

New Mexico Oil Conservation Division, District I
1625 N. French Drive
Hobbs, NM 88240

Form 3160-3
(September 2001)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER


FORM APPROVED
OMB No. 1004-0136
Expires January 31, 2004

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM0474
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" 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.		7. If Unit or CA Agreement, Name and No.
3a. Address P. O. Box 2237, Midland, TX 79702		8. Lease Name and Well No. Federal "B" No.2
3b. Phone No. (include area code) 432/683-5216		9. API Well No. 30-041-20904
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface Unit B, 1310' FNL & 1330' FEL, Sec 4, T8S-R37E At proposed prod. zone same		10. Field and Pool, or Exploratory Bluitt Wolfcamp (Gas)
11. Sec., T., R., M., or Bk. and Survey or Area Sec.4, T8S-R37E		12. County or Parish Roosevelt
14. Distance in miles and direction from nearest town or post office* 10 Miles East from Milnsand, New Mexico		13. State NM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1310 ft.	16. No. of Acres in lease 320	17. Spacing Unit dedicated to this well 320
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 2342 ft.	19. Proposed Depth 8020 ft.	20. BLM/BIA Bond No. on file 0679788
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 4054' GL	22. Approximate date work will start* 11/30/03	23. Estimated duration 21 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) Jerry M. Jordan	Date 10/21/03
Title Operations Manager		
Approved by (Signature) /S/LARRY D. BRAY	Name (Printed/Typed) /S/LARRY D. BRAY	Date DEC 04 2003
Title Assistant Field Manager,	Office ROSWELL FIELD OFFICE	APPROVED FOR 1 YEAR

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)

OPER. COORD NO. 213179
PROPERTY NO. 29859
POOL CODE 72640
EFF. DATE 12/8/03
API NO. 30-041-20904



District I
PO Box 1980, Hobbs, NM 88241-1980
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 & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-102
Revised October 18, 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 API Number 30-041-20004	² Pool Code 72640	³ Pool Name Bluitt (Wolfcamp) Gas
⁴ Property Code 29859	⁵ Property Name Federal "B"	⁶ Well Number 2
⁷ OGRID No. 213179	⁸ Operator Name H. L. Brown Operating, L.L.C.	⁹ Elevation 4054'

¹⁰ Surface Location

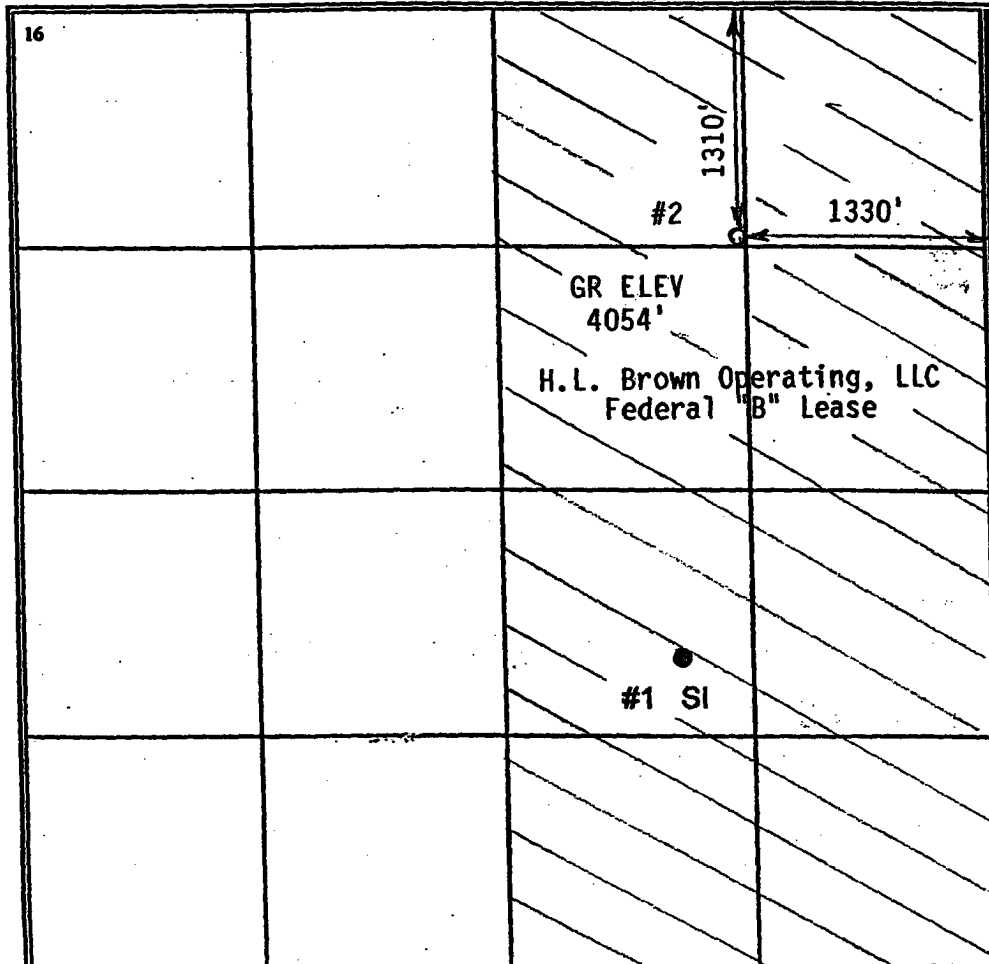
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	4	-8-S	-37-E		1310	North	1330	East	Roosevelt

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

¹² Dedicated Acres 320	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

<div>16</div> 	<div>17 OPERATOR CERTIFICATION</div> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p> <p><i>Jerry M. Jordan</i> Signature Jerry M. Jordan Printed Name Operations Manager Title 10/21/03 Date</p>
	<div>18 SURVEYOR CERTIFICATION</div> <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>October 3, 2003</p> <p>Date of Survey</p> <p>Signature and Seal of Professional Surveyor: <i>Max A. Schumann, Jr.</i> Max A. Schumann, Jr. Certificate Number 1510</p>

RECEIVED

2003 OCT 24 AM 7:25

BUREAU OF LAND MANAGEMENT
ROOSEVELT OFFICE

Supplemental Drilling Data

H.L. Brown, Operating, L.L.C..
Federal "B" No. 2
1310 ft. FNL & 1330 ft. FEL
Sec 4, T-8-S, R-37-E
Roosevelt County, NM

NM 0474

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

Overview of Well:

The subject well is proposed to be drilled as a replacement well for the Federal "B" No. 1 in the Wolfcamp formation. The well will be drilled vertically to a depth of 7970 ft. At the depth of 7970 ft., a 5 1/2" casing string will be run and cemented. The drilling rig will be released and a completion rig will be rigged up. The Wolfcamp pay zone 7970 ft-8010 ft will be drilled using foam-air to minimize any formation damage. The Wolfcamp will be completed open hole.

1.) **Surface Formation:** Ogallala

2.) **Estimated Top of Geologic Markers:**

Rustler	1986 ft.
Yates	2519 ft.
San Andres	3690 ft.
ABO	6997 ft.
Wolfcamp	7966 ft.

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

Water	None Anticipated
Oil	None Anticipated
Gas	Wolfcamp at 7979 ft.
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 ft.	500 sx Class "C" w/2% CaCl ₂ + 1/4 lb/sx celloflake	Surface
11	8 5/8"	32	J-55	LT&C	3750 ft.	Lead: 1200 sx Class "C" 35:65 POZ + 6% Gel + 5 lb/sx salt + 1/4 lb/sx celloflake tail-in: 300 sx Class "C"	Surface
7 7/8	5 1/2"	17.00	J-55	LT&C	0-80 ft.	Lead: 1200sx	3250 ft.
	5 1/2"	15.50	J-55	LT&C	80-6900 ft.	Class "H" + 10 % GEL + 5% salt	
	5 1/2"	17	J-55	LT&C	6900-7970 ft.	Tail: 200 sx Class "H" +0.3% fluid loss additive	

The surface and intermediate casing strings will be tested to 1000 psi. The 5 1/2" 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 operated daily.

6.) Circulating Medium:

Depth Interval	Mud Type	Wt. lb/gal	Viscosity sec/1000cc	Filtrate cc/30min	Remarks
0-550 ft.	FW-Gel	8.5-9.0	32-35	NC	
550-2100 ft.	FW-Native	8.6-9.0	32-35	NC	
2100-3750 ft.	Cut Brine	9.2-10.3	32-34	NC	Use 2-3 % Oil
3750-6800 ft.	FW	8.4-9.2	28-29	NC	
6800-7970 ft	SW-Gel	9.2-9.6	38-40	10	Use 5-6% Oil
7970-8010	Foam Air	5.0	NA	NA	

No abnormal pressures are anticipated. Mud is used for borehole stability and filtrate 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:

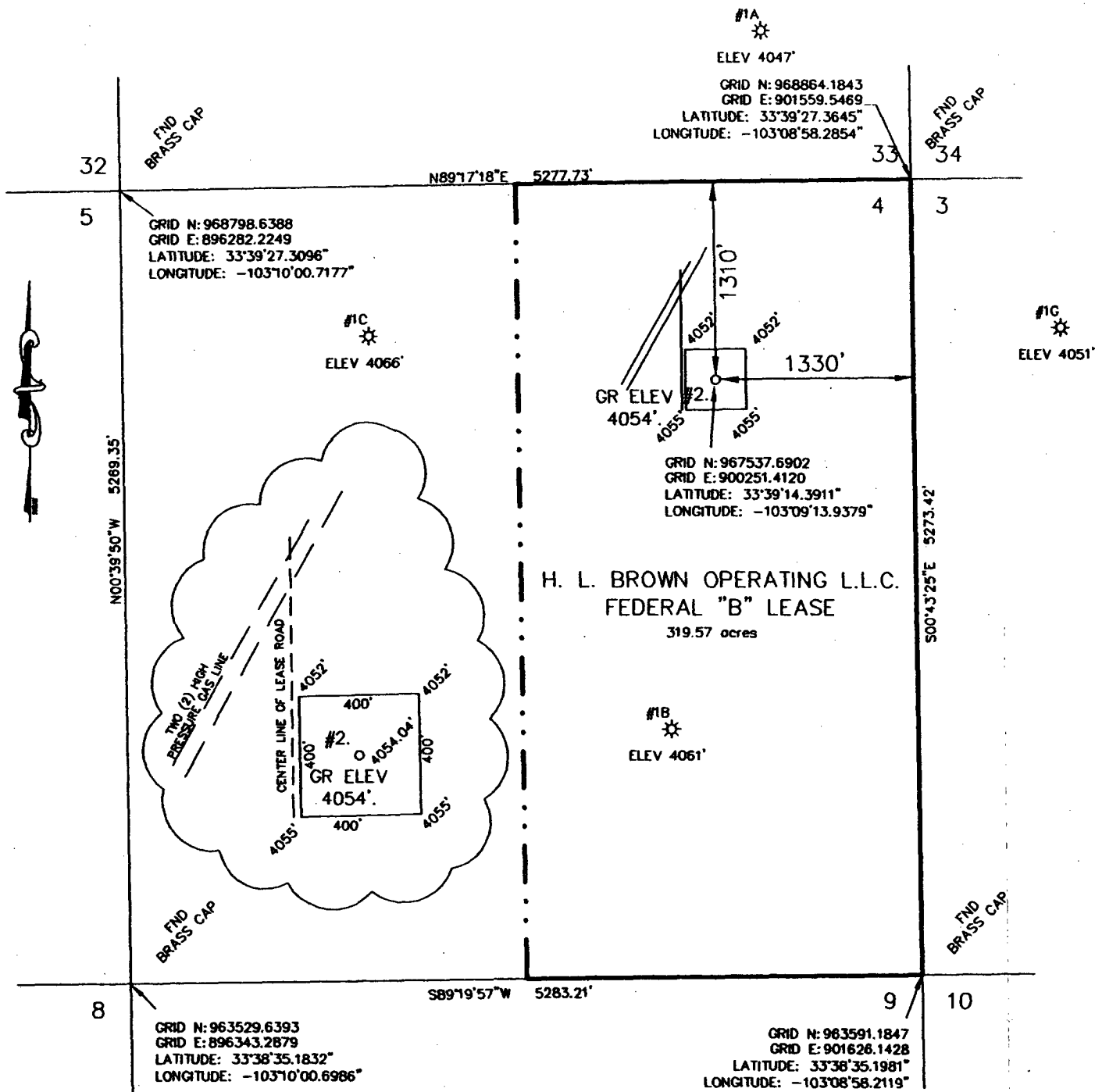
- a.) Samples: Drilling samples will be caught at 10 ft. intervals below 3750 ft.
- b.) DST and Cores: None planned.
- c.) Logging: GR-CNL will be run from surface to TD.

9.) Abnormal Pressures, Temperature or Hydrogen Sulfide:

None Anticipated.

10.) Anticipated Starting Date:

Drilling operations are expected to commence November 30, 2003 and are expected to last 16 days. Completion operations are expected to last 5 days.



NOTE:
 COURSES, DISTANCES AND COORDINATES SHOWN HEREON
 ARE LAMBERT GRID AND CONFORM TO THE "NEW MEXICO
 COORDINATE SYSTEM", NEW MEXICO EAST ZONE, NORTH
 AMERICAN DATUM OF 1983. ALL DISTANCES AND
 COORDINATES ARE SHOWN IN GRID FEET.

SCHUMANN ENGINEERING CO., INC.

REGISTERED PROFESSIONAL LAND SURVEYORS
 LICENSED STATE LAND SURVEYORS

REGISTERED PROFESSIONAL CIVIL ENGINEERS
 TEXAS and NEW MEXICO

Civil Engineering ~ Land Surveying

408 N. PECOS STREET - P. O. BOX 504
 MIDLAND, TEXAS 79702-0504

Office (432) 684-5548
 Fax (432) 684-6973

QUAD: BLUIT
 SCALE: 1" = 1000'

PROJECT: 68345HLB
 JOB NO: 68.345

OCTOBER 3, 2003

Michael Schumann

WELLHEAD BLOWOUT CONTROL SYSTEM

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

Location: 1310' FNL & 1330' FEL
Unit B, Section 4, T-8-S, R- 37-E
Roosevelt Co, NM

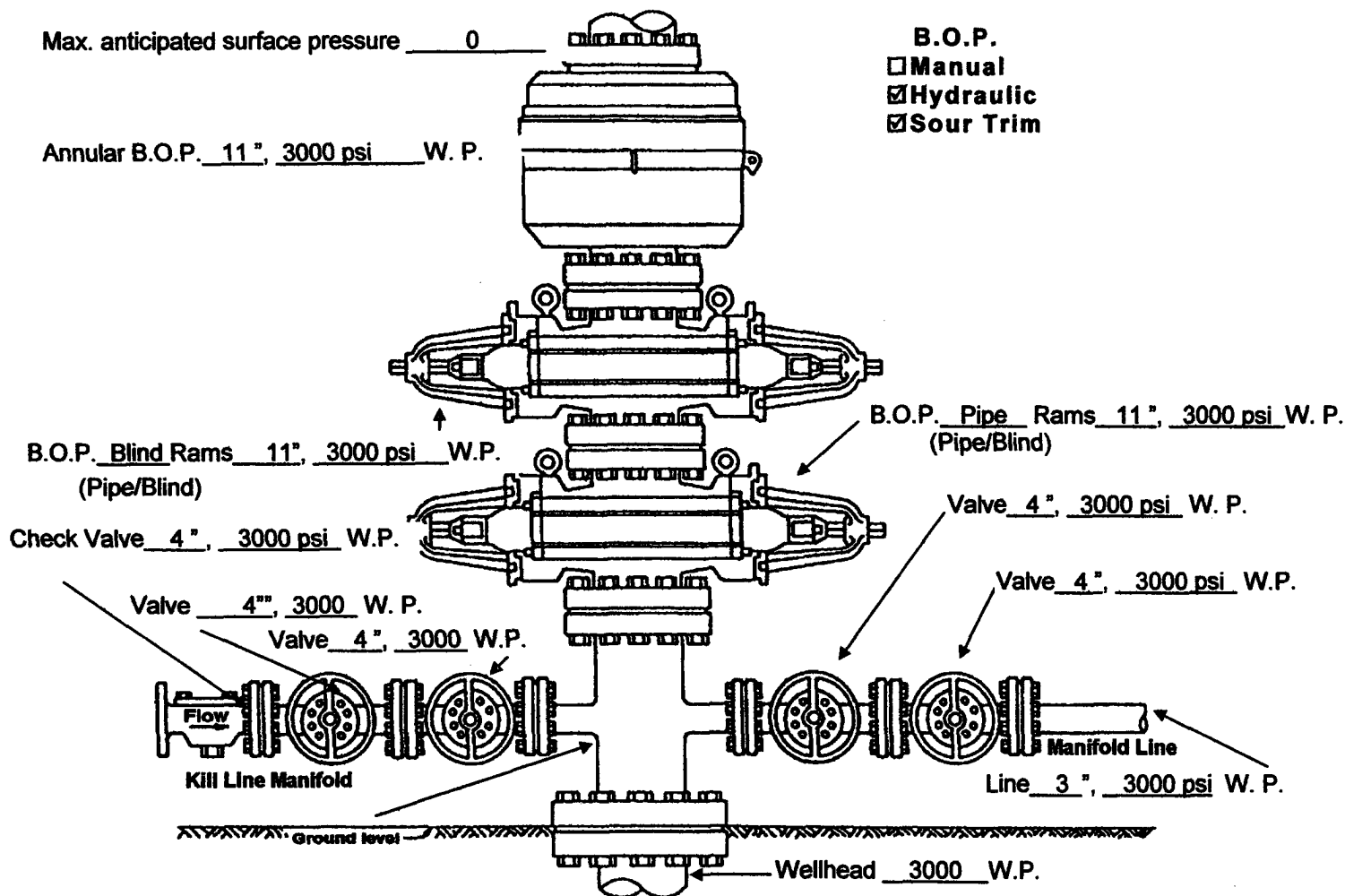
Applicant

H.L. Brown Operating, L.L.C

P.O. Box 2237, Midland Texas 79702

Well name and number

Federal B No. 2



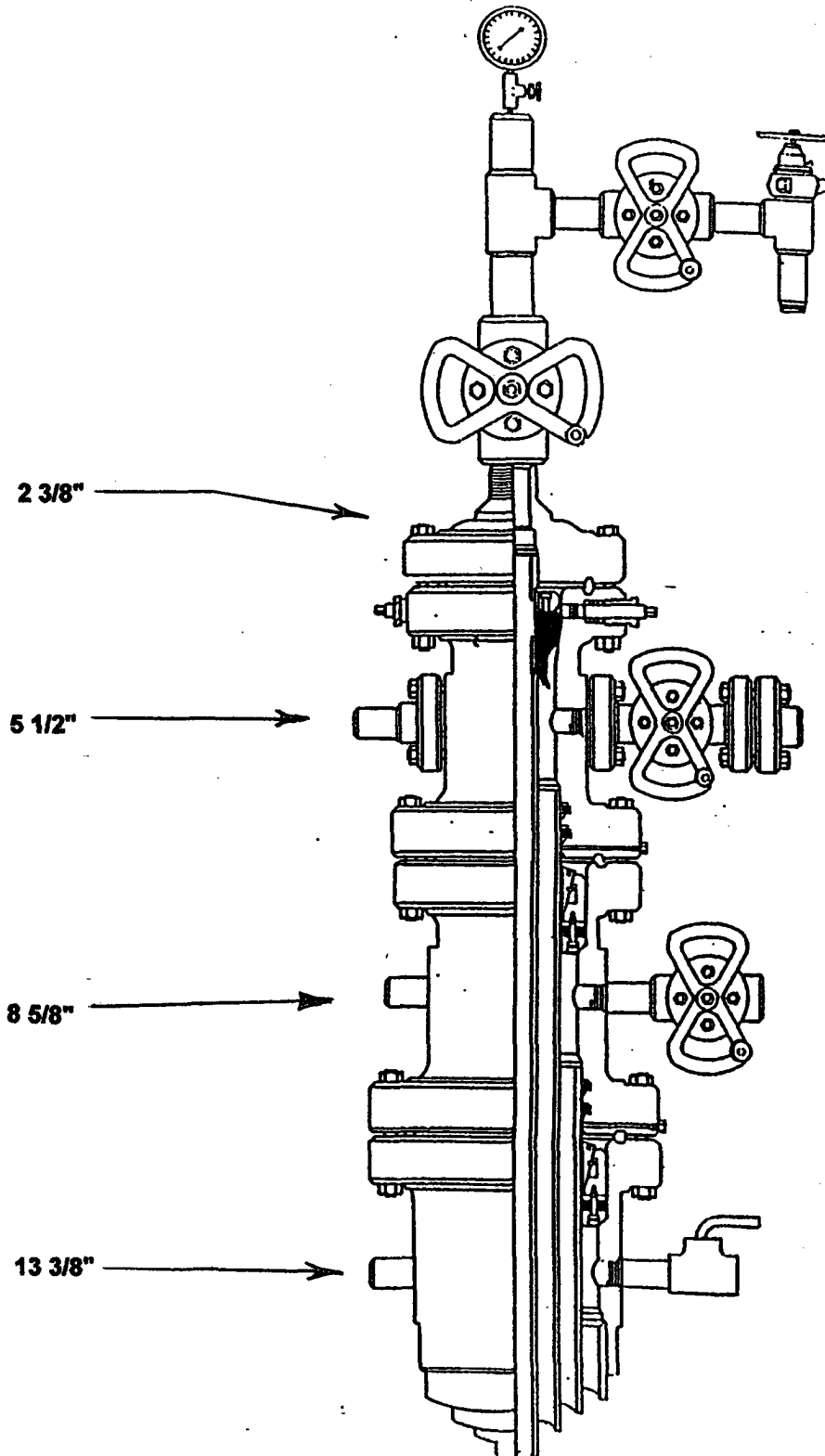
Fill above blanks with applicable information. If not applicable, enter "N.A." or cross-out item shown.
Describe test pressures and procedure for conducting pressure test. Identify any exceptions to R324.406 being requested.

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

Federal "B" No. 2

Wellhead

13 3/8" X 8 5/8" X 5 1/2" X 2 3/8" 3000psi WP



RECEIVED
2008 OCT 24 AM 7:25
BUREAU OF LAND MANAGEMENT
ROOSEVELT OFFICE

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

**H. L. BROWN OPERATING, L.L.C.
FEDERAL "B" No. 2
1310' FNL AND 1330' FEL, SEC. 4, T-8-S, R-37-E
ROOSEVELT COUNTY, NEW MEXICO
NEW MEXICO LEASE NM-0474**

This plan is submitted with the Application for Permit to Drill the above described well. The purpose of the plan is to describe the location of the proposed well, the proposed construction activities and operations plan, the magnitude of necessary surface disturbances 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 effects associated with the operation.

1. EXISTING ROADS:

- A. Exhibit "A" is a portion of a highway and lease road map showing the location of the proposed well as staked. The well is approximately 9 miles east of Milnesand on State Highway 262. Go straight east where highway makes a 90° corner south to Bluit. Go east about 1 mile on county road, go NE about ¾ mile, and go south ¼ mile to the well.
- B. Exhibit "B" is a plat showing all existing roads within one-mile radius of the well site.
- C. There are no plans to improve or repair any of the existing roads at this time; however, this is an area where H. L. Brown Operating, L.L.C. operates thirteen gas wells and two oil wells, and the existing roads have been maintained in the past and that practice will continue in the future.

2. PLANNED ACCESS ROADS:

- A. Length and width: New road required will be twelve feet wide and approximately 75 feet long and will enter the location at the south west corner. This new road is labeled on Exhibit "B". The center line of the proposed new road from the beginning to the wellsite has been staked and flagged with the stakes being visible from any one to the next.
- B. Surfacing material: Six inches of caliche, water, compacted and graded.
- C. Maximum grade: 1 percent.

- D. Turnouts: None required.
- E. Drainage design: New road will have a drop of six inches from centerline on each side.
- F. Culvert: This is relatively flat surface broken with occasional low dunes of some 3-4' in relief. It is planned to meander slightly to avoid as much cutting and filling as practical; however, some dune leveling may be necessary on both the new road and on the proposed location. No culverts will be required.

3. LOCATION OF EXISTING WELLS:

- A. Existing wells within a one-mile (plus) radius are shown on Exhibit "B".

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

- A. Flow lines, and production equipment exist on this lease on the Federal "B" No. 1 well location owned by H. L. Brown Operating, L.L.C. The Federal "B" No. 1 is currently shut-in pending permanent plug and abandonment.
- B. If the proposed well is productive, a flow line will be laid from the Federal "B" No. 2 well location adjacent to the existing road to the production equipment at the Federal "B" No. 1 well location.

5. TYPE OF WATER SUPPLY:

- A. Water will be purchased and trucked to location by low bidder.

6. SOURCE OF CONSTRUCTION MATERIALS:

- A. Caliche for surfacing the well pad and access road will be obtained from a privately owned pit located in the SW/4 of Section 6, T-8-S, R-37-E. The pit is owned by Mr. John Mohon, Milnesand, NM.

7. METHODS OF HANDLING WASTE DISPOSAL:

- A. Drill cuttings will be disposed of in the drilling pits.
- B. Drilling fluids will be allowed to evaporate in the drilling pits until pits are dry. Water produced during tests will be disposed of in the drilling pits. Oil produced during tests will be stored in test tanks until sold.

- C. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- D. Trash, waste paper, garbage, and junk will be discarded in a trash trailer and hauled to a state approved garbage disposal facility. All waste material will be contained within trailer to prevent scattering by the wind.
- E. All trash and debris will be removed from the wellsite within 30 days after finishing drilling and/or completion operations.

8. ANCILLARY FACILITIES:

- A. None required.

9. WELLSITE LAYOUT:

- A. Exhibit "C" shows the relative and dimensions of the well pad.
- B. Only minor leveling of the wellsite will be required. No significant cuts and fills will be necessary.
- C. The reserve pit will be plastic lined.
- D. The pad and pit area have been staked and flagged.

10. PLANS FOR RESTORATION OF THE SURFACE:

- A. After completion of drilling and/or completion operations, all equipment and other material not needed for operation will be removed. Pits will be filled and location cleaned of all trash and junk to leave the wellsite is as aesthetically pleasing condition as possible.
- B. Any unguarded pits containing fluids will be fenced until they are filled.
- C. After abandonment of the well, surface restoration will be in accordance with the agreement with the surface owner. Pits will be filled and location will be cleaned. The pit area, well pad, and all unneeded access road will be ripped to promote re-vegetation. Rehabilitation should be accomplished within 90 days after abandonment.

11. OTHER INFORMATION:

- A. Topography: Land surface is undulating to gently rolling and dunny. From an elevation of 4054 feet at the wellsite, the surface slopes gently toward the East at about 30 feet per mile.
- B. Soil: Soil is predominantly sand and sandy loam underlain by caliche.
- C. Flora and Fauna: The vegetative cover is generally fifty to seventy five percent and consists of mesquite, yucca, shinnery oak, sandsage, and perennial native range grass. Wildlife in the area is the typical of semi-arid desert land and includes coyotes, rabbits, rodents, reptiles, prairie chicken, dove, quail, deer and occasional antelope.
- D. Ponds and Streams: There are no rivers, streams, lakes, or ponds in the area.
- E. Residences and Other Structures: There are no occupied dwellings or other structures within or near the proposed area of the wellsite.
- F. Archeological, Historical and Cultural Sites: None observed in the area.
- G. Land Use: Grazing and hunting in season.
- H. Surface Ownership: Wellsite and road are on the surface owned by Mr. Mack Kizer, Pep, NM. An agreement has been reached with the owners of the surface on which the subject well will be drilled concerning surface use during the drilling and producing operations.

12. OPERATORS' REPRESENTATIVES:

The field representative responsible for assuring compliance with the approved surface use and operations plan is:

Jerry M. Jordan	(432) 683-5216 (office)
Operations Manager	(432) 694-1801 (residence)

H. L. Brown Operating, L.L.C.'s office is located at 300 W. Louisiana, Midland, Texas, 79701.


13. 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

H. L. Brown Operating, L.L.C.
Federal "B" No. 2
Page Five

which presently exist; that the statements made in the 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 H. L. Brown Operating, L.L.C. and it's contractors and subcontractors in conformity with this plan and terms and conditions under which is approved. This statement is subject to provisions of 18 U.P.S. 1001 for the filing of false statement.

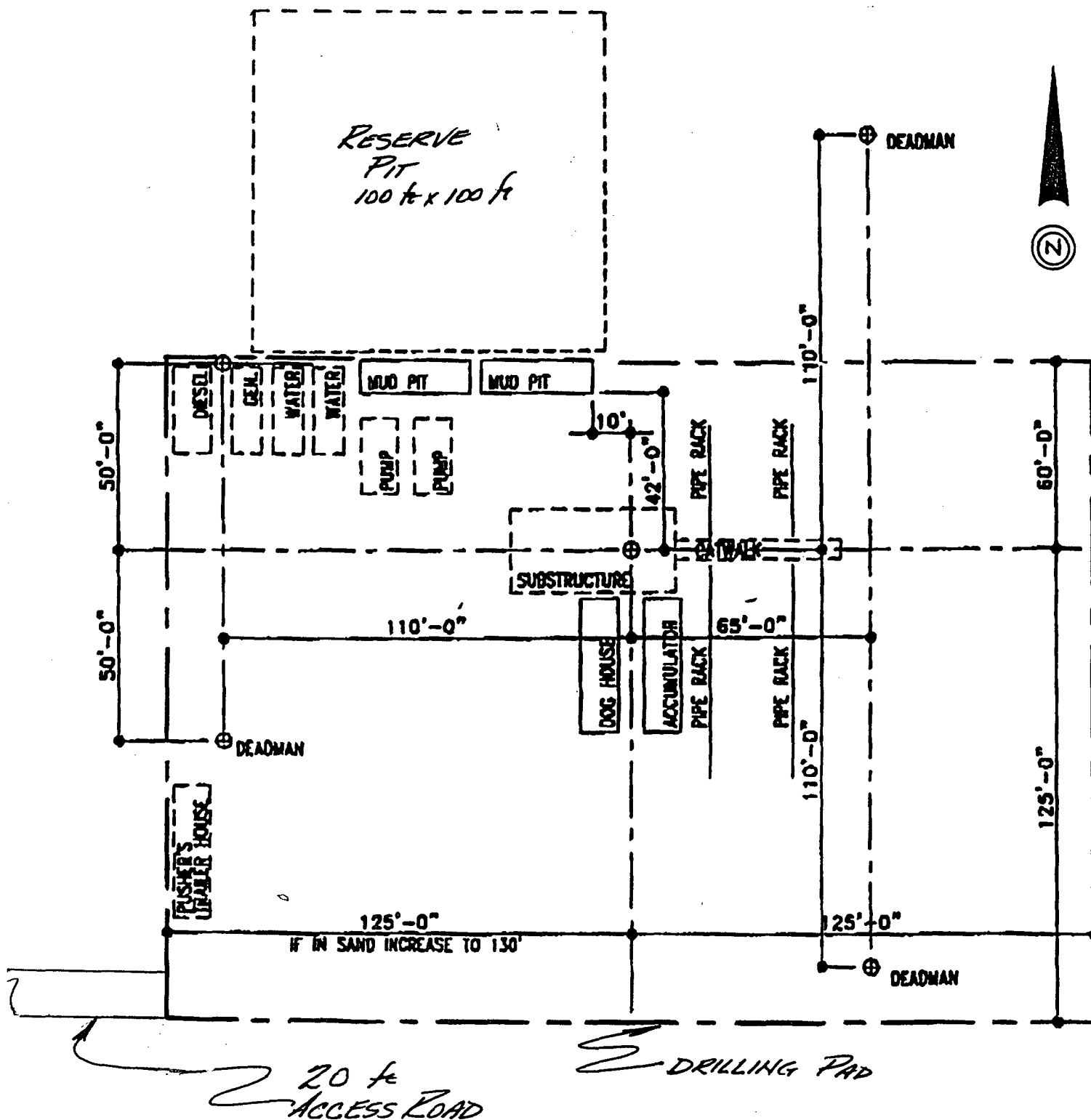
10/21/03
Date


Jerry M. Jordan
Operations Manager
H. L. Brown Operating, L.L.C.

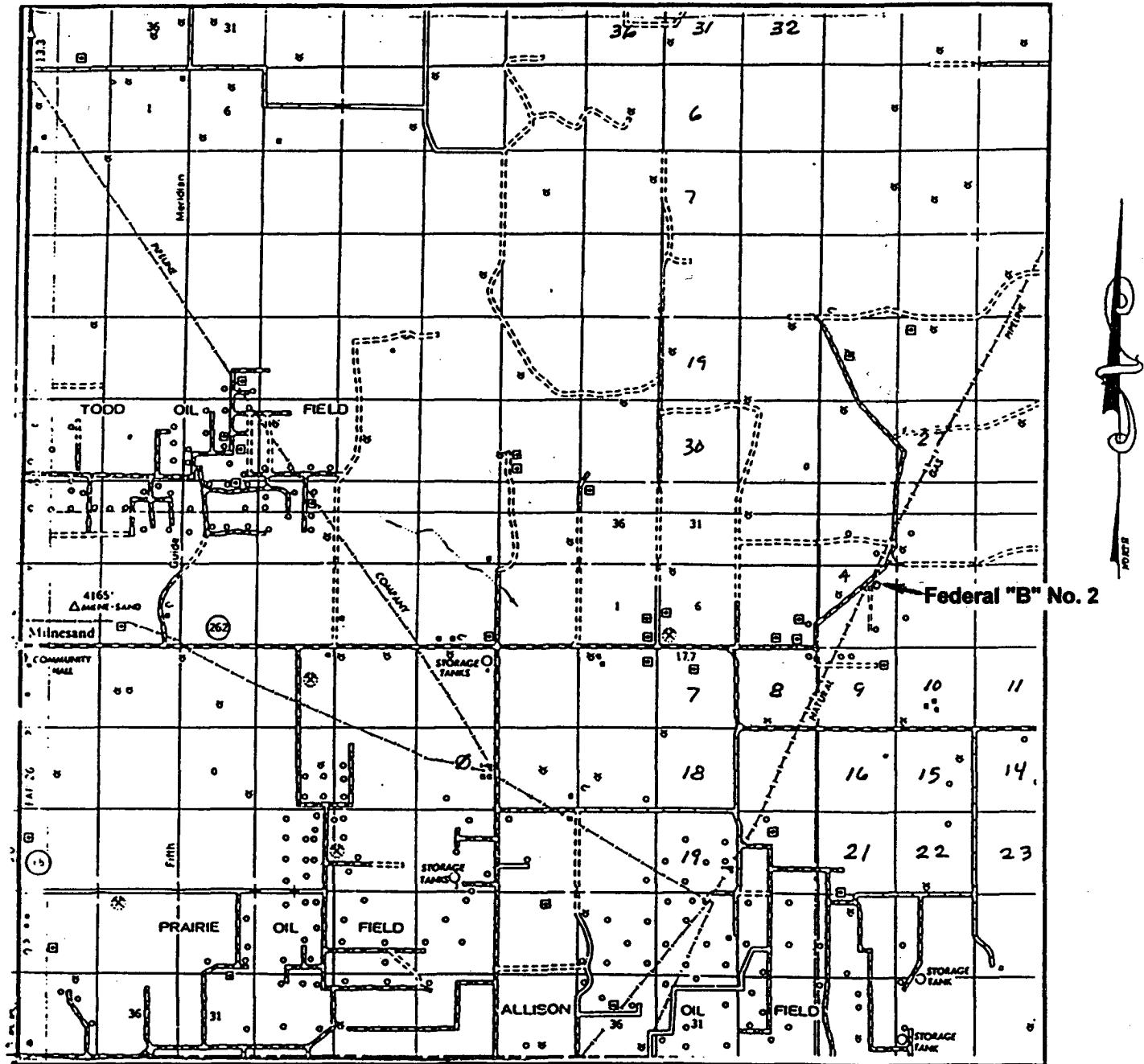
Enclosures

**Federal "B" No. 2
1310 ft FNL & 1330 ft FEL
Sec 4, T-8-S, R-37-E
Roosevelt County, NM**

RESERVE
PIT
100 ft x 100 ft



VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 4 TWP. 8-S RGE. 37-E

SURVEY N.M.P.M.

COUNTY ROOSEVELT

DESCRIPTION 1310' FNL & 1330' FEL

ELEVATION 4054'

OPERATOR H. L. BROWN OPERATING, L. L. C.

LEASE FEDERAL "B"

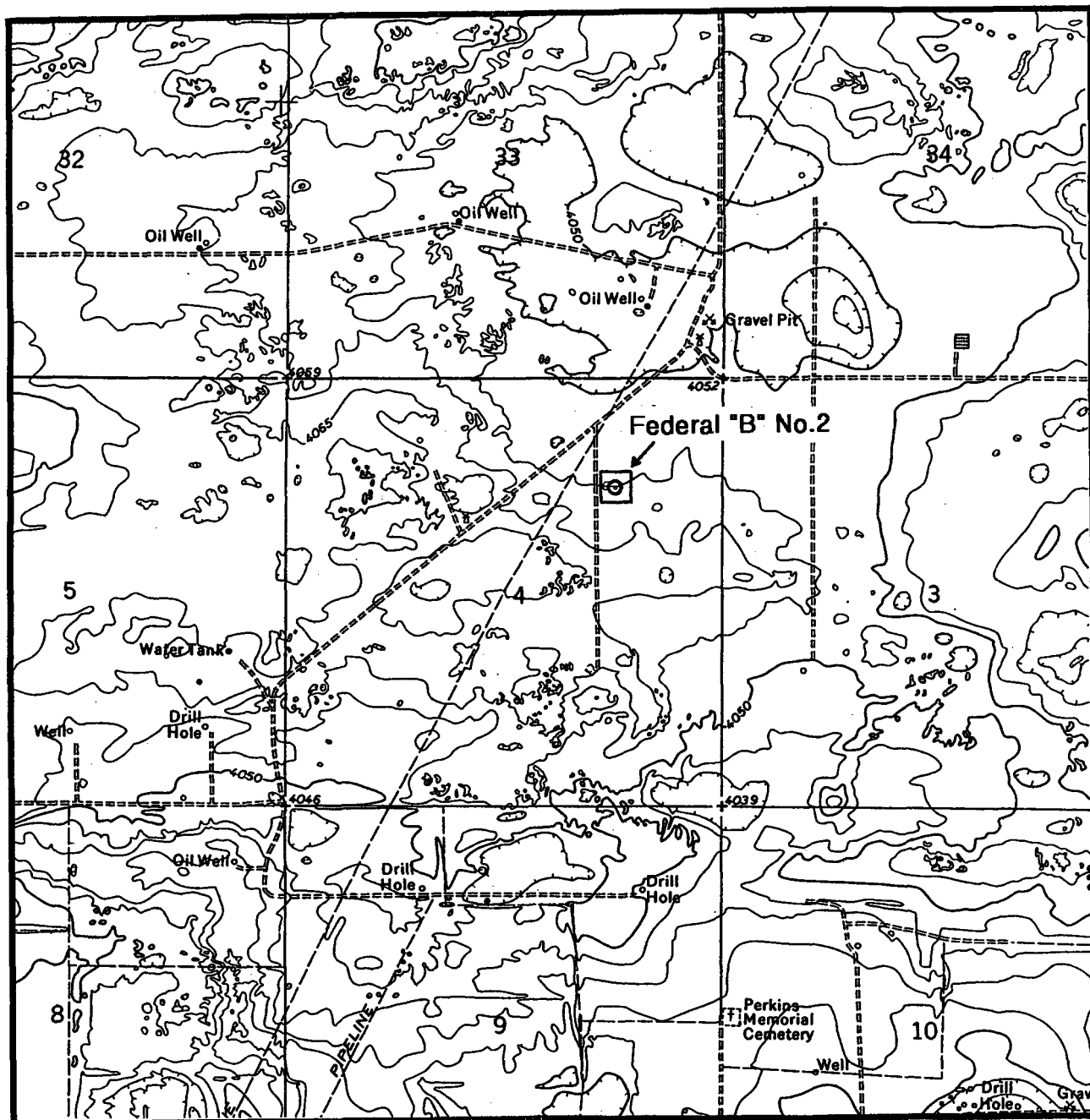
H. L. BROWN OPERATING, L. L. C.

MIDLAND, TEXAS

432/683-5216

EXHIBIT "A"

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10'

SEC. 4 TWP. 8-S RGE. 37-E

SURVEY N.M.P.M.

COUNTY ROOSEVELT

DESCRIPTION 1310' FNL & 1330' FEL

ELEVATION 4054'

OPERATOR H.L. BROWN OPER. L.L.C.

LEASE FEDERAL "B"

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

MIDLAND, TEXAS

432/683-5216

EXHIBIT "B"