N. M. SUBNIT IN

5. LEASE DESIGNATION AND SERIAL NO.

LC-048479-A

# UNITED STATES ARTENA (Other instructions on DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB NO. 1004-0136 Expires: February 28, 1995

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ATTACHMENT 3160-3 OXY USA Inc. OXY Grandslam Federal #1 SEC 20 T17S R28E Eddy County, NM

PROPOSED TD:

10200 TVD

BOP PROGRAM:

0' - 400'None

400' - 2100'

11" 5M blind and pipe rams with 5M annular

preventer.

2100' - 1.0200'

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'

Intermediate: 8-5/8" OD 24# K55 ST&C new casing from 0-2100'.

Production:

4-1/2" OD 11.6# N80 LT&C new casing from 0-10200'

CEMENT:

Surface - Circulate cement with 160sx 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 315sx 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% CaCl,.

Production - Cement with 750sx 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 tcp of cement is 6000'.

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' - 2100' \*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.

2100' - 6900' Fresh water. Lime for pH control(9-9.5).

Paper for seepage.

Wt 8.3-8.5 ppg, Vis 28-29 sec

6900' - 9300' Cut brine. Lime for pH control (10-10.5).

Wt 9.6-10.0 ppg, Vis 28-29sec

9300' - 10200' Mud up with an Duo Vis/Flo Trol mud system.

Wt 9.6-10.0ppg, Vis 32-36sec, WL<10cc

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

DISTRICT III

## State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994
Instruction on back
Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

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

1000 Rio Brazos Rd., Aztec, NM 87410

## OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

D AMENDED REPORT

## WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-30834	Pool Code 76440	Pool Name Empire Pe	
Property Code 25078	Property OXY GRANDSLA		Well Number
OGRID No. 16696	Operator OXY USA		Elevation 3629'

#### Surface Location

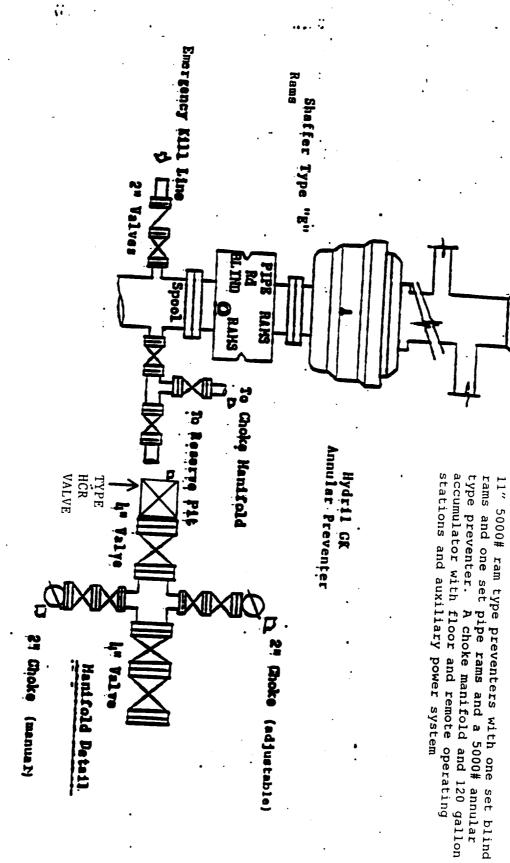
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County	ļ
В	20	17 S	28 E		660	NORTH	1650	EAST	EDDY	i

## 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 o	r Infill Co	nsolidation	Code Or	der No.	<u> </u>		1	

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

	3625.3' \$\tilde{\pi}\$ 3626.2'	OPERATOR CERTIFICATION  I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.
	3628.3 3624.1 Kersey CoRLPSUTr2-2-P&A	Signature  David Stewart
	LAT - N 32*49'30"   LONG - W 104*11'41"   NMSPCE - N 663936.17   E 583955.22	Regulatory Analyst Title  t ((())
		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
 		Date Supplied Seal of Professional Surveyor
		W.O. No. 9182A
		Certificate No. Cery La James 7977  BASIN SURVEYS



Choks Hantfold

## MULTI-POINT SURFACE USE AND OPERATIONS PLAN

OXY USA Inc.

OXY Grandslam Federal #1

Eddy County, New Mexico
Lease No. LC-0484879A

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 had done an archaeological reconnaissance of the work area, when the well was originally permitted. Their findings concerning cultural resources was 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 Artesia, NM on Hwy 82 go east approximately 13 miles to caliche road. Turn north and go approximately 2 miles to proposed lease road.

## 2. Planned Access Road

- A. A new access road will built. The access road will run approximately 310' west from an existing lease road to the location. 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.

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

## 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 Grandslam 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.

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

#### 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.

## 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: Boegle Farms, P.O. Box 460, Dexter, NM 88230-0460. 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 3629'.
- 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.

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

- 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 ½ 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.
- 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 69
Hobbs, New Mexico 88240
Office Phone: 505-393-2174
Cellular: 505-390-6426

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

DATE DATE

Gary L. Womack

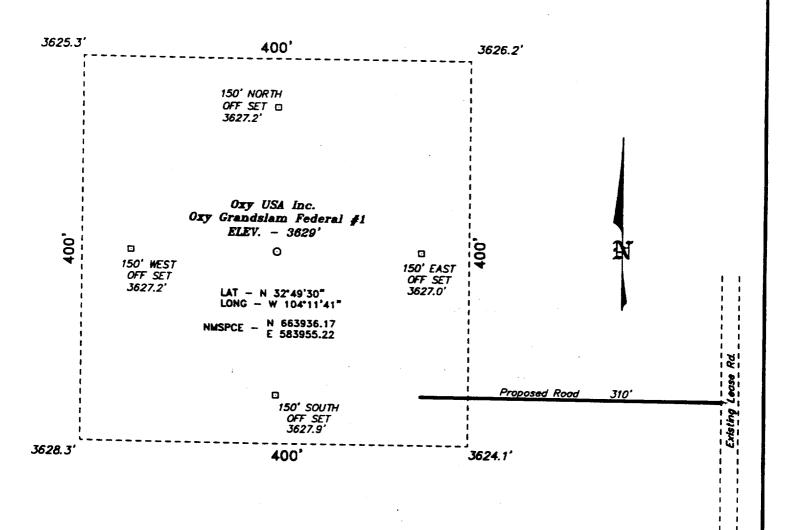
Operations Engineer

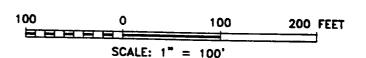
915-685-5772

Frontier Asset Team

OXY USA Inc.

SECTION 20, TOWNSHIP 17 SOUTH, RANGE 28 EAST, N.M.P.M., EDDY COUNTY. NEW MEXICO.





## OXY USA

Oxy Grandslam Federal No. 1 / Well Pad Topo

THE OXY GRANDSLAM FED. No. 1 LOCATED 660' FROM THE NORTH LINE AND 1650' FROM THE EAST LINE OF SECTION 20, TOWNSHIP 17 SOUTH, RANGE 28 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

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

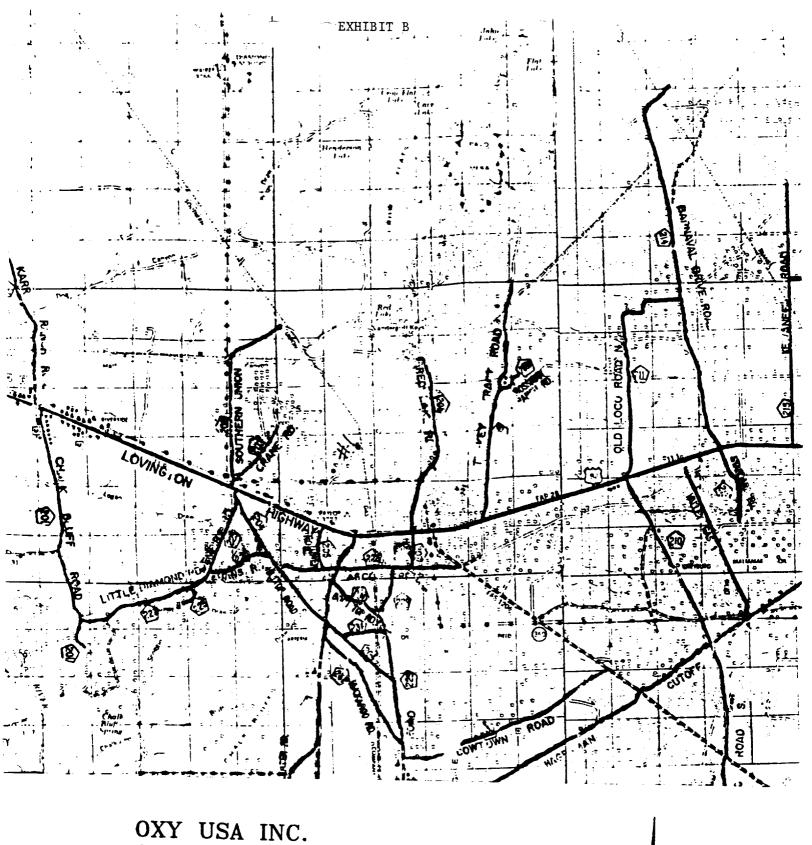
V.O. Number: 9182 Drawn By: K. GOAD #120

ate: 05-20-99 Diet. KIC



OXY USA INC. OXY GRANDSLAM FEDERAL #1 660' FNL & 1650' FEL Sec. 20, T-17-S, R-28-E, Eddy County, New Mexico.





OXY USA INC.
OXY GRANDSLAM FEDERAL #1
660' FNL & 1650' FEL
Sec. 20, T-17-S, R-28-E,
Eddy County, New Mexico.

SCALE: 1"=2 MILES

BASIN SURVEYS

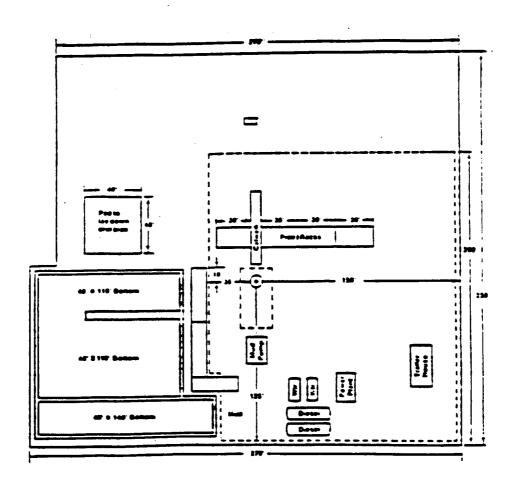
P.O. BOX 1786-HOBBS, NEW MEXICO

2 MILES

2 MILES

4 MILES

EXHIBIT D



United States Department of the Interior Bureau of Land Management Roswell District 2909 W. Second Street Roswell, New Mexico 88202

Attention:

Armando A. Lopez

RE:

OXY Grandslam Federal No. 1 Well

660' FNL, 1650' FEL, Section 20, T17S-R28E

**Eddy County, New Mexico** 

## STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

**OPERATOR NAME:** 

OXY USA Inc.

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 - 048479-A

LEGAL DESCRIPTION:

N/2 Section 20, T17S-R28E

Eddy County, New Mexico

**FORMATIONS:** 

From 3500' below the surface

**BOND COVERAGE:** 

Nationwide

**BLM BOND FILE NO.:** 

ES 0136

**OXY USA Inc.** 

AUTHORIZED SIGNATURE:

The state of the s

TITLE:

Landman Advisor

DATE"

June 24, 1999



## ARCHAEOLOGICAL SERVICES

August 30, 1999

Mr. Gary Womack OXY USA, INC. P.O. Box 50200 Midland, TX 79710

Dear Mr. Womack:

Enclosed please find your copy of Desert West Archaeological Services (DWAS) Clearance Report for OXY USA, INC.'s proposed Oxy Grandslam Federal Well No. 1 (660' FNL; 1650' FEL) and associated access road in Section 20, T17S, R28E, NMPM, Eddy County, New Mexico. One isolated manifestation (IM) was encountered and recorded during this survey. Archaeological clearance is recommended for OXY USA, INC.'s proposed Oxy Grandslam Federal Well No. 1 (660' FNL; 1650' FEL) and associated access road as presently staked. No further archaeological work should be required.

If you have any questions, please call our office.

Sincerely,

Arita Slate

**Enclosure** 

Xc: Mr. Joe Gibson, OXY USA, INC., Hobbs, NM (1)

Mr. R.F. Fort, Landman, Midland, TX (1)

Bureau of Land Management, Carlsbad Field Office, Carlsbad, NM (2)

## TITLE PAGE/ABSTRACT/ NEGATIVE SITE REPORT CARLSBAD FIELD OFFICE

## BLM/RDO 1/95

1. BLM Report No.	2. (ACCEPTED)	(REJECTED)	3. NMCRIS No. 65646			
4. Title of Report (Project Title): Archaeological survey of Oxy U.S.A., Inc. No. 1 and associated access road in Sec NM.	andslam Federal Well	5. Project Date(s) 8-29-1999				
NM.		MAPM, Eddy County,	6. Report Date - 8-30-1999			
Address: P.O. Box 645, Carlsbad, NM 882	Direct Charge: David Wilcox Name: Desert West Archaeological Services					
Authors Name: David Wilcox Field personnel names – David Wilcox Phone (505) 887-7646		9. Consultant Report No. DWAS 99-31U				
10. Sponsor Name and Address: Indiv. Responsible: Mr. Gary Womack Name: Oxy U.S.A., Inc. Address: P.O. Box 50200, Midland, TX 797 Phone (915) 685-5600	11. For BLM Use only.  12 ACREAGE: Total No. of acres surveyed – 4.38 Per Surface -					
			Ownership: Federal			

- 13. Location & Area: (Maps Attached if negative survey)
  - a. State NM
  - b. County Eddy
  - c. BLM Field Office: Carlsbad
  - d. Nearest City or town: Riverside, NM
  - e. Location: Section 20, T17S, R28E

Well Pad footages: 660' FNL; 1650' FEL (nw/4, ne/4)

- f. 7.5 'Map Name(s) and Code Numbers(s): Red Lake, NM (1955 [32104-G2]).
- g. Area: Block: Impact: within the staked area

Surveyed: 400' x 400' Linear: Impact: 50' x 310' Surveyed: 310' x 100'

## 14. a. Records Search:

Location: BLM and ARMS

Date: 8-30-1999

Conducted by: David Wilcox

List by LA# All sites within .25 miles of the project:

(Those sites within  $500^\circ$  are to be shown on the project map)

According to these records, there is one previously recorded site (LA 127706) that lies within a ¼ mile radius of the

## b. Description of undertaking:

Class III pedestrian survey of Oxy U.S.A., Inc.'s proposed Oxy Grandslam Federal Well No. 1 and associated access road in Section 20, T17S, R28E, NMPM, Eddy County, NM. This proposed access road connects to an existing caliche capped lease road to the east.

c. Environmental Setting (NRCS soil designation; vegetative community; etc.)

Vegetation – Mesquite, creosote, sumac, littleleaf horsebrush and assorted grasses.

Topography – This project lies on a relatively flat loamy ridge. Gatuna gravels are most prominent on the eastern side of the staked well pad and entire access road areas.

Soils – Simona-Pajarito association: Sandy, deep soils and soils that are shallow to caliche; from windworked deposits.

## d. Field Methods:

Transect Intervals: straight and zigzag transects, spaced not greater than 15 meters apart

Time in Field: I hour total

Collections: no

Cultural Resource Findings: One isolated manifestation (I.M.) was encountered and recorded by this project. I.M. #1 (nw/4, se/4, nw/4, ne/4) Consists of a heavily deflated thermally altered caliche concentration of about 50 x50 cm in diameter, with approximately 25 cobbles/rocks, and no subsurface deposition. No surficial or subsurface staining was encountered. This manifestation yields no further information potential. This concentration is about 20' west of the proposed pad's center stake.

## 16. Management Summary (Recommendations):

Archaeological clearance for Oxy U.S.A., Inc.'s proposed Oxy Grandslam Federal Well No. 1 and associated access road in Section 20, T17S, R28E, NMPM, Eddy County, NM is recommended as staked.

I maintain that the information provided above is correct and accurate and meets all appreciable BLM standards.

Responsible Archaeologist		8-30-1999
	Signature	Date

Figure 1. Topographic map of USGS 7.5' Series Red Lake, NM (1955) showing the project area in Section 20, T17S, R28F.

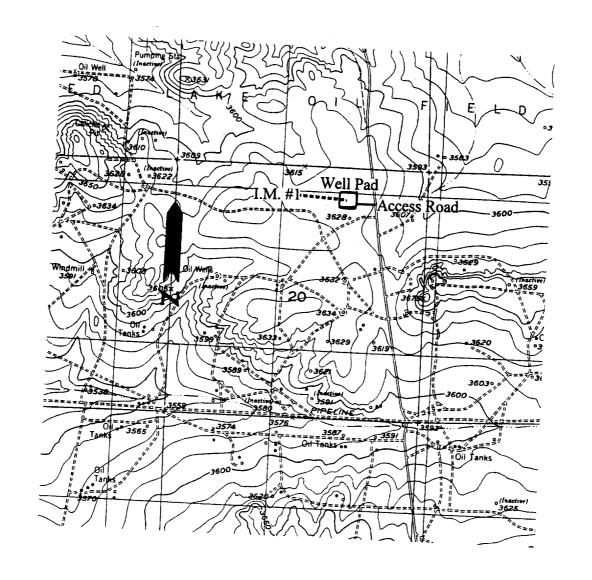


Figure 1. Showing OXY U.S.A., INC.'s proposed Oxy Grandslam Federal Well No. 1 (660' FNL; 1650' FEL) and access road in Section 20, T17S, R28E, NMPM, Eddy County, NM. Map Reference: USGS 7.5' series, Red Lake, NM (1955)

Form 3160-3 (July 1992)

T. ... 10 17 C C . . .

AMIESIA, ITIO OR INTERPLICATES
(Other Instructions on reverse side) FORM APPROVED OMB NO. 1004-0136 Expires: February 28, 1995 UNITED STATES DEPARTMENT OF THE INTERIOR

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- ADDRESS AND TELEPHONE NO.	OXY USA IT	ıc.			1669	34	OXY Grandsla	m Federal #
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P.O. BOX 50250		, TX	79710-02	50	915-685-	-5717	30-015- 50	<u> </u>
. LOCATION OF WELL (Re	port location ele	arly and in	accordance wit	b any	State requirements.	3/1/	10. FIELD AND FOOL Empire Penn	OE WILDCAT
660 F	NL 1650 FEI	NWNE	(B)	٠.				<u>+6741</u>
At proposed prod. some	•		ď				11. SEC., T., E., M., O AND SURVEY OR	AREA
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12 miles so	BED*	om Art	esia, NM	10			EDDY	NM
PROPRETT OR LEARS L	INR. PT.		660'	10. N	O. OF ACRES IN LEASE	17. NO. 0	OF ACRES ASSIGNED HIS WELL	
S. DISTANCE FROM PROPERTY.		<u>''</u>		36 =	320			320
TO NEAREST WELL. DE OR APPLIED POR, ON THE	ILLING. COMPLET	<b>E</b> D.	N/A	19 P	10200 t	20. ROTA	ST OR CABLE TOULS	
1. ELEVATIONS (Show who	ther DF. RT. GR.	eta.)			10200		R	
			362	291			22. APPROX. DATE 1 11/1/9	ORE WILL STARTS
3.			POPOSED CASE				11/1/9	<del></del>
SIES OF HOLE	OLAGE SERVICE				D CEMENTING PROGRAM	<b>4</b>	_	
17-1/2"	13-3/8"		WEIGHT PER PO	<b>207</b>	SETTING DEPTH		QUARTITY OF CEM	BHT
11"	8-5/8"	H40 K:55	<u>48#</u> 24#		400 1717	300s	c - Circulate	
7-7/8"	4-1/2"	N80	11.6#	<del></del>	2100' 10200'	_515s <sub>2</sub>	c - Circulate c - EST TOC 60	
		S	SEE OTHER	SIDE ,	10200  10	APP GEN SPE	TI - API ROVAL SUBJEC ERAL REQUIRE CIAL STIPULAT	EMENTS AND
BIGNED  (This space for Feder	Su		oposal is to despen, and measured and tr	D.	a on present productive zone and depths. Give blowout preventable STEWART EGULATORY ANALYS	nes brokusm	d new productive zone. If	Proposal is to drill o
PERMIT No	ICI Warrant or cemify	hat the armi-	Cant holds leave as		APPROVAL DATE			·
	ifany: IG. SGD.) ARMA			A	assistant Field Office ands and Minerals			0 1999

ATTACHMENT 3160-3 OXY USA Inc. OXY Grandslam Federal #1 SEC 20 T175 R28E Eddy County, NM

PROPOSED TD:

10200' TVD

BOP PROGRAM:

0' - 400'

None

400' - 2100'

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

preventer.

2100' - 10200' 13-3/8" 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'

Intermediate: 8-5/8" OD 24# K55 ST&C new casing from 0-2100'

Production:

4-1/2" OD 11.6# N80 LT&C new casing from 0-10200'

CEMENT:

Surface - Circulate cement with 160sx 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 315sx 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 750sx 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 6000'.

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' - 2100' 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

2100' - 6900' Fresh water. Lime for pH control(9-9.5).

Paper for seepage.

Wt 8.3-8.5 ppg, Vis 28-29 sec

6900' - 9300' Cut brine. Lime for pH control (10-10.5).

Wt 9.6-10.0 ppg, Vis 28-29sec

9300' - 10200' Mud up with an Duo Vis/Flo Trol mud system. Wt 9.6-10.0ppg, Vis 32-36sec, WL<10cc

## CONDITIONS OF APPROVAL - DRILLING

Oerator's Name: OXY USA INC.

Well No. 1 - Oky Grandslam Federal

Location: 660' FNL & 1650' FEL sec. 20, T. 17 S., R. 28 E.

Lease: <u>NMLC-043479-A</u>

## I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at (505) 887-6544 in sufficient time for a representative to witness:

A. Spudding

B. Cementing casing: <u>13-3/8</u> inch <u>8-5/8</u> inch <u>4-1/2</u> inch

C. BOP tests

- 2. 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.
- 3. Include the API No. assigned to well by NMOCD on the subsequent report of setting the first casing string.

## II. CASING:

- 1. 13-3/8 inch surface casing should be set at 400 feet, below usable water and circulate cement to the surface. If cement does not circulate to the surface this BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the tcp of the cement. Remedial cementing shall be completed prior to drilling out that string.
- 2. Minimum required fill of cement behind the 8-5/8 inch intermediate casing is circulate or tie back 50' into surface casing. Dy JL
- 3. Minimum required fill of cement behind the 4-1/2 inch production casing is cement shall extend upward a minimum of 500 feet above the uppermost perforation.

## III. PRESSURE CONTROL:

- 1. Before drilling below the 13-3/8 inch surface casing, the blowout preventer assembly shall consist of a minimum of One Annular Preventer or Two Ram-Type Preventers and a Kelly Cock/Stabbing Valve.
- 2. Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 5000 psi.
- 3. The BOPE shall be installed before drilling below the 8-5/8 inch intermediate casing and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.
- 4. The results of the test will be reported to the BLM Carlsbad Field Office at 620 E. Greene St., Carlsbad, New Mexico 88240, Phone 505-887-6544.

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## SPECIAL DRILLING STIPULATIONS

( ) Other

OPERATOR'S NAME OXY USA INC. WELL NO. & NAME #1 OXY GRANDSLAM FEDERAL LOCATION 660' F N L & 1650'F E L SEC. 20 , T. 175 ., R. 28E LEASE NO. LC-048479-A COUNTY EDDY STATE NEW MEXICO
The special stipulations check marked below are applicable to the above described well an approval of this application to drill is conditioned upon compliance with such stipulations in addition to the General Requirements. The permittee should be familiar with the General Requirements, a copy of which is available from a Bureau of Land Management office. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE STIPULATIONS PURSUANT TO TITLE 43 CFR 3165.3 and 3165.4.
This permit is valid for a period of one year from the date of approval or until lease expiration or termination whichever is shorter.
I. SPECIAL ENVIRONMENT REQUIREMENTS
( ) Lesser Prairie Chicken (Stips attached) ( ) Floodplain (Stips attached) ( ) Other
II. ON LEASE - SURFACE REQUIREMENTS PRIOR TO DRILLING
( The BLM will monitor construction of this drill site. Notify the ( Carlsbad Resource Area Office at (505) 887-6544 ( ) Hobbs Office at (505) 393-3612, at least 3 working days prior to commencing construction.
(N) Roads and the drill pad for this well must be surfaced with 6 inches of compacted caliche.
() All topsoil and vegetation encountered during the construction of the drill site area will be stockpiled and made available for resurfacing of the disturbed area after completion of the drilling operation. Topsoil on the subject location is approximately inches in depth. Approximately cubic yards of topsoil material will be stockpiled for reclamation.
( ) Other
III. WELL COMPLETION REQUIREMENTS
( ) A Communitization Agreement covering the acreage dedicated to the well must be filed for approval with the BLM. The effective date of the agreement must be prior to any sales.
Surface Restoration: If the well is a producer, the reserve pit(s) will be backfilled when dry, and cut-and-fill slopes will be reduced to a slope of 3:1 or less. All areas of the pad not necessary for production must be re-contoured to resemble the original contours of the surrounding terrain, and topsoil must be re-distributed and reseeded with a drill equipped with a depth indicator (set at a depth of 1/2 inch) with the following seed mixture, in pounds of Pure Live Side (PLS), per acre.
() B. Seed Mixture 2 (Sandy Sites)  Side Oats Grass (Bouteloua curtipendula) 5.0 Sand Dropseed (Sporobolus cryptendrus) 1.0  Sand Dropseed (Sporobolus cryptendrus) 1.0  Sand Dropseed (Sporobolus cryptendrus) 2.0
C. Seed Mixture 3 (Shallow Sites)  Sideoats Grama (Boute curtipendula) 1.0  Alkali Sacaton (Sporobolus airoides) 1.0  Four-Wing Saltbush (Atriplex canescens) 5.0
Seeding should be done either late in the fall (September 15 - November 15, before freeze up) or early as possible the following spring to take advantage of available ground moisture.

## RESERVE PIT CONSTRUCTION STANDARDS

The reserve pit shall be constructed entirely in cut material and lined with 6 mil plastic.

Mineral material extracted during construction of the reserve pit may be used for development of the pad and access road as needed. Removal of any additional material on location must be purchased from BLM.

Reclamation: Reclamation of this type of deep pit will consist of pushing the pit walls into the pit when sufficiently dry to support track equipment. The pit liner is NOT TO BE RUPTURED to facilitate drying; a ten month period after completion of the well is allowed for drying of the pit contents.

The pit area must be contoured to the natural terrain with all contaminated drilling mud buried with at least 3 feet of clean soil. The reclaimed area will then be seeded as specified in this permit.

## OPTIONAL PIT CONSTRUCTION STANDARDS

The reserve pit may be constructed in predominantly fill material if:

- 1) Lined as specified above and,
- 2) A borrow/caliche/gravel pit can be constructed immediately adjacent to the reserve pit and is capable of containing all reserve pit contents. The mineral material removed in the process can be used for pad and access road construction. However, a material sales contract must be purchased from BLM prior to removal of the material.

Reclamation of the reserve pit consists of bulldozing all reserve pit contents and contaminants into the borrow pit and covering with a minimum of 3 feet of clean soil material. The entire area must be recontoured, all trash removed, and reseeded as specified in this permit.

#### CULTURAL

Whether or not an archaeological survey has been completed and notwithstanding that operations are being conducted as approved, the lessee/operator/grantee shall notify the BLM immediately if previously unidentified cultural resources are observed during surface disturbing operations. From the time of the observation, the lessee/operator/grantee shall avoid operations that will result in disturbance to these cultural resources until directed to proceed by BLM.

#### TRASH PIT STIPS

All trash, junk and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

#### EXHIBIT A

BLM Serial Number: LC-048479-A

Company Reference: #1

#1 OXY GRANDSLAM FEDERAL

## STANDARD STIPULATIONS FOR PERMANENT RESOURCE ROADS

MIC CULLUL " LIFES

The holder/grantee/permittee shall hereafter be identified as the holder in these stipulations. The Authorized Officer is the person who approves the Application for Permit to Drill (APD) and/or Right-of-Way (ROW).

#### GENERAL REQUIREMENTS

The holder shall minimize disturbance to existing fences and other improvements on public domain surface. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will make a documented good-faith effort to contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence.

Holder agrees to comply with the following stipulations:

## 1. ROAD WIDTH AND GRADE

The road will have a driving surface of 14 feet (all roads shall have a minimum driving surface of 12 feet, unless local conditions dictate a different width). The maximum grade is 10 percent unless the box below is checked. Maximum width of surface disturbance from construction will be 30 feet.

/\_/ Those segments of road where grade is in excess of 10% for more than 300 feet shall be designed by a professional engineer.

## 2. CROWNING AND DITCHING

Crowning with materials on site and ditching on one side of the road on the uphill side will be required. The road cross-section will conform to the cross section diagrams in Figure 1. If conditions dictate, ditching may be required for both sides of the road; if local conditions permit, a flat-bladed road may be considered (if these conditions exist, check the appropriate box below). The crown shall have a grade of approximately 2% (i.e., 1" crown on a 12' wide road).

Ditching will be required on both sides of the roadway as shown on the attached map or as staked in the field.

/\_/ Flat-blading is authorized on segment(s) delineated on the attached map.

#### DRAINAGE

Drainage control shall be ensured over the entire road through the use of borrow ditches, outsloping, insloping, natural rolling topography, lead-off (turnout) ditches, culverts, and/or drainage dips.

A. All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval for lead-off ditches shall be determined according to the following table, but may be amended depending upon existing soil types and centerline road slope (in %):

SPACING INTERVAL	FOR	TURNOUT	DITCHES
Percent slope			interval
0% - 4%			- 150'
4% - 6%		250'	- 125'
6 <b>% - 8</b> %		200'	- 100'
8% - 10%		150'	- 75'

A typical lead-off ditch has a minimum depth of 1 foot below and a berm 6 inches above natural ground level. The berm will be on the down-slope side of the lead-off ditch. The ditch end will tie into vegetation whenever possible.

For this road the spacing interval for lead-off ditches shall be at

- /\_/ 400 foot intervals.

  /\_/ 200 foot intervals.

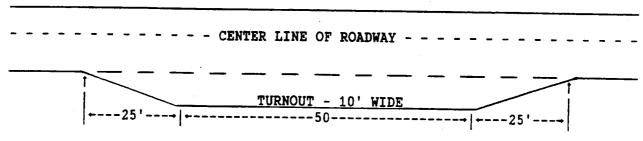
  /\_/ locations staked in the field as per spacing intervals above.

  /\_/ locations delineated on the attached map.
- B. Culvert pipes shall be used for cross drains where drainage dips or low water crossings are not feasible. The minimum culvert diameter must be 18 inches. Any culvert pipe installed shall be of sufficient diameter to pass the anticipated flow of water. Culvert location and required diameter are shown on the attached map (Further details can be obtained from the Roswell District Office or the appropriate Resource Area Office).
- C. On road slopes exceeding 2%, drainage dips shall drain water into an adjacent lead-off ditch. Drainage dip location and spacing shall be determined by the formula:

Example: 4% slope: spacing interval = 400 + 100 = 200 feet

#### 4. TURNOUTS

Unless otherwise approved by the Authorized Officer, vehicle turnouts will be required. Turnouts will be located at 2000-foot intervals, or the turnouts will be intervisible, whichever is less. Turnouts will conform to the following diagram:



STANDARD TURNOUT - PLAN VIEW

## 5. SURFACING

Surfacing of the road or those portions identified on the attached map may, at the direction of the Authorized Officer, be required, if necessary, to maintain traffic within the right-of-way with caliche, gravel, or other surfacing material which shall be approved by the Authorized Officer. When surfacing is required, surfacing materials will be compacted to a minimum thickness of six inches with caliche material. The width of surfacing shall be no less than the driving surface. Prior to using any mineral materials from an existing or proposed Federal source, authorization must be obtained from the Authorized Officer.

#### 6. CATTLEGUARDS

Where used, all cattleguard grids and foundation designs and construction shall meet the American Association of State Highway and Transportation Officials (AASHTO) Load Rating H-20, although AASHTO U-80 rated grids shall be required where heavy loads (exceeding H-20 loading), are anticipated (See BLM standard drawings for cattleguards). Cattleguard grid length shall not be less than 8 feet and width of not less than 14 feet. A wire gate (16-foot minimum width) will be provided on one side of the cattleguard unless requested otherwise by the surface user.

#### 7. MAINTENANCE

The holder shall maintain the road in a safe, usable condition. A maintenance program shall include, but not be limited to blading, ditching, culvert installation, culvert cleaning, drainage installation, cattleguard maintenance, and surfacing.

## 8. PUBLIC ACCESS

Public access along this road will not be restricted by the holder without specific written approval being granted by the Authorized Officer. Gates or cattleguards on public lands will not be locked or closed to public use unless closure is specifically determined to be necessary and is authorized in writing by the Authorized Officer.

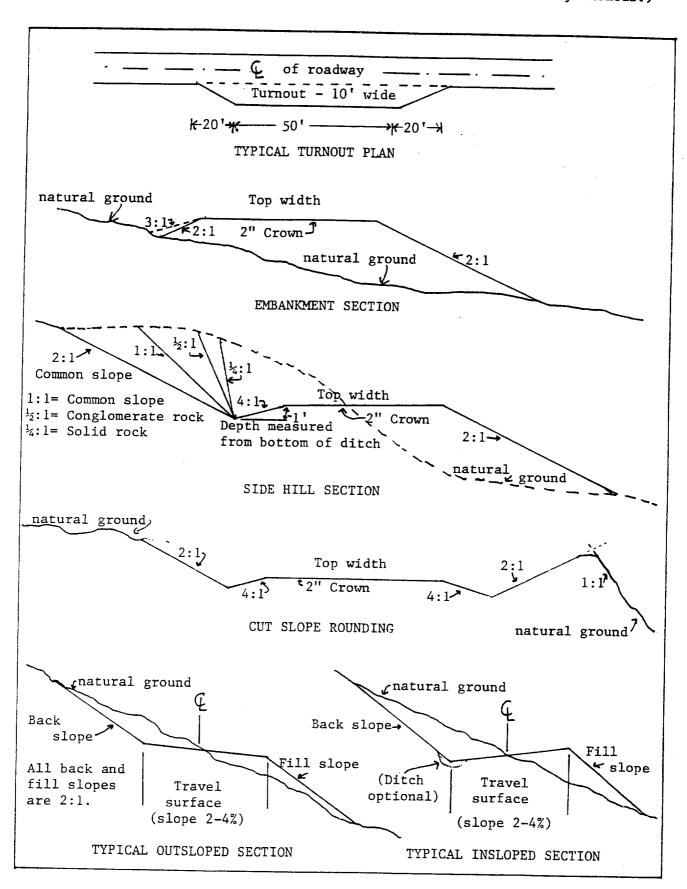
## 9. CULTURAL RESOURCES

Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the authorized officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the authorized officer after consulting with the holder.

10. SPECIAL STIPULATIONS: No re.

# FIGURE 1: CRO! SEC' NS AND PLANS FOR TYPICAL AD C. STRUCTION REPRESENTATIVE OF BLM RESOURCE, AND HIGHER CLASS, ROADS.

(Travel way, top width, driving surface, and travel surface are synonomous.)





January 11, 2001

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

Re: Application for Permit to Drill
OXY USA Inc.
OXY Grandslam Federal #1
Eddy County, New Mexico
Lease No. LC-048479A

#### Gentlemen:

OXY USA Inc. respectfully requests permission to drill our OXY Grandslam Federal #1 located 660 FNL and 1650 FEL of Section 20, T17S, R28E, Eddy County, New Mexico, Federal Lease No. LC-048479A. This well was originally permitted 9/21/99 and approved 11/10/99. The proposed well will be drilled to a TD of approximately 10200' (TVD). The location and work area has been staked. It is approximately 12 miles southeast of Artesia, 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 May 19, 1999.
- The elevation of the unprepared ground is 3629 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 10200' (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 10200' TVD.
- 7. Estimated tops of important geologic markers.

Wolfcamp	6900′	TVD
Strawn	9300′	TVD
Atoka	9600′	TVD
Morrow	9900′	TVD

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## APD - OXY Grandslam Federal #1 Page 2

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

Primary Objective: Morrow 9900' TVD

Secondary Objective: Atoka 9600' TVD

9. The proposed casing program is as follows:

Surface: 13-3/8" 48# H40 ST&C new casing set at 400"

Intermediate: 8-5/8" 24# K55 ST&C new casing from 0-2100'

Production: 4-1/2" 11.6# N80 LT&C new casing from 0-10200'

10. Casing setting depth and cementing program:

A. 13-3/8" surface casing set at 400' in 17-1/2" hole. Circulate cement with 160sx 35:65 POZ/C w/ 6% Bentonite + 2% CaCl<sub>2</sub> + .25#/sx Cello-Seal followed by 200sx Class C w/ 2% CaCl<sub>2</sub>.

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%  $CaCl_2$ .

B. 8-5/8" intermediate casing set at 2100' in 11" hole. Circulate cement with 315sx 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>.

C. 4-1/2" production casing set at 10200'. Cement with 750sx 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 6000'.

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

## APD - OXY Grandslam Federal #1 Page 3

#### 11. Pressure Control Equipment

0' - 400' None

400' - 2100' 11" 5000# ram type preventers with one set blind rams and one set pipe rams and a 5000# annular preventer.

2100' - 10200' 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.

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 8-5/8" 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 - 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' - 2100' 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.

2100' - 6900' Fresh water. Lime for pH control (9-9.5). Paper for seepage.

Wt. 8.3-8.5 ppg, vis 28-29 sec.