

RECEIVED: 9/25/18	REVIEWER: LRL	TYPE: NSL	APP NO: PLEL1826837779
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ABOVE THIS TABLE FOR OCD DIVISION USE ONLY

NEW MEXICO OIL CONSERVATION DIVISION
 - Geological & Engineering Bureau -
 1220 South St. Francis Drive, Santa Fe, NM 87505



ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND
 REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

Applicant: OXY USA INC. **OGRID Number:** 16696
Well Name: WHOMPING WILLOW CC 15-16 STATE COM 44H **API:** 30-015-45218
Pool: PURPLE SAGE WOLFCAMP **Pool Code:** 98220

**SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION
 INDICATED BELOW**

- 1) **TYPE OF APPLICATION:** Check those which apply for [A]
 A. Location – Spacing Unit – Simultaneous Dedication
☒ NSL ☐ NSP (PROJECT AREA) ☐ NSP (PRORATION UNIT) ☐ SD
- B. Check one only for [I] or [II]
 [I] Commingling – Storage – Measurement
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM
 [II] Injection – Disposal – Pressure Increase – Enhanced Oil Recovery
☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR

2) **NOTIFICATION REQUIRED TO:** Check those which apply.

- A. ☒ Offset operators or lease holders
 B. ☐ Royalty, overriding royalty owners, revenue owners
 C. ☐ Application requires published notice
 D. ☒ Notification and/or concurrent approval by SLO
 E. ☐ Notification and/or concurrent approval by BLM
 F. ☐ Surface owner
 G. ☐ For all of the above, proof of notification or publication is attached, and/or,
 H. ☐ No notice required

FOR OCD ONLY

- ☐ Notice Complete
☐ Application
 Content
 Complete

- 3) **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

SARAH CHAPMAN

Print or Type Name

Sarah Chapman
 Signature

08/21/2018

Date

713-350-4997

Phone Number

SARAH_CHAPMAN@OXY.COM

e-mail Address



OXY USA Inc

5 Greenway Plaza, Suite 110
Houston, TX 77046-0521

September 21, 2018

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

Attention: Leonard Lowe

Re: *Application for Administrative Approval of Non-Standard Location
Whomping Willow CC 15-16 State Com 44H – Purple Sage Wolfcamp
Surface – 1365 FSL 420 FEL Unit I Sec 15 T24S R29E
First Take Point – 940 FSL 100 FEL Unit I Sec 15 T24S R29E
Last Take Point – 940 FSL 100 FWL Unit M Sec 16 T24S R29E
Bottom Hole – 940 FSL 20 FWL Unit M Sec 16 T25S R29E
Eddy County, New Mexico*

Dear Mr. Lowe:

OXY USA Inc. respectfully requests administrative approval of a non-standard location on the Whomping Willow CC 15-16 State Com #44H well, API Number-30-015-45218, Property Code 322294. The #44H well is proposed to be completed in the Purple Sage Wolfcamp pool, Pool Code 98220 which has special pool rules specifying the completed interval must be located 330 feet from the exterior boundary of the applicable spacing unit. The proposed completed interval is projected to be as follows:

Surface – 1365 FSL 420 FEL Unit I Sec 15 T24S R29E
First Take Point – 940 FSL 100 FEL Unit I Sec 15 T24S R29E
Last Take Point – 940 FSL 100 FWL Unit M Sec 16 T24S R29E
Bottom Hole – 940 FSL 20 FWL Unit M Sec 16 T25S R29E

The adjoining units towards which the unorthodox location encroaches are located in T24S R29E, Section 14 – Unit M and T24S-R30E Section 17 – Unit P.

Approval of the unorthodox completed interval will allow for efficient spacing of horizontal wells and thereby prevent waste.

To support this request, the following information has been submitted for your review:

1. Application for Permit to Drill.
2. C-102 Plat for the proposed well and additional plats with offsetting well and affected spacing units.
3. List of affected offset parties in each adjoining spacing unit in the same pool or formation located closer to the unorthodox well location than the minimum distance prescribed by applicable rule or order, copies of the signed certified return receipts will be furnished upon request.
4. Proposed Directional Survey
5. Statement from Oxy Production Engineer

If you need any additional information, please call me at 713-350-4997.

Sincerely,

Sarah Chapman
Regulatory Specialist

Attachments

CC: NMOCD-Artesia, SLO-Santa Fe, Service List



OXY USA Inc

5 Greenway Plaza, Suite 110
Houston, TX 77046-0521

September 21, 2018

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Re: *Application for Administrative Approval of Non-Standard Location
Whomping Willow CC 15-16 State Com 44H – Purple Sage Wolfcamp
Surface – 1365 FSL 420 FEL Unit I Sec 15 T24S R29E
First Take Point – 940 FSL 100 FEL Unit I Sec 15 T24S R29E
Last Take Point – 940 FSL 100 FWL Unit M Sec 16 T24S R29E
Bottom Hole – 940 FSL 20 FWL Unit M Sec 16 T25S R29E
Eddy County, New Mexico*

Ladies and Gentlemen:

Enclosed is a copy of an application, filed with the New Mexico Oil Conservation Division by OXY USA Inc., requesting administrative approval for a non-standard location. As an affected party, notice is being provided to you pursuant to Rule 19.15.4.12 (A)(2)(a), 19.15.15.9 (A) and 19.15.16.15 (B). The well is located as follows:

Surface – 1365 FSL 420 FEL Unit I Sec 15 T24S R29E
First Take Point – 940 FSL 100 FEL Unit I Sec 15 T24S R29E
Last Take Point – 940 FSL 100 FWL Unit M Sec 16 T24S R29E
Bottom Hole – 940 FSL 20 FWL Unit M Sec 16 T25S R29E

If you object to the well's location, you must notify the Division in writing no later than 20 days from the date the application is received by the NMOCD (1220 South St. Francis Drive, Santa Fe, NM 87505; Attention: Leonard Lowe).

If you need any additional information, you can contact Jeremy Murphrey at 713-350-4816 or myself at 713-350-4997.

Sincerely,

A handwritten signature in black ink that reads "Sarah Chapman".

Sarah Chapman
Regulatory Specialist
OXY USA Inc.

Attachments

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II

811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form C-101
August 1, 2011

Permit 255684

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

1. Operator Name and Address OXY USA INC P.O. Box 4294 Houston, TX 77210-4294		2. OGRID Number 16696
4. Property Code 322294		3. API Number 30-015-45218
5. Property Name WHOMPING WILLOW CC 15 16 STATE COM		6. Well No. 044H

7. Surface Location

UL - Lot I	Section 15	Township 24S	Range 29E	Lot Idn I	Feet From 1365	N/S Line S	Feet From 420	E/W Line E	County Eddy
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8. Proposed Bottom Hole Location

UL - Lot M	Section 16	Township 24S	Range 29E	Lot Idn M	Feet From 940	N/S Line S	Feet From 20	E/W Line W	County Eddy
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9. Pool Information

PURPLE SAGE;WOLFCAMP (GAS)	98220
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Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 2943
16. Multiple N	17. Proposed Depth 21302	18. Formation Wolfcamp	19. Contractor	20. Spud Date 10/24/2018
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

☒ We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	14.75	10.75	40.5	400	326	0
Int1	9.875	7.625	26.4	10360	2118	0
Prod	6.75	5.5	20	21302	839	9860

Casing/Cement Program: Additional Comments

Proposed Casing/Cementing Program: Intermediate 1 – Contingency DVT/ECP @ +/- 2987'. If cement circulates to surface during primary cementing operation, DVT cancellation cone will be run and 2nd stage cancelled. Proposed Mud Program: 0-400' Water-Based Mud - 400-10360' Saturated Brine-Based or Oil-Based Mud - 10360'-TD Water-Based or Oil-Based Mud. BOP Program: 13-5/8" 5M three ram stack w/ 5M annular preventer, 5M choke manifold. Additional information will be sent along with the H2S and Gas Capture Plan.

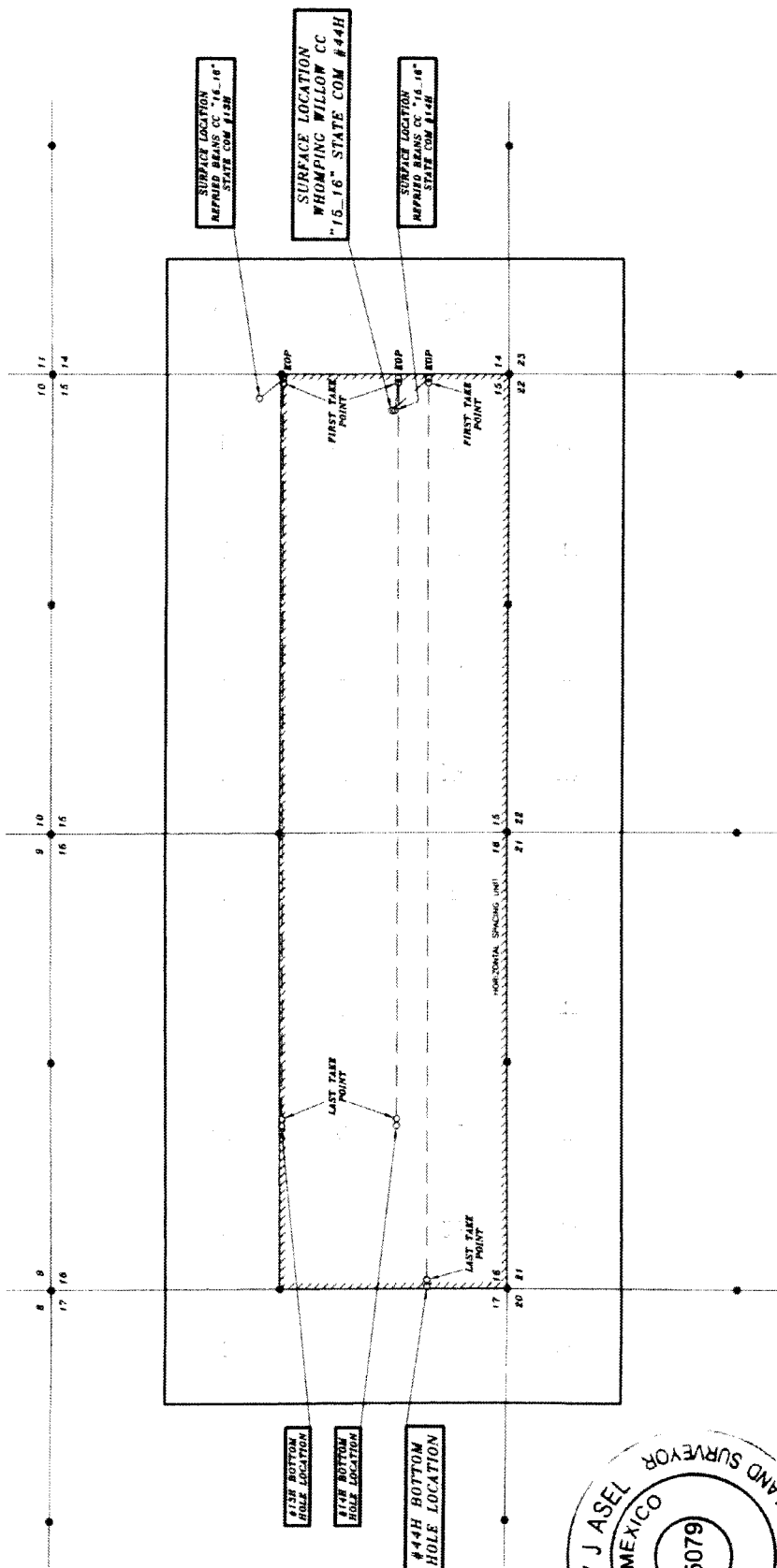
22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Annular	5000	5000	
Double Ram	5000	5000	

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify I have complied with 19.15.14.9 (A) NMAC <input checked="" type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input checked="" type="checkbox"/> , if applicable. Signature:	OIL CONSERVATION DIVISION
Printed Name: Electronically filed by KELLEY MONTGOMERY	Approved By: Raymond Podany
Title: Manager Regulatory	Title: Geologist
Email Address: kelley_montgomery@oxy.com	Approved Date: 8/28/2018 Expiration Date: 8/28/2020
Date: 8/24/2018 Phone: 713-366-5716	Conditions of Approval Attached

OXY USA INC.

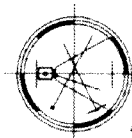
WHOMPING WILLOW CC "15_16" STATE COM #44H
SECTIONS 14, 15, 16, 17, 20, 21, 22 & 23, T24S, R29E,
N.M.P.M., EDDY COUNTY, NEW MEXICO



SURVEYORS CERTIFICATE

I, TERRY J. ASE, NEW MEXICO PROFESSIONAL SURVEYOR NO. 15079, DO HEREBY CERTIFY THAT I CONDUCTED AND AM RESPONSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND MEETS THE "MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO" AS ADOPTED BY THE NEW MEXICO STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND SURVEYORS.

Terry J. Ase 9/19/2018
Terry J. Ase, P.M., R.P.L.S. No. 15079



Asel Surveying

P.O. BOX 393 - 310 W. TAYLOR
HOBBS, NEW MEXICO - 575-393-9146



District I
1423 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-4141 Fax: (575) 393-4726
District II
411 S. First St., Artesia, NM 88210
Phone: (575) 768-1283 Fax: (575) 768-4726
District III
1600 San Ramon Road, Arma, NM 87410
Phone: (505) 534-6176 Fax: (505) 534-6176
District IV
1220 E. N. Pecos Dr., Santa Fe, NM 87505
Phone: (505) 476-3448 Fax: (505) 476-3442

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-	Pool Code 98220	Pool Name Purple Sage Wolfcamp
Property Code	Property Name WHOMPING WILLOW CC "15_16" STATE COM	Well Number 44H
OGRID No. 16696	Operator Name OXY USA INC.	Elevation 2942.8'

Surface Location

UL or lot no.	Section	Township	Range	Lot No.	Feet from the	North-South line	Feet from the	East-West line	County
I	15	24 SOUTH	29 EAST, N.M.P.M.		1365'	SOUTH	420'	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot No.	Feet from the	North-South line	Feet from the	East-West line	County
M	16	24 SOUTH	29 EAST, N.M.P.M.		940'	SOUTH	20'	WEST	EDDY

Dedicated Acres 640	Joint or Infill N	Consolidation Code	Order No.
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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>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that the organization either owns a working interest or undivided mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order.</p> <p>Authorized agent for the division: Jana Mendiola 8/7/18 Email address: jana.mendiola@oxy.com </p>			
<p>SURVEYOR CERTIFICATION</p> <p>I hereby certify that the information shown on this plat was obtained from a reliable source and that the same is true and correct to the best of my belief.</p> <p>Date of Survey: MAY 22 2018</p> <p>Signature and Seal of Professional Surveyor: Terry J. Paul 7/23/2018 15079 </p>			

Intent ☒ As Drilled ☐

API # 30-015-45218			
Operator Name: Oxy USA Inc.		Property Name: Whomping Willow CC 15-16 State com	Well Number 44H

Kick Off Point (KOP)

UL I	Section 15	Township 24S	Range 29E	Lot	Feet 940	From N/S SOUTH	Feet 50	From E/W EAST	County EDDY
Latitude 32.2128160					Longitude -103.9639120				NAD NAD 83

First Take Point (FTP)

UL I	Section 15	Township 24S	Range 29E	Lot	Feet 940	From N/S SOUTH	Feet 100	From E/W EAST	County EDDY
Latitude 32.2128161					Longitude -103.9640737				NAD NAD 83

Last Take Point (LTP)

UL H	Section 16	Township 24S	Range 29E	Lot	Feet 940	From N/S SOUTH	Feet 100	From E/W WEST	County EDDY
Latitude 32.2128396					Longitude -103.9976497				NAD NAD 83

Is this well the defining well for the Horizontal Spacing Unit? ☐

Is this well an infill well? ☐

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #			
Operator Name:		Property Name:	Well Number

KZ 06/29/2018

Application Non-Standard Location - Service List
OXY USA Inc.
Whomping Willow CC 15-16 State Com #44H

New Mexico Oil Conservation Division
 811 S. First St.
 Artesia, NM 88210
 7018 0360 0000 0626 7503

New Mexico Oil Conservation Division
 1220 South St. Francis Dr.
 Santa Fe, NM 87505
 7018 0680 0000 1684 5075

New Mexico State Land Office
 P. O. Box 1148
 Santa Fe, NM 87504
 7018 0680 0000 1684 5082

T24S-R29E 1.
Section 14 - Unit M

Devon Energy Production Company, LP
 20 N Broadway
 Oklahoma City, OK 73102
 7018 0680 0000 1684 5099

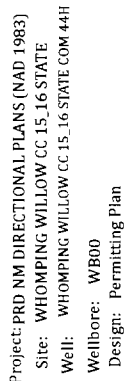
T24S-R29E 1.
Section 16 - Unit P

Oxy USA Inc.
 P.O. Box 4294
 Houston, TX 77210

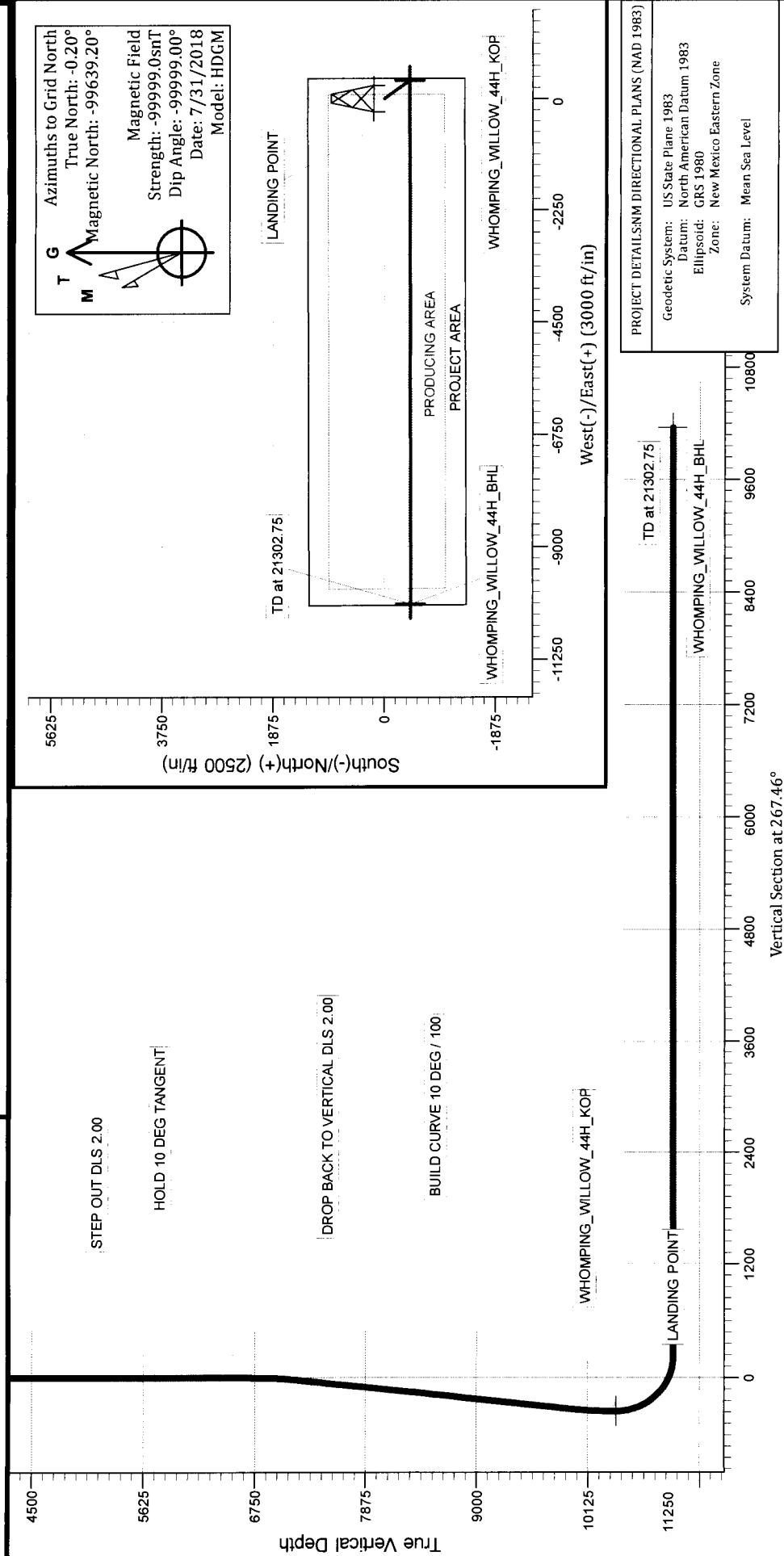
Copies of this application were mailed to the following individuals, companies and organizations
 on or before September 21, 2018.

Sarah Chapman

Sarah Chapman
 OXY USA Inc.



+N/-S	+E/-W	Northing	Easting	Ground Level:
0.00	0.00	441778.01	655217.10	2942.80
			32	
			DATUM @ 2969.30ft	

[illegible]

OXY

**PRD NM DIRECTIONAL PLANS (NAD 1983)
WHOMPING WILLOW CC 15_16 STATE
WHOMPING WILLOW CC 15_16 STATE COM 44H**

WB00

Plan: Permitting Plan

Standard Planning Report

31 July, 2018

Oxy Planning Report

Database:	HOPSPP	Local Co-ordinate Reference:	Well WHOMPING WILLOW CC 15_16 STATE COM 44H
Company:	ENGINEERING DESIGNS	TVD Reference:	DATUM @ 2969.30ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	DATUM @ 2969.30ft
Site:	WHOMPING WILLOW CC 15_16 STATE	North Reference:	Grid
Well:	WHOMPING WILLOW CC 15_16 STATE COM 44H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB00		
Design:	Permitting Plan		

Project	PRD NM DIRECTIONAL PLANS (NAD 1983)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		Using geodetic scale factor

Site	WHOMPING WILLOW CC 15_16 STATE		
Site Position:	Map	Northing:	441,778.01 usft
From:		Easting:	655,217.10 usft
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in
		Latitude:	32° 12' 50.357642 N
		Longitude:	103° 57' 54.392299 W
		Grid Convergence:	0.20 °

Well	WHOMPING WILLOW CC 15_16 STATE COM 44H					
Well Position	+N/-S	0.00 ft	Northing:	441,778.01 usft	Latitude:	32° 12' 50.357642 N
	+E/-W	0.00 ft	Easting:	655,217.10 usft	Longitude:	103° 57' 54.392299 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	2,942.80 ft

Wellbore	WB00				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	7/31/2018	-99,639.00	-99,999.00	-99,999

Design	Permitting Plan			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N-S (ft)	+E-W (ft)	Direction (°)
	0.00	0.00	0.00	267.46

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6,710.00	0.00	0.00	6,710.00	0.00	0.00	0.00	0.00	0.00	0.00	
7,209.91	10.00	138.83	7,207.38	-32.75	28.64	2.00	2.00	0.00	138.83	
9,960.47	10.00	138.83	9,916.16	-392.25	342.98	0.00	0.00	0.00	0.00	
10,460.38	0.00	269.86	10,413.54	-425.00	371.62	2.00	-2.00	0.00	180.00	WHOMPING_WILL
11,361.38	90.10	269.86	10,986.50	-426.40	-202.34	10.00	10.00	0.00	-90.14	
21,302.75	90.02	269.86	10,976.50	-450.60	-10,143.67	0.00	0.00	0.00	180.00	WHOMPING_WILL

Oxy Planning Report

Database:	HOPSPP	Local Co-ordinate Reference:	Well WHOMPING WILLOW CC 15_16 STATE COM 44H
Company:	ENGINEERING DESIGNS	TVD Reference:	DATUM @ 2969.30ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	DATUM @ 2969.30ft
Site:	WHOMPING WILLOW CC 15_16 STATE	North Reference:	Grid
Well:	WHOMPING WILLOW CC 15_16 STATE COM 44H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB00		
Design:	Permitting Plan		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00

Oxy Planning Report

Database:	HOPSPP	Local Co-ordinate Reference:	Well WHOMPING WILLOW CC 15_16 STATE COM 44H
Company:	ENGINEERING DESIGNS	TVD Reference:	DATUM @ 2969.30ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	DATUM @ 2969.30ft
Site:	WHOMPING WILLOW CC 15_16 STATE	North Reference:	Grid
Well:	WHOMPING WILLOW CC 15_16 STATE COM 44H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB00		
Design:	Permitting Plan		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00
5,600.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,700.00	0.00	0.00	0.00	0.00	0.00	0.00
5,800.00	0.00	0.00	5,800.00	0.00	0.00	0.00	0.00	0.00	0.00
5,900.00	0.00	0.00	5,900.00	0.00	0.00	0.00	0.00	0.00	0.00
6,000.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00	0.00
6,100.00	0.00	0.00	6,100.00	0.00	0.00	0.00	0.00	0.00	0.00
6,200.00	0.00	0.00	6,200.00	0.00	0.00	0.00	0.00	0.00	0.00
6,300.00	0.00	0.00	6,300.00	0.00	0.00	0.00	0.00	0.00	0.00
6,400.00	0.00	0.00	6,400.00	0.00	0.00	0.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,500.00	0.00	0.00	0.00	0.00	0.00	0.00
6,600.00	0.00	0.00	6,600.00	0.00	0.00	0.00	0.00	0.00	0.00
6,700.00	0.00	0.00	6,700.00	0.00	0.00	0.00	0.00	0.00	0.00
6,710.00	0.00	0.00	6,710.00	0.00	0.00	0.00	0.00	0.00	0.00
6,800.00	1.80	138.83	6,799.99	-1.06	0.93	-0.88	2.00	2.00	0.00
6,900.00	3.80	138.83	6,899.86	-4.74	4.15	-3.93	2.00	2.00	0.00
7,000.00	5.80	138.83	6,999.51	-11.04	9.65	-9.15	2.00	2.00	0.00
7,100.00	7.80	138.83	7,098.80	-19.95	17.45	-16.54	2.00	2.00	0.00
7,200.00	9.80	138.83	7,197.61	-31.47	27.52	-26.09	2.00	2.00	0.00
7,209.91	10.00	138.83	7,207.38	-32.75	28.64	-27.16	2.00	2.00	0.00
7,300.00	10.00	138.83	7,296.10	-44.53	38.93	-36.92	0.00	0.00	0.00
7,400.00	10.00	138.83	7,394.58	-57.60	50.36	-47.76	0.00	0.00	0.00
7,500.00	10.00	138.83	7,493.06	-70.67	61.79	-58.59	0.00	0.00	0.00
7,600.00	10.00	138.83	7,591.54	-83.74	73.22	-69.43	0.00	0.00	0.00
7,700.00	10.00	138.83	7,690.02	-96.81	84.65	-80.27	0.00	0.00	0.00
7,800.00	10.00	138.83	7,788.51	-109.88	96.08	-91.10	0.00	0.00	0.00
7,900.00	10.00	138.83	7,886.99	-122.95	107.50	-101.94	0.00	0.00	0.00
8,000.00	10.00	138.83	7,985.47	-136.02	118.93	-112.78	0.00	0.00	0.00
8,100.00	10.00	138.83	8,083.95	-149.09	130.36	-123.62	0.00	0.00	0.00
8,200.00	10.00	138.83	8,182.43	-162.16	141.79	-134.45	0.00	0.00	0.00
8,300.00	10.00	138.83	8,280.91	-175.23	153.22	-145.29	0.00	0.00	0.00
8,400.00	10.00	138.83	8,379.39	-188.30	164.65	-156.13	0.00	0.00	0.00
8,500.00	10.00	138.83	8,477.87	-201.37	176.07	-166.96	0.00	0.00	0.00
8,600.00	10.00	138.83	8,576.36	-214.44	187.50	-177.80	0.00	0.00	0.00
8,700.00	10.00	138.83	8,674.84	-227.51	198.93	-188.64	0.00	0.00	0.00
8,800.00	10.00	138.83	8,773.32	-240.58	210.36	-199.48	0.00	0.00	0.00
8,900.00	10.00	138.83	8,871.80	-253.65	221.79	-210.31	0.00	0.00	0.00
9,000.00	10.00	138.83	8,970.28	-266.72	233.22	-221.15	0.00	0.00	0.00
9,100.00	10.00	138.83	9,068.76	-279.79	244.64	-231.99	0.00	0.00	0.00
9,200.00	10.00	138.83	9,167.24	-292.86	256.07	-242.82	0.00	0.00	0.00
9,300.00	10.00	138.83	9,265.72	-305.93	267.50	-253.66	0.00	0.00	0.00
9,400.00	10.00	138.83	9,364.21	-319.00	278.93	-264.50	0.00	0.00	0.00
9,500.00	10.00	138.83	9,462.69	-332.07	290.36	-275.33	0.00	0.00	0.00
9,600.00	10.00	138.83	9,561.17	-345.14	301.79	-286.17	0.00	0.00	0.00
9,700.00	10.00	138.83	9,659.65	-358.21	313.21	-297.01	0.00	0.00	0.00
9,800.00	10.00	138.83	9,758.13	-371.28	324.64	-307.85	0.00	0.00	0.00
9,900.00	10.00	138.83	9,856.61	-384.35	336.07	-318.68	0.00	0.00	0.00
9,960.47	10.00	138.83	9,916.16	-392.25	342.98	-325.24	0.00	0.00	0.00
10,000.00	9.21	138.83	9,955.14	-397.22	347.32	-329.35	2.00	-2.00	0.00

Oxy Planning Report

Database:	HOPSPP	Local Co-ordinate Reference:	Well WHOMPING WILLOW CC 15_16 STATE COM 44H
Company:	ENGINEERING DESIGNS	TVD Reference:	DATUM @ 2969.30ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	DATUM @ 2969.30ft
Site:	WHOMPING WILLOW CC 15_16 STATE	North Reference:	Grid
Well:	WHOMPING WILLOW CC 15_16 STATE COM 44H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB00		
Design:	Permitting Plan		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,100.00	7.21	138.83	10,054.11	-407.96	356.72	-338.26	2.00	-2.00	0.00
10,200.00	5.21	138.83	10,153.52	-416.10	363.84	-345.01	2.00	-2.00	0.00
10,300.00	3.21	138.83	10,253.24	-421.62	368.66	-349.59	2.00	-2.00	0.00
10,400.00	1.21	138.83	10,353.17	-424.52	371.20	-352.00	2.00	-2.00	0.00
10,460.38	0.00	269.86	10,413.54	-425.00	371.62	-352.39	2.00	-2.00	0.00
10,500.00	3.96	269.86	10,453.13	-425.01	370.25	-351.02	10.00	10.00	0.00
10,600.00	13.96	269.86	10,551.78	-425.04	354.69	-335.48	10.00	10.00	0.00
10,700.00	23.96	269.86	10,646.24	-425.12	322.24	-303.06	10.00	10.00	0.00
10,800.00	33.96	269.86	10,733.62	-425.24	273.88	-254.74	10.00	10.00	0.00
10,900.00	43.96	269.86	10,811.28	-425.39	211.08	-191.99	10.00	10.00	0.00
11,000.00	53.96	269.86	10,876.85	-425.58	135.74	-116.72	10.00	10.00	0.00
11,100.00	63.96	269.86	10,928.35	-425.79	50.17	-31.23	10.00	10.00	0.00
11,200.00	73.96	269.86	10,964.20	-426.01	-43.04	61.91	10.00	10.00	0.00
11,300.00	83.96	269.86	10,983.32	-426.25	-141.07	159.85	10.00	10.00	0.00
11,361.38	90.10	269.86	10,986.50	-426.40	-202.34	221.06	10.00	10.00	0.00
11,400.00	90.10	269.86	10,986.43	-426.49	-240.96	259.65	0.00	0.00	0.00
11,500.00	90.10	269.86	10,986.26	-426.74	-340.96	359.56	0.00	0.00	0.00
11,600.00	90.10	269.86	10,986.08	-426.98	-440.96	459.47	0.00	0.00	0.00
11,700.00	90.10	269.86	10,985.91	-427.22	-540.96	559.38	0.00	0.00	0.00
11,800.00	90.10	269.86	10,985.75	-427.47	-640.96	659.29	0.00	0.00	0.00
11,900.00	90.10	269.86	10,985.58	-427.71	-740.96	759.21	0.00	0.00	0.00
12,000.00	90.09	269.86	10,985.41	-427.95	-840.96	859.12	0.00	0.00	0.00
12,100.00	90.09	269.86	10,985.25	-428.20	-940.95	959.03	0.00	0.00	0.00
12,200.00	90.09	269.86	10,985.09	-428.44	-1,040.95	1,058.94	0.00	0.00	0.00
12,300.00	90.09	269.86	10,984.92	-428.68	-1,140.95	1,158.85	0.00	0.00	0.00
12,400.00	90.09	269.86	10,984.76	-428.93	-1,240.95	1,258.77	0.00	0.00	0.00
12,500.00	90.09	269.86	10,984.61	-429.17	-1,340.95	1,358.68	0.00	0.00	0.00
12,600.00	90.09	269.86	10,984.45	-429.41	-1,440.95	1,458.59	0.00	0.00	0.00
12,700.00	90.09	269.86	10,984.29	-429.66	-1,540.95	1,558.50	0.00	0.00	0.00
12,800.00	90.09	269.86	10,984.14	-429.90	-1,640.95	1,658.41	0.00	0.00	0.00
12,900.00	90.09	269.86	10,983.99	-430.14	-1,740.95	1,758.33	0.00	0.00	0.00
13,000.00	90.09	269.86	10,983.84	-430.39	-1,840.95	1,858.24	0.00	0.00	0.00
13,100.00	90.09	269.86	10,983.69	-430.63	-1,940.95	1,958.15	0.00	0.00	0.00
13,200.00	90.08	269.86	10,983.54	-430.87	-2,040.95	2,058.06	0.00	0.00	0.00
13,300.00	90.08	269.86	10,983.39	-431.12	-2,140.95	2,157.97	0.00	0.00	0.00
13,400.00	90.08	269.86	10,983.25	-431.36	-2,240.95	2,257.88	0.00	0.00	0.00
13,500.00	90.08	269.86	10,983.10	-431.61	-2,340.95	2,357.80	0.00	0.00	0.00
13,600.00	90.08	269.86	10,982.96	-431.85	-2,440.95	2,457.71	0.00	0.00	0.00
13,700.00	90.08	269.86	10,982.82	-432.09	-2,540.95	2,557.62	0.00	0.00	0.00
13,800.00	90.08	269.86	10,982.68	-432.34	-2,640.95	2,657.53	0.00	0.00	0.00
13,900.00	90.08	269.86	10,982.55	-432.58	-2,740.95	2,757.44	0.00	0.00	0.00
14,000.00	90.08	269.86	10,982.41	-432.82	-2,840.95	2,857.36	0.00	0.00	0.00
14,100.00	90.08	269.86	10,982.28	-433.07	-2,940.95	2,957.27	0.00	0.00	0.00
14,200.00	90.08	269.86	10,982.14	-433.31	-3,040.95	3,057.18	0.00	0.00	0.00
14,300.00	90.07	269.86	10,982.01	-433.55	-3,140.95	3,157.09	0.00	0.00	0.00
14,400.00	90.07	269.86	10,981.88	-433.80	-3,240.95	3,257.00	0.00	0.00	0.00
14,500.00	90.07	269.86	10,981.75	-434.04	-3,340.95	3,356.92	0.00	0.00	0.00
14,600.00	90.07	269.86	10,981.63	-434.28	-3,440.94	3,456.83	0.00	0.00	0.00
14,700.00	90.07	269.86	10,981.50	-434.53	-3,540.94	3,556.74	0.00	0.00	0.00
14,800.00	90.07	269.86	10,981.38	-434.77	-3,640.94	3,656.65	0.00	0.00	0.00
14,900.00	90.07	269.86	10,981.25	-435.01	-3,740.94	3,756.56	0.00	0.00	0.00
15,000.00	90.07	269.86	10,981.13	-435.26	-3,840.94	3,856.47	0.00	0.00	0.00

Oxy Planning Report

Database:	HOPSPP	Local Co-ordinate Reference:	Well WHOMPING WILLOW CC 15_16 STATE COM 44H
Company:	ENGINEERING DESIGNS	TVD Reference:	DATUM @ 2969.30ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	DATUM @ 2969.30ft
Site:	WHOMPING WILLOW CC 15_16 STATE	North Reference:	Grid
Well:	WHOMPING WILLOW CC 15_16 STATE COM 44H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB00		
Design:	Permitting Plan		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
15,100.00	90.07	269.86	10,981.01	-435.50	-3,940.94	3,956.39	0.00	0.00	0.00
15,200.00	90.07	269.86	10,980.89	-435.74	-4,040.94	4,056.30	0.00	0.00	0.00
15,300.00	90.07	269.86	10,980.78	-435.99	-4,140.94	4,156.21	0.00	0.00	0.00
15,400.00	90.07	269.86	10,980.66	-436.23	-4,240.94	4,256.12	0.00	0.00	0.00
15,500.00	90.06	269.86	10,980.55	-436.47	-4,340.94	4,356.03	0.00	0.00	0.00
15,600.00	90.06	269.86	10,980.44	-436.72	-4,440.94	4,455.95	0.00	0.00	0.00
15,700.00	90.06	269.86	10,980.33	-436.96	-4,540.94	4,555.86	0.00	0.00	0.00
15,800.00	90.06	269.86	10,980.22	-437.20	-4,640.94	4,655.77	0.00	0.00	0.00
15,900.00	90.06	269.86	10,980.11	-437.45	-4,740.94	4,755.68	0.00	0.00	0.00
16,000.00	90.06	269.86	10,980.00	-437.69	-4,840.94	4,855.59	0.00	0.00	0.00
16,100.00	90.06	269.86	10,979.90	-437.93	-4,940.94	4,955.51	0.00	0.00	0.00
16,200.00	90.06	269.86	10,979.79	-438.18	-5,040.94	5,055.42	0.00	0.00	0.00
16,300.00	90.06	269.86	10,979.69	-438.42	-5,140.94	5,155.33	0.00	0.00	0.00
16,400.00	90.06	269.86	10,979.59	-438.66	-5,240.94	5,255.24	0.00	0.00	0.00
16,500.00	90.06	269.86	10,979.49	-438.91	-5,340.94	5,355.15	0.00	0.00	0.00
16,600.00	90.06	269.86	10,979.40	-439.15	-5,440.94	5,455.07	0.00	0.00	0.00
16,700.00	90.05	269.86	10,979.30	-439.39	-5,540.94	5,554.98	0.00	0.00	0.00
16,800.00	90.05	269.86	10,979.21	-439.64	-5,640.94	5,654.89	0.00	0.00	0.00
16,900.00	90.05	269.86	10,979.11	-439.88	-5,740.94	5,754.80	0.00	0.00	0.00
17,000.00	90.05	269.86	10,979.02	-440.12	-5,840.94	5,854.71	0.00	0.00	0.00
17,100.00	90.05	269.86	10,978.93	-440.37	-5,940.94	5,954.63	0.00	0.00	0.00
17,200.00	90.05	269.86	10,978.84	-440.61	-6,040.94	6,054.54	0.00	0.00	0.00
17,300.00	90.05	269.86	10,978.76	-440.85	-6,140.94	6,154.45	0.00	0.00	0.00
17,400.00	90.05	269.86	10,978.67	-441.10	-6,240.94	6,254.36	0.00	0.00	0.00
17,500.00	90.05	269.86	10,978.59	-441.34	-6,340.93	6,354.27	0.00	0.00	0.00
17,600.00	90.05	269.86	10,978.50	-441.58	-6,440.93	6,454.19	0.00	0.00	0.00
17,700.00	90.05	269.86	10,978.42	-441.83	-6,540.93	6,554.10	0.00	0.00	0.00
17,800.00	90.05	269.86	10,978.34	-442.07	-6,640.93	6,654.01	0.00	0.00	0.00
17,900.00	90.04	269.86	10,978.27	-442.31	-6,740.93	6,753.92	0.00	0.00	0.00
18,000.00	90.04	269.86	10,978.19	-442.56	-6,840.93	6,853.83	0.00	0.00	0.00
18,100.00	90.04	269.86	10,978.11	-442.80	-6,940.93	6,953.75	0.00	0.00	0.00
18,200.00	90.04	269.86	10,978.04	-443.04	-7,040.93	7,053.66	0.00	0.00	0.00
18,300.00	90.04	269.86	10,977.97	-443.29	-7,140.93	7,153.57	0.00	0.00	0.00
18,400.00	90.04	269.86	10,977.90	-443.53	-7,240.93	7,253.48	0.00	0.00	0.00
18,500.00	90.04	269.86	10,977.83	-443.77	-7,340.93	7,353.39	0.00	0.00	0.00
18,600.00	90.04	269.86	10,977.76	-444.02	-7,440.93	7,453.30	0.00	0.00	0.00
18,700.00	90.04	269.86	10,977.70	-444.26	-7,540.93	7,553.22	0.00	0.00	0.00
18,800.00	90.04	269.86	10,977.63	-444.50	-7,640.93	7,653.13	0.00	0.00	0.00
18,900.00	90.04	269.86	10,977.57	-444.75	-7,740.93	7,753.04	0.00	0.00	0.00
19,000.00	90.03	269.86	10,977.51	-444.99	-7,840.93	7,852.95	0.00	0.00	0.00
19,100.00	90.03	269.86	10,977.45	-445.23	-7,940.93	7,952.86	0.00	0.00	0.00
19,200.00	90.03	269.86	10,977.39	-445.48	-8,040.93	8,052.78	0.00	0.00	0.00
19,300.00	90.03	269.86	10,977.33	-445.72	-8,140.93	8,152.69	0.00	0.00	0.00
19,400.00	90.03	269.86	10,977.28	-445.96	-8,240.93	8,252.60	0.00	0.00	0.00
19,500.00	90.03	269.86	10,977.22	-446.21	-8,340.93	8,352.51	0.00	0.00	0.00
19,600.00	90.03	269.86	10,977.17	-446.45	-8,440.93	8,452.42	0.00	0.00	0.00
19,700.00	90.03	269.86	10,977.12	-446.69	-8,540.93	8,552.34	0.00	0.00	0.00
19,800.00	90.03	269.86	10,977.07	-446.94	-8,640.93	8,652.25	0.00	0.00	0.00
19,900.00	90.03	269.86	10,977.02	-447.18	-8,740.93	8,752.16	0.00	0.00	0.00
20,000.00	90.03	269.86	10,976.97	-447.42	-8,840.93	8,852.07	0.00	0.00	0.00
20,100.00	90.03	269.86	10,976.93	-447.67	-8,940.93	8,951.98	0.00	0.00	0.00
20,200.00	90.02	269.86	10,976.88	-447.91	-9,040.93	9,051.90	0.00	0.00	0.00

Oxy Planning Report

Database:	HOPSPP	Local Co-ordinate Reference:	Well WHOMPING WILLOW CC 15_16 STATE COM 44H
Company:	ENGINEERING DESIGNS	TVD Reference:	DATUM @ 2969.30ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	DATUM @ 2969.30ft
Site:	WHOMPING WILLOW CC 15_16 STATE	North Reference:	Grid
Well:	WHOMPING WILLOW CC 15_16 STATE COM 44H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB00		
Design:	Permitting Plan		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
20,300.00	90.02	269.86	10,976.84	-448.15	-9,140.93	9,151.81	0.00	0.00	0.00
20,400.00	90.02	269.86	10,976.80	-448.40	-9,240.93	9,251.72	0.00	0.00	0.00
20,500.00	90.02	269.86	10,976.76	-448.64	-9,340.93	9,351.63	0.00	0.00	0.00
20,600.00	90.02	269.86	10,976.72	-448.88	-9,440.93	9,451.54	0.00	0.00	0.00
20,700.00	90.02	269.86	10,976.69	-449.13	-9,540.92	9,551.46	0.00	0.00	0.00
20,800.00	90.02	269.86	10,976.65	-449.37	-9,640.92	9,651.37	0.00	0.00	0.00
20,900.00	90.02	269.86	10,976.62	-449.61	-9,740.92	9,751.28	0.00	0.00	0.00
21,000.00	90.02	269.86	10,976.59	-449.86	-9,840.92	9,851.19	0.00	0.00	0.00
21,100.00	90.02	269.86	10,976.56	-450.10	-9,940.92	9,951.10	0.00	0.00	0.00
21,200.00	90.02	269.86	10,976.53	-450.35	-10,040.92	10,051.02	0.00	0.00	0.00
21,300.00	90.02	269.86	10,976.50	-450.59	-10,140.92	10,150.93	0.00	0.00	0.00
21,302.75	90.02	269.86	10,976.50	-450.60	-10,143.67	10,153.68	0.03	-0.03	0.00

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
WHOMPING_WILLO - plan hits target center - Point	0.00	0.00	10,413.54	-425.00	371.62	441,353.04	655,588.69	32° 12' 46.139573 N	103° 57' 50.083911
WHOMPING_WILLO - plan hits target center - Point	0.00	0.00	10,976.50	-450.60	-10,143.67	441,327.45	645,074.22	32° 12' 46.227507 N	103° 59' 52.474346

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
6,710.00	6,710.00	0.00	0.00	STEP OUT DLS 2.00
7,209.91	7,207.38	-32.75	28.64	HOLD 10 DEG TANGENT
9,960.47	9,916.16	-392.25	342.98	DROP BACK TO VERTICAL DLS 2.00
10,460.38	10,413.54	-425.00	371.62	BUILD CURVE 10 DEG / 100
11,361.38	10,986.50	-426.40	-202.34	LANDING POINT
21,302.75	10,976.50	-450.60	-10,143.67	TD at 21302.75



Occidental Oil and Gas Corporation
ATTN: Jennifer James
5 Greenway Plaza, Suite 110
Houston, TX 77046
713-350-4889
jennifer_james@oxy.com

September 21, 2018

Mr. Leonard Lowe
New Mexico Oil Conservation Division
1220 South Francis Drive
Santa Fe, New Mexico 87505

RE: *Application for Nonstandard Location—Engineering Justification*
OXY USA Inc.
Whomping Willow CC 15-16 State Com 44H
SWSW Section 14 and SESE Section 17, T24S-R29E, Eddy County

Dear Mr. Lowe:

Oxy USA Inc. respectfully seeks approval for a non-standard location, decreasing the first and last take point for Whomping Willow CC 15-16 State Com 44H in the Wolfcamp formation of the Purple Sage Pool from 330 feet to 100 feet. It is Oxy's responsibility as a prudent operator to maximize lateral length and minimize reserves left in the ground. Decreasing the first and last take point will increase this wells effective lateral length by 460 feet, and increase the estimated ultimate recovery of the well by approximately 5%. Any increase in first and last take point would result in untapped reserves left in the reservoir, and waste of a resource that would not be developed otherwise.

Sincerely,

A handwritten signature in black ink, appearing to read "J. C. James".

Jennifer James
Development Engineer

Application Non-Standard Location - Service List
OXY USA Inc.
Whomping Willow CC 15-16 State Com #44H

New Mexico Oil Conservation Division
811 S. First St.
Artesia, NM 88210
7018 0360 0000 0626 7503

New Mexico Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505
7018 0680 0000 1684 5075

New Mexico State Land Office
P. O. Box 1148
Santa Fe, NM 87504
7018 0680 0000 1684 5082

T24S-R29E

No Existing Spacing Unit: Section 14 - Unit K, L, M and N

Devon Energy Production Company, LP
20 N Broadway
Oklahoma City, OK 73102
7018 0680 0000 1684 5099

T24S-R29E

Existing Spacing Unit: Section 17 - Units A, B, G, H, I, J, O and P

T24S-R29E

Existing Spacing Unit: Section 8 - Units A, B, G, H, I, J, O and P

GD McKinney Investments LP
Attn: Gary D. McKinney
300 N Marienfield, Ste 1100
Midland, TX 79701
7017 0530 0000 6129 0384

Leopard Petroleum LP
P.O. Box 51440
Midland, TX 79710
7017 0530 0000 6129 0391

Beryl Oil and Gas, LP
P.O. Box 51440
Midland, TX 79710
7017 0530 0000 6129 0407

B. Jack Reed
506 Charismatic
Midland, TX 79705
7017 0530 0000 6129 0414

DRW Energy, LLC
400 W. Illinois, Suite 970
Midland, TX 79701
7017 0530 0000 6129 0421

M'lissa L. McKinney Schoening
301 Sir Barton Parkway
Midland, TX 79705
7017 0530 0000 6129 0438

EOG Y Resources Inc.
5509 Champions Drive
Midland, TX 79706
7017 0530 0000 6129 0445

EOG A Resources Inc.
5509 Champions Drive
Midland, TX 79706
7017 0530 0000 6129 0452

EOG M Resource Inc.
5509 Champions Drive
Midland, TX 79706
7017 0530 0000 6129 0469

Copies of this application were mailed to the following individuals, companies and organizations on or before October 9, 2018.

Sarah Chapman

Sarah Chapman
OXY USA Inc.

Lowe, Leonard, EMNRD

From: Chapman, Sarah E <Sarah_Chapman@oxy.com>
Sent: Tuesday, October 9, 2018 3:13 PM
To: Lowe, Leonard, EMNRD
Cc: Morris, Justin C
Subject: [EXT] Whomping Willow CC 15-16 State Com 44H Updated Notice List
Attachments: Whomping Willow CC 15-16 State Com 44H NSL Notice List.pdf

Good afternoon Leonard,

Attached is the updated Notice List with the correct parties who have been sent notice per our conversation last week. Please let me know if you have any questions.

Have a great afternoon.

Sarah Chapman

Regulatory Specialist | Permian Resources – New Mexico
Office: (713) 350-4997 | 29.097 | Cell: (281) 642-5503
Email: Sarah_Chapman@oxy.com

Lowe, Leonard, EMNRD

From: McMillan, Michael, EMNRD
Sent: Wednesday, October 3, 2018 2:27 PM
To: Lowe, Leonard, EMNRD
Subject: RE: RE: [EXT] RE: FW: NSL Application: Whomping Willow CC 15-16 State Com Well No. 44H

yes 10/10/18 Confirmed w/M.M., Good to Go! Cont. process.

From: Lowe, Leonard, EMNRD
Sent: Wednesday, October 3, 2018 2:26 PM
To: McMillan, Michael, EMNRD <Michael.McMillan@state.nm.us>
Subject: RE: RE: [EXT] RE: FW: NSL Application: Whomping Willow CC 15-16 State Com Well No. 44H

So, shall I let it fester until you get a plan together?

From: McMillan, Michael, EMNRD
Sent: Wednesday, October 3, 2018 12:24 PM
To: Lowe, Leonard, EMNRD <Leonard.Lowe@state.nm.us>
Subject: RE: RE: [EXT] RE: FW: NSL Application: Whomping Willow CC 15-16 State Com Well No. 44H

Can we talk about this-OXY may not need an NSL

Mike

From: Lowe, Leonard, EMNRD
Sent: Wednesday, October 3, 2018 12:22 PM
To: Brooks, David K, EMNRD <DavidK.Brooks@state.nm.us>; Jones, William V, EMNRD <WilliamV.Jones@state.nm.us>; McMillan, Michael, EMNRD <Michael.McMillan@state.nm.us>
Subject: FW: RE: [EXT] RE: FW: NSL Application: Whomping Willow CC 15-16 State Com Well No. 44H

The latest.....

From: Morris, Justin C <Justin_Morris@oxy.com>
Sent: Wednesday, October 3, 2018 11:11 AM
To: Lowe, Leonard, EMNRD <Leonard.Lowe@state.nm.us>
Cc: Chapman, Sarah E <Sarah_Chapman@oxy.com>
Subject: RE: RE: [EXT] RE: FW: NSL Application: Whomping Willow CC 15-16 State Com Well No. 44H

Good afternoon Leonard,

In this case, there is an operator in the Purple Sage in section 17 so you are correct that we will have to notify the owners of that spacing unit (please see attached plat). Since it is operated by Oxy, we will notify all the working interest owners of that spacing unit (320 acres). There are no other existing spacing units so no other notification should be required in section 17.

In section 14, there are no existing spacing units in the Purple Sage. Therefore, according to the rule 19.15.4.12 that was copied below, notice should only be required to the quarter section (L-K-M-N) in section 14.

Lowe, Leonard, EMNRD

From: Lowe, Leonard, EMNRD
Sent: Tuesday, September 25, 2018 12:39 PM
To: 'Sarah_Chapman@oxy.com'
Subject: NSL Application: Whomping Willow CC 15-16 State Com Well No. 44H

Importance: High

Ms. Sarah Chapman,

Good afternoon.

OCD's review of your submitted NSL application for the above subject well appears that you did not properly notice all affected tracts. You indicate only "M" in Section 14 and "P" in Section 17. Those are 40 acre tracts, you are affected 320 acre tracts.

From review, the following areas are affected, please verify.

SECTION 14, W2 & S2

SECTION 17, E2 & S2

If there are no affected parties in these tracts, then you need to state so.

Your application is currently on hold until proper public notice is completed.

Leonard Lowe

Engineering Bureau

Oil Conservation Division

Energy Minerals and Natural Resources Department

1220 South St. Frances

Santa Fe, New Mexico 87004

Office: 505-476-3492

Cell: 505-930-6717

Fax: 505-476-3462

E-mail: leonard.lowe@state.nm.us

Website: <http://www.emnrd.state.nm.us/ocd/>