

New Mexico Oil Conservation Division, District I

1625 N. French Drive
Hobbs, NM 88249

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

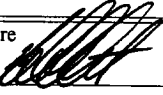
FORM APPROVED
OMB No. 1004-0136
Expires January 31, 2004

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 24516 NM 021097A	
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 # 213179		7. If Unit or CA Agreement, Name and No.	
3a. Address P.O. Box 3737, Midland, Texas 79707		8. Lease Name and Well No. Federal 'C' #2	
3b. Phone No. (include area code) 432-688-3726		9. API Well No. 30-041-20910	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 1980' FSL & 1330' FWL, Unit K At proposed prod. zone		10. Field and Pool, or Exploratory Bluitt Wolfcamp	
14. Distance in miles and direction from nearest town or post office* 10 miles east of Milnesand, NM		11. Sec., T., R., M., or Blk. and Survey or Area Sec 4, T-8 -S, R-37 -E	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1330'		12. County or Parish Roosevelt	
16. No. of Acres in lease 320		13. State NM	
17. Spacing Unit dedicated to this well 320		18. Distance from proposed* location to nearest well, drilling, completed, applied for, on this lease, ft. 2332'	
19. Proposed Depth 8200'		20. BLM/BIA Bond No. on file 0679788	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 4062' GL		22. Approximate date work will start* 12-01-04	
		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.
2. A Drilling Plan.
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).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
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 10-06-04	
Title Operations Manager/ Petroleum Engineer					
Approved by (Signature) /S/LARRY D. BRAY		Name (Printed/Typed) /S/LARRY D. BRAY		Date NOV 23 2004	
Title Assistant Field Manager, Lands And Minerals		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. OGRID NO. 213179
PROPERTY NO. 29860
POOL CODE 72640
EFF. DATE 11/29/04
API NO. 30-041-20910

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS ATTACHED



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 30-041-20910	Pool Code 72640	Pool Name Bluitt (Wolfcamp) Gas
Property Code 002269 29860	Property Name FEDERAL "C"	Well Number 2
OGRID No. 213179	Operator Name H.L. BROWN OPERATING L.L.C.	Elevation 4062'

Surface Location

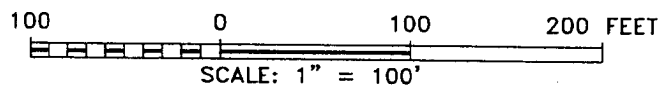
UL or lot No. K	Section 4	Township 8 S	Range 37 E	Lot Idn	Feet from the 1980	North/South line SOUTH	Feet from the 1330	East/West line WEST	County ROOSEVELT
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Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 320		Joint or Infill	Consolidation Code	Order No.					

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

	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p></p> <p>Signature</p> <p>Robert McNaughton</p> <p>Printed Name</p> <p>Operations Manager/Engineer</p> <p>Title</p> <p>10-06-04</p> <p>Date</p> <p>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>SEPTEMBER 15, 2004</p> <p>Date Surveyed</p> <p>JONES</p> <p>Signature & Seal of Professional Surveyor</p> <p>7977</p> <p>W.O. No. 4647</p> <p>Certification No. Jones 7977</p> <p>BASIN SURVEYS</p>
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FROM MILNESAND, GO EAST ON STATE HWY 262 FOR 8.5 MILES TO LEASE ROAD RR 425; THENCE GO EAST FOR 1.0 MILE; THENCE NORTH 0.2 MILE; THENCE NORTHEAST FOR 0.3 MILE TO PROPOSED LEASE ROAD.

THE FEDERAL "C" No. 2 LOCATED 1980' FROM
THE SOUTH LINE AND 1330' FROM THE WEST LINE OF
SECTION 4, TOWNSHIP 8 SOUTH, RANGE 37 EAST,
N.M.P.M., ROOSEVELT COUNTY, NEW MEXICO.

W.O. Number: 4647	Drawn By: K. GOAD
Date: 09-16-2004	Disk: KJG CD#4 - 4647A.DWG

Survey Date: 09-15-2004 Sheet 1 of 1 Sheets

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

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

Federal "C" No. 2

1980' FSL & 1330' FWL, Sec. 4, Unit K, T-08-S, R-37-E

Roosevelt County, New Mexico

New Mexico Lease NM - 21513

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. **Figure No.1** is a portion of a USGS contour map showing the location of the proposed well. The well is approximately 9 miles East of Milnesand, NM on State Highway 262. Go straight east one mile on lease road where highway makes a 90 corner south to Bluitt. Go north 1/3 mile just past the compressor station and 1/3 mile to the northeast. Turn south 800' to the proposed location (**Figure 2**).
- B. **Figure No.1** also shows all existing roads within one-mile radius of the well site. The proposed location is near the center of the Bluitt Wolfcamp gas field.
- C. The existing roads will be maintained as needed for both drilling and production by offset lease operators.

2. PLANNED ACCESS ROADS:

- A. Length and width: New road required will be 12' wide and approximately 710' long (from existing lease road and will enter the location at the north west corner. This new road is labeled on Exhibit "A". 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 and Culverts: None required.
- E. Drainage design: New road will have a drop of six inches from centerline on each side.
- F. Cuts and Fills: This is relatively flat surface broken by occasional small sand dunes. A slight amount of leveling will be required.
- G. Gates and Cattle Guards: None will be needed.

3. LOCATION OF EXISTING WELLS:

- A. Existing wells within a one-mile (plus) radius are shown on **Figure No.2**.

4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES:

- A. Any produced oil and water will be stored in a tank battery to be built on location. Produced water will be sent to the main battery for collection and off lease disposal. The well will make little or no measurable condensate. Gas will be sent down existing sales lines.
- B. We expect this well flow naturally through the existing low pressure gathering system. In the distant future, rod pumping may be necessary

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 dug from the reserve pit. Additional caliche will be transported from a privately owned pit located in the SW/4 of Section 6, T-8-S, R-37-E.

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. **Figure No.3** shows the general layout 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 as per current BLM and NMOCD regulations.
- 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 as soon as they dry. The location will be cleaned of all trash and junk to leave the wellsite 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 lessee and the BLM. 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 relatively level with small to moderate sand dunes. From an elevation of 4062' at the wellsite, the regional surface slopes gently toward the east at about 30' per mile.
- B. Soil: Soil is predominantly sand and sandy loam underlain by caliche.
- C. Flora and Fauna: The vegetative cover moderate and includes range grasses, weeds, scrub oak and mesquite bushes. Wildlife in the area is the typical of semi-arid desert land and includes coyotes, rabbits, rodents, reptiles, dove, quail and hawks.
- D. Ponds and Streams: There are no rivers, 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 well site. The pumper's residence is located next to the compressor station about ½ mile away. There are a few ranch houses several miles to the north.

- F. Archeological, Historical and Cultural Sites: None observed in the area.
- G. Land Use: Grazing, oil and gas production and wildlife habitat.
- H. Surface Ownership: The surface that the well site and road are on is owned by Mack Kizer, P.O. Box 27, Pep, New Mexico 88126.

12. OPERATORS' REPRESENTATIVES:

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

Robert McNaughton (432) 688-3726 (office)
Operations Manager/ Petroleum Engineer (432) 694-2553 (residence)
(432) 559-9307 (cell)


Greg McWilliams (806) 790-1332 (mob)
Operations Foreman

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 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.

10-06-04
Date


Robert McNaughton
Operations Manager/ Petroleum Engineer
H. L. Brown Operating, L.L.C.

Enclosures

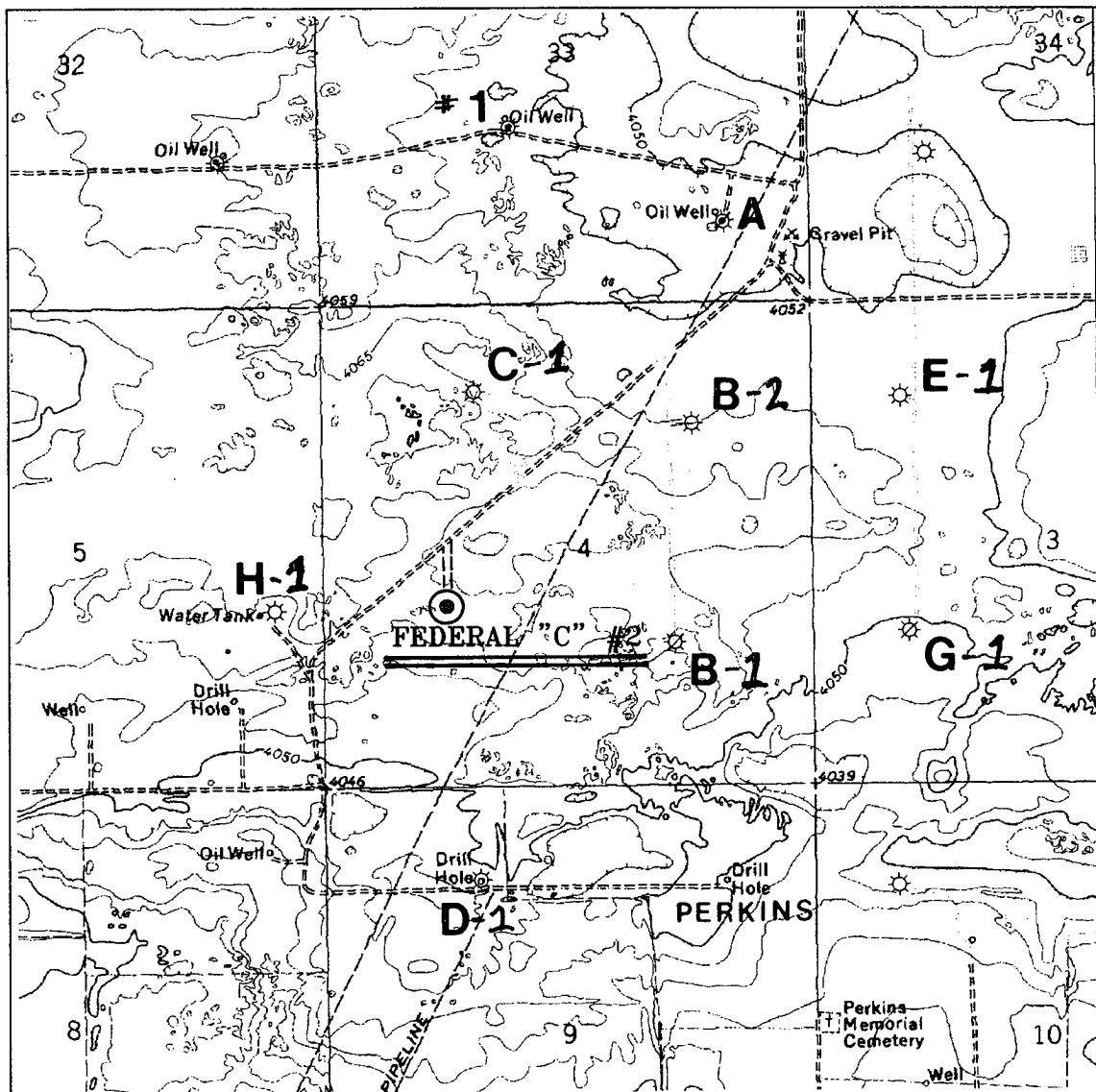


Figure No. 1

FEDERAL "C" #2

Located at 1980' FSL and 1330' FWL
 Section 4, Township 8 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: 4647AA - KJG #1

Survey Date: 09-15-2004

Scale: 1" = 2000'

Date: 09-16-2004

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

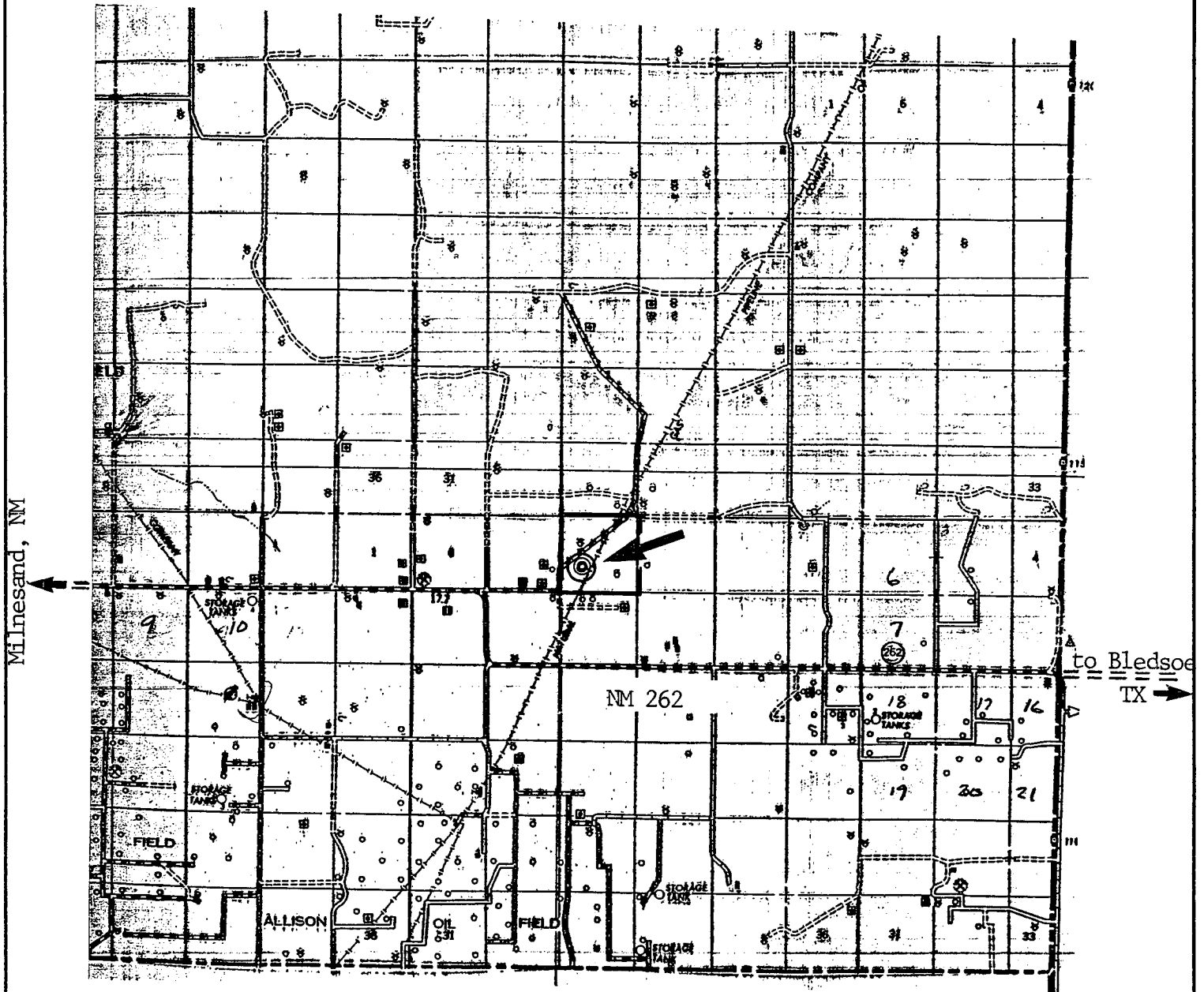


Figure No. 2

FEDERAL "C" #2
 Located at 1980' FSL and 1330' FWL
 Section 4, Township 8 South, Range 37 East,
 N.M.P.M., Roosevelt County, New Mexico.

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 (505) 392-3074 - Fax
 basinsurveys.com

W.O. Number: 4647AA - KJG #1

Survey Date: 09-15-2004

Scale: 1" = 2 miles

Date: 09-16-2004

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

<p>DRILLING RIG & RESERVE PIT LAYOUT</p> <p>Worksheet supplement for "Application for Permit to Drill or Deepen a Well"</p>	<p>Applicant</p> <p>H.L. Brown Operating L.L.C</p> <p>P.O. Box 2237, Midland Texas 79702</p>
<p>Location: 1980' FSL & 1330' FWL</p> <p>Unit K, Section 4, T- 4-S, R- 37-E</p> <p>Roosevelt Co, NM</p>	<p>Well name and number</p> <p>Federal C No. 2</p>

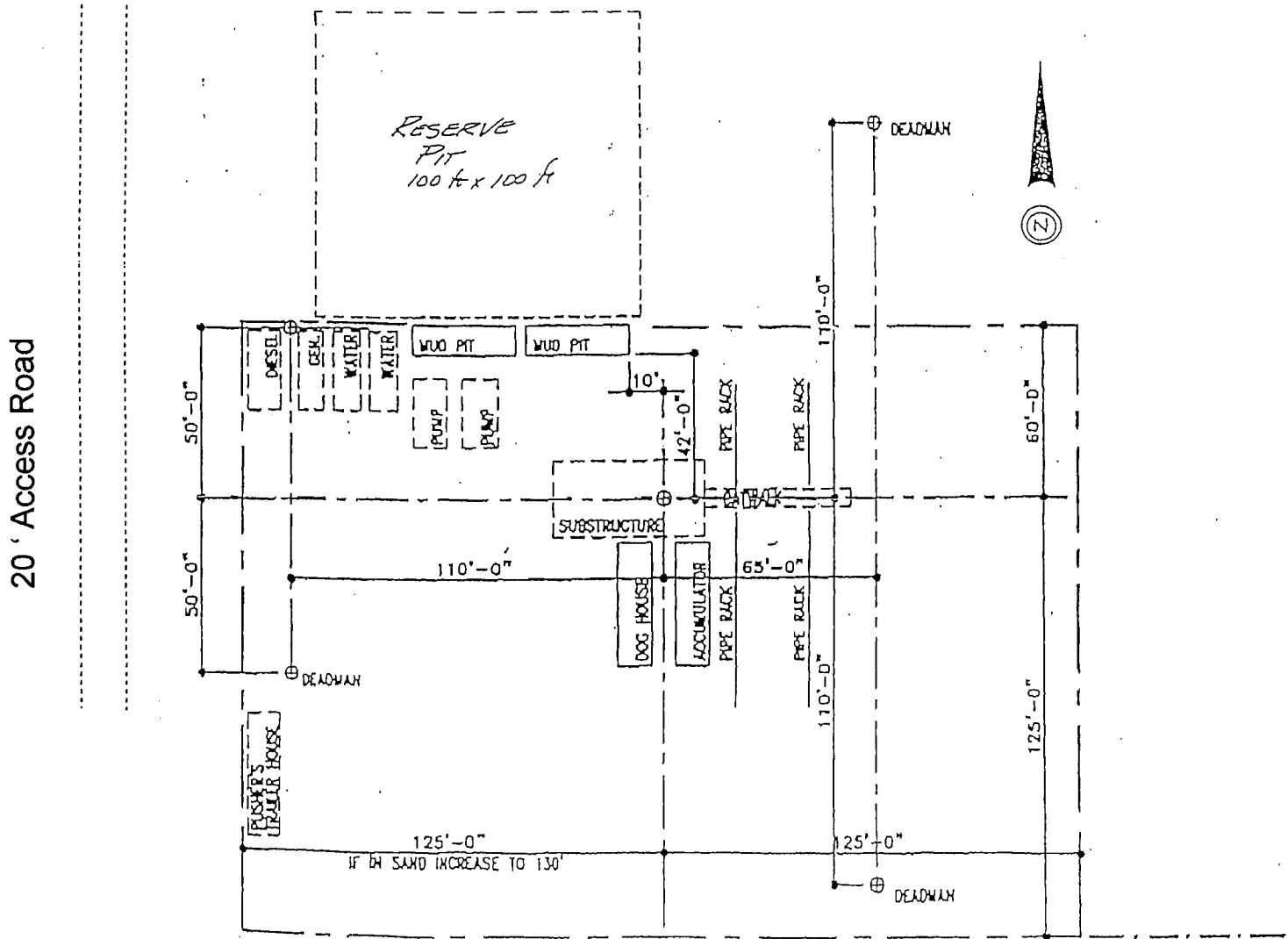


Figure No. 3

Supplemental Drilling Data

H. L. BROWN OPERATING, L. L. C.
Federal "C" No. 2
1980' FSL & 1330' FWL, Sec. 4, Unit K, T-8-S, R-37-E
Roosevelt County, New Mexico
New Mexico Lease NM - 21513

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 8400' to test the Wolfcamp formation. 13-3/8" surface pipe will be set at about 515', 8-5/8" intermediate pipe will be set at 3750' and 5-1/2" production casing will be set at 8400'. The Wolfcamp will be perforated and acid/fracture stimulated.

1.) Surface Formation: Ogallala

2.) Estimated Top of Geologic Markers:

Rustler Anhydrite	1980'
Yates	2515'
San Andres	3685'
Abo	6985'
Wolfcamp	7990'

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

Water	None Anticipated
Oil/ Gas	Wolfcamp carbonates at 7965'
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 ₂ , + 1/4# sx celloflake	Surface Must circulate
12-1/4"	8-5/8"	32	J-55	LT&C	3750'	Lead: 1200 sx "C" Poz + 6% gel + celloflake Tail: 300 sx "C" w/ CaCl ₂	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' – 8200'	Lead: 1200 sx "H" Poz + 10% gel + 5% salt Tail: 200 sx "H" w/ FLA	3250' ** tie into 8-5/8" casing

The surface casing string 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 (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' - 3750'	Cut Brine	9.2-10.3	32-34	NC	Add 2% - 3% oil
3750' - 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' - 8200'	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 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 3750'.
- 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 ~3800' (minimum).

9.) Abnormal Pressures, Temperature or Hydrogen Sulfide:

None Anticipated.

10.) Completion Equipment:

The completed well will be a flowing gas well with a stack pack for flow control. (Figure No. 6).

11.) Anticipated Starting Date:

Drilling operations are expected to commence December 01, 2004 and are expected to last 14 days. Completion operations are expected to last 7 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
Location: 1980' FSL & 1330' FWL Unit K, Section 4, T- 4-S, R- 37-E Roosevelt Co, NM	Well name and number <div style="text-align: center; font-size: 1.2em;">Federal C No. 2</div>

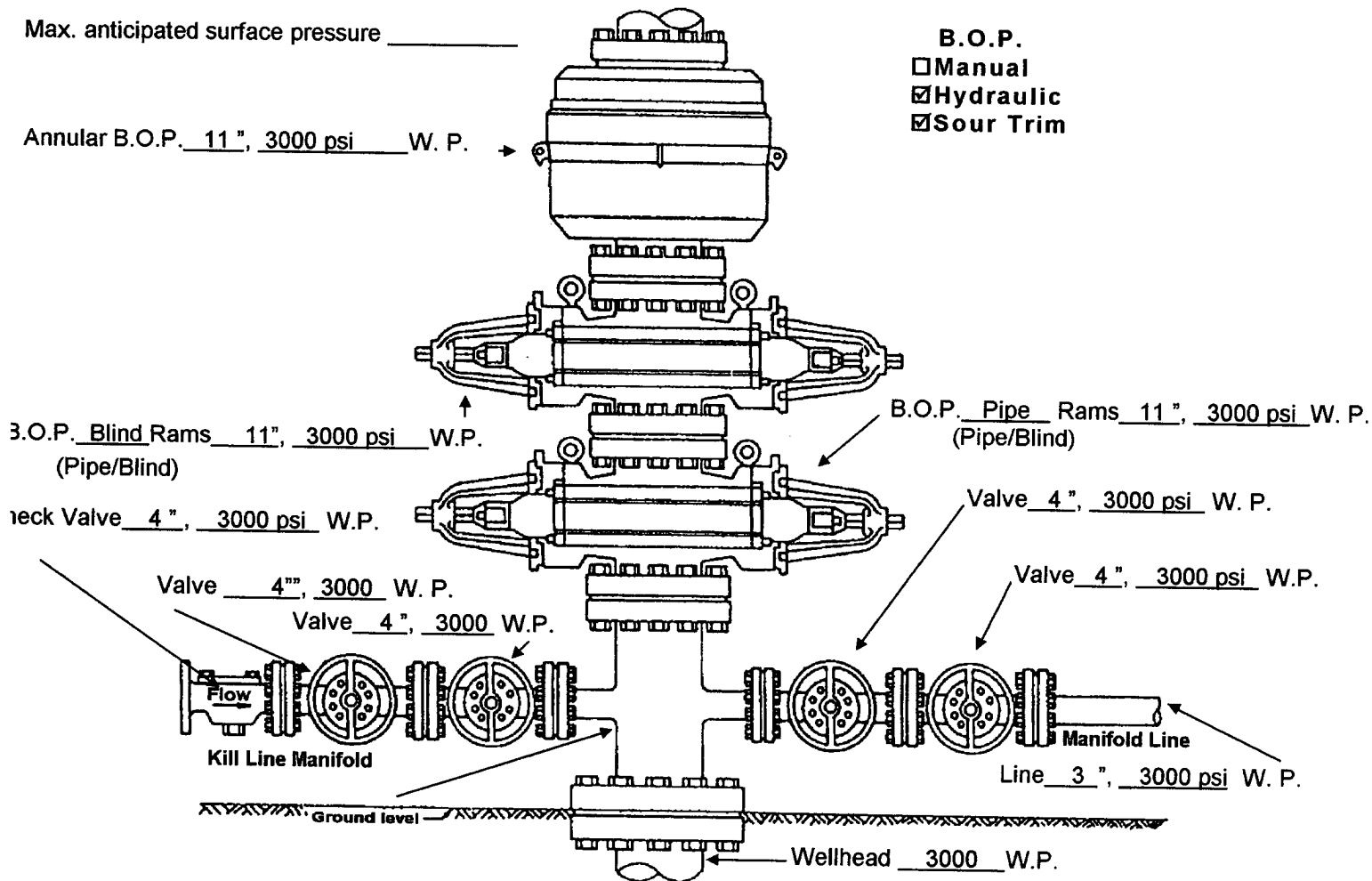


Figure No. 4

<p align="center">CHOKE MANIFOLD DIAGRAM</p> <p>Worksheet supplement for "Application for Permit to Drill or Deepen a Well"</p>	<p>Applicant H.L. Brown Operating L.L.C P.O. Box 2237, Midland Texas 79702</p>
<p>Location: 1980' FSL & 1330' FWL Unit K, Section 4, T- 4-S, R- 37-E Roosevelt Co, NM</p>	<p>Well name and number <p align="center">Federal C No. 2</p></p>

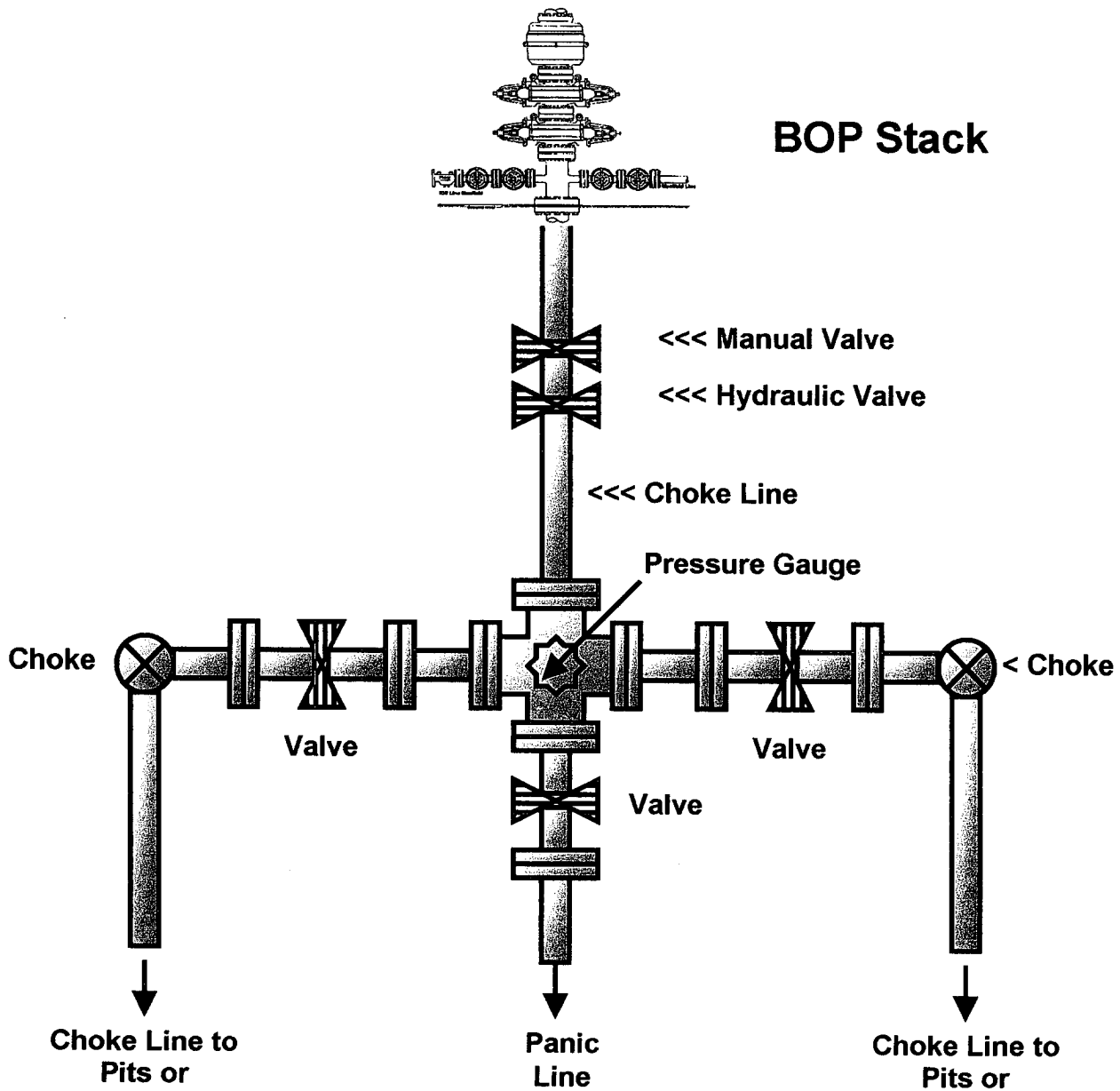


Figure No. 5

<p align="center">WELLHEAD DIAGRAM</p> <p>Worksheet supplement for "Application for Permit to Drill or Deepen a Well"</p>	<p>Applicant H.L. Brown Operating L.L.C P.O. Box 2237, Midland Texas 79702</p>
<p>Location: 1980' FSL & 1330' FWL Unit K, Section 4, T- 4-S, R- 37-E Roosevelt Co, NM</p>	<p>Well name and number <p align="center">Federal C No. 2</p></p>

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

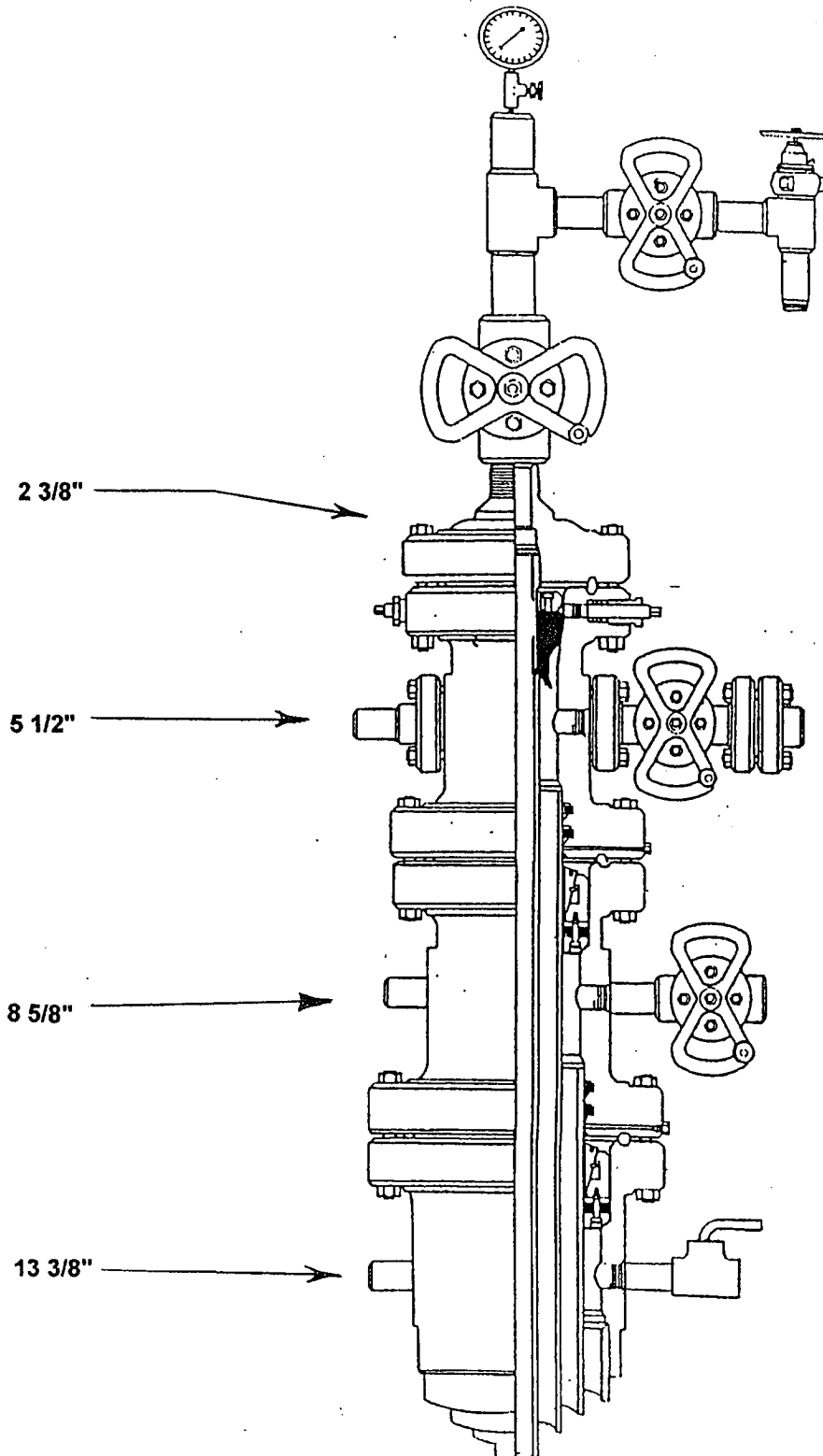


Figure No. 6

UNITED STATES DEPARTMENT OF THE INTERIOR
Bureau of Land Management
Roswell Field Office
2909 West Second Street
Roswell, New Mexico 88201-1287

Statement Accepting Responsibility for Operations

Operator Name: H.L. Brown Operating L.L.C.
Address: 300 West Louisiana
City, State: Midland, Texas
Zip Code: 79702

The undersigned accepts all applicable terms, conditions, stipulations and restrictions concerning operations conducted on the leased land, or portion thereof, as described below:

Lease Name: **Federal "C" #2**

Lease Number: **NM – 21513**

Legal Description of Land: **E/2 of Section 4, T-8-S, R-37-E, NMPM, Roosevelt County, New Mexico.**

Formations: **All uncommitted mineral interests from 5000' to total depth.**

Bond Coverage: **Statewide**

BLM Bond File Number: **#0679788**

Authorized Signature: 

Name: Robert McNaughton

Title: Operations Manager/ Engineer

Date: October 5, 2004

1. (For BLM Use) BLM Report No.	2. (For BLM Use) Reviewer's Initials/Date _____ Accepted () Rejected ()	3. NMCRIS Number: 90128			
4. Type of Report: Negative (X) Positive ()					
5. Title of Report: A Cultural Resource Survey for the Federal "C" No. 2 Well Pad and Access Road Author(s): Justin Rein		6. Fieldwork Date(s): September 21, 2004 7. Report Date: September 21, 2004			
8. Consultant Name/Address: Mesa Field Services Direct Charge: Theresa Straight Field Personnel Names: Justin Rein Address: P.O. Box 3072 Carlsbad, New Mexico 88221-3072 Phone (505) 628-8885		9. Cultural Resource Permit No.: 153-2920-03-N 10. Consultant Report No.: MFS-1077			
11. Customer Name: H.L. Brown Operating, LLC Responsible Individual: Robert McNaughton Address: P.O. Box 2237 Midland, TX 79702 Phone: (432) 688-3726		12. Customer Project No.:			
13. Land Status	BLM	State	Private	Other	Total
a. Area Surveyed (acres)	8.90				8.90
b. Area of Effect (acres)	4.51				4.51
14. Block Length <u>600 ft</u> Width <u>600 ft</u> Linear Length <u>730 ft</u> Width <u>100 ft</u>					
15. Location (Map[s] Attached): a. State: New Mexico b. County: Roosevelt County c. BLM Office: Roswell Field Office d. Nearest City or Town: Bluit, NM e. Legal Description: T 8 S, R 37 E, Section 4: N½ SW¼ f. Well Pad Footages: The Federal "C" No. 2 is centered 1,980 feet from the north line and 1,330 feet from the west line of Section 4. g. USGS 7.5' Map Name(s), Date(s), and Code(s): Bluit, New Mexico 1972 Photorevised 1984 (32103-F2)					

16. Project Data:

a. **Records Search:** Date(s) of BLM File Review: September 21, 2004 Name of Reviewer(s): Justin Rein
Date(s) of ARMS Data Review September 16, 2004 Name of Reviewer(s): Justin Rein

Findings (see Field Office requirements to determine area to be reviewed during records search): No previously recorded sites were located within one mile of the project area.

b. **Description of Undertaking:** H.L. Brown Operating plans to construct the Federal "C" No. 2 well pad and access road. The project is located in T 8 South, Range 37 East, Section 4. The proposed well is centered 1,980 feet from the south line and 1,330 feet from the west line of Section 4. The well pad will impact a 400 ft by 400 ft area, yet a 600 ft by 600 ft block was inspected to ensure the protection of cultural resources. The access road begins at an existing lease road and travels approximately 710 ft south, then 20 ft east, to the southwest corner of the proposed pad. The access road will impact a 50 ft wide corridor, yet a 100 ft wide corridor was surveyed. Approximately 450 ft of the proposed road falls within the well pad survey and was not included in the total survey acres. In all, 8.90 acres was surveyed, entirely on private property with federal mineral rights administered by the BLM-CFO.

c. **Environmental Setting (NRCS soil designation; vegetative community; elevation; etc.):** The project area is located 1.5 miles northeast of Bluit, New Mexico. Overall the terrain is flat with occasional undulations and dunal ridges. The project area slopes gradually towards the south at a grade of well under one percent. Soils consist of sandy deposits of the Brownfield-Patricia-Tivoli association as defined by the Soil Conservation Service of the U.S. Department of Agriculture. Local vegetation includes shin oak, grasses, broom snakeweed, yucca, and various low forbs. Due to this vegetative cover, ground surface visibility averaged 80 percent at the time of survey.

Meteorological data was obtained for the nearby city of Tatum, New Mexico from the Western Regional Climate Center online database. From 1919 to 2003, Tatum received an annual precipitation of 16.04 inches. July through September were the wettest months while December through February were the driest. During the same time, Tatum had an average high temperature of 74.7 degrees Fahrenheit and an average low temperature of 42.0 degrees Fahrenheit. January was the coldest month with an average high of 55.4 degrees Fahrenheit, while July was the warmest with an average high temperature of 92.5 degrees Fahrenheit.

d. **Field Methods (transect intervals; crew size; time in field; etc.):** A crew of one spent 2 hours surveying the project area. A 15 m transect interval was used.

e. **Artifacts Collected?:** None

17. Cultural Resource Findings: No cultural materials were encountered.

a. **Location/Identification of Each Resource:** N/A

b. **Evaluation of Significance of Each Resource:** N/A

18. Management Summary (Recommendations): Because no cultural materials were encountered, archaeological clearance is recommended for the proposed project as staked. If any cultural resources are encountered during construction activities, work at that location should stop immediately and archaeologists at the BLM-RFO should be notified.

19.

I certify the information provided above is correct and accurate and meets all applicable BLM standards.

Responsible Archaeologist

Signature

Date

THE ABOVE COMPLETES A NEGATIVE REPORT. IF ELIGIBLE OR POTENTIALLY ELIGIBLE PROPERTIES ARE INVOLVED, THE ABOVE WILL BE THE TITLE PAGE AND ABSTRACT FOR A COMPLETE REPORT.

Survey for the Federal "C" No. 2 Well Pad and Access Road

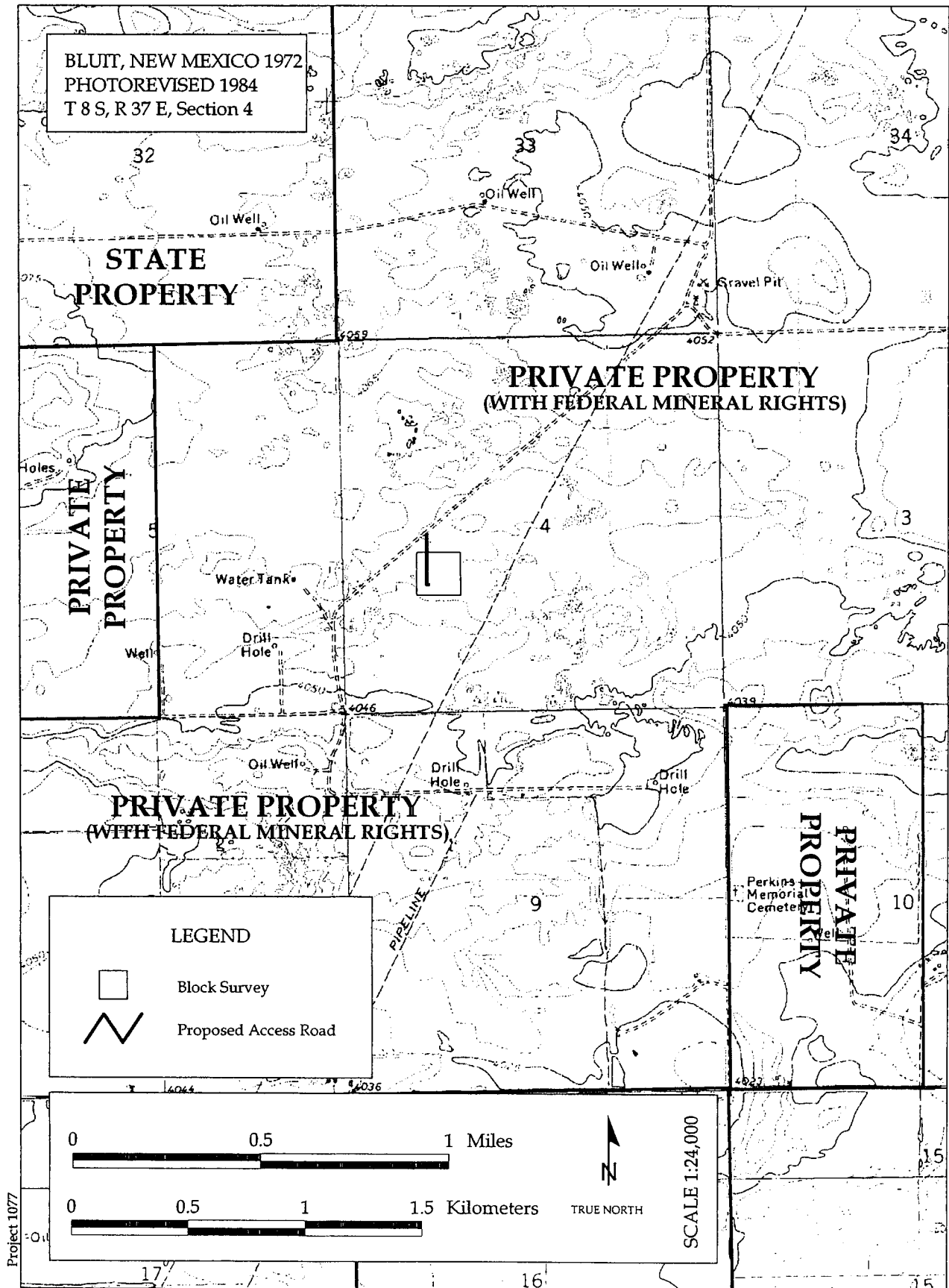


Figure 1. Project Area Map

Mesa Field Services

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. 30-041-20910
5. Indicate Type of Lease STATE <input type="checkbox"/> FED <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
6. Federal Oil & Gas Lease No. NM - 21513
7. Lease Name or Unit Agreement Name Federal "C"
8. Well Number 2
9. OGRID Number 213179
10. Pool name or Wildcat Bluitt Wolfcamp

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: **K** : **1980'** feet from the **South** line and **1330'** feet from the **West** line
Section **4** Township **T-8** Range **R-37-E** NMPM **Roosevelt** County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
4062' GL

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

Pit Location: UL **K** Sect **4** Township **8-S** Range **37-E** Pit type **drilling**

Depth to Groundwater **176'** Distance from nearest fresh water well **2000' West** Distance from nearest surface water **2000' West** ***

Below-grade Tank Location UL _____ Sect _____ Twp _____ Rng _____ ; _____ feet from the _____ line and _____ feet from the _____ 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 actual water depth measurement is in Section 5, T-8-S, R-37-E, at 176'.

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  TITLE Operations Manager/ Petroleum Engineer DATE 10-06-04

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 PETROLEUM ENGINEER DATE NOV 29 2004
Conditions of approval, if any: