

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work ☒ DRILL ☐ REENTER  
1b. Type of Well ☐ Oil Well ☐ Gas Well ☒ Other ☒ Single Zone ☐ Multiple Zone

2. Name of Operator  
Occidental Permian Limited Partnership

3a. Address  
P.O. Box 4294, Houston, TX 77210-4294

3b. Phone No. (include area code)  
(281) 552-1158

4. Location of Well (Report location clearly and in accordance with any State requirements)\*

At surface 641' FSL & 2419' FEL

At proposed prod. zone 486' FSL & 2573' FEL

14. Distance in miles and direction from nearest town or post office\*

3.5 miles Northwest from Hobbs, NM

15. Distance from proposed\*  
location to nearest  
property or lease line, ft.  
(Also to nearest drg. unit line, if any)  
5911' FSL

16. No. of Acres in lease  
10,649.53

17. Spacing Unit dedicated to this well  
40 acres

18. Distance from proposed location\*  
to nearest well, drilling, completed,  
applied for, on this lease, ft.  
217'

19. Proposed Depth  
4600' TVD

20. BLM/BIA Bond No. on file  
NM2797

21. Elevations (Show whether DF, KDB, RT, GL, etc.)

3651' GL

22. Approximate date work will start\*

5/24/03

23. Estimated duration

11 days

24. Attachments

Lea County 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:

- 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

Mark Stephens

Name (Printed/Typed)

Mark Stephens

Date

4/21/03

Title

Regulatory Compliance Analyst

Approved by (Signature)

/s/ LESLIE A. THEISS

Name (Printed/Typed)

/s/ LESLIE A. THEISS

Date

MAY 12 2003

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.

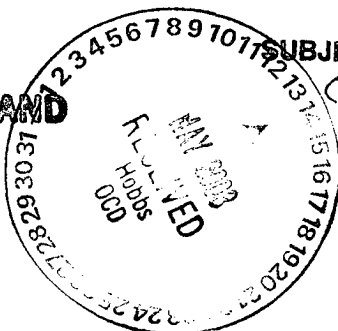
Conditions of approval, if any, are attached.

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)

APPROVAL SUBJECT TO  
GENERAL REQUIREMENTS AND  
SPECIAL STIPULATIONS  
ATTACHED



DISTRICT I  
P.O. Box 1980, Hobbs, NM 88241-1980

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised February 10, 1994  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

DISTRICT II  
P.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV  
P.O. Box 2088, Santa Fe, N.M. 87504-2088

OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number <b>30-025-36286</b>	Pool Code 31920	Pool Name HOBBS: GRAYBURG - SAN ANDRES
Property Code 19520	Property Name NORTH HOBBS G/SA UNIT	Well Number 536
OGRD No. 157984	Operator Name OCCIDENTAL PERMIAN LIMITED PARTNERSHIP	Elevation 3651'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	30	18 S	38 E		641	SOUTH	2419	EAST	LEA

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
0	30	18 S	38 E		486	SOUTH	2573	EAST	LEA

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
40	I	U	

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>LOT 2</p> <p>(TRUE BRG.) S43°41'W - 159' SURF. TO PROP. PENETRATION PT. (TRUE BRG.) S43°41'W - 217' SURF. TO PROP. BOTTOM HOLE LOC.</p> <p>37.85 AC.</p> <p>LOT 3</p> <p>37.67 AC.</p> <p>LOC 4</p> <p>LAT. = 32°42'45.89"N LONG. = 103°11'11.81"W</p> <p>PROPOSED SURFACE LOC. NAD 27 NM EAST ZONE N=624915.7 E=852709.3</p> <p>PROPOSED PENETRATION POINT @ 3944.8 TVD</p> <p>PROPOSED BOTTOM HOLE LOCATION @ 4414.8 TVD NAD 27 NM EAST ZONE N=624760.2 E=852557.7</p> <p>30 37.91 AC. 31 LOT 1</p> <p>37.94 AC.</p> <p>DETAIL</p> <p>3651.7' 3650.0' 3650.0' 3648.6'</p> <p>SEE DETAIL</p> <p>2419' 2532' 2573'</p> <p>486' 527' 641'</p>	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><u>Mark Stephens</u> Signature</p> <p>Mark Stephens Printed Name</p> <p>Reg. Comp. Analyst Title</p> <p>April 4, 2003 Date</p> <p>SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>JANUARY 21, 2003</p> <p>Date Surveyed</p> <p>Signature &amp; Seal of Professional Surveyor</p> <p><u>Ronald J. Edson</u> 3/3/03 03.11.0061</p> <p>Certificate No. RONALD J. EDSON 3239 GARY EDSON 12641</p>
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Flac No.						DRILLING AND COMPLETION PROGRAM					
Rig No.		Key 11				Date:		April 11, 2003			
API #						County:		Lea, New Mexico			
Lease:		North Hobbs G/SA Unit		Well No.		536		Field:		Hobbs	
Location:		641' FSL & 2419' FEL, Lot. O Sec. 30, T-18-S, R-38-E		Bottomhole		486' FSL & 2573' FEL, Location: Let. O, Sec. 30, T-18-S, R-38E					
OBJECTIVE:		Primary: San Andres				Secondary:					
METHOD OF DRILLING						APPROXIMATE DEPTHS OF GEOLOGICAL MARKER					
TYPE OF TOOLS		DEPTH OF DRILLING				Est. Elev. @ GL: 3651' AMSL		3665' @ KE		KB 14' AGL	
Rotary		Set Through - 4415 TVD RKB				Marker					
						Redbeds		265'			
LOG PROGRAM		Depth Interval				Rustler		1460'-1555'			
						Yates		2815'			
						Seven Rivers		3035'			
						Queen		3570'			
						Grayburg		3900'			
						San Andres		4020'			
REMARKS:											
NO MUD LOGGER											
						TOTAL DEPTH		4415' TVD			
SPECIAL TESTS						# Probable completion interval					
TYPE		DEPTH INTERVAL, ETC				DRILL CUTTING SAMPLES		DRILLING TIME			
						FREQUENCY DEPTH		FREQUENCY		DEPTH	
						NONE		Continuous		0' - TD	
						Remarks:					
Remarks: Permit well to 4600' - Directional Hole						Surveys required every 500' in vertical hole.					
Mud Program											
Approx Interval		Type Mud		Weight		Vis, sec/qt		W/L, cc's/30 min		pH control	
Surface		Fresh Water / Native Mud		8.6 - 9.5		32 - 36		No Control		None	
Production		Brine Water		10 - 10.2		28 - 29		No Control		None	
REMARKS:											
CASING PROGRAM:											
Casing String	Est. Depth	Casing	Hole Size	Cu. Ft. Cement	Cement Recipe	Landing Point					
Surface	1515'	8.625", 24#, J-55, ST&C	12.25"		See below	Cut hole to fit pipe tally					
Production	4415'	5.5", 15.5#, J-55, LT&C	7.875"		See below	4415' TVD RKB					
Float Equipment:											
Surface float equipment - Guide Shoe - 1 shoe joint - Float Collar - 10 centralizers											
Production float equipment - Guide shoe - 1 shoe joint - Float Collar - DV Tool - ECP - 12 centralizers											
Remarks:											
Surface Casing: Cement with 600 sx PBCZ (10.3 gal/sx water & 1.88 Yield) and 250 sx Premium Plus (6.3 gal/sx water & 1.32 yield)											
Production Casing: Centralizers from 3400' to TD. DV Tool set at 3500'. Centralize DV tool on either side. ECP set @ 1400' or 100' inside surface casing. Cement first stage with 350 sx Prem. Plus and second stage with 600 sx Interfill "C" lead and 100 sx Premium Plus tail cement. Add .25 lbs/sx flo-cele to cement on both stages to improve circulation to surface of cement.											
GENERAL REMARKS:											
Directional Hole. The 8-5/8" Bradenhead valves (BHO) are to be North - South											
Reviewed by				Logging program developed by:							
PREPARED BY: Blackwell/Lowery				APPROVED:				APPROVED:			

# WELL BORE SKETCH

## WELL HEAD 6" X 900

Well: NHU 30-536  
Pool: Hobbs; Grayburg-San Andres

Ground Level: 3651.00  
RDB: 14.00  
GL + RDB: 3665.00

Objective: San Andres

Directional

16" Conductor set at 40'

Cement 8 5/8" surface casing  
with 600 sx PBCZ lead and 250  
sx Premium Plus tailend.  
Circulate to surface.

8 5/8" 24#, J-55, ST&C casing  
S/A 1515' with 10 centralizers

External Casing Packer @ 1400'

7.875" Hole

Cement 2nd stage with 600 sx Interfill  
"C" and 100 sx Premium Plus

DV Tool set at 3500'

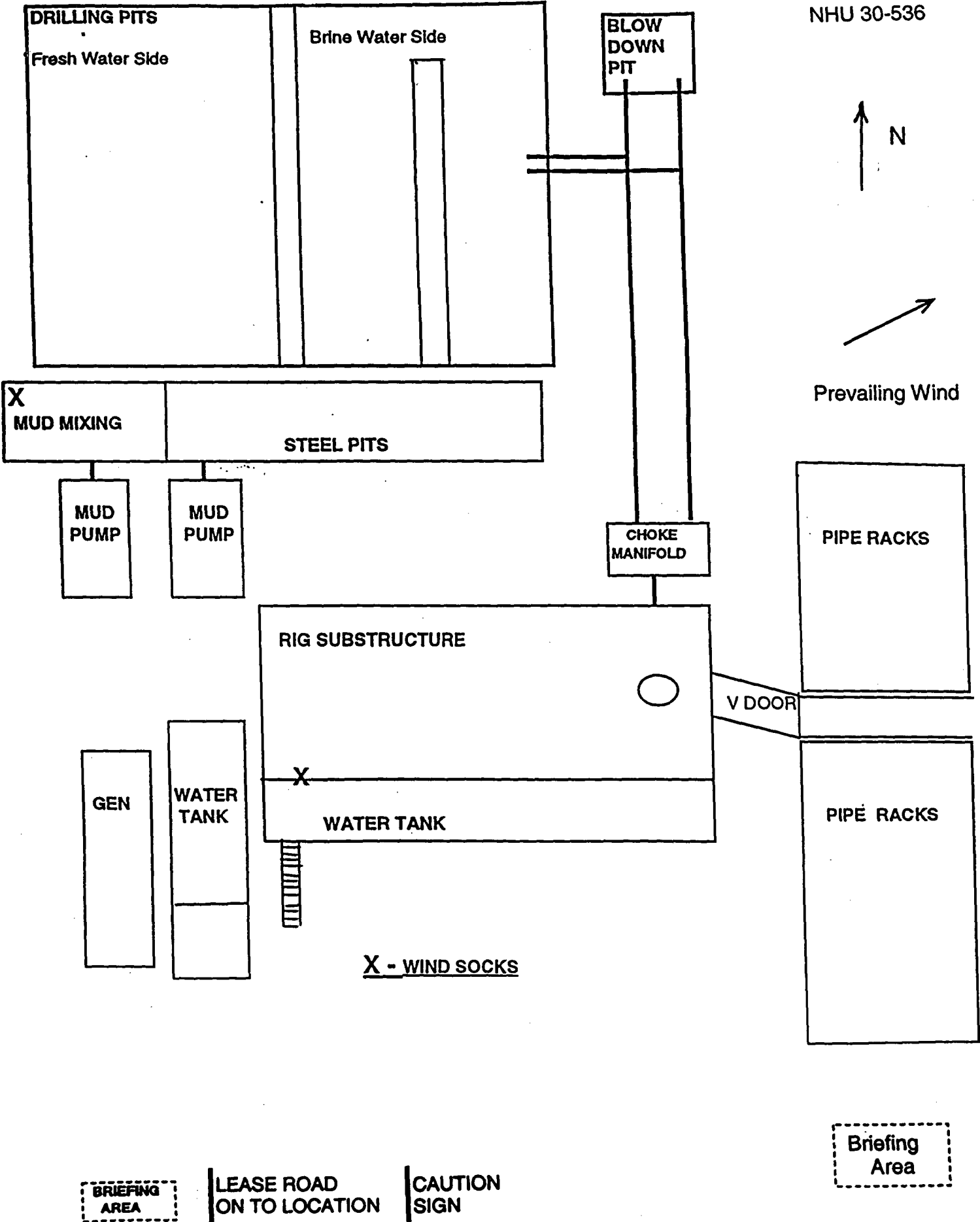
5-1/2", 15.5#, J-55, LT&C casing  
set at 4415' w/12 centralizers

Cement first Stage with 350 sx  
Premium Plus

TD 4415' TVD

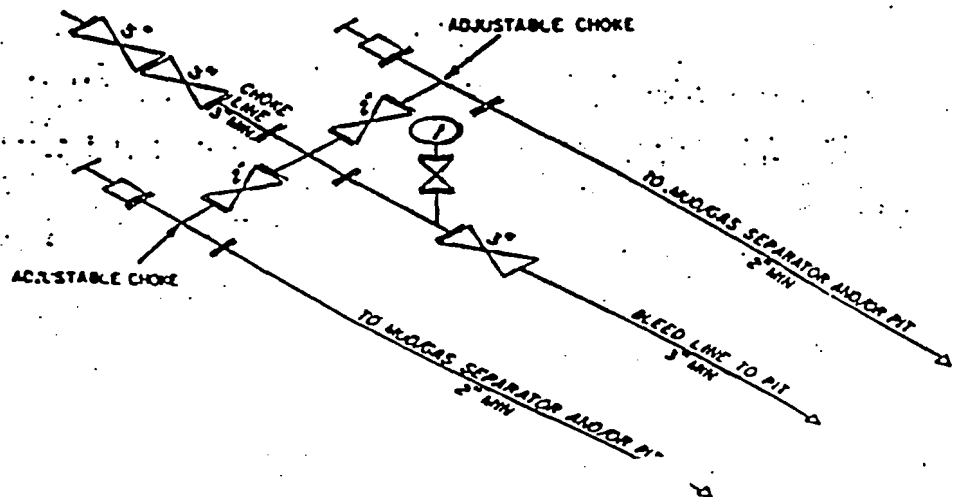
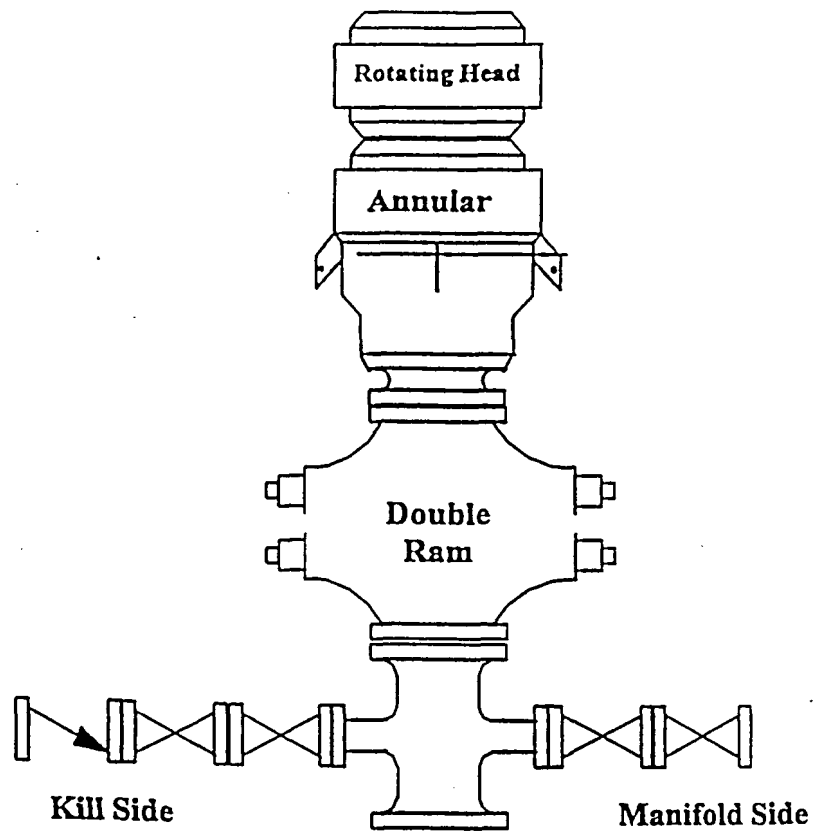
5.5" Float Collar  
One Shoe Joint  
5.5" Guide Shoe

NHU 30-536



## **NOTES REGARDING THE BLOWOUT PREVENTERS**

- 1) Drilling nipple to be so constructed that it can be removed without use of a welder through rotary table opening, with minimum i.d. equal to preventer bore.
- 2) Blowout preventer (BOP) and all fittings must be in good condition, 3000 psi WP minimum. BOP, choke manifold, and all related equipment will be suitable for H<sub>2</sub>S service per 43 CFR 3160 Onshore Oil and Gas Order No. 6, Hydrogen Sulfide Operations (III.C).
- 3) All fittings to be flanged.
- 4) Safety valve must be available on rig floor at all times with proper connections; valve to be full bore 3000 psi WP minimum.
- 5) All choke and kill lines to be securely anchored, especially ends of choke lines.
- 6) Equipment through which bit must pass shall be at least as large as the diameter of the casing being drilled through.
- 7) Kelly cock on kelly.
- 8) Extension wrenches and hand wheels to be properly installed.
- 9) Blow out preventer control to be located as close to driller's position as feasible.
- 10) BOP closing equipment to meet specifications of 43 CFR 3160 Onshore Oil and Gas Order No. 2, Drilling Operations (III.A.).



Request for Variance – BOP  
Well Control Requirements (III.A.2.i.)  
Onshore Oil and Gas Order No. 2, Drilling Operations

Request: Utilize 3000 psi BOP stack, but test only to 1100 psi.

Logic: Surface casing will be set at approximately 1505' below grade. At this depth, the fracture gradient of the formation is estimated to be approximately 13.3 ppg. The formation at the casing shoe can therefore only hold  $(13.3)(.052)(1505) = 1041$  psi without fracturing. Assuming brine in the wellbore, 1041 psi at the casing shoe translates into  $1041 - (8.9)(.052)(1505) = 344$  psi at the wellhead. Assuming gas in the wellbore, 1041 psi at the casing shoe translates into  $1041 - (0)(.052)(1505) = 1041$  psi at the wellhead. Thus, the BOP stack on this well is unlikely to be subjected to well control pressures in excess of approximately 1041 psi.





# **EMERGENCY ACTION PLAN**

**DOWNHOLE SERVICES GROUP**

**DRILLING AND CRITICAL WELL OPERATIONS**

Updated March 2003

**DOWNHOLE SERVICES GROUP  
DRILLING AND CRITICAL WELL OPERATIONS**

**EMERGENCY ACTION PLAN**

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## **PREFACE**

An effective and viable Emergency Action Plan (EAP) is intended to provide prior planning and guidance in responding to emergency incidents. The primary considerations in its development are protection of personnel, the public, company and public property, and the environment.

Although the plan addresses varied emergency situations which may occur, it recognizes that flexibility and the use of the organization's knowledge and experience is critical to safe resolution of emergency incidents. Response actions outlined in the plan provide a framework, which may be placed into operation without confusion. These actions should promote quick and decisive actions during the critical initial period and immediately following an emergency. As the response progresses, additional guidelines and procedures may need to be implemented as the situation dictates. In addition, all emergency incidents must be properly reported per the Oxy Incident Reporting and Notification Policy, state and federal requirements, etc.

The following procedures are provided as Oxy Permian's minimum expectations. The Contractor's own procedures may be utilized in lieu of Oxy Permian's, provided that it meets or exceeds the minimum deliverables. It should be understood that this list is not all-inclusive, but the overall plan should assist in lateral application to similar incidents.

This EAP is intended for use on Oxy Downhole Services Group projects and the operations within their area of responsibility, such as drilling, critical well work, etc.

# **EMERGENCY RESPONSE ACTIVATION AND GENERAL RESPONSIBILITIES**

## ***Activation of the Emergency Action Plan***

- A. In the event of any emergency situation, all personnel on location should first ensure that the following items are initiated. After that, they should refer to the appropriate Specific Emergency Guidance sections on pages five (5) through nine (9) in this document for further responsibilities:
  - 1. Notify the senior ranking contract representative on site.
  - 2. Notify Oxy representative in charge.
  - 3. Notify civil authorities if the Oxy Representative can not be contacted and the situation dictates.
  - 4. Perform rescue and first aid as required (without jeopardizing additional personnel).

## ***General Responsibilities***

### **Oxy Permian Personnel:**

- A. Operations Specialist: The Oxy Drilling/Critical Well Servicing Operations Specialist or contract personnel serving in that capacity will serve as Operations Chief Officer for all emergency incidents. The Operations Chief Officer is responsible for:
  - 1. Notification to the Downhole Services Team Leader of the incident occurrence.
  - 2. Notification to the local RMT/PMT leader of the incident occurrence, and the need for the designated local RMT/PMT Incident Commander to act in that capacity for the response effort.
  - 3. Sole control of all tactical activities directed toward reducing the immediate hazard, establishing situational control and restoring the operations to a non-emergency state.
- B. Local RMT/PMT Designated Incident Commander: The Oxy local RMT/PMT Designated Incident Commander will serve as the overall Incident Commander for the drilling or critical well servicing emergency incident. The Incident Commander is responsible for:
  - 1. Coordinating with the Downhole Services Team Leader for notification to the Oxy Crisis Management team of the incident occurrence.
  - 2. Establishing and managing the overall incident command structure and response from inception through restoration of normal activities in the area.
- C. Downhole Services HES Tech: The Downhole Services HES Tech (or his designate) is responsible for reporting to the incident as soon as reasonably possible, to provide support to the response effort as required by the Operations Chief Officer or the Incident Commander.

**Contract Drilling Personnel** will immediately report to their assigned stations and perform their duties as outlined in the appropriate Specific Emergency Guidance sections on pages five (5) through nine (9) in this document.

**Other Contractor Personnel** will report to the safe briefing area to assist Oxy personnel and civil authorities as requested when it is safe to do so and if they have been adequately trained in their assigned duties.

**Civil Authorities** (Law Enforcement, Fire, and EMS) will be responsible for:

- 1. Establishing membership in the Unified Incident Command.
- 2. As directed by the Incident Commander and the Unified Command, control site access, re-route traffic, and provide escort services for response personnel.
- 3. Perform all fire control activities in coordination with the Unified Command.
- 4. Initiate public evacuation plans as instructed by the Incident Commander.
- 5. Perform rescue or recovery activities with coordination from the Unified Command.
- 6. Provide medical assistance as dictated by the situation at hand.

## **WELL CONTROL**

The following procedures will be implemented when a loss of primary control is indicated. Indicators of loss of primary control are flow from the well, an increase in pit volume, or when the drilling fluid used to fill the hole on trips is less than the calculated pipe displacement volume. The emergency signal for well control procedures will be a single long blast of the rig air horn.

### **Kick While Drilling - Procedures And Responsibilities**

#### **Driller:**

1. Stop the rotary and hoist the kelly above the rotary table.
2. Stop the mud pump(s).
3. Check for flow.
4. If flowing, sound the alarm immediately.
5. Ensure that all crew members fill their responsibilities to secure the well.
6. Record drill pipe and casing shut-in pressures and pit volume increase and begin kill sheet.

#### **Derrickman:**

1. Go to BOP/choke manifold area.
2. Open choke line valve on BOP.
3. Signal to Floorman #1 that the choke line is open.
4. Close chokes after annular or pipe rams are closed.
5. Record shut-in casing pressure and pit volume increase.
6. Report readings and observations to Driller.
7. Verify actual mud weight in suction pit and report to Driller.
8. Be readily available as required for additional tasks.

#### **Floorman # 1:**

1. Go to accumulator control station and await signal from Derrickman.
2. Close annular preventer and HCR on signal (if available, if not then close pipe rams).
3. Record accumulator pressures and check for leaks in the BOP or accumulator system.
4. Report to Driller, and be readily available as required for additional tasks.

#### **Floorman # 2:**

1. Start water on motor exhausts.
2. Notify Contractor Tool Pusher or Rig Manager of well control situation.
3. Check location for ignition sources and extinguish or turn off, and stop any welding in progress.
4. Report to Driller, and be readily available as required for additional tasks.

#### **Floorman # 3:**

1. Stand-by with Driller, and be readily available as required for additional tasks.

#### **Tool Pusher/Rig Manager:**

1. Notify Oxy Representative and report to rig floor.
2. Review and verify all pertinent information.
3. Communicate information to Oxy Representative, and confer on an action plan.
4. Finalize well control worksheets, calculations and preparatory work for action plan.
5. Initiate and ensure the action plan is carried out.
6. Communicate any changes in well or site conditions, or any indications that the action plan needs to be revised to the Oxy representative.

#### **Oxy Representative:**

1. Notify Operation Specialists or Team Leader and RMT Leader or Local Incident Commander, and Police, Fire Department, or other local emergency services as required.

## **WELL CONTROL (continued)**

### **Kick While Tripping - Procedures and Responsibilities**

#### **Driller:**

1. Sound the alarm immediately when pipe displacement volume is less than 75% of calculated.
2. Position the upper tool joint just above rotary table and set slips.
3. Check for flow.
4. Ensure that all crew members fill their responsibilities to secure the well.
5. Record drill pipe and casing shut-in pressures and pit volume increase, and begin kill sheets.

#### **Derrickman:** (same as while drilling)

#### **Floor Man # 1:**

1. Install full opening valve (with help from Floorman #2) in top drill string connection.
2. Tighten valve with make up tongs.
3. Go to accumulator control station and await signal from Derrickman.
4. Close annular preventer and HCR valve on signal (if available, if not then close pipe rams).
5. Record accumulator pressures and check for leaks in the BOP and accumulator system.
6. Report to Driller, and be readily available as required for additional tasks.

#### **Floor Man # 2:**

1. Assist installing full opening valve in drill string.
2. Position back-up tongs for valve make-up.
3. Start water on motor exhausts.
4. Notify Contractor Tool Pusher or Rig Manager of well control situation.
5. Check location for ignition sources and extinguish or turn off, and stop any welding in progress.
6. Report to Driller, and be readily available as required for additional tasks.

#### **Floorman # 3, Rig Manager/Tool Pusher, and Oxy Representative:** (same as while drilling)

### **H2S RELEASE**

The following procedures and responsibilities will be implemented on activation of the H2S siren and lights.

#### **All Personnel:**

1. On alarm, don escape unit (if available) and report to upwind briefing area.

#### **Rig Manager/Tool Pusher:**

1. Check that all personnel are accounted for and their condition.
2. Administer or arrange for first aid treatment, and /or call EMTs as needed.
3. Identify two people best suited to secure well and perform rescue, and instruct them to don SCBA.
4. Notify Contractor management and Oxy Representative.
5. Remain at the briefing area, assess and monitor personnel and overall situation for hazards or conditions that might warrant a change in the action plan.

#### **Two People Responsible For Shut-in and Rescue:**

1. Don SCBA and acquire tools to secure well and perform rescue, i.e., wrenches, retrieval ropes, etc.
2. Utilize the buddy system to secure well and perform rescue(s).
3. Return to the briefing area and stand by for further instructions.

#### **All Other Personnel:**

1. Remain at the briefing area and await further instructions - do not leave unless instructed.

#### **Oxy Representative:**

1. Remain at the briefing area, assess and monitor personnel and overall situation for hazards or conditions that might warrant a change in the action plan.
2. Notify Operation Specialists or Team Leader and RMT Leader or Local Incident Commander, and Police, Fire Department, or other local emergency services as required.

## **PERSONAL INJURY OR DEATH**

• Call for assistance, and then administer first aid for the injured. Treatment should be prioritized by life-threatening conditions.

- A. Do not move injured personnel unless they are in imminent danger. An ambulance should be summoned for any injury that appears to be serious.

## **FIRE OR EXPLOSION**

### **Fire Fighting Philosophy**

It is Oxy Permian's intent that Oxy and contract personnel will only extinguish incipient or beginning stage fires and perform or assist in initial non-threatening rescue operations. The responding fire department will be given primacy when they arrive to control a fire on any Oxy property. Any Oxy or contract employee who participates in a fire response must be fully trained and qualified as such, and must be utilizing appropriate Personal Protective Equipment.

### **Contract and Oxy Personnel Deployment**

In the event of a fire or explosion all personnel will report to the safe briefing area. The Senior Contract Representative on site will designate personnel for rescue as appropriate depending on their qualifications and the risks of the rescue. Any rescue which involves significant risk to those performing the rescue should be deferred to professional response personnel.

No personnel will leave the area without direction / permission from the Senior Contract Representative on-site.

The Senior Contract Representative on site will notify local emergency response personnel as required, along with the Contract Company management and the Oxy Representative as soon as reasonably possible.

## **SPILLS**

In the event of a significant spill of any substance, the person discovering it should immediately notify the rig supervisor and the Oxy Representative. Personnel onsite should **NOT** attempt identification, control or containment unless they are absolutely sure of the product spilled, are fully aware of the hazard characteristics, and are equipped with the appropriate personal protective equipment.

## **HYDROCARBON VAPOR CLOUD RELEASE**

Upon discovery of a Hydrocarbon Vapor Cloud (NGL) release, take immediate safety precautions to protect any company personnel or others that might be in the area. Other emergency actions should be initiated only by trained expert personnel from the appropriate pipeline company.

**The following guidelines should be followed:**

1. Immediately notify the rig supervisor and the Oxy Representative.
2. Determine wind direction, and evacuate upwind or at 90 degrees to the release.
3. Maintain a safe distance from the cloud.
4. Render first aid and call for an ambulance as necessary.
5. Attempt to warn approaching individuals of the hazard.

## **BOMB THREAT**

In the event of a bomb threat, the person receiving the call, on or off site, should try to get as much information as possible from the caller. The person receiving the call should immediately contact the supervisor in charge. Evacuation of the field should be considered at this time. Roadblocks may need to be installed. The supervisor in charge should make all appropriate contacts.

### **The Supervisor contacted should:**

- a. Realize that every bomb threat is serious.
- b. Notify Corporate Security
- c. Inform Police/Sheriff's Department and Fire Department
- d. Contact RMT Leader or his designated relief to coordinate search efforts with the assistance of the local law enforcement agencies.

## **BOMB THREAT CHECKLIST**

Date \_\_\_\_\_ Name of person taking call \_\_\_\_\_ Phone # call came on \_\_\_\_\_

### **FILL OUT COMPLETELY IMMEDIATELY AFTER BOMB THREAT**

1. When is the bomb set to explode? \_\_\_\_\_
2. Where is the bomb located? \_\_\_\_\_
3. What does the bomb look like? \_\_\_\_\_
4. What type of bomb is it? \_\_\_\_\_
5. What will cause the bomb to explode? \_\_\_\_\_
6. Did the caller place the bomb? \_\_\_\_\_
7. Why did the caller place the bomb? \_\_\_\_\_
8. What is the caller's name and address? \_\_\_\_\_

Callers: Sex \_\_\_\_\_ Age \_\_\_\_\_ Race \_\_\_\_\_ Length of call \_\_\_\_\_

### **DESCRIPTION OF CALLER'S VOICE (Check all that apply)**

<input type="checkbox"/> Calm	<input type="checkbox"/> Rapid	<input type="checkbox"/> Laughing	<input type="checkbox"/> Lisp	<input type="checkbox"/> Disguised
<input type="checkbox"/> Angry	<input type="checkbox"/> Crying	<input type="checkbox"/> Raspy	<input type="checkbox"/> Accent	<input type="checkbox"/> Familiar? Whom did
<input type="checkbox"/> Excited	<input type="checkbox"/> Normal	<input type="checkbox"/> Deep	<input type="checkbox"/> Stutter	it sound like?
<input type="checkbox"/> Slow	<input type="checkbox"/> Distinct	<input type="checkbox"/> Ragged	<input type="checkbox"/> Deep	<input type="checkbox"/> Deep Breathing
<input type="checkbox"/> Loud	<input type="checkbox"/> Slurred	<input type="checkbox"/> Nasal	<input type="checkbox"/> Clearing Throat	

### **BACKGROUND SOUNDS:**

<input type="checkbox"/> Street	<input type="checkbox"/> House	<input type="checkbox"/> Factory	<input type="checkbox"/> Music	<input type="checkbox"/> Local Call
<input type="checkbox"/> Noises	<input type="checkbox"/> Noises	<input type="checkbox"/> Machinery	<input type="checkbox"/> Static	<input type="checkbox"/> Long Distance
<input type="checkbox"/> Voices	<input type="checkbox"/> Motor	<input type="checkbox"/> Animals	<input type="checkbox"/> PA System	<input type="checkbox"/> Phone Booth
<input type="checkbox"/> Office	<input type="checkbox"/> Clear	<input type="checkbox"/> Other		

### **THREAT LANGUAGE:**

<input type="checkbox"/> Well-Spoken	<input type="checkbox"/> Foul	<input type="checkbox"/> Incoherent	<input type="checkbox"/> Irrational	<input type="checkbox"/> Taped
<input type="checkbox"/> Message Read by Threat Maker				

### **REMARKS:**



## **NATURAL DISASTERS**

### **Tornadoes**

These general procedures should be followed by everyone seeking shelter from a severe storm or tornado:

#### **Indoors:**

1. Protect yourself from flying glass and debris.
2. Take refuge near the core of the building for maximum protection.
3. Do not smoke while taking shelter.
4. Shut all doors to offices, if time permits.

#### **In the field:**

1. Seek cover in a low-lying area, such as a culvert, ditch, pit, or water injection valve box.
2. Get out of and away from your vehicle.
3. Stay away from power lines.
4. Cover your head with your arms and clothing.

### **Thunderstorms**

#### **Indoors:**

1. Avoid water pipes, sinks, showers, tubs, etc.
2. Stay away from doors and windows.
3. Do not use the telephone.
4. Take off head sets.
5. Turn off, unplug, and stay away from appliances, computers, power tools, & TV sets.

#### **In the field:**

1. Avoid water.
2. Avoid high ground and open spaces.
3. Avoid all metal objects including electric wires, fences, machinery, motors, power tools, etc. Unsafe places include underneath canopies, small picnic or rain shelters, or near trees. Where possible, find shelter in a substantial building or in a fully enclosed metal vehicle such as a car, truck or a van with the windows completely shut. If lightning is striking nearby when you are outside, you should:
  - a. Crouch down, feet together, hands over ears
  - b. Avoid proximity (minimum of 15 ft.) to other people.
4. SUSPEND ACTIVITIES for 30 minutes after the last observed lightning or thunder.

## **PUBLIC RELATIONS**

Oxy recognizes that the news media have a legitimate interest in incidents at Oxy facilities that could affect the public. It is to the company's benefit to cooperate with the news media when incidents occur because these media are our best liaison with the public.

Our objective is to see that all reports of any emergency are factual and represent the company's position fairly and accurately. Cooperation with news media representatives is the most reliable guarantee that this objective will be met.

All contract and Oxy employees are instructed **NOT** to make any statement to the media concerning the emergency incident. If a media representative contacts any employee, they should refer them to the designated Emergency Command Center where they should contact the Incident Commander or his designated relief for any information concerning the incident.

# OXY PERMIAN DOWNHOLE SERVICES GROUP

NAME	LOCATION	OFFICE	FAX	CELLULAR	PAGER
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## ***Manager Operations Support***

Hardesty, Steve	Houston	281-552-1654	713-985-1298	713-560-8095	
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## ***Team Leader***

Pennington, Randy	Houston	281-552-1215	918-628-5149	713-560-8090	713-312-8186
			Toledo Bend =	318-590-2349	

## ***Operations Specialists***

Baker, Randy	Odessa	915-385-2109	915-385-2135	915-661-3892	915-567-8762
Blackwell, Mike	Slaughter	806-229-9472	806-229-9573	806-638-3861	806-761-5447
Dunaway, Drue	Odessa	915-385-2104	915-385-2135	915-556-3288	915-567-8757
Fleming, Joe	Midland	915-685-5858	915-685-5742	915-425-6075	915-498-3281
Kennedy, B.J.	Slaughter	806-229-9469	806-229-9573	806-638-1951	
Pulliam, Ron	Odessa	915-385-2104	915-385-2135	915-631-1620	915-567-8741
Ray, Fred	Midland	915-685-5683	915-685-5742	915-661-3893	915-499-3915
Videtich, Kevin	Denver City	806-592-6213	806-592-6248	806-891-2000	

## ***Well Staking / Site Construction***

Weaver, Dusty	Slaughter	806-229-9467	806-229-9573	806-893-3067	806-723-4435
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## ***Drilling Engineers***

DeNitto, Phil	Slaughter	806-229-9473	806-229-9573	806-638-6670	505-257-3613
Lowery, Keith	Houston	281-552-1258	918-628-5109	713-560-8062	888-788-5059

## ***HES Tech***

Thompson, Don	Midland	915-685-5719	713-985-1895	915-556-1505	
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**OXY PERMIAN PRODUCTION AND PLANT PERSONNEL**  
**OXY Permian Crisis Team Hotline Notification (713) 935-7210**

PERSON	LOCATION	OFFICE	FAX	CELL	PAGER
<b>Asset Management-Operations Areas</b>					
OXY Permian General Manager: Pat Oenbring	Houston	(281) 552-1361	(281) 552-1484	(713) 560-8044	
Slaughter Asset: Tom Menges	Houston	(281) 552-1147	(713) 985-1234	(713) 560-8038	
Wasson Asset: Harry Huff	Houston	(281) 552-1002	(281) 552-1484	(713) 560-8071	
South Permian Asset: Matt Hyde	Midland	(915) 685-5802	(915) 685-5930	(915) 556-5016	
Operations Support: Steve Hardesty	Houston	(281) 552-1654	(713) 985-1298	(713) 560-8095	

<b>RMT/PMT Leaders: Slaughter Asset</b>					
Sunland RMT: Billy Elliott	Sunland-Levelland	(806) 894-0209	(806) 894-0270	(806) 638-3680	
Anton Irish RMT: Ron Miller	Anton	(806) 637-5901	(806) 637-5920		(806) 723-3829
Cogdell RMT: Leamon Hood	Houston	(281) 552-1354	(713) 985-1576	(713) 560-8030	(713) 612-5808
Welch/Cedar Lake RMT: Keith Brown	Midland	(915) 685-5836	(915) 685-5635	(915) 556-1275	(915) 495-3661
Slaughter PMT: Charlie Wagner	Mallet CO2 Plant	(806) 229-9715	(806) 229-9750	(806) 638-3494	(806) 761-6245

<b>RMT/PMT Leaders: Wasson Asset</b>					
Wasson San Andres RMT: Tommy McKenzie	Houston	(281) 552-1176	(918) 641-7109	(713) 560-8034	
Wasson Clearfork RMT: Andy Falls	Houston	(281) 552-1018	(713) 985-1376	(713) 560-8035	
Hobbs RMT: Gary Bullock	Hobbs	(505) 397-8203	(505) 397-8204	(505) 390-9144	
Wasson PMT: Mike Kelly	Wasson CO2 Removal Plt.	(806) 592-7301	(806) 592-7355	(806) 891-8854	(888) 971-7777

<b>RMT/PMT Leaders: South Permian Asset</b>					
Odessa RMT: Jim Briscoe	Midland	(915) 685-5845	(915) 685-5931	(915) 238-4405	
Goldsmith, Seminole, S.Cowden RMT: Billy Bledsoe	Midland	(915) 685-5730	(915) 685-5931	(915) 557-2814	
Frontier RMT: Tommy Johnson	Midland	(915) 685-5671	(915) 685-4054	(915) 238-9343	(915) 567-7038

**OXY Permian Production and Plant Personnel**  
**OXY Permian Crisis Team Hotline Notification (713) 935-7210**

PERSON	LOCATION	OFFICE	FAX	CELL	PAGER
<b>Production Coordinators: Slaughter Asset</b>					
Welch/Cedar Lake Prod & Plants: Terry Crews	Welch/Cedar Lake	(806) 637-5956	(806) 637-5402	(806) 773-3118	(877) 440-3460
Mallet Plant: John Dorrow	Mallet CO2 Plant	(806) 229-9771	(806) 229-9750	(806) 638-8549	(806) 761-8725
Slaughter Gas Plant: Jim Richardson	Slaughter Gas Plant	(806) 229-9602	(806) 229-9650	(806) 778-9832	(806) 778-9832
Bravo Dome CO2 Gas Unit: Danny Holcomb	Bravo Dome	(505) 374-3010	(505) 374-3054	(505) 799-6848	
Levelland: Larry Frazier	Sunland-Levelland	(806) 894-0213	(806) 894-0270	(806) 777-4996	
Slaughter: Rick Huckaby	Sunland-Levelland	(806) 894-8309	(806) 894-0270	(806) 638-5812	
Sunland: Dave Pickett	Sunland-Levelland	(806) 894-0205	(806) 894-0270		

<b>Production Coordinators: Wasson Asset</b>					
Wasson San Andres: Velia Thompson	Denver City	(806) 592-6449	(806) 592-6248	(806) 893-2392	(888) 333-2704
Wasson San Andres: Gilbert Williams	Denver City	(806) 592-6300	(806) 592-6498	(806) 891-3762	(800) 492-4342
Wasson Clearfork: John Hammerle	Denver City	(806) 592-6255	(806) 592-6498	(806) 893-4422	(888) 333-2703
WCRP: Mack Alexander	Denver City	(806) 592-7308	(806) 592-7355	(806) 893-6200	(806) 767-6585
DUCRP: Alonzo Hernandez	Denver City	(806) 592-6200	(806) 592-6454	(806) 891-1799	(877) 532-6782

<b>Production Coordinators: S. Permian Asset</b>					
Seminole/Flanagan: Herbie Bruton	Flanagan/Seminole	(915) 385-2778	(915) 758-8126	(915) 634-6152	(800) 222-6377
South Cowden: Mark Maroney	Odessa	(915) 385-2112	(915) 385-2135	(915) 556-3774	(915) 499-3001
Goldsmith: Bill Sweeney	Goldsmith	(915) 385-3751	(915) 385-3774	(915) 556-4467	(915) 499-9952
Midland Farms: Dennis Cunningham	North Cowden	(915) 385-3710	(915) 385-3137	(915) 557-5473	(915) 567-0047
North Cowden: Pete Maciula	North Cowden	(915) 385-3142	(915) 385-3137	(915) 557-2445	(915) 499-9158
North Cowden: Randy Rives	North Cowden	(915) 385-3108	(915) 385-3137	(915) 557-2815	(915) 567-4476
New Mexico: John Erickson	Hobbs	(505) 393-2174	(505) 397-2671	(505) 390-6426	(505) 370-6836
Cross: Jim Oliver	McCamey	(915) 652-8607	(915) 652-8617	(915) 556-0078	
Terrell: Jim Oliver	Terrell Gas Plant	(915) 385-2159	(915) 652-8617	(915) 556-0078	
Dora Roberts & Other TX: David Talbott	Odessa	(915) 580-0017	(915) 580-7093	(915) 556-4255	(915) 499-4200

**OXY Permian HES Personnel**  
**OXY Permian Crisis Team Hotline Notification (713) 935-7210**

PERSON	LOCATION	OFFICE	FAX	CELL	PAGER
HES Manager: Greg Hardin	Houston	(281) 552-1324	(918) 641-7175	(713) 560-8037	(713) 612-8864
Safety Advisor: Trent Adcock	Houston	(281) 552-1327	(918) 641-7107	(713) 819-0566	(888) 415-4874
Safety Advisor: Rusty Barnett	Houston	(281) 552-1325	(281) 552-1581	(713) 560-8031	(888) 902-0437
Safety Advisor: Rickie Tyler	Midland	(915) 685-5707	(915) 685-5742	(915) 556-6790	(915) 498-1116
Environmental Engineer: Mike Starrett	Houston	(281) 552-1322	(918) 628-5177	(281) 266-8333	
Environmental Air Specialist: Peggy Waisanen	Midland	(915) 685-5673	(915) 685-5742	(915) 940-3253	
Administrative Assistant: Angela Hart	Houston	(281) 552-1329	(918) 641-7176		
Business Associate: Judy Browning	Midland	(915) 685-5667	(915) 685-5742	(915) 940-3250	(915) 498-1975

**HES Coordinators & Area of Responsibility**

Remediation: Pat Hunter	Midland	(915) 685-5824	(915) 685-5742	(915) 940-3254	(915) 498-1115
Pipeline Safety: Don Bales	Midland	(915) 685-5844	(915) 685-5742	(915) 631-7388	800 499-9813
Goldsmith, Seminole, S.Cowden & Odessa: Freddy Cleere	S.Cowden-Odessa	(915) 385-2110	(915) 385-2135	(915) 634-1336	
Wasson: Roy Escobedo	Denver City	(806) 592-6481	(806) 592-6248	(806) 893-2691	(888) 221-3493
Slaughter; Welch/Cedar Lake & Bravo Dome: Mike Greenwood	Sunland-Levelland	(806) 229-9504	(806) 229-9573	(806) 638-5811	(806) 743-8407
Plants: Mike Presley	Brownfield	(806) 637-5350	(806) 637-5427	(806) 638-8884	(806) 766-5516
Frontier: Tom Scott	Midland	(915) 685-5677	(915) 685-5742	(915) 448-1121	(915) 498-1312

**HES Techs & Area of Responsibility**

Wasson San Andres RMT: Mark Anderson	Denver City	(806) 592-6299	(806) 592-6248	(806) 893-1065	(800) 737-0888
Wasson Clearfork RMT: Ricky Lehnert	Denver City	(806) 592-6320	(806) 592-6248	(806) 893-2391	
Hobbs RMT: Steve Bishop	Hobbs	(505) 397-8251	(505) 397-8204	(505) 390-4784	(877) 339-1954-1118#
Mallet Plant & Bravo Dome: Lawson Farrar	Sundown	(806) 229-9728	(806) 229-9750	(806) 638-5794	(800) 764-9269
Welch/Cedar Lake RMT & Plant: Eddie Gonzales	Welch/Cedar Lake	(806) 637-5963	(806) 637-5991	(806) 638-2034	(806) 742-8937
Wasson Plant: Ronnie Popejoy	Denver City	(806) 592-7310	(806) 592-7355	(806) 891-0825	(806) 723-0919
Sunland RMT: Kelly Jennings	Levelland	(806) 894-8330	(806) 894-0266	(806) 638-8561	(806) 743-0419
Sunland RMT: Robert Romero	Levelland	(806) 894-0210	(806) 894-0266	(806) 781-6244	(806) 766-4751
Frontier-New Mexico: Rick Kerby	Hobbs	(505) 393-2174	(505) 393-2671	(505) 390-8639	(505) 370-6527

**OXY Permian HES Personnel (cont'd)**  
**OXY Permian Crisis Team Hotline Notification (713) 935-7210**

Person	Location	Office	Fax	Cell	Pager
<b>HES Techs &amp; Area of Responsibility (cont'd)</b>					
Frontier-Texas: C.W. King	McCamey	(915) 652-8607	(915) 652-8617	(915) 556-0077	(915) 499-5530
Goldsmith-S.Cowden, Seminole: Kevin McPherson	S.Cowden-Odessa	(915) 385-2149; (915) 495-4903	(915) 385-2135	(915) 634-4507	(915) 495-4903
Cogdell RMT: Carl Morales	Snyder	(915) 573-7272	(915) 573-3968	(915) 725-7796	(915) 776-3518
Anton & Slaughter Plants; Prentice & Levelland Boosters: Tommy Pugh	Sundown	(806) 229-9605	(806) 229-9650	(806) 781-6451	(806) 766-4177
Odessa RMT: Earl Whitworth	N.Cowden	(915) 385-3104	(915) 385-3106	(915) 556-5309	(915) 567-6901
Anton RMT: Tommy Wright	Anton	(806) 637-5907	(806) 637-5413	(806) 638-8049	(806) 743-0158

**Attachment 1**  
**SURFACE USE AND OPERATING PLAN**

Occidental Permian, Ltd.  
North Hobbs G/SA Unit Well No. 30-536  
641 FSL & 2419 FEL  
Unit Letter O, Section 30, T-18-S, R-38-E  
Lea County, New Mexico

1. Existing Roads:

- A. Access to the location is shown in Attachment 2.
- B. The well site survey plat for the proposed well is shown in Attachment 3.
- C. Directions to location: From corner of Hwy 62/180 and West County Rd. Turn north on west County Rd. and go 1.1 miles. Turn left off West County onto Sanger (Dirt Road) and go approximately 7/8 of a mile. Turn east on lease road and go approximately 500' to well pad.

2. Location of Existing Wells:

Attachment 4 shows existing unit wells within a one-mile radius of this well operated by Occidental Permian, Ltd.

3. Location of Existing and/or Proposed Facilities:

The well will be connected to an existing facilities located approximately 2300 feet northwest of this proposed site by a flowline installed according to API specifications.

4. Location and Type of Water Supply:

The well will be drilled with a combination of brine and fresh water mud systems as outlined in the drilling program. The water will be obtained from commercial water stations in the area and hauled to the location by transport truck over the existing and proposed roads shown in Attachment 2. No water well will be drilled on the location.

5. Source of Construction Material:

All caliche required for construction of the drill pad and to maintain the access roads will be obtained from an approved caliche pit or from the construction of the reserve pit. All roads and pads will be constructed of 6 inches of rolled and compacted caliche.

6. Methods of Handling Waste Disposal:

- A. Drill cuttings will be disposed of into the reserve pit.
- B. Drilling fluids will be contained in steel mud tanks and the reserve pit. The reserve pit will contain any excess drilling fluid or flow from the well during drilling, cementing, and completion operations.
  - 1. The reserve pit will be an earthen pit, approximately 150 feet x 125 feet x 6 feet deep and fenced. The pit will be plastic-lined (5-7 mil thickness) to minimize loss of drilling fluids and saturation of the ground with brine water. The pit will be divided into two separate pits, one being for fresh water cuttings, and the other for brine water cuttings. At the completion of the well the pits will be allowed to dry, the brine cuttings will be removed and taken to a licensed disposal site, and the fresh water cuttings will be buried on site.

- C. Water produced from the well during completion may be disposed into the brine cuttings side of the reserve pit or a steel tank. After the well is permanently placed on production, produced water will be collected in existing facilities.
- D. A portable chemical toilet will be provided on the location for human waste during the drilling and completion operations.
- E. Garbage and trash produced during drilling and completion operations will be collected in a screened-in trailer. All waste material will be contained to prevent scattering by the wind. After drilling operations are complete the trash will be disposed of in a nearby landfill.
- F. After the rig is moved out and the well is either completed or abandoned, all waste materials will be cleaned up within 30 days. No adverse materials will be left on the location. The reserve pit will be completely fenced and kept closed until it has dried. In the event of a dry hole, only a dry hole marker will remain.

7. Ancillary Facilities:

No airstrip, campsite, or other facilities will be built as a result of the operations on this well.

8. Well Site Layout:

Attachment 5 shows a typical orientation for the rig and associated drilling equipment, reserve pit, and pipe racks. No permanent living facilities are planned, but a temporary foreman/toolpusher's trailer will be on location during the drilling operations.

9. Plans for Restoration of the Surface:

- A. Upon completion of the proposed operations, if the well is abandoned, the caliche will be removed from the location and road and returned to the pit from which it was taken. The pit area, after allowing to dry, will be broken out and leveled. The original topsoil will be returned to the entire location that will be leveled and contoured to as nearly the original topography as possible. Pit lining material will be buried or hauled away in order to leave the location in an aesthetically pleasing condition. All pits will be filled and the location leveled within 120 days after abandonment.
- B. The disturbed surface area will be restored per agreement with surface owners.

10. Surface Ownership:

The well site and lease is located entirely on privately owned surface.

11. Operator's Representative:

An Occidental representative responsible for assuring compliance with the surface use plan is as follows:

Drill Site Compliance:

Dusty Weaver  
1017 W. Stanolind  
Hobbs, NM 88240  
Work Phone 806-893-3067

Well and Facilities Operations:

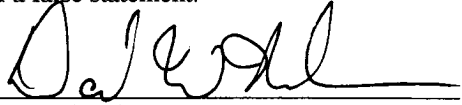
David Nelson  
1017 W. Stanolind  
Hobbs, NM 88240  
Work Phone 505-397-8211

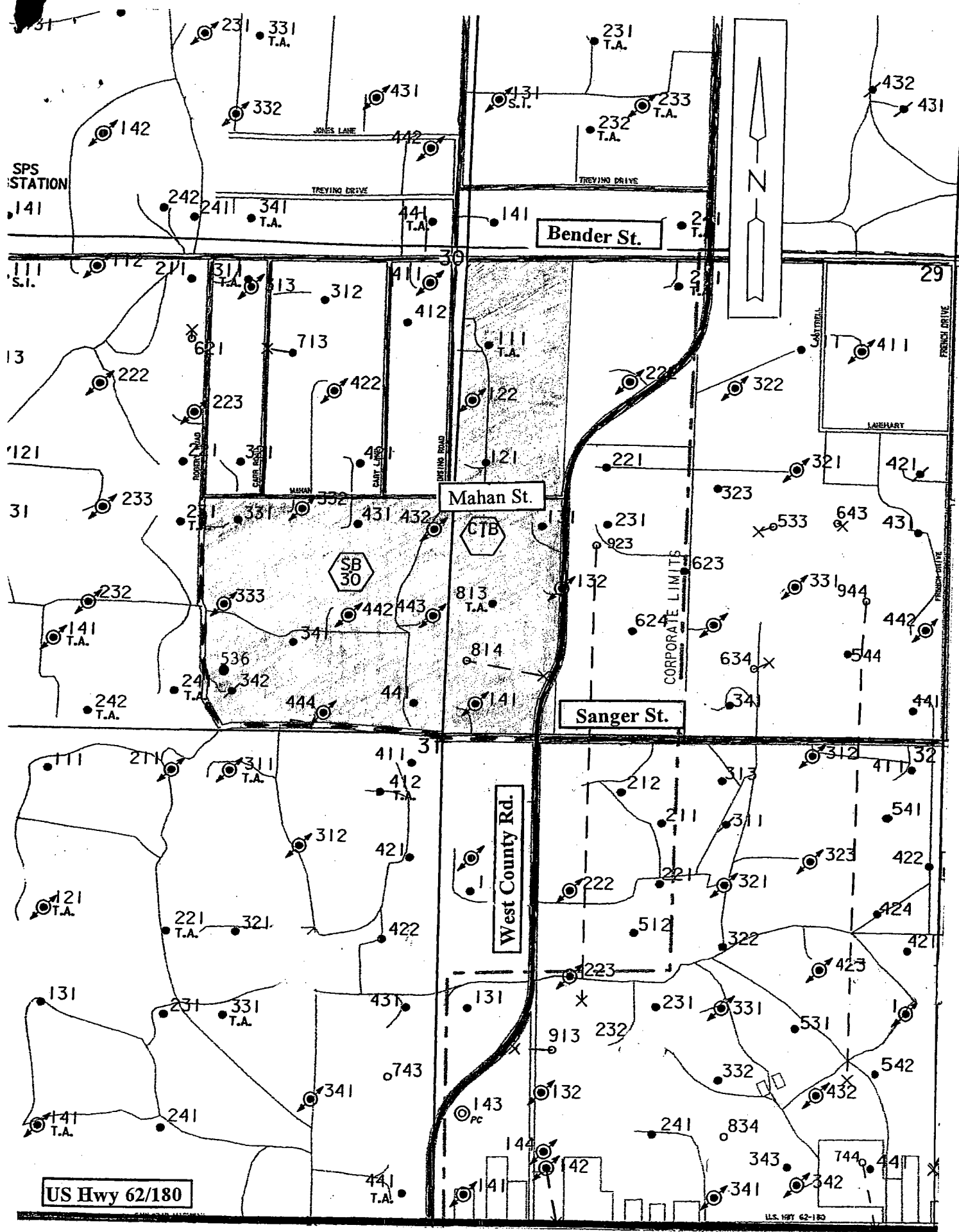


Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are to best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed by Occidental Permian, Ltd. and its contractors and subcontractors in conformity with this plan and the terms and conditions which is in approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

Date: 3-11-03

Signed:   
David Nelson  
Hobbs RMT Production Engineer



Federal Minerals/Private Surface



## STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

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

Lease No.: LC-032233(A)  
Legal Description: Letter O, Section 30, T-18-S, R-38-E  
Formation: Grayburg – San Andres  
Bond Coverage: \$25,000.00 (Statewide Oil & Gas Bond)  
BLM Bond No.: NM2797 (5/22/00)  
Surety Bond No: 929128583

Authorized Signature Mark Stephens 4/22/03  
Mark Stephens  
Regulatory Compliance Analyst  
Occidental Permian Limited Partnership

**PRIVATE SURFACE OWNER'S AGREEMENT OR STATEMENT THAT AN  
AGREEMENT HAS BEEN REACHED CONCERNING SURFACE USE**

Occidental Permian Limited Partnership, P.O. Box 4294, Houston, TX 77210-4294  
is both operator (North Hobbs G/SA Unit) and surface owner (Letter O, Section 30, T-18-S,  
R-38-E, Lea Co. NM), and therefore, no surface agreement is necessary.

Authorized Signature Mark Stephens 4/22/03  
Mark Stephens  
Regulatory Compliance Analyst  
Occidental Permian Limited Partnership



## **H2S DRILLING OPERATIONS PLAN**

### **NORTH HOBBS UNIT GRAYBURG/SAN ANDRES**

**Lea County, New Mexico**

**12 Well Package**

#### **INTRODUCTION**

Oxy Permian LTD. plans to drill and complete 12 San Andres wells in the North Hobbs Unit in Lea County, New Mexico in close proximity to Hobbs. Oxy Permian operates offset wells producing out of the San Andres formation, and a concentration of 45,000 to 65,000-ppm H<sub>2</sub>S is typical for production wells. The amounts of H<sub>2</sub>S and gas encountered during drilling operations are expected to be significantly lower.

#### **TRAINING**

All personnel shall receive proper training in H<sub>2</sub>S drilling and contingency procedures in accordance with the general training requirements outlined in the American Petroleum Institute's (API) Recommended Practice (RP) 49 (April 15, 1987 or subsequent editions) for Safe Drilling of Wells Containing Hydrogen Sulfide, Section 2. All training will be completed before any drilling operations commence. In addition to the requirements of API RP-49, a minimum of an initial training session and weekly H<sub>2</sub>S and well control drills for all personnel in each working crew shall be conducted. The initial training session for each well shall include a review of the site specific H<sub>2</sub>S Drilling Operations Plan. All service company personnel will be required to have proper H<sub>2</sub>S training and be briefed on the site-specific plan before commencing operations. All training and drills will be recorded on the driller's log. One job title will be identified to all on-site personnel as the person primarily responsible for on-site safety training.

**WELL SITE DIAGRAMS — posted at the start of each well**

Each well site diagram will contain the following information:

- Drill rig orientation
- Prevailing wind direction
- Location of all briefing areas
- Location of access road(s)
- Location of flare line(s) and pit(s)
- Location of caution and/or danger signs
- Location of wind direction indicators

**WELL CONTROL EQUIPMENT**

Due to the shallow depth of the wells and that no abnormal pressures are expected during drilling operations, a 3M (3000 PSI) BOPE system will be installed and tested prior to drilling out from under surface casing. The BOPE will be tested only to 1100 psi, since this is approximately the maximum pressure that the surface casing shoe can tolerate without fracturing the formation. The BOPE system will include a hydraulic accumulator along with the following equipment:

- Two sets of rams (blind and pipe rams, blind rams on top)
- Kill line(2-inch minimum)
- 1 kill line valve (2 inch minimum)
- 1 choke line valve
- 1 remote-activated choke
- Upper kelly cock valve with handle available
- Safety valve and subs to fit all drill strings in use
- Pressure gauge on choke manifold
- 2 inch minimum choke line
- Annular
- Flare line and means of ignition
- Rotating head
- Mud-gas separator

Pipe rams, blind rams, and annular will be functionally tested before drilling the production hole.

**PROTECTIVE EQUIPMENT FOR ESSENTIAL PERSONNEL**

There shall be a safety trailer, located on location, with 300-cubic-foot cylinders located inside and approximately 8 hours worth of grade "D" breathing air available. Hoses shall be plumbed to the rig floor to allow for emergency control of the well.

Stored inside the trailer shall be 4 (SAR) workline units with egress capability to be used under IDLH conditions.

There shall be 2-SCBA, designed to last approximately 30 minutes duration for use in rescue or emergency conditions located at briefing areas that are at 90° opposing sides of location.

These will be stored in hard plastic cases and sealed against weather conditions. Also 2- SCBA designated as backup shall be stored in the safety trailer making a total of four (4).

There will be 5 emergency escape units with approximately 5 minutes duration stored on the rig floor in the top dog house ready for emergency evacuation purposes. One unit will be placed with the derrick man during pipe tripping operations.

- All units shall be maintained and inspected monthly and after each use. Periodic rig checks shall include visual inspection of all breathing apparatus to insure emergency readiness.
- Communication while wearing breathing apparatus can be performed by normal speech through the speaking diaphragm, but if the noise level succeeds in "drowning out" speech, then communication shall alternately be performed through hand signals agreed upon.

### ***H<sub>2</sub>S DETECTION AND MONITORING EQUIPMENT***

A stationary H<sub>2</sub>S monitor shall be stationed in the top dog house (the recognized communications center) with remote audible and visual alarm located on the rig floor high enough up so as not to obscure being seen or heard readily. There shall be three H<sub>2</sub>S detecting sensors (1) located on the rig floor, (2) located at the bell nipple and (3) located at the flow line/steel pits (where applicable) that are calibrated with the monitor prior to assembly at the rig and calibrated/checked weekly.

Sensors for the stationary monitor shall be either electro-chemical (EC) cell and/or Metal oxide (MOS). Sensors will be capable of sensing a minimum concentration of 10 ppm H<sub>2</sub>S in ambient air.

A portable tri-range monitor (H<sub>2</sub>S, O<sub>2</sub>, LEL) (EC) and a portable SO<sub>2</sub> (BC) monitor shall be located in the safety trailer.

The detection system will be tested in accordance with manufacturer's instructions. All tests will be recorded on the driller's log.

### ***VISUAL WARNING SYSTEMS***

Wind direction indicators will be visible at all times, a windsock will be attached to the rig floor, high enough to be seen from anyplace on location. In addition streamers will be attached to all guide wires at eye level.



Warning sign(s) will be placed at each entrance to the location at a minimum of 200' and a maximum of 500' from the well site. Each sign will read DANGER — POISON GAS — HYDROGEN SULFIDE, and employ a three flag (green = safe, yellow = caution, red = danger) warning system to alert personnel to the hazard level on location. A red flag will be displayed when H<sub>2</sub>S in excess of 10 ppm is detected at any sensing point. Signs will be either red/black/white or yellow with black lettering.

### ***MUD PROGRAM***

The mud system will utilize a conventional pit system, solids control will be maintained by circulating the reserve pits. The mud system will be fresh water/brine water with additions of Lime and Caustic soda to maintain a pH level of 10 or greater. A mud test shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, filtration, and pH. A sufficient quantity of Zinc Lignosulfonate H<sub>2</sub>S scavenger will be maintained on location to neutralize any H<sub>2</sub>S that may be encountered. Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the wellsite at all times.

### ***METALLURGY***

Metallurgical Equipment. All equipment that has the potential to be exposed to H<sub>2</sub>S shall be suitable for H<sub>2</sub>S service. Equipment which shall meet these metallurgical standards include the drill string, casing, wellhead, blowout preventer assembly, casing head and spool, rotating head, kill lines, choke, choke manifold and lines, valves, mud-gas separators, drill-stem test tools, test units, tubing, flanges, and other related equipment. To minimize stress corrosion cracking and/or H<sub>2</sub>S embrittlement, the equipment shall be constructed of material whose metallurgical properties are chosen with consideration for both an H<sub>2</sub>S working environment and the anticipated stress. The metallurgical properties of the materials used shall conform to the current National Association of Corrosion Engineers (NACE) Standard MR 0175-90, Material Requirement, Sulfide Stress Cracking Resistant Metallic Material for Oil Field Equipment.

A drill fluid treatment and corrosion inhibitor program as per API's RP-49, § 6.2.2. will be in use.

### ***MEANS OF COMMUNICATION FROM THE WELL SITE.***

A telephone will be on location at all times, this will be either cellular, radio, or satellite connection. Key Rig #11 (806) 891-6361.

## **PLANS FOR WELL TESTING**

Testing shall be performed with a minimum number of personnel in the immediate vicinity, which are necessary to safely and adequately operate the test equipment. No drill stem testing will be conducted on any of these wells. The well test will be conducted at a later date through the completed surface facilities.

## **EMERGENCY PROCEDURES**

In the event of detection of H<sub>2</sub>S the following procedures will be in use. (Excerpt from the Oxy DHS Reaction Plan)

### **Emergency Procedures**

#### Emergency Reaction Steps

	Drilling	Tripping
<b>All Personnel</b>	<ol style="list-style-type: none"> <li>1. On alarm don escape unit and report to upwind briefing area.</li> <li>2. Check status of personnel (buddy system)</li> <li>3. Secure breathing equipment and shut well in.</li> <li>4. Await orders from Supervisor</li> </ol>	<p>Same</p> <p>Same</p> <p>Same</p> <p>Same</p>
<b>Oxy Representative</b>	<ol style="list-style-type: none"> <li>1. Report to upwind briefing area.</li> <li>2. Don breathing equipment and return to point of release with Pusher or Driller (buddy system)</li> <li>3. Determine H<sub>2</sub>S concentration.</li> <li>4. Assess situation and take control measures.</li> </ol>	<p>Same</p> <p>Same</p> <p>Same</p> <p>Same</p>
<b>Tool Pusher</b>	<ol style="list-style-type: none"> <li>1. Report to upwind briefing area.</li> <li>2. Don breathing equipment and return to point of release with Oxy Rep or driller. (buddy system)</li> <li>3. Determine H<sub>2</sub>S concentration</li> <li>4. Assess situation and take control measures.</li> </ol>	<p>Same</p> <p>Same</p> <p>Same</p> <p>Same</p>

<b>Driller</b>	1. Don escape unit.	Same
	2. Check monitor for point of release.	Same
	3. Report to briefing area.	Same
	4. Check status of personnel: (in an attempted rescue use buddy system)	Same
	5. Assign least essential person to notify Oxy Rep and Tool Pusher by quickest means in the case of their absence.	Same
	6. Assume the responsibilities of the Oxy Rep and Tool Pusher until they arrive should they be absent.	Same

### Emergency Reaction Steps

	Drilling	Tripping
<b>Derrick Man</b> Floor Man #1 Floor Man #2	1. Remain in briefing area until instructed by supervisor.	Same
<b>Mud Engineer</b>	1. Report to briefing area. 2. When instructed, begin check of mud for Ph and H <sub>2</sub> S levels. (Garnett Gas Train)	Same Same
<b>Safety Personnel</b>	1. Mask up and check status of same for all personnel and secure operations as instructed by Oxy Rep.	Same

### Taking A Kick

When taking a kick during an H<sub>2</sub>S emergency, all personnel will follow standard BOP Procedures after reporting to briefing area and masking up.

### Open Hole Logging

All unnecessary personnel will leave the drilling floor. Oxy Representative and Safety Personnel should monitor condition, advise status, and determine the need for use of emergency equipment.

## Running Casing or Plugging

Follow the same procedures as above. Oxy Representative and Safety Personnel should determine if all personnel have access to protective equipment.

### Notes:

- Warning System Response. When H<sub>2</sub>S is detected in excess of 10 ppm at any detection point, all non-essential personnel shall be moved to a safe area and essential personnel (i.e., those necessary to maintain control of the well) shall wear pressure-demand type protective breathing apparatus. Once accomplished, operations may proceed.
- Anytime a SCBA is used, a minimum of two people shall don equipment and a "buddy system" will be used, under no circumstances should any rescue or emergency operations be undertaken without backup personnel.

### **EMERGENCY PHONE NUMBERS**

	FIRE	AMBULANCE	POLICE	SHERIFF	STATE POLICE	HOSPITAL
	911	911	911	911	911	
Hobbs	505-397- 9308	505-397- 9308	505-397- 9265	505-393- 2515	505-392- 5588	505-492- 5000

NMOCD Hobbs - OFFICE: (505) 393-6161 FAX: (505) 393-0720

Downhole Services Team Leader	Randy Pennington	281-552-1215
Team Leader – Hobbs	Gary Bullock	505-397-8203

(A complete list of all emergency contacts will be posted on the rig board)

Request for Variance – Second Egress  
Drilling/Completion/Workover Requirements (III.C.2.a.)  
Onshore Oil and Gas Order No. 6, Hydrogen Sulfide Operations

Request: Permit each drilling pad to be built with only one ingress/egress road.

Logic: In the event of an H<sub>2</sub>S release or other similar incident, a second-egress road or foot-path would be unlikely to provide additional routes of egress from the drilling pad. The area surrounding the drilling pad is relatively flat, and contains few obstructions (the perimeter of the drilling pad is not fenced, and essentially the only obstructions are scattered brush with significant clear areas between plants). In the event of an H<sub>2</sub>S release or other similar incident, personnel on the drill pad would most likely exit the drill pad at the nearest point, regardless of whether the surrounding area at that point was cleared or uncleared. In the event of an H<sub>2</sub>S-release or other similar incident, personnel on the drill pad would not be expected to travel back through some portion of the drill pad and exit the drill pad via one of the two cleared egress routes.

Further, a second egress route would disturb additional areas of the native environment.