company, L.P.
Attn. Ms Karen Cottom
20 North Broadway, Suite 1500
Oklahoma City, Oklahoma 73102-8260

Re: Red Lake Field Area
Master Drilling and Surface Use Plan
Eddy County, New Mexico

The master drilling and surface use plan, dated May 6, 2003, for the Red Lake Field Area in Townships 17 and 18 South, Range 27 East, Eddy County, New Mexico, is now approved. Several corrections have been made to the attached list describing the field area. An approved copy is attached for your records.

Please note that the surface casing setting depth may change in individual APD (Form 3160-4) submittals because the depth of the expected fresh water varies across this area.

If you have any questions, please contact Alexis C. Swoboda, P.E. at 505-627-0228.

Sincerely,

Larry D. Bray
Assistant Field Manager
Lands and Minerals



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

Telephone: (405) 228-7512
Fax: (405) 552-4621

May 6, 2003

Bureau of Land Management
Attn Armando Lopez
2909 West Second Street
Roswell, NM 88201

Re: Master Drilling and Surface Use Program
Red Lake Field

Dear Armando:

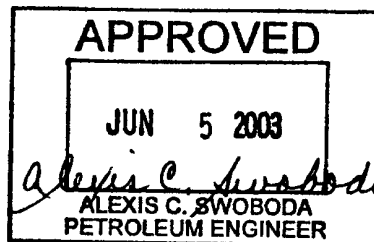
Per our conversation, we are submitting a Master Drilling and Surface Use Program, one original and three copies, for the Red Lake Field. I have enclosed the program and a map detailing the area for which we intend to use the program. It is my understanding that we submit the MDSUP for approval first and then submit the 3160-3 forms as they are needed.

Please contact me should there be any additional information required. Thanks for your help.

Sincerely,

Karen Cottom
Engineering Technician
Devon Energy Production Company, L.P.

kc
Enclosure



Master Drilling Program
Red Lake Field

To be attached to Form 3160-3

UNIT AREA: Leases in the following sections, Townships and Ranges that are operated by Devon Energy Production Company, LP.

Lease Numbers as follows but not limited to:

Section 2	NMNM 2029-634 NMNM-B-1483	NE4/NW4, NW4/NE4	T18S-R27E
Section 3	NMLC 065478-B NMNM 015605 NMLC 061783-B	All of Section 3 except S2/N2 NW4	T18S-R27E
Section 4	NMNM 033825 NMLC 055465-A NMNM 29278 NMNM 025530 NMLC 070937 NMLC 061783-A NMNM 7720	All of Section 4 except N2/NW4 and NW4/SW4	T18S-R27E
Section 25	NMNM 0558679	W2NW4	T17S-27E
Section 26	NMNM 0557370	E2 NE/4, E2SE/4, S/2 SW/4	T17S-R27E
	NMNM 0558679	SW4NW4, NW4SW4	
Section 27	NMLC 067849	N2, N2/S2	T17S-R27E
	NMNM 0557370	S/2S/2,	
Section 28	NMLC 067849	NE4/NE4	
Section 33	NMLC 026874-F	NW4, NW4SW4	T17S-R27E
	NMLC 026874-B	SE4SW4	
	NMLC 049648-B	NE4SW4	
	NMNM 025528	N2NE4, SW4NE4	
	NMNM 056122	SE4NE4	
	NMNM 033865	N2SE4	
	NMNM 025528	S2SE4	
Section 34	NMLC 064050-A	E2 NW4 , NE/4 SE/4	T17S-R27E
	NMLC 067849	W2 NW4, SW4	
	NMNM 0557370	NE/4, NW/4SE/4,	
Section 35	NMLC 064050-A	NW4SW4	T17S-R27E
	NMLC 067849	NW/4NW/4	
	NMLC 057798	SW4SW4, N/2SE4 NE/4SW/4, SE/4,SE/4	
	NMLC 028755-A	SE/4SW/4, SW/4SE/4	
	NMNM 0557370	SW/4NW/4	
	NMLC050158	E/2NE/4, E/2NW/4	

If drilling is proposed on additional leases, the BLM will be advised when they are proposed.

NM 29270

SESE

2

1. Geologic Name of Surface Formation:

Permian

2. Estimated Tops of Important Geologic Markers:

Queen	879'
Grayburg	1330'
San Andres	1610'
Glorieta-Yeso	2960'

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

Water

Possible small amounts of fresh water from surface to 1130'.

Oil

Grayburg:	1330'
San Andres:	1610'
Glorieta-Yeso	2960'

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.

4. Casing Program:

<u>Hole Size</u>	<u>Interval</u>	<u>Csg OD</u>	<u>Weight, Grade, Type</u>
17 1/2"	0- 40'	14"	Conductor, 0.30" wall
12-1/4"	0-1150'	8-5/8"	24#, J-55 ERW or seamless ST&C R-3
7-7/8"	0-TD	5-1/2"	15.5# J-55, ERW, FBN or seamless LT&C , R-3

5. Cementing Program:

13 3/8" Conductor Casing:	Cemented with redimix to surface.
8 5/8" Surface Casing:	Cemented to surface with 350 sks Lite + 5% salt + 1/4 lb/sk cellophane flakes and 200 sks Class C + 2% CaCl ₂ + 1/4 lb/sk cellophane flakes. Circulate to surface.
5-1/2" Production:	Cemented to surface with 380 sks Lite + 5#/sx salt + 1/4 lb/sk cellophane flakes and 370 sks 50:50 Pos 'C' w/3% salt, Fluid loss, 1/4#/sx flake.

The above cement volumes could be revised pending the caliper measurement from the open hole logs. The top of cement is designed to reach surface.

6. Minimum Specifications for Pressure Control:

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 rams). 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 will be tested with the rig pump to 1000 psi.

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.

6. Types and Characteristics of the Proposed Mud System:

The well will be drilled to total depth using a fresh water mud system. Depths of systems are as follows:

<u>Depth</u>	<u>Type</u>	<u>Weight (ppg)</u>	<u>Viscosity (1/sec)</u>	<u>Water Loss (cc)</u>
0 -1150'	Fresh Water	8.4-8.8	34-38	No Control
1150' - TD	Fresh Water/Cut Brine	8.4-8.6	28-32	No Control

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

7. Auxiliary Well Control and Monitoring Equipment:

- A. A Kelly cock will be in the drill string at all times.
- B. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.

8. Logging, Testing and Coring Program:

- A. No drill stem tests are planned.
- B. The open hole electrical logging program will be:
 - T. D. to 1150': Dual Induction-Micro SFL with Gamma Ray, and Caliper
 - T. D. to 1150': Compensated Neutron-Litho Density with Gamma Ray and Caliper
 - T. D. to surface: Gamma Ray/Neutron
- C. No cores are planned.

9. Abnormal Pressures, Temperatures and Potential Hazards:

No abnormal pressures or temperatures are foreseen. The anticipated bottom hole temperature at total depth is 90 degrees and maximum bottom hole pressure is 800 psi. No major loss circulation intervals have been encountered in adjacent wells. An H₂S Drilling Operations Plan is included as Exhibit #6.

10. Anticipated Starting Date and Duration of Operations:

Road and location preparation will not be undertaken until approval has been received from the BLM. The anticipated spud date will be provided with each well application. The drilling operation should require approximately 10 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 production facility.

MASTER SURFACE USE AND OPERATING PLAN
Red Lake Field

This plan will be submitted with Form 3160-3, Application for Permit to Drill. The purpose of this plan is to describe the location of the proposed wells, the proposed construction activities and operations plan, the magnitude of necessary surface disturbance involved and the procedures to be followed in rehabilitating the surface after completion of the operations. This plan will allow a complete appraisal to be made of the environmental effects associated with the proposed operations.

UNIT AREA: Leases in the following Sections, Townships and Ranges that are Operated by Devon Energy Production Company, LP.

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Section 25	NMNM 0558679	W2NW4	T17S-27E
Section 26	NMNM 0557370	E2 NE/4, E2SE/4, S/2 SW/4	T17S-R27E
	NMNM 0558679	SW4NW4, NW4SW4	
Section 27	NMLC 067849	N2, N2/S2	T17S-R27E
	NMNM 0557370	S/2S/2,	
Section 28	NMLC 067849	NE4/NE4	
Section 33	NMLC 026874-F	NW4, NW4SW4	T17S-R27E
	NMLC 026874-B	SE4SW4	
	NMLC 049648-B	NE4SW4	
	NMNM 025528	N2NE4, SW4NE4	
	NMNM 056122	SE4NE4	
	NMNM 033865	N2SE4	
	NMNM 025528	S2SE4	
Section 34	NMLC 064050-A	E2, NW4, NE/4 SE/4	T17S-R27E
	NMLC 067849	W2 NW4, SW4	
	NMNM 0557370	NE/4, NW/4SE/4,	
Section 35	NMLC 064050-A	NW4SW4	T17S-R27E
	NMLC 067849	NW/4NW/4	
	NMLC 057798	SW4SW4, N/2SE4 NE/4SW/4, SE/4, SE/4	
	NMLC 028755-A	SE/4SW/4, SW/4SE/4	
	NMNM 0557370	SW/4NW/4	
	NMLC050158	E/2NE/4, E/2NW/4	

If drilling is proposed on additional leases, the BLM will be advised when they are proposed.

1. Existing Roads:

- A. The well site and elevation plat for each well will be provided with the 3160-3 when proposed.
- B. All roads to the location are shown on Exhibit #2 of each individual application. The existing roads are illustrated in red and are adequate for travel during drilling and production operations. Upgrading of the roads prior to drilling will be done where necessary as determined during the onsite inspections.
- C. Directions to location will be provided for each individual well application.
- D. Routine grading and maintenance of existing roads will be conducted as necessary to maintain their condition as long as any operations continue on the lease.

2. Proposed Access Road

Exhibit #3 of each application will show the new access road (if necessary) to be constructed and will be illustrated in yellow. The road will be constructed as follows:

- A. The maximum width of the road will be fifteen (15) feet.
- B. It will be crowned and made of 6 inches 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.
- D. The average grade will be approximately 1%.
- E. No cattle guards; grates or fence cuts will be required
- F. No turnouts are planned.

4. Location of Existing and/or Proposed Facilities:

- A. In the event the well is found productive, the collection facilities will be noted on the Application to Permit. We believe that existing facilities will be sufficient unless otherwise stated in the individual APD form. Existing facilities are listed below:

Malco Batt NE / SW OF SEC 6
 CARTER COLLIER NE / SW OF SEC 5
 WRL BATT AND INJ. ST. 1 NE / NW OF SEC 7
 JOHNSTON BATT SW / NW SEC 7
 JACKSON BATT SW / SW SEC 7
 KAISER B 6 BATT NW / SE OF SEC 18
 KAISER BATT NE / SE OF SEC 18
 HAWK 8 BATT IN SW / SE OF SEC 8
 WRL SATALITE BATT. NE / NE OF SEC 8
 WRL INJ ST 2 NW / NE OF SEC 9
 HAWK 9 BATT NW / SE OF SEC 9
 HONDO BATT NE / SW OF SEC 4
 WINDFOHR BATT SE / NE OF SEC 4
 FALCON BATT NE / SW OF SEC 3
 COMPTON 33 BATT SW / NE OF SEC 33
 EAGLE BATT SW / NE OF SEC 34
 LOGAN ST 2 BATT NW / NE OF SEC 2
 LOGAN 35 BATT SE / SW OF SEC 35

EALGLE 27 BATT NW / SE OF SEC 27
ASAU SE / SE OF SEC 13

- B. If the well is productive, rehabilitation plans are as follows:
- a. The reserve pit will be back-filled after the contents of the pit are dry (within 120 days after completion, weather permitting).
 - b. The drill site will then be contoured to the original natural state.

5. Methods of Handling Water Disposal:

- A. Drill cuttings will be disposed into the reserve pit.
- B. Drilling fluids will be contained in steel mud tanks or lined earthen pits and the reserve pit. The reserve pit will contain excess drilling fluid or fluid from the well during drilling, cementing, and completion operations. The reserve pit will be an earthen pit roughly 70' x 70' x 5', or smaller, in size.
- C. The reserve pit will be fenced on three sides throughout drilling operations and will be totally isolated upon removal of the rotary rig. The pit will be lined using a 5-7 mil plastic to minimize loss of drilling fluids.
- D. Water produced from the well during completion operations will be disposed into a steel tank or reserve pit, if volumes prove excessive. After placing the well on production through the production facilities, all water will be collected in tanks and injected into the water injection system. Produced oil will be separated into steel stock tanks until sold.
- E. A portable chemical toilet will be available on the location for human waste during the drilling operations.
- F. Garbage, trash and waste paper produced during drilling operations will be collected in a contained trailer and disposed at a approved landfill. All waste material will be contained to prevent scattering by the wind. All water, fluids, salt or other chemicals will be disposed into the reserve pit. No toxic waste or hazardous chemicals will be generated by this operation.
- G. All waste material will be removed within 30 days after the well is either completed or abandoned. The reserve pit will be completely fenced until it has dried. At the point the reserve pit is found sufficiently dry, it will be backfilled and reclaimed. The portion of the drilling pad used by the production equipment (pumping unit) will remain in use.

6. Well Site Layout:

- A. The drill pad layout will be shown on Exhibit 4 for each individual well. Dimensions

- B. No permanent living facilities are planned, but temporary trailers for the tool pusher, drilling foreman and mud logger may be on location throughout drilling operations.
- C. The reserve pit and earthen pits will be lined using plastic sheeting of 5-7 mil thickness.

7. Surface Ownership:

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

8. Other Information:

- A. The project area is classified as vegetations consisting of thick grasses, isolated creosote, and shallow silty sandy soil over gypsum.
- B. There is permanent water (Pecos River) to the west of the area covered by the Master Drilling and Surface use plan.
- C. A Cultural Resources Examination for each APD will be completed by Southern New Mexico Archeological Services, Inc. and forwarded to the Carlsbad, New Mexico BLM office.

9. Lessee's and Operator's Representative:

The Devon Energy Corporation representatives responsible for assuring compliance of the surface use plan are:

Gerald T. (Tom) Pepper
Operations Engineering Advisor

Don Mayberry
Superintendent

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

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

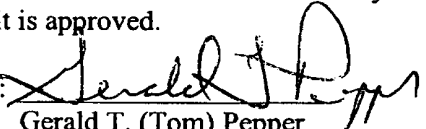
(405) 552-4513 (office)
(405) 728-8641 (home)

(505) 748-3371 (office)
(505) 746-4945 (home)

Certification:

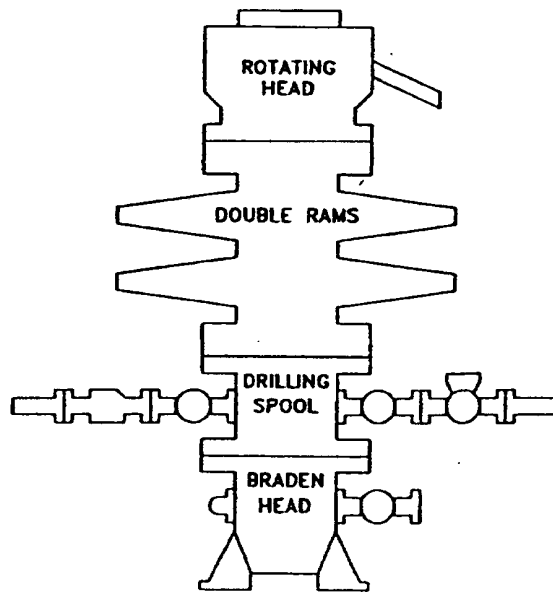
I hereby certify that I am familiar with the conditions that presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Devon Energy Corporation (Nevada) and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Date: 5/6/03

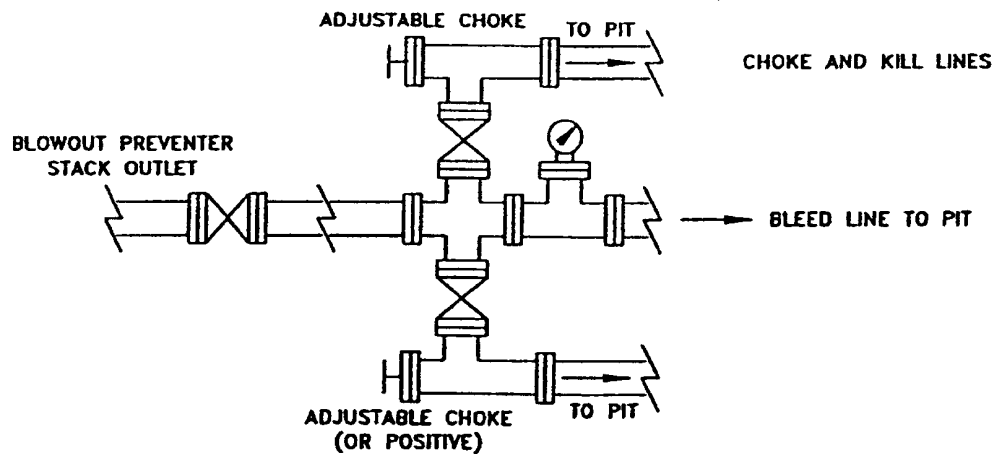
Signed: 
Gerald T. (Tom) Pepper
Operations Engineering Advisor

Attachment to Exhibit #1
NOTES REGARDING BLOWOUT PREVENTORS
West Red Lake Area
Eddy County, New Mexico

1. Drilling nipple will be constructed so it can be removed mechanically without the aid of a welder. The minimum internal diameter will equal BOP bore.
 2. Wear ring will be properly installed in head.
 3. Blowout preventor and all associated fittings will be in operable condition and tested to 1000 psi with the rig pump.
 4. All fittings will be flanged.
 5. A full bore safety valve 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. All BOP equipment will meet API standards and include a minimum 40 gallon accumulator having two independent means of power to initiate closing operation.
 11. **BOP will consist of either a single annular preventor or a set of double rams as shown in Exhibit #1.**
-



CHOKE MANIFOLD REQUIREMENT (2000 psi WP)



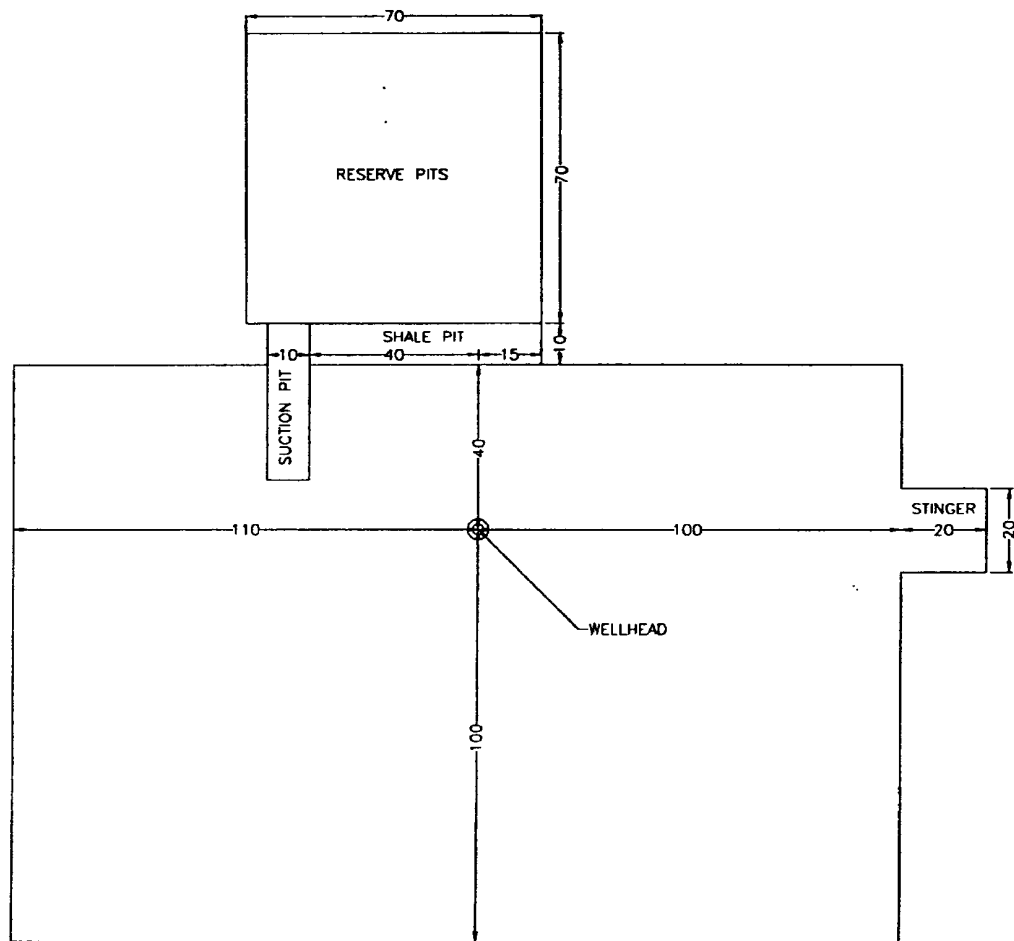
WEST RED LAKE AREA <small>EDDY COUNTY, NEW MEXICO</small>	
<small>SCHEMATIC</small> BLOWOUT PREVENTOR <small>(2000 PSI WORKING WP)</small>	

Q:\PROJECTS\EXPANDED

WRLBOP	

CB

8/98



FILE:

devon
ENERGY CORPORATION

WEST RED LAKE AREA

EDDY COUNTY, NEW MEXICO

DRILLING PAD

EXHIBIT 5

Scale in Feet
25 0 25 50 75 100

EB

6/96

DEVON ENERGY CORPORATION

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

A. Hydrogen Sulfide Training

All rig crews and company personnel will receive training from a qualified instructor in the following areas prior to penetrating any hydrogen sulfide bearing formations during drilling operations:

1. The hazards and characteristics of hydrogen sulfide (H₂S).
2. The proper use and maintenance of the H₂S safety equipment and of personal protective equipment to be utilized at the location such as H₂S detection monitors, alarms and warning systems, and breathing equipment. Briefing areas and evacuation procedures will also be discussed and established.
3. Proper rescue techniques and procedures will be discussed and established.

In addition to the above, supervisory personnel will be trained in the prevention of oil and gas well blowouts in accordance with Minerals Management Service Standards Subpart - 0 - 250 - 212.

Prior to penetrating any known H₂S bearing formation, H₂S training will be required at the rig site for all rig crews and company personnel that have not previously received such training. This instruction will be provided by a qualified instructor with each individual being required to pass a 20 question test regarding H₂S safety procedures. All contract personnel employed on an unscheduled basis will be required to have received appropriate H₂S training.

This Hydrogen Sulfide Drilling And Operations Plan shall be available at the wellsite during drilling operations.

B. H₂S Safety Equipment And Systems

All H₂S safety equipment and systems will be installed, tested, and operational when drilling operations reach a depth approximately 500' above any known or probable H₂S bearing formation. The safety systems to be utilized during drilling operations are as follows:

1. Well Control Equipment

- (a) Double ram BOP with a properly sized closing unit and pipe rams to accommodate all pipe sizes in use.
- (b) A choke manifold with a minimum of one remote choke.

2. H2S Detection And Monitoring Equipment

- (a) Three (3) H2S detection monitors will be placed in service at the location. One monitor will be placed near the bell nipple on the rig floor; one will be placed at the rig substructure; and, one will be at the working mud pits or shale shaker. This monitoring system will have warning lights and audible alarms that will alert personnel when H2S levels reach 10 ppm.
- (b) One (1) Sensidyne Pump with the appropriate detection tubes will also be available to perform spot checks for H2S concentrations in any remote or isolated areas.

3. Protective Equipment For Essential Personnel

Protective equipment will consist of the following:

- (a) Four (4) - five minute escape packs located at strategic points around the rig.
- (b) Two (2) - thirty minute rescue packs to be located at the designated briefing areas.

4. Visual Warning System

Visual warning system will consist of the following:

- (a) Two wind direction indicators.
- (b) One condition / warning sign which will be posted on the road - providing direct access to the location. The sign will contain lettering of sufficient size to be readable at a reasonable distance from the immediate location. The sign will inform the public that a hydrogen sulfide gas environment could be encountered at the location.

5. Mud Program

- (a) The mud program has been designed to minimize the volume of H₂S circulated to surface. Proper mud weight and safe drilling practices (for example, keeping the hole filled during trips) will minimize hazards when drilling in H₂S bearing formations.

6. Metallurgy

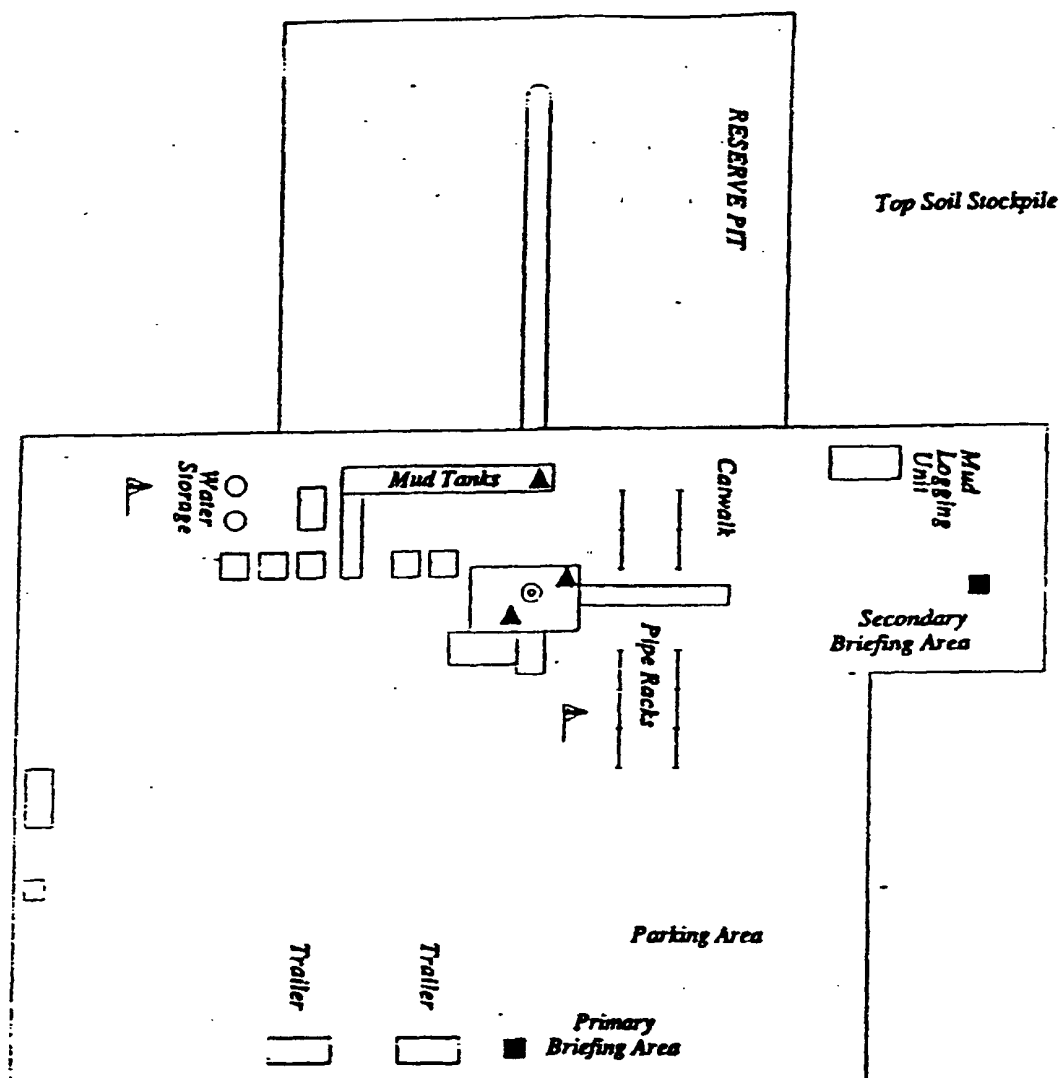
- (a) All drill strings, casings, tubing, wellhead, blowout preventers, drilling spools, kill lines, choke manifold and lines, and valves shall be suitable for H₂S service.

7. Communication

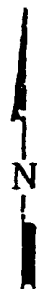
- (a) Two way radio and cellular telephone communication will be available in company vehicles.

C. Diagram of Drilling Location

- 1. Attached is a diagram representing a typical location layout as well as the location of H₂S monitors, briefing areas, and wind direction indicators.



- ▲ H2S MONITORS WITH ALARMS AT THE BELL NIPPLE, SUBSTRUCTURE, AND SHALE SHAKER
- ┆ WIND DIRECTION INDICATORS
- SAFE BRIEFING AREAS WITH CAUTION SIGNS AND PROTECTIVE BREATHING EQUIPMENT



devon

WEST RED LAKE AREA

MCDEV COUNTY, NEW MEXICO

H2S PLAN

Scale in Feet: 25 0 25 50 75 100

Well name:	West Red Lake Area
Operator:	Devon Energy Corporation
String type:	Surface
Location:	Eddy County, NM

Design parameters:**Collapse**

Mud weight: 9.630 ppg
Design is based on evacuated pipe.

Minimum design factors:**Collapse:**

Design factor 1.125

Burst:

Design factor 1.00

Environment:

H2S considered? No
Surface temperature: 75 °F
Bottom hole temperature: 77 °F
Temperature gradient: 0.20 °F/100ft
Minimum section length: 1,150 ft

Burst

Max anticipated surface pressure: 717 psi
Internal gradient: 0.000 psi/ft
Calculated BHP 717 psi

No backup mud specified.

Tension:

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

Non-directional string.

Tension is based on buoyed weight.
Neutral point: 984 ft

Re subsequent strings:

Next setting depth: 4,000 ft
Next mud weight: 9.630 ppg
Next setting BHP: 2,001 psi
Fracture mud wt: 12.000 ppg
Fracture depth: 1,150 ft
Injection pressure 717 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)	Internal Capacity (ft³)
1	1150	8.625	24.00	J-55	ST&C	1150	1150	7.972	55.4
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	575	1370	2.38	717	2950	4.12	24	244	10.33 J

Prepared by: Jim Linville
by: Devon Energy

Phone: (405) 228-4621
FAX: (405) 552-4621

Date: March 12, 2001
Oklahoma City, Oklahoma

Remarks:

Collapse is based on a vertical depth of 1150 ft, a mud weight of 9.63 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:
 Operator: **Devon Energy Corporation**
 String type: **Production**
 Location: **Eddy County, NM**

West Red Lake Area

Design parameters:

Collapse

Mud weight: 9.630 ppg
 Design is based on evacuated pipe.

Minimum design factors:

Collapse:

Design factor 1.125

Environment:

H2S considered? No
 Surface temperature: 75 °F
 Bottom hole temperature: 95 °F
 Temperature gradient: 0.50 °F/100ft
 Minimum section length: 1,500 ft

Burst:

Design factor 1.00

Burst

Max anticipated surface pressure: 2,001 psi
 Internal gradient: 0.000 psi/ft
 Calculated BHP 2,001 psi

No backup mud specified.

Tension:

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

Non-directional string.

Tension is based on buoyed weight.

Neutral point: 3,417 ft

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft³)
1	4000	5.5	15.50	J-55	LT&C	4000	4000	4.825	125.4
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	2001	4040	2.02	2001	4810	2.40	53	217	4.10 J

Prepared by: **Jim Linville**
 by: **Devon Energy**

Phone: (405) 228-4621
 FAX: (405) 552-4621

Date: **March 12, 2001**
Oklahoma City, Oklahoma

Remarks:

Collapse is based on a vertical depth of 4000 ft, a mud weight of 9.63 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.

