Form 3160-3 (July 1992)

Title 18 U.S.C. Section 1001 -- mine at a --

SUBMIT IN TRIPLICATE. UNITED STATES

18 : 1761 C

(Other instructions on reverse side)

FORM APPROVED OMB NO. 1004-0136

DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Expires: February 28, 1995 J. LEASE DESIGNATION AND SERIAL NO.

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b. TYPE OF WELL	RILL X		DEEPEN 📃	•			T. UNIT AGREEMENT	NAME
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2. NAME OF OPERATOR	WELL A	OTHER	•	ZONE X	ZONE		8. FARM OR LEASE NAME V	WELL NO =
	OXY USA	Inc.	16676		1669	5	OXY Wonder F	ederal #1
3. ADDRESS AND TELEPHONE N	ю.		70070				9. AT WELL NO	3 C C
P.O. BOX 502		AND, TX	79710-0250	O	915-685-	5717	30-015-3	
4. LOCATION OF WELL At SULACE				any State requires	ments.*		Happy Valley	MONNOUT
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At proposed prod. z	one						AND SURVEY OR	AREA
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				OFFICE.			12. COUNTY OR PARIS	H 13. STATE
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PERMIT NO.								
Application approval does CONDITIONS OF APPROVA	not warrant or cert	tify that the appin	ant holds legal or equital	ble title to those rights	in the subject leas	e which wou	id entitle the applicant to co	induct operations there
				Assista	nt Field M	anage	۲,	
	ioleann;	J Single			and Miner			·
APPROVED B':	·		TILE				DATE	
				ons On Reverse				FOH LYEAR

ATTACHMENT 3160-3 OXY USA Inc. OXY Wonder Federal #1 SEC 21 T17S R28E Eddy County, NM

PROPOSED TD:

11800' TVD

BOP PROGRAM:

0' - 700' None

700' - 2800'

13-3/8" 5M blind and pipe rams with 5M annular

preventer.

2800' - 11800'

13-3/8" 5M blind pipe rams with 5M annular

preventer and rotating head below 8300'.

CASING:

Surface: 13-3/8" OD 48# H40 ST&C new casing set at 700'

Intermediate: 9-5/8" OD 36# K55 ST&C new casing from 0-2800'

Production:

5-1/2" OD 17# N80-S95 LT&C new casing from 0-11800'

8000'-N80 3800'-S95

CEMENT:

Surface - Circulate cement with 350sx 35:65 POZ/C with 6% Bentonite + 2% CaCl<sub>2</sub> + .25#/sx Cello-Seal followed by 200sx Cl C with 2% CaCl<sub>2</sub>.

Intermediate - Circulate cement with 795sx 35:65 POZ/C with 6% Bentonite + 2% CaCl<sub>2</sub> + .25#/sx Cello-Seal + 5#/sx Gilsonite followed by 200sx Cl C with 2% CaCl2.

Production - Cement with 860sx 15:61:11 POZ/C/CSE with .5% FL-52 + .5% FL-25 + 8#/sx Gilsonite followed by 75sx Cl C

with .7% FL-25.

Estimated top of cement is 8500'.

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

MUD:

0 - 700'

Fresh water/native mud. Lime for pH control

(9-10). Paper for seepage. Wt 8.7-9.2 ppg, Vis 32-34 sec

700' - 2800'

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 increase to 20000PPM.

2800' - 8300'

Fresh water. Lime for pH control(9-9.5).

Paper for seepage.

Wt 8.3-8.5 ppg, Vis 28-29 sec

3300′ - 10000'

Cut brine. Lime for pH control (10-10.5).

Wt 9.6-10.0 ppg, Vis 28-29sec

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

10000' - 11800'

DISTRICT I 1625 N. French Dr., Hobbs, KM 86240 DISTRICT II 811 South First, Artesia, NM 88210

## State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102 Revised March 17, 1999

Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

### DISTRICT III 1000 Rio Brazos Rd., Azteo, NM 57410

#### DISTRICT IV 2040 South Pachece, Santa Fe, NM 87505

## OIL CONSERVATION DIVISION

2040 South Pacheco Santa Fe, New Mexico 87504-2088

XX AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

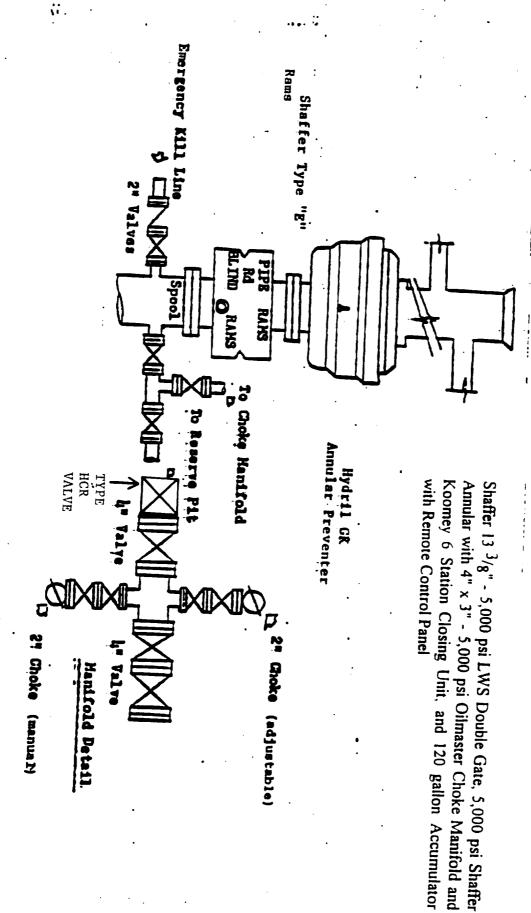
OGRID No.  Property Name  OXY WONDER FEDERAL	-015-	Happy Valley	Morrow
		Property Name	
	IRID No.	OXY WONDER FEDERAL	Well Numbe
10090	6696	Operator Name	1
OXY USA INC		OXY USA INC	Elevation 3341

UL or lot No.	Section	-			Surface Loca	ation			<del>-</del>
N	21	Township 22 S	Range 26 F	Lot Idn		North/South line	Feet from the	East/West line	County
				**	990	SOUTH	1650	WEST	EDDY
UL or lot No.	Section	Township	Range	Hole Loc	ation If Diffe	rent From Sur	face		2001

UL or lot No.	Section	Township	DOCUM	Hole To	cation If	Diffe	erent From Sur	face	<del></del>	
1 1		rownamp	Range	Lot Idn	Feet from	_	N . 13 . 6-	E-4.	Foot (Foot 1)	
Dedicated Acres	Joint o	Infil C							East/West line	County
320	) I	J	solidation Co	ode Or	der No.		*			
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HO ALLO	MABLE W	UL BE AS	SIGNED T	O THIS	COMPLETI	ON L	NTIL ALI, INTER	EGMC TALL		

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

	ONT 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 28 as  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 supervison and that the same is true and
LAT - N 32°22'24.6" LONG - W 104°18'04.0"	January 11, 2000  Date Superfect  Signature 20 to 10 t
3326.3' 3334.4'	Pryfessioned Surveyor  W.O. No. 0014
	Celufforto No. Gory to Sones 7977



Choke Hantfold

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

OXY USA Inc.
OXY Wonder Federal #1
Eddy County, New Mexico
Lease No. NM29632

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. Desert West 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 junction of USH 62/160 and Hidalgo road, go west approximately 3 miles to CR 429. Then go approximately 1 mile to a point which lies 1500 feet from the the proposed location.

#### 2. Planned Access Road

- A. A new access road will built. The access road will run approximately 711' northeast, then 886' southeast. Exhibit B.
- B. Surfacing material: Six inches of caliche and water, compacted and graded.
- C. Maximum Grade: Less than 3%
- D. Turnouts: None needed.
- E. Drainage Design: N/A.
- F. Culverts: None needed.
- G. Cuts and Fills: Leveling the location will require minimal cuts or fills.
- 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.

#### Multi-Point Surface Use and Operations Plan OXY Wonder Federal #1 Page 2

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 Wonder 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 Federal pit located in Section 12, T20S, R27E, Eddy County, New Mexico.

#### 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. Exhibit D.
- 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.

#### Multi-Point Surface Use and Operations Plan OXY Wonder Federal #1 Page 3

#### 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 privately owned surface. The surface is owned by: Mr. Jess Rayroux, P.O. Box 644, Carlsbad, NM 882221. 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 3341'.
- B. Soil: Sandy clay loams.
- C. Flora and Fauna: The vegetative cover is generally sparse consisting of mesquite, yucca, shinnery oak, sandsage and perennial native range grasses. Wildlife in the area is also sparse consisting of coyotes, rabbits, rodents, reptiles, dove and quail.
- D. Ponds and Streams: There are no rivers, streams, lakes or ponds in the area.
- E. Residences and Other Structures: There are no occupied dwellings within a  $\frac{1}{4}$  mile radius of the location.
- F. Archaeological, Historical and Cultural Sites: Cultural resources have been recorded in the area. Desert West 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.

#### Multi-Point Surface Use and Operations Plan OXY Wonder Federal #1 Page 4

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.

#### Operator's Representatives and Certification 13.

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

Joe Gibson, Production Coordinator P.O. Box 69

Hobbs, New Mexico 88240 Office Phone: 505-393-2174 Home Phone: 505-390-4988

Joe Fleming P.O. Box 50250

Midland, TX 79710-0250 Office Phone: 915-685-5858

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by OXY USA Inc. and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

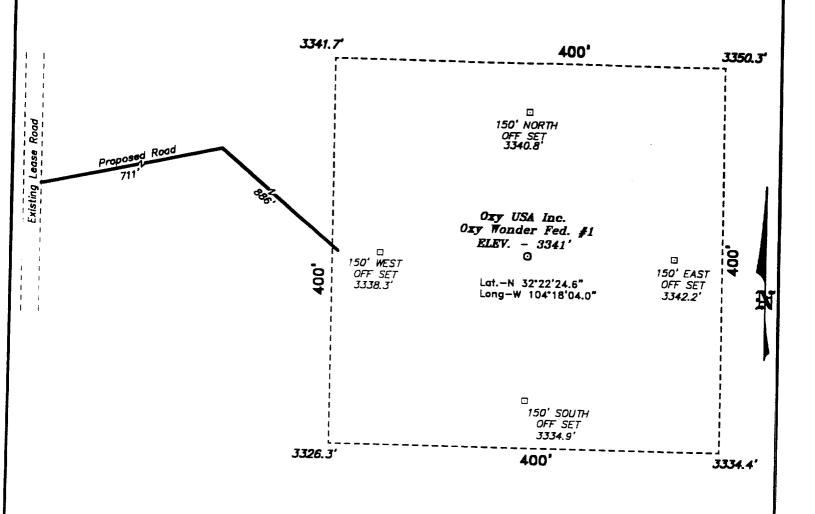
Operations Engineer

915-685-5772

Permian Asset Group

OXY USA Inc.

# SECTION 21, TOWNSHIP 22 SOUTH, RANGE 26 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.



Directions to Location:

FROM THE US HWY 62/180 AND HIDALGO ROAD JUNCTION, GO WEST ON HIDLAGO ROAD APPROX. 3 MILES; THENCE NORTHWEST ON CO. RD. 429 APPROX. 1 MILE TO A POINT WHICH LIES 1500 FEET FROM THE PROPOSED WELL LOCATION.

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

W.O. Number: 0014 Drawn By: K. GOAD
Oate: 01-25-2000 Disk: KJG #122 - 0014A.DWG

100 0 100 200 FEET

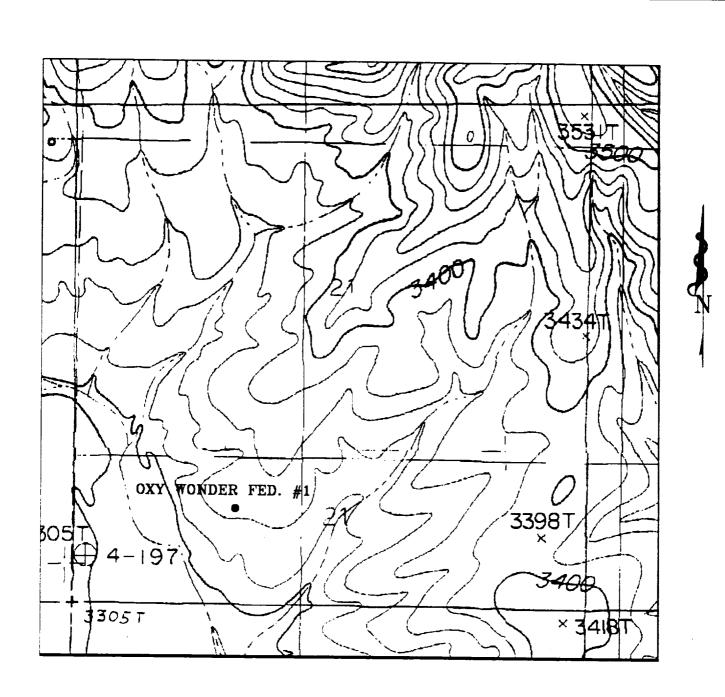
SCALE: 1" = 100'

## Oxy USA Inc.

REF: Oxy Wonder Fed. No. 1 / Well Pad Topo

THE OXY WONDER FED. No. 1 LOCATED 990' FROM THE SOUTH LINE AND 1650' FROM THE WEST LINE OF SECTION 21, TOWNSHIP 22 SOUTH, RANGE 26 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 01-21-2000 Sheet 1 of 1 Sheets



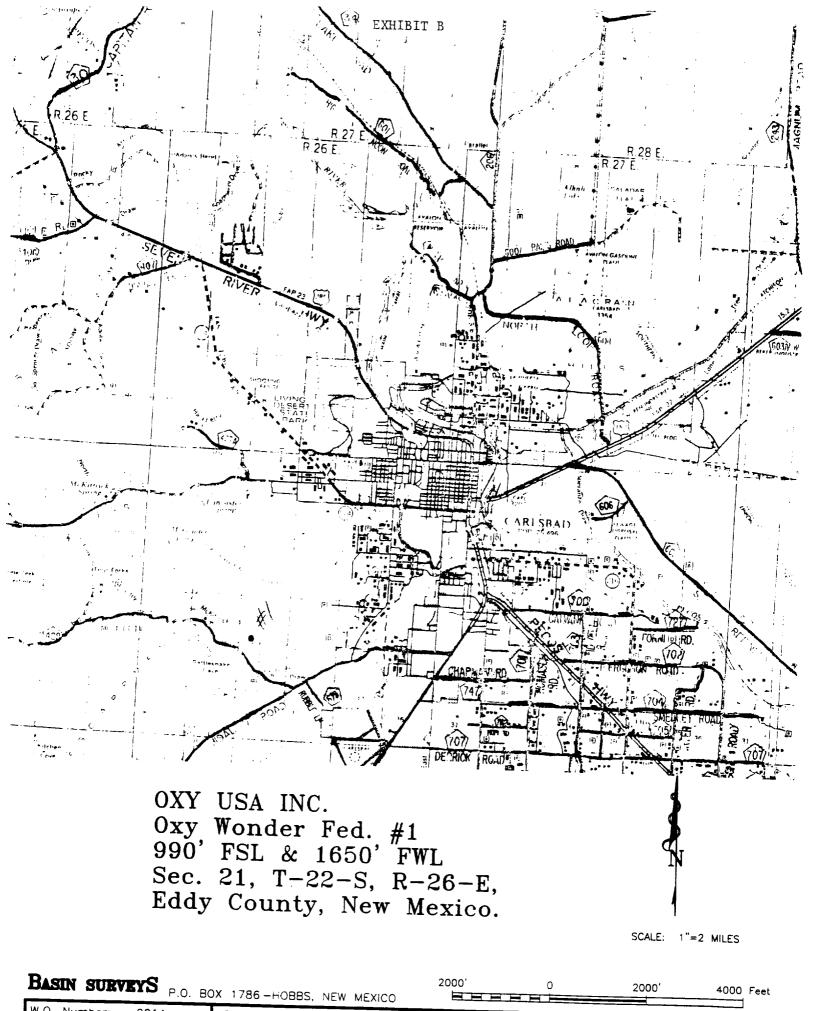
OXY WONDER FED. #1 Located at 990' FSL and 1650' FWL Section 21, Township 22 South, Range 26 East, N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (505) 393-7316 - Office (505) 392-3074 - Fax basinsurveys.com

	W.O. Number:	0014AA - KJG #122
١	Survey Date:	01-11-2000
•	Scale: 1" = 100	00,
	Date: 01-12-2	2000

OXY USA INC.



W.O. Number: 0014 Drawn By: K. GOAD Sheet Sheets

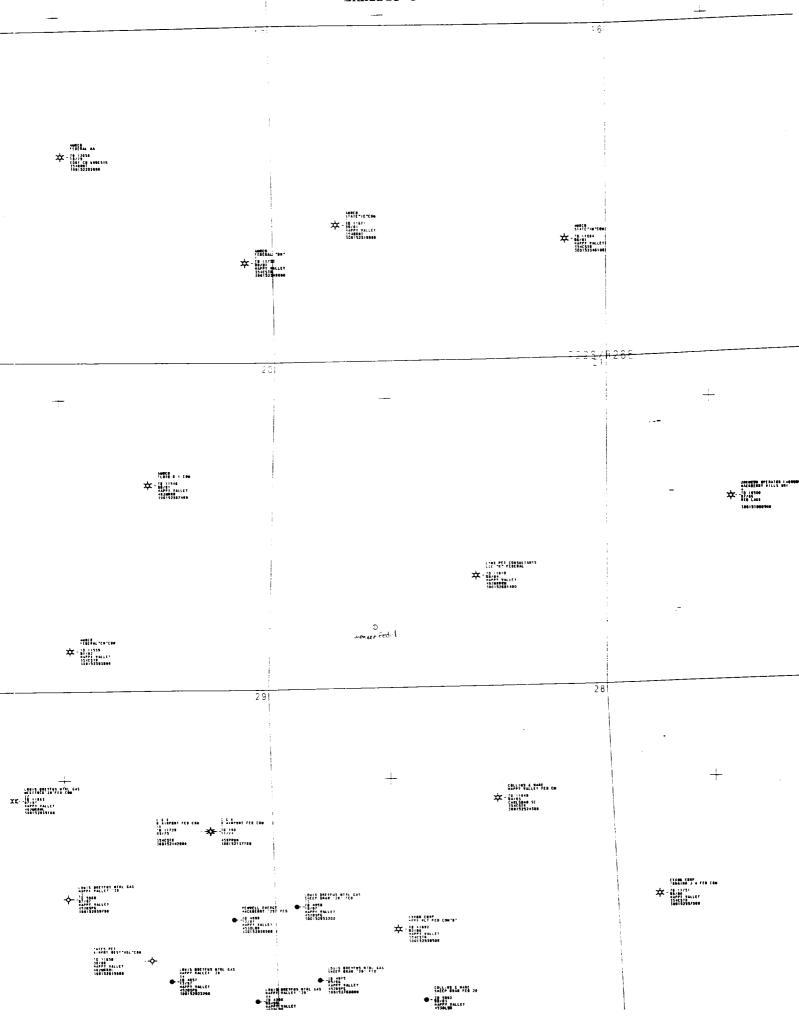
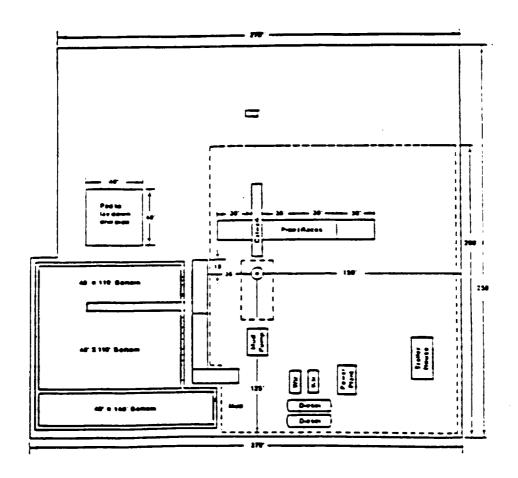


EXHIBIT D





P.O. Box 50250, Midland, TX 79710-0250

January 28, 2000

United States Department of the Interior Bureau of Land Management Roswell District Office 2909 West Second Street Roswell, New Mexico 88201

Attn: Linda Askwig

Re: Amended Application for Permit to Drill

OXY USA Inc.

OXY Wonder Federal #1 Eddy County, New Mexico

Lease No. NM29632

OXY USA Inc. respectfully requests that this amended application for permit to drill our OXY Wonder Federal #1 replace the previous application that was filed 1/3/00. The surface location was moved at the request of Barry Hunt with the BLM in Carlsbad. The proposed well is located 990 FSL and 1650 FWL of Section 21, T22S, R26E, Eddy County, New Mexico.

If additional information is needed, please call me at 915-685-5717. Thank you for your help in this manner.

Sincerely,

David Stewart Regulatory Analyst Permian Asset Group

OXY USA Inc.

DRS/drs

Attachments





P.O. Box 50250, Midland, TX 79710-0250

January 28, 2000

United States Department of the Interior Bureau of Land Management Roswell District Office 2909 West Second Street Roswell, New Mexico 88201

Amended Application for Permit to Drill

OXY USA Inc.

OXY Wonder Federal #1 Eddy County, New Mexico

Lease No. NM29632

#### Gentlemen:

OXY USA Inc. respectfully requests permission to drill our OXY Wonder Federal #1 located 990 FSL and 1650 FWL of Section 21, T22S, R26E, Eddy County, New Mexico, Federal Lease No. NM29632. The proposed well will be drilled to a TD of approximately 11800' (TVD). The location and work area has been staked. It is approximately 112 miles west of Carlsbad, 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:
  - Form 3160.3, Application for Permit to Drill.
  - Form C-102 Location and Acreage Dedication Plat certified by Gary L. Jones, Registered Land Surveyor No. 7977 in the State of New Mexico, dated January 11, 2000.
  - The elevation of the unprepared ground is 3341 feet above sea 3.
  - The geologic name of the surface formation is Permian Rustler. 4.
  - Rotary drilling equipment will be utilized to drill the well to TD 11800' (TVD), and run casing. This equipment will then be rigged down and the well will be completed with a pulling unit.
  - Proposed total depth is 11800' TVD. 6.
  - Estimated tops of important geologic markers. 7.

Wolfcamp	8600′	TVD
Strawn	10150′	TVD
Atoka	10400′	TVD
Morrow	10870′	TVD

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

Primary Objective:

Morrow

10870' TVD

Secondary Objective: Atoka

10400' TVD

## APD - OXY Wonder Federal #1 Page 2

9. The proposed casing program is as follows:

Surface: 13-3/8" 48# H40 ST&C new casing set at 700'

Intermediate: 9-5/8" 36# K55 ST&C new casing from 0-2800'

Production: 5-1/2" 17# N80-S95 LT&C new casing from 0-11800'

- 10. Casing setting depth and cementing program:
  - A. 13-3/8" surface casing set at 700' in 17-1/2" hole. Circulate cement with 350sx 35:65 POZ/C w/ 6% Bentonite + 2%  $CaCl_2$  + .25#/sx Cello-Seal followed by 200sx Class C w/ 2%  $CaCl_2$ .

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<sub>2</sub>.

B. 9-5/8" intermediate casing set at 2800' in 124" hole. Circulate cement with 795sx 35:65 POZ/C w/ 6% Bentonite + 2% CaCl<sub>2</sub> + .25#/sx Cello-Seal + 5#/sx Gilsonite followed by 200sx Class C w/ 2% CaCl<sub>2</sub>.

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<sub>2</sub>.

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

C. 5-1/2" production casing set at 11800'. Cement with 860sx 15:61:11 POZ/C/CSE w/ .5% FL-25 + .5% FL-52 + 8#/sx Gilsonite followed by 75sx Class C w/ .7% FL-25.

Estimated top of cement is 8500'.

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

11. Pressure Control Equipment

0' - 700' None

700' - 2800' 13-3/8" 5000# ram type preventers with one set blind rams and one set pipe rams and a 5000# annular preventer.

2800' - 11800' 13-3/8" 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 8300'. Exhibit A.

## APD - OXY Wonder Federal #1 Page 3

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 - 700' Fresh water/native mud. Lime for pH control (9-10). Paper for seepage. Wt.8.7-9.2 ppg, vis 32-34 sec.

700' - 2800' 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.

2800' - 8300' Fresh water. Lime for pH control (9-9.5). Paper for seepage.
Wt. 8.3-8.5 ppg, vis 28-29 sec.

8300' - 10000' Cut brine. Lime for pH control (10-10.5). Wt. 9.6-10.0 ppg, vis 28-29 sec.

10000' - 11800' 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:

- A recording pit level indicator.
- A pit volume totalizer.
- 3) A flowline sensor.

## APD - OXY Wonder Federal #1 Page 4

- 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. 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 February 21, 2000. It should take approximately 28 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 Regulatory Analyst Permian Asset Group OXY USA Inc.

DRS/drs

Attachments