

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. TYPE OF WORK  
DRILL ☒ DEEPEN ☐

b. TYPE OF WELL  
OIL WELL ☒ GAS WELL ☐ OTHER ☐

SINGLE ZONE ☒ MULTIPLE ZONE ☐

2. NAME OF OPERATOR  
RAY WESTALL

3. ADDRESS AND TELEPHONE NO.  
P.O. BOX 4 LOCO HILLS NEW MEXICO 505.677.2370

4. LOCATION OF WELL (REPORT LOCATION CLEARLY AND IN ACCORDANCE WITH ANY STATE REQUIREMENTS)  
AT SURFACE 1980' FSL & 990' FEL  
AT PROPOSED PROD. ZONE SAME

5. LEASE DESIGNATION AND SERIAL NO.  
NM-68821

6. IF INDIAN, ALLOTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME, WELL NO.  
FEDERAL 30 #4

9. API WELL NO.  
30-025-35829

10. FIELD AND POOL, OR WILDCAT  
BELL LAKE DELAWARE, NORTH

11. SEC., T., R., M., OR BLK  
AND SURVEY OR AREA  
SEC. 30 T23S-R34E

12. COUNTY OR PARISH  
LEA

13. STATE  
NEW MEXICO

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE  
15 MILES NW OF JAL NEW MEXICO

15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT.  
(Also to nearest drig. unit line, if any) 990'

16. NO. OF ACRES IN LEASE  
640

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.  
990'

19. PROPOSED DEPTH  
8700'

20. ROTARY OR CABLE TOOLS  
RT

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
3598.45

APPROX. DATE WORK WILL START  
ASAP

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WT PER FT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8" K-55 STC	48#	600'	900 SXS CIRCULATED
11"	8 5/8" K-55 STC	32#	5145'	1500 SXS CIRCULATED
7 7/8"	5 1/2" J-55 LTC	17#	8700'	400 SXS TIE 600' INTO 8 5/8"

ALL CASING WILL BE NEW, OR USED MEETING BLM SPECS.  
CEMENT WILL BE CIRCULATED ON 13 3/8" AND 8 5/8" CASING.  
CEMENT QUANTITIES AND ADDITIVES ARE SUBJECT TO CHANGE DUE TO HOLE CONDITIONS.

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED

RECEIVED  
FEB 12 2002  
LAND MANAGEMENT  
SOURCES

PROPOSED MUD PROGRAM

0-600'	FRESH WATER AND SPUD MUD
600-5154	BRINE
5154-8700	CUT BRINE 8.8-9.1#

MUD PROGRAM SUBJECT TO CHANGE DUE TO HOLE CONDITIONS

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, 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 [Signature] TITLE 60000151 DATE 01/09/01

(THIS SPACE FOR FEDERAL OR STATE OFFICE USE)

PERMIT NO. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

OPER. OGRID NO. 18862  
PROPERTY NO. 27861  
POOL CODE 5166  
EFF. DATE 2-5-02  
API NO. 30-025-35829  
DATE FEB 04 2002

APPROVED BY /s/ LESLIE A. THEISS

TITLE FIELD MANAGER

TITLE 18 U.S.C. SECTION 1001, MAKES IT A CRIME FOR ANY PERSONS 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

APPROVAL FOR 1 YEAR

3  
c  
A

District I  
PO Box 1960, Hobbs, NM 88241-1960  
District II  
PO Drawer DD, Artesia, NM 88211-0719  
District III  
1000 Rio Brazos Rd., Amar, NM 87410  
District IV  
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

Form C-102  
Revised February 10, 1994  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 APT Number 30-025-35829		2 Pool Code 27861		3 Pool Name Bell Lake, Delaware North		
4 Property Code 27861		5 Property Name Federal "30"			6 Well Number 4	
7 OGRID No. 18862		8 Operator Name Ray Westall, Operator			9 Elevation 3589	

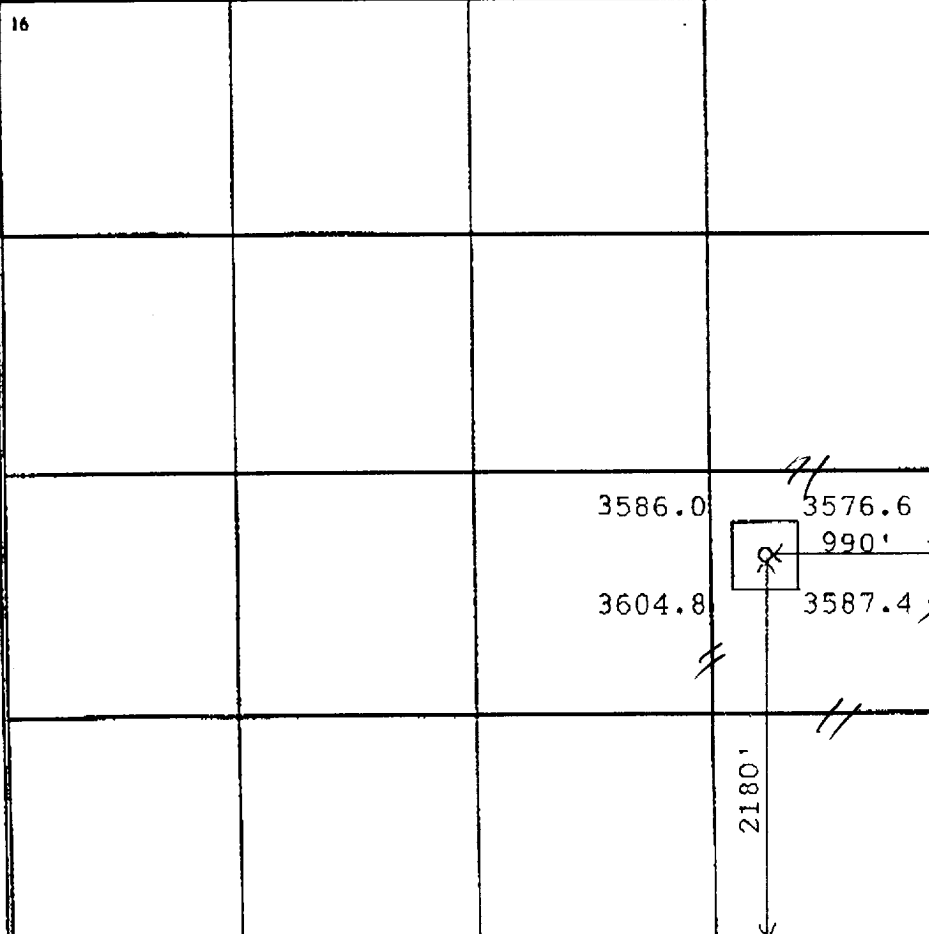
10 Surface Location

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
I	30	23s	34e		2180	South	990	East	Lea

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Ida	Feet from the	North/South line	Feet from the	East/West line	County
12 Dedicated Acres 40		13 Joint or Infill		14 Consolidation Code		15 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>16</p> 				<p>17 OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p>Signature: <i>[Signature]</i> Printed Name: RANOLD HARRIS Title: GEOLOGIST Date: 1/29/02</p>	
				<p>18 SURVEYOR CERTIFICATION</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>Date of Survey: February 5, 2001 Signature and Seal of Professional Surveyor: <i>[Signature]</i> Certificate Number: 8112</p>	
				<p>8112</p> <p>Certificate Number</p>	

District I  
PO Box 1980, Hobbs, NM 88241-1980  
District II  
PO Drawer DD, Artesia, NM 88211-0719  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

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☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number		Pool Code		Pool Name	
Property Code		Property Name Federal "30"			Well Number 4
OGRID No.		Operator Name Ray Westall, Operator			Elevation 3598.45

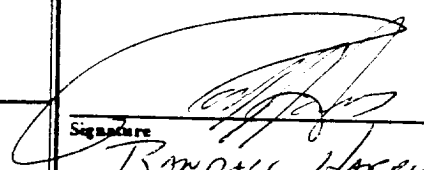
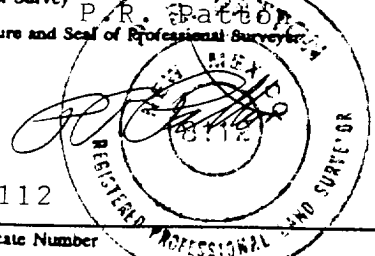
10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
I	30	23s	34e		1980	South	990	East	Lea

11 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.			

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

16				17 OPERATOR CERTIFICATION	
				I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief	
				Signature 	
				Printed Name RANDALL HARRIS	
				Title GEOLOGIST	
				Date 01/09/01	
18 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 supervision, and that the same is true and correct to the best of my belief.					
December 7, 2000					
Date of Survey				Signature and Seal of Professional Surveyor	
8112					
Certificate Number					

RECEIVED  
JAN 11 3:12 PM  
OIL AND GAS DIVISION  
SANTA FE, NM

3598.0  
3605.1  
3581.5  
990'  
3594.9  
1980'

## APPLICATION FOR DRILLING

Ray Westall  
Federal 30 #4  
1980' FSL & 990' FEL  
Section 30  
Township 23 South, Range 34 East  
Lea County, New Mexico

In conjunction with Form 3160-3, Application for Permit to Drill, Ray Westall submits the following ten items of pertinent information in accordance with BLM requirements:

1. The geological surface formation is Quaternary.
2. The estimated tops of geologic markers are as follows:  
Rustler 1250'  
Lamar Ls 5160'  
T/Delaware Sd. 5200'  
Bone Springs 8700'
3. The estimated depths at which anticipated water, oil & gas formations are expected to be encountered:  
Water 0-800'  
Oil & Gas Zones 5200-8700'
4. Proposed casing program: See 3160-3
5. Pressure Control Equipment:  
A 900s BOP will be installed on the 8 5/8" casing and tested prior to drill out.
6. Mud Program:  
Fresh water in surface hole.  
Brine in production hole.
7. Auxiliary Equipment: None
8. Logging Program: CNL/FDC/GR, DLL.
9. No abnormal pressures or temperatures are anticipated. Estimated BHP is 3100#,  
Estimated BHT is 125 F.
10. Anticipated Starting date: 01/01/01  
Duration: 12 Days drilling  
5 Days completion

# **MULTI-POINT SURFACE USE AND OPERATIONS PLAN**

## **RAY WESTALL FEDERAL 30 #4**

This plan is submitted with form 3160-3, Application for Permit to Drill, covering the above described well. The purpose of this plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of surface disturbance involved, and the procedures to be followed in rehabilitating the surface after completion of the operations, so that a complete appraisal can be made of the environmental effect associated with the operation.

1. Existing Roads.  
Exhibit A is a portion of a USGS topographic map showing the wells and roads in the vicinity of the proposed location.
2. Planned Access Road.  
Approximately 900' of road will be constructed east from the Federal 30 #5 location.
3. Location of Existing Wells.  
Exhibit B is a topo map showing the existing wells.
4. Location of existing/or proposed facilities:  
If productive a 3" SDR 7 poly line will be laid along existing ROW to the battery located on the Federal 30 #1 location. A 4 phase power line and poles will be routed along the existing ROW paralleling the road.
5. Location and Type of Water Supply.  
It is planned to drill the proposed well with fresh and brine water system. The water will be obtained from commercial sources and will be hauled to the location by truck.
6. Source of Construction Materials.  
The location and road will be from pit excavation and or will be hauled in from an approved caliche pit.
7. Methods of Handling Waste Disposal.
  - A. Drill cuttings will be disposed of in the reserve pit.
  - B. Drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry.
  - C. Produced water during operations will be stored in reserve pits until dry.
  - D. Oil produced during operations will be stored in tanks until sold.
  - E. Current laws and regulations pertaining to the disposal of human waste will

be complied with.

- F. Trash, waste paper, garbage and junk will be stored in a wire cage preventing blowing or scattering by the wind. After drilling and completion all waste will be removed to an approved site.

8. Ancillary Facilities

None required.

9. Wellsite Layout.

Exhibit C shows the relative location and dimensions of the well pad, the reserve pit, a 400' X 400' area has been staked and flagged.

10. Plans For Restoration of The Surface.

- A. After finishing drilling and completion operations all equipment and other material not needed for further operations will be removed. The location will be cleaned of all trash and junk to leave the Wellsite in as aesthetically pleasing a condition as possible.
- B. Unguarded pits, if any containing fluids will be fenced until they have been filled.
- C. If the proposed well is non-productive, all rehabilitation and or vegetation requirements of the BLM and USGS will be complied with and will be accomplished as expeditiously as possible. All pits will be filled and leveled within 90 days after abandonment.

11. Other Information:

- A. Topography: The land surface in the vicinity of the Wellsite is sandy loam with caliche hills and outcrops.
- B. Flora and Fauna: the vegetation cover consists of prairie grass, greasewood and miscellaneous desert growth. No wildlife was observed, but wildlife in the area probably includes those typical of semi-arid desert land. The area is used for cattle grazing.
- C. There are no ponds, lakes or rivers in the area.
- D. There are no inhabited dwellings in the vicinity of the proposed well.
- E. Surface ownership is federal.
- F. Evidence of archeological sites has been reported and previously filed by Archaeological Survey Consultants.

12. Operator's Representative:

Ray Westall  
P.O. Box 4  
Loco Hills, NM 88255  
(505) 677-2370

**Certification:**

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route, that I am familiar with the conditions which 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 operation proposed herein will be performed by the operator and its' subcontractors in conformity with this plan and the terms and conditions under which is approved

Randall L. Harris  
Geologist

Gravel P.

3705

1. \_\_\_\_\_

2.

1

1-0574

17:30

2873

FEDAL 30

EXISTING  
SECOND

Proposed  
Roads

DELAWARE  
BISMARCK  
Rd

22

23

24

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21

28

2

10

34

6.

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2

Tip Top Wells: NM Scale 1" = 0.379M 610M 2,000Ft 1 Mi = 2,640' 1 cm = 240M



1

160-1000

100-100000

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176177 1.55)

100

10-10  
10-10

3500-  
225

Shaffer 10" Series 900 Type B B.O.P. with 4 1/2" pipe rams and blocks. Hydraulic operated 6,000# test, 3,000# WOP.

2-201



## RAY WESTALL OPERATING

### HYDROGEN SULFIDE DRILLING PLAN

#### 1. HYDROGEN SULFIDE TRAINING

All personnel that are connected with the drilling or completion of a well within a known H<sub>2</sub>S area 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.
- B. The proper use of personal protective equipment and life support systems.
- C. The proper use of H<sub>2</sub>S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.

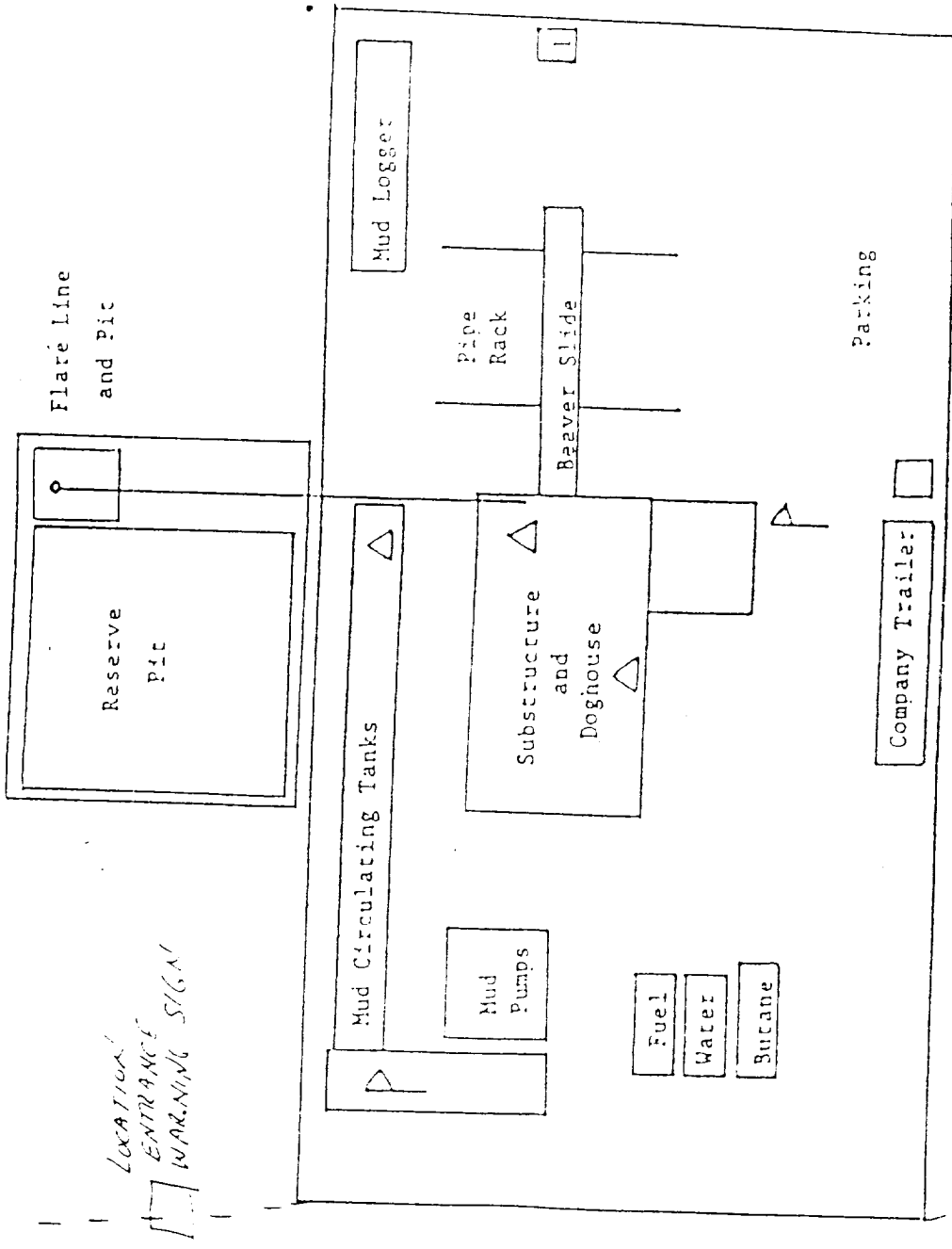
There will be an initial training session just prior to encountering a known or probable H<sub>2</sub>S zone (within 3 days) and weekly H<sub>2</sub>S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H<sub>2</sub>S Drilling Plan. This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

#### 2. H<sub>2</sub>S SAFETY EQUIPMENT AND SYSTEMS

All H<sub>2</sub>S 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 H<sub>2</sub>S.

##### A. Well Control Equipment:

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



- △ - H2S Monitors with alarms at the bell nipple and shale shaker
- ▽ - Wind Direction Indicators
- - Safe Breathing areas with caution signs and protective breathing equipment Min. 450 feet from wellhead, 1 designates primary area