

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

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

0879

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. LC 061873-B	
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 3737, Midland, Texas 79707		8. Lease Name and Well No. Paduca 9 Federal #2	
3b. Phone No. (include area code) 432-688-3726		9. API Well No. 30 - 025 - 36861	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 660' FNL & 660' FWL, Unit D At proposed prod. zone		10. Field and Pool, or Exploratory Paduca Delaware	
14. Distance in miles and direction from nearest town or post office* 27 miles West of Jal, NM		11. Sec., T., R., M., or Blk. and Survey or Area Sec 9, T-25-S, R-32-E	
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 160	12. County or Parish Lea	
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 1320'	19. Proposed Depth 5000'	13. State NM	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3456' GL.	22. Approximate date work will start* 10-01-04	17. Spacing Unit dedicated to this well 40	
24. Attachments		20. BLM/BIA Bond No. on file 0679788	
		23. Estimated duration 8 days	

CARLSBAD CONTROLLED WATER BASIN

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 7-26-04
Title Operations Manager/ Petroleum Engineer		
Approved by (Signature) /s/ Joe G. Lara	Name (Printed/Typed) /s/ Joe G. Lara	Date 18 SEP 2004
Title FIELD MANAGER	Office CARLSBAD FIELD OFFICE	

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)

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS  
AND SPECIAL STIPULATIONS  
ATTACHED

DECLARED WATER BASIN -  
CEMENT BEHIND THE 8 3/8"  
CASING MUST BE

CIRCULATED NO. 213179  
PROPERTY NO. 34006  
WITNESS POOL CODE 49460  
EFF. DATE 9/23/04  
API NO. 30-025-368

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>3D-025-36861</b>	Pool Code <b>49460</b>	Pool Name <b>Paduca Delaware</b>
Property Code <b>34006</b>	Property Name <b>PADUCA "9" FEDERAL</b>	Well Number <b>2</b>
OGRID No. <b>213179</b>	Operator Name <b>H.L. BROWN OPERATING L.L.C.</b>	Elevation <b>3456'</b>

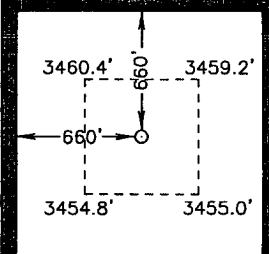
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<b>D</b>	<b>9</b>	<b>25 S</b>	<b>32 E</b>		<b>660</b>	<b>NORTH</b>	<b>660</b>	<b>WEST</b>	<b>LEA</b>

Bottom Hole Location If Different From Surface

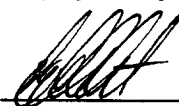
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres <b>40</b>	Joint or Infill	Consolidation Code	Order No.						

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

 Lat.: N32°09'01.3" Long.: W103°41'11.5"									

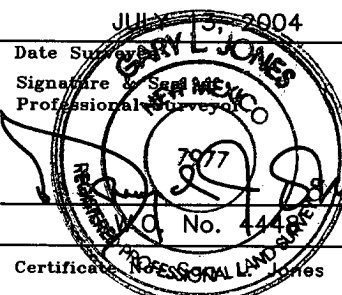
**OPERATOR CERTIFICATION**

I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.

  
Signature  
**Robert McNaughton**  
Printed Name  
**Ops. Mgr./ Petroleum Engr.**  
Title  
**7-26-04**  
Date

**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.

**JULY 13, 2004**  
Date Surveyed  
  
Signature of Professional Surveyor  
**7977**  
Certificate No.  
**BASIN SURVEYS**

SECTION 9, TOWNSHIP 25 SOUTH, RANGE 32 EAST, N.M.P.M.,  
LEA COUNTY, NEW MEXICO.

3460.4'

600'

3459.2'

150' NORTH  
OFF SET  
3457.4'

H.L. BROWN OPERATING L.L.C.  
PADUCA "9" FEDERAL #2

Elev. - 3456'

Lat.-N 32°09'01.3"  
Long-W 103°41'11.5"

150' WEST  
OFF SET  
3457.8'

150' EAST  
OFF SET  
3456.9'

150' SOUTH  
OFF SET  
3457.3'

3454.8'

600'

3455.0'

Proposed Lease Road 1126'

Directions to Location:

FROM THE JUNCTION OF STATE HWY 128 AND CO.  
RD. J-1, GO SOUTH FOR 5.1 MILES TO LEASE ROAD;  
THENCE WEST FOR 0.3 MILE; THENCE  
NORTH/NORTHWEST FOR 0.6 MILE; THENCE SOUTH  
OF TEXACO WELL GO WEST FOR 0.1 MILE; THENCE  
NORTH FOR 0.2 MILE TO PADUCA "9" FED. #1 AND  
PROPOSED LEASE ROAD ON NE CORNER OF PAD.

PADUCA "9" FED. #1

100 0 100 200 FEET

SCALE: 1" = 100'

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

REF: PADUCA "9" FED. No. 2 / Well Pad Topo

THE PADUCA "9" FED. No. 2 LOCATED 660' FROM  
THE NORTH LINE AND 660' FROM THE WEST LINE OF  
SECTION 9, TOWNSHIP 25 SOUTH, RANGE 32 EAST,

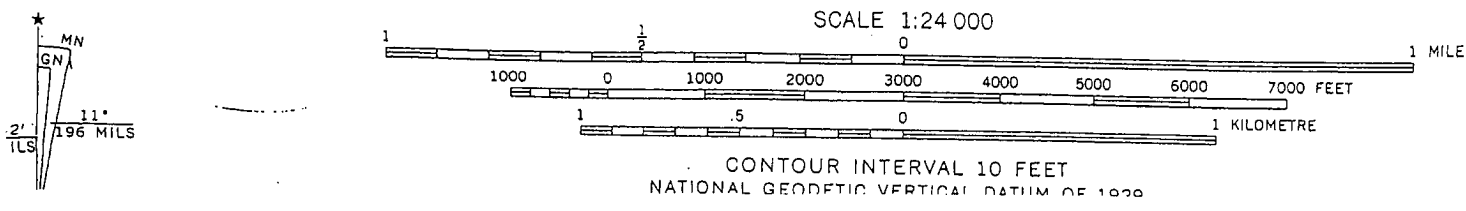
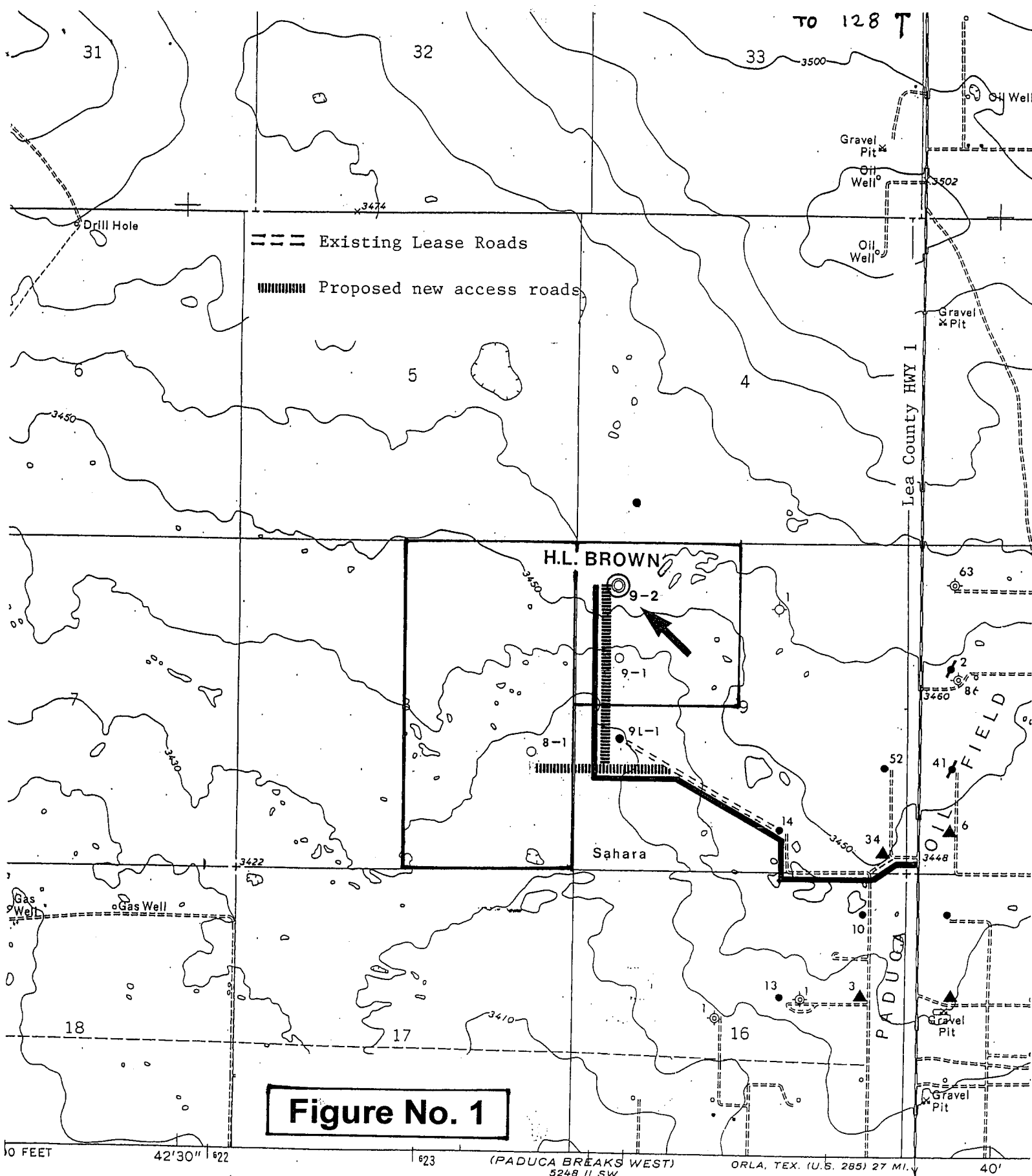
N.M.P.M., LEA COUNTY, NEW MEXICO.

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

W.O. Number: 4448

Drawn By: K. GOAD

Survey Date: 07-13-2004 Sheet 1 of 1 Sheets



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

**H. L. BROWN OPERATING, L.L.C.  
Paduca Federal "9" No. 2  
660' FNL & 660' FWL, Sec. 9, Unit E, T-25-S, R-32-E  
Lea County, New Mexico  
New Mexico Lease LC - 061873-b**

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 as staked. The well is approximately 30 miles west of Jal, NM on State Highway 128 and 5.7 miles south on Lea County Highway #1. From the lease road intersection with the highway, go 1/10 mile west to Cotton Draw Unit No. 34, 1/10 mile southwest to a lease road intersection. Turn right and go ¼ mile west to Cotton Draw Unit (CDU) #14. Go 3/8 of a mile northwest towards the 9L #1 well and behind the west fence line. The proposed new lease access road will branch off to the north about 2/3 mile to the new well.
- B. **Figure No.1** also shows all existing roads within one-mile radius of the well site. The proposed location is adjacent to the Cotton Draw Unit water flood operated by Sahara.
- 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 1250' long (from #9-1) and will enter the location at the south 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: 2 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. We anticipate sending produced water to an existing water disposal line serving the 9L #1 and running south to the Cotton Draw Unit. Gas will be sent down existing sales lines.

B. We expect this well will be rod pumped. We expect to be able to tie into an existing electrical line serving the 9L #1. This will require that about 2/3 mile of new power line will be constructed. Alternatively, we may run the pumping unit on an Ajax gas engine until fluid production stabilizes.

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 an approved pit located in the NW/4 of the NE/4 of Section 2, T-25-S, R-31-E, or as designated by the BLM.

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 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 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 lessee and the BLM. 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 relatively level with small to moderate sand dunes. From an elevation of 3436' at the wellsite, the regional surface slopes gently toward the south at about 1 to 2 percent.
- 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 wellsite.
- 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: Well site and road are on the surface owned by the Bureau of Land Management.

12. OPERATORS' REPRESENTATIVES:

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

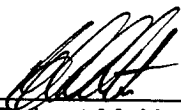
Robert McNaughton	(432) 688-3726 (office)
Petroleum Engineer	(432) 694-2553 (residence)

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 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.

7-26-04  
Date

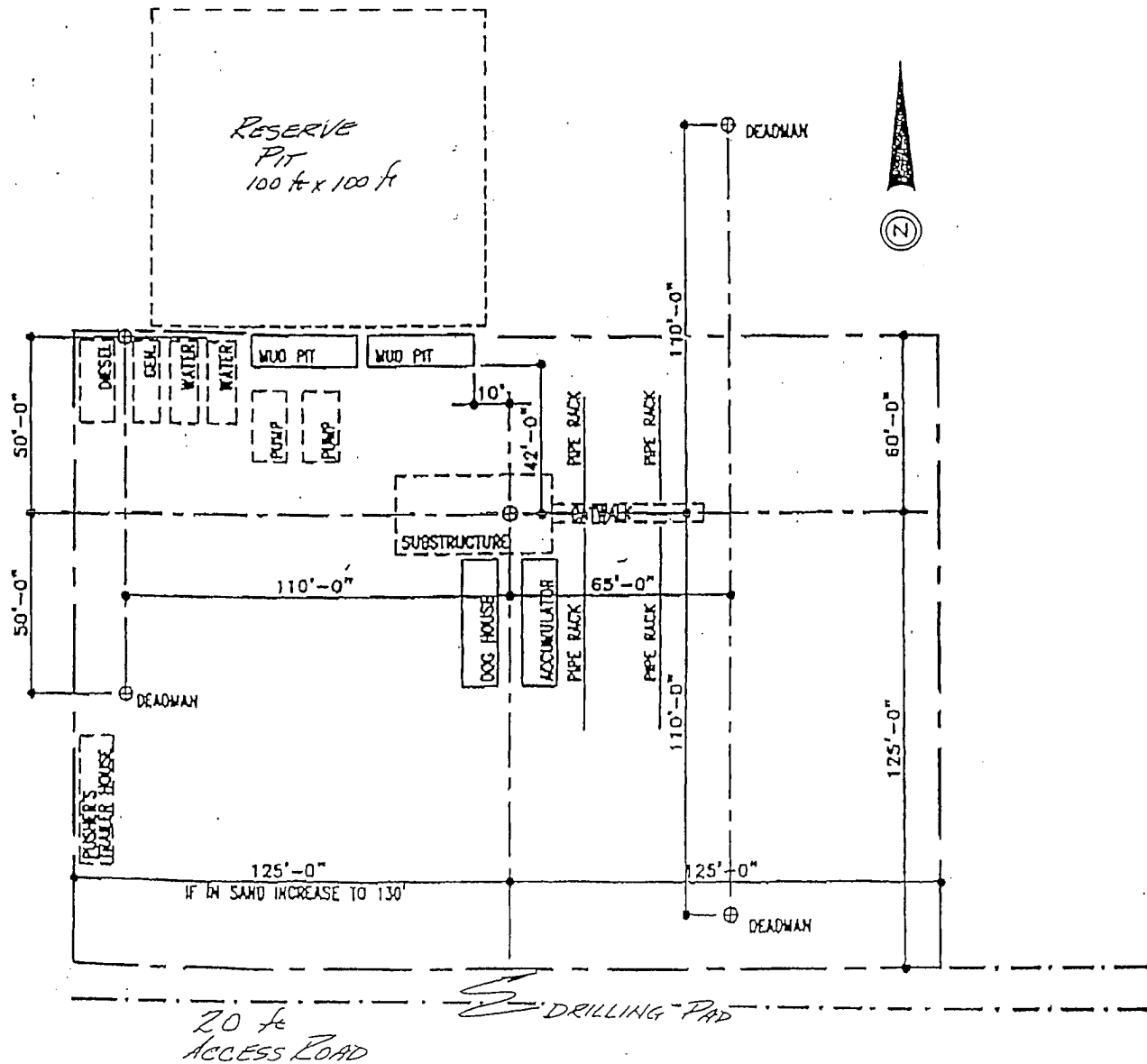
  
Robert McNaughton  
Petroleum Engineer  
H. L. Brown Operating, L.L.C.

Enclosures





<p><b>DRILLING RIG &amp; RESERVE PIT LAYOUT</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>Location: <b>660' FNL &amp; 660' FWL</b>  <b>Unit D, Section 9, T-25-S, R- 32-E</b>  <b>Lea Co, NM</b></p>	<p>Well name and number  <b>Paduca Federal 9 #2</b></p>



**Figure No. 3**

## Supplemental Drilling Data

H. L. BROWN OPERATING, L.L.C.  
Paduca Federal "9" No. 2  
660' FNL & 660' FWL, Unit D, Sec. 9, T-25-S, R-32-E  
Lea County, New Mexico  
New Mexico Lease LC - 061873-b

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 5000' to test the Delaware formation. 8-5/8" intermediate pipe will be set at 780' and 5-1/2" production casing will be set at 5000'. The Delaware will be perforated and fracture stimulated.

#### 1.) Surface Formation: Ogallala

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

Rustler Anhydrite	750'	
T/ Salado Salt	1000'	B/ Salado Salt 3200'
Castile Anhydrite	3200	
Lamar Shale	4570'	
Ramsey Sand	4590'	
Ford Shale	4635'	
Olds Sands	4645'	

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

Water	None Anticipated
Oil/ Gas	Ramsey/ Olds sands at 4590'
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			
12-1/4"	8-5/8"	24	J-55	LT&C	780'	260 sx "C" Poz 35:65:6 200 sx "C" w/ CaCl <sub>2</sub>	Surface * must circulate
7-7/8"	5-1/2"	15.50	J-55	LT&C	5000'	175 sx "C"	4000'

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 - 780'	FW-Gel	8.5-9.0	32-35	NC	
780' - 4000'	Cut Brine	9.2-10.3	32-34	NC	
4000' - 5000'	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: may cut up to 10 rotary sidewall cores.
- 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.

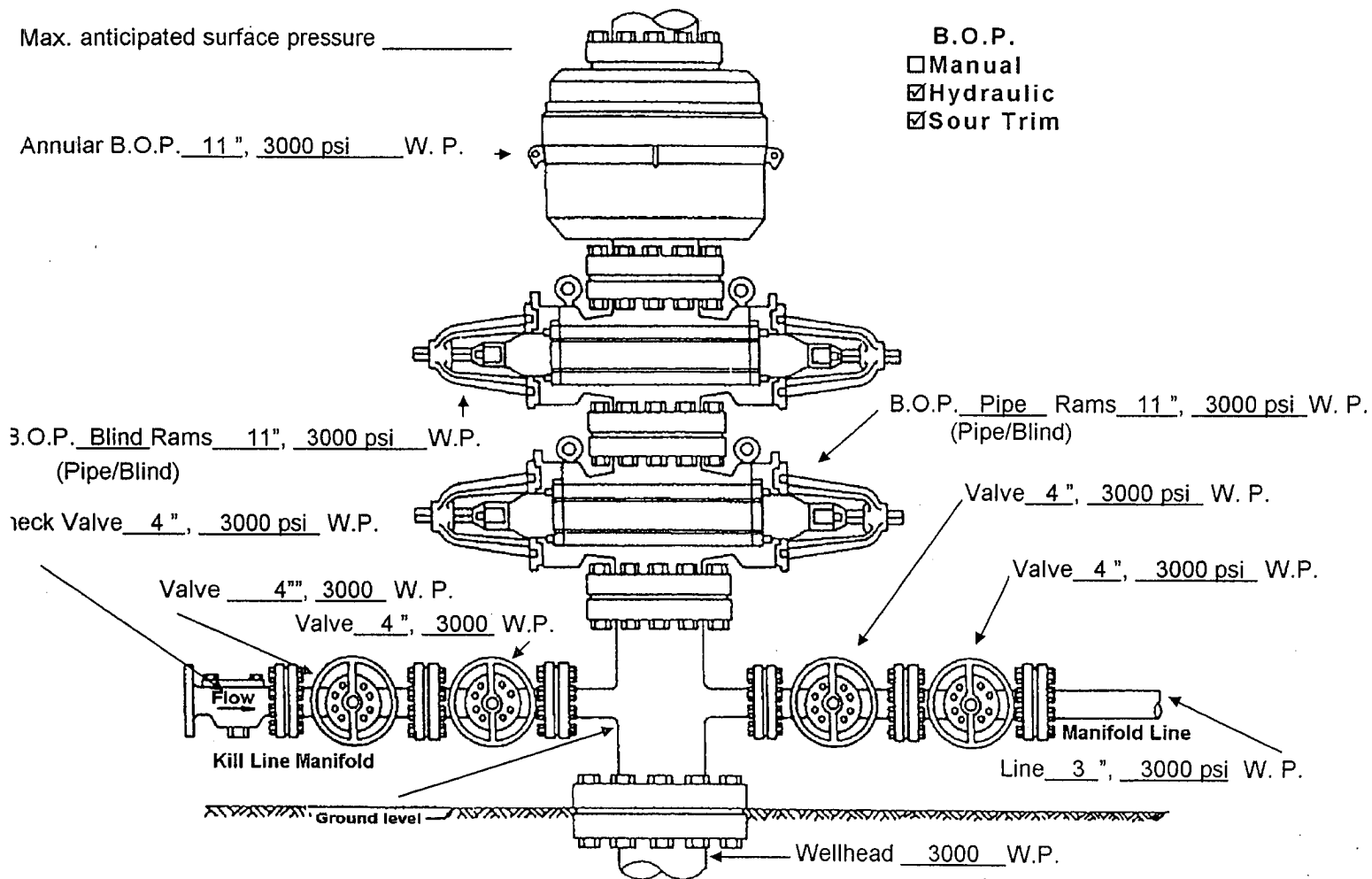
**10.) Completion Equipment:**

The completed well will be rod pumped with a screw-on wellhead and stuffing box. (**Figure No. 6**).

**11.) Anticipated Starting Date:**

Drilling operations are expected to commence August 15, 2004 and are expected to last 8 days. Completion operations are expected to last 10 days.

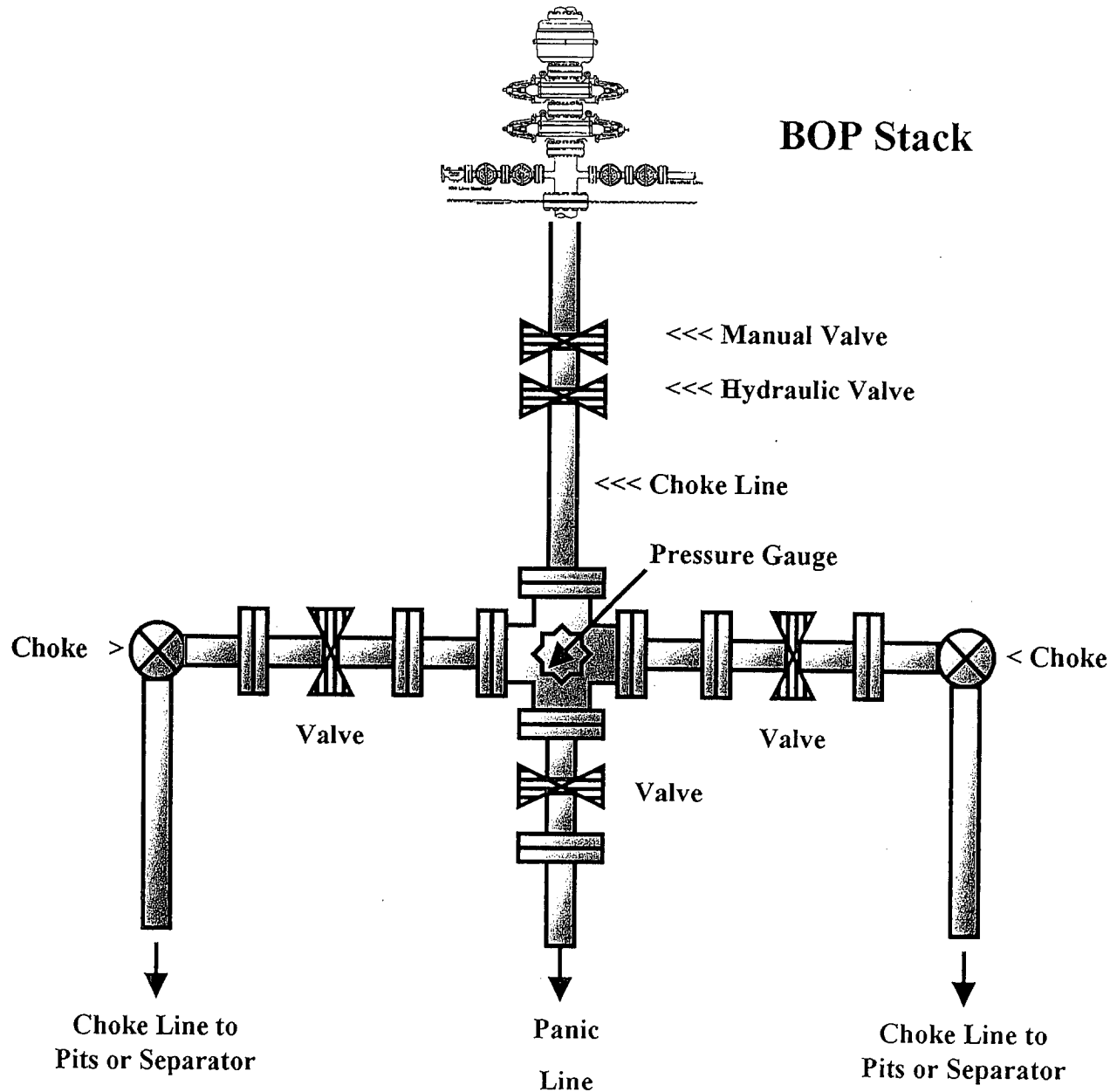
<b>WELLHEAD BLOWOUT CONTROL SYSTEM</b> Worksheet supplement for "Application for Permit to Drill or Deepen a Well"	Applicant <b>H.L. Brown Operating L.L.C</b> <b>P.O. Box 2237, Midland Texas 79702</b>
<b>Location: 660' FNL &amp; 660' FWL</b> <b>Unit D, Section 9, T-25-S, R- 32-E</b> <b>Lea Co, NM</b>	Well name and number <b>Paduca Federal 9 #2</b>



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.

**Figure No. 4**

<p align="center"><b>CHOKE MANIFOLD 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: 660' FNL &amp; 660' FWL</b>  <b>Unit D, Section 9, T-25-S, R- 32-E</b>  <b>Lea Co, NM</b></p>	<p>Well name and number  <b>Paduca Federal 9 #2</b></p>



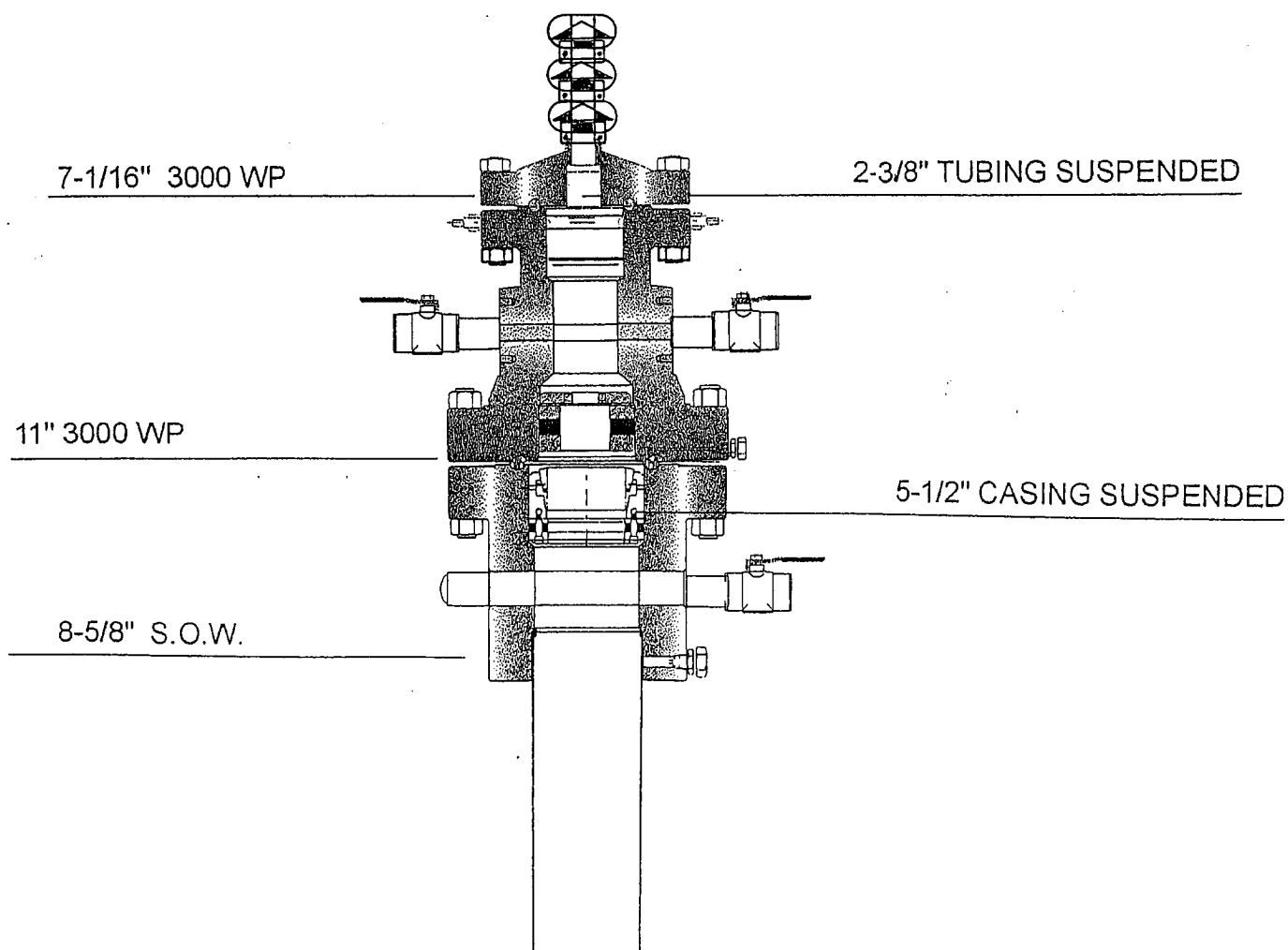
3/17/2004

RTM

**Figure No. 5**

<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: 660' FNL &amp; 660' FWL</b>  <b>Unit D, Section 9, T-25-S, R- 32-E</b>  <b>Lea Co, NM</b></p>	<p>Well name and number  <b>Paduca Federal 9 #2</b></p>

Stuffing Box For Rod Pumping



**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 Names: **Paduca Federal 8, Paduca Federal 9**

Lease Number: **LC – 061873-B (lease will be reassigned if well is completed)**

Legal Description of Land: **T-25-S, R-32-E, NMPM, Lea County, New Mexico:**

**Section 4: SW/4**

**Section 5: SE/4**

**Section 8: E/2**

**Section 9: NW/4**

**Section 17: NE/4**

Formations: **All uncommitted mineral interests from surface to the base of the Wolfcamp.**

Bond Coverage: **Statewide**

BLM Bond File Number: **#0679788**

Authorized Signature: 

Name: Robert McNaughton

Title: Operations Manager/ Petroleum Engineer

Date: July 26, 2004



1. (For BLM Use) BLM Report No.		2. (For BLM Use) Reviewer's Initials/Date _____ Accepted ( ) Rejected ( )		3. NMCRIS Number: 89263	
4. Type of Report:                      Negative ( X )                      Positive ( )					
5. Title of Report: A Cultural Resource Survey for the Paduca "9" Federal No. 2 Well Pad and Access Road  Author(s): Justin Rein				6. Fieldwork Date(s): July 16, 2004	
				7. Report Date: July 16, 2004	
8. Consultant Name/Address: Mesa Field Services Direct Charge: Theresa Straight Field Personnel Names: Theresa Straight 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-1044	
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)	9.80				9.80
b. Area of Effect (acres)	4.44				4.44
14. Block                      Length <u>600 ft</u> Width <u>600 ft</u> Linear                      Length <u>1,120 ft</u> Width <u>100 ft</u>					
15. Location (Map[s] Attached): a. State: New Mexico b. County: Lea County c. BLM Office: Carlsbad d. Nearest City or Town: Jal, NM e. Legal Description: T 25 S, R 32 E, Section 9: W½ NW¼ f. Well Pad Footages: The Paduca "9" Federal No. 2 is centered 660 FNL and 660 FWL of Section 9. g. USGS 7.5' Map Name(s), Date(s), and Code(s): Paduca Breaks NW, New Mexico 1973 (32103-B6)					

**16. Project Data:**

**a. Records Search:** Date(s) of BLM File Review: July 16, 2004 Name of Reviewer(s): Justin Rein  
Date(s) of ARMS Data Review July 15, 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 are located within 0.25 mile of the undertaking. An expanded search revealed two sites, LA 46450 and LA 46451, within one mile. Neither site will be impacted by the proposed project.

**b. Description of Undertaking:** H.L. Brown Operating plans to construct the Paduca "9" Federal No. 2 well pad and access road. The project is located in T 25 South, Range 32 East, Section 9. The proposed well is centered 660 feet from the north line and 660 feet from the west line of Section 9. 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 the northeast corner of an existing well pad and travels approximately 1,120 ft north to the southeast corner of the proposed pad. The access road will impact a 30 ft wide corridor, yet a 100 ft wide corridor was surveyed. The southern 300 ft of the proposed road falls within previous project MFS-1001 (NMCRIS No. 87607), and though field checked was not included in the total survey acres. Similarly, the northern 150 ft of the road lies within the current block survey and was likewise not included in total acreage. In all, 9.80 acres was surveyed, all of which is on property owned and administered by the BLM-CFO.

**c. Environmental Setting (NRCS soil designation; vegetative community; elevation; etc.):** The project area is located within the Paduca Oil Field, eight miles northeast of Phantom Banks and four miles northwest of Paduca Breaks. The terrain is relatively flat with a southern slope of less than one percent. The soil is reddish brown sands of the Pyote-Maljammar-Kermit association as defined by the Soil Conservation Service of the U.S. Department of Agriculture. Local vegetation includes shin oak, sage, snakeweed, mesquite, cacti, grasses, and various low forbes. Due to this vegetative cover, ground surface visibility averaged 75 percent at the time of survey.

Meteorological data was obtained for the nearby city of Jal, New Mexico from the Western Regional Climate Center online database. From 1919 to 2003, Jal received an annual precipitation of 12.31 inches. July through September were the wettest months while December through February were the driest. During the same time, Jal had an average high temperature of 79.5 degrees Fahrenheit and an average low temperature of 48.2 degrees Fahrenheit. January was the coldest month with an average high of 59.7 degrees Fahrenheit, while July was the warmest with an average high temperature of 96.5 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:** One isolated manifestation was encountered and recorded.

**a. Location/Identification of Each Resource:** IM no.1 consists of a white chalcedony stage I biface. The tool is complete and exhibits approximately 15 percent remaining cortex. The edge is continuous with a variable angle. It is a size 4 (Zone 13: 624011 E/ 3557563 N).

**b. Evaluation of Significance of Each Resource:** By definition, IM no. 1 is recommended ineligible to the NRHP.

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

**PADUCA BREAKS NW, NEW MEXICO 1973**  
T 25 S, R 32 E, Section 9

**BLM - CFO PROPERTY**

**STATE PROPERTY**

**LEGEND**

- Block Survey
- Proposed Access Road
- Isolated Manifestation

**PADUCA BREAKS WEST, NEW MEXICO / TEXAS 1973**

**BLM - CFO PROPERTY**

Scale: 1:24,000

0 0.5 1 Miles

0 0.5 1 1.5 Kilometers

TRUE NORTH

Section Numbers: 4, 9, 16, 17

Other Labels: IM #1, Gravel Pit, PADUCA FIELD

*Mesa Field Services*