

District I  
PO Box 1980, Hobbs, NM 88241-1980  
District II  
PO Drawer DD, Artesia, NM 88211-0719  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Minerals & Natural Resources Department  
**OIL CONSERVATION DIVISION**  
PO Box 2088  
Santa Fe, NM 87504-2088

Form C-101  
Revised February 10, 1994  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 6 Copies  
Fee Lease - 5 Copies

☐ AMENDED REPORT

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

<sup>1</sup> Operator Name and Address. OXY USA Inc. P.O. Box 50250 Midland, TX 79710-0250		<sup>1</sup> OGRID Number 16696
		<sup>1</sup> API Number 30 - 0 15 - 29007
<sup>4</sup> Property Code 19046	<sup>4</sup> Property Name Hagerman	<sup>4</sup> Well No. 1

**<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
K	30	22S	27E		1650	South	2200	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
073960									
<sup>8</sup> Proposed Pool 1 Carlsbad Morrow, South					<sup>8</sup> Proposed Pool 2				

<sup>11</sup> Work Type Code N	<sup>11</sup> Well Type Code G	<sup>11</sup> Cable/Rotary R	<sup>11</sup> Lease Type Code P	<sup>11</sup> Grossed Level Elevation 3184'
<sup>11</sup> Multiple No	<sup>11</sup> Proposed Depth 11900'	<sup>11</sup> Formation Morrow	<sup>11</sup> Contractor N/A	<sup>11</sup> Spud Date ASAP

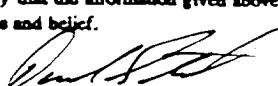
**<sup>21</sup> Proposed Casing and Cement Program**

Hole Size	Casing Size	Casing weight/foot	Setting Depth	Sacks of Cement	Estimated TOC
17-1/2"	13-3/8"	48#	400'	420sx	Surface
11"	8-5/8"	24-32#	5300'	1080sx	Surface
7-7/8"	5-1/2"	17-20#	11900'	435sx	8000'

<sup>21</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 OTHER SIDE

Permit ID: 1  
6-14-96  
John Doe & HPT

<sup>22</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief. Signature: 		<b>OIL CONSERVATION DIVISION</b>	
Printed name: David Stewart		Approved by: <b>ORIGINAL SIGNED BY T. W. GUM</b>	
Title: Regulatory Analyst		Title: <b>DISTRICT II SUPERVISOR</b>	
Date: 6/7/96		Approval Date: 6-11-96	Expiration Date: 6-11-97
Phone: 915-685-5717		Conditions of Approval: Attached <input type="checkbox"/>	

ATTACHMENT C-101  
OXY USA Inc.  
Hagerman #1  
SEC 30 T22S R27E  
Eddy County, NM

PROPOSED TD: 11900' TVD

BOP PROGRAM: 0' - 400' None  
400'-5300' 13-3/8" 5M blind and pipe rams with 5M annular preventer.  
5300'-11900' 13-3/8" 5M blind and pipe rams with 5M annular preventer and rotating head below 8500'.

CASING: 13-3/8" 48# H40 ST&C casing @ 400'. 17 1/2" hole.  
8-5/8" 24-32# K55 ST&C casing @ 5300', 11" hole  
5-1/2" 17-20# N80 LT&C casing @ 11900', 7-7/8" hole.

CEMENT: Surface - Circulate cement with 220sx 65/35 POZ/C w/2% CaCl<sub>2</sub> + 6% gel + .25#/sx Cello-seal followed by 200sx Class C with 2% CaCl<sub>2</sub>.

Intermediate - Circulate cement with 780sx POZ/C w/ 6% gel + 5#/sx salt + .25#/sx Cello-seal followed by 200sx Class C with 2% CaCl<sub>2</sub>. Cement volumes may be adjusted to fluid caliper.

Production - Cement with 435sx Super C Modified w/ 5#/sx Gilsonite + fluid loss additives and retarder. Estimated top of cement is 8000'. Cement volumes may be adjusted to hole caliper.

MUD: 0' - 400' Fresh water spud mud. Lime for pH control (9 to 10). Paper for seepage. Wt. 8.5 ppg, vis 33-36 sec.  
400' - 5300' Brine water/native mud. Lime for pH control (10-10.5). Paper for seepage. Wt. 9.6-9.8 ppg, vis 32-34 sec  
5300' - 8500' Fresh water/native mud. Lime for pH control (9-9.5). Paper for seepage. Wt. 8.4 ppg, vis 26-28 sec  
8500' - 11900' At 8500' displace hole w/ cut brine weighing 9.6-9.8 ppg. At 10000' mud up with an XCD Polymer/PAC system Wt. 10.0-10.5 ppg 42-48 sec funnel vis, WL less than 8cc.

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88240

State of New Mexico  
Energy, Minerals and Natural Resources Department

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DISTRICT II  
P.O. Drawer DD, Artesia, NM 88210

OIL CONSERVATION DIVISION

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-29007	Pool Code 073960	Pool Name Carlsbad Morrow, South
Property Code	Property Name Hagerman	Well Number 1
OGRID No. 16696	Operator Name OXY USA INC	Elevation 3184'

Surface Location

UL or lot No. K	Section 30	Township 22 S	Range 27 E	Lot Idn	Feet from the 1650	North/South line South	Feet from the 2200	East/West line West	County Eddy
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Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 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

	<b>OPERATOR CERTIFICATION</b>  I hereby certify the the information contained hereon is true and complete to the best of my knowledge and belief.   Signature David Stewart Printed Name Regulatory Analyst Title 6/7/96 Date
	<b>SURVEYOR CERTIFICATION</b>  I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my belief.   Date Surveyed Signature & Seal of Professional Surveyor 7977 W.O. No. 5193a Certificate No. Gary L. Jones 7977 BASIN SURVEYS



T. Kent Woolley, CPL  
Senior Landman

OXY USA INC.

Box 50250, Midland, TX 79710

Phone (915) 685-5906  
FAX: (915) 685-5888

May 28, 1996

Mr. Jon R. Tully  
City Administrator, City of Carlsbad  
P. O. Box 1569  
Carlsbad, New Mexico 88221-1569

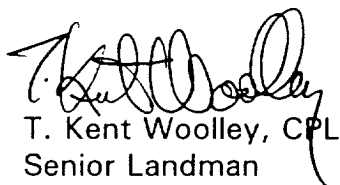
RE: Oil and Gas Drilling Permit  
Hagerman #1 well, Section 30,  
T-22S R-27E, Eddy County, New  
Mexico 30-C-3449

Dear Mr. Tully:

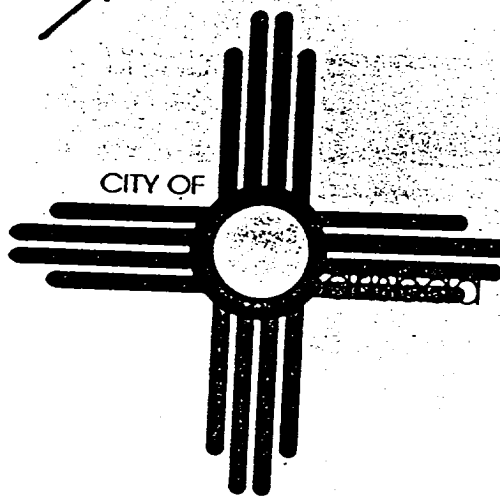
Pursuant to Approval of Permit to Drill the above well issued on March 12, 1996, please be advised that OXY USA Inc. has made one change in the information provided under the Application. The well will now be a straight hole with the surface location being 2200' FWL and 1650' FSL, Section 30 and the bottom hole will also be approximately the same rather than that shown on the Application.

In addition to the above, we would like to inquire if it is possible to utilize a lined pit rather than a steel pit. Section 16 (A)(2) requires the use of steel pits. We are inquiring if there is any flexibility in the use of lined pits rather than steel?

Yours truly,

  
T. Kent Woolley, CPL  
Senior Landman

TKW/fh



CITY OF

Mayor  
**GARY L. PERKOWSKI**

PHONE (505) 887-1191 • P.O. BOX 1569 • CARLSBAD, NM 88221-1569

City Administrator  
**JON R. TULLY**

March 13, 1996

Mr. T. Kent Woolley  
Senior Landman  
OXY USA Inc.  
Box 50250  
Midland, TX 79710

RE: Oil & Gas Well Drilling Permit  
Hagerman Well, Section 30,  
T-22S, R-27E, Eddy County,  
New Mexico

Dear Mr. Woolley:

At its regular meeting held March 12, 1996, the governing body of the City of Carlsbad approved your company's request for the above noted permit to drill a well within the City limits. Please notify our Environmental Services Officer, Mr. John Waters, when you start preparations to drill.

If you have any questions, please contact Mr. Waters or myself at (505) 887-1191.

Sincerely,

Jon R. Tully  
City Administrator

JRT:rc  
Enclosure

**Ward 1**  
TOM GUINTELA  
JOE FLOREZ

**Ward 2**  
DALE JANWAY  
FRED BLOSS

**COUNCILORS**

**Ward 3**  
DR. TED HAUSER  
CHUCK WIGGINS

**Ward 4**  
HOUSTON CLARK  
BOB MURRAY

CITY OF CARLSBAD  
P O BOX 1569  
CARLSBAD NM 88221

## APPLICATION FOR PERMIT

A separate application shall be required for each well, trunkline pipeline and each water or gas repressurizing or injection facility.

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Drill Well         | <input type="checkbox"/> Water/Gas Repressurizing/Injection Facility |
| <input type="checkbox"/> Re-enter/Deepen Existing Well | <input type="checkbox"/> Construct/Operate Gas Pipeline              |

Applicant Name: OXY USA Inc.		Filing Date:
If not Corporation, name of local attorney as Agent:		
If Corporation, Name of Registered Agent: Prentice Hall Legal & Financial Services		
Applicant Address: P. O. Box 50250	City: Midland	State/Zip: TX 79710

Proposed site (including location of gathering lines):  See Attachment
--

Name of lease owner: Charles Hagerman
Accurate description of well location (with legal description of all acreage dedicated to well or legal description of easements to be used by pipeline):  Acreage dedicated to the well is the S/2 Section 30, T-22S R-27E. Well location is 2200' FWL, 1650' FSL, Section 30, T-22S R-27E. Bottom Hole location is 660' FSL and 660' FWL, Section 30, T-22S, R-27E.

Location with respect to property lines, right-of-way boundaries, and surface contours: 1650' FSL & 2200' FWL, Sec. 30, T-22S R-27E, Eddy County, New Mexico. A plat is attached showing the well location in relation to structures, roads, etc.
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Ground elevation at well site: Well depth 11,900' TVD, 12,175' MD
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Type of derrick: 13' Jackknife manufactured by Drilling Structures, Inc.	Proposed depth: 11,900' TVD, 12,185' MD
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Detailed explanation of operating pressures of all pipelines and facilities:  See Attachment
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Application continued on reverse side.

Location of compressor with operating characteristics: No lease compression anticipated.	
Location of compressor control with operating characteristics: No lease compression anticipated.	
Location of safety devices with operating characteristics: See Attachment.	
Name of person to be notified in case of emergency: See Attachment.	
Proposed hole size: See Attachment.	Casing Program: See Attachment.
Mud Program: See Attachment.	Cementing Program: See Attachment.
Specifications of safety provisions and equipment for installation of any pipeline with pressures in excess of 250 psi:  See Attachment.	
Have you attached a current certified financial statement? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Signature of authorized agent: <u>Robert D. Hunt</u> Date: <u>3/1/96</u>	
Typed or Printed name of authorized agent: <u>Robert D. Hunt</u> <u>may in fact</u>	

This application shall be filed with the City Administrator and accompanied by a filing fee \$500.00 in cash, cashier's check, or certified check made payable to the City of Carlsbad.

☒ Cash, Cashier's Check, Certified Check accompanies application.

Permit:    ☐ Approved    ☐ Disapproved by Council.    Date: \_\_\_\_\_

This Permit incorporates by reference and requires compliance with all applicable City Ordinance and regulations.

\_\_\_\_\_  
City Administrator

Date: \_\_\_\_\_

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Energy, Minerals and Natural Resources Department

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1090 Rio Brazos Rd., Aztec, NM 87410

OIL CONSERVATION DIVISION

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☐ AMENDED REPORT

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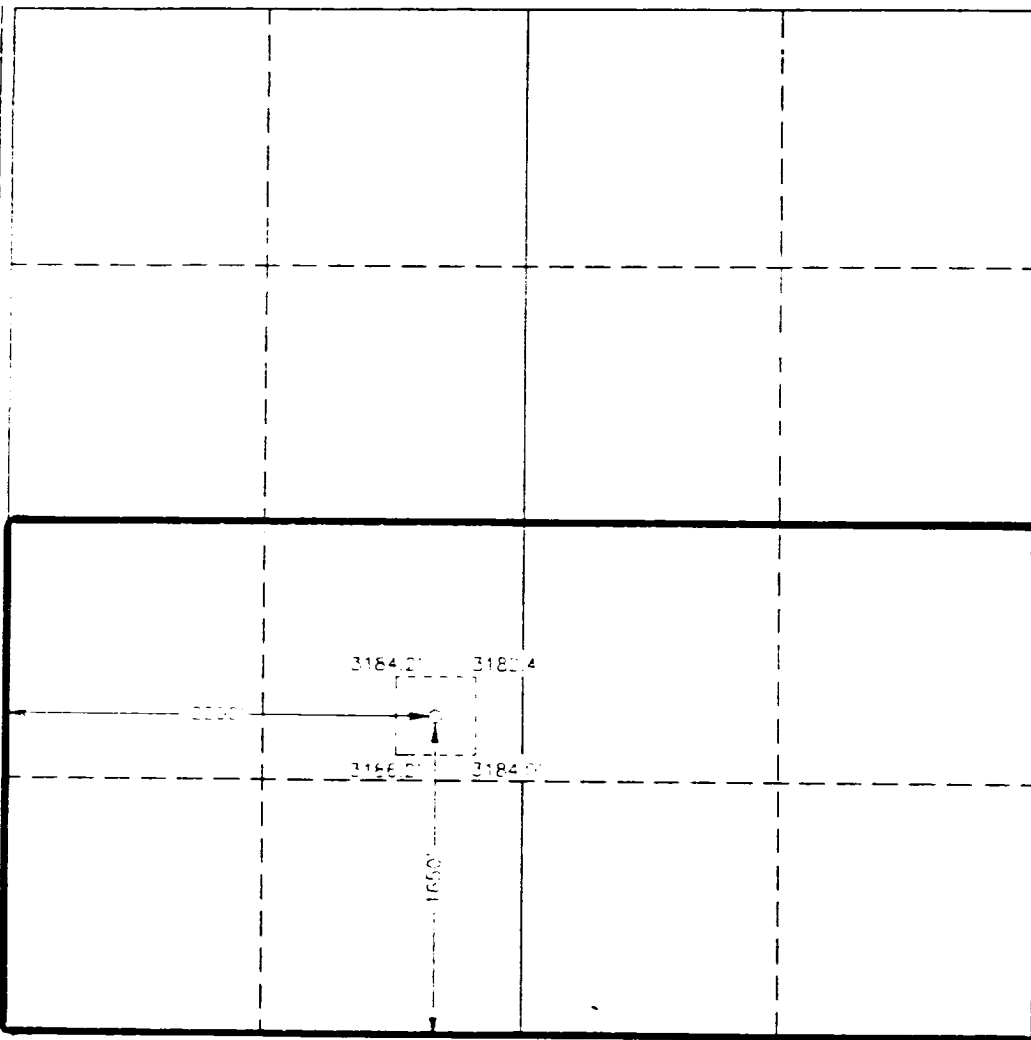
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OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



OPERATOR CERTIFICATION

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

  
Signature

David Stewart  
Printed Name

Regulatory Analyst  
Title

1/23/96  
Date

SURVEYOR CERTIFICATION

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

June 5, 1995

Date Surveyed  
Signature & Seal of  
Professional Surveyor



W.O. No. 51930

Certificate No. Gary L. Jones 7977

BASIN SURVEYS





February 26, 1996

## Hagerman #1

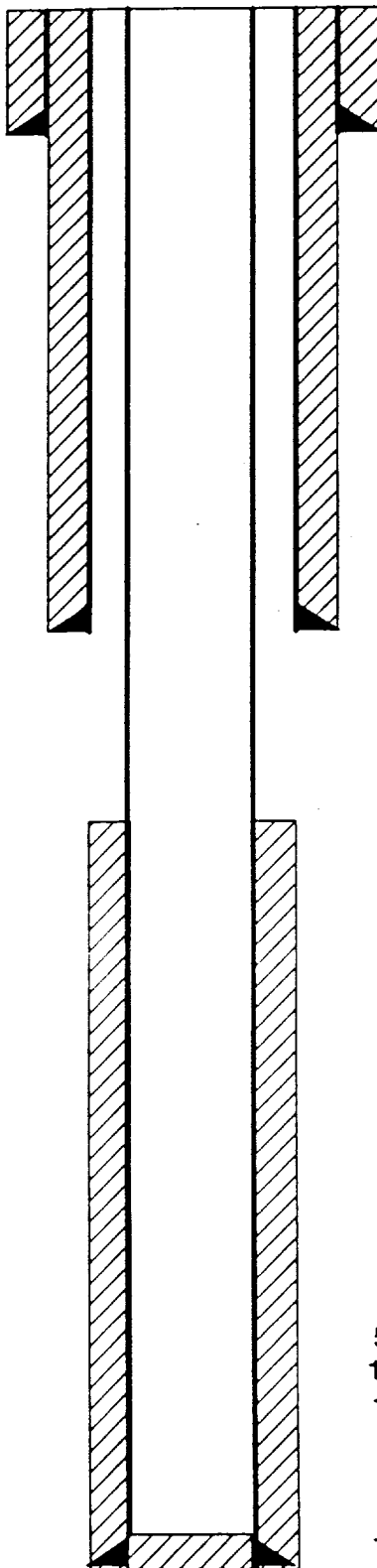
Location:

1650' FSL & 2200' FWL (Surf.)

~~660' FSL & 660' FWL (BH)~~

Sec 30 T22S R27E

Eddy Co., New Mexico



13-3/8", 48#, H-40 ST&C @ 400'  
Cement circulated to surface

8-5/8", 32&36#, K-55 ST&C  
Set @ 5300'  
Cement circulated to surface

KOP @ 5400'  
Build 1.5 deg/100ft to 17.2 deg

TOC @ 8000'

5-1/2" Casing  
17#, N-80 LT&C @ 10,000'  
17#, USS-95 LT&C @ 12,170'

TD: 12,170' MD  
TD: 11,900' TVD

Prepared By: Robert Elliott

## **HAGERMAN WELL INFORMATION**

### **Proposed Site**

Surface: 1650' FSL & 2200' FWL Section 30, T-22-S, R-28-E, Eddy County, New Mexico.

Bottom Hole: 660' FSL & 660' FWL Section 30, T-22-S, R-28-E, Eddy County, New Mexico.

Gathering Lines: To be determined by gas gatherer. However, It is anticipated that any new gathering lines will be laid adjacent to existing abandoned lines and within existing right-of-ways.

### **In Case of Emergency:**

John Stinson - Production Technician  
P.O. Box 1387  
Carlsbad, NM 88221  
Office Phone: (505) 887-5158  
Mobile Phone: (505) 370-4506  
Home Phone: (505) 885-3376

Joe Gibson - Production Coordinator  
P.O. Box 69  
Hobbs, NM 88240  
Office Phone: (505) 393-2174  
Mobile Phone: (505) 370-0760  
Home Phone: (505) 392-4988

### **Hole Size, Casing Program, Mud Program and Cementing Program**

13-3/8", 48#, H-40 ST&C surface casing set at 400' in 17-1/2" hole. Cement will be circulated to surface. Surface hole will be drilled with fresh water spud mud using paper for seepage and lime for pH control (8.5 ppg).

8-5/8", 32 & 36#, K-55 ST&C intermediate casing will be set at 5300' in 11" hole. Cement will be circulated to surface. Intermediate hole will be drilled with brine water using caustic for pH control and paper for seepage (9.6 to 9.8 ppg).

After drilling out of the intermediate casing (7-7/8" hole size) the well will be drilled directionally. At 5400' the well will be kicked off, and the angle will be built at 1.5 degrees per 100 ft until a maximum angle of 17.2 degrees is achieved. This angle will be held to TD. The wellbore will take a west-southwesterly direction.

5-1/2", 17#, N80 & USS95 LT&C production casing will be set at 12,170' MD, 11,900' TVD in 7-7/8" hole. Well will be cemented bringing top of cement to 8000'. This portion of the well will be drilled with fresh water to approximately 8500' TVD, then 9.6 to 9.8 ppg brine will be used to approximately 10,000' TVD. At 10,000' TVD the well will be mudded up with a XCD polymer/PAC mud system weighing 10.0-10.5 ppg. This mud will be used to TD.