

**State of New Mexico  
Energy, Minerals & Natural Resources**

**Form C-101  
May 27, 2004**

**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

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

**RECEIVED** Submit to appropriate District Office  
OCT 21 2004  
**OCD-ARTESIA** ☐ **AMENDED REPORT**

**APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE**

<sup>1</sup> Operator Name and Address OXY USA WTP Limited Partnership P.O. Box 50250 Midland, TX 79710-0250		<sup>2</sup> OGRID Number 192463
		<sup>3</sup> API Number 30-015-33677
<sup>4</sup> Property Code	<sup>5</sup> Property Name OXY Cottontail State	<sup>6</sup> Well No. 1
<sup>9</sup> Proposed Pool 1 Undesignated Red Lake Atoka-Morrow 83620		<sup>10</sup> Proposed Pool 2

**<sup>7</sup>Surface Location**

UL or lot no.	Section	Township	Range	Lot. Idn	Feet from the	North/South Line	Feet from the	East/West line	County
L	13	18S	27E		1470	south	750	west	Eddy

**<sup>8</sup>Proposed 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
L	13	18S	27E		1600	south	1140	west	Eddy

**Additional Well Location**

<sup>11</sup> Work Type Code N	<sup>12</sup> Well Type Code G	<sup>13</sup> Cable/Rotary R	<sup>14</sup> Lease Type Code S - B-10715	<sup>15</sup> Ground Level Elevation 3522'
<sup>16</sup> Multiple No	<sup>17</sup> Proposed Depth 10350' VD 10385' MD	<sup>18</sup> Formation MORROW	<sup>19</sup> Contractor N/A	<sup>20</sup> Spud Date 12/2/04
Depth to ground water		Distance from nearest fresh water well		Distance from nearest surface water
Pit: Liner: Synthetic <input type="checkbox"/> _____ mils thick Clay <input type="checkbox"/> Pit Volume _____ bbls Drilling Method: Closed-Loop System <input type="checkbox"/> Fresh Water <input type="checkbox"/> Brine <input type="checkbox"/> Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/>				

**<sup>21</sup>Proposed Casing and Cement Program**

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17-1/2"	13-3/8"	48#	400'	460sx	surface-circulate
12-1/4"	9-5/8"	36#	1800'	565sx	surface-circulate
8-3/4"	5-1/2"	17#	10350'	1705sx	Est TOC-1300'

<sup>22</sup> Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

See Attachment

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines <input type="checkbox"/> a general permit <input type="checkbox"/> , or an (attached) alternative OCD-approved plan <input type="checkbox"/> .		<b>OIL CONSERVATION DIVISION</b>	
Signature: <i>David Stewart</i>		Approved by: <b>TIM W. GUM</b>	
Printed name: David Stewart		Title: <b>DISTRICT II SUPERVISOR</b>	
Title: Sr. Regulatory Analyst		Approval Date: <b>OCT 22 2004</b>	Expiration Date: <b>OCT 22 2005</b>
E-mail Address: david.stewart@oxy.com		Conditions of Approval:	
Date: <b>10/20/04</b>	Phone: 432-685-5717	Attached <input type="checkbox"/>	

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

State of New Mexico  
Energy Minerals and Natural Resources

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

Form C-144  
March 12, 2004

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

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

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

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

Operator: Occidental U.S.A. W.T.P., LP Telephone: 432.685.5719 e-mail address: Don\_Thompson2@oxy.com

Address: P.O. Box 50250, Midland, TX 79710

Facility or well name: Oxy Cottentail State No. 1 API #: U/L or Qtr/Qtr\_NWSW\_Sec\_13\_T\_18S\_R\_27E

County: Eddy Latitude 32°44'38.48" N Longitude 104°14'15.78" W NAD: 1927 ☒ 1983 ☐ Surface Owner Federal ☐ State ☒ Private ☐ Indian ☐

**Pit**

Type: Drilling ☒ Production ☐ Disposal ☐

Workover ☐ Emergency ☐

Lined ☒ Unlined ☐

Liner type: Synthetic ☒ Thickness 12 mil Clay ☐

Volume 11,000 bbl

**Below-grade tank**

Volume: bbl Type of fluid:

Construction material:

Double-walled, with leak detection? Yes ☐ If not, explain why not.

Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)

Less than 50 feet

50 feet or more, but less than 100 feet

100 feet or more

(20 points) SEE NOTE BELOW

(10 points)

( 0 points)

Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)

Yes

No

(20 points)

( 0 points) 0

Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)

Less than 200 feet

200 feet or more, but less than 1000 feet

1000 feet or more

(20 points)

(10 points)

( 0 points) 0

**Ranking Score (Total Points)**

**If this is a pit closure:** (1) attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location:

onsite ☐ offsite ☐ If offsite, name of facility (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

Date: October 18, 2004

Printed Name/Title Don Thompson/HES Tech

Signature

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations. Because of the unknown fresh water depth Oxy is applying for a closed loop pit system at this time. Once the drilling permit has been approved a hole will be drilled with the rat hole machine to determine the depth to the fresh water. After determining what the sub-surface water level is and if conditions are met using the NMOCD Pit or Below-Grade Tank Guidelines allow, Oxy will file an amended C-144 requesting an earthen reserve drilling pit.

Approval:

Date OCT 21 2004

Printed Name/Title

Signature

Accepted for record

Well C-101  
Monttail State #1  
70 FSL 750 FWL BHL-1600 FSL 1140 FWL  
B T18S R27E Eddy County, NM  
Lease No. B-10715

**PROPOSED TD:** 10350' TVD 10385' TMD

**BOP PROGRAM:** 0 - 400' None

400 - 1800' 13-3/8" 3M annular preventer, to be used as  
divertor only.

1800 - 10350' 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 400'  
17-1/2" hole

Intermediate: 9-5/8" OD 36# K55 ST&C new casing from 0-1800'  
12-1/4" hole

Production: 5-1/2" OD 17# N80 LT&C new casing from 0-10350'  
8-3/4" hole DV Tool @ 7500'

**CEMENT:** Surface - Circulate cement with 210sx HES light premium plus w/ 2%  
CaCl<sub>2</sub> followed by 250sx PP w/ 2% CaCl<sub>2</sub>.

Intermediate - Circulate cement with 365sx Interfill C w/ .25#/sx  
Flocele followed by 200sx PP w/ 2% CaCl<sub>2</sub>.

Production - 1<sup>st</sup> stage - cement with 640sx Super H w/ .5% HR-344 +  
.4% CFR-3 + 5#/sx Gilsonite + 1#/sx salt + .2% HR-7. 2<sup>nd</sup> stage -  
cement with 865sx Interfill C w/ .25#/sx Flkocel followed by 200sx  
PP w/ .2% CaCl<sub>2</sub>. Estimated top of cement is 1300'.

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

**MUD:** 0 - 400' Fresh water/native mud. Lime for pH control  
(9-10). Paper for seepage.  
Wt 8.7-9.2 ppg, Vis 32-34 sec

400 - 1800' 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.

1800 - 5900' Fresh water. Lime for pH control(9-9.5). Paper  
for seepage.  
Wt 8.3-8.5 ppg, Vis 28-29 sec

5900 - 8000' Cut brine. Lime for pH control (10-10.5).  
Wt 9.6-10.0 ppg, Vis 28-29sec

8000 - 10350' Mud up with an Duo Vis/Flo Trol mud system.  
Wt 9.6-10.0ppg, Vis 32-36sec, WL<10cc

State of New Mexico

Energy, Minerals and Natural Resources Department

88240

Form C-102

Revised JUNE 10, 2003

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

1220 SOUTH ST. FRANCIS DR.

Santa Fe, New Mexico 87505

NM 88210

state, NM 87410

DISTRICT

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-015-	Pool Code 83620	Pool Name Undesignated Red Lake Atoka-Morrow
Property Code	Property Name OXY COTTONTAIL STATE COM	Well Number 1
OGRID No. 192463	Operator Name OXY U.S.A. W.T.P., LP	Elevation 3522'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	13	18-S	27-E		1470	SOUTH	750	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
L	13	18-S	27-E		1600	SOUTH	1140	WEST	EDDY
Dedicated Acres 320	Joint or Infill N	Consolidation Code	Order No.						

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

	<p>GEODETIC COORDINATES NAD 27 NME</p> <p>Y=634,999.5 N X=529,999.1 E</p> <p>LAT.=32°44'38.48" N LONG.=104°14'15.78" W</p>	<p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p></p> <p>Signature David Stewart Printed Name Sr. Regulatory Analyst Title 10/20/04 Date</p>
	<p><b>SURVEYOR CERTIFICATION</b></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>AUGUST 25, 2004</p> <p>Date Surveyed Signature &amp; Seal of Professional Surveyor  04.11.1097</p> <p>Certificate No. GARY. EIDSON 12641</p>	

1. Pre-OnGard - 3001500882 - State B-5 - TD-1927' - 2310 FSL 990 FWL
2. 3001500886 - State B-14 - TD-2125' - 1650 FSL 490 FWL - Not on NMOCD Well List
3. CBS Operating Corp. - 3001521486 - Artesia St Tr 6-2 - TD-2000'  
1530 FSL 1310 FWL - Artesia QN-GB-SA

Oxy Permian  
Oxy Cottontail State Com #1 - Plan #1

Eddy Co., New Mexico  
Oxy Cottontail State Com #1

Measured Depth (ft)	Incl.	Azim.	Vertical Depth (ft)	Northings (ft)	Eastings (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
6100.00	0.000	71.565	6100.00	0.00 N	0.00 E	0.00	0.00
6200.00	2.000	71.565	6199.98	0.55 N	1.66 E	1.75	2.00
6300.00	4.000	71.565	6299.84	2.21 N	6.62 E	6.98	2.00
6400.00	6.000	71.565	6399.45	4.96 N	14.89 E	15.69	2.00
6500.00	8.000	71.565	6498.70	8.82 N	26.45 E	27.88	2.00
6604.59	10.092	71.565	6601.99	14.02 N	42.05 E	44.32	2.00
6700.00	10.092	71.565	6695.92	19.30 N	57.91 E	61.04	0.00
6800.00	10.092	71.565	6794.37	24.84 N	74.53 E	78.56	0.00
6900.00	10.092	71.565	6892.82	30.39 N	91.16 E	96.09	0.00
7000.00	10.092	71.565	6991.28	35.93 N	107.78 E	113.61	0.00
7100.00	10.092	71.565	7089.73	41.47 N	124.40 E	131.13	0.00
7200.00	10.092	71.565	7188.18	47.01 N	141.03 E	148.66	0.00
7300.00	10.092	71.565	7286.64	52.55 N	157.65 E	166.18	0.00
7400.00	10.092	71.565	7385.09	58.09 N	174.27 E	183.70	0.00
7500.00	10.092	71.565	7483.54	63.63 N	190.90 E	201.22	0.00
7600.00	10.092	71.565	7581.99	69.17 N	207.52 E	218.75	0.00
7700.00	10.092	71.565	7680.45	74.71 N	224.14 E	236.27	0.00
7800.00	10.092	71.565	7778.90	80.26 N	240.77 E	253.79	0.00
7900.00	10.092	71.565	7877.35	85.80 N	257.39 E	271.31	0.00
8000.00	10.092	71.565	7975.81	91.34 N	274.01 E	288.84	0.00
8100.00	10.092	71.565	8074.26	96.88 N	290.64 E	306.36	0.00
8200.00	10.092	71.565	8172.71	102.42 N	307.26 E	323.88	0.00
8300.00	10.092	71.565	8271.16	107.96 N	323.88 E	341.40	0.00
8360.45	10.092	71.565	8330.68	111.31 N	333.93 E	352.00	0.00
8400.00	9.499	71.565	8369.65	113.44 N	340.32 E	358.73	1.50
8500.00	7.999	71.565	8468.49	118.25 N	354.75 E	373.94	1.50
8600.00	6.499	71.565	8567.68	122.24 N	366.72 E	386.55	1.50
8700.00	4.999	71.565	8667.18	125.41 N	376.22 E	396.57	1.50
8800.00	3.499	71.565	8766.90	127.75 N	383.25 E	403.98	1.50
8900.00	1.999	71.565	8866.78	129.27 N	387.80 E	408.77	1.50
9000.00	0.499	71.565	8966.76	129.95 N	389.86 E	410.95	1.50
9033.24	0.000	71.565	9000.00	130.00 N	390.00 E	411.10	1.50
9100.00	0.000	71.565	9066.76	130.00 N	390.00 E	411.10	0.00
9200.00	0.000	71.565	9166.76	130.00 N	390.00 E	411.10	0.00
9300.00	0.000	71.565	9266.76	130.00 N	390.00 E	411.10	0.00
9400.00	0.000	71.565	9366.76	130.00 N	390.00 E	411.10	0.00
9500.00	0.000	71.565	9466.76	130.00 N	390.00 E	411.10	0.00
9600.00	0.000	71.565	9566.76	130.00 N	390.00 E	411.10	0.00
9700.00	0.000	71.565	9666.76	130.00 N	390.00 E	411.10	0.00
9800.00	0.000	71.565	9766.76	130.00 N	390.00 E	411.10	0.00
9900.00	0.000	71.565	9866.76	130.00 N	390.00 E	411.10	0.00
10000.00	0.000	71.565	9966.76	130.00 N	390.00 E	411.10	0.00
10100.00	0.000	71.565	10066.76	130.00 N	390.00 E	411.10	0.00
10200.00	0.000	71.565	10166.76	130.00 N	390.00 E	411.10	0.00
10300.00	0.000	71.565	10266.76	130.00 N	390.00 E	411.10	0.00
10383.24	0.000	71.565	10350.00	130.00 N	390.00 E	411.10	0.00

All data are in feet unless otherwise stated. Directions and coordinates are relative to Grid North.

Vertical depths are relative to WELL. Northings and Eastings are relative to well.

The Dogleg Severity is in Degrees per 100 feet.

Vertical Section is from Slot and calculated along an Azimuth of 71.565° (Grid).

Coordinate System is NAD 1927 (NADCON CONUS) US State Plane 1927 (Exact solution), New Mexico East 3001.

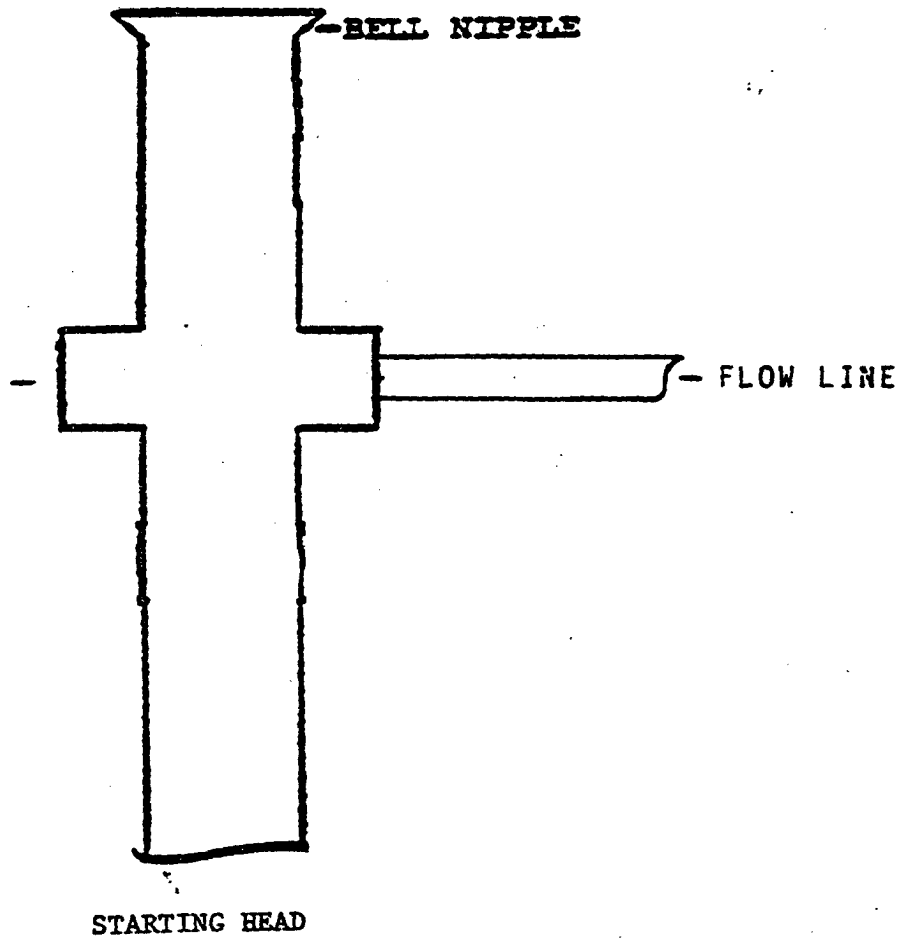
Central meridian is -104.333°.

Grid Convergence at surface is 0.066°.

Based upon Minimum Curvature type calculations, at a Measured Depth of 10383.24ft., the Bottom Hole Displacement is 411.10ft., in the Direction of 71.565° (Grid).

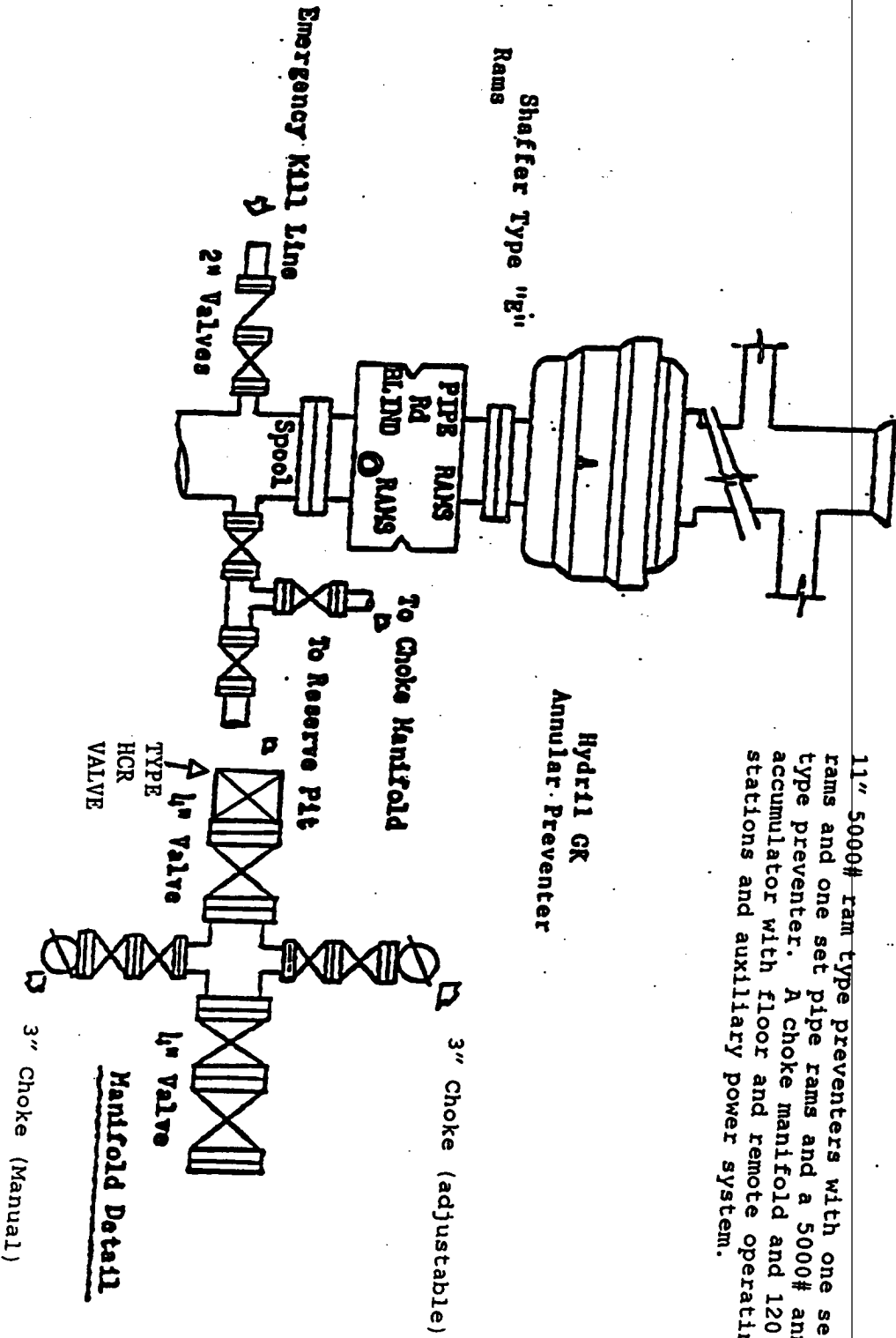
EXHIBIT A

ANNULAR PREVENTOR  
TO BE USED AS DIVERTOR ONLY



# BLOWOUT PREVENTOR SCHEME

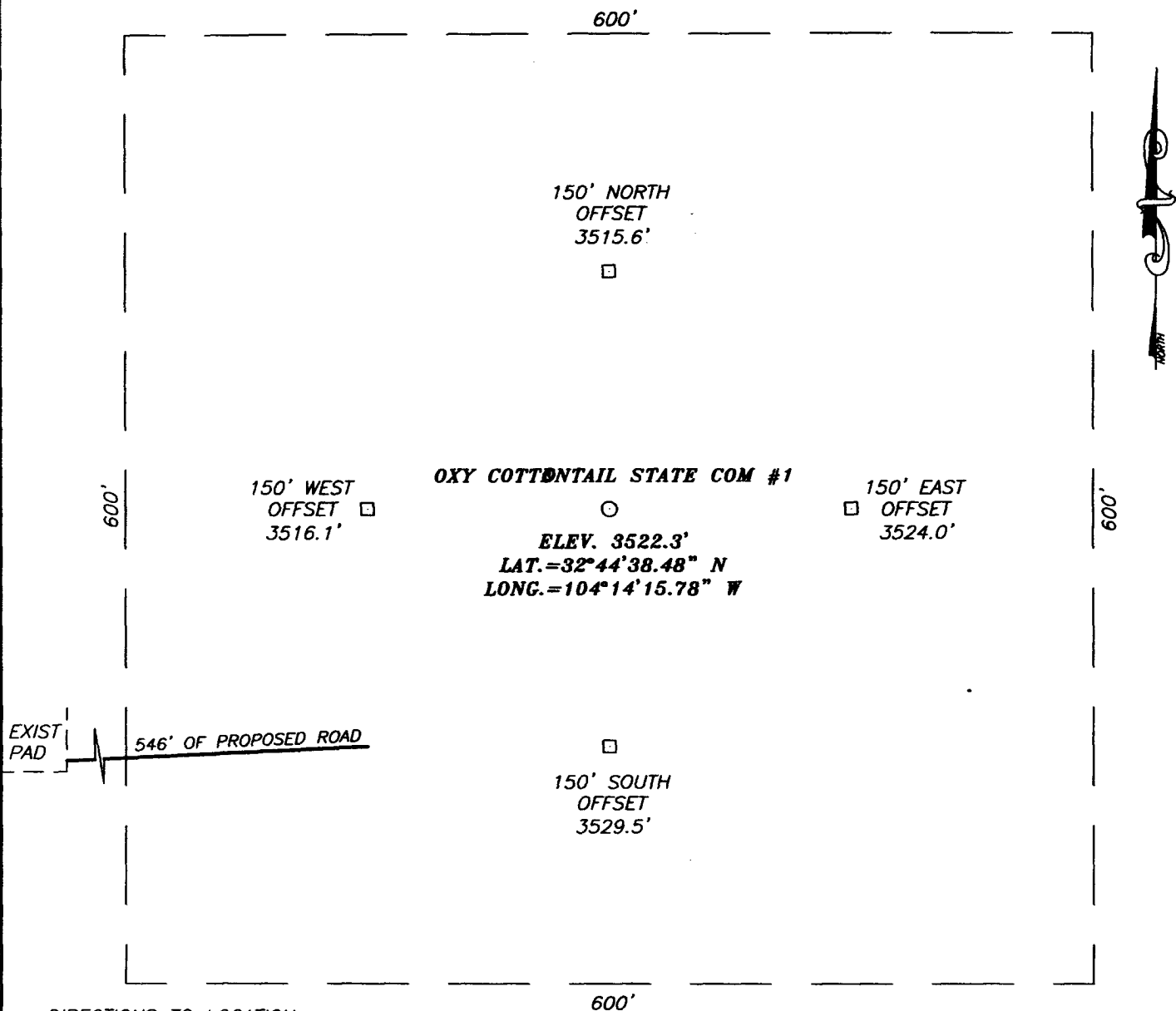
EXHIBIT A



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.

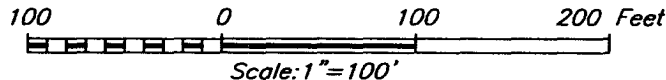


**SECTION 13, TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M.,**  
 EDDY COUNTY, NEW MEXICO



**DIRECTIONS TO LOCATION**

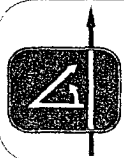
FROM THE INTERSECTION OF CO. RD. #206 (ILLINOIS CAMP RD.) AND CO. RD. #234 (OIL CENTER RD.) GO NORTH ON CO. RD. #206 FOR APPROX. 0.7 MILES TO A CALICHE ROAD ON THE LEFT. TURN LEFT (WEST) AND FOLLOW ROAD IN A WESTERLY DIRECTION FOR APPROX. 1.5 MILES TO THE THE YATES MYM STATE #1 WELL. TAKE CALICHE ROAD SW AND GO APPROX. 0.5 MILES TO A N-S CALICHE ROAD. TURN RIGHT (NORTH) AND GO APPROX. 0.3 MILES TO THE CBS OPERATING ARTESIA STATE #1 WELL. FROM THE SE COR. PAD FOLLOW THE PROPOSED ROAD SURVEY APPROX. 600' TO PROPOSED LOCATION.



**OXY U.S.A. W.T.P., LP**

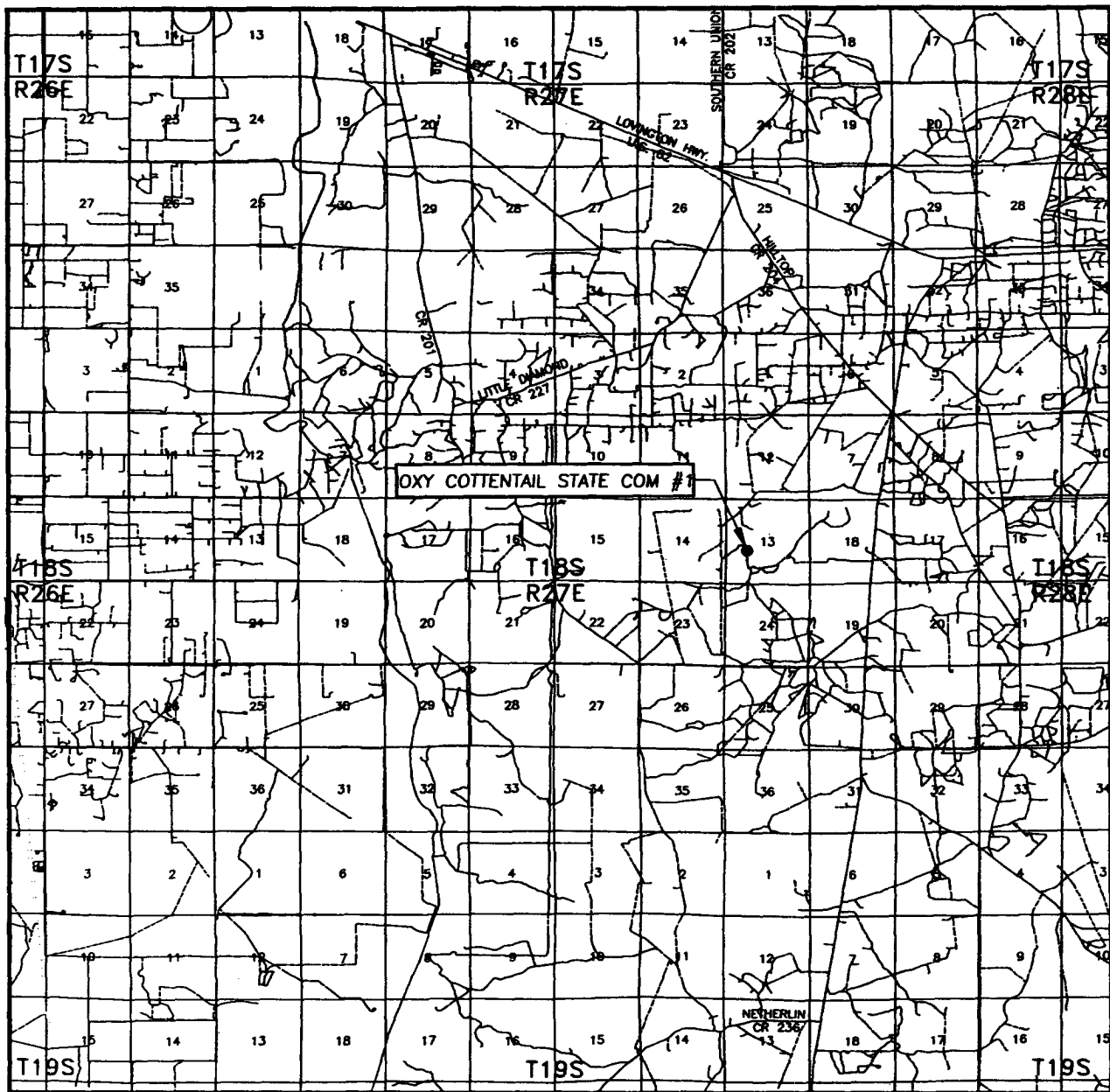
OXY COTTONTAIL STATE COM #1 WELL  
 LOCATED 1470 FEET FROM THE SOUTH LINE  
 AND 750 FEET FROM THE WEST LINE OF SECTION 13,  
 TOWNSHIP 18 SOUTH, RANGE 27 EAST, N.M.P.M.,  
 EDDY COUNTY, NEW MEXICO.

Survey Date: 08/25/04	Sheet 1 of 1 Sheets
W.O. Number: 04.11.1097	Dr By: J.R. Rev 1:N/A
Date: 09/13/04	Disk: CD#10 04111097 Scale: 1"=100'



PROVIDING SURVEYING SERVICES  
 SINCE 1946  
**JOHN WEST SURVEYING COMPANY**  
 412 N. DAL PASO  
 HOBBS, N.M. 88240  
 (505) 383-3117

# VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 13 TWP. 18-S RGE. 27-E

SURVEY N.M.P.M.

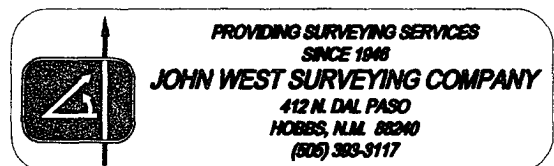
COUNTY EDDY

DESCRIPTION 1470' FSL & 750' FWL

ELEVATION 3522'

OPERATOR OXY U.S.A. W.T.P., LP

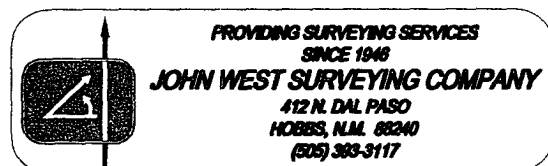
LEASE OXY COTTONTAIL STATE COM





CONTOUR INTERVAL:  
ILLINOIS CAMP, N.M. - 10'

U.S.G.S. TOPOGRAPHIC MAP  
ILLINOIS CAMP, N.M.



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

**Hydrogen Sulfide (H<sub>2</sub>S)  
Contingency Plan**

**For**

**OXY Cottontail State No. 1  
1470 ft FSL, 750 ft FWL  
Sec 13, T18S, R27E  
Eddy County, NM**

**And**

**Patterson/UTI Drilling Co., Rig No. 508**

## **TABLE OF CONTENTS**

<b><u>ITEM</u></b>	<b><u>PAGE</u></b>
PREFACE .....	3
LOCATION MAP .....	4
RIG SKETCH.....	5
EMERGENCY RESPONSE ACTIVATION AND GENERAL RESPONSIBILITIES	6
SPECIFIC EMERGENCY GUIDANCE	
- H2S Release .....	8
- Well Control .....	10
PUBLIC RELATIONS .....	13
PHONE CONTACTS – OP DOWNHOLE SERVICES GROUP .....	14
EMERGENCY PERSONELL NOTIFICATION NUMBERS.....	15
PHONE CONTACTS – OP PRODUCTION AND PLANT PERSONNEL .....	16
PHONE CONTACTS – OP HES PERSONNEL .....	16

## **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 Cottontail State No. 1**

**Lat. 32° 44' 38.48" N**

**Long. 104° 14' 15.78" W**

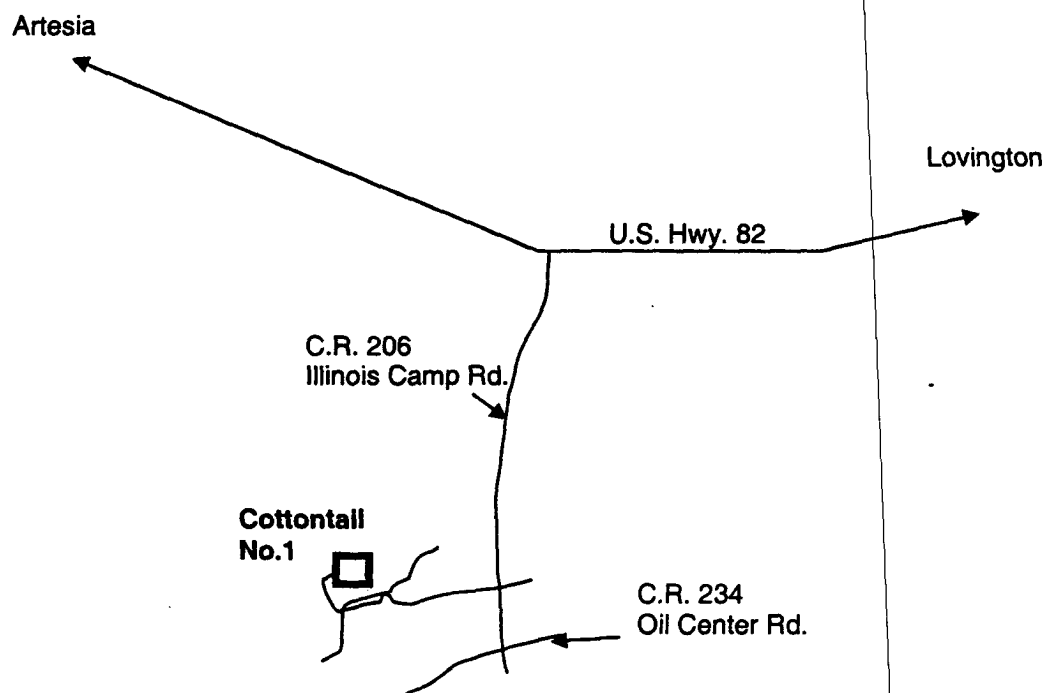
**NAD 27 NME**

**Y = 634399.5 N**

**X = 529399.1 E**

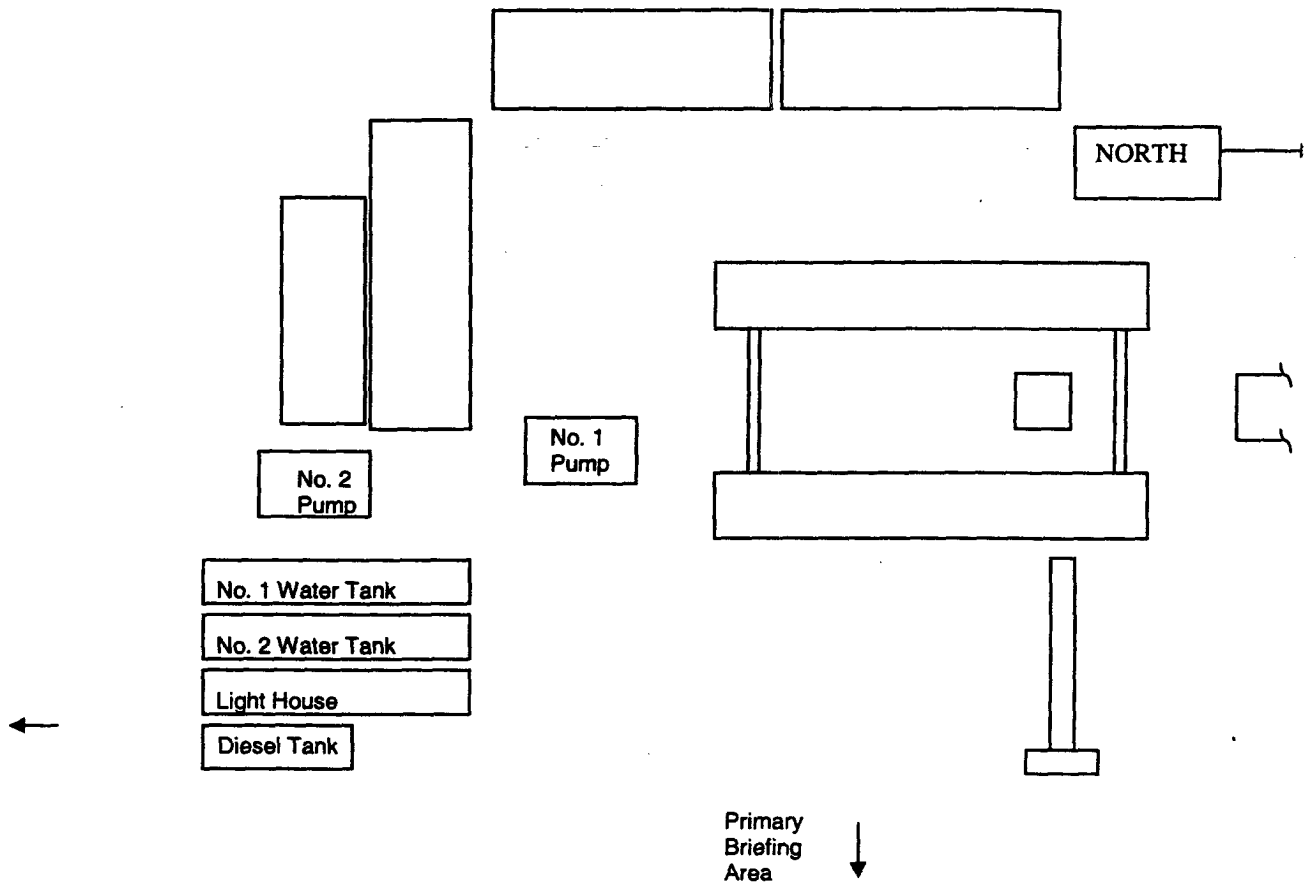


**NORTH**



From the intersection of Co. Rd. 206 (Illinois Camp Rd.) and Co. Rd. 234 (Oil Center Rd.) go north on Co. Rd. 206 approx. 0.7 miles to a caliche road on the left. Turn left (west) and follow road in a westerly direction for approx. 1.5 miles to the Yates MYM State No. 1 well. Take caliche road SW and go approx. 0.5 miles to a N-S caliche road. Turn right (north) and go approx. 0.3 miles to the CBS operating Artesia St. No. 1 well. The Cottontail is approx. 600 feet to the east.

**Patterson/UTI 508**





## **AGENCY 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 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 H<sub>2</sub>S zone (within 3 days or 500 feet) and weekly H<sub>2</sub>S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H<sub>2</sub>S 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 (SO<sub>2</sub>). Intentional ignition must be coordinated with the NMOC and local officials. Additionally the NM State Police shall be the Incident Command of any major release. Ignition of the well will be with the concurrence of the drilling team leader and the Oxy Crisis Management Team as time allows.

Characteristics of H<sub>2</sub>S and SO<sub>2</sub>

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H <sub>2</sub> S	1.189 Air = 1	10 ppm	100 ppm	600 ppm
Sulfur Dioxide	SO <sub>2</sub>	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.

or 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	PAGER
<b>Manager Operations Support</b>					
Hardesty, Steve	Midland	432-685-5880	432/694-6441	713-560-8095	
<b>Team Leader</b>					
Pennington, Randy	Midland	432-685-5684	432/689-7642	432-556-0207	
			Toledo Bend =	318-590-2349	
<b>Operations Specialists</b>					
Fleming, Joe	Midland	432-685-5858	432/699-0875	432-425-6075	432-498-3281
Ray, Fred	Midland	432-685-5683	432/362-2857	432-661-3893	432-499-3432
<b>HES Tech</b>					
Thompson, Don	Midland	432-685-5719	432/684-3900	432-556-1505	

## **Emergency Notification Numbers**

<b>Public Authorities</b>		
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

<b>Emergency Services</b>		
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

<b>Other Emergency Services</b>		
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

<b>OXY Permian Production and Plant Personnel</b> <b>OXY Permian Crisis Team Hotline Notification (713) 935-7210</b>
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PERSON	LOCATION	OFFICE	FAX	CELL	PAGER
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<b>Asset Management-Operations Areas</b>					
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	

<b>RMT/PMT Leaders: South Permian Asset</b>					
Frontier RMT:	Midland				

PERSON	LOCATION	OFFICE	FAX	CELL	PAGER
<b>Production Coordinators: S. Permian Asset</b>					
New Mexico: John Erickson	Hobbs	(505) 393-2174	(505) 397-2671	(505) 390-6426	(505) 370-6836

<b>OXY Permian HES Personnel</b> <b>OXY Permian Crisis Team Hotline Notification (713) 935-7210</b>
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PERSON	LOCATION	OFFICE	FAX	CELL	PAGER
<b>HES Techs &amp; Area of Responsibility</b>					
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