

Resubmit

OPER. OGRID NO. 113315  
PROPERTY NO. 25070  
POOL CODE 31680  
EFF. DATE 10/01/04  
API NO. 30-025-36897

Form 3160-3  
(September 2001)

UNITED 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. <u>LC-032233-A</u>
1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other <u>INJECTION</u> <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator <u>Texland Petroleum - Hobbs, L.L.C.</u>		7. If Unit or CA Agreement, Name and No.
3a. Address <u>177 Main #3200 Ft Worth, Tx. 76102</u>		8. Lease Name and Well No. <u>Bowers "A" Federal 40</u>
3b. Phone No. (include area code) <u>817-336-2751</u>		9. API Well No. <u>30-025-36897</u>
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface <u>2440' FNL and 195' FWL</u> At proposed prod. zone <u>170 See SN DATED 7/23/04</u>		10. Field and Pool, or Exploratory <u>Hobbs: Upper Blinberry</u>
14. Distance in miles and direction from nearest town or post office* <u>3 miles west of Hobbs</u>		11. Sec., T., R., M., or Blk. and Survey or Area <u>Sec. 29, T. 18 S.</u>
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) <u>195' FWL</u>	16. No. of Acres in lease <u>300</u>	12. County or Parish <u>Lea</u>
17. Spacing Unit dedicated to this well <u>40</u>	18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	13. State <u>New Mex.</u>
19. Proposed Depth <u>6000</u>	20. BLM/BIA Bond No. on file <u>588064</u>	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) <u>3650</u>	22. Approximate date work will start* <u>8/1/04</u>	23. Estimated duration <u>12 days</u>
24. Attachments		

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

- Well plat certified by a registered surveyor.
- A Drilling Plan.
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification.
- Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature <u>Diane Harber</u>	Name (Printed/Typed) <u>Diane Harber</u>	Date <u>6/30/04</u>
Title <u>Regulatory Assistant</u>		
Approved by (Signature) <u>PSI RUSS SORENSSEN</u>	Name (Printed/Typed) <u>PSI RUSS SORENSSEN</u>	Date <u>AUG 11 2004</u>
Title <u>ACTING FIELD MANAGER</u>	Office <u>CARLSBAD FIELD OFFICE</u>	

Application approval does not warrant or certify the 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.

APPROVAL FOR 1 YEAR

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)

Lea County Controlled Water Basin

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED

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. 1004-0137  
Expires: March 31, 2007

**SUNDRY NOTICES AND REPORTS ON WELLS**

*Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.*

**SUBMIT IN TRIPLICATE- Other instructions on reverse side.**

1. Type of Well  
☐ Oil Well ☐ Gas Well ☒ Other **INJECTION**

2. Name of Operator **Texland Petroleum L.P.**

3a. Address **#3200  
777 Main Fm, TX 76102**

3b. Phone No. (include area code)

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

**2440' FNL ÷ 170 FWL  
Sec 29, T.18.S R.38.E NMPM**

5. Lease Serial No.  
**LC 032233A**

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

8. Well Name and No.  
**Bowers A Federal 4C**

9. API Well No.

10. Field and Pool, or Exploratory Area

**Hobbs: Upper Blinberry  
Hwa Co, N.M.**

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☒ Notice of Intent  
☐ Subsequent Report  
☐ Final Abandonment Notice

TYPE OF ACTION

- |   |   |  |   |
|---|---|--|---|
| <input type="checkbox"/> Acidize              | <input type="checkbox"/> Deepen           | <input type="checkbox"/> Production (Start/Resume) | <input type="checkbox"/> Water Shut-Off |
| <input type="checkbox"/> Alter Casing         | <input type="checkbox"/> Fracture Treat   | <input type="checkbox"/> Reclamation               | <input type="checkbox"/> Well Integrity |
| <input type="checkbox"/> Casing Repair        | <input type="checkbox"/> New Construction | <input type="checkbox"/> Recomplete                | <input type="checkbox"/> Other          |
| <input type="checkbox"/> Change Plans         | <input type="checkbox"/> Plug and Abandon | <input type="checkbox"/> Temporarily Abandon       |   |
| <input type="checkbox"/> Convert to Injection | <input type="checkbox"/> Plug Back        | <input type="checkbox"/> Water Disposal            |   |

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

**See attached plat showing moving the stake from 195' FNL to 170' FWL.**

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

**Diane Harber**

Title

**Regulatory Assistant**

Signature

**Diane Harber**

Date

**7.23.04**

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved by

**ISL Russ Sorenson**

Field Manager

**FIELD MANAGER**

Date

**AUG 11 2004**

Conditions of approval, if any, are attached. Approval of this notice 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.

Office

**CARLSBAD FIELD OFFICE**

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 page 2)

DISTRICT I  
1825 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 30-025-36897	Pool Code 31680	Pool Name Hobbs Upper Blinberry
Property Code 25070	Property Name BOWERS "A" FEDERAL	Well Number 40
OGRID No. 113315	Operator Name TEXLAND PETROLEUM INC.	Elevation 3650'

Surface Location

UL or lot No. E	Section 29	Township 18 S	Range 38 E	Lot Idn	Feet from the 2440	North/South line NORTH	Feet from the 170	East/West line WEST	County LEA
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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 48	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>LAT - N32°43'07.9" LONG - W103°10'41.3"</p>	<b>OPERATOR CERTIFICATION</b>  I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.  Mark A. Jacoby Signature Mark A. Jacoby Printed Name Area Mgr. of Drly + Prod. Title 7-26-04 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.  JULY 20, 2004 Date Surveyed Signature, Seal or Professional Surveyor Professional Surveyor Certification No. Gary L. Jones 7977 BASIC SURVEYS

## OCD-HOBBS

Form 3160-5  
(April 2004)UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB No. 1004-0137  
Expires: March 31, 2007

## SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE- Other instructions on reverse side.

1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other <b>INJECTION</b>	5. Lease Serial No. <b>LC-032233-A</b>
2. Name of Operator <b>Texland Petroleum-Hobbs, L.L.C.</b>	6. If Indian, Allottee or Tribe Name
3a. Address <b>777 main #3200, Ft Worth, Tx</b>	7. If Unit or CA/Agreement, Name and/or No.
3b. Phone No. (include area code) <b>817-336-2751</b>	8. Well Name and No. <b>Bowers 'A' Federal #40</b>
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) <b>2440' FNL, 195FWL, Sec 29, T18S, R38E, NMPM</b>	9. API Well No.
	10. Field and Pool, or Exploratory Area <b>Hobbs, Upper Blinberry</b>
	11. County or Parish, State <b>Lea, New Mexico</b>

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <b>lay injection lines to well</b>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleation in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Texland Petroleum-Hobbs, L.L.C. proposes to lay a 2" injection line of 2065' from the Bowers A Federal #40 to the Bowers A Federal injection header as staked and shown on attached plat. The surface disturbance will be a clearance of 2065' long by 50' will be dragged and a 12" deep ditch dug where the line will be buried. After completion the site will be left in as aesthetically pleasing condition as possible. Archaeological survey report has been requested and filed per attached plat.

14. I hereby certify that the foregoing is true and correct  
Name (Printed/Typed)

Signature <b>Diane Harber</b>	Title <b>Regulatory assistant</b>
<b>Diane Harber</b>	Date <b>6-30-04</b>

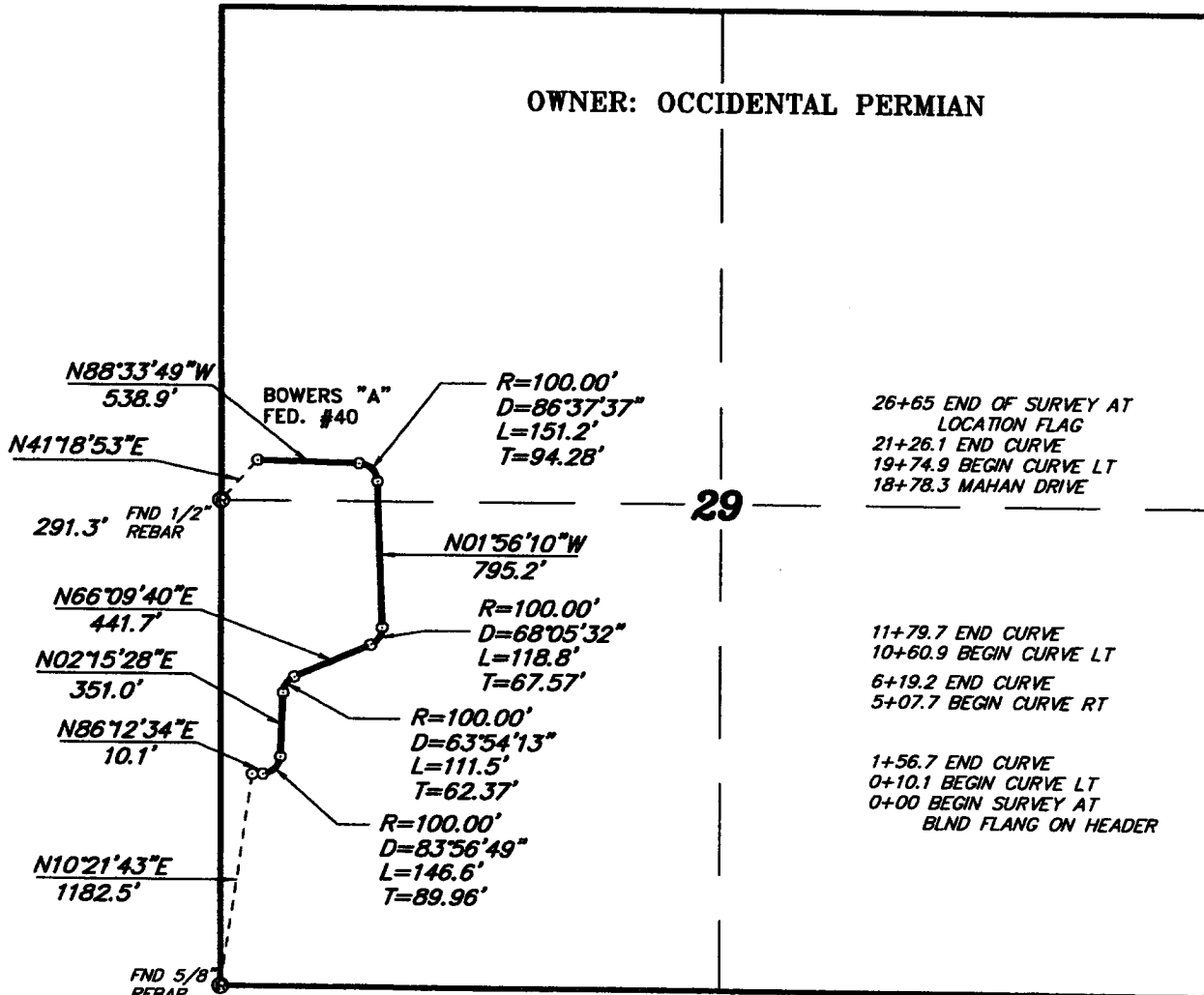
## THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by <b>LSI RISS SORENSEN ACTING</b>	Title <b>FIELD MANAGER</b>	Date <b>AUG 11 2004</b>
Office <b>CARLSBAD FIELD OFFICE</b>		

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 page 2)

SECTION 29, TOWNSHIP 18 SOUTH, RANGE 38 EAST,  
LEA COUNTY, NEW MEXICO.



LEGAL DESCRIPTION

A STRIP OF LAND 30.0 FEET WIDE, LOCATED IN SECTION 29, TOWNSHIP 18 SOUTH, RANGE 38 EAST, N.M.P.M., LEA COUNTY, NEW MEXICO AND BEING 15.0 FEET LEFT AND RIGHT OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY.

BEGINNING AT A POINT WHICH LIES N.10°21'43"E., 1182.5 FEET FROM THE SOUTHWEST CORNER OF SAID SECTION 29; THENCE N.86°12'34"E., 10.1 FEET TO A POINT ON A CURVE TO THE LEFT HAVING A RADIUS OF 100.0 FEET, A CURVE BEARING OF 83°56'49" THROUGH A DISTANCE OF 146.5 FEET; THENCE N.02°15'28"E., 351.0 FEET TO A POINT ON A CURVE TO THE RIGHT HAVING A RADIUS OF 100.0 FEET, A CURVE BEARING OF 63°54'13" THROUGH A DISTANCE OF 111.5 FEET; THENCE N.66°09'40"E., 441.7 FEET TO A POINT ON A CURVE TO THE LEFT HAVING A RADIUS OF 100.0 FEET, A CURVE BEARING OF 68°05'32" THROUGH A DISTANCE OF 118.8 FEET; THENCE N.01°56'10"W., 795.2 FEET TO A POINT ON A CURVE TO THE LEFT HAVING A RADIUS OF 100.0 FEET, A CURVE BEARING OF 86°37'37" THROUGH A DISTANCE OF 151.2 FEET; THENCE N.88°33'49"W., 538.9 FEET TO THE END OF THIS LINE WHICH LIES N.41°18'53"E., 291.3 FEET FROM THE WEST QUARTER CORNER OF SAID SECTION 29. SAID STRIP OF LAND BEGIN 2665.0 FEET OR 161.52 RODS IN LENGTH.

I HEREBY CERTIFY THAT THIS PLAT WAS PREPARED FROM FIELD NOTES OF AN ACTUAL SURVEY AND MEETS OR EXCEEDS ALL REQUIREMENTS FOR LAND SURVEYS AS SPECIFIED BY THIS STATE.

GARY L. JONES N.M. P.S.  
TEXAS P.L.S.



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

W.O. Number: 4416 Drawn By: R. GOAD  
Date: 06-28-2004 Disk: KJG CD#5 - TEX4416A.DWG

1000 0 1000 2000 FEET

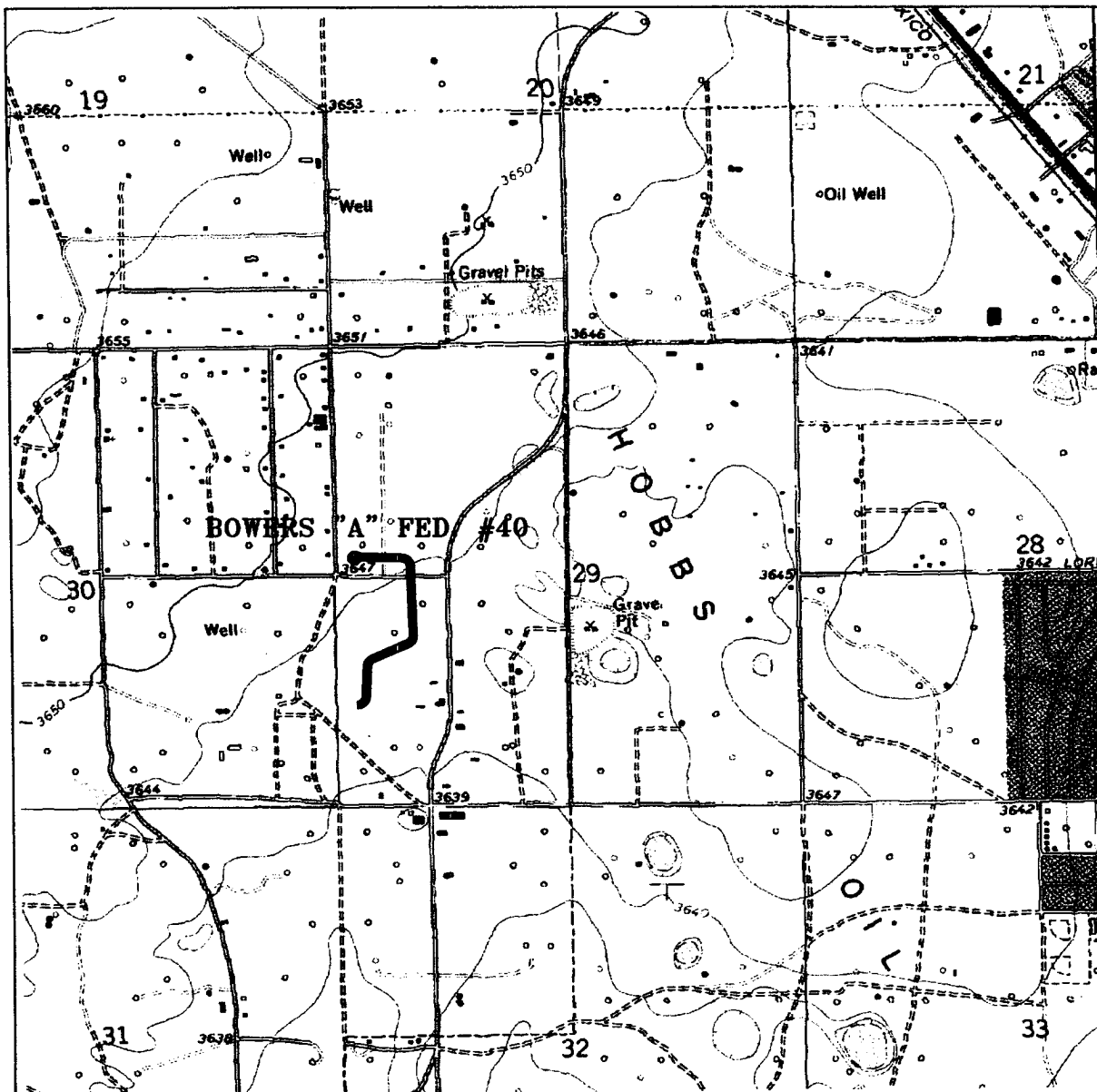
**TEXLAND PETROLEUM INC.**

REF: PROPOSED INJECTION LINE TO THE BOWERS "A" FED. #40

A PIPELINE CROSSING FEE LAND IN  
SECTION 29, TOWNSHIP 18 SOUTH, RANGE 38 EAST,  
N.M.P.M., LEA COUNTY, NEW MEXICO.

Survey Date: 06-25-2004 Sheet 1 of 1





INJECTION LINE TO THE BOWERS "A" FEDERAL #40  
 Section 29, Township 18 South, Range 38 East,  
 N.M.P.M., Lea 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: 4416AA - KJG CD#4

Survey Date: 06-25-2004

Scale: 1" = 2000'

Date: 06-28-2004

**TEXLAND  
 PETROLEUM INC.**

N.M. Oil Cons. Division  
1625 N. French Dr.  
Hobbs, NM 88240

**TEXLAND PETROLEUM, L.P.**

EXPLORATION AND PRODUCTION

777 MAIN STREET, SUITE 3200

FORT WORTH, TEXAS 76102

(817) 338-2751

June 30, 2004

RECEIVED  
BUREAU OF LAND MANAGEMENT  
ROSWELL OFFICE

United States Dept. of Interior  
Bureau of Land Management  
Roswell District Office  
2909 W. Second Street  
Roswell, New Mexico 88201

Re: Application for Permit to Drill  
Texland Petroleum - Hobbs L.L.C.  
Bowers "A" Federal Well #40  
Lea County, New Mexico  
Lease No. LC - 032233.A

Gentlemen:

Texland Petroleum - Hobbs, L.L.C respectfully requests permission to drill our Bowers "A" Federal, Well #40 located 2440' FNL & 195' FWL of Sec. 29, T-18-S, R-38-E, Lea County, New Mexico, Federal Lease No. LC-032233-A. The proposed well will be drilled to a TD of approximately 6000' (TVD). The location and work area has been staked. It is approximately 3 miles west of Hobbs, New Mexico.

In accordance with requirements stipulated in Federal Onshore Oil & Gas Order No. 1 under 43 CFR 3162.1, our Application for Permission to Drill and supporting evidence is hereby submitted.

***Application for Permit to Drill:***

1. Form 3160.3, Application for Permit to Drill
2. Form C-102 location & acreage dedication plat certified by Gary Jones, Registered Land Surveyor No. 7977, in State of New Mexico dated April 20, 2001.
3. Elevation of the unprepared ground is 3650' above sea level.
4. Geologic name of surface formation is Permian Rustler.
5. Rotary drilling equipment will be utilized to drill the well to TD 6000' (TVD), and run casing. This equipment will then be rigged down and the well will be completed with a well servicing unit.
6. Proposed total depth is 6000' TVD.



7. Estimated tops of important geologic markers.

Santa Rosa	1135' TVD	San Andres	4060' TVD
Rustler	1455' TVD	Glorieta	5370' TVD
Yates	2630' TVD	Blinbry	5755' TVD
Seven Rivers	2740' TVD		
Queen	3120' TVD		

8. Estimated depths at which anticipated water, oil, gas or other mineral bearing formations are expected to be encountered:

Possible oil/gas:	Yates	2630' TVD
	Seven Rivers	2740' TVD
	Queen	3210' TVD
	San Andres	4060' TVD
	Glorieta	5370' TVD

Primary objective: Blinbry 5755' TVD

9. The proposed casing program is as follows:

Surface: 8-5/8", 24# J55 ST&C new casing set at 1500'  
Production: 5-1/2", 15.5# J-55 LT&C new casing from 0-3800'  
17# J-55 LT&C new casing from 3800-6000'

10. Casing setting depth and cementing program:

a. 8-5/8" surface casing set at 1500' in 12-1/4" hole. Circulate cement with 650 sx. Class C + 4% Bentonite + 2% CaC12 + .25#/sk Cello-seal followed by 200 sx. Class C w/2% CaC12.

If cement does not circulate, a temperature survey will be run to find the TOC and then finish cementing to surface through 1" using Class C with 2% CaC12.

b. Cmt 1st stage with 375 sx. Super H 2-1/2% salt, .4% LAP-1 .2% CFR-3, 1/4# flocele. Cmt 2<sup>nd</sup> stage with 100 sx. Interfill C, 300 sx. Premium plus .5% LAP-1, .2% CFR-3, 700 sx. Interfill C 1/4# flocele, 50 sx. Premium plus.

Estimated top of cement is surface.

Note: Cement volumes will be adjusted based on experience and fluid caliper

11. Pressure Control Equipment

0 - 1500'	None
1500-6000'	6" 3000# ram type preventers with one set

blind rams and one set pipe rams and a choke Manifold and 120 gallon accumulator with floor and remote operating stations and auxiliary power system.

After setting the 8-5/8" casing, the blowout preventers and related control equipment shall be pressure tested to 1500 psi. Any equipment failing to test satisfactorily shall be repaired or replaced. Results of the BOP test will be recorded in the Driller's Log. The BOP's will be maintained ready for use until drilling operations are completed.

BOP drills will be conducted as necessary to assure that equipment is operational and each crew is properly trained to carry out emergency duties.

Accumulator shall maintain a pressure capacity reserve at all times to provide for the close-open-close sequence of the blind and pipe rams of the hydraulic preventers.

12. Mud Program:

0 - 1500'	Fresh water/native mud. Lime for pH control (9-10). Paper for seepage. Wt 8.7-9.2 ppg, Vis 32-35 sec. Potential lost circulation at +/- 4000' may require viscous pill with medium to coarse lost circulation material.
1500 - 5700'	Brine water. Lime for pH control (9-10). Paper for seepage. Wt 9.9-10.1 ppg, vis 28-29 Sec. Potential lost circulation at +/- 4000' may require viscous pill with medium to coarse lost circulation material.
5700-6000'	Mud up will be determined by hole conditions and on wells obtaining open hole logs. Brine, water. Caustic soda for pH control (9-10). Paper for seepage. Wt 10-10.2 ppg vis. 29-36 sec. WL 10-15 cc. Use starch for filtration control.

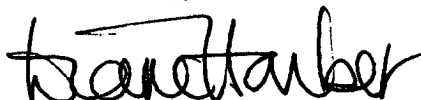
13. Testing, logging and Coring Program:

- A. Logging Programs
  - a) Open hole - none
  - b) Cased hole - GR/CLL/CNL

14. No abnormal temperatures or pressures anticipated. H<sub>2</sub>S can be expected during drilling through the San Andres formation at 3800 to 4600 ft. Oxy operates production from this interval and produces a concentration of 45,000 to 60,000 ppm. H<sub>2</sub>S detection and monitoring equipment will be installed and will be in compliance with NMOCD. There will be 10 - 300 CF air cylinders at 2400# per cylinder, 4 - 30 min. SCBA's, 4 - 30 min. work units, 4 - 5 min. escape packs, 2 - 10" wind socks, 2 - 20" Wind sock poles, and all the associated signs, hoses, etc. Contingency Plan is attached.
15. Anticipated starting date is August 1, 2004. It should take approximately 12 days to drill the well and another 5 days to complete.
16. The multi-point surface use & operation plan is attached.

If the Bureau of Land Management needs additional information to evaluate this application, please advise.

Sincerely,



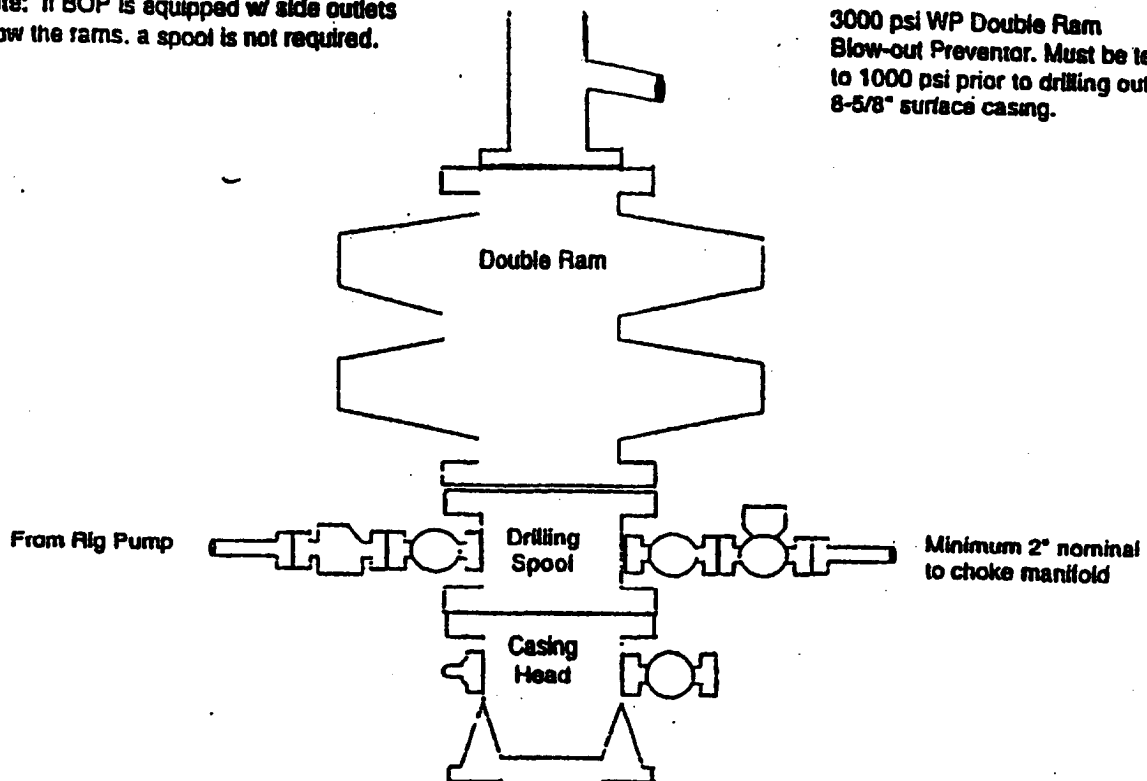
Diane Harber  
Regulatory Assistant

:dh  
Enclosures

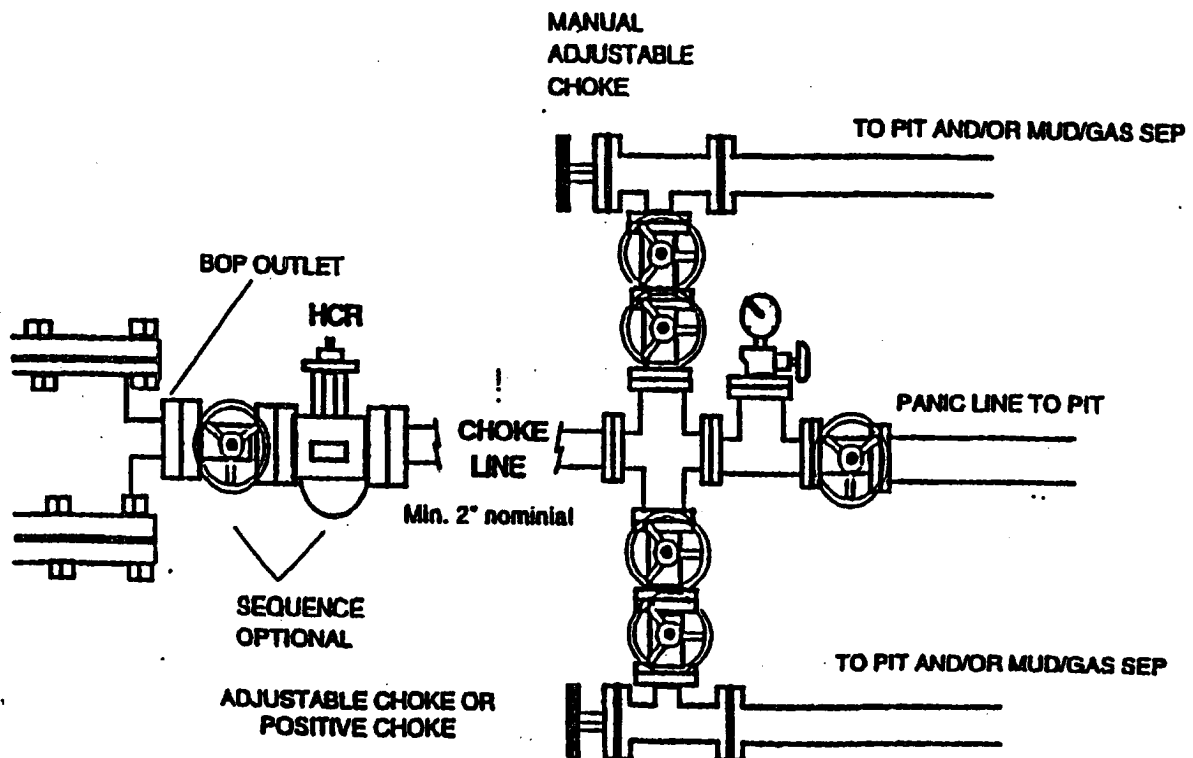
## BOP Schematic

\*Note: If BOP is equipped w/ side outlets below the rams, a spool is not required.

3000 psi WP Double Ram  
Blow-out Preventor. Must be tested  
to 1000 psi prior to drilling out  
8-5/8" surface casing.



## Choke Manifold Schematic



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

Texland Petroleum – Hobbs, L.L.C.  
Bowers "A" Federal Well #40  
Lea County, New Mexico  
Lease No. LC-32233- A

This plan is submitted with the Application for Permit to Drill the above described well. The purpose of the plan is to identify the location of the proposed well, the proposed construction activities and operations plan, the magnitude of necessary surface disturbance involved and the procedures to be followed in rehabilitating the surface after completion of the operation so that a complete appraisal may be made of the environmental affects associated with the operation.

A registered New Mexico land surveyor has staked the well and work area. Geo-Marine Inc. has been engaged to make an archaeological reconnaissance of the work area. Their findings concerning cultural resources will be reported to the Bureau of Land Management.

### **1. Existing Roads**

A copy of a USGS "East Hobbs, SE New Mexico" quadrangle map is attached showing the proposed location. The well location is spotted on this map, which also shows the existing road system.

Directions to location: From Hobbs, New Mexico, go west on US 62-180 to West County Road. Go north 1.6 miles to Mahan Drive. Go west .1 mile to the location on the right side of the road.

### **2. Planned Access Road**

- A. No access road will be built.
- B. Surfacing material: Caliche
- C. Maximum Grade: No grade
- D. Turnouts: None
- E. Drainage Design: Edges of caliche location sloped
- F. Culverts: None
- G. Cuts and Fills: None
- H. Gates or Cattleguards: None

3. Existing wells within a one-mile radius of the proposed injection well are shown on an area map.

4. Location of Existing and/or Proposed Facilities

Within one mile radius:

Gas production facilities: None

Oil production facilities: 1/4 mile south

Oil gathering lines: map of existing gathering line is attached. None will be installed with this application.

Gas gathering lines: None

Injection lines: A line will be installed from this well 1000' south

Disposal lines: None

All site security guidelines identified in 43 CFR 3162.7 regulation will be adhered to and a site security plan will be submitted for the Bowers "A" federal Well #40 tank battery. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed.

5. Location and Type of Water Supply

Fresh water and brine water will be used to drill this well. It will be purchased from a supply in Hobbs and transported to the well site. Bids will be taken from transporters to provide brine and fresh water.

6. Source of Construction Materials

Caliche for surfacing the well pad will be obtained from a pit located in SE of NE Section 32, T18S, R38E, Lea County, New Mexico.

7. Method of Handling Waste Disposal

- A. Drill cuttings will be accumulated in lined drilling pits, and hauled to disposal when drilling is completed.
- B. Drilling fluids will be hauled to disposal.
- C. Water produced during test will be disposed of in the drilling pits. Oil produced during tests will be stored in the test tanks until sold.

- D. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- E. Trash, waste paper, garbage and junk will be collected in steel trash bins and removed after drilling and completion operations are completed. All waste material will be contained to prevent scattering by the wind.
- F. 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 needed.

9. Wellsite Layout

- A. The location and dimensions of the well pad mud pits, reserve pit and location of major rig components are shown on the well site layout sketch, which is attached. The V-door will be to the east and the pits to the north.
- B. Leveling of the wellsite will be required with minimal cuts or fills anticipated.
- C. The reserve pit will be plastic lined.
- D. While constructing the pits and material is encountered at a depth, which would not allow the pits to meet the BLM stipulations without blasting, Texland requests a variance. There will be an adequate amount of material to reclaim the pit per the stipulations.
- E. 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 materials not needed for operations will be removed.
- B. Pits will be filled and location cleaned of all trash and junk to leave the well site in as aesthetically pleasing condition as possible. Any plastic material used to line the pits or sumps will be cut off below ground level as far as possible and disposed of before the pits are covered. All unattended pits containing liquid will be fenced and the liquid portion hauled to disposal.
- C. After abandonment of the well, surface restoration will be in accordance with the landowner. This will be accomplished as expeditiously as

possible. Barring unforeseen problems, all pits will be filled and leveled within 90 days after abandonment.

11. **Surface Ownership**

The wellsite is on privately owned surface. The surface is owned by: Grimes Land Co. Ltd, Mr. Gary Schubert, P. O. Box 5102, Hobbs, New Mexico. Texland has a surface use agreement with Mr. Gary Schubert. They will be notified of our intention to drill prior to any activity.

12. **Other Information**

- A. Topography: The location is a flat plain. GL elevation is 3650'.
- B. Soil: Sandy clay loams
- C. Flora and Fauna: The vegetative cover is generally sparse consisting of mesquite, yucca, shinnery oak, sandsage and perennial native range grasses. Wildlife in the area is also sparse consisting of coyotes, rabbits, rodents, reptiles, dove and quail.
- D. Ponds and Streams: There are no rivers, streams, lakes or ponds in the area.
- E. Residences and Other Structures: There are occupied dwellings within a ½ mile radius of the location. The surface at the wellsite has been substantially disturbed by previous oil well drilling and producing activities.
- F. Archaeological, Historical and Cultural Sites: Cultural resources have been recorded in the area. Geo-Marine Inc. will be engaged to make an archaeological reconnaissance of the work area.
- G. Land Use: Idle
- H. The well site will be maintained and kept clean of all trash and litter detracts from the surrounding environment. Equipment will be maintained in accordance with good operating practice.
- I. After the wellsite is cleaned and pits and sumps backfilled, any obstruction to the natural drainage will be corrected by ditching or terracing. All disturbed areas, including any access road no longer needed, will be ripped. Those areas will be reseeded with grass if, in the opinion of the landowner, it is required.



**13. Operator's representatives and certification**

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

Jerry Rogers  
P. O. Box 239  
Seminole, Texas 79360  
Office phone: 432-596-4412  
Home phone: 432-794-6818

I hereby certify that I, or person under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; the statements made in this 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 Texland Petroleum - Hobbs, L.L.C. and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

6-30-04

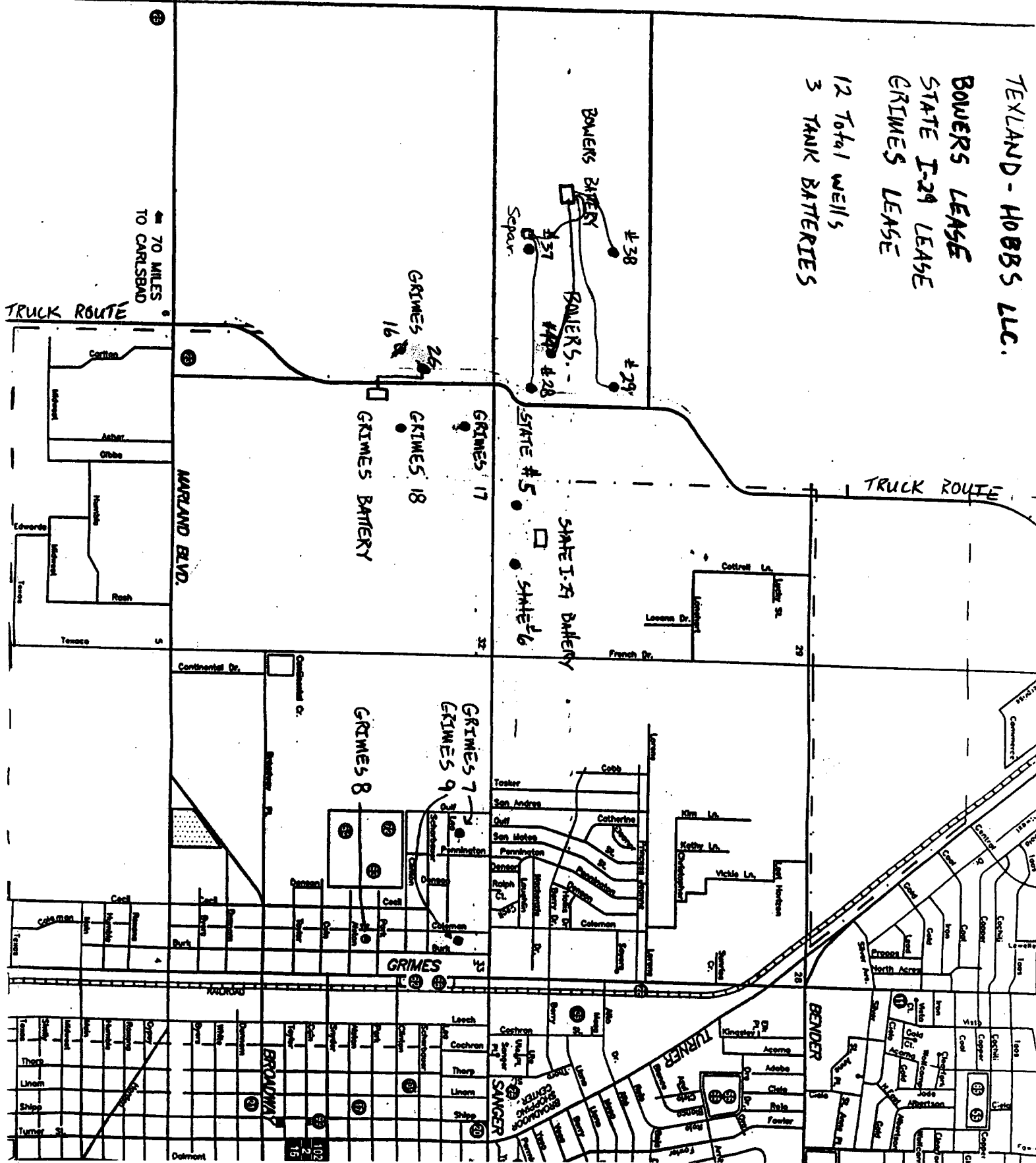
Date

  
Jerry Rogers  
Operations Engineer

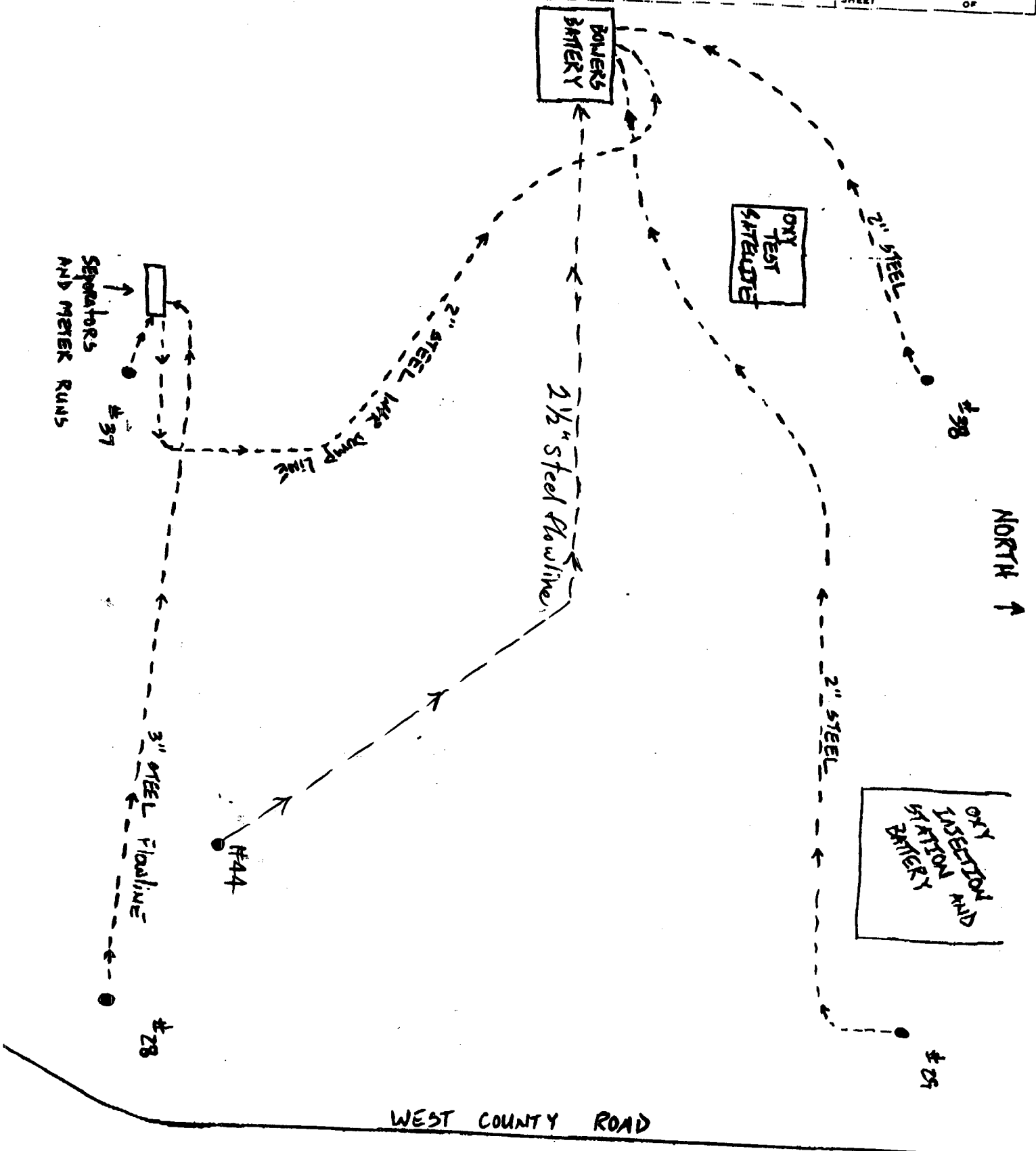
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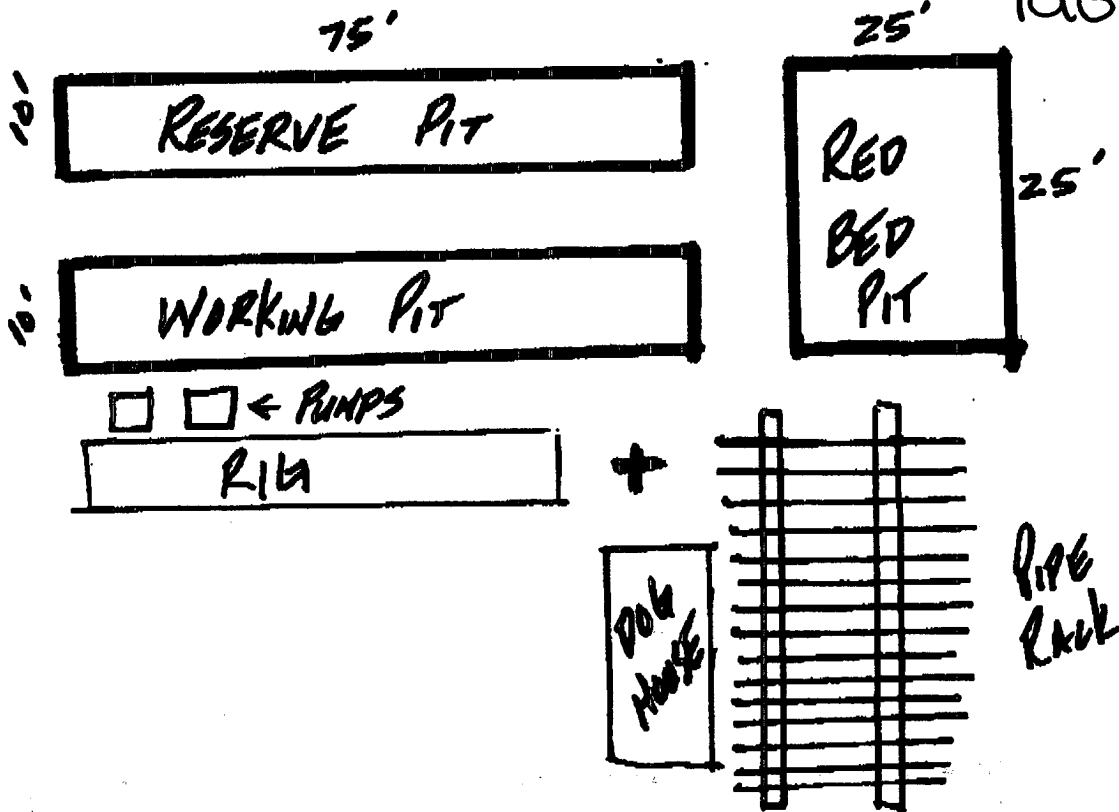
TEXLAND - HOBBS LLC  
BOWERS LEASE  
STATE I-29 LEASE  
GRIMES LEASE  
12 Total wells,  
3 TANK BATTERIES



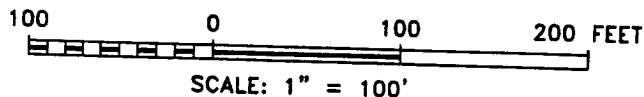
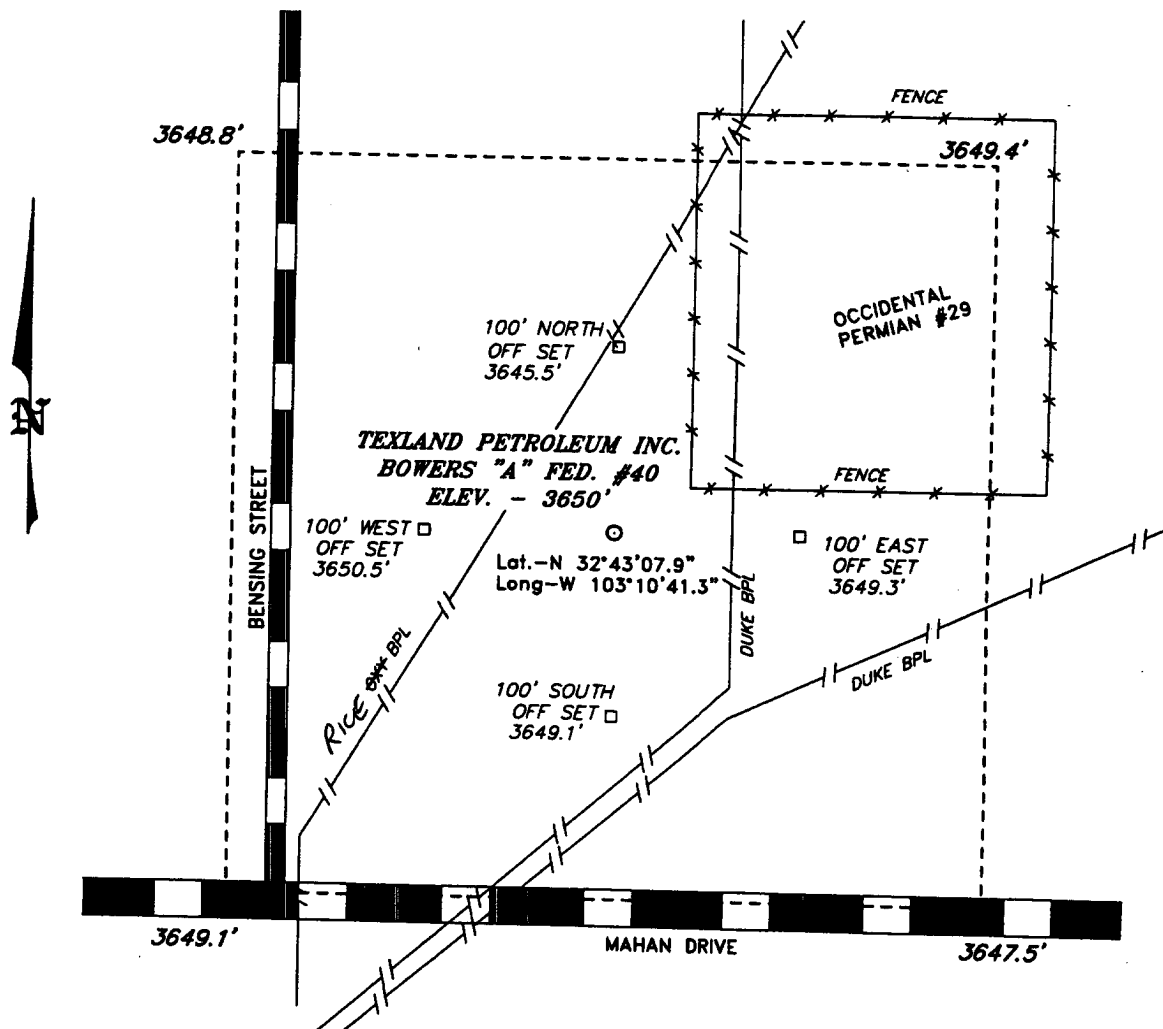
ATT: MARK	CALCULATIONS AND DESIGN DATA	PREPARED BY Kirk Jackson
SUBJECT BOWERS A FEDERAL FLOWLINES		DATE 8/1/01
		SHEET OF



# LAPSTAR - LOCATION and RIG LAYOUT



SECTION 29, TOWNSHIP 18 SOUTH, RANGE 38 EAST, N.M.P.M.,  
LEA COUNTY, NEW MEXICO.



**TEXLAND PETROLEUM INC.**

REF: Bowers "A" Fed. No. 40 / Well Pad Topo

THE BOWERS "A" FED. No. 40 LOCATED 2440' FROM  
THE NORTH LINE AND 195' FROM THE WEST LINE OF  
SECTION 29, TOWNSHIP 18 SOUTH, RANGE 38 EAST,  
N.M.P.M., LEA COUNTY, NEW MEXICO.

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

W.O. Number: 1246

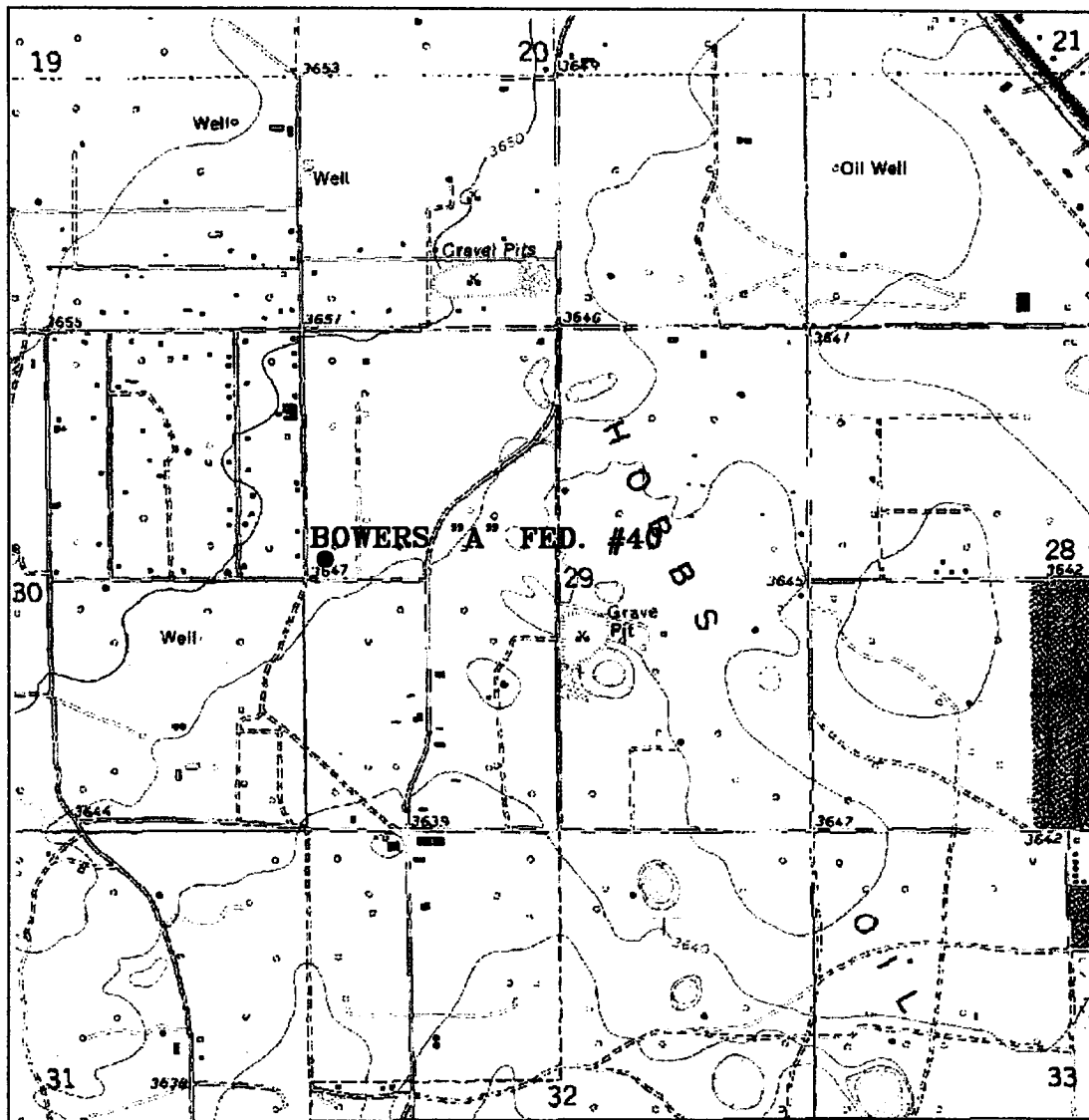
Drawn By: K. GOAD

Date: 04-20-2001

Disk: KJG CD#4 - 1246I.DWG

Survey Date: 04-20-2001

Sheet 1 of 1 Sheets



## BOWERS "A" FED. #40

Located at 2440' FNL and 195' FWL

Section 29, Township 18 South, Range 38 East,  
N.M.P.M., Lea 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

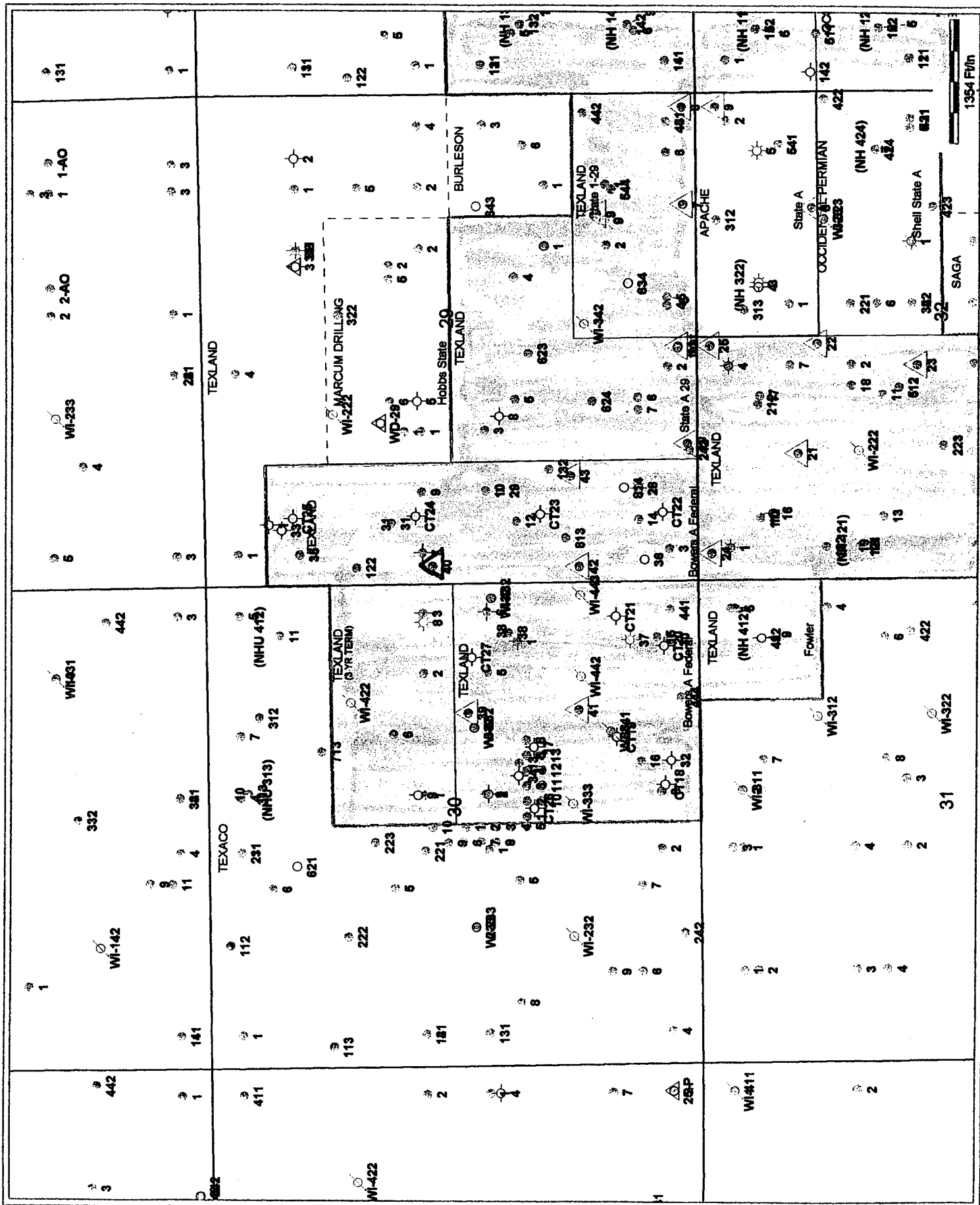
W.O. Number: 124611 - KJG CD#4

Survey Date: 04-20-2001

Scale: 1" = 2000'

Date: 04-20-2001

**TEXLAND**  
**PETROLEUM INC.**



COPY CMS

**SURFACE USE AND RIGHT-OF-WAY AGREEMENT** w/ GARY SCHUBER

This Surface Use and Right-of-way Agreement (the "Agreement") is made and entered into this 1st day of March, 2001 (the "Effective Date") by GRIMES LAND COMPANY, L.L.C., whose address is P.O. Box 6056, Hobbs, New Mexico 88240, (hereinafter "Grantor") and TEXLAND PETROLEUM-HOBBS, L.L.C., whose address is 777 Main Street, Suite 3200, Fort Worth Texas 76102 (hereinafter "Grantee").

**RECITALS:**

- A. Grantor is the owner of the surface estate of the lands located in Lea County, New Mexico, set forth and described in Exhibit "A", attached hereto and made a part hereof for all purposes (the "Lands").
- B. Grantee is the owner or operator of various oil and gas leasehold interests under portions of the Lands and is currently implementing cooperative lease line waterflood operations with other leasehold owner/operators of other lands in the area (the "Adjacent Lands") for the development of oil and gas leasehold and mineral interests under and around the Lands and the Adjacent Lands, including, but not limited to the drilling and equipping of production wells and injection wells, construction of oil storage facilities, construction of water injection facilities, the laying of injection pipelines and flow lines, the construction of roads, removal and use of caliche, the construction of electrical and utility lines, the maintenance and repair of any such wells, pipelines, roads or facilities placed on the lands by Grantee, the conduct of seismic operations and all other operations reasonably necessary to the development of the oil and gas leasehold and mineral estates under the Lands and the Adjacent Lands (the "Permitted Uses").
- C. For the mutual benefit of both parties, Grantee and Grantor desire to enter into this Agreement to grant Grantee a right-of-way across the Lands for the purposes of the development of the oil and gas leasehold and mineral estates and to set forth specified amounts as compensation for damages arising from specific operations of Grantee.

**AGREEMENT:**

NOWHEREFORE, in consideration of ten dollars (\$10.00) and other good and valuable consideration, the receipt of which is acknowledged by the undersigned, and in consideration of the mutual covenants and agreements set forth herein, Grantor and Grantee hereby agree as follows:

- 1. Grant of Rights. Grantor does hereby GRANT and CONVEY unto Grantee and its successors and assigns, with warranty covenants, the right, privilege, easement and right-of-way to use the surface of the Lands as may be reasonably necessary solely for the Permitted Uses. The rights granted in this paragraph are subject to all terms and



(12)

conditions of this Agreement, including the consultation and accommodation provisions contained in paragraph 3 hereof.

2. Surface Damage Schedule. Grantee shall pay to Grantor consideration and damages for utilization of the Lands for Permitted Uses initiated after the date of this Agreement in accordance with the following schedule:
- (a) Water processing and storage facilities, tank batteries and well locations (either injection or production): \$ 4,500.00 per acre to be calculated based on the area disturbed.
  - (b) Caliche from the Lands: \$ 3.00 per cubic yard.
  - (c) Pipeline Rights-of-Way/Easements \$ 15.00 per rod.
  - (d) Road Rights-of-Way/Easements: Road easements not to exceed 12' in width - \$15.00 per rod.
  - (e) All electric lines and utility easements: \$ 15.00 per rod.
  - (f) 3-D Seismic: \$ 10.00 per acre for any portion of the Lands included within a seismic survey by Grantee.

Grantor and Grantee stipulate and agree that the amount set forth above constitutes reasonable compensation for damage caused to the Lands by Grantee in connection with the Permitted Uses. The schedule of damages set forth above shall be adjusted on the 5<sup>th</sup> anniversary of the Effective Date and every five (5) years thereafter based upon the change in the consumer price index, all urban consumers using U.S. City Average, all items in an index base of 1982 - 1984 equals 100, using the most recent sixty (60) month information available.

In the event Grantee digs and removes caliche from the Lands, Grantee shall level such site and bring such location up to or above the original grade once Grantee's use of such site is concluded.

Grantee is aware that Grantor owns and operates a produced water disposal facility, fresh water trucking facility and brine water supply facility. Grantee agrees to purchase these products and services from Grantor so long as Grantor can provide such services at the most favorable competitive market rate. Additionally, Grantor has a tap and meter located upon the Lands for potable water from the City of Hobbs. In the event Grantee has need for additional make-up water in connection with Grantee's water flood operations, Grantor agrees to sell water to Grantee at Grantor's cost under its account with the City of Hobbs. This water will only be used after all water rights and pumping operations of Grantee are exhausted.

3. Use of Surface. Grantee agrees to bury all water injection pipelines (i.e. pipelines

OM5

going from the water injection facility to the injection wells) to a depth of at least twelve inches (12"). All other pipelines may be placed upon the surface of the lands or buried, at Grantee's election; provided however, any such pipelines placed upon the surface shall be polyethylene or steel pipelines. Grantee agrees to consult with Grantor regarding the routes, locations and construction of any pipelines or construction of any well-sites, roads or facilities upon the Lands and Grantee agrees to reasonably accommodate the existing uses of Grantor upon the Lands. Likewise, Grantor agrees to conduct its operations on the Lands in a way that reasonably accommodates the rights granted under this Agreement to Grantee. In the event Grantee elects to utilize polyethylene pipelines upon the surface of the Lands, Grantee shall first obtain Grantor's prior written consent, which consent shall not be unreasonably withheld.


4. Grantor's Fence. Grantor has advised Grantee that a perimeter fence around a portion of the Lands is being constructed by Grantee and Occidental Permian, Ltd. pursuant to plans dated 12/1 2000, which have been furnished to Grantee. Grantee shall be granted reasonable access to the Lands and Grantee agrees to cooperate with Grantor and/or Occidental Permian, Ltd. with regard to the location of gates and other issues relating to the security of the portion of the Lands included within such fence.
5. Term. This Agreement is effective as of the date first set forth above and shall remain in full force and effect for so long as Grantee, its successors and assigns own and/or operate oil and gas leasehold or mineral interests under the Lands. Upon the termination of this Agreement, Grantee shall execute and deliver a Release of this Agreement to Grantor.
6. Memorandum. Grantee and Grantor shall execute a Memorandum of this Agreement to be recorded in the County records of Lea County, New Mexico.
7. No Waiver of Rights. It is acknowledged that Grantee has certain rights and interests upon the Lands by operation of law and by virtue of the contractual provisions contained in the oil and gas leases governing its leasehold estate under portions of the Lands. With the exception of the surface damage schedule stipulated and agreed to by Grantor and Grantee herein, it is understood and agreed by the undersigned that this Agreement in no way waives or limits the rights held by Grantee pursuant to New Mexico law and the outstanding oil and gas leases.
8. Agreement Binding on Successors and Assigns. This Agreement shall extend to, be binding upon, and inure to the benefit of, the respective heirs, devisees, legal representatives, successors and assigns of the parties hereto, and shall constitute a covenant running with the Lands and leasehold interests of Grantee.

Chub

This Agreement is executed effective the 1<sup>st</sup> day of March, 2001.

**GRANTOR:**

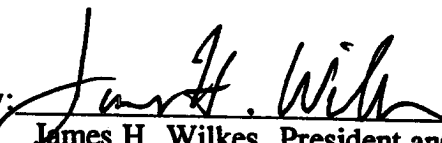
GRIMES LAND COMPANY, L.L.C.

By:   
Gary Schubert, Managing Member

**GRANTEE:**

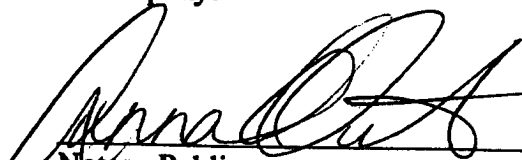
TEXLAND PETROLEUM-HOBBS, L.L.C.

By: Texland Petroleum, Inc., Managing Member

By:   
James H. Wilkes, President and  
Chief Operating Officer

STATE OF NEW MEXICO §  
§  
COUNTY OF LEA §

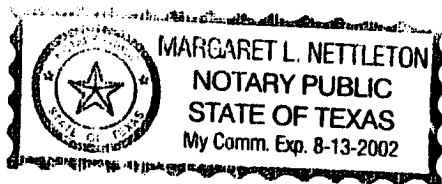
This instrument was acknowledged before me on the 28<sup>th</sup> day of February, 2001 by **GARY SCHUBERT**, Managing Member of Grimes Land Company, L.L.C., a New Mexico limited liability company, on behalf of said company.

  
Notary Public

CONF

STATE OF TEXAS       §  
                                  §  
COUNTY OF TARRANT   §

This instrument was acknowledged before me on the 1 day of March, 2001, by JAMES H. WILKES, President and Chief Operating Officer of Texland Petroleum, Inc., a Texas corporation, as Managing Member of Texland Petroleum - Hobbs, L.L.C., a Texas limited liability company, on behalf of said company.



Margaret L. Nettleton  
Notary Public for the State of Texas

C:\My Documents\Tobacco\Water Lease\Surface Use and Right-of-Way Agreements.rpt

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**CONTINGENCY PLAN**

**FOR**

**TEXLAND PETROLEUM, HOBBS, L.L.C.**

**BOWERS "A" FEDERAL LEASE  
WELL NUMBER 40**

**LEA COUNTY, NEW MEXICO**

**JUNE 30, 2004**

## CONTINGENCY PLAN

### INDEX

- I. Location Information
- II. Emergency Notification
- III. Emergency Procedures and Responsibilities
- IV. Drillsite Location
- V. Training Procedures and Materials
- IV. Procedural Check List
- VII. Rescue Breathing and CPR

## SAFETY

It is the Texland Petroleum's responsibility in all operations to do everything possible to insure the safety of it's employees and the contract employees on the job site, and further, to provide for the safety and comfort of persons near the operation by protecting the environment to the fullest degree possible.

The primary purpose of the procedures outlined herein is to guide the personnel on location in the event that Hydrogen Sulfide ( $H_2S$ ) gas reaches the surface.

To protect their own safety and the safety of others, all personnel on the job site will rigidly follow this plan.

## PRIMARY RESPONSIBILITIES

In case of a release of a potentially hazardous amount of  $H_2S$ , all personnel will immediately proceed upwind to the nearest designated safety area and don their protective breathing equipment. The Texland Petroleum Representative will immediately, upon assessing the situation, set this plan into action by taking the proper procedures to contain the gas and notify the appropriate people and agencies.

If Texland's Representative is not on location or is incapacitated this responsibility will fall to the Drilling Company's Toolpusher.

If both are absent or incapacitated, the Driller on tour will then be responsible.

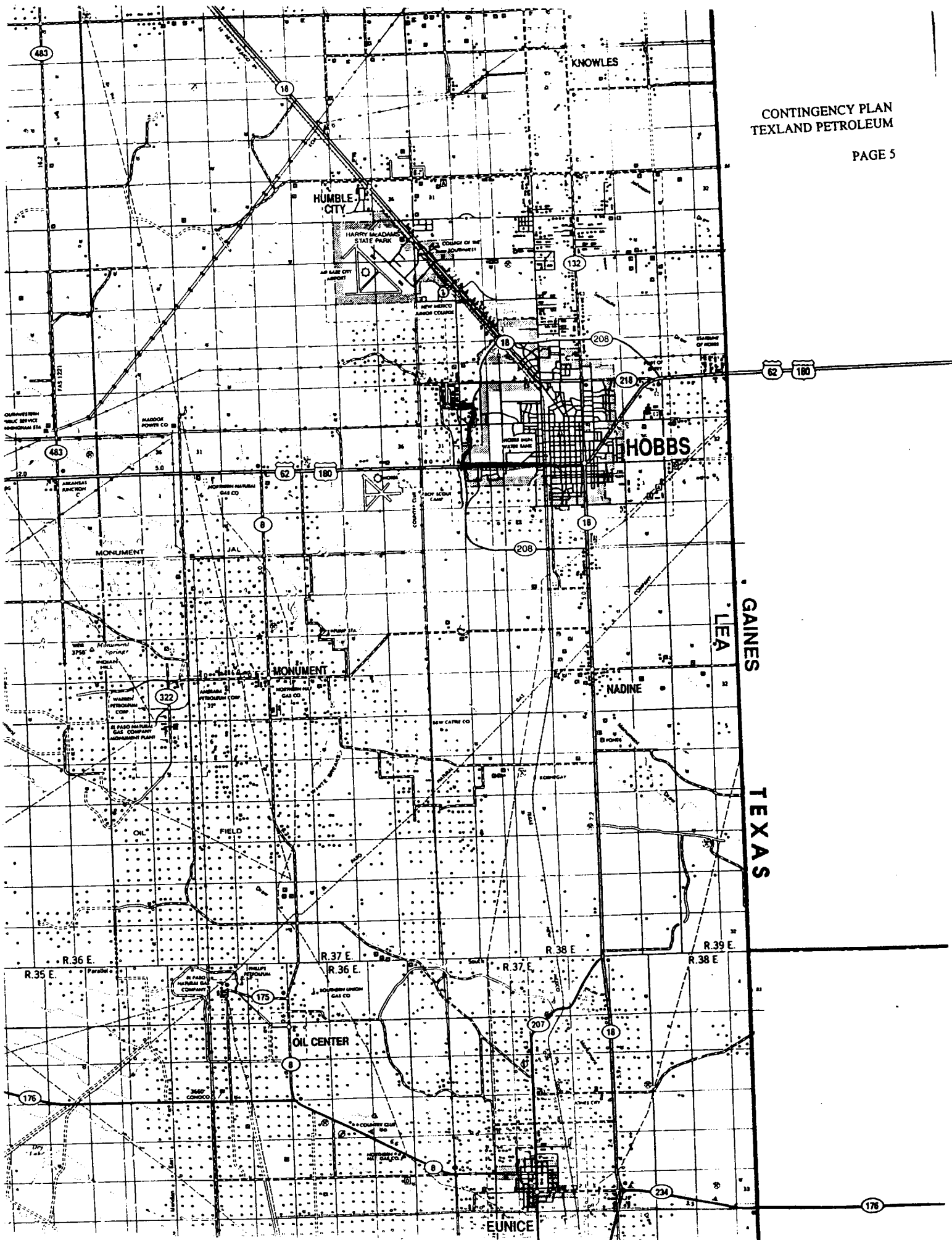
All safety equipment will be installed and operational so safety procedures can be completely dependable when drilling has reached a depth of 3800 feet.

## LOCATION INFORMATION

### DIRECTIONS TO LOCATION

From Hobbs, New Mexico. Go west on US 62 - 180 to West County Road. Go north 1.6 miles to Mahan Drive. Go west 0.1 mile to the location on the right side of the road.





### **EMERGENCY PHONE NUMBERS**

Hobbs Fire Dept.	911	505-397-9308
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Hobbs Ambulance	911	505-397-9308
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Hobbs Police Dept.	911	505-397-9265
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Lea County Sheriff	911	505-393-2515
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New Mexico State Police	911	505-392-5588
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Hobbs Hospital	Hobbs, New Mex.	505-392-6581
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NMOCD Hobbs - Office: 505-393-6161    Fax: 505-393-0720

Downhole Services Team Leader: Jerry Rogers	432-596-4412
---	--------------

Team Leader:        Jerry Rogers	432-596-4412
----------------------------------	--------------

## **COMPANY REPRESENTATIVES AND NUMBERS**

<b>TEXLAND PETROLEUM, L.P.</b>	<b>FULLERTON, TEXAS</b>	<b>432-596-4412</b>
	<b>RADIO PATCH</b>	
<b>DRILLING FOREMAN</b>	<b>JERRY ROGERS - office</b>	<b>432-596-4412</b>
	<b>" home</b>	<b>806-794-6818</b>
	<b>" cell</b>	<b>806-781-3396</b>
	<b>" pager</b>	<b>806-761-7907</b>
<b>SUPERINTENDENT</b>	<b>TOM FOX - office</b>	<b>806-894-4657</b>
	<b>" home</b>	<b>806-794-1329</b>
	<b>" pager</b>	<b>806-741-9607</b>
	<b>" cell</b>	<b>806-781-3414</b>
<b>PRODUCTION FOREMAN</b>	<b>KIRK JACKSON - office</b>	<b>432-596-4412</b>
	<b>" cell</b>	<b>432-894-1461</b>
<b>CAPSTAR DRILLING</b>	<b>ODESSA, TEXAS</b>	<b>800-442-5224</b>

## EMERGENCY NOTIFICATION

### Evacuation Plan

The following general plan has been developed in the event that any public evacuation becomes necessary:

1. The company has requested and has been assured of the support by the various public safety entities in the area.
2. Any evacuation will be conducted with and coordinated by the County Sheriff and supported by the State Highway Patrol.
3. Assistance from other public safety entities will be enlisted and coordinated by the County Sheriff's Office.
4. The included maps detail the area of the wellsite including the inventory of the public within the radius of exposure of the well,
5. In the event that there is any suspected problem on the well, the wellsite supervisor will notify the Sheriff's Office for "Alert Status".
6. "Alert Status" will require that available public support personnel will assemble at the courthouse and standby for instructions.
7. If isolation and evacuation are necessary, units will be dispatched to points marked on the map with instructions to maintain road blocks.
8. Evacuation teams will then proceed to sectors to be evacuated. Evacuation procedures will follow appropriate consideration for wind conditions.
9. Personnel from Calloway Safety Equipment Company will establish safe perimeters using an H<sub>2</sub>S detector.
10. The New Mexico Oil Conservation Division and other authorities will be notified as soon as possible.
11. Other Supplemental contractors will be contacted and called in as needed.

## RESIDENTS AND PUBLIC ROADS

### IN RADIUS OF EXPOSURE (ROE)

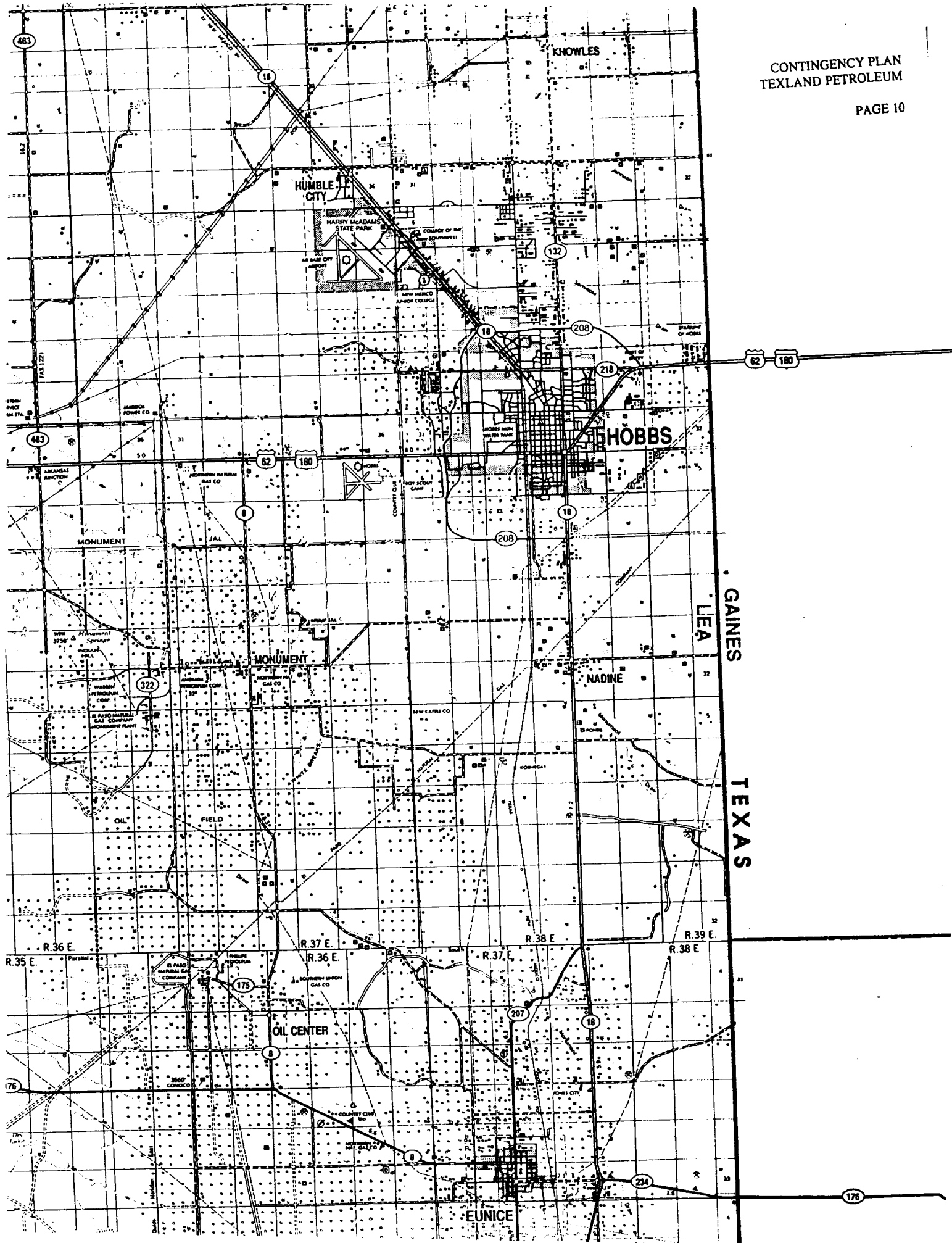
**Businesses:** 1800' to the east of the location

**Residence:** 1 mile west of the location

**Public Roads:**

County Road: 200' to the south of the location  
175' to the west of the location

\*\* See map



## EMERGENCY PROCEDURES

### RESPONSIBILITIES AND DUTIES

#### Texland Petroleum's Drilling Foreman

1. In an emergency, the Drilling Foreman on duty will have complete responsibility and will take whatever actions are deemed necessary to insure the personnel's safety, to protect the well and to prevent property damage.
2. Will advise the superintendent when procedures as specified herein have been met, will inform of emergencies and deviations from the plan, and ensure that procedures are observed at all times.
3. Will advise each contractor, service company and all others entering the site, that Hydrogen Sulfide may be encountered and the potential hazards that may exist.
4. Will authorize the evacuation of local residents if Hydrogen Sulfide threatens their safety.
5. Will keep the number of persons on location to a minimum during hazardous operations.
6. Will assess the situation when an alarm sounds, and issue work orders; or, when conditions warrant, order all personnel to "Safe Briefing Areas".
7. Will direct corrective actions to control the flow of gas.
8. Has full responsibility of the decision to cease drilling operations.

#### Drilling Company

1. The Toolpusher will assume all responsibilities of the Texland Petroleum's Drilling Foreman in an emergency in the event that the Drilling Foreman becomes incapacitated.
2. The toolpusher will order the Driller to secure the rig, if time permits.
3. The Driller will secure the rig in an emergency situation, if time permits.

**Special Notation:**

In case of an emergency, and in the absence of a company man or toolpusher, an employee of Callaway Safety Equipment Company, acting as Texland Petroleum's agent, will assume all responsibility for safety to immediate personnel and to public safety.

1. Visitors will be restricted, unless accompanied by the Texland Petroleum's Drilling Foreman, when Hydrogen Sulfides might be encountered.
2. Visitors and non-essential personnel will be prohibited from remaining in or entering contaminated areas where Hydrogen Sulfide concentrations in the atmosphere exceed ten(10) ppm.
3. When Hydrogen Sulfide might be encountered, no personnel on location will be permitted to sleep in vehicles.



## EMERGENCY PROCEDURES

The fact is to be instilled in the minds of all rig personnel that the sounding alarm means only one thing:  $H_2S$  is present. Everyone is to proceed to his assigned station and the contingency plan should be put into effect.

In order to assure proper execution of the contingency plan, it is essential that one person be responsible for and in complete charge of implementing these procedures. The responsibility will be Texland Petroleum, Inc.'s representative.

1. Texland Representative on location - should he become disabled or unable to locate
2. Senior Texland Representative - should he become disabled or unable to locate
3. Senior Texland Drilling Engineer - should he become disabled or unable to locate

### Drilling Crew Actions:

1. All personnel will don their protective breathing apparatus. The Driller will take necessary precaution as stated in "Operating Procedures".
2. The "Buddy System" will be implemented. All personnel will act upon directions from the company Representative.
3. If there are non-essential personnel on location, they will move off location,
4. Entrance to location will be patrolled and the proper Well Condition Sign will be displayed at the entrance to the location.

## INSTRUCTIONS TO PERSONNEL

### WHERE

### HYDROGEN SULFIDE MAY BE ENCOUNTERED

1. Every person involved in the operation will be informed of the characteristics of Hydrogen Sulfide, its dangers, safe procedures to be used when it is encountered and recommended first aid procedures for regular rig personnel.
2. The Supervisor will conduct training sessions and will repeat them as deemed necessary by him or as instructed by the Drilling Foreman.
3. Instructions will include the following:
  - a. Dangers of Hydrogen Sulfide
  - b. Use and limitation of air equipment
  - c. Use of resuscitator; organize "buddy system" and first aid procedures
  - d. Use of detection devices; designate responsible people
  - e. Explain rig layout, current policy on visitors, designate smoking and safety areas, and emphasize the importance of wind direction
  - f. Explain functions of H<sub>2</sub>S Supervisor
  - g. Explain and organize H<sub>2</sub>S drill
  - h. Explain the overall emergency plan with emphasis given to the evacuation phase of the plan.
4. The above instructions will be attended by every person involved in the operation.
5. Visitors will be instructed to report to the Texland Petroleum's Drilling Foreman.
6. Visitors will be refused entrance for lack of safety equipment, if special operations are in progress, or for other reasons involving personnel safety.

## OPERATIONS WHEN HYDROGEN SULFIDE IS DETECTED

1. At this time, the Texland Petroleum's Drilling Foreman will assess the situation, outline a program of control and assign duties. His instructions will be followed carefully. Success depends on how quickly, thoroughly and effectively each man does his assigned duties.
2. When severity of the situation has been determined, all personnel will be advised.
3. Personnel will develop a practice of watching out for each other when emergency conditions exist. Where possible, work should be done in pairs. When a Hydrogen Sulfide emergency exists, personnel should use the "buddy system" to prevent anyone from entering a contaminated area alone.
4. Hydrogen Sulfide gas discipline will be followed, when "Masks On" requirements exist. THERE ARE NO EXCEPTIONS.
5. Personnel will not remove the breathing equipment until tests indicate that the atmosphere is safe to breathe and "All Clear" is announced.
6. In the event of Sudden Gas Release, with no advance warning, personnel will be instructed to take the following general actions:
  - a. Hold breath - do not breathe
  - b. Put on protective breathing equipment
  - c. Help any person(s) in distress
  - d. Proceed to the designated "Safe Briefing Area" and secure instructions from Supervisor
  - e. DO NOT PANIC
  - f. If conditions warrant, the Driller will secure the rig, stop motion of the rig, and close the blowout preventers.
  - g. Schooling and instruction to all personnel on the site, concerning Hydrogen Sulfide Safety will be conducted by Callaway Safety Equipment Company instructors.

NOTE: PUT ON YOUR BREATHING EQUIPMENT BEFORE ATTEMPTING A RESCUE.

YOU TOO, CAN BECOME A VICTIM.

### DRILLSITE LOCATION

1. The drilling rig should be situated on the location, such that prevailing winds blow across the rig toward the reserve pit or at right angles to a line from the rig to the reserve pit.
2. The entrance to the location should be designated so that it can be barricaded if Hydrogen Sulfide emergency conditions arise. An auxiliary exit (or entrance) should be available so that in case of a catastrophe, a shift in wind direction would not preclude escape from the location. Appropriate warning signs and flags should be placed at all location entrances.
3. Once H2S Safety Procedures are established on location, no beards or facial hair, which will interfere with face seal on mask, will be allowed on location.
4. A minimum of two "Briefing Areas" will be established not less than 250 feet from the well head and in such location that at least one area will be upwind from the well at all times. Upon recognition of an emergency situation, all personnel should assemble at the designated "briefing Areas" for instructions.
5. A Safety Equipment Trailer will be stationed at one of the Briefing Areas. A wind streamer will be attached near the trailer to indicate wind direction.
6. Three (3) windsocks will be installed and wind streamers, 6 to 8 feet above ground level, placed at the location entrance. Windsocks shall be illuminated for night time operation. Personnel should develop wind direction consciousness.
7. The mud logging trailer will be located away from the shale shaker mud tank and a minimum of 125 feet from the well bore.
8. Shale shaker mud tanks will be located so as to minimize the danger from gas that breaks out of the drilling fluid.
9. Electric power plants will be located as far from the well bore as practical so that it may be used under conditions where it otherwise would have to be shut down.
10. When approaching a depth where Hydrogen Sulfide may be encountered, appropriate warning signs will be posted on all access roads to the location and at the foot of all stairways to the derrick floor.

11. Appropriated smoking areas will be designated and smoking will be prohibited elsewhere.
12. On the rig bulletin board and in the safety equipment trailer, will be posted in clear plastic envelopes, a list of current emergency telephone numbers.

### SPECIAL EQUIPMENT

1. An automatic Hydrogen Sulfide Monitor will be installed with a combination visual and audible alarm system located where it can be seen and/or heard throughout the drilling location. This system will have the capabilities of being activated from four (4) points.
2. The automatic monitor should be set to trigger the drilling location visual/audible alarms when Hydrogen Sulfide concentrations in the atmosphere reach 10 ppm.
3. Extra equipment will be available if required to provide adequate respiratory protection for all personnel on location.

### BLOWOUT PREVENTION EQUIPMENT

1. A kill line of ample strength and length will be laid to a sage point to allow pumping into the well in an emergency situation.
2. The closing unit should be located a safe distance from the well bore and positioned for maximum utilization based on the prevailing wind direction.
3. BOP equipment will be tested in accordance with standard company policy.

### DRILL STEM TEST

1. Drill Stem Testing of Hydrogen Sulfide zones will be permitted only in daylight hours.
2. All non-essential personnel will be moved to "Safe Briefing Area".
3. Put on air masks before formation fluid are expected at the surface and continue "Masks On" until flares are lighted and work areas test no more than 10 ppm Hydrogen Sulfide and the area has been declared safe.



## TRAINING PROCEDURES AND MATERIALS

**THERE IS NO TIME TO WASTE  
WHEN BREATHING STOPS !!!**

**RESCUE BREATHING MUST  
BE STARTED FAST !!!**

**After Breathing is Stopped For:**

**The Chances for Life Are:**

1 Minute	98 out of 100
2 Minutes	92 out of 100
3 Minutes	72 out of 100
4 Minutes	50 out of 100
5 Minutes	25 out of 100 *
6 Minutes	11 out of 100 *
7 Minutes	8 out of 100 *
8 Minutes	5 out of 100 *
9 Minutes	2 out of 100 *
10 Minutes	1 out of 100 *
11 Minutes	1 out of 1,000 *
12 Minutes	1 out of 10,000 *

\* Authorities State: Irreparable brain damage starts at about the fifth minute.

**LEARN HOW TO USE LIFE SAVING EQUIPMENT !!!**

## **SAFETY TRAINING**

- a. H2S safety Training will be given to all personnel. The training sessions will cover, but will not be limited to the following:
  - a. General information on H2S and SO2 gas
  - b. Hazards on these gases
  - c. Safety equipment on location
  - d. Proper use and care of personal protective equipment
  - e. Operational procedures in dealing with H2S gas
  - f. Evacuation procedures
  - g. Chemicals to be used in mud to control H2S
  - h. First Aid, reviving a H2S victim, toxicity, etc.
  - i. Metallurgical considerations.

NOTE: Drills will be part of the designated drilling company's BOP training, including "Mask Up" situations.

Once H2S safety procedures are established on location, no beards or facial hair, which will interfere with face, seal or mask will be allowed on location.

- b. When H2S alarm is activated;
  - a. Masks up
  - b. Raise tool Joint above the rotary table and shut down pump
  - c. Close in hydrill
  - d. Go to safe briefing area.

## EMERGENCY CONDITIONS

### Operating Conditions

#### 1. Emergency Procedures and Definitions of Warning Flags:

##### A. Condition:

Green.....Normal Operations

##### B. Condition:

Yellow.....Potential Danger, Condition

##### Causes for condition:

- a. Circulating up drilling breaks
- b. Trip gas after trip
- c. Circulating out gas on choke
- d. Poisonous gas present, but below threshold concentration

##### Safety Action:

- a. Check safety equipment and keep it with you
- b. Be alert for a change in condition
- c. Follow instructions.

##### C. Condition:

Red.....Extreme Danger

##### Cause for Condition:

- a. Uncontrolled flow from well with lethal concentrations of H<sub>2</sub>S.

##### Safety Action:

- a. "Masks up" all personnel will have protective breathing equipment with them. All personnel will stay in "Safe Briefing Area" unless instructed to do otherwise.
- b. Order evacuation of local people within the danger zone.

## **THE USE OF SELF CONTAINED BREATHING EQUIPMENT**

1. Written procedures shall be prepared covering safe use of respirators in dangerous atmospheres which might be encountered in normal operations or emergencies. Personnel shall be familiar with these procedures and the available respirators.
2. Respirators shall be inspected frequently at random to insure that they are properly used, cleaned and maintained.
3. Anyone who may use the respirators shall be trained in how to insure proper face piece to face seal. They shall wear respirators in normal air, and then wear it in a test atmosphere. (NOTE: Such items as facial hair, beard, or sideburns, and eyeglass temple pieces will not allow a proper seal). Anyone who may be reasonably expected to wear respirators should have these items removed before entering a toxic atmosphere. A special mask must be obtained for anyone who must wear eyeglasses. Contact lenses should not be allowed.
4. Maintenance and care of respirators:
  - A. A program for maintenance and care of respirators should include the following:
    - a. Inspection for defects, including leak checks
    - b. Cleaning and disinfecting
    - c. Repair
    - d. Storage
  - B. Inspection: Self-contained breathing apparatus for emergency use shall be inspected monthly for the following, and a permanent record kept of these inspections.
    - a. Fully charged cylinders
    - b. Regulator and warning device operation
    - c. Conditions of face piece and connections
    - d. Elastomer or rubber parts shall be stretched or massaged to keep them pliable and prevent deterioration.
  - C. Routinely used respirators shall be collected, cleaned and disinfected as frequently as necessary to insure proper protection usage by the local company.

### **THE USE OF SELF CONTAINED BREATHING EQUIPMENT**

3. Respirators should be worn when:
  - A. Any employee working near the top or on top of any tank, unless a test reveals less than 10 ppm of H<sub>2</sub>S.
  - B. When breaking out any line where H<sub>2</sub>S can reasonable be expected.
  - C. When sampling air in areas to determine if toxic concentrations of H<sub>2</sub>S exist.
  - D. When working in areas where over 10 ppm of H<sub>2</sub>S has been detected.
  - E. At any time when there is a doubt as to the H<sub>2</sub>S level in the are to be entered.

## **PHYSICAL EFFECTS OF HYDROGEN SULFIDE POISONING**

The Principal hazard is death by inhalation:

When the amount of gas absorbed into the bloodstream exceeds that which is readily oxidized, systemic poisoning results, with a general action on the nervous system. Labored respiration occurs shortly and respiratory paralysis may follow immediately at concentrations of 700 ppm and above. This condition may be reached almost without warning as the originally detected odor of H<sub>2</sub>S may have disappeared due to olfactory paralysis. Death then occurs from asphyxiation unless the exposed person is removed immediately to fresh air and breathing is stimulated by artificial respiration. Other levels of exposure may cause the following symptoms individually or in combination:

1. Headache
2. Dizziness
3. Excitement
4. Nausea or gastro-intestinal disturbances
5. Dryness and sensation of pain in nose, throat and chest
6. Coughing
7. Drowsiness

All personnel should be alerted to the fact that detection of H<sub>2</sub>S solely by sense of smell is highly dangerous as the gas rapidly paralyzes the sense of smell. Ten (10) ppm of H<sub>2</sub>S detected should be treated as if it were 700 ppm.

## **TREATMENT OF HYDROGEN SULFIDE POISONING**

### **Inhalation:**

As Hydrogen Sulfide in the blood oxidizes rapidly, symptoms of acute poisoning pass off when inhalation of the gas ceases. It is important, therefore, to get the victim of poisoning to fresh air as quickly as possible. He should be kept at rest and chilling should be prevented. If respiration is slow, labored, or impaired, artificial respiration may be necessary. Most persons overcome by Hydrogen Sulfide may be revived if artificial respiration is applied before the heart action ceases. Victims of poisoning may lead to serious complications such as pneumonia. Under those conditions, treatment by the physician necessarily would be symptomatic. The patient should be kept in fresh air and hygienic conditions should be watched carefully.

### **Contact with Eyes:**

Eye contact with liquid and/or gas containing Hydrogen Sulfide will cause painful irritation (conjunctivitis). Keep the patient in a darkened room, apply ice compresses to eyes, put ice on forehead and send for a physician. Eye irritation caused by exposure to Hydrogen Sulfide requires treatment by a physician, preferably an eye specialist. The prognosis to recovery in these cases is usually good.

### **Contact with Skin:**

Skin absorption is very low. Skin discoloration is possible after contact with liquids containing Hydrogen Sulfide. If such contact is suspected, the area should be thoroughly washed.



### **CHARACTERISTICS OF HYDROGEN SULFIDE**

1. Extremely Toxic (Poisonous).
2. Heavier than air and chlorous
3. Odor of rotten eggs in small amounts.
4. Burns with a blue flame and produces Sulfur Dioxide (SO<sub>2</sub>) gas, which is very irritating to eyes and lungs. The SO<sub>2</sub> is as toxic as H<sub>2</sub>S, but the severe discomfort at low concentration acts as a barrier to human exposure to toxic levels of this gas.
5. H<sub>2</sub>S forms explosive mixture with air between 5.9% and 27.2% by volume.
6. H<sub>2</sub>S is soluble in water but becomes less soluble as the water temperature increases.
7. H<sub>2</sub>S is almost as toxic as Hydrogen Cyanide – and is between 5 and 6 times more toxic than Carbon Monoxide.

## **EFFECTS OF HYDROGEN SULFIDE ON METAL**

Hydrogen Sulfide dissolved in water to form a weak acid that can cause some pitting, particularly in the presence of Oxygen and/or Carbon Dioxide. However, the most significant action of H<sub>2</sub>S is Sulfide Stress Cracking. Sulfide Stress Cracking is result of metals being subjected to high stress levels in a corrosive environment where H<sub>2</sub>S is present. The metal will often fail catastrophically in a brittle manner. Sulfide Stress Cracking steel is dependent upon and determined by:

1.      **Strength (hardens) of the Steel:**

The higher the strength, the greater the susceptibility to Sulfide Stress Cracking. Steels having yielded strengths up to 95,000 psi and hardness up to Rc22 are generally resistant to Sulfide Stress Cracking. These limitations can be extended slightly higher for properly quenched and tempered materials.

2.      **Total Member Stress (Load):**

The higher the stress level (load) the greater the susceptibility to Sulfide Stress Cracking.

3.      **Corrosive Environment:**

Corrosive reactions, acids, bacterial action, thermal degradation of law FH fluid environment.

### TOXICITY OF HYDROGEN SULFIDE

COMMON NAME	CHEMICAL FORMULA	SPECIFIC GRAVITY	THRESHOLD LIMIT 1	THRESHOLD LIMIT 2	LETHAL CONCEN
Hydrogen Sulfide	H <sub>2</sub> S	1.189	10 ppm 20 ppm	250 ppm/hr	600 ppm

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#### Definitions:

##### Threshold Limit:

Concentration at which it is believed that all workers may be repeatedly exposed day after day without adverse effects.

##### Hazardous Limit:

Concentration that may cause death.

##### Lethal Concentration:

Concentration that will cause death with short-term exposure.

##### Threshold Limit 10 ppm:

American Conference of Government Industrial Hygienist

##### Threshold Limit 20 ppm:

ANSI acceptable ceiling concentration for eight (8) hours of exposure (based on 40 hour week) is 20 ppm. OSHA Rules and Regulations (CFR-Vol. 37, No. 202 Part II, 09-01-89).

**PHYSICAL EFFECTS OF HYDROGEN SULFIDE**

CONCENTRATIONS			PHYSICAL EFFECTS
Percent (%)	PPM	Grains/100 Std. Cubic Feet	
.001	10	0.65	obvious and unpleasant odor
.002	20	1.3	Safe for eight (8) hours.
.01	100	6.48	Kills smell in 3 to 5 minutes. May sting eyes and throat.
.05	500	12.96	Dizziness – breathing ceases in a few minutes. Need prompt artificial respiration.
.07	700	45.36	Unconscious quickly. Death will result if not rescued promptly.
.10	1000	64.80	Unconsciousness at once, followed by death within minutes.

### RELATED GASSES

COMMON NAME	CHEMICAL FORMULA	SPECIFIC GRAVITY	THRESHOLD LIMIT 1	THRESHOLD LIMIT 2	LETHAL CONCENT.
Hydrogen Sulfide	H <sub>2</sub> S	1.189	10 ppm 20 ppm	250 ppm/hr	600 ppm
Hydrogen Cyanide	HCN	0.94	10 ppm	150 ppm/hr	300 ppm
Sulfur Dioxide	SO <sub>2</sub>	2.21	5 ppm		1000 ppm
Chlorine	Cl <sub>2</sub>	2.45	1 ppm	4 ppm/hr	1000 ppm
Carbon Monoxide	CO	0.97	50 ppm	400 ppm/hr	1000 ppm
Carbon Dioxide	CO <sub>2</sub>	1.52	5000 ppm	5%	10%
Methane	CH <sub>4</sub>	0.55	90,000 ppm	Combustible above 5% in air.	

**PART VI**

**CHECK LIST**

## H2S CONTINGENCY PLAN

### Procedural Check List

#### Performed Each Tour by the Drilling Contract Personnel:

1. Check fire extinguishers to see that they have the proper charge:
2. Check pressure on breathing air cascade system to make sure they are charged to full volume.
3. Check pressure on drill pipe gauge on auxiliary panel for choke manifold to see that it is pressure communication with primary panel.

#### Performed Each Week by Drilling Contractor Personnel:

1. Blowout Preventer Drills.
2. Check nitrogen supply pressure on BOP accumulator stand-by source.

#### Performed Each Week by Callaway Safety Company Personnel:

Or

#### Daily on Supervisor:

1. Check each piece of breathing equipment to make sure that demand regulatory is working. This requires that the bottle to be opened and the mask assembly be put on tight enough so that when you inhale, you get air.
2. Check butane supply for burn pit for volume and to make sure 1" line is not plugged. Check automatic ignition system.
3. Check all SKA-PAC units for operation; demand regulator, escape bottle air volume, supply bottle air volume.
4. Check breathing equipment mask assembly to see that traps are loosened and turned back ready to put on.
5. Check pressure on breathing equipment air bottles to make sure they are charged to full volume.
6. Confirm pressure on all supply air bottles.
7. Perform breathing equipment drills with onsite personnel.

8. Check oxygen resuscitator for pressure on oxygen bottles and make sure demand regulator is working
9. Check the following supplies for availability:
  - a. Stretcher
  - b. Flare gun and flares
  - c. Emergency telephone list
  - d. Spare Oxygen bottle
  - e. Bandix detectors and tubes



District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-144  
June 1, 2004

For drilling and production facilities, submit to appropriate NMOCD District Office.  
For downstream facilities, submit to Santa Fe office

### Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☐ No ☒

Type of action: Registration of a pit or below-grade tank ☐ Closure of a pit or below-grade tank ☐

Operator: <b>Texland Petroleum L.P.</b> Telephone: <b>817-336-2751</b> E-mail address: <b>mjacoby@texpetro.com</b>	
Address: <b>777 Main #3200 Fort Worth TX 76102</b>	
Facility or well name: <b>Bowers A-1 to 30</b> U/L or Qtr/Qtr <b>E</b> Sec <b>29</b> T <b>18</b> S <b>38</b> E	
County: <b>Hobbs NM</b> Latitude: <b>N32°43'07"</b> Longitude: <b>W103°10'41.3"</b> NAD: 1927 <input checked="" type="checkbox"/> 1983 <input type="checkbox"/> Surface Owner Federal <input type="checkbox"/> State <input type="checkbox"/> Private <input checked="" type="checkbox"/> Indian <input type="checkbox"/>	
<b>Pit</b> Type: Drilling <input checked="" type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input type="checkbox"/> Lined <input checked="" type="checkbox"/> Unlined <input type="checkbox"/> Liner type: Synthetic <input checked="" type="checkbox"/> Thickness <b>12</b> mil Clay <input type="checkbox"/> Pit Volume <b>2300</b> bbl	
<b>Below-grade tank</b> Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not: _____	
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet <input checked="" type="checkbox"/> (20 points) <input checked="" type="checkbox"/> 50 feet or more, but less than 100 feet (10 points) 100 feet or more (0 points)
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes <input checked="" type="checkbox"/> (20 points) No (0 points)
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet (20 points) 200 feet or more, but less than 1000 feet (10 points) 1000 feet or more (0 points) <input checked="" type="checkbox"/>
Ranking Score (Total Points) <b>40</b>	

If this is a pit closure: (1) attach a diagram showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if you are burying in place) onsite ☐ offsite ☐ If offsite, name of facility: \_\_\_\_\_. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface: \_\_\_\_\_ ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments:

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described 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 ☐.

Date: **8-19-04**  
Printed Name/Title: **MARK JACOBY, ENGINEER** Signature: \_\_\_\_\_

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval: **8/20/04**  
Printed Name/Title: **CHRIS WILLIAMS**

Signature: **Chris Williams** Date: **8/20/04**