

## New Mexico Oil Conservation Division, District I

1625 N. French Drive  
Hobbs, NM 88240FORM APPROVED  
OMB No. 1004-0136  
Expires January 31, 2004UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

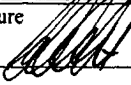
## APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM 54450
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator H.L. Brown Operating L.L.C. # 213179		7. If Unit or CA Agreement, Name and No.
3a. Address P.O. Box 2237, Midland, Texas 79701		8. Lease Name and Well No. <u>35316</u> Federal '28' <del>GM</del> #3
3b. Phone No. (include area code) 432 - 688 - 3726		9. API Well No. <u>3D-041-20925</u>
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 2310' FSL & 660' FEL, Unit I At proposed prod. zone		10. Field and Pool, or Exploratory <u>6910</u> Blutts (Siluro-Devonian) <u>North</u>
11. Sec., T., R., M., or Blk. and Survey or Area Sec 28, T-7 -S, R-37 -E		12. County or Parish Roosevelt
13. State NM		14. Distance in miles and direction from nearest town or post office* 10 miles ENE of Milnesand, NM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 660'	16. No. of Acres in lease 600	17. Spacing Unit dedicated to this well 80
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1361'	19. Proposed Depth 9100'	20. BLM/BIA Bond No. on file 0679788
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 4060' GL	22. Approximate date work will start* 01-01-06	23. Estimated duration 38 days

## 24. Attachments

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

- |   |  |
|---|--|
| 1. Well plat certified by a registered surveyor.  | 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) Robert McNaughton	Date 11-15-05
Title Operations Manager/ Petroleum Engineer		
Approved by (Signature) <u>/S/LARRY D. BRAY</u>	Name (Printed/Typed) <u>/S/LARRY D. BRAY</u>	Date <u>DEC 21 2005</u>
Title <u>Assistant Field Manager, Lands And Minerals</u>	Office <u>ROSWELL FIELD OFFICE</u>	<u>APPROVED FOR 1 YEAR</u>

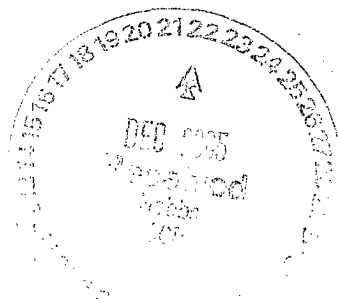
Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*(Instructions on reverse)

NSL - 5248



DISTRICT I  
1625 N. French Dr., Hobbs, NM 88240  
DISTRICT II  
811 South First, Artesia, NM 88210  
DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410  
DISTRICT IV  
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised March 17, 1999

Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

2040 South Pacheco  
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number <b>30-041-20925</b>	Pool Code <b>6910</b>	Pool Name <b>Bluitt Siluro-Devonian, North</b>
Property Code <b>54450 35316</b>	Property Name <b>FEDERAL "28" COM</b>	Well Number <b>3</b>
OGRID No. <b>213179</b>	Operator Name <b>H.L. BROWN OPERATING L.L.C.</b>	Elevation <b>4060'</b>

Surface Location

UL or lot No. <b>1</b>	Section <b>28</b>	Township <b>7 S</b>	Range <b>37 E</b>	Lot Idn	Feet from the <b>2310</b>	North/South line <b>SOUTH</b>	Feet from the <b>660</b>	East/West line <b>EAST</b>	County <b>ROOSEVELT</b>
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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 <b>80</b>	Joint or Infill <b>N</b>	Consolidation Code <b>C</b>	Order No. <b>pending NSL-5248</b>						

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

	<b>OPERATOR CERTIFICATION</b>  I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.   Signature <b>Robert McNaughton</b> Printed Name <b>Operations MGR/ Engr.</b> Title <b>11-15-05</b> Date
	<b>SURVEYOR CERTIFICATION</b>  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.  <b>JUNE 08, 2005</b> Date Surveyed  Signature Professional Surveyor  Certificate No. <b>Gary L. Jones 7977</b> BASIN SURVEYS

Submit 3 Copies To Appropriate District Office  
District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Ave., 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

Form C-103  
March 4, 2004

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

WELL API NO.

5. Indicate Type of Lease  
STATE ☐ FED ☒ FEE ☐

6. Federal Oil & Gas Lease No.  
NM - 544550

7. Lease Name or Unit Agreement Name

Federal 28 Cam

8. Well Number

3

9. OGRID Number  
213179

10. Pool name or Wildcat  
Bluitt North (Devonian)

SUNDRY NOTICES AND REPORTS ON WELLS

(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well:

Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

H.L. Brown Operating L.L.C

3. Address of Operator

300 West Louisiana, Midland, Texas 79702

4. Well Location

Unit Letter: I : 2310' feet from the South line and 660' feet from the East line

Section 28 Township T-7 Range R-37-E NMPM Roosevelt County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)

4060' GL

Pit or Below-grade Tank Application (For pit or below-grade tank closures, a form C-144 must be attached)

Pit Location: UL I Sect 28 Township 7-S Range 37-E Pit type drilling

Depth to Groundwater 176' Distance from nearest fresh water well 2 miles South Distance from nearest surface water 2 miles South

Below-grade Tank Location UL I Sect 28 Twp 7-S Rng 37-E ; 660' feet from the East line and 2310' feet from the South line

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐

TEMPORARILY ABANDON ☐ CHANGE PLANS ☐

PULL OR ALTER CASING ☐ MULTIPLE COMPLETION ☐

OTHER: Construct reserve pit for drilling rig ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐

CASING TEST AND CEMENT JOB ☐

OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103.  
For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

According to the State Land Office files, the closest water depth measurement is two miles southwest in Section 5, T-8-S, R-37-E, at 176'. Three miles to the northeast, the water level is at 159' in Section 13, T-7 S, R-37-E.

Will use a single layer - 12 mil liner as per BLM and NMOCD requirements.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Robert McNaughton TITLE Operations Manager/ Petroleum Engineer DATE 11-15-05

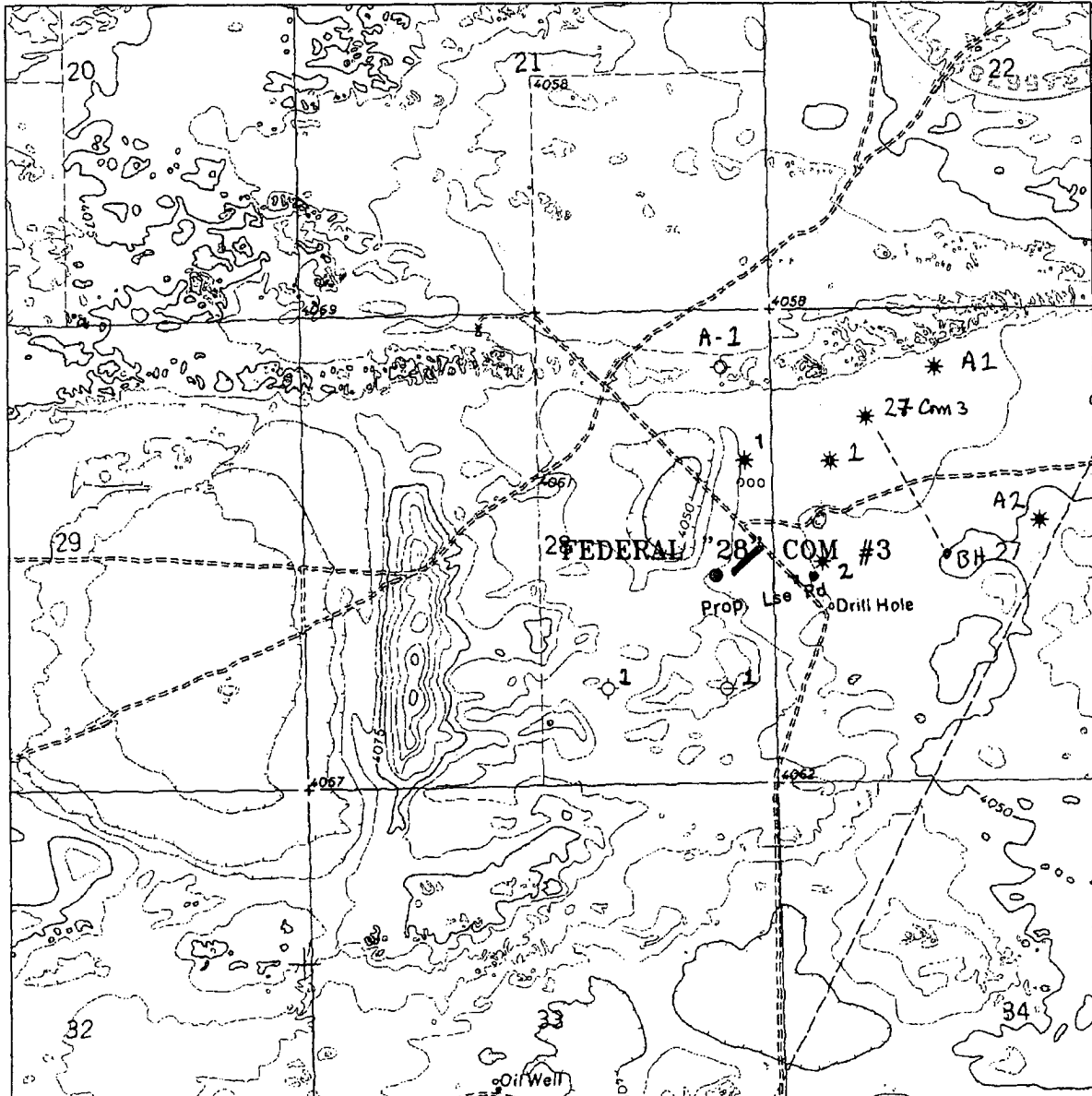
Type or print name Robert McNaughton E-mail address: robertm@hlboperating.com Telephone No. 432-688-3726

(This space for State use)

APPROVED BY \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

Conditions of approval, if any:

# Figure No. 1



## FEDERAL "28" COM #3

Located at 2310' FSL and 660' FEL  
Section 28, Township 7 South, Range 37 East,  
N.M.P.M., Roosevelt County, New Mexico.

**basin  
surveys**  
focused on excellence  
in the oilfield

P.O. Box 1786  
1120 N. West County Rd.  
Hobbs, New Mexico 88241  
(505) 393-7316 - Office  
(505) 392-3074 - Fax  
basinsurveys.com

W.O. Number: 5486AA - KJG #1

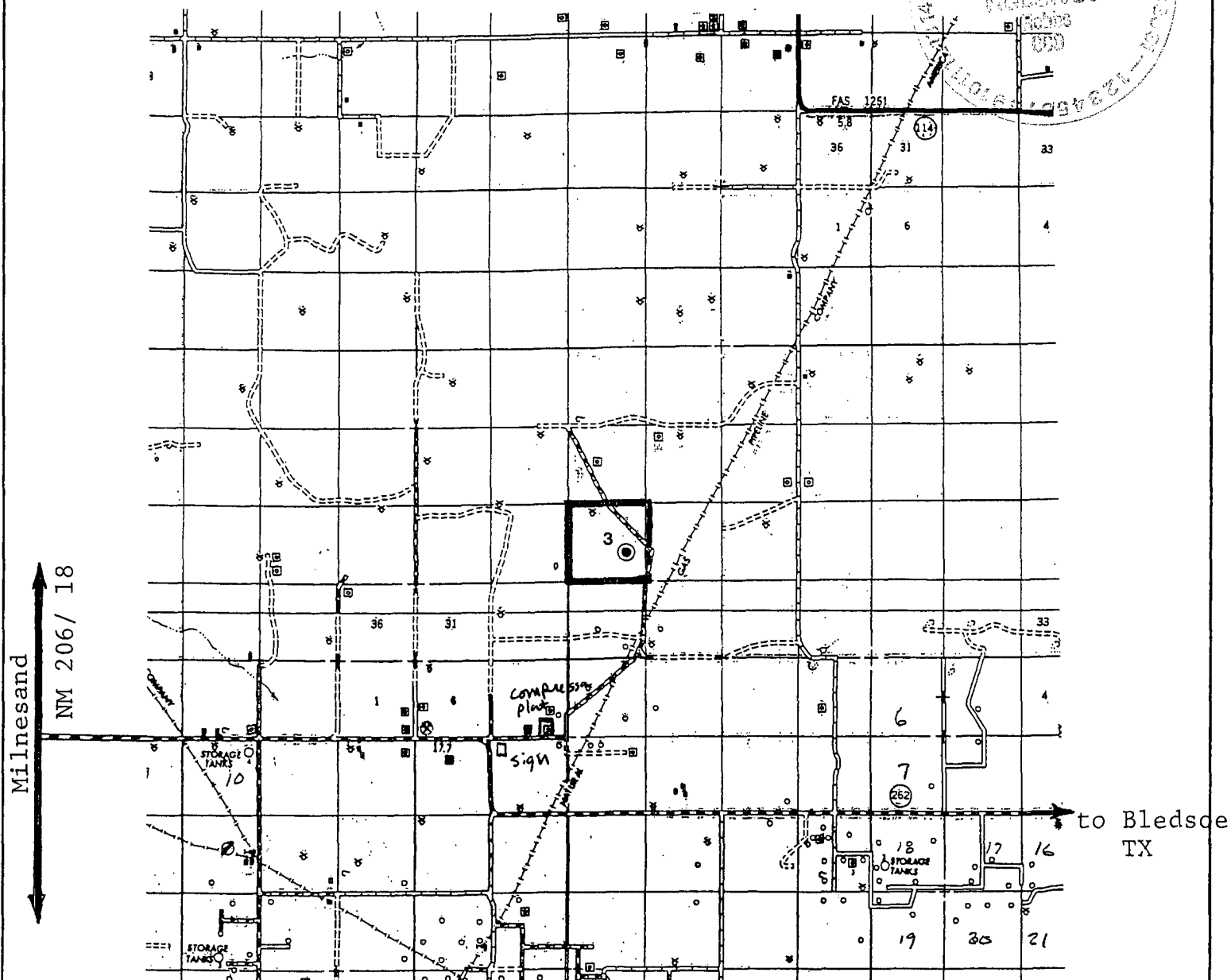
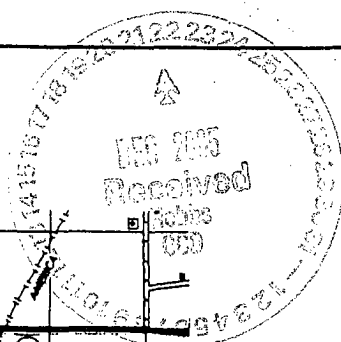
Survey Date: 06-08-2005

Scale: 1" = 2000'

Date: 06-10-2005

**H.L. BROWN  
OPERATING L.L.C.**

# Figure No. 2



FEDERAL "28" COM #3  
 Located at 2310' FSL and 660' FEL  
 Section 28, Township 7 South, Range 37 East,  
 N.M.P.M., Roosevelt County, New Mexico.

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P.O. Box 1786  
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 Hobbs, New Mexico 88241  
 (505) 393-7316 - Office  
 (505) 392-3074 - Fax  
 basinsurveys.com

W.O. Number: 5486AA - KJG #1

Survey Date: 06-08-2005

Scale: 1" = 2 MILES

Date: 06-10-2005

H.L. BROWN  
 OPERATING L.L.C.

SECTION 28, TOWNSHIP 7 SOUTH, RANGE 37 EAST, N.M.P.M.,  
ROOSEVELT COUNTY, NEW MEXICO.

FED. "28" #1

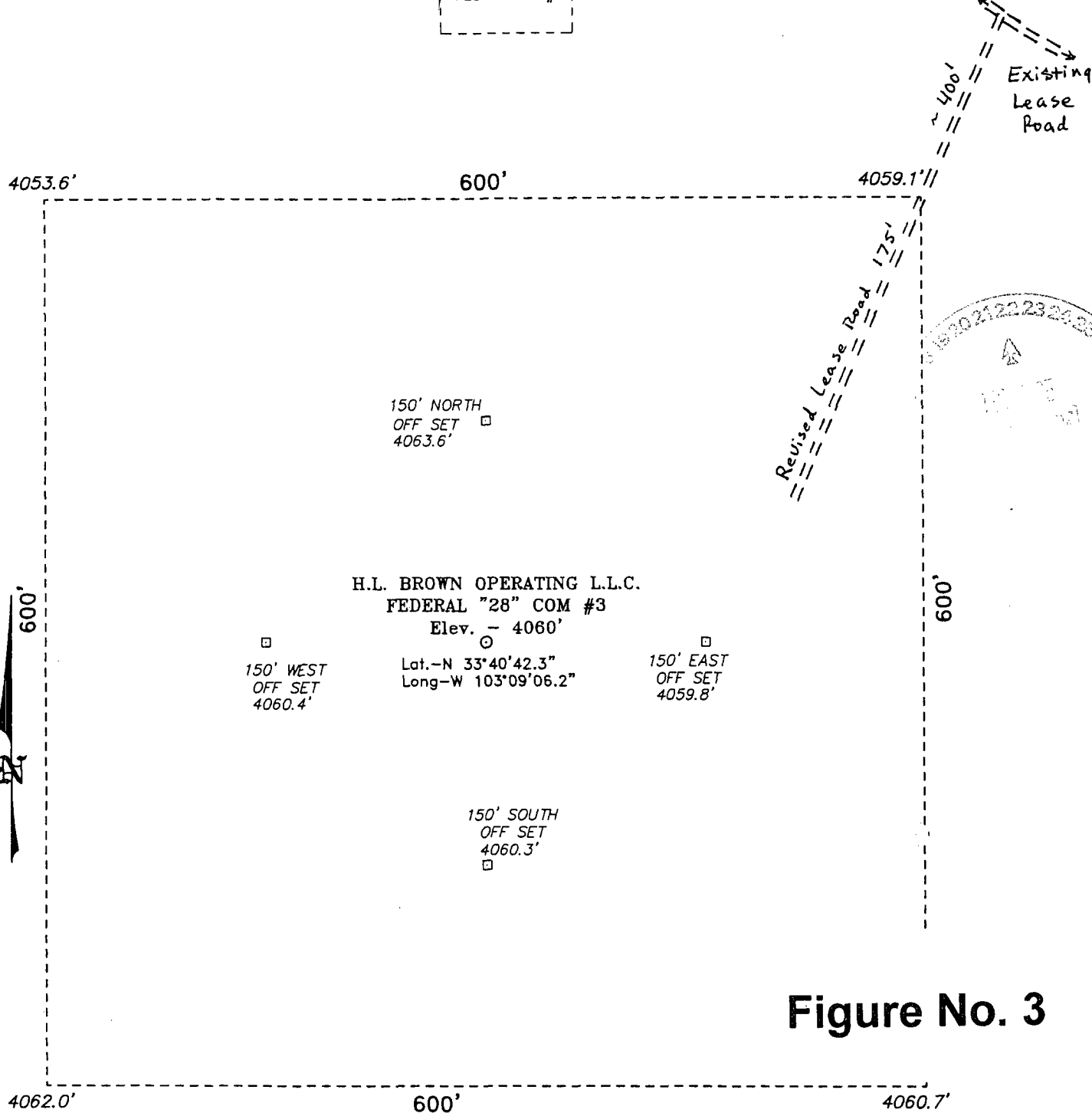


Figure No. 3

Directions to Location:

FROM MILNESAND, GO EAST ON STATE HWY 262 FOR 9.0 MILES TO LEASE ROAD (ROOSEVELT ROAD 42); THENCE GO EAST FOR 1.0 MILE; THENCE NORTH 2.7 MILE TO THE FEDERAL "27" #2 AND PROPOSED WELL PAD FOR THE FEDERAL "27" #4.

100 0 100 200 FEET  
SCALE: 1" = 100'

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

W.O. Number: 5486

Drawn By: K. GOAD

**H.L. BROWN OPERATING L.L.C.**

REF: FEDERAL "28" COM No. 3 / Well Pad Topo

THE FEDERAL "28" COM No. 3 LOCATED 2310' FROM THE SOUTH LINE AND 660' FROM THE EAST LINE OF SECTION 28, TOWNSHIP 7 SOUTH, RANGE 37 EAST, N.M.P.M., ROOSEVELT COUNTY, NEW MEXICO.

### Supplemental Drilling Data

**H. L. BROWN OPERATING, L. L. C.**

### Federal "28" Com No. 3

**2310' FSL & 660' FEL, Sec. 28, Unit I, T-7-S, R-37-E**

Roosevelt County, New Mexico

**New Mexico Lease NM - 54450**

The following items supplement Form 3160-3 in accordance with instructions contained in onshore Oil and Gas Order No.1:

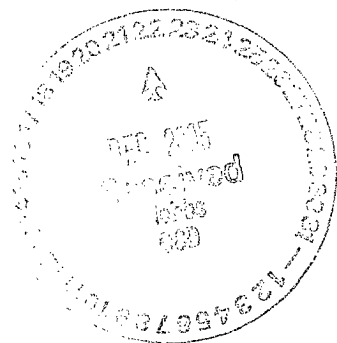
### Overview of Well:

The proposed well will be drilled to about 9100' to test the Devonian formation. 13-3/8" surface pipe will be set at about 515', 8-5/8" intermediate pipe will be set at 3900' and 5-1/2" production casing will be set at 9100'. The Devonian will be perforated and acid stimulated.

### 1.) Surface Formation: Ogallala

## 2.) Estimated Top of Geologic Markers:

Rustler Anhydrite	1980'
Yates	2560'
San Andres	3685'
Abo	7000'
Wolfcamp	7975'



**3.) Estimated Depths Water, Oil, Gas or Other Mineral Bearing Formations:**

Water	None Anticipated
Oil/ Gas	Devonian carbonates at 8900'
Other Minerals	None Anticipated

#### 4.) Proposed Casing and Cementing Program:

Hole Size, in.	Casing Data				Depth, ft	Cement	Expected Top of Cement
	Size	Wt.,#/ft	Grade	Thread			
17-1/2"	13-3/8"	48	H-40	ST&C	510'	500 sx "C" w/ 2% CaCl <sub>2</sub> , + 1/4#/ sx celloflake	Surface Must circulate
12-1/4"	8-5/8"	32	J-55	LT&C	3900'	Lead: 1200 sx "C" Poz + 6% gel + celloflake Tail: 300 sx "C" w/ CaCl <sub>2</sub>	Surface Must circulate
7-7/8"	5-1/2"	17.0 15.5 17.0	J-55 J-55 J-55	LT&C LT&C LT&C	0' – 80' 80' – 6900' 6900' – 9100'	Lead: 1200 sx "H" Poz + 10% gel + 5% salt Tail: 200 sx "H" w/ FLA	3250' ** tie into 8-5/8" casing

The surface and intermediate casing strings will be tested to 1000 psi. The 5 ½" casing will be tested to 2000 psi. All casing will be new or used, inspected yellow-band or better.

**5.) Pressure Control Equipment:**

Pressure control equipment will include a 3000 psi WP blowout preventer stack, sour trim, with both pipe rams and blind rams. Above BOP stack will be an annular BOP, 3000 psi WP with sour trim. Below the double BOP stack will be an adapter spool, 3000 psi WP. On one side of the adapter spool will be a kill line with a check valve and a ball valve. The other side will be a choke manifold with a bleed off line. Hydraulic BOP controls will be checked daily (Figures No.4 and No.5).

**6.) Circulating Medium:**

Depth	Mud Type	Wt. lb/gal	Viscosity sec/1000cc	Filtrate cc/30min	Remarks
0' - 510'	FW-Gel	8.6-9.0	32-34	NC	
510' - 2100'	FW- native	8.6-9.0	29-32	NC	
2100' - 3900'	Cut Brine	9.2-10.3	32-34	NC	Add 2% - 3% oil
3900' - 6800'	FW	8.4-9.2	29-30	NC	
6800' - 7800'	SW-Gel	9.2-10.3	38-40	NC	Add 5% - 6% oil
7800' - 9100'	SW-Gel	9.2-10.3	38-40	10	Mud up for logs and cores

No abnormal pressures are anticipated. Mud is used for borehole stability and filtrate/ shale control and will not be needed for formation pressure control.

**7.) Auxiliary Equipment:**

- a.) Kelly cock: in mud line above swivel.
- b.) Floats at bit: none planned.
- c.) Mud system monitoring equipment: No automatic equipment planned; will use visual testing and inspection by rig and mud company personnel.

**8.) Testing, Logging and Coring Program:**

- a.) Samples: Drilling samples will be caught at 10' intervals below 3900'.
- b.) DST and Cores: none planned
- c.) Logging: GR/CNL will be run from surface to TD and the GR/CNL/SDL and DLL/MLL will be run from TD to ~3900'.

**9.) Abnormal Pressures, Temperature or Hydrogen Sulfide:**

None Anticipated.

**10.) Completion Equipment:**

The well will initially be completed to flow gas and oil through a stack pack. (Figure No. 6).

**11.) Anticipated Starting Date:**

Drilling operations are expected to commence in January 2006 and are expected to last 30 days.  
Completion operations are expected to last 8 days.



# WELLHEAD BLOWOUT CONTROL SYSTEM

Worksheet supplement for "Application for Permit to Drill or Deepen a Well"

Applicant

H.L. Brown Operating L.L.C

P.O. Box 2237, Midland Texas 79702

Well name and number

Location: 2310' FSL & 660' FEL

Unit I, Section 28, T-7-S, R-37-E  
Roosevelt Co, NM

Federal 28 #3

Max. anticipated surface pressure 1000 Psi

Annular B.O.P. 11", 3000 psi W.P.

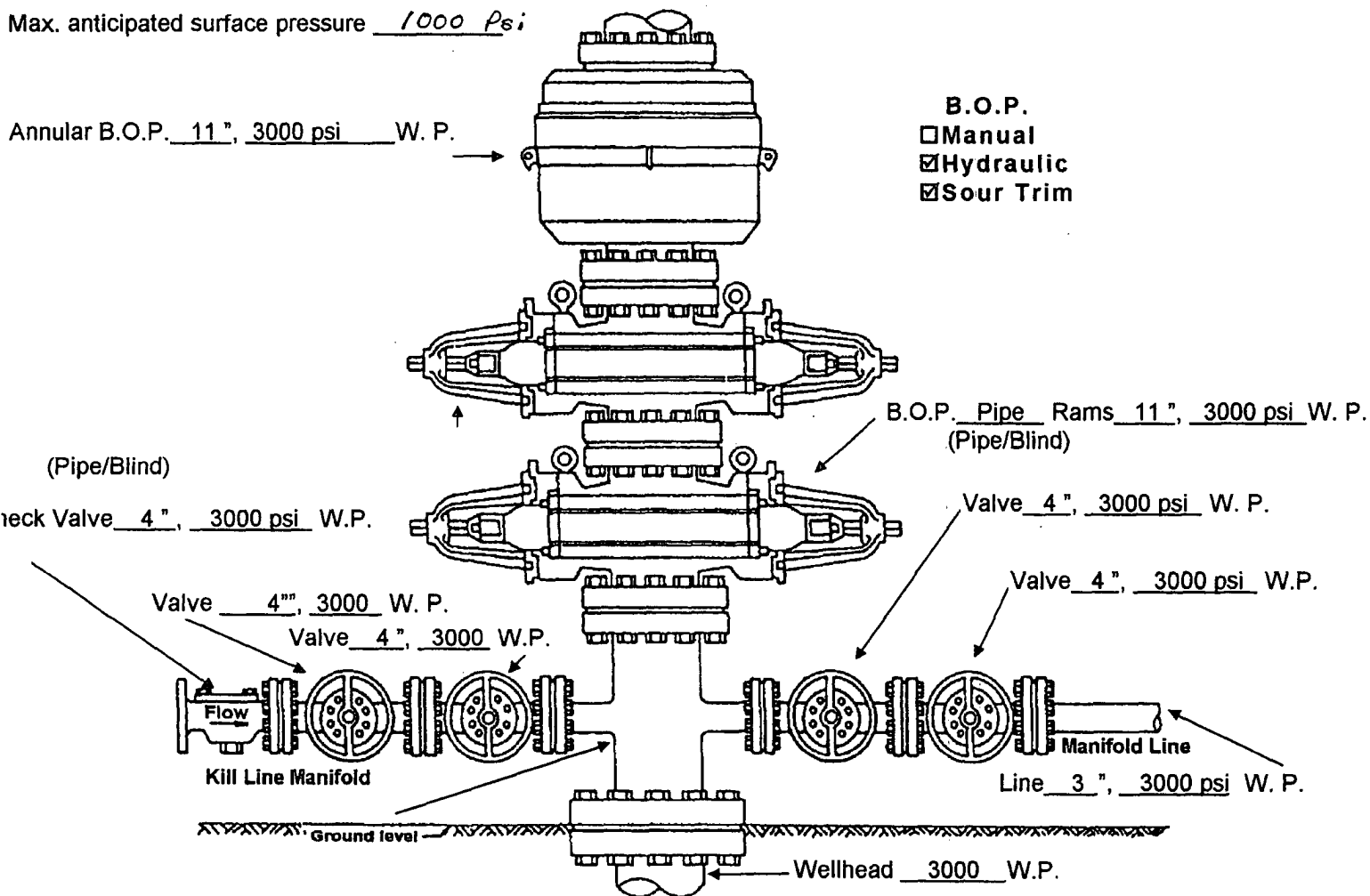
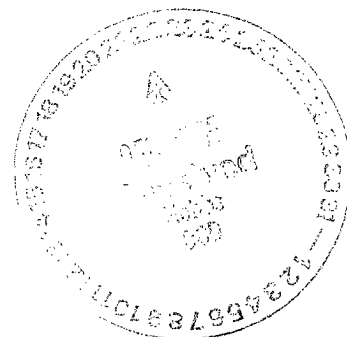


Figure No. 5



## CHOKE MANIFOLD DIAGRAM

Worksheet supplement for "Application for Permit to Drill or Deepen a Well"

**Location: 2310' FSL & 660' FEL**  
**Unit I, Section 28, T-7-S, R-37-E**  
**Roosevelt Co, NM**

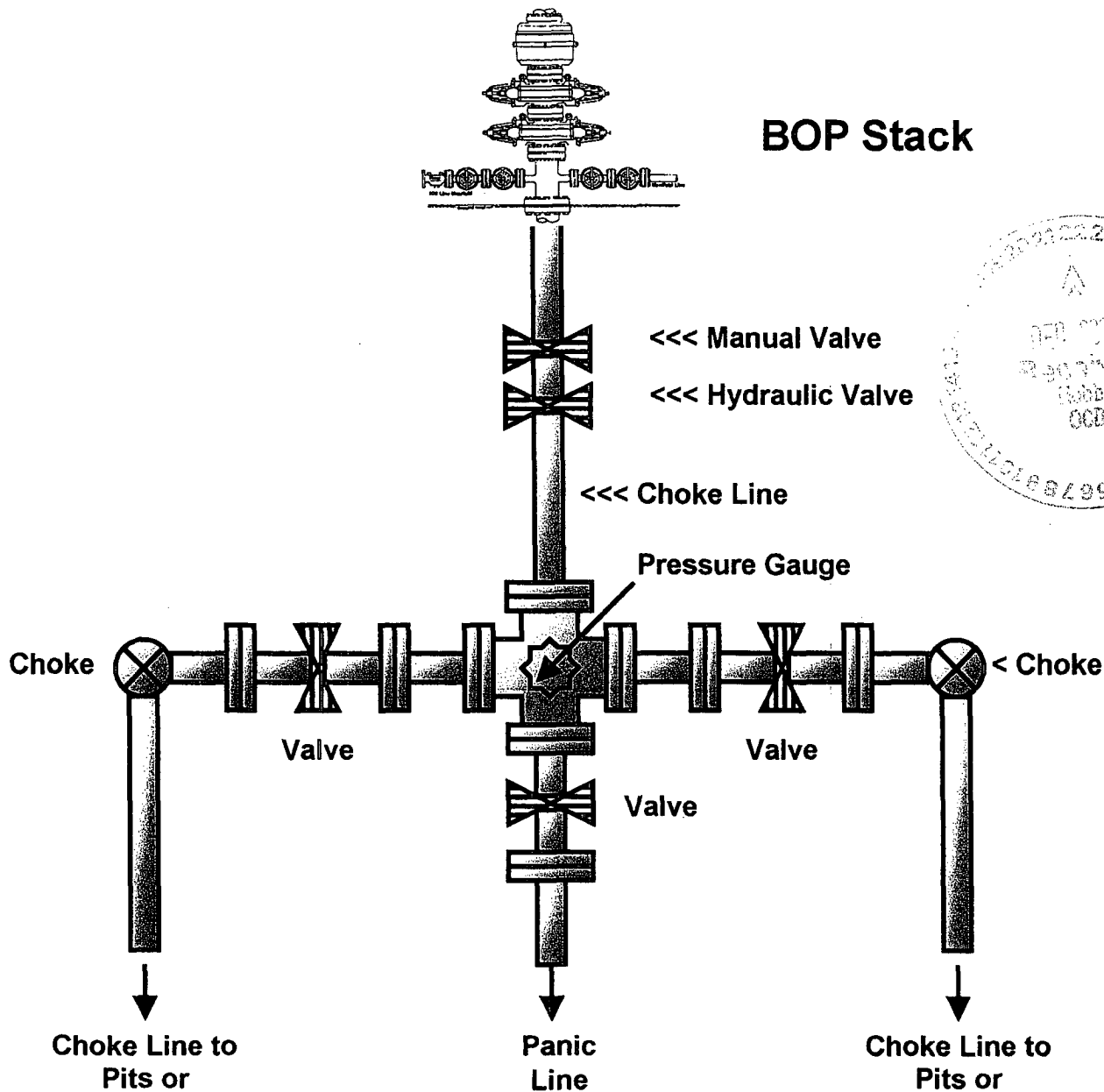
**Applicant**

**H.L. Brown Operating L.L.C**

**P.O. Box 2237, Midland Texas 79702**

Well name and number

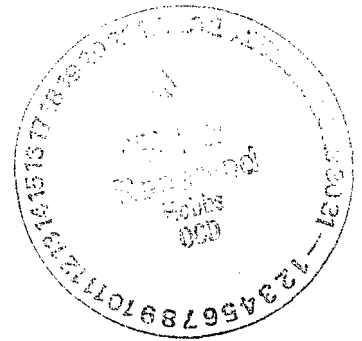
## Federal 28 #3



### Figure No. 6

<p align="center"><b>WELLHEAD DIAGRAM</b></p> <p>Worksheet supplement for "Application for Permit to Drill or Deepen a Well"</p>	<p>Applicant  <b>H.L. Brown Operating L.L.C</b>  <b>P.O. Box 2237, Midland Texas 79702</b></p>
<p><b>Location: 2310' FSL &amp; 660' FEL</b>  <b>Unit I, Section 28, T-7-S, R-37-E</b>  <b>Roosevelt Co, NM</b></p>	<p>Well name and number</p> <p align="center"><b>Federal 28 #3</b></p>

<p><b>WELLHEAD DIAGRAM</b></p> <p>Worksheet supplement for "Application for Permit to Drill or Deepen a Well"</p>	<p>Applicant</p> <p><b>H.L. Brown Operating L.L.C</b></p> <p><b>P.O. Box 2237, Midland Texas 79702</b></p>
<p><b>Location: 2310' FSL &amp; 660' FEL</b></p> <p><b>Unit I, Section 28, T-7-S, R-37-E</b></p> <p><b>Roosevelt Co, NM</b></p>	<p>Well name and number</p> <p><b>Federal 28 #3</b></p>



## Figure No. 7

# TITLE PAGE/ABSTRACT/NEGATIVE SITE REPORT

1. BLM Report No. 2. Reviewer's Initials/Date.....3. NMCRIS Number  
Accepted ( ) Rejected ( ) 95019

4. Type of Report: Negative ( X ) Positive ( )

5. Title of Report: **A CULTURAL RESOURCE SURVEY  
OF AN ALTERNATE ACCESS ROAD FOR THE FED.  
"28" COM. NO. 3 WELL, ROOSEVELT COUNTY, NEW  
MEXICO**  
Author: **Don Clifton**

6. Fieldwork Date(s)  
**06Oct2005**

7. Report Date  
**14Oct2005**

8. Consultant Name and Address:  
Direct Charge: **Don Clifton**  
Field Personel: **Don Clifton**  
Address: **P.O. Box 30, Pep, N.M. 88126**  
Phone: **(505)675-2360**

9. Cultural Resource Permit No.:  
**83-2920-02-O**

10. Consultant Report Number  
**598**

11. Client Name: **H. L. Brown Operating, LLC**  
Responsible Individual: **Robert McNaughton**  
Address: **300 W. Louisiana, Midland, Tx 79702**  
Phone: **915-683-5216**

13. Land Status	BLM	State	Private	Other	Total
a. Area Surveyed			.6		.6 acres
b. Area of Effect			.3		.3 acres

14. Linear Length: **250'** Width: **100'**

15. Location:

a. State: **New Mexico**

a. County: **Roosevelt**

c. BLM Office: **Roswell**

d. Nearest City or Town: **Milnesand**

e. Legal Description: **SE1/4 SE1/4 NE1/4 Sec. 28, T7S, R37E**

f. Well Pad Footages: **N/A**

g. USGS 7.5' Map: **Bluit, New Mexico 1972 rev. 1984 33103 F2**

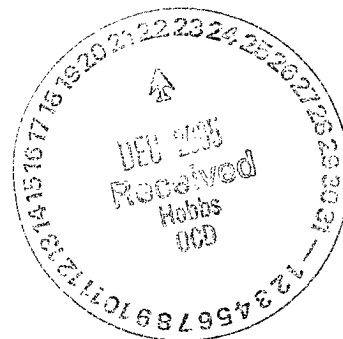
16. Project Data:

a. Records Search:

Date of BLM Review: **03Oct2005** Name of Reviewer: **Don Clifton**

Date of ARMS Data Review: **01Oct2005** Name of Reviewer: **Don Clifton**

Findings: **No previously recorded cultural resources are within one mile of the project.**



b. Description of Undertaking. A 250' long alternate access road for the Fed. "28" Com. #3 will connect the northeast corner of the well location to an existing caliche lease road.

c. Environmental Setting: The project is approximately 10 miles east of Milnesand, New Mexico. The proposed access road is on the east-facing slope of a low rise. Soils are classified as Berthoud sandy loams. Vegetation is a dominant shinnery oak, mesquite, sandsage, yucca, snakeweed, and mixed grasses.

There is an estimated 70% of surface visibility.

d. Field Methods: The proposed access road was examined for cultural resources by walking a single transect on either side of a staked center line.

e. Artifacts Collected: **None**

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17. Cultural Resource Findings:

a. Location and Identification of each resource: **No cultural resources were discovered within the area examined.**

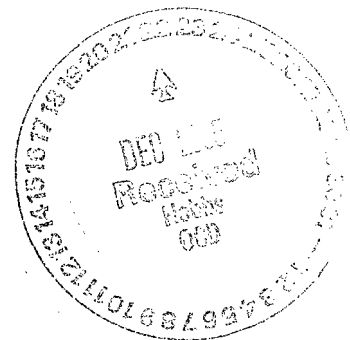
b. Evaluation of significance of each resource

18. Management Summary: **It is recommended that construction of the proposed access road proceed without any further cultural resource investigations.**

19. I certify the information provided is correct and accurate to my knowledge and meets all applicable BLM standards.

Responsible Archaeologist: *Don Clifton*

Date: *Oct. 14, 2005*





**United States Department of the Interior**  
**BUREAU OF LAND MANAGEMENT**  
Roswell Field Office  
2909 West Second Street  
Roswell, New Mexico 88201



## **EXHIBIT B**

### **WELL DRILLING REQUIREMENTS**

1 of 6 pages

OPERATORS NAME: H.L. Brown Operating L.L.C. LEASE NO.: NM-54450  
WELL NAME & NO: Federal "28" #3  
QUARTER/QUARTER & FOOTAGE: NE $\frac{1}{4}$ SE $\frac{1}{4}$  - 2310' FSL & 660' FEL  
LOCATION: Section 28, T. 7 S., R. 37 E., NMPM  
COUNTY: Roosevelt County, New Mexico

#### **I. GENERAL PROVISIONS:**

- A. The operator has the right of administrative review of these requirements pursuant to 43 CFR 3165.1(a).
- B. The operator shall hereafter be identified as the holder in these requirements. The Authorized Officer is the person who approves the Well Drilling Requirements.

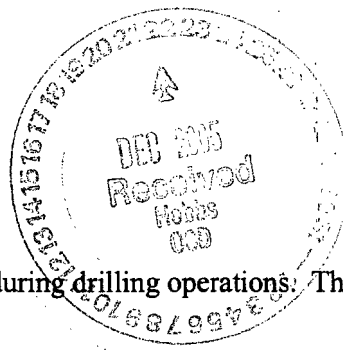
#### **II. WELL PAD CONSTRUCTION REQUIREMENTS:**

- A. The BLM shall administer compliance and monitor construction of the access road and well pad. Notify Richard G. Hill at least 3 working days (72 Hours) prior to commencing construction of the access road and/or well pad. Roswell Field Office number (505) 627-0247.
- B. Prior to commencing construction of the access road, well pad, or other associated developments, the holder shall provide the dirt contractor with a copy of the approved APD signature page, a copy of the location map (EXHIBIT A), a copy of pages 1 & 2 from the Well Drilling Requirements (EXHIBIT B), and a copy of the Permanent Resource Road Requirements (EXHIBIT D).
- C. The holder shall stockpile the topsoil from the surface of the well pad. The topsoil on the Federal "28" #3 well pad is approximate 6 inches in depth. Approximately 800 cubic yards of topsoil shall be stockpiled on the Southwest corner of the well pad, opposite the reserve pit.

#### **D. Reserve Pit Requirements:**

- 1. The reserve pit shall be constructed 100' X 100' on the North side of the well pad.
- 2. The reserve pit shall be constructed to a minimum depth of four (4) feet below ground level. The reserve pit shall be constructed, so that the cuttings in the reserve pit can be buried a minimum depth of three (3) feet below ground level. See Exhibit E – Surface Reclamation/Restoration Requirements.
- 3. A synthetic or fabricated liner 12 mil in thickness shall be used to line the reserve pit. The liner shall meet ASTM standards that are designed to be resistant to the reserve pit contents.

## WELL DRILLING REQUIREMENTS



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4. The reserve pit shall be fenced on three (3) sides during drilling operations. The fourth side shall be fenced immediately upon rig release.
5. The reserve pit shall be constructed so as not to leak, break, or allow discharge of drilling muds. Under no circumstances will the reserve pit be cut to drain drilling muds on the well location.
6. The reserve pit shall not be located in any natural drainage.
7. The reserve pit shall be equipped to deter entry by birds, bats, other wildlife, and livestock, if the reserve pit contains any oil and/or toxic fluids.
8. Drilling muds shall be properly disposed of before the reserve pit is reclaimed. Drilling muds can be allowed to evaporate in the reserve pit or be removed and transported to an authorized disposal site. The reserve pit shall be backfilled when dry.
9. Dumping of junk or trash into the reserve pit is not allowed. Junk or trash shall be removed from within the reserve pit before the reserve pit is reclaimed. **Junk or trash shall not be buried in the reserve pit.**

### E. Federal Mineral Materials Pit Requirements:

1. Caliche, gravel, or other related materials from new or existing pits on Federal mineral estate shall not be taken without prior approval from the authorized officer. Contact Jerry Dutchover at (505) 627 -0236.
2. Payment for any Federal mineral materials that will be used to surface the access road and the well pad is required prior to removal of the mineral materials.
3. Mineral Materials extracted during construction of the reserve pit may be used for development of the pad and access road as needed, for the Federal "28" #3 oil well only. Removal of any additional material on location must be purchased from BLM prior to removal of any material.
  - a. An optional mineral material pit may be constructed within the archaeologically cleared area. The mineral material removed in the process can be used for pad and access road construction. However, a mineral material sales contract must be purchased from the BLM prior to removal of any material.

### F. Well Pad Surfacing Requirement:

The well pad shall be surfaced with 6 inches of compacted caliche, gravel, or other approved surfacing material. The well pad shall be surfaced prior to drilling operations. See **Permanent Resource Road Requirements - EXHIBIT D - requirement #4, for road surfacing.**

### G. Cave Requirements:

1. If, during any construction activities any sinkholes or cave openings are discovered, all construction activities shall immediately cease. Contact Larry Bray at (505) 627-0250.
2. The BLM Authorized Officer will, within 24 hours of notification in "A" above, conduct an on-the-ground field inspection for karst. At the field inspection the authorized field inspector will authorize or suggest mitigating measures to lessen the damage to the karst environment. A verbal order to proceed or stop the operation will be issued at that time.

## WELL DRILLING REQUIREMENTS

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### III. DRILLING OPERATION REQUIREMENTS:

#### A. GENERAL DRILLING REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Roswell Field Office, 2909 West Second St., Roswell NM 88201, (505) 627-0272, in sufficient time for a representative to witness:

A. Spudding      B. Cementing casing: 13 $\frac{3}{4}$  inch 8 $\frac{1}{2}$  inch 5 $\frac{1}{2}$  inch      C. BOP tests

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

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

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

#### B. CASING:

1. The 13 $\frac{3}{4}$  inch surface casing shall be set at 510' and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.

2. The minimum required fill of cement behind the 8 $\frac{1}{2}$  inch intermediate casing is with sufficient amount of cement circulate to surface.

3. The minimum required fill of cement behind the 5 $\frac{1}{2}$  inch production casing is cement shall be tied back to the 8-5/8" casing.

#### C. PRESSURE CONTROL:

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the 13 $\frac{3}{4}$  inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

2. Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 3000 psi.

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

- A. The results of the test shall be reported to the appropriate BLM office.
- B. Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
- C. Testing must be done in a safe workman-like manner. Hard line connections shall be required.
- D. BOPE shall be tested before drilling into the Wolfcamp formation.

#### D. DRILLING MUD:

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

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





## WELL DRILLING REQUIREMENTS

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### IV. ON LEASE - WELL REQUIREMENTS:

A. The holder shall post signs identifying the location permitted herein with the requirements contained in Onshore Oil and Gas Order #1 and 43 CFR 3162.6.

B. The following data is required on the well sign that shall be posted in a conspicuous place on the well pad. The sign shall be kept up with current identification and shall be legible for as long as the well is in existence:

Operator Name: H.L. Brown Operating L.L.C.  
Well Name & No.: Federal "28" #3  
Lease No.: NM-54450  
Footage: 2310' FSL & 660' FEL  
Location: Section 28, T. 7 S., R. 37 E.

C. UPON ABANDONMENT OF THE WELL, THE SAME INFORMATION SHALL BE INSCRIBED ON THE DRY HOLE MARKER WITH A BEADED WELD.

D. The approval of the APD does not in any way imply or grant approval of any on-lease, off-lease, or off-unit action(s). It is the responsibility of the holder to obtain other approval(s) such as rights-of-way from the Roswell Field Office or other agencies, including private surface landowner(s).

E. All vehicles, including caterpillar track-type tractors, motor graders, off-highway trucks and any other type of motorized equipment that is used in the construction of the access road and well pad shall be confined to the area(s) herein approved. The drilling rig that is used to drill the well shall also be confined to the approved area(s).

#### F. **Containment Structure Requirement:**

1. A containment structure or earthen dike shall be constructed and maintained around all storage facilities/batteries. The containment structure or earthen dike shall surround the storage facilities/batteries.
2. The containment structure or earthen dike shall be constructed two (2) feet high around the facilities/batteries (the containment structure or earthen dike can be constructed higher than the two (2) feet high minimum).
3. The perimeter of the containment structure or earthen dike can be constructed substantial larger for greater holding capacity of the contents of the largest tank.
4. The containment structure or earthen dike shall be constructed so that in case of a spill the structure can contain the entire contents of the largest tank, plus 24 hour production, within the containment structure or earthen dike, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

Submit 3 Copies To Appropriate District  
Office  
District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Ave., 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

Form C-103  
March 4, 2004

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

WELL API NO.  
**30-041-20925**  
5. Indicate Type of Lease  
STATE ☐ FED ☒ FEE ☐  
6. Federal Oil & Gas Lease No.  
NMI - 544550

SUNDRY NOTICES AND REPORTS ON WELLS  
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A  
DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH  
PROPOSALS.)

1. Type of Well:  
Oil Well ☒ Gas Well ☐ Other ☐  
2. Name of Operator  
**H.L. Brown Operating L.L.C**  
3. Address of Operator  
**300 West Louisiana, Midland, Texas 79702**  
7. Lease Name or Unit Agreement Name  
**Federal 28 Com**  
8. Well Number  
**3**  
9. OGRID Number  
**213179**  
10. Pool name or Wildcat  
**Bluitt North (Devonian)**

4. Well Location  
Unit Letter: **I** : **2310'** feet from the **South** line and **660'** feet from the **East** line  
Section **28** Township **T- 7** Range **R-37-E** NMPM **Roosevelt** County  
11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
**4060' GL**

Pit or Below-grade Tank Application (For pit or below-grade tank closures, a form C-144 must be attached)  
Pit Location: UL **I** Sect **28** Township **7-S** Range **37-E** Pit type **drilling**  
Depth to Groundwater **176'** Distance from nearest fresh water well **2 miles South** Distance from nearest surface water **2 miles South**  
Below-grade Tank Location UL **I** Sect **28** Twp **7-S** Rng **37-E** ; **660'** feet from the **East** line and **2310'** feet from the **South** line

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐  
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
PULL OR ALTER CASING ☐ MULTIPLE COMPLETION ☐  
OTHER: Construct reserve pit for drilling rig ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐  
CASING TEST AND CEMENT JOB ☐  
OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103  
For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

According to the State Land Office files, the closest water depth measurement is two miles southwest in Section 5, T-8-S, R-37-E, at 176'. Three miles to the northeast, the water level is at 159' in Section 13, T-7 S, R-37-E.

Will use a single layer - 12 mil liner as per BLM and NMOCD requirements. ✓

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Robert McNaughton TITLE Operations Manager/ Petroleum Engineer DATE 11-15-05

Type or print name Robert McNaughton E-mail address: robertm@hlboperating.com Telephone No. 432-688-3726

(This space for State use)

APPROVED BY [Signature] TITLE PETROLEUM ENGINEER DATE JUN 20 2006  
Conditions of approval, if any:

 The sender of this message has requested a read receipt. [Click here to send a receipt.](#)

**Mull, Donna, EMNRD**

**From:** Phillips, Dorothy, EMNRD  
**To:** Mull, Donna, EMNRD  
**Cc:**  
**Subject:** RE: Financial Assurance Requirement  
**Attachments:**

**Sent:** Tue 6/20/2006 10:04 AM

None appear on Jane's list and all have blankets.

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**From:** Mull, Donna, EMNRD  
**Sent:** Tuesday, June 20, 2006 7:45 AM  
**To:** Phillips, Dorothy, EMNRD  
**Cc:** Macquesten, Gail, EMNRD; Sanchez, Daniel J., EMNRD  
**Subject:** Financial Assurance Requirement

Dorothy,

Is the Financial Assurance Requirements for these Operators OK?

H L Brown Operating LLC (213179)  
Mewbourne Oil Co (14744)  
Melrose Operating Co (184860)  
COG Operating LLC (229137)  
Latigo Petroleum Inc (227001)  
Marbob Energy Corp (14049)  
Devon Energy Production Co LP ( 6137)  
McElvain Oil & Gas Properties Inc (22044)

I have checked each Operator in the Inactive well list.

Please let me know. Thanks and have a nice day. Donna