Form 3160-3
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD-ARTESIA

FORM APPROVED
OMB NO. 1004-0136
Expires: November 30, 2000

ATS-07-488

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: [X] DRILL [ ] REENTER — HIGH CAVE/KARST	5 Lease Serial No. NMLC-068722
1b. Type of Well: [ ] Oil Well [X] Gas Well [ ] Other [X] Single Zone [ ] Multiple Zone	6 If Indian, Allotee or Tribe Name
	7. Unit or CA Agreement Name and No.
2. Name of Operator: OXY USA WTP Limited Partnership 192463	8. Lease Name and Well No. OXY Salamander Federal #1
3a. Address: P.O. Box 50250 Midland, TX 79710-0250 — 3b. Phone No. (include area code): 432-685-5717	9. API Well No. 30-015- 35770
4. Location of Well (*Report location clearly and in accordance with any State equirements*)* At surface: 1650 FNL 990 FWL SWNW(E) — AUG 27 2007 OCD-ARTESIA	10. Field and Pool, or Exploratory Grayburg; Morrow
At proposed prod. zone: Roswell Controlled Water Basin	11 Sec., T., R., M., or Blk. and Survey or Area Sec 10 T17S R29E
14. Distance in miles and direction from nearest town or post office*: 4 miles northeast from Loco Hills, NM	12. County or Parish: Eddy — 13. State: NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any): 990'	16. No. of Acres in lease: 320	17 Spacing Unit dedicated to this well: 320
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.: N/A	19. Proposed Depth: 11000'	20. BLM/BIA Bond No. on file: ES0136
21 Elevations (Show whether DF, KDB, RT, GL, etc.: 3580'	22. Approximate date work will start*: 9/1/07	23. Estimated duration: 45 days

24. Attachments

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

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

25. Signuature: [signature]	Name (*Printed/Typed*): David Stewart	Date: 6/6/07
Title: Sr. Regulatory Analyst		
Approved by (Signautre): Steve Caffey	Name (*Printed/Typed*):	Date: 8-23-07
Title: For FIELD MANAGER	Office: CARLSBAD FIELD OFFICE	

Application approval does not warrant or certify that the applicant holds legal or equitable rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

If earthen pits are used in association with the drilling of this well, an OCD pit permit must be obtained prior to pit construction.

APPROVAL FOR TWO YEARS

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)

SEE ATTACHED FOR CONDITIONS OF APPROVAL

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

OXY Salamander Federal #1
1650 FNL 990 FWL SWNW(E) SEC 10 T17S R29E Eddy County, NM
Federal Lease No. NMLC-068722

PROPOSED TD: 11000' TVD

BOP PROGRAM:

0-450'	None
450-3000'	13-3/8" 3M annular preventer, to be used as divertor only.
3000-11000'	11" 5M blind pipe rams with 5M annular preventer and rotating head below 8500'.

CASING:

Surface:	13-3/8" OD 48# H40 ST&C new casing set at 450' 17-1/2" hole
Intermediate:	9-5/8" OD 36# K55 ST&C new casing from 0-3000' 12-1/4" hole
Production:	5-1/2" OD 17# N80 LT&C new casing from 0-11000' 8-3/4" hole

CEMENT: Surface - Circulate cement with 300sx HES light PP w/ 2% $CaCl_2$ followed by 250sx PP w/ 2% $CaCl_2$.

Intermediate - Circulate cement with 750sx IFC w/ .25#/sx Flocele followed by 200sx PP w/ 2% $CaCl_2$.

Production - Cement with 600sx Interfill H w/ .1% HR-7 followed by 400sx Super H w/ .5% HR-344 + .4% CFR-3 + 5#/sx Gilsonite + 1#/sx salt + .2% HR-7. Estimated top of cement is 6800'.

Note: Cement volumes may need to be adjusted to hole caliper.

MUD:

0-450'	Fresh water/native mud. Lime for pH control (9-10). Paper for seepage. Wt 8.7-9.2 ppg, Vis 32-34 sec
450-3000'	Fresh/*Brine water. Lime for pH control (10.0-10.5). Paper for seepage. Wt 8.3-9.0/10.0-10.1ppg, Vis 28-29 sec *Fresh water will be used unless chlorides in the mud system increases to 20000PPM.
3000-7000'	Fresh water. Lime for pH control(9-9.5). Paper for seepage. Wt 8.3-8.5 ppg, Vis 28-29 sec
7000-9300'	Cut brine. Lime for pH control (10-10.5). Wt 9.6-10.0 ppg, Vis 28-29sec
9300-11000'	Mud up with an Duo Vis/Flo Trol mud system. Wt 9.6-10.0ppg, Vis 32-36sec, WL<10cc

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240

DISTRICT II
1301 W. GRAND AVENUE, ARTESIA, NM 88210

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

DISTRICT IV
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
1220 SOUTH ST. FRANCIS DR.
Santa Fe, New Mexico 87505

AUG 27 2007
OCD-ARTESIA

Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease – 4 Copies
Fee Lease – 3 Copies

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
30-015-	77840	Grayburg, Morrow

Property Code	Property Name	Well Number
36711	OXY SALAMANDER FEDERAL	1

OGRID No.	Operator Name	Elevation
192463	OXY USA WTP LP	3580'

Surface Location

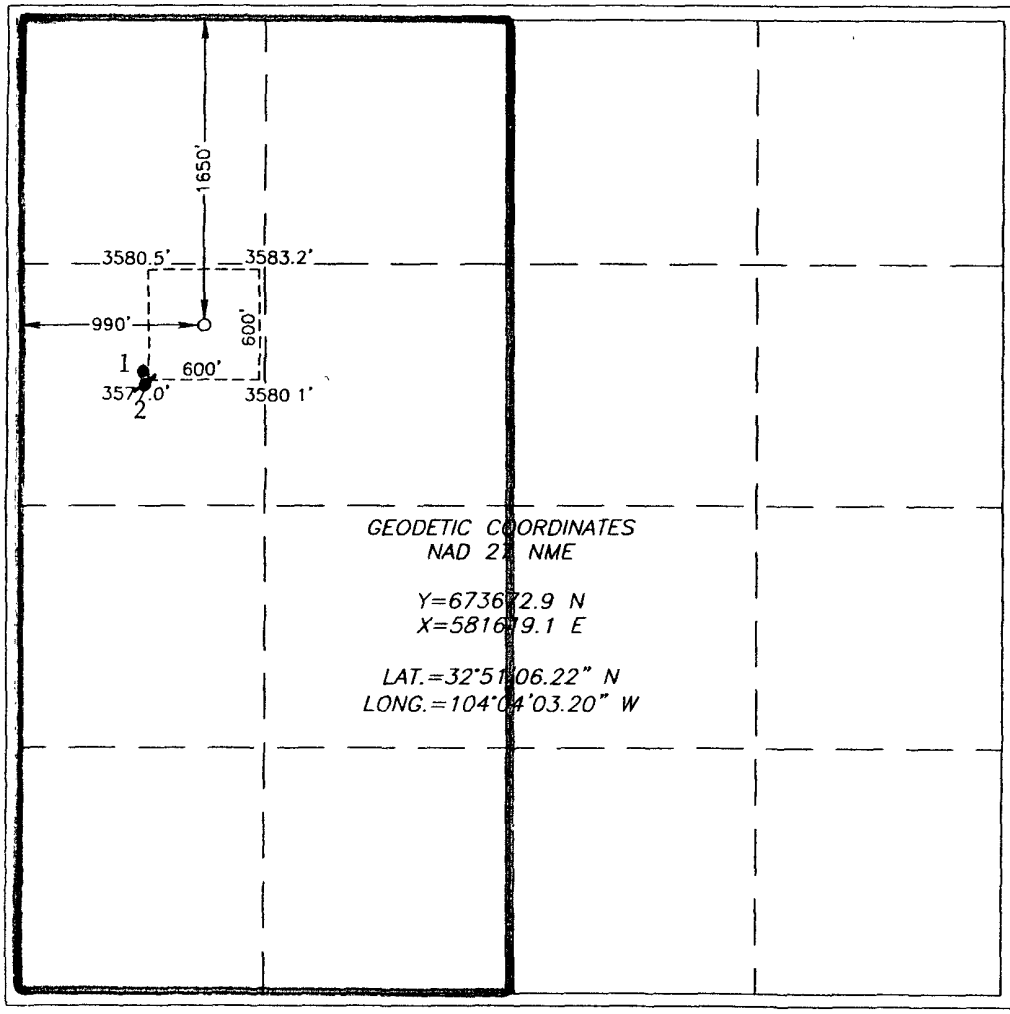
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
E	10	17-S	29-E		1650	NORTH	990	WEST	EDDY

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	Joint or Infill	Consolidation Code	Order No.
320	N		

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



GEODETIC COORDINATES
NAD 27 NME

Y=673672.9 N
X=581679.1 E

LAT.=32°51'06.22" N
LONG.=104°04'03.20" W

OPERATOR CERTIFICATION

I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature 6/6/07 Date

David Stewart
Printed Name
Sr. Reg. Analyst

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

MAY 10, 2006
Date Surveyed MR

Signature & Seal of Professional Surveyor

GARY L. EIDSON
NEW MEXICO
12641

Gary L. Eidson 5/30/06

06.11.0723

Certificate No. GARY EIDSON 12641
RONALD J. EIDSON 3239

1. 3001502938-Hanson Energy-Featherstone #1Y-1880FNL 660FWL E-10-17S-29E-TD 2455'
2. 3001502939-Pre-Ongard-Featherstone #1-1980FNL 660FWL E-10-17S-29E-TD 1115'

United States Department of the Interior
Bureau of Land Management
Carlsbad Field Office
620 East Greene Street
Carlsbad, New Mexico 88220

Attention: Linda Denniston

RE: OXY Salamander Federal #1
W/2 of Section 10, T17S-R29E
Eddy County, New Mexico

STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

OPERATOR NAME: OXY USA WTP Limited Partnership
ADDRESS: P. O. Box 50250
Midland, Texas 79710

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 068722

LEGAL DESCRIPTION: 1650' FNL & 990' FWL
T17S-R29E Sec. 10
Eddy County, New Mexico

FORMATIONS: None

BOND COVERAGE: Nationwide

BLM BOND FILE NO.: ES 0136

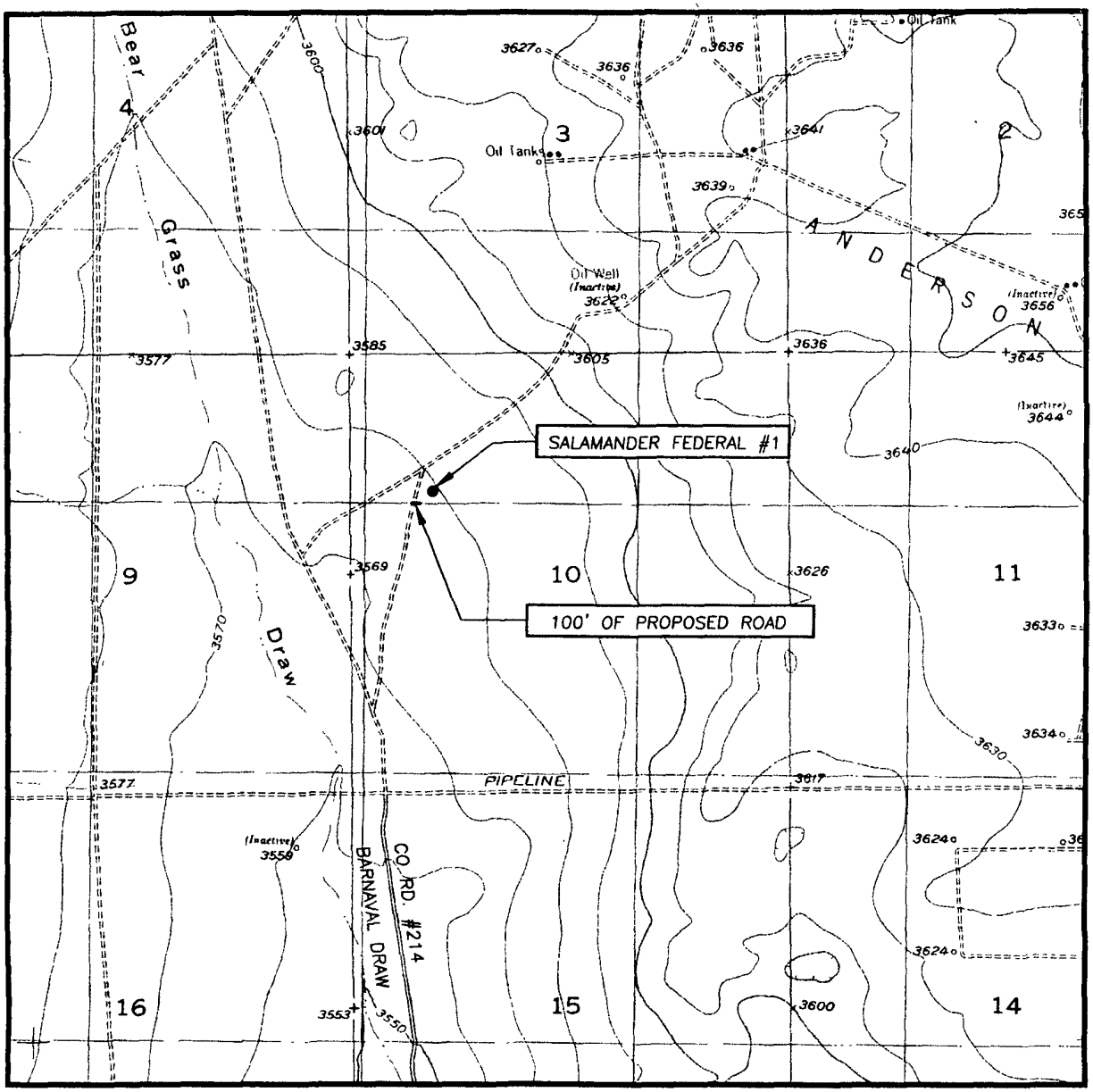
OXY USA WTP Limited Partnership

AUTHORIZED SIGNATURE: **BY:** Steve R. Evans

TITLE: Land Negotiator
DATE: May 31, 2007

cc: David Stewart

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
RED LAKE SE, N.M. – 10'

SEC. 10 TWP. 17-S RGE. 29-E

SURVEY N.M.P.M.

COUNTY EDDY STATE NEW MEXICO

DESCRIPTION 1650' FNL & 990' FWL

ELEVATION 3580'

OPERATOR OXY USA WTP LP

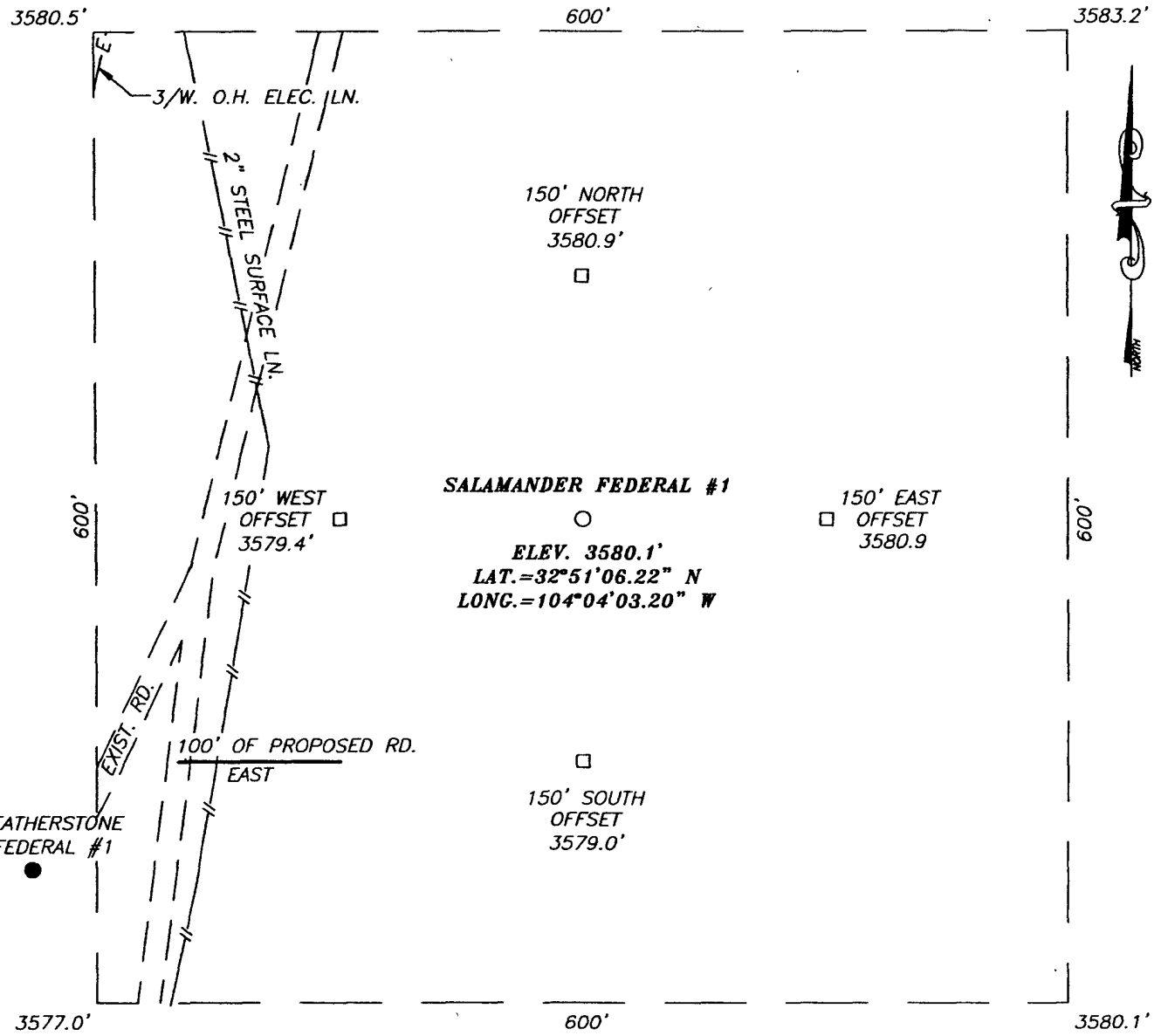
LEASE SALAMANDER FEDERAL

U.S.G.S. TOPOGRAPHIC MAP
RED LAKE SE, N.M.

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

SECTION 10, TOWNSHIP 17 SOUTH, RANGE 29 EAST, N.M.P.M.,

EDDY COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION U.S. HWY. #82 AND CO. RD. #214 (BARNAVAL DRAW), GO NORTH ON CO. RD. #214 APPROX. 1.77 MILES TO A "Y" INTERSECTION. STAY TO THE RIGHT AND GO NORTH APPROX. 0.5 MILES. THIS LOCATION IS APPROX. 190 FEET EAST.

100 0 100 200 Feet

Scale: 1"=100'

PROVIDING SURVEYING SERVICES SINCE 1946

JOHN WEST SURVEYING COMPANY

412 N. DAL PASO

HOBBS, N.M. 88240

(505) 393-3117

OXY USA WTP LP

SALAMANDER FEDERAL #1
LOCATED 1650 FEET FROM THE NORTH LINE
AND 990 FEET FROM THE WEST LINE OF SECTION 10,
TOWNSHIP 17 SOUTH, RANGE 29 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.

Survey Date: 05/10/06	Sheet 1 of 1 Sheets		
W.O. Number: 06.11.0723	Dr By: M.R.	Rev 1:N/A	
Date: 05/17/06	Disk: CD#6	06110723	Scale: 1"=100'

OXY USA WTP Limited Partnership
P.O. Box 50250, Midland, TX 79710-0250

June 6, 2007

United States Department of the Interior
Bureau of Land Management
Carlsbad District Office
620 East Greene Street
Carlsbad, New Mexico 88220

Re: Application for Permit to Drill
OXY USA WTP Limited Partnership
OXY Salamander Federal #1
Eddy County, New Mexico
Lease No. NMLC-068722

Gentlemen:

OXY USA WTP Limited Partnership respectfully requests permission to drill our OXY Salamander Federal #1 located 1650 FNL and 990 FWL of Section 10, T19S, R29E, Eddy County, New Mexico, Federal Lease No. NMLC-068722. The proposed well will be drilled to a TD of approximately 11000' (TVD). The location and work area has been staked. It is approximately 4 miles northeast of Loco Hills, New Mexico.

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

I. Application for Permit to Drill:

1. Form 3160.3, Application for Permit to Drill.

2. Form C-102 Location and Acreage Dedication Plat certified by Gary G. Eidson, Registered Land Surveyor No. 12641 in the State of New Mexico, dated May 30, 2006.

3. The elevation of the unprepared ground is 3580 feet above sea level.

4. The geologic name of the surface formation is Permian Rustler.

5. Rotary drilling equipment will be utilized to drill the well to TD 11000' (TVD), and run casing. This equipment will then be rigged down and the well will be completed with a pulling unit.

6. Proposed total depth is 11000' TVD.

7. Estimated tops of important geologic markers.

Penn	8650' TVD
Strawn	9830' TVD
Atoka	10050' TVD
Morrow	10280' TVD

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

Primary Objective: Morrow 10280' TVD

Secondary Objective: Atoka 10050' TVD

10A

1. 13-3/8" Surface Casing

Size	Weight	Grade	Connection	MD/TVD	Strength, w/o SF: Burst (psi)	Collapse (psi)	Tension, (klbs) Conn/Body
13-3/8"	48	H-40	STC	450	1730	770	322/541

Minimum Setting Mud Weight @ Casing Shoe: 8.7 ppg

Surface Casing Test Pressure: 1,200 psi based on greater of:

a. 1500 psi, not to exceed 70% of burst rating less mud weight effects
= (0.7)(API Rating) - (Mud Weight - 8.3 ppg FW)(0.052)(Csg Depth, TVD)

= (0.7)(1,730) - (8.7 - 8.3)(0.052)(450) = 1,202 psi - Burst Rating less MW effects

1200 psi

b. 0.22 psi /ft of string length
= (0.22)(Csg Depth, MD)
= (0.22)(450)

99 psi

Burst SF = API Burst Rating/Test Pressure

= 1,730/1,200 = **1.44**

Cementing Collapse = (Cement Equivalvent Wt, ppg - Min. Displacement Fluid Wt, ppg)(0.052)(Csg Shoe Depth, TVD)
= (12.9 - 8.3)(0.052)(450)
= **108 psi**

Collapse SF = API Collapse Rating/Cementing Collapse

= (770/108) = **7.15**

TL = (Csg Length, MD-ft)(Csg Wt, lb/ft)(1 - MW/65.5)

= (450)(48.00)(1 - 8.7/65.5)
= **18,731 lbs**

Tension SF = API Tension Rating / TL

= (322,000/18,731) = **17.19**

10 B

2. 9-5/8" Intermediate Casing

Size	Weight	Grade	Connection	MD/TVD	Strength, w/o SF: Burst (psi)	Collapse (psi)	Tension, (klbs) Conn/Body
9-5/8"	36	K-55	STC	3000	3520	2020	423/564

Minimum Setting Mud Weight @ Casing Shoe: 8.3 ppg

Intermediate Casing Test Pressure: 1,500 psi based on greater of:

a. 1500 psi, not to exceed 70% of burst rating less mud weight effects
= (0.7)(API Rating) - (Mud Weight - 8.3 ppg FW)(0.052)(Csg Depth, TVD)

= (0.7)(3,520) - (8.3 - 8.3)(0.052)(3,000) = 2,464 psi - Burst Rating less MW effects

1500 psi

b. 0.22 psi /ft of string length
= (0.22)(Csg Depth, MD)
= (0.22)(3000)

660 psi

Burst SF = API Burst Rating/Test Pressure

= 3,520/1,500 = **2.35**

Cementing Collapse = (Cement Equivalvent Wt, ppg - Min. Displacement Fluid Wt, ppg)(0.052)(Csg Shoe Depth, TVD)
= (11.9 - 8.3)(0.052)(3000)
= **562 psi**

Collapse SF = API Collapse Rating/Cementing Collapse
= 2020/562
= **3.60**

TL = (Csg Length, MD-ft)(Csg Wt, lb/ft)(1 - MW/65 5)

= (3000)(36)(1-8.3/65.5)
= **94,315 lbs**

Tension SF = API Tension Rating / TL

= 423,000 / 94,315 = **4.48**

10C

3. 5-1/2" Production Casing

Size	Weight	Grade	Connection	MD/TVD	Strength, w/o SF: Burst (psi)	Collapse (psi)	Tension, (klbs) Conn/Body
5-1/2"	17	N-80	LTC	11000	7740	6280	348/397

Minimum Setting Mud Weight @ Casing Shoe: 9.6 ppg

Production Casing Test Pressure: 2,420 psi based on greater of:

a. 1500 psi, not to exceed 70% of burst rating less mud weight effects
= (0.7)(API Rating) - (Mud Weight - 8 3 ppg FW)(0.052)(Csg Depth, TVD)

= (0.7)(7,740) - (9.6 - 8 3)(0.052)(11,000) = 4,674 psi - Burst Rating

1500 psi

b. 0.22 psi /ft of string length
= (0.22)(Csg Depth, MD)
= (0.22)(11000)

2420 psi

Burst SF = API Burst Rating/Test Pressure

= 7,740/2,420 = **3.20**

Cementing Collapse = (Cement Equivalvent Wt, ppg - Min Displacement Fluid Wt, ppg)(0.052)(Csg Shoe Depth, TVD)
= (11.9 - 8.3)(0.052)(11000)
= **2059 psi**

Collapse SF = API Collapse Rating/Cementing Collapse

= 6280/2059 = **3.05**

TL = (Csg Length, MD-ft)(Csg Wt, lb/ft)(1 - MW/65.5)

= (11000)(17)(1-9.6/65.5)
= **159,592 lbs**

Tension SF = API Tension Rating / TL

= 348,000 /159,592 = **2.18**

9. The proposed casing program is as follows:

Surface: 13-3/8" 48# H40 ST&C new casing set at 450'

Intermediate: 9-5/8" 36# K55 ST&C new casing from 0-3000'

Production: 5-1/2" 17# N80 LT&C new casing from 0-11000'

10. Casing setting depth and cementing program:

A. 13-3/8" surface casing set at 450' in 17-1/2" hole. Circulate cement with 425sx HES light PP w/ 2% $CaCl_2$ + .25#/sx Flocele followed by 250sx PP w/ 2% $CaCl_2$ + .25#/sx Flocele.

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% $CaCl_2$.

See attached 10A, 10B, 10C

B. 9-5/8" intermediate casing set at 3000' in 12-1/4" hole. Circulate cement with 555sx IFC w/ .25#/sx Flocele followed by 200sx PP w/ 2% $CaCl_2$.

If hole conditions dictate, a DV tool may be run to ensure that the intermediate string is cemented to surface.

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% $CaCl_2$.

Note: Cement volumes may be adjusted according to fluid caliper.

C. 5-1/2" production casing set at 11000' in 8-3/4" hole. Cement with 600sx IFH w/ .1% HR-7 followed by 400sx PP. Estimated top of cement is 6800'

Note: Cement volumes may need to be adjusted to hole caliper.

11. Pressure Control Equipment

0-450'	None
450-3000'	13-3/8" 3M annular preventer, to be used as divertor only. Exhibit A
3000-11000'	11" 5000# ram type preventers with one set blind rams and one set pipe rams and a 5000# annular type preventer. A choke manifold and 120 gallon accumulator with floor and remote operating stations and auxiliary power system. Rotating head below 8500'. Exhibit A.

See COA

After setting the 13-3/8" casing, the annular preventor (that is used as a divertor only) will be tested by the rig pump to 1000#.

A kelly cock will be installed and maintained in operable condition and a drill string safety valve in the open position will be available on the rig floor.

After setting the 9-5/8" casing, the blowout preventers and related control equipment shall be pressure tested to 5000 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:

0-450'	Fresh water/native mud. Lime for pH control (9-10). Paper for seepage. Wt.8.7-9.2 ppg, vis 32-34 sec.
450-3000'	Fresh/*brine water. Lime for pH control (10-10.5). Paper for seepage. Wt. 8.3-9.0/10.0-10.1ppg, vis 28-29 sec. *Fresh water will be used unless chlorides in the mud system increase to 20000PPM.
3000-7000'	Fresh water. Lime for pH control (9-9.5). Paper for seepage. Wt. 8.3-8.5 ppg, vis 28-29 sec.
7000-9300'	Cut brine. Lime for pH control (10-10.5). Wt. 9.6-10.0 ppg, vis 28-29 sec.
9300-11000'	Mud up with an Duo Vis/Flo Trol system. Wt. 9.6-10.0 ppg, Vis 32-36sec, WL<10cc.

Mud system monitoring equipment with derrick floor indicators and visual/audio alarms shall be installed and operative prior to drilling into the Wolfcamp formation. This equipment will remain in use until the production casing is run and cemented. Monitoring equipment shall consist of the following:

1) A recording pit level indicator.

2) A pit volume totalizer.

3) A flowline sensor.

13. Testing, Logging and Coring Program:

    A. Testing program: No DST's are anticipated.

    B. Mud logging program: One-man unit from 6000' to TD.

    C. Electric logging program: CNL/LDT/CAL/GR, DLL/CAL/GR.

    D. Coring program: Possible sidewall rotary cores.

14. No abnormal temperatures, or H2S gas are anticipated. H2S Contingency Plan is attached per NMOCD requirements. The highest anticipated pressure gradient would be .55psi/ft. Adequate flare lines will be installed off the mud/gas separator where gas may be flared safely.

15. Anticipated starting date is September 1, 2007. It should take approximately 45 days to drill the well and another 10 days to complete.

16. The Multi-Point Surface Use & Operation Plan is attached.

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

Very truly yours,

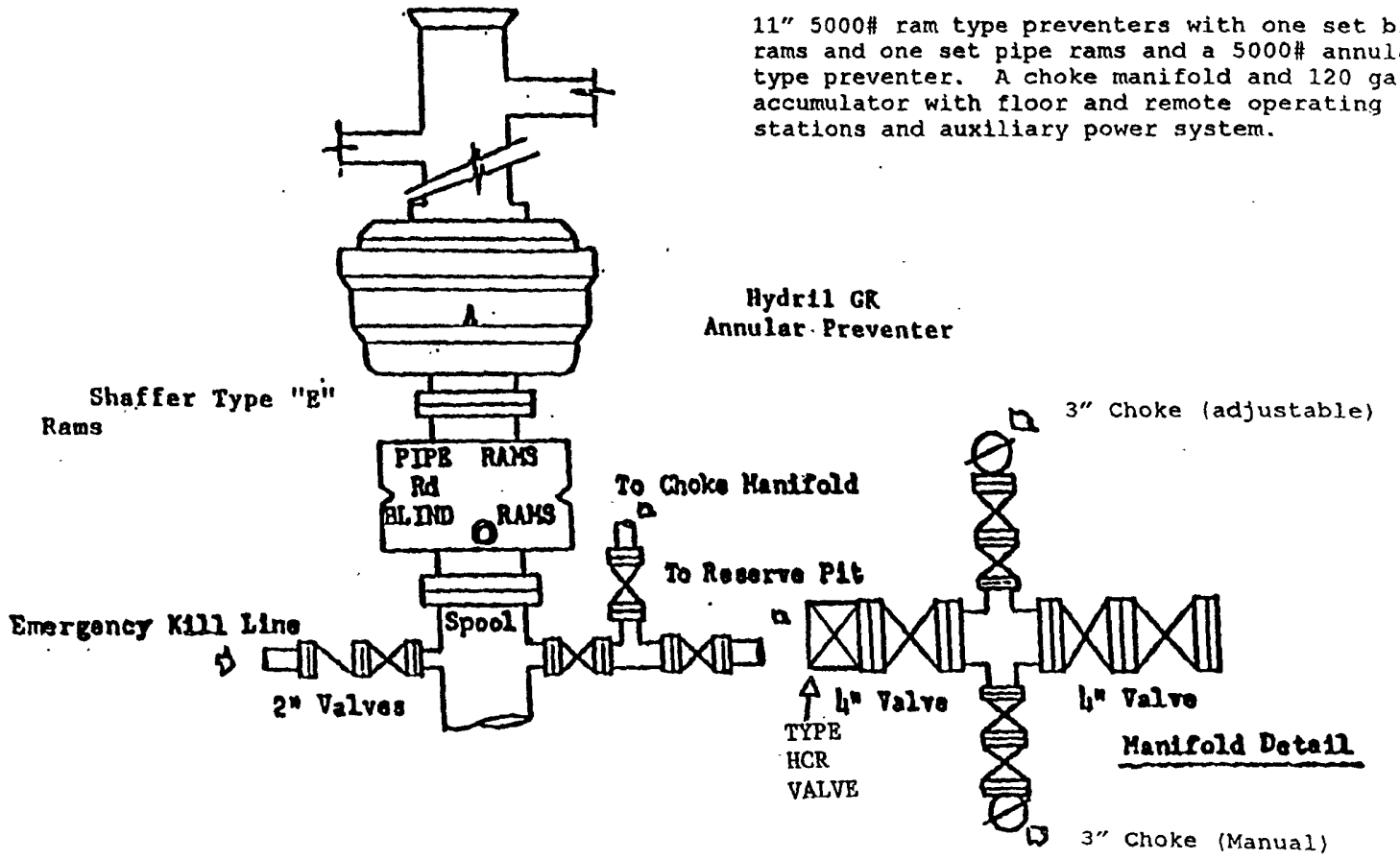
David Stewart
Sr. Regulatory Analyst
OXY USA WTP LP

DRS/drs

Attachments

EXHIBIT A

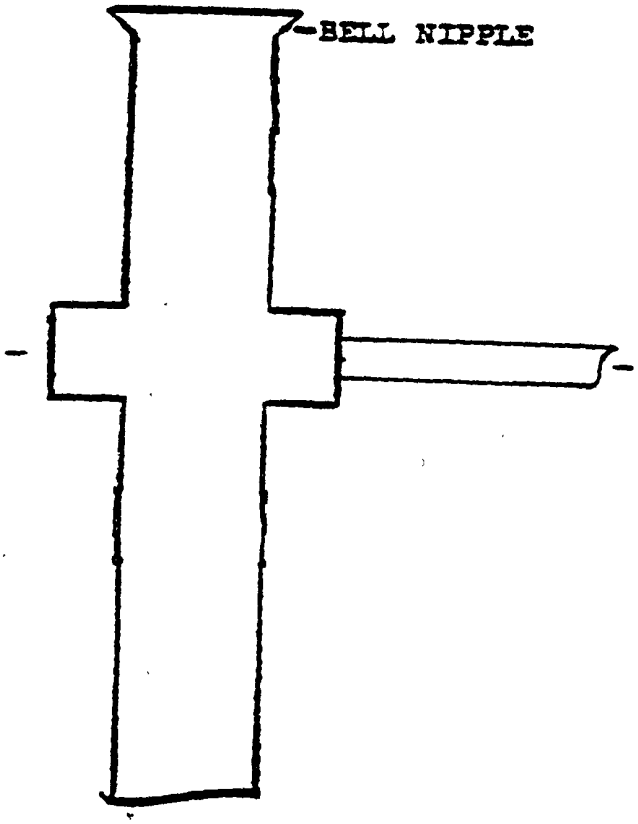
BLOWOUT PREVENTOR SCHEME



11" 5000# ram type preventers with one set blind rams and one set pipe rams and a 5000# annular type preventer. A choke manifold and 120 gallon accumulator with floor and remote operating stations and auxiliary power system.

EXHIBIT A

ANNULAR PREVENTOR
TO BE USED AS DIVERTOR ONLY



STARTING HEAD

OXY USA WTP
Limited Partnership
PO Box 50250
Midland, TX 79710

Hydrogen Sulfide (H_2S) Contingency Plan

For

Salamander Fed No. 1
1650 FNL, 990 FWL
Sec 10, T17S, R29E
Eddy County, NM

And

McVay Drilling Co. Rig No. 8

TABLE OF CONTENTS

PREFACE

An effective and viable Contingency Plan 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.

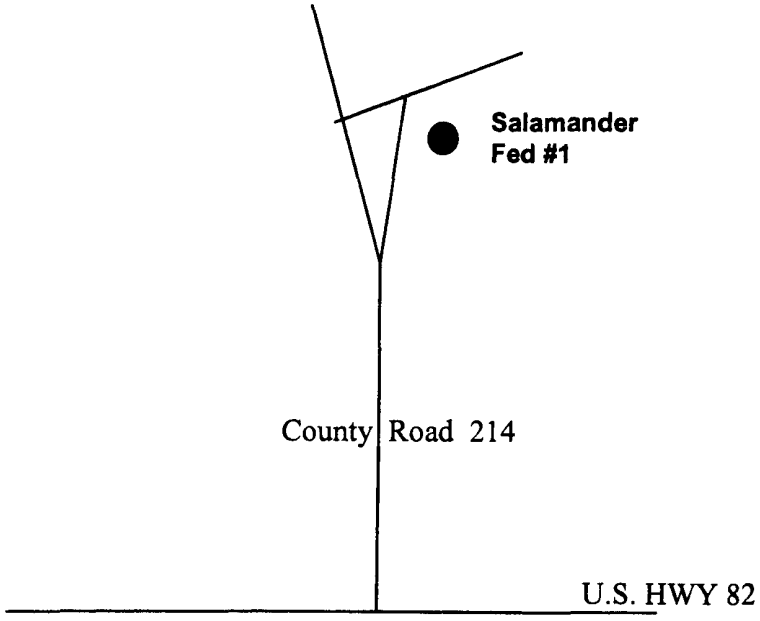
Although the plan addresses varied emergency situations which may occur, it recognizes that flexibility and the use of the organization's knowledge and experience is critical to safe resolution of emergency incidents. Response actions outlined in the plan provide a framework, which may be placed into 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.

This Contingency Plan 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.

A copy of the Plan shall be maintained in the Top Dog House, Rig Managers trailer, and Company Representative's trailer if applicable.

OXY USA WTP
Salamander Fed No. 1
Lat. 32°51'06.22"N
Long. 104°04'03.20"W

North



Directions to location: From the intersection of USH 82 and CR 214, go north on CR 214 approximately 1.77 miles to a "Y" intersection. Stay to the right and go north approx. 0.5 miles. This location is approx. 190' east.

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 ten (10) through twelve (12) 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.

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. Isolate the area and prevent entry by other persons into the 100 ppm ROE. Additionally the first responder(s) must evacuate any public places encompassed by the 100 ppm ROE. First responder(s) must take care not to injure themselves during this operation. Company and/or local officials must be contacted to aid in this operation. Evacuation of the public should be beyond the 100 ppm ROE.

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.

Training

There will be an initial training session prior to encountering a known or probable H2S zone (within 3 days or 500 feet) and weekly H2S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H2S Drilling Operations Plan and the Public Protection Plan (Contingency Plan). This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.

Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO2). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police shall be the Incident Command of any major release.

Characteristics of H2S and SO2

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H_2S	1.189 Air = 1	10 ppm	100 ppm	600 ppm
Sulfur Dioxide	SO_2	2.21 Air = 1	2 ppm	N/A	1000 ppm

Contacting Authorities

Oxy Permian personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as; type and volume of release, wind direction, location of release, etc. Be prepared with all information available. The following call list of essential and potential responders has been prepared for use during a release. This response plan must be in coordination with the State of New Mexico's 'Hazardous Materials Emergency Response Plan' (HMER).

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.

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)

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

	LOCATION	OFFICE	HOME	CELL	
Manager Operations Support					
Hardesty, Steve	Midland	432-685-5880	432/694-6441	713-560-8095	
Drilling Manager					
Thompson, Tommy	Midland	432-685-5877	432/699-4383	432-664-4214	
Drilling Superintendents					
Hagan, Festus	Midland	432-685-5719	432-689-2199	432-894-5352	
Murray, Mike	Midland	432-685-5718	432-689-2592	432-556-6792	
HES Tech					
Maciula, Pete	Midland	432-685-5677		432-557-2450	

Emergency Notification Numbers

Public Authorities		
New Mexico State Police	Artesia	505/746-2704
New Mexico State Police	Carlsbad	505/885-3137
New Mexico State Police	Hobbs	505/392-5588
Eddy County Sheriff's Office	Artesia	505/746-2704
Eddy County Sheriff's Office	Carlsbad	505/887-7551
Lea County Sheriff's Office	Hobbs	505/393-2515
Local Emergency Planning Center	Eddy County	505/887-9511
Local Emergency Planning Center	Lea County	505/397-9231
New Mexico Oil & Gas Commission	Artesia	505/748-1283
New Mexico Oil & Gas Commission	Hobbs	505/393-6161
NM Emergency Response Center	Hobbs	505/827-9222

Emergency Services		
Fire Fighting, Rescue, Ambulance, Police	Artesia	911
Fire Fighting, Rescue, Ambulance, Police	Carlsbad	911
Fire Fighting, Rescue, Ambulance, Police	Hobbs	911
Flight For Life	Lubbock	806/743-9911
Aerocare	Lubbock	806/7478923
Med Flight Air Ambulance	Albuquerque	505/842-4433

Other Emergency Services		
Boots and Coots		1/800-256-9688
Cudd Pressure Control	Midland	432/699-0139
B.J. Services	Artesia	505/746-3569
Halliburton	Artesia	505/746-2757

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

PERSON	LOCATION	OFFICE	FAX	CELL	PAGER
Asset Management-Operations Areas					
OXY Permian General Manager: Tom Menges	Houston	(281) 552-1147	(281) 552-1484	(713) 560-8038	
South Permian Asset: Matt Hyde	Midland	(432) 685-5802	(432) 685-5930	(432) 556-5016	
RMT/PMT Leaders: South Permian Asset					
John Nichols	Midland	(432) 685-5600			
PERSON	**LOCATION**	**OFFICE**	**FAX**	**CELL**	**PAGER**
Production Coordinators: S. Permian Asset					
New Mexico: John Erickson	Hobbs	(505) 393-2174	(505) 397-2671	(505) 390-6426	(505) 370-6836

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

PERSON	LOCATION	OFFICE	FAX	CELL	PAGER
HES Coordinators & Area of Responsibility					
HES Techs & Area of Responsibility					
Hobbs RMT: Steve Bishop	Hobbs	(505) 397-8251	(505) 397-8204	(505) 390-4784	(877) 339-1954-1118#
Frontier-New Mexico: Rick Kerby	Hobbs	(505) 393-2174	(505) 393-2671	(505) 390-8639	(505) 370-6527

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 ten (10) through twelve (12) 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:

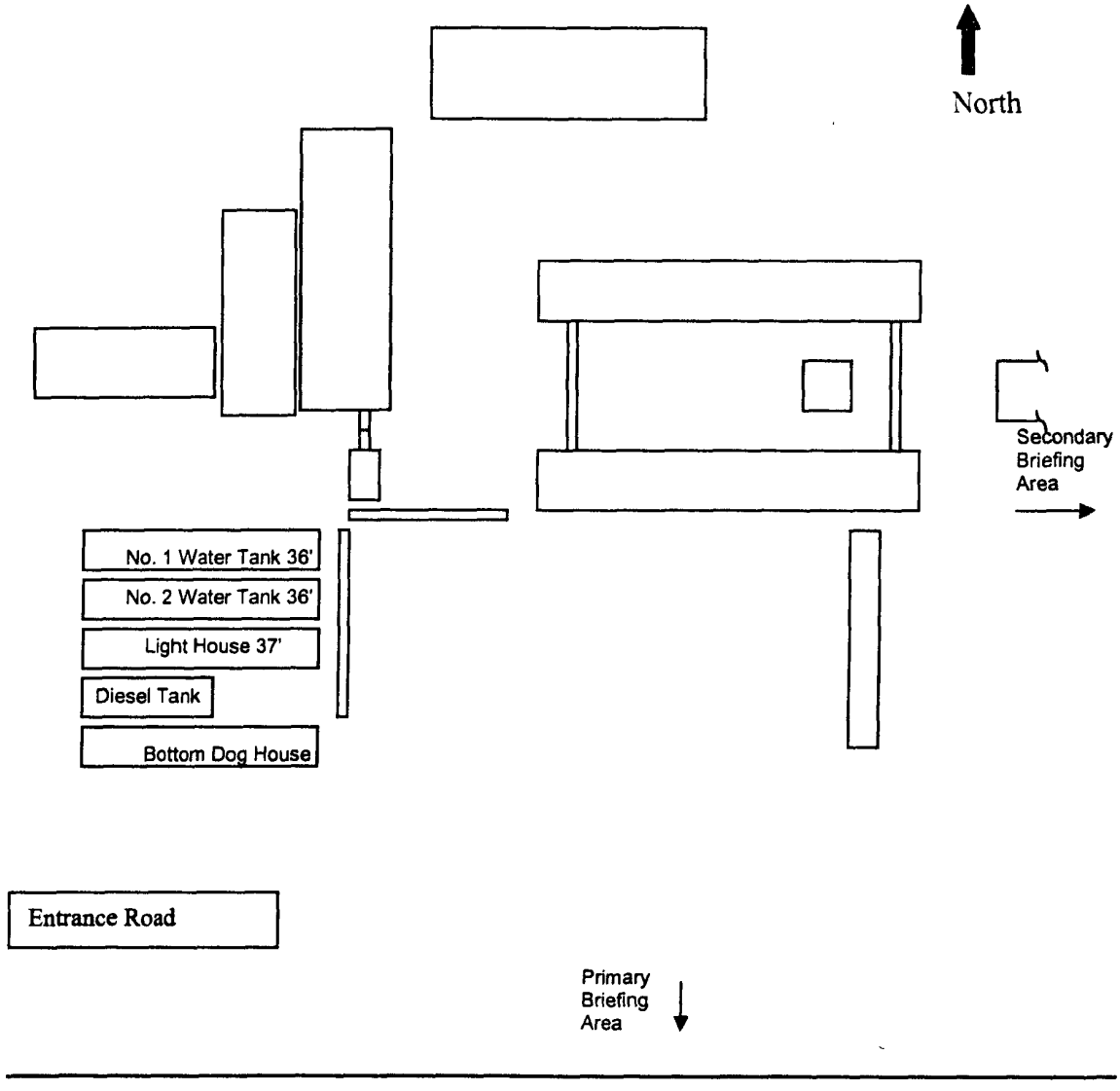
1. Notification to the Downhole Services Team Leader of the incident occurrence.
2. Notification to the local RMT/PMT leader of the incident occurrence, and the need for the designated local RMT/PMT Incident Commander to act in that capacity for the response effort.
3. Sole control of all tactical activities 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

McVay Rig 8


North
Secondary Briefing Area
No. 1 Water Tank 36'
No. 2 Water Tank 36'
Light House 37'
Diesel Tank
Bottom Dog House
Entrance Road
Primary Briefing Area

MULTI-POINT SURFACE USE AND OPERATIONS PLAN

OXY USA WTP Limited Partnership
OXY Salamander Federal #1
Eddy County, New Mexico
Lease No. NMLC-068722

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 effects associated with the operation.

The well, and work area have been staked by a registered New Mexico land surveyor. Boone Archaeological Services, LLC 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 "Red Lake 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. Exhibit B.

Directions to location:

From the intersection of USH 82 and CR 214, go north on CR 214 approximately 1.77 miles to a "Y" intersection. Stay to the right and go north approx. 0.5 miles. This location is approx. 190' east.

2. Planned Access Road

A. No new access road will be built. Exhibit B.

B. Surfacing material: N/A

C. Maximum Grade: N/A

D. Turnouts: None needed

E. Drainage Design: N/A

F. Culverts: None needed

G. Cuts and Fills: N/A

H. Gates or Cattleguards: None required

3. Existing wells within a one mile radius of the proposed development well are shown on Exhibit C.

4. Location of Existing and/or Proposed Facilities

A. If the well is productive, production facilities will be constructed on the well pad. The facility will consist of a stack pack, one 300 bbl oil tank and one 300 bbl fiberglass water tank. All permanent above ground facilities will be painted in accordance with the BLM's painting guidelines simulating the color of sandstone brown.

B. All site security guidelines identified in 43 CFR 3162.7 regulations will be adhered to and a site security plan will be submitted for the OXY Salamander Federal #1 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 Loco Hills and transported to the well site.

6. Source of Construction Materials

Caliche for surfacing the well pad will be obtained from a pit located in SE/4 NE/4 of Section 5, T17S, R29E, Eddy County NM.

7. Method of Handling Waste Disposal

A. Drill Cuttings will be disposed of in drilling pits.

B. Drilling fluids will be allowed to evaporate in the drilling pits until pits are dry.

C. Water produced during tests will be disposed of in the drilling pits. Oil produced during tests will be stored in 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. 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 with out blasting, OXY 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 allowed to evaporate before the pits are broken and backfilled.

C. After abandonment of the well, surface restoration will be in accordance with the land owner. 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 federal owned surface. The surface is leased to: Bogle Ltd., P.O. Box 460, Dexter, NM 88230.
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 3580'.

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: None within 2 miles.

F. Archaeological, Historical and Cultural Sites: Cultural resources have been recorded in the area. Boone Archaeological Services, LLC will be engaged to make an archaeological reconnaissance of the work area.

G. Land Use: Cattle ranching.

H. The well site, if a producer, will be maintained and kept clean of all trash and litter which 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 land owner, it is required.

13. Operator's Representatives and Certification

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

John Erickson
Production Coordinator
P.O. Box 1988
Carlsbad, New Mexico 88220
Office Phone: 505-887-8337
Cellular: 505-390-6426

Fetus Hagan
Drilling Superintendent
P.O. Box 50250
Midland, TX 79710-0250
Office Phone: 915-685-5719
Cellular: 505-894-5352

Calvin C. (Dusty) Weaver
Operation Specialist
P.O. Box 2000
Levelland, TX 79336
Office Phone: 806-229-9467
Cellular: 806-893-3067

Richard Jackson
Drilling Engineering Advisor
P.O. Box 50250
Carlsbad, NM 79710-0250
Office Phone: 432-685-5941
Cellular: 432-894-7867

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements. Executed this 6th day of June, 2007.

Scott Gengler
Engineering Advisor
P.O. Box 50250 Midland, TX 79710
432-685-5825
South Permian Asset Team
OXY USA WTP Limited Partnership

Conditions of Approval
Cave and Karst

EA#: NM-520-07-0903
Lease #: LC-068722
OXY USA WTP, LP
OXY Salamander Federal No.1

Cave/Karst Surface Mitigation
The following stipulations will be applied to minimize impacts during construction, drilling and production.

Berming:
Any tank batteries will be constructed and bermed large enough to contain any spills that may occur.

Bermed areas will be lined with rip-stop padding to prevent tears or punctures in liners and lined with a permanent 20 mil plastic liner.

Cave/Karst Subsurface Mitigation
The following stipulations will be applied to protect cave/karst and ground water concerns:

Rotary Drilling with Fresh Water:
Rotary drilling techniques in cave or karst areas will include the use of fresh water as a circulating medium in zones where caves or karst features are expected. Use depth to the deepest expected fresh water as listed in the geologist report.

Lost Circulation:
ALL lost circulation zones from the surface to the base of the cave occurrence zone will be logged and reported.

Regardless of the type of drilling machinery used, if a void (bit drops) of four feet or more and circulation losses greater then 75 percent occur simultaneously while drilling in any cave-bearing zone, drilling operations will immediately stop and the BLM will be notified by the operator. The BLM will assess the consequences of the situation and work with operator on corrective actions to resolve the problem.

Record Keeping:
The Operator will track customary drilling activities, including the rate of penetration, pump pressure, weight on bit, bit drops, percent of mud returns, and presence of absence of cuttings returning to the surface. As part of customary record keeping, each detectable void or sudden increase in the rate of penetration not attributable to a change in the formation type should be documented and evaluated as it is encountered.

CONDITIONS OF APPROVAL - DRILLING

Operator's Name:	**OXY USA WTP LP**
Well Name & No.	**OXY Salamander Federal # 1**
Location:	**1650'FNL, 990'FWL, SEC10, T17S, R29E, Eddy County, NM**
Lease:	**LC-068722**

I. DRILLING OPERATIONS REQUIREMENTS:

A. The Bureau of Land Management (BLM) is to be notified a minimum of 4 hours in advance for a representative to witness:

1. Spudding well
2. Setting and/or Cementing of all casing strings
3. BOPE tests

- Eddy County call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822

B. A Hydrogen Sulfide (H2S) Drilling Plan should be activated 500 feet prior to drilling into the **Delaware group**.

C. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

D. If floor controls are required, (3M or Greater) controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.

II. CASING:

A. The **13.625** inch surface casing shall be set **above the salt; should it occur more shallow @ approximately 450 feet** and cemented to the surface.

1. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
2. Wait on cement (WOC) time for a primary cement job will be a minimum of 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compression strength, whichever is greater. (This is to include the lead cement)
3. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compression strength, whichever is greater.
4. If cement falls back, remedial action will be done prior to drilling out that string.

B. The minimum required fill of cement behind the **9.625** inch intermediate casing is circulating cement to the surface. If cement does not circulate see A.1 thru 4.

C. The minimum required fill of cement behind the **5.5** inch production casing is circulating cement to 200 feet above the shoe of the _9.625 inch_ intermediate casing, unless circulation is lost while drilling the well bore for the 9.625 inch casing, in which case the cement for this string will be brought up to at least 200 feet above the most shallow lost circulation zone.

D. If hardband drill pipe is rotated inside casing; returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool I joints of the drill pipe will be installed prior to continuing drilling operations.

III. PRESSURE CONTROL:

A. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2.

B. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be _**2000**_ psi.

C. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **9.625** Intermediate casing shoe shall be _5000_ psi.

D. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

1. The tests shall be done by an independent service company.
2. The results of the test shall be reported to the appropriate BLM office.
3. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
4. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi in accordance with API RP 53, section 17. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.
5. A variance to test the BOP/BOPE **to be nippled up on the 13.375 inch** surface casing to the reduced pressure of **1000** psi with the rig pumps is approved.
6. The formation below the shoe of the 9.625 inch casing will be tested as per Onshore Order # 2.III.B.1.i.

IV. DRILLING MUD:

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** formation, and shall be used until production casing is run and cemented.

1. Recording pit level indicator to indicate volume gains and losses.
2. Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.
3. Flow-sensor on the flow line to warn of abnormal mud returns from the well

V. Hazards:

1. Our geologist has indicated that there is high potential for Cave /Karst features.
2. Our geologist has indicated that there is potential for lost circulation in the Grayburg and San Andres formations.
3. Our geologist has indicated that there is potential for flows in the Salado and Artesia groups.
4. Our geologist has indicated that there is potential for abnormal pressures in the Wolfcamp formation and the Pennsylvanian system.

Engineering can be reached at 505-706-2779 for variances.

FWright 7/25/07