

C-104 Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024
--	---	----------------------

REQUEST FOR ALLOWABLE AND AUTHORIZATION TO TRANSPORT

Section 1 - Operator and Well Information

Submittal Type: ☐ Test Allowable (C-104RT) ☒ New Well (C-104NW) ☐ Recomplete (C-104RC) ☐ Pay Add (C-104RC) ☐ Amended	
Operator Name: OXY USA INC	OGRID: 16696
Property Name and Well Number: TOP SPOT 12-13 FEDERAL COM 25H	Property Code: 329719
Mineral Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal	API Number: 30-0 15-47639
Pool Name: Bilbrey Basin; Bone Spring	Pool Code: 5695

Section 2 – Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
O	13	22S	31E		520 FSL	1375 FEL	32.385677°	-103.727401°	EDDY

Section 3 – Completion Information

Producing Method	Ready Date	Perforations MD	Perforations TVD
Gas lift	08/27/24	10598-20593' MD	10347-10423' TVD

Section 4 – Action IDs for Submissions and Order Numbers

List Action IDs for Drilling Sundries	Was an Order required / needed (Y/N), if yes list Order number:
C-104 RT Action ID (if C-104NW):	Communitization Agreement ☒ Yes ☐ No, Order No. Pending w/ BLM
Surface Casing Action ID: 392348	Unit: ☐ Yes ☒ No, Order No.
Intermediate 1 Casing Action ID: 392367	Compulsory Pooling: ☒ Yes ☐ No, Order No. R-23271
Intermediate 2 Casing Action ID: NA	Down Hole Commingling: ☐ Yes ☒ No, Order No.
Production Casing Action ID: 392367	Surface Commingling: ☒ Yes ☐ No, Order No. PLC-844
All casing was pressure tested in accordance with NMAC ☒ Yes ☐ No	Non-standard Location: ☐ Yes ☒ No ☐ Common ownership Order No.
Liner 1 Action ID: NA	Non-standard Proration: ☐ Yes ☒ No, Order No.
Casing was installed prior to OCD's Action ID system (Y/N): N	Simultaneous Dedication: ☐ Yes ☒ No, Order No.

Section 5 - Operator Signature and Certification

☒ I hereby certify that the required Water Use Report has been, or will be, submitted for this well's completion.	
☒ I hereby certify that the required Fracfocus disclosure has been, or will be, submitted for this well's completion.	
☒ I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.	
Name Jana Mendiola	<i>Jana Mendiola</i>
Title Regulatory Advisor	Date 12/03/24

C-102 Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024	
		Submittal Type:	☐ Initial Submittal
			☐ Amended Report
		☒ As Drilled	

WELL LOCATION INFORMATION

API Number 30-015-47639	Pool Code 5695	Pool Name Bilbrey Basin; Bone Spring
Property Code 329719	Property Name TOP SPOT 12_13 FED COM	Well Number 25H
OGRID No. 16696	Operator Name OXY USA INC.	Ground Level Elevation 3,583.5'
Surface Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal		Mineral Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal

Surface Location

UL O	Section 13	Township 22S	Range 31E	Lot	Ft. from N/S 520 SOUTH	Ft. from E/W 1,375 EAST	Latitude (NAD 83) 32.385677°	Longitude (NAD 83) -103.727401°	County EDDY
---------	---------------	-----------------	--------------	-----	---------------------------	----------------------------	---------------------------------	------------------------------------	----------------

Bottom Hole Location

UL B	Section 12	Township 22S	Range 31E	Lot	Ft. from N/S 52 NORTH	Ft. from E/W 2,182 EAST	Latitude (NAD 83) 32.413140°	Longitude (NAD 83) -103.730003°	County EDDY
---------	---------------	-----------------	--------------	-----	--------------------------	----------------------------	---------------------------------	------------------------------------	----------------

Dedicated Acres 320	Infill or Defining Well	Defining Well API	Overlapping Spacing Unit (Y/N)	Consolidation Code
Order Numbers.		Well setbacks are under Common Ownership: ☐ Yes ☐ No		

Kick Off Point (KOP)

UL O	Section 13	Township 22S	Range 31E	Lot	Ft. from N/S 48 SOUTH	Ft. from E/W 2,133 EAST	Latitude (NAD 83) 32.384382°	Longitude (NAD 83) -103.729857°	County EDDY
---------	---------------	-----------------	--------------	-----	--------------------------	----------------------------	---------------------------------	------------------------------------	----------------

First Take Point (FTP)

UL O	Section 13	Township 22S	Range 31E	Lot	Ft. from N/S 411 SOUTH	Ft. from E/W 2,213 EAST	Latitude (NAD 83) 32.385379°	Longitude (NAD 83) -103.730115°	County EDDY
---------	---------------	-----------------	--------------	-----	---------------------------	----------------------------	---------------------------------	------------------------------------	----------------

Last Take Point (LTP)

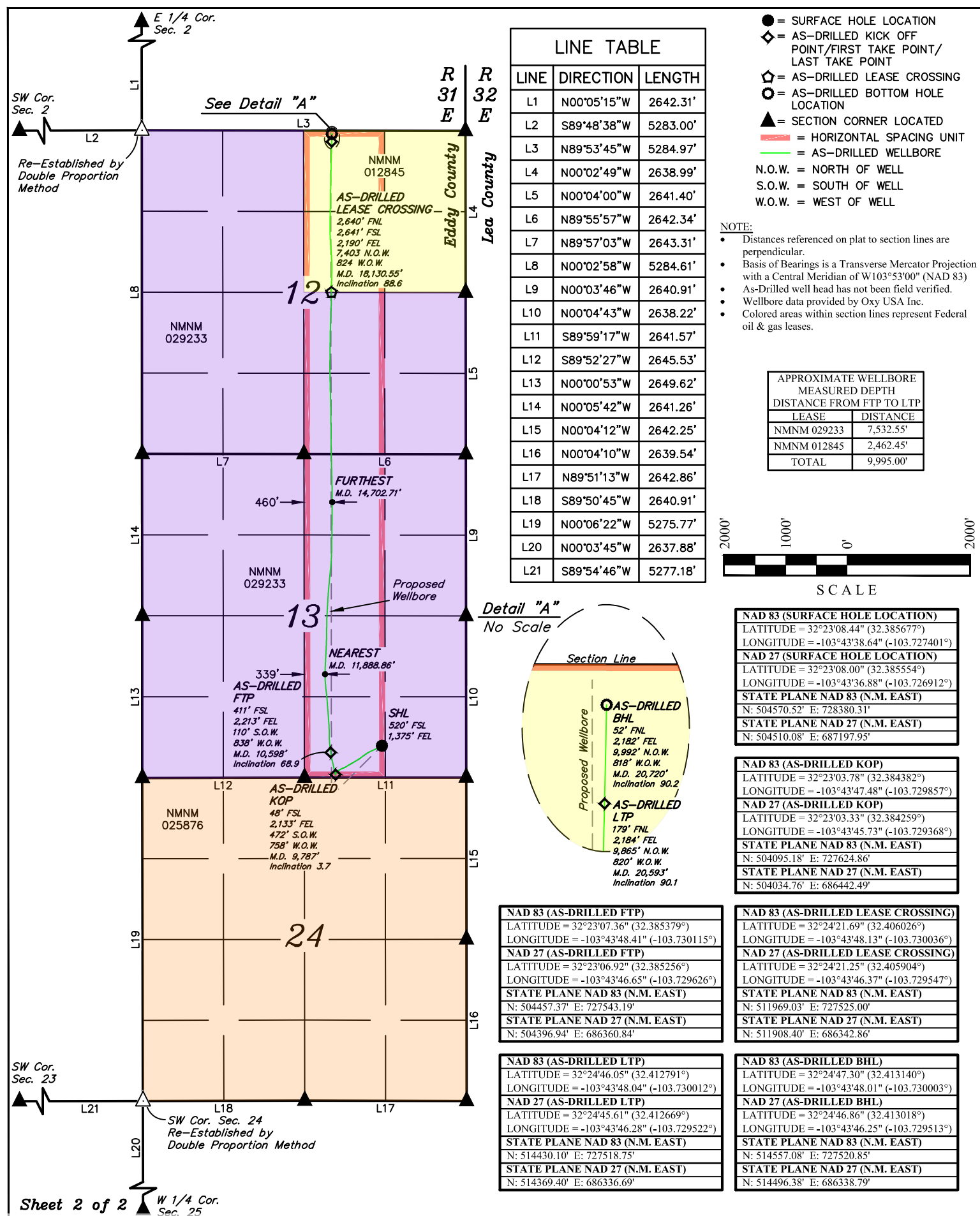
UL B	Section 12	Township 22S	Range 31E	Lot	Ft. from N/S 179 NORTH	Ft. from E/W 2,184 EAST	Latitude (NAD 83) 32.412791°	Longitude (NAD 83) -103.730012°	County EDDY
---------	---------------	-----------------	--------------	-----	---------------------------	----------------------------	---------------------------------	------------------------------------	----------------

Unitized Area or Area of Uniform Interest	Spacing Unit Type ☒ Horizontal ☐ Vertical	Ground Floor Elevation:
---	--	-------------------------

OPERATOR CERTIFICATIONS <i>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, that this organization either owns a working interest or unleased 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 a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</i> <i>If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interest in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division.</i> <i>Jana Mendiola</i> 12/03/24 Signature Date Jana Mendiola Printed Name janalyn_mendiola@oxy.com Email Address	SURVEYOR CERTIFICATIONS <i>I hereby certify that the well location shown on this plat was plotted from the field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</i>  Signature and Seal of Professional Surveyor 23782 February 26, 2024 Certificate Number Date of Survey
---	--

Note: No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.

Property Name TOP SPOT 12_13 FED COM	Well Number 25H	Drawn By N.R. 09-09-24	Revised By
---	--------------------	---------------------------	------------

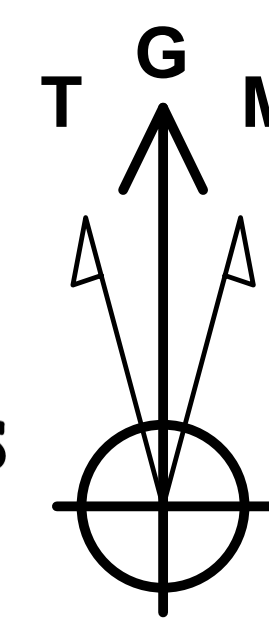




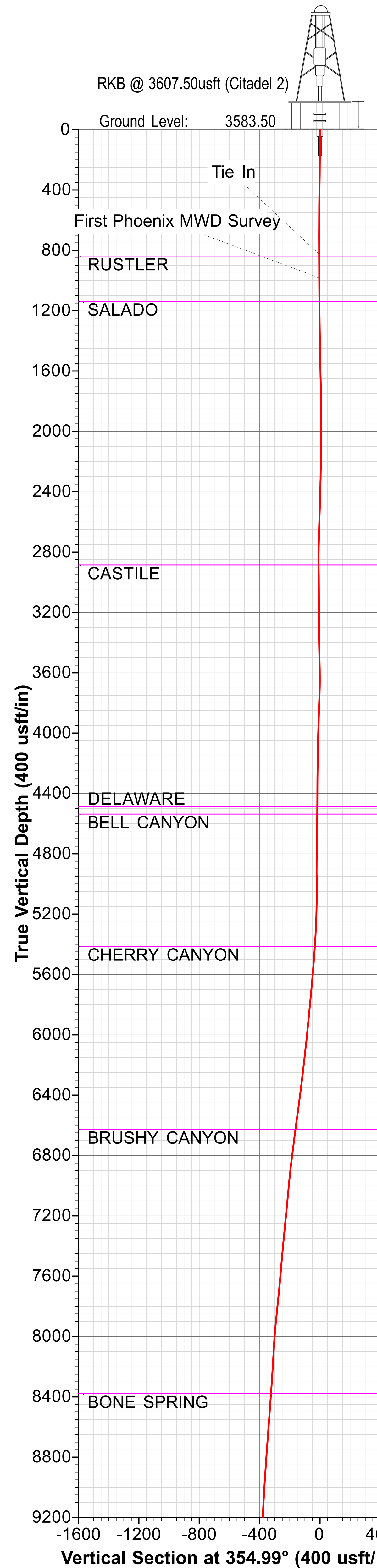
Project: Eddy County, NM (NAD83-NME)
Site: Top Spot 12_13
Well: Top Spot 12_13 Fed Com 25H
Wellbore: OH / 74975
Design: Plan 5 06-20-24
Rig: Citadel 2



PHOENIX
TECHNOLOGY SERVICES



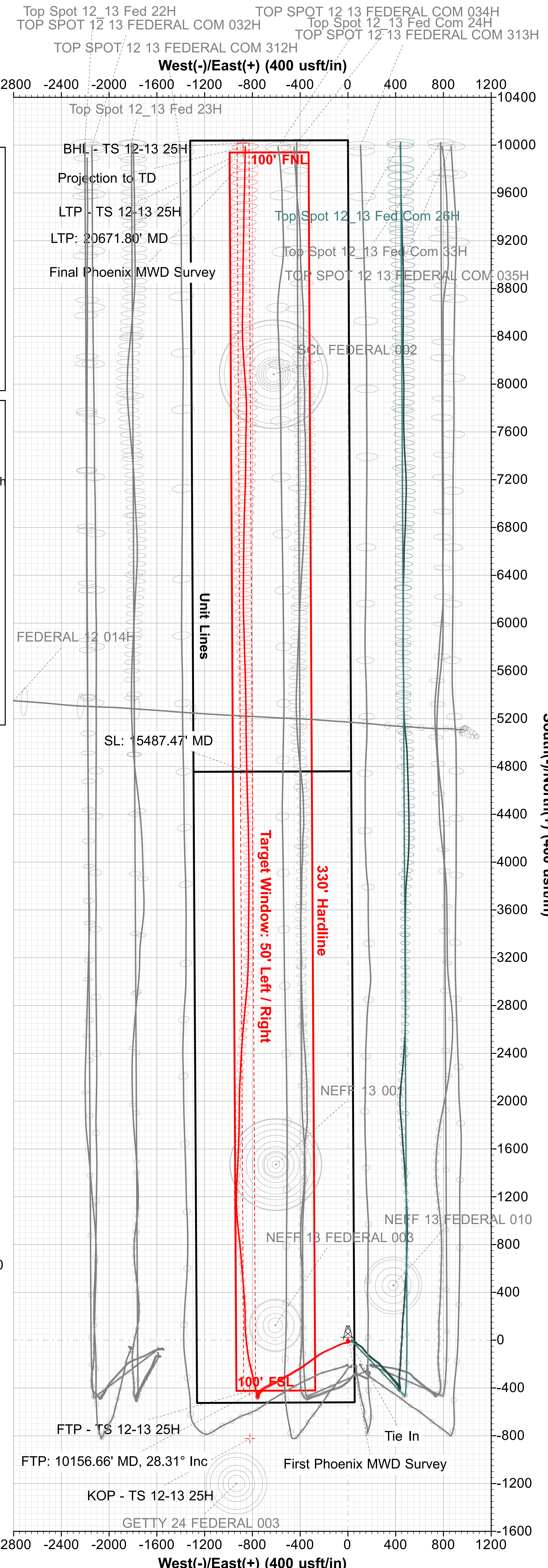
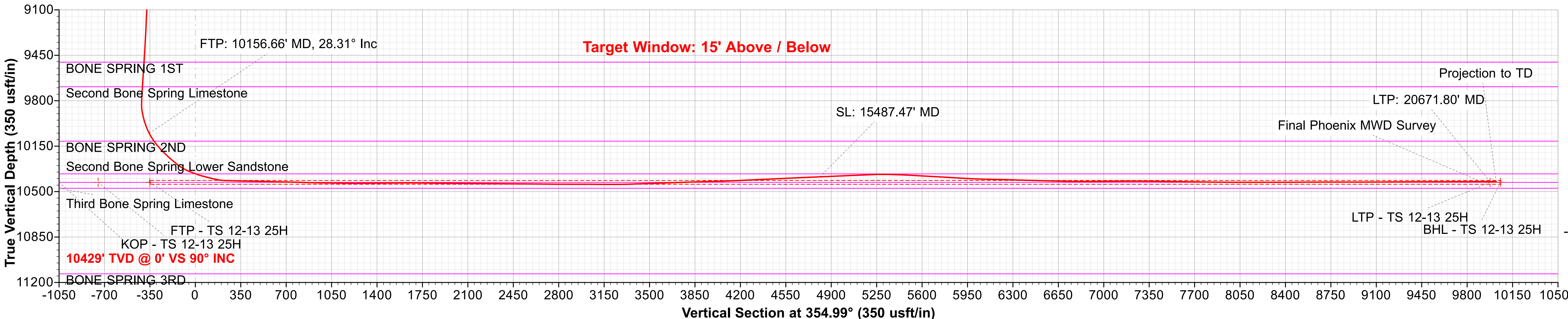
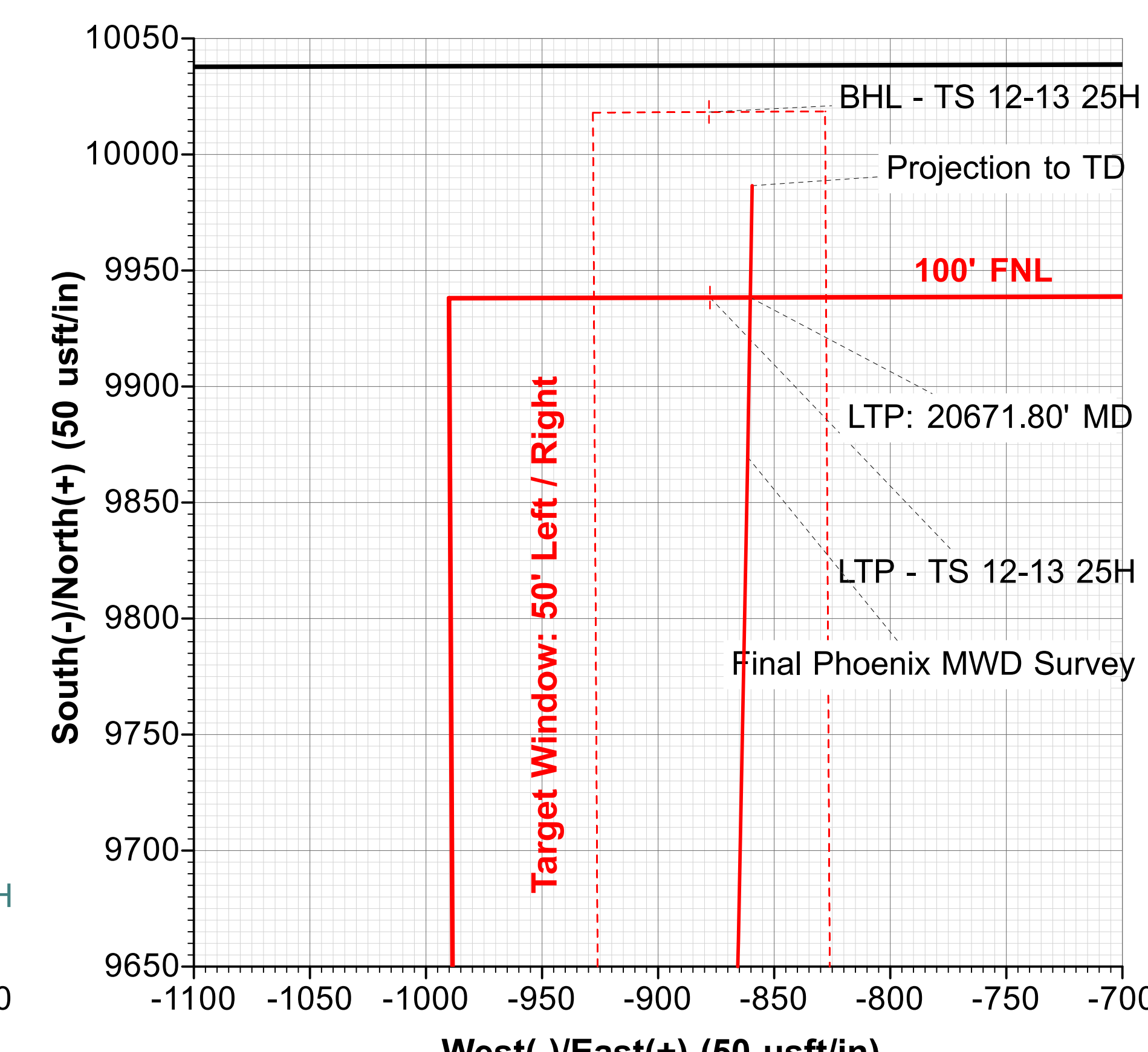
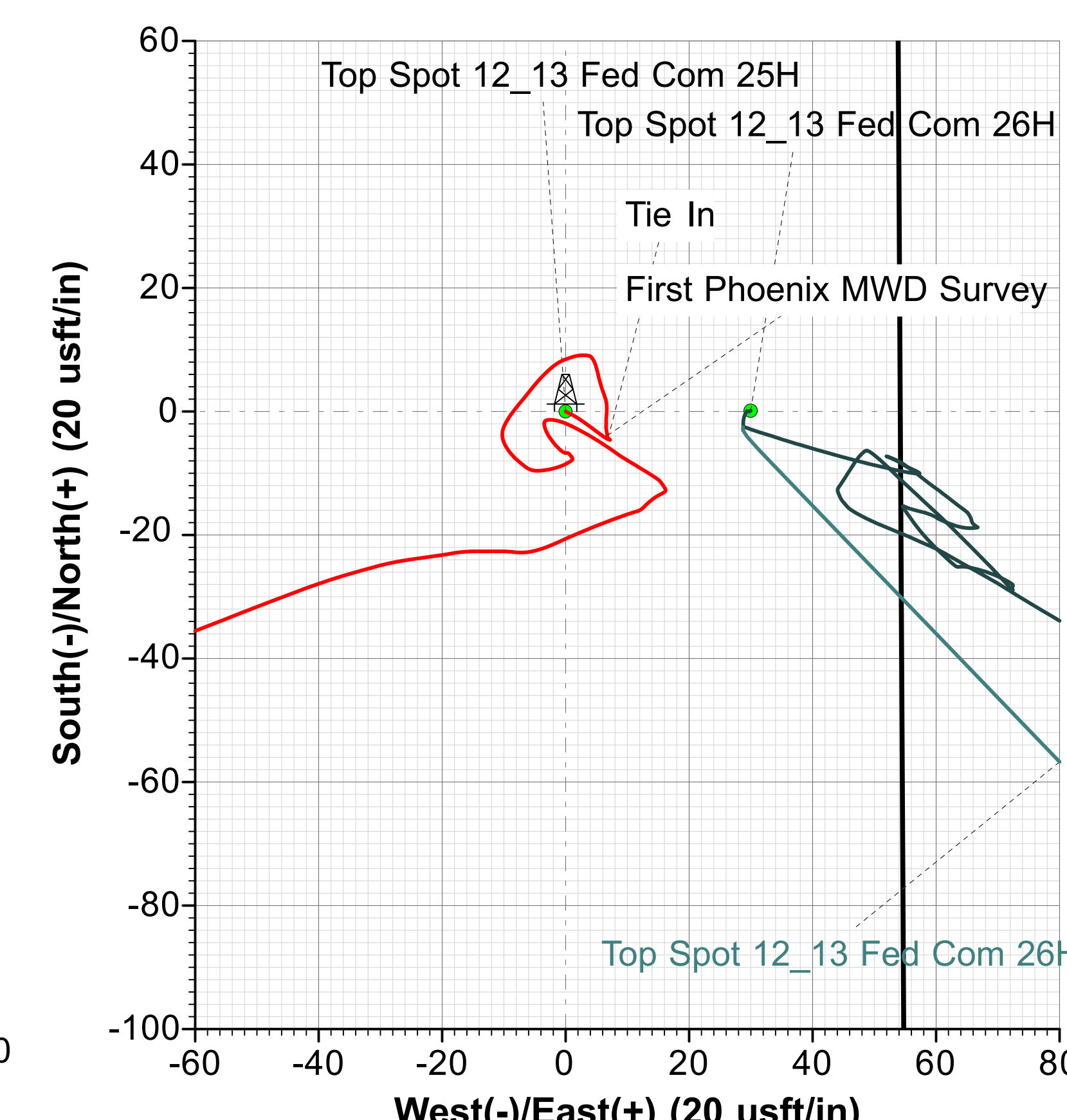
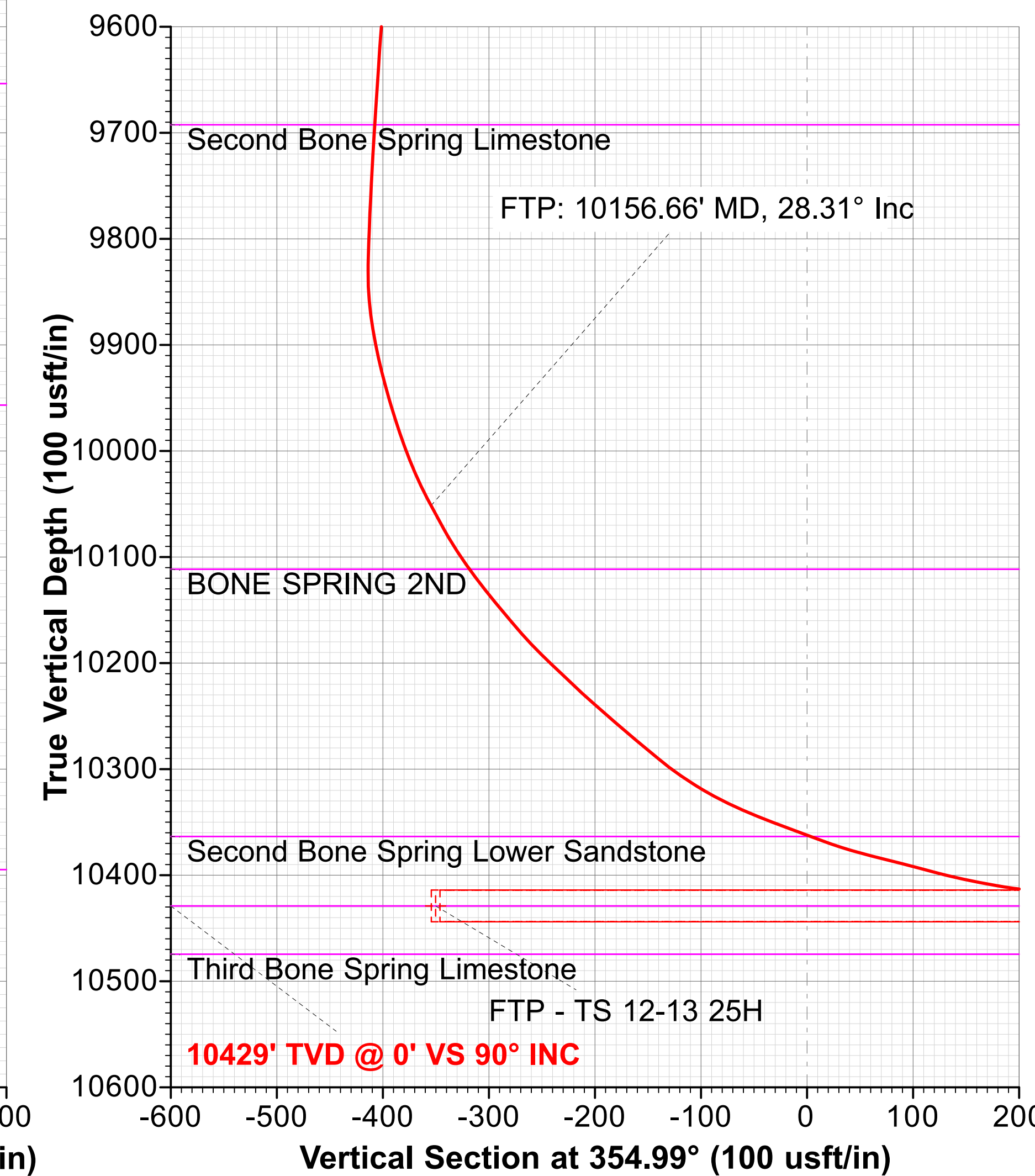
Azimuths to Grid North
True North: -0.32°
Magnetic North: 6.28°
Magnetic Field
Strength: 47554.9nT
Dip Angle: 60.06°
Date: 6/26/2024
Model: IFR



WELL DETAILS											
		Ground Level:		3583.50							
+N/-S	+E/-W	Northing	Easting	Latitude		Longitude					
0.00	0.00	504570.52	728380.31	32° 23' 8.436967 N		103° 43' 38.643359 W					
SECTION DETAILS											
MD	Inc	Azi	TVD	+N/-S	+E/-W	VSect	Departure	Annotation			
826.00	0.13	293.19	825.93	-4.35	6.89	-4.94	9.18	Tie In			
983.00	0.26	3.32	982.93	-3.91	6.75	-4.49	9.67	First Phoenix MWD Survey			
10156.66	28.31	348.64	10051.48	-423.31	-769.71	-354.49	1072.46	FTP: 10156.66' MD, 28.31° Inc			
15487.47	92.26	358.96	10386.46	4757.60	-846.31	4813.33	6268.53	SL: 15487.47' MD			
20603.00	90.17	0.94	10423.47	9869.58	-861.38	9907.10	11382.38	Final Phoenix MWD Survey			
20671.80	90.17	0.94	10423.26	9938.37	-860.26	9975.52	11451.18	LTP: 20671.80' MD			
20720.00	90.17	0.94	10423.12	9986.56	-859.46	10023.46	11499.38	Projection to TD			

FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
838.50	838.57	RUSTLER
1138.50	1138.57	SALADO
2886.50	2886.57	CASTILE
4486.50	4486.57	DELAWARE
4537.50	4537.57	BELL CANYON
5414.50	5422.56	CHERRY CANYON
6627.50	6667.47	BRUSHY CANYON
8379.50	8462.44	BONE SPRING
9503.50	9596.03	BONE SPRING 1ST
9692.50	9785.48	Second Bone Spring Limestone
10111.50	10214.28	BONE SPRING 2ND
10363.50	10573.07	Second Bone Spring Lower Sandstone
10429.00	10849.86	10429' TVD @ 0° VS 90° INC

Map System: US State Plane 1983
Datum: North American Datum 1983
Ellipsoid: GRS 1980
Zone Name: New Mexico Eastern Zone
Local Origin: Well Top Spot 12_13 Fed Com 25H, Grid North
Latitude: 32° 23' 8.436967 N
Longitude: 103° 43' 38.643359 W
Grid East: 728380.31
Grid North: 504570.52
Scale Factor: 1.000
Geomagnetic Model: IFR
Sample Date: 26-Jun-24
Magnetic Declination: 6.601°
Dip Angle from Horizontal: 60.064°
Magnetic Field Strength: 47554.90000000nT
To convert a Magnetic Direction to a Grid Direction, Add 6.276°
To convert a Magnetic Direction to a True Direction, Add 6.601° East
To convert a True Direction to a Grid Direction, Subtract 0.325°





OXY USA INC.

Eddy County, NM (NAD83-NME)

Top Spot 12_13

Top Spot 12_13 Fed Com 25H

3001547639

OH / 74975

Design: Surveys (Citadel 2)

Standard Survey Report

30 July, 2024





Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Top Spot 12_13 Fed Com 25H
Project:	Eddy County, NM (NAD83-NME)	TVD Reference:	RKB @ 3607.50usft (Citadel 2)
Site:	Top Spot 12_13	MD Reference:	RKB @ 3607.50usft (Citadel 2)
Well:	Top Spot 12_13 Fed Com 25H	North Reference:	Grid
Wellbore:	OH / 74975	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Citadel 2)	Database:	USAEDMDB

Project	Eddy County, NM (NAD83-NME)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Top Spot 12_13		
Site Position:		Northing:	504,694.60 usft
From:	Map	Easting:	726,555.60 usft
Position Uncertainty:	0.90 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 23' 9.766554 N
		Longitude:	103° 43' 59.914620 W

Well	Top Spot 12_13 Fed Com 25H		
Well Position	+N/-S	0.00 usft	Northing: 504,570.52 usft
	+E/-W	0.00 usft	Easting: 728,380.31 usft
Position Uncertainty	2.00 usft	Wellhead Elevation:	usft
Grid Convergence:	0.325 °	Ground Level:	3,583.50 usft

Wellbore	OH / 74975				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IFR	6/26/2024	6.601	60.064	47,554.90000000

Design	Surveys (Citadel 2)				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00		354.99

Survey Program	Date	7/30/2024			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
24.00	826.00	MWD Surveys - Adj Surface (OH / 74975)	B004Mc_MWD+HRGM+S	MWD+HRGM+Sag	
840.27	9,899.00	Phoenix MWD Surveys - Int - SQC (OH / 7	SQC_C705Mb_MWD+IFF	MWD+IFR1+Sag+FDIR	
9,913.00	20,720.00	Phoenix MWD Surveys - Prod - SQC (OH	SQC_C705Mb_MWD+IFF	MWD+IFR1+Sag+FDIR	

Survey	Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	24.00	0.00	0.00	24.00	0.00	0.00	0.00	0.00	0.00	0.00
	147.00	0.68	116.38	147.00	-0.32	0.65	-0.38	0.55	0.55	0.00
	208.00	0.87	116.86	207.99	-0.69	1.39	-0.81	0.31	0.31	0.79
	300.00	1.16	126.69	299.98	-1.57	2.76	-1.80	0.37	0.32	10.68
	389.00	1.12	125.68	388.96	-2.61	4.19	-2.97	0.05	-0.04	-1.13
	479.00	1.10	128.02	478.94	-3.66	5.59	-4.13	0.06	-0.02	2.60
	568.00	0.67	118.32	567.93	-4.43	6.72	-5.00	0.51	-0.48	-10.90



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Top Spot 12_13 Fed Com 25H
Project:	Eddy County, NM (NAD83-NME)	TVD Reference:	RKB @ 3607.50usft (Citadel 2)
Site:	Top Spot 12_13	MD Reference:	RKB @ 3607.50usft (Citadel 2)
Well:	Top Spot 12_13 Fed Com 25H	North Reference:	Grid
Wellbore:	OH / 74975	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Citadel 2)	Database:	USAEDMDB

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
658.00	0.10	33.33	657.93	-4.61	7.22	-5.23	0.74	-0.63	-94.43
747.00	0.23	298.84	746.93	-4.46	7.11	-5.07	0.29	0.15	-106.17
826.00	0.13	293.19	825.93	-4.35	6.89	-4.94	0.13	-0.13	-7.15
Tie In									
840.27	0.13	304.03	840.20	-4.34	6.86	-4.92	0.17	0.00	75.96
854.55	0.13	314.65	854.48	-4.32	6.83	-4.90	0.17	0.00	74.37
868.82	0.14	324.45	868.75	-4.29	6.81	-4.87	0.18	0.07	68.68
883.09	0.15	333.01	883.02	-4.26	6.79	-4.84	0.17	0.07	59.99
897.36	0.16	340.21	897.29	-4.22	6.78	-4.80	0.15	0.07	50.46
911.64	0.17	346.15	911.57	-4.18	6.77	-4.76	0.14	0.07	41.60
925.91	0.19	351.02	925.84	-4.14	6.76	-4.71	0.18	0.14	34.13
940.18	0.21	355.02	940.11	-4.09	6.75	-4.66	0.17	0.14	28.03
954.45	0.23	358.31	954.38	-4.04	6.75	-4.61	0.17	0.14	23.06
968.73	0.25	1.04	968.66	-3.98	6.75	-4.55	0.16	0.14	19.12
983.00	0.26	3.32	982.93	-3.91	6.75	-4.49	0.10	0.07	15.98
First Phoenix MWD Survey									
996.71	0.29	359.39	996.64	-3.85	6.75	-4.42	0.26	0.22	-28.67
1,010.43	0.32	356.14	1,010.36	-3.77	6.75	-4.35	0.25	0.22	-23.69
1,024.14	0.36	353.41	1,024.07	-3.69	6.74	-4.27	0.31	0.29	-19.91
1,037.86	0.39	351.08	1,037.79	-3.60	6.73	-4.18	0.25	0.22	-16.98
1,051.57	0.42	349.07	1,051.50	-3.51	6.71	-4.08	0.24	0.22	-14.66
1,065.29	0.45	347.31	1,065.22	-3.41	6.69	-3.98	0.24	0.22	-12.83
1,079.00	0.48	345.76	1,078.93	-3.30	6.67	-3.87	0.24	0.22	-11.31
1,092.57	0.48	348.00	1,092.50	-3.19	6.64	-3.76	0.14	0.00	16.51
1,106.14	0.48	350.23	1,106.07	-3.08	6.62	-3.64	0.14	0.00	16.43
1,119.71	0.48	352.43	1,119.63	-2.96	6.60	-3.53	0.14	0.00	16.21
1,133.29	0.48	354.60	1,133.21	-2.85	6.59	-3.42	0.13	0.00	15.98
1,146.86	0.48	356.74	1,146.78	-2.74	6.58	-3.30	0.13	0.00	15.77
1,160.43	0.48	358.84	1,160.35	-2.62	6.58	-3.19	0.13	0.00	15.48
1,174.00	0.49	0.89	1,173.92	-2.51	6.58	-3.07	0.15	0.07	15.11
1,187.71	0.50	0.79	1,187.63	-2.39	6.58	-2.96	0.07	0.07	-0.73
1,201.43	0.52	0.67	1,201.35	-2.27	6.58	-2.83	0.15	0.15	-0.87
1,215.14	0.54	0.53	1,215.06	-2.14	6.58	-2.71	0.15	0.15	-1.02
1,228.86	0.55	0.37	1,228.78	-2.01	6.58	-2.58	0.07	0.07	-1.17
1,242.57	0.57	0.19	1,242.49	-1.88	6.58	-2.44	0.15	0.15	-1.31
1,256.29	0.59	0.00	1,256.21	-1.74	6.58	-2.31	0.15	0.15	-1.38
1,270.00	0.61	359.80	1,269.92	-1.60	6.58	-2.16	0.15	0.15	-1.46
1,283.57	0.65	0.97	1,283.49	-1.45	6.58	-2.02	0.31	0.29	8.62
1,297.14	0.69	1.99	1,297.06	-1.29	6.59	-1.86	0.31	0.29	7.52
1,310.71	0.73	2.86	1,310.63	-1.12	6.59	-1.69	0.31	0.29	6.41
1,324.29	0.77	3.63	1,324.20	-0.94	6.60	-1.51	0.30	0.29	5.67
1,337.86	0.81	4.30	1,337.77	-0.76	6.62	-1.33	0.30	0.29	4.94
1,351.43	0.85	4.89	1,351.34	-0.56	6.63	-1.14	0.30	0.29	4.35
1,365.00	0.89	5.41	1,364.91	-0.35	6.65	-0.93	0.30	0.29	3.83

Phoenix

Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Top Spot 12_13 Fed Com 25H
Project:	Eddy County, NM (NAD83-NME)	TVD Reference:	RKB @ 3607.50usft (Citadel 2)
Site:	Top Spot 12_13	MD Reference:	RKB @ 3607.50usft (Citadel 2)
Well:	Top Spot 12_13 Fed Com 25H	North Reference:	Grid
Wellbore:	OH / 74975	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Citadel 2)	Database:	USAEDMDB

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,378.57	0.90	3.87	1,378.48	-0.14	6.67	-0.72	0.19	0.07	-11.35
1,392.14	0.90	2.33	1,392.05	0.07	6.68	-0.51	0.18	0.00	-11.35
1,405.71	0.91	0.79	1,405.62	0.28	6.69	-0.30	0.19	0.07	-11.35
1,419.29	0.91	359.25	1,419.19	0.50	6.69	-0.09	0.18	0.00	-11.34
1,432.86	0.92	357.71	1,432.76	0.72	6.68	0.13	0.20	0.07	-11.35
1,446.43	0.93	356.18	1,446.33	0.94	6.67	0.35	0.20	0.07	-11.27
1,460.00	0.93	354.66	1,459.90	1.15	6.65	0.57	0.18	0.00	-11.20
1,473.57	0.98	351.75	1,473.47	1.38	6.62	0.80	0.51	0.37	-21.44
1,487.14	1.02	349.07	1,487.03	1.61	6.58	1.03	0.45	0.29	-19.75
1,500.71	1.07	346.60	1,500.60	1.85	6.53	1.28	0.50	0.37	-18.20
1,514.29	1.11	344.33	1,514.18	2.10	6.47	1.53	0.43	0.29	-16.72
1,527.86	1.16	342.23	1,527.75	2.36	6.39	1.80	0.48	0.37	-15.48
1,541.43	1.22	340.30	1,541.31	2.63	6.30	2.07	0.53	0.44	-14.22
1,555.00	1.27	338.51	1,554.88	2.90	6.20	2.35	0.47	0.37	-13.19
1,568.57	1.27	339.31	1,568.45	3.19	6.09	2.64	0.13	0.00	5.90
1,582.14	1.28	340.35	1,582.01	3.47	5.98	2.93	0.19	0.07	7.66
1,595.71	1.28	341.49	1,595.58	3.76	5.88	3.23	0.19	0.00	8.40
1,609.29	1.29	342.64	1,609.16	4.04	5.79	3.52	0.20	0.07	8.47
1,622.86	1.31	343.73	1,622.72	4.34	5.70	3.83	0.23	0.15	8.03
1,636.43	1.33	344.68	1,636.29	4.64	5.62	4.13	0.22	0.15	7.00
1,650.00	1.35	345.40	1,649.86	4.95	5.53	4.44	0.19	0.15	5.31
1,663.57	1.39	346.02	1,663.42	5.26	5.45	4.77	0.31	0.29	4.57
1,677.14	1.43	346.41	1,676.99	5.59	5.37	5.10	0.30	0.29	2.87
1,690.71	1.47	346.54	1,690.55	5.92	5.29	5.43	0.30	0.29	0.96
1,704.29	1.51	346.38	1,704.13	6.26	5.21	5.78	0.30	0.29	-1.18
1,717.86	1.54	345.85	1,717.69	6.61	5.13	6.14	0.24	0.22	-3.91
1,731.43	1.56	344.81	1,731.26	6.97	5.03	6.50	0.25	0.15	-7.66
1,745.00	1.55	343.00	1,744.82	7.32	4.93	6.86	0.37	-0.07	-13.34
1,758.71	1.50	339.98	1,758.53	7.67	4.81	7.22	0.69	-0.36	-22.03
1,772.43	1.42	335.92	1,772.25	7.99	4.68	7.55	0.95	-0.58	-29.59
1,786.14	1.35	330.93	1,785.95	8.29	4.54	7.86	1.02	-0.51	-36.40
1,799.86	1.28	325.19	1,799.67	8.56	4.37	8.14	1.09	-0.51	-41.84
1,813.57	1.23	319.08	1,813.37	8.79	4.19	8.39	1.04	-0.36	-44.57
1,827.29	1.04	297.43	1,827.09	8.96	3.98	8.58	3.39	-1.38	-157.80
1,841.00	0.99	280.42	1,840.80	9.04	3.75	8.68	2.22	-0.36	-124.07
1,854.57	0.99	277.48	1,854.37	9.08	3.52	8.73	0.37	0.00	-21.67
1,868.14	1.00	274.59	1,867.94	9.10	3.29	8.78	0.38	0.07	-21.30
1,881.71	1.02	271.76	1,881.50	9.11	3.05	8.81	0.40	0.15	-20.85
1,895.29	1.03	268.99	1,895.08	9.12	2.80	8.84	0.37	0.07	-20.40
1,908.86	1.05	266.31	1,908.65	9.11	2.56	8.85	0.39	0.15	-19.75
1,922.43	1.07	263.71	1,922.22	9.08	2.31	8.85	0.38	0.15	-19.16
1,936.00	1.09	261.21	1,935.78	9.05	2.06	8.84	0.38	0.15	-18.42
1,949.57	1.11	258.82	1,949.35	9.00	1.80	8.81	0.37	0.15	-17.61



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Top Spot 12_13 Fed Com 25H
Project:	Eddy County, NM (NAD83-NME)	TVD Reference:	RKB @ 3607.50usft (Citadel 2)
Site:	Top Spot 12_13	MD Reference:	RKB @ 3607.50usft (Citadel 2)
Well:	Top Spot 12_13 Fed Com 25H	North Reference:	Grid
Wellbore:	OH / 74975	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Citadel 2)	Database:	USAEDMDB

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,963.14	1.14	256.47	1,962.92	8.95	1.54	8.78	0.41	0.22	-17.32
1,976.71	1.17	254.18	1,976.49	8.88	1.27	8.73	0.41	0.22	-16.88
1,990.29	1.20	251.92	1,990.06	8.80	1.01	8.68	0.41	0.22	-16.64
2,003.86	1.27	251.16	2,003.63	8.70	0.73	8.61	0.53	0.52	-5.60
2,017.43	1.34	251.08	2,017.20	8.60	0.44	8.53	0.52	0.52	-0.59
2,031.00	1.40	251.01	2,030.76	8.50	0.13	8.45	0.44	0.44	-0.52
2,044.57	1.41	248.37	2,044.33	8.38	-0.18	8.37	0.48	0.07	-19.45
2,058.14	1.41	245.54	2,057.89	8.25	-0.49	8.26	0.51	0.00	-20.85
2,071.71	1.41	242.63	2,071.46	8.11	-0.79	8.14	0.53	0.00	-21.44
2,085.29	1.41	239.74	2,085.04	7.95	-1.08	8.01	0.52	0.00	-21.28
2,098.86	1.42	236.96	2,098.60	7.77	-1.37	7.86	0.51	0.07	-20.49
2,112.43	1.44	234.41	2,112.17	7.58	-1.65	7.69	0.49	0.15	-18.79
2,126.00	1.46	232.23	2,125.73	7.37	-1.92	7.51	0.43	0.15	-16.06
2,139.57	1.48	230.43	2,139.30	7.16	-2.20	7.32	0.37	0.15	-13.26
2,153.14	1.50	228.95	2,152.86	6.93	-2.46	7.12	0.32	0.15	-10.91
2,166.71	1.52	227.69	2,166.43	6.69	-2.73	6.90	0.29	0.15	-9.29
2,180.29	1.55	226.58	2,180.01	6.44	-3.00	6.68	0.31	0.22	-8.17
2,193.86	1.58	225.57	2,193.57	6.19	-3.26	6.45	0.30	0.22	-7.44
2,207.43	1.60	224.62	2,207.14	5.92	-3.53	6.21	0.24	0.15	-7.00
2,221.00	1.63	223.70	2,220.70	5.65	-3.80	5.96	0.29	0.22	-6.78
2,234.57	1.64	222.79	2,234.26	5.36	-4.06	5.70	0.21	0.07	-6.71
2,248.14	1.66	221.89	2,247.83	5.07	-4.33	5.43	0.24	0.15	-6.63
2,261.71	1.67	221.03	2,261.39	4.78	-4.59	5.16	0.20	0.07	-6.34
2,275.29	1.68	220.22	2,274.97	4.48	-4.85	4.88	0.19	0.07	-5.96
2,288.86	1.70	219.51	2,288.53	4.17	-5.10	4.60	0.21	0.15	-5.23
2,302.43	1.71	218.96	2,302.10	3.86	-5.36	4.31	0.14	0.07	-4.05
2,316.00	1.73	218.63	2,315.66	3.54	-5.61	4.02	0.16	0.15	-2.43
2,329.57	1.76	218.69	2,329.22	3.22	-5.87	3.72	0.22	0.22	0.44
2,343.14	1.79	218.93	2,342.79	2.89	-6.13	3.41	0.23	0.22	1.77
2,356.71	1.82	219.24	2,356.35	2.56	-6.40	3.11	0.23	0.22	2.28
2,370.29	1.86	219.52	2,369.92	2.22	-6.68	2.80	0.30	0.29	2.06
2,383.86	1.90	219.70	2,383.49	1.88	-6.96	2.48	0.30	0.29	1.33
2,397.43	1.95	219.68	2,397.05	1.53	-7.26	2.16	0.37	0.37	-0.15
2,411.00	1.99	219.39	2,410.61	1.17	-7.55	1.82	0.30	0.29	-2.14
2,424.57	2.06	218.87	2,424.17	0.80	-7.85	1.48	0.53	0.52	-3.83
2,438.14	2.12	218.06	2,437.73	0.41	-8.16	1.12	0.49	0.44	-5.97
2,451.71	2.18	217.00	2,451.29	0.00	-8.47	0.74	0.53	0.44	-7.81
2,465.29	2.23	215.66	2,464.86	-0.42	-8.78	0.35	0.53	0.37	-9.87
2,478.86	2.27	213.95	2,478.42	-0.85	-9.09	-0.06	0.58	0.29	-12.60
2,492.43	2.29	211.69	2,491.98	-1.31	-9.38	-0.48	0.68	0.15	-16.65
2,506.00	2.27	208.55	2,505.54	-1.77	-9.65	-0.93	0.93	-0.15	-23.14
2,519.57	2.17	204.15	2,519.10	-2.24	-9.88	-1.37	1.46	-0.74	-32.42
2,533.14	2.04	198.44	2,532.66	-2.71	-10.06	-1.82	1.82	-0.96	-42.08



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Top Spot 12_13 Fed Com 25H
Project:	Eddy County, NM (NAD83-NME)	TVD Reference:	RKB @ 3607.50usft (Citadel 2)
Site:	Top Spot 12_13	MD Reference:	RKB @ 3607.50usft (Citadel 2)
Well:	Top Spot 12_13 Fed Com 25H	North Reference:	Grid
Wellbore:	OH / 74975	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Citadel 2)	Database:	USAEDMDB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
2,546.71	1.92	191.45	2,546.22	-3.16	-10.19	-2.26	1.99	-0.88	-51.51
2,560.29	1.83	183.39	2,559.80	-3.60	-10.24	-2.69	2.05	-0.66	-59.35
2,573.86	1.78	174.79	2,573.36	-4.03	-10.24	-3.12	2.03	-0.37	-63.38
2,587.43	1.79	166.59	2,586.92	-4.44	-10.17	-3.54	1.88	0.07	-60.43
2,601.00	1.84	159.89	2,600.49	-4.85	-10.05	-3.96	1.61	0.37	-49.37
2,614.57	1.81	154.86	2,614.05	-5.25	-9.88	-4.37	1.20	-0.22	-37.07
2,628.14	1.83	150.53	2,627.61	-5.63	-9.68	-4.77	1.02	0.15	-31.91
2,641.71	1.87	146.81	2,641.17	-6.01	-9.45	-5.16	0.93	0.29	-27.41
2,655.29	1.94	143.55	2,654.75	-6.38	-9.20	-5.55	0.95	0.52	-24.01
2,668.86	2.01	140.63	2,668.31	-6.75	-8.91	-5.94	0.90	0.52	-21.52
2,682.43	2.10	137.92	2,681.87	-7.12	-8.59	-6.34	0.98	0.66	-19.97
2,696.00	2.18	135.29	2,695.43	-7.48	-8.24	-6.74	0.93	0.59	-19.38
2,709.57	2.25	132.56	2,708.99	-7.85	-7.87	-7.13	0.93	0.52	-20.12
2,723.14	2.32	129.86	2,722.55	-8.20	-7.46	-7.52	0.95	0.52	-19.90
2,736.71	2.40	127.27	2,736.11	-8.55	-7.02	-7.91	0.98	0.59	-19.09
2,750.29	2.47	124.81	2,749.68	-8.89	-6.55	-8.28	0.93	0.52	-18.11
2,763.86	2.54	122.52	2,763.23	-9.22	-6.06	-8.65	0.90	0.52	-16.88
2,777.43	2.11	111.74	2,776.79	-9.47	-5.58	-8.95	4.51	-3.17	-79.44
2,791.00	1.79	93.09	2,790.35	-9.58	-5.13	-9.09	5.21	-2.36	-137.44
2,804.71	1.89	89.94	2,804.06	-9.59	-4.69	-9.14	1.04	0.73	-22.98
2,818.43	1.99	86.99	2,817.77	-9.58	-4.23	-9.17	1.03	0.73	-21.50
2,832.14	2.10	84.26	2,831.47	-9.54	-3.74	-9.18	1.07	0.80	-19.91
2,845.86	2.19	81.71	2,845.18	-9.48	-3.23	-9.16	0.96	0.66	-18.59
2,859.57	2.28	79.27	2,858.88	-9.39	-2.70	-9.11	0.96	0.66	-17.80
2,873.29	2.33	76.85	2,872.59	-9.27	-2.16	-9.05	0.80	0.36	-17.64
2,887.00	2.34	74.29	2,886.29	-9.13	-1.62	-8.96	0.76	0.07	-18.67
2,900.43	2.26	71.45	2,899.71	-8.97	-1.11	-8.84	1.04	-0.60	-21.15
2,913.86	2.15	68.26	2,913.13	-8.80	-0.62	-8.71	1.23	-0.82	-23.75
2,927.29	2.03	64.73	2,926.55	-8.60	-0.17	-8.55	1.31	-0.89	-26.28
2,940.71	1.90	60.93	2,939.96	-8.39	0.24	-8.38	1.37	-0.97	-28.32
2,954.14	1.80	57.09	2,953.38	-8.17	0.61	-8.19	1.19	-0.74	-28.59
2,967.57	1.35	54.13	2,966.81	-7.96	0.91	-8.01	3.40	-3.35	-22.04
2,981.00	0.56	48.85	2,980.24	-7.83	1.09	-7.89	5.91	-5.88	-39.31
2,994.57	0.22	18.38	2,993.81	-7.76	1.15	-7.83	2.85	-2.51	-224.54
3,008.14	0.25	0.81	3,007.38	-7.70	1.16	-7.78	0.57	0.22	-129.48
3,021.71	0.29	347.39	3,020.95	-7.64	1.15	-7.71	0.55	0.29	-98.89
3,035.29	0.34	337.77	3,034.53	-7.57	1.13	-7.64	0.53	0.37	-70.84
3,048.86	0.40	330.87	3,048.10	-7.49	1.09	-7.56	0.55	0.44	-50.85
3,062.43	0.47	325.80	3,061.67	-7.40	1.03	-7.47	0.59	0.52	-37.36
3,076.00	0.54	321.97	3,075.23	-7.31	0.96	-7.36	0.57	0.52	-28.22
3,089.71	0.49	321.70	3,088.94	-7.21	0.89	-7.26	0.37	-0.36	-1.97
3,103.43	0.44	321.33	3,102.66	-7.12	0.82	-7.17	0.37	-0.36	-2.70
3,117.14	0.40	320.84	3,116.37	-7.05	0.76	-7.08	0.29	-0.29	-3.57
3,130.86	0.35	320.17	3,130.09	-6.98	0.70	-7.01	0.37	-0.36	-4.88



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Top Spot 12_13 Fed Com 25H
Project:	Eddy County, NM (NAD83-NME)	TVD Reference:	RKB @ 3607.50usft (Citadel 2)
Site:	Top Spot 12_13	MD Reference:	RKB @ 3607.50usft (Citadel 2)
Well:	Top Spot 12_13 Fed Com 25H	North Reference:	Grid
Wellbore:	OH / 74975	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Citadel 2)	Database:	USAEDMDB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3,144.57	0.31	319.24	3,143.80	-6.92	0.65	-6.95	0.29	-0.29	-6.78
3,158.29	0.26	317.94	3,157.52	-6.86	0.60	-6.89	0.37	-0.36	-9.48
3,172.00	0.21	316.00	3,171.23	-6.82	0.56	-6.85	0.37	-0.36	-14.15
3,185.57	0.23	303.83	3,184.80	-6.79	0.52	-6.81	0.37	0.15	-89.68
3,199.14	0.25	293.55	3,198.37	-6.76	0.47	-6.78	0.35	0.15	-75.76
3,212.71	0.29	285.26	3,211.94	-6.74	0.41	-6.75	0.41	0.29	-61.09
3,226.29	0.32	278.69	3,225.52	-6.73	0.34	-6.73	0.34	0.22	-48.38
3,239.86	0.36	273.48	3,239.09	-6.72	0.26	-6.72	0.37	0.29	-38.39
3,253.43	0.41	269.31	3,252.66	-6.72	0.17	-6.71	0.42	0.37	-30.73
3,267.00	0.45	265.94	3,266.23	-6.72	0.07	-6.70	0.35	0.29	-24.83
3,280.57	0.51	280.20	3,279.80	-6.71	-0.04	-6.69	0.98	0.44	105.08
3,294.14	0.60	290.78	3,293.37	-6.68	-0.17	-6.64	1.00	0.66	77.97
3,307.71	0.71	298.44	3,306.94	-6.61	-0.31	-6.56	1.03	0.81	56.45
3,321.29	0.82	304.05	3,320.52	-6.52	-0.46	-6.45	0.98	0.81	41.31
3,334.86	0.94	308.26	3,334.09	-6.40	-0.63	-6.32	1.00	0.88	31.02
3,348.43	1.06	311.49	3,347.65	-6.24	-0.81	-6.15	0.98	0.88	23.80
3,362.00	1.19	314.03	3,361.22	-6.06	-1.01	-5.95	1.03	0.96	18.72
3,375.57	1.22	315.48	3,374.79	-5.86	-1.21	-5.73	0.32	0.22	10.69
3,389.14	1.27	316.99	3,388.36	-5.65	-1.41	-5.50	0.44	0.37	11.13
3,402.71	1.32	318.50	3,401.92	-5.42	-1.62	-5.26	0.45	0.37	11.13
3,416.29	1.36	320.03	3,415.50	-5.18	-1.83	-5.00	0.40	0.29	11.27
3,429.86	1.41	321.59	3,429.06	-4.93	-2.03	-4.73	0.46	0.37	11.50
3,443.43	1.45	323.24	3,442.63	-4.66	-2.24	-4.45	0.42	0.29	12.16
3,457.00	1.49	325.08	3,456.20	-4.38	-2.44	-4.15	0.46	0.29	13.56
3,470.57	1.48	327.31	3,469.76	-4.08	-2.64	-3.84	0.43	-0.07	16.43
3,484.14	1.45	329.74	3,483.33	-3.79	-2.82	-3.53	0.51	-0.22	17.91
3,497.71	1.41	332.45	3,496.89	-3.49	-2.99	-3.22	0.58	-0.29	19.97
3,511.29	1.37	335.56	3,510.47	-3.20	-3.13	-2.91	0.63	-0.29	22.90
3,524.86	1.31	339.26	3,524.03	-2.90	-3.25	-2.61	0.78	-0.44	27.27
3,538.43	1.24	343.85	3,537.60	-2.62	-3.35	-2.31	0.91	-0.52	33.82
3,552.00	1.15	349.93	3,551.17	-2.34	-3.41	-2.04	1.14	-0.66	44.80
3,565.57	0.99	356.04	3,564.74	-2.09	-3.44	-1.78	1.45	-1.18	45.03
3,579.14	0.82	5.21	3,578.30	-1.88	-3.44	-1.57	1.64	-1.25	67.58
3,592.71	0.68	19.11	3,591.87	-1.70	-3.41	-1.40	1.68	-1.03	102.43
3,606.29	0.62	37.54	3,605.45	-1.57	-3.34	-1.27	1.59	-0.44	135.71
3,619.86	0.65	54.99	3,619.02	-1.47	-3.23	-1.18	1.44	0.22	128.59
3,633.43	1.35	77.70	3,632.59	-1.39	-3.01	-1.12	5.83	5.16	167.35
3,647.00	1.88	88.07	3,646.15	-1.35	-2.63	-1.11	4.44	3.91	76.42
3,660.57	1.99	94.19	3,659.72	-1.36	-2.17	-1.16	1.72	0.81	45.10
3,674.14	2.16	99.87	3,673.28	-1.42	-1.69	-1.27	1.96	1.25	41.86
3,687.71	2.38	104.72	3,686.84	-1.53	-1.16	-1.43	2.15	1.62	35.74
3,701.29	2.63	108.69	3,700.40	-1.71	-0.59	-1.65	2.24	1.84	29.23
3,714.86	2.88	111.87	3,713.96	-1.93	0.02	-1.93	2.16	1.84	23.43



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Top Spot 12_13 Fed Com 25H
Project:	Eddy County, NM (NAD83-NME)	TVD Reference:	RKB @ 3607.50usft (Citadel 2)
Site:	Top Spot 12_13	MD Reference:	RKB @ 3607.50usft (Citadel 2)
Well:	Top Spot 12_13 Fed Com 25H	North Reference:	Grid
Wellbore:	OH / 74975	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Citadel 2)	Database:	USAEDMDB

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3,728.43	3.11	114.35	3,727.51	-2.21	0.67	-2.26	1.95	1.69	18.28
3,742.00	3.32	116.24	3,741.06	-2.54	1.36	-2.65	1.73	1.55	13.93
3,755.57	3.43	118.07	3,754.60	-2.90	2.07	-3.07	1.13	0.81	13.49
3,769.14	3.51	119.36	3,768.15	-3.30	2.79	-3.53	0.82	0.59	9.51
3,782.71	3.57	120.29	3,781.69	-3.71	3.51	-4.01	0.61	0.44	6.85
3,796.29	3.61	120.97	3,795.25	-4.15	4.25	-4.50	0.43	0.29	5.01
3,809.86	3.65	121.44	3,808.79	-4.59	4.98	-5.01	0.37	0.29	3.46
3,823.43	3.68	121.73	3,822.33	-5.05	5.72	-5.53	0.26	0.22	2.14
3,837.00	3.54	122.31	3,835.88	-5.50	6.44	-6.04	1.07	-1.03	4.27
3,850.43	2.76	125.24	3,849.28	-5.91	7.06	-6.50	5.93	-5.81	21.82
3,863.86	2.41	126.43	3,862.70	-6.26	7.55	-6.90	2.64	-2.61	8.86
3,877.29	2.46	125.34	3,876.12	-6.60	8.01	-7.27	0.51	0.37	-8.12
3,890.71	2.53	124.12	3,889.53	-6.93	8.49	-7.64	0.65	0.52	-9.09
3,904.14	2.60	122.94	3,902.94	-7.26	8.99	-8.02	0.65	0.52	-8.79
3,917.57	2.68	121.99	3,916.36	-7.59	9.51	-8.39	0.68	0.60	-7.07
3,931.00	2.77	121.43	3,929.77	-7.93	10.06	-8.78	0.70	0.67	-4.17
3,944.57	2.87	121.09	3,943.33	-8.27	10.63	-9.17	0.75	0.74	-2.51
3,958.14	2.98	121.08	3,956.88	-8.63	11.22	-9.58	0.81	0.81	-0.07
3,971.71	3.10	121.27	3,970.43	-9.00	11.84	-10.00	0.89	0.88	1.40
3,985.29	3.21	121.56	3,983.99	-9.39	12.48	-10.45	0.82	0.81	2.14
3,998.86	3.31	121.91	3,997.54	-9.80	13.13	-10.91	0.75	0.74	2.58
4,012.43	3.40	122.30	4,011.08	-10.22	13.80	-11.39	0.68	0.66	2.87
4,026.00	3.23	123.95	4,024.63	-10.65	14.46	-11.87	1.44	-1.25	12.16
4,039.57	2.62	128.44	4,038.18	-11.06	15.02	-12.33	4.80	-4.50	33.09
4,053.14	1.60	139.80	4,051.74	-11.39	15.39	-12.69	8.09	-7.52	83.71
4,066.71	1.48	144.08	4,065.31	-11.68	15.61	-13.00	1.22	-0.88	31.54
4,080.29	1.45	146.05	4,078.89	-11.97	15.81	-13.30	0.43	-0.22	14.51
4,093.86	1.41	148.05	4,092.45	-12.25	16.00	-13.60	0.47	-0.29	14.74
4,107.43	1.36	149.77	4,106.02	-12.53	16.16	-13.89	0.48	-0.37	12.68
4,121.00	1.15	193.76	4,119.58	-12.80	16.21	-14.17	7.07	-1.55	324.17
4,134.57	1.55	232.93	4,133.15	-13.04	16.03	-14.39	7.22	2.95	288.65
4,148.14	1.83	243.79	4,146.71	-13.25	15.69	-14.57	3.13	2.06	80.03
4,161.71	1.75	242.30	4,160.28	-13.44	15.32	-14.73	0.68	-0.59	-10.98
4,175.29	1.66	240.29	4,173.85	-13.64	14.96	-14.89	0.80	-0.66	-14.80
4,188.86	1.56	237.85	4,187.42	-13.83	14.63	-15.06	0.89	-0.74	-17.98
4,202.43	1.47	235.12	4,200.98	-14.03	14.33	-15.23	0.85	-0.66	-20.12
4,216.00	1.39	232.27	4,214.55	-14.23	14.06	-15.40	0.79	-0.59	-21.00
4,229.57	1.30	230.78	4,228.11	-14.43	13.81	-15.58	0.71	-0.66	-10.98
4,243.14	1.21	229.50	4,241.68	-14.62	13.58	-15.75	0.69	-0.66	-9.43
4,256.71	1.12	228.33	4,255.25	-14.80	13.38	-15.91	0.69	-0.66	-8.62
4,270.29	1.05	227.22	4,268.83	-14.97	13.19	-16.07	0.54	-0.52	-8.17
4,283.86	0.97	226.13	4,282.39	-15.14	13.01	-16.22	0.61	-0.59	-8.03
4,297.43	0.91	225.06	4,295.96	-15.29	12.85	-16.36	0.46	-0.44	-7.89



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Top Spot 12_13 Fed Com 25H
Project:	Eddy County, NM (NAD83-NME)	TVD Reference:	RKB @ 3607.50usft (Citadel 2)
Site:	Top Spot 12_13	MD Reference:	RKB @ 3607.50usft (Citadel 2)
Well:	Top Spot 12_13 Fed Com 25H	North Reference:	Grid
Wellbore:	OH / 74975	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Citadel 2)	Database:	USAEDMDB

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,311.00	0.86	224.05	4,309.53	-15.44	12.71	-16.49	0.39	-0.37	-7.44
4,324.43	0.81	227.00	4,322.96	-15.58	12.57	-16.62	0.49	-0.37	21.97
4,337.86	0.77	230.27	4,336.39	-15.70	12.43	-16.73	0.45	-0.30	24.35
4,351.29	0.73	233.90	4,349.82	-15.81	12.29	-16.82	0.46	-0.30	27.03
4,364.71	0.70	237.92	4,363.24	-15.90	12.15	-16.90	0.44	-0.22	29.96
4,378.14	0.67	242.32	4,376.66	-15.98	12.01	-16.97	0.45	-0.22	32.76
4,391.57	0.64	247.11	4,390.09	-16.05	11.87	-17.02	0.46	-0.22	35.67
4,405.00	0.62	252.25	4,403.52	-16.10	11.73	-17.06	0.45	-0.15	38.27
4,418.57	0.66	252.21	4,417.09	-16.15	11.59	-17.10	0.29	0.29	-0.29
4,432.14	0.69	252.17	4,430.66	-16.20	11.44	-17.13	0.22	0.22	-0.29
4,445.71	0.72	252.13	4,444.23	-16.25	11.28	-17.17	0.22	0.22	-0.29
4,459.29	0.76	252.09	4,457.81	-16.30	11.11	-17.21	0.29	0.29	-0.29
4,472.86	0.79	252.05	4,471.38	-16.36	10.94	-17.25	0.22	0.22	-0.29
4,486.43	1.52	253.55	4,484.94	-16.44	10.68	-17.31	5.38	5.38	11.05
4,500.00	2.19	251.54	4,498.51	-16.57	10.26	-17.40	4.96	4.94	-14.81
4,513.57	2.25	251.17	4,512.07	-16.74	9.76	-17.53	0.45	0.44	-2.73
4,527.14	2.33	250.76	4,525.63	-16.92	9.25	-17.66	0.60	0.59	-3.02
4,540.71	2.41	250.35	4,539.18	-17.10	8.72	-17.80	0.60	0.59	-3.02
4,554.29	2.49	249.96	4,552.75	-17.30	8.17	-17.95	0.60	0.59	-2.87
4,567.86	2.56	249.59	4,566.31	-17.51	7.61	-18.10	0.53	0.52	-2.73
4,581.43	2.63	249.25	4,579.87	-17.72	7.04	-18.27	0.53	0.52	-2.51
4,595.00	2.67	248.96	4,593.42	-17.95	6.45	-18.44	0.31	0.29	-2.14
4,608.57	2.69	248.69	4,606.98	-18.17	5.86	-18.62	0.17	0.15	-1.99
4,622.14	2.69	248.47	4,620.53	-18.41	5.26	-18.80	0.08	0.00	-1.62
4,635.71	2.68	248.27	4,634.09	-18.64	4.67	-18.98	0.10	-0.07	-1.47
4,649.29	2.66	248.07	4,647.65	-18.88	4.09	-19.16	0.16	-0.15	-1.47
4,662.86	2.64	247.86	4,661.21	-19.11	3.50	-19.35	0.16	-0.15	-1.55
4,676.43	2.63	247.62	4,674.76	-19.35	2.93	-19.53	0.11	-0.07	-1.77
4,690.00	2.62	247.30	4,688.32	-19.59	2.35	-19.72	0.13	-0.07	-2.36
4,703.43	2.62	246.87	4,701.73	-19.83	1.79	-19.91	0.15	0.00	-3.20
4,716.86	2.62	246.41	4,715.15	-20.07	1.22	-20.10	0.16	0.00	-3.43
4,730.29	2.63	245.98	4,728.57	-20.32	0.66	-20.30	0.16	0.07	-3.20
4,743.71	2.65	245.64	4,741.97	-20.57	0.10	-20.50	0.19	0.15	-2.53
4,757.14	2.66	245.47	4,755.39	-20.83	-0.47	-20.71	0.09	0.07	-1.27
4,770.57	2.67	245.56	4,768.80	-21.09	-1.04	-20.92	0.08	0.07	0.67
4,784.00	2.68	246.03	4,782.22	-21.34	-1.61	-21.12	0.18	0.07	3.50
4,797.57	2.68	247.12	4,795.77	-21.60	-2.19	-21.32	0.38	0.00	8.03
4,811.14	2.68	248.62	4,809.33	-21.84	-2.78	-21.51	0.52	0.00	11.05
4,824.71	2.68	250.40	4,822.88	-22.06	-3.37	-21.68	0.61	0.00	13.12
4,838.29	2.68	252.38	4,836.45	-22.26	-3.97	-21.83	0.68	0.00	14.58
4,851.86	2.68	254.49	4,850.00	-22.44	-4.58	-21.96	0.73	0.00	15.55
4,865.43	2.64	256.88	4,863.56	-22.60	-5.19	-22.06	0.87	-0.29	17.61
4,879.00	2.33	260.30	4,877.12	-22.71	-5.77	-22.12	2.53	-2.28	25.20
4,892.57	2.30	263.56	4,890.68	-22.79	-6.31	-22.15	1.00	-0.22	24.02



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Top Spot 12_13 Fed Com 25H
Project:	Eddy County, NM (NAD83-NME)	TVD Reference:	RKB @ 3607.50usft (Citadel 2)
Site:	Top Spot 12_13	MD Reference:	RKB @ 3607.50usft (Citadel 2)
Well:	Top Spot 12_13 Fed Com 25H	North Reference:	Grid
Wellbore:	OH / 74975	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Citadel 2)	Database:	USAEDMDB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,906.14	2.33	267.75	4,904.23	-22.83	-6.86	-22.15	1.27	0.22	30.88
4,919.71	2.32	271.32	4,917.79	-22.84	-7.41	-22.10	1.07	-0.07	26.31
4,933.29	2.32	274.68	4,931.36	-22.81	-7.96	-22.03	1.00	0.00	24.74
4,946.86	2.35	277.47	4,944.92	-22.75	-8.51	-21.92	0.87	0.22	20.56
4,960.43	2.86	275.14	4,958.48	-22.68	-9.12	-21.80	3.84	3.76	-17.17
4,974.00	3.73	270.66	4,972.02	-22.65	-9.90	-21.70	6.68	6.41	-33.01
4,987.57	4.15	269.92	4,985.56	-22.64	-10.83	-21.61	3.12	3.10	-5.45
5,001.14	4.33	269.93	4,999.10	-22.64	-11.83	-21.53	1.33	1.33	0.07
5,014.71	4.53	269.82	5,012.62	-22.65	-12.88	-21.44	1.48	1.47	-0.81
5,028.29	4.74	269.72	5,026.16	-22.65	-13.98	-21.34	1.55	1.55	-0.74
5,041.86	4.94	269.70	5,039.68	-22.66	-15.12	-21.25	1.47	1.47	-0.15
5,055.43	5.34	265.50	5,053.20	-22.71	-16.34	-21.20	4.05	2.95	-30.95
5,069.00	5.95	262.48	5,066.70	-22.85	-17.66	-21.22	5.00	4.50	-22.25
5,082.57	6.57	260.46	5,080.19	-23.07	-19.13	-21.31	4.85	4.57	-14.89
5,096.14	6.71	261.07	5,093.67	-23.32	-20.68	-21.43	1.16	1.03	4.50
5,109.71	6.84	261.71	5,107.14	-23.56	-22.26	-21.53	1.11	0.96	4.72
5,123.29	6.98	262.25	5,120.63	-23.79	-23.88	-21.62	1.14	1.03	3.98
5,136.86	7.13	262.58	5,134.09	-24.01	-25.53	-21.69	1.15	1.11	2.43
5,150.43	7.82	258.68	5,147.55	-24.30	-27.27	-21.83	6.31	5.08	-28.74
5,164.00	8.37	256.17	5,160.98	-24.72	-29.13	-22.08	4.82	4.05	-18.50
5,177.57	8.57	255.44	5,174.40	-25.21	-31.07	-22.40	1.67	1.47	-5.38
5,191.14	8.80	254.51	5,187.82	-25.74	-33.05	-22.76	1.99	1.69	-6.85
5,204.71	9.04	253.49	5,201.22	-26.32	-35.07	-23.16	2.12	1.77	-7.52
5,218.29	9.28	252.48	5,214.63	-26.95	-37.14	-23.61	2.13	1.77	-7.44
5,231.86	9.51	251.54	5,228.02	-27.64	-39.25	-24.11	2.04	1.69	-6.93
5,245.43	9.86	250.15	5,241.40	-28.39	-41.40	-24.66	3.10	2.58	-10.24
5,259.00	10.10	249.66	5,254.76	-29.20	-43.61	-25.28	1.88	1.77	-3.61
5,272.71	10.21	249.21	5,268.26	-30.04	-45.87	-25.92	0.99	0.80	-3.28
5,286.43	10.29	248.92	5,281.76	-30.92	-48.15	-26.59	0.69	0.58	-2.11
5,300.14	10.35	248.76	5,295.25	-31.80	-50.44	-27.28	0.49	0.44	-1.17
5,313.86	10.39	248.66	5,308.74	-32.70	-52.75	-27.97	0.32	0.29	-0.73
5,327.57	10.43	248.61	5,322.23	-33.60	-55.05	-28.67	0.30	0.29	-0.36
5,341.29	10.45	248.59	5,335.72	-34.51	-57.37	-29.37	0.15	0.15	-0.15
5,355.00	10.47	248.58	5,349.20	-35.42	-59.68	-30.07	0.15	0.15	-0.07
5,368.57	10.48	248.57	5,362.54	-36.32	-61.98	-30.77	0.07	0.07	-0.07
5,382.14	10.49	248.55	5,375.89	-37.22	-64.28	-31.47	0.08	0.07	-0.15
5,395.71	10.51	248.53	5,389.23	-38.13	-66.58	-32.17	0.15	0.15	-0.15
5,409.29	10.53	248.49	5,402.58	-39.04	-68.89	-32.87	0.16	0.15	-0.29
5,422.86	10.57	248.44	5,415.92	-39.95	-71.20	-33.58	0.30	0.29	-0.37
5,436.43	11.45	246.34	5,429.24	-40.95	-73.59	-34.36	7.13	6.48	-15.48
5,450.00	11.98	244.72	5,442.53	-42.09	-76.10	-35.28	4.60	3.91	-11.94
5,463.57	12.10	244.62	5,455.80	-43.30	-78.66	-36.27	0.90	0.88	-0.74
5,477.14	12.25	244.51	5,469.07	-44.53	-81.24	-37.26	1.12	1.11	-0.81



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Top Spot 12_13 Fed Com 25H
Project:	Eddy County, NM (NAD83-NME)	TVD Reference:	RKB @ 3607.50usft (Citadel 2)
Site:	Top Spot 12_13	MD Reference:	RKB @ 3607.50usft (Citadel 2)
Well:	Top Spot 12_13 Fed Com 25H	North Reference:	Grid
Wellbore:	OH / 74975	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Citadel 2)	Database:	USAEDMDB

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,490.71	12.40	244.40	5,482.32	-45.78	-83.85	-38.28	1.12	1.11	-0.81
5,504.29	12.56	244.30	5,495.58	-47.05	-86.50	-39.31	1.19	1.18	-0.74
5,517.86	12.70	244.22	5,508.82	-48.34	-89.17	-40.37	1.04	1.03	-0.59
5,531.43	13.51	244.64	5,522.04	-49.66	-91.95	-41.45	6.01	5.97	3.10
5,545.00	14.09	245.20	5,535.22	-51.03	-94.88	-42.56	4.39	4.27	4.13
5,558.57	14.17	245.24	5,548.38	-52.42	-97.89	-43.68	0.59	0.59	0.29
5,572.14	14.24	245.29	5,561.53	-53.82	-100.91	-44.80	0.52	0.52	0.37
5,585.71	14.30	245.37	5,574.69	-55.21	-103.95	-45.93	0.47	0.44	0.59
5,599.29	14.36	245.44	5,587.84	-56.61	-107.01	-47.05	0.46	0.44	0.52
5,612.86	14.41	245.52	5,600.99	-58.01	-110.08	-48.18	0.40	0.37	0.59
5,626.43	14.46	245.58	5,614.13	-59.41	-113.15	-49.30	0.38	0.37	0.44
5,640.00	14.52	245.61	5,627.27	-60.81	-116.25	-50.43	0.45	0.44	0.22
5,654.69	14.59	245.61	5,641.49	-62.34	-119.61	-51.66	0.48	0.48	0.00
5,669.38	14.66	245.58	5,655.70	-63.87	-122.99	-52.89	0.48	0.48	-0.20
5,684.08	14.74	245.54	5,669.92	-65.41	-126.38	-54.13	0.55	0.54	-0.27
5,698.77	14.81	245.48	5,684.12	-66.97	-129.79	-55.38	0.49	0.48	-0.41
5,713.46	14.89	245.41	5,698.32	-68.53	-133.22	-56.64	0.56	0.54	-0.48
5,728.15	14.96	245.34	5,712.52	-70.11	-136.66	-57.91	0.49	0.48	-0.48
5,742.85	15.04	245.27	5,726.72	-71.70	-140.11	-59.19	0.56	0.54	-0.48
5,757.54	15.12	245.19	5,740.90	-73.30	-143.58	-60.48	0.56	0.54	-0.54
5,772.23	15.19	245.12	5,755.08	-74.91	-147.07	-61.79	0.49	0.48	-0.48
5,786.92	15.27	245.05	5,769.25	-76.54	-150.57	-63.10	0.56	0.54	-0.48
5,801.62	15.34	244.99	5,783.43	-78.18	-154.08	-64.43	0.49	0.48	-0.41
5,816.31	15.41	244.94	5,797.60	-79.83	-157.61	-65.76	0.48	0.48	-0.34
5,831.00	15.49	244.92	5,811.76	-81.48	-161.16	-67.10	0.55	0.54	-0.14
5,844.57	15.56	244.94	5,824.83	-83.02	-164.45	-68.35	0.52	0.52	0.15
5,858.14	15.63	244.97	5,837.90	-84.57	-167.75	-69.60	0.52	0.52	0.22
5,871.71	15.70	245.01	5,850.97	-86.12	-171.07	-70.85	0.52	0.52	0.29
5,885.29	15.76	245.06	5,864.04	-87.67	-174.41	-72.11	0.45	0.44	0.37
5,898.86	15.82	245.09	5,877.10	-89.23	-177.76	-73.37	0.45	0.44	0.22
5,912.43	15.88	245.12	5,890.15	-90.79	-181.12	-74.63	0.45	0.44	0.22
5,926.00	15.92	245.12	5,903.20	-92.35	-184.49	-75.89	0.29	0.29	0.00
5,939.71	15.95	245.09	5,916.38	-93.93	-187.91	-77.17	0.23	0.22	-0.22
5,953.43	15.97	245.02	5,929.58	-95.53	-191.33	-78.46	0.20	0.15	-0.51
5,967.14	15.99	244.92	5,942.76	-97.12	-194.75	-79.75	0.25	0.15	-0.73
5,980.86	16.00	244.78	5,955.94	-98.73	-198.17	-81.05	0.29	0.07	-1.02
5,994.57	16.01	244.60	5,969.12	-100.35	-201.59	-82.36	0.37	0.07	-1.31
6,008.29	15.66	243.70	5,982.32	-101.98	-204.96	-83.69	3.12	-2.55	-6.56
6,022.00	14.76	242.31	5,995.55	-103.61	-208.16	-85.04	7.08	-6.56	-10.14
6,035.57	14.56	241.45	6,008.68	-105.23	-211.19	-86.39	2.18	-1.47	-6.34
6,049.14	14.57	240.82	6,021.81	-106.87	-214.18	-87.77	1.17	0.07	-4.64
6,062.71	14.57	240.15	6,034.95	-108.56	-217.15	-89.18	1.24	0.00	-4.94
6,076.29	14.56	239.46	6,048.09	-110.27	-220.10	-90.64	1.28	-0.07	-5.08



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Top Spot 12_13 Fed Com 25H
Project:	Eddy County, NM (NAD83-NME)	TVD Reference:	RKB @ 3607.50usft (Citadel 2)
Site:	Top Spot 12_13	MD Reference:	RKB @ 3607.50usft (Citadel 2)
Well:	Top Spot 12_13 Fed Com 25H	North Reference:	Grid
Wellbore:	OH / 74975	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Citadel 2)	Database:	USAEDMDB

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
6,089.86	14.56	238.81	6,061.23	-112.02	-223.03	-92.12	1.20	0.00	-4.79
6,103.43	14.18	238.50	6,074.37	-113.78	-225.91	-93.62	2.86	-2.80	-2.28
6,117.00	13.61	238.39	6,087.54	-115.48	-228.68	-95.07	4.20	-4.20	-0.81
6,130.57	13.56	237.98	6,100.73	-117.16	-231.39	-96.51	0.80	-0.37	-3.02
6,144.14	13.49	237.62	6,113.93	-118.85	-234.08	-97.96	0.81	-0.52	-2.65
6,157.71	13.42	237.31	6,127.13	-120.55	-236.74	-99.42	0.74	-0.52	-2.28
6,171.29	13.35	237.02	6,140.34	-122.26	-239.38	-100.89	0.71	-0.52	-2.14
6,184.86	13.28	236.75	6,153.54	-123.96	-242.00	-102.36	0.69	-0.52	-1.99
6,198.43	13.21	236.50	6,166.75	-125.67	-244.60	-103.84	0.67	-0.52	-1.84
6,212.00	13.15	236.27	6,179.96	-127.39	-247.17	-105.32	0.59	-0.44	-1.69
6,225.57	13.11	236.05	6,193.18	-129.10	-249.73	-106.81	0.47	-0.29	-1.62
6,239.14	13.07	235.85	6,206.40	-130.82	-252.28	-108.30	0.45	-0.29	-1.47
6,252.71	13.05	235.66	6,219.61	-132.55	-254.81	-109.80	0.35	-0.15	-1.40
6,266.29	13.04	235.47	6,232.84	-134.28	-257.34	-111.30	0.32	-0.07	-1.40
6,279.86	13.04	235.29	6,246.06	-136.02	-259.86	-112.81	0.30	0.00	-1.33
6,293.43	13.06	235.11	6,259.28	-137.77	-262.38	-114.34	0.33	0.15	-1.33
6,307.00	13.10	234.94	6,272.50	-139.53	-264.89	-115.87	0.41	0.29	-1.25
6,320.57	13.18	234.76	6,285.72	-141.31	-267.42	-117.42	0.66	0.59	-1.33
6,334.14	13.27	234.59	6,298.93	-143.10	-269.95	-118.99	0.72	0.66	-1.25
6,347.71	13.38	234.43	6,312.13	-144.92	-272.50	-120.57	0.85	0.81	-1.18
6,361.29	13.50	234.28	6,325.34	-146.76	-275.06	-122.18	0.92	0.88	-1.10
6,374.86	13.63	234.14	6,338.53	-148.62	-277.64	-123.81	0.99	0.96	-1.03
6,388.43	13.75	234.03	6,351.72	-150.50	-280.24	-125.46	0.90	0.88	-0.81
6,402.00	13.87	233.94	6,364.89	-152.41	-282.86	-127.13	0.90	0.88	-0.66
6,415.57	13.99	233.89	6,378.06	-154.33	-285.50	-128.81	0.89	0.88	-0.37
6,429.14	14.10	233.86	6,391.23	-156.27	-288.16	-130.52	0.81	0.81	-0.22
6,442.71	14.20	233.84	6,404.39	-158.23	-290.84	-132.23	0.74	0.74	-0.15
6,456.29	14.30	233.83	6,417.55	-160.20	-293.54	-133.96	0.74	0.74	-0.07
6,469.86	14.40	233.82	6,430.70	-162.19	-296.26	-135.70	0.74	0.74	-0.07
6,483.43	14.49	233.80	6,443.84	-164.19	-298.99	-137.45	0.66	0.66	-0.15
6,497.00	14.57	233.77	6,456.97	-166.20	-301.74	-139.22	0.59	0.59	-0.22
6,510.57	14.65	233.70	6,470.10	-168.22	-304.49	-140.99	0.60	0.59	-0.52
6,524.14	14.71	233.62	6,483.23	-170.26	-307.27	-142.78	0.47	0.44	-0.59
6,537.71	14.76	233.53	6,496.35	-172.31	-310.04	-144.58	0.41	0.37	-0.66
6,551.29	14.80	233.44	6,509.48	-174.37	-312.83	-146.39	0.34	0.29	-0.66
6,564.86	14.83	233.36	6,522.60	-176.44	-315.61	-148.21	0.27	0.22	-0.59
6,578.43	14.84	233.29	6,535.72	-178.51	-318.40	-150.03	0.15	0.07	-0.52
6,592.00	14.83	233.24	6,548.84	-180.59	-321.18	-151.86	0.12	-0.07	-0.37
6,605.57	14.78	233.24	6,561.96	-182.67	-323.96	-153.69	0.37	-0.37	0.00
6,619.14	14.71	233.26	6,575.08	-184.73	-326.73	-155.50	0.52	-0.52	0.15
6,632.71	14.62	233.28	6,588.21	-186.79	-329.48	-157.31	0.66	-0.66	0.15
6,646.29	14.53	233.31	6,601.35	-188.83	-332.22	-159.10	0.67	-0.66	0.22
6,659.86	14.44	233.32	6,614.49	-190.86	-334.94	-160.89	0.66	-0.66	0.07
6,673.43	14.25	233.91	6,627.64	-192.85	-337.65	-162.64	1.77	-1.40	4.35



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Top Spot 12_13 Fed Com 25H
Project:	Eddy County, NM (NAD83-NME)	TVD Reference:	RKB @ 3607.50usft (Citadel 2)
Site:	Top Spot 12_13	MD Reference:	RKB @ 3607.50usft (Citadel 2)
Well:	Top Spot 12_13 Fed Com 25H	North Reference:	Grid
Wellbore:	OH / 74975	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Citadel 2)	Database:	USAEDMDB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
6,687.00	13.91	235.55	6,640.80	-194.76	-340.35	-164.30	3.86	-2.51	12.09
6,700.57	13.86	235.41	6,653.97	-196.61	-343.03	-165.91	0.44	-0.37	-1.03
6,714.14	13.81	235.23	6,667.15	-198.45	-345.70	-167.51	0.49	-0.37	-1.33
6,727.71	13.77	235.03	6,680.33	-200.30	-348.35	-169.12	0.46	-0.29	-1.47
6,741.29	13.74	234.82	6,693.52	-202.16	-350.99	-170.74	0.43	-0.22	-1.55
6,754.86	13.72	234.60	6,706.70	-204.02	-353.62	-172.36	0.41	-0.15	-1.62
6,768.43	13.70	234.40	6,719.89	-205.89	-356.24	-174.00	0.38	-0.15	-1.47
6,782.00	13.71	234.22	6,733.07	-207.76	-358.85	-175.64	0.32	0.07	-1.33
6,795.57	13.74	234.07	6,746.25	-209.65	-361.46	-177.29	0.34	0.22	-1.11
6,809.14	13.78	233.96	6,759.43	-211.54	-364.07	-178.95	0.35	0.29	-0.81
6,822.71	13.82	233.86	6,772.61	-213.45	-366.69	-180.62	0.34	0.29	-0.74
6,836.29	13.86	233.79	6,785.80	-215.37	-369.31	-182.30	0.32	0.29	-0.52
6,849.86	13.89	233.74	6,798.97	-217.29	-371.94	-183.99	0.24	0.22	-0.37
6,863.43	13.89	233.72	6,812.14	-219.22	-374.56	-185.68	0.04	0.00	-0.15
6,877.00	13.86	233.73	6,825.32	-221.14	-377.19	-187.37	0.22	-0.22	0.07
6,890.57	13.76	233.79	6,838.50	-223.06	-379.80	-189.05	0.74	-0.74	0.44
6,904.14	13.63	233.89	6,851.68	-224.95	-382.39	-190.71	0.97	-0.96	0.74
6,917.71	13.48	234.00	6,864.87	-226.83	-384.96	-192.35	1.12	-1.11	0.81
6,931.29	13.33	234.12	6,878.08	-228.67	-387.51	-193.97	1.12	-1.10	0.88
6,944.86	13.19	234.24	6,891.29	-230.50	-390.04	-195.56	1.05	-1.03	0.88
6,958.43	13.04	236.00	6,904.51	-232.26	-392.56	-197.10	3.14	-1.11	12.97
6,972.00	12.91	238.54	6,917.73	-233.90	-395.12	-198.51	4.31	-0.96	18.72
6,985.57	12.70	241.01	6,930.96	-235.42	-397.72	-199.79	4.32	-1.55	18.20
6,999.14	12.71	241.07	6,944.20	-236.86	-400.33	-201.01	0.12	0.07	0.44
7,012.71	12.73	241.12	6,957.44	-238.31	-402.95	-202.22	0.17	0.15	0.37
7,026.29	12.77	241.16	6,970.68	-239.75	-405.57	-203.43	0.30	0.29	0.29
7,039.86	12.80	241.18	6,983.92	-241.20	-408.20	-204.64	0.22	0.22	0.15
7,053.43	12.83	241.18	6,997.15	-242.65	-410.84	-205.86	0.22	0.22	0.00
7,067.00	12.84	241.13	7,010.38	-244.11	-413.48	-207.07	0.11	0.07	-0.37
7,080.57	12.82	241.03	7,023.61	-245.56	-416.12	-208.30	0.22	-0.15	-0.74
7,094.14	12.78	240.88	7,036.84	-247.02	-418.75	-209.52	0.38	-0.29	-1.11
7,107.71	12.73	240.71	7,050.08	-248.49	-421.36	-210.75	0.46	-0.37	-1.25
7,121.29	12.67	240.53	7,063.33	-249.95	-423.96	-211.98	0.53	-0.44	-1.33
7,134.86	12.62	240.34	7,076.57	-251.42	-426.55	-213.21	0.48	-0.37	-1.40
7,148.43	12.57	240.15	7,089.81	-252.88	-429.12	-214.45	0.48	-0.37	-1.40
7,162.00	12.54	239.98	7,103.05	-254.36	-431.67	-215.70	0.35	-0.22	-1.25
7,175.43	12.54	239.84	7,116.16	-255.82	-434.20	-216.93	0.23	0.00	-1.04
7,188.86	12.55	239.71	7,129.27	-257.29	-436.72	-218.18	0.22	0.07	-0.97
7,202.29	12.57	239.59	7,142.38	-258.76	-439.24	-219.43	0.24	0.15	-0.89
7,215.71	12.59	239.47	7,155.48	-260.24	-441.76	-220.68	0.25	0.15	-0.89
7,229.14	12.61	239.33	7,168.59	-261.74	-444.28	-221.95	0.27	0.15	-1.04
7,242.57	12.62	239.16	7,181.69	-263.24	-446.80	-223.22	0.29	0.07	-1.27
7,256.00	12.61	238.95	7,194.80	-264.74	-449.31	-224.50	0.35	-0.07	-1.56



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Top Spot 12_13 Fed Com 25H
Project:	Eddy County, NM (NAD83-NME)	TVD Reference:	RKB @ 3607.50usft (Citadel 2)
Site:	Top Spot 12_13	MD Reference:	RKB @ 3607.50usft (Citadel 2)
Well:	Top Spot 12_13 Fed Com 25H	North Reference:	Grid
Wellbore:	OH / 74975	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Citadel 2)	Database:	USAEDMDB

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,269.57	12.58	238.66	7,208.04	-266.28	-451.85	-225.81	0.52	-0.22	-2.14
7,283.14	12.53	238.34	7,221.29	-267.82	-454.36	-227.13	0.63	-0.37	-2.36
7,296.71	12.47	238.01	7,234.54	-269.37	-456.86	-228.45	0.69	-0.44	-2.43
7,310.29	12.41	237.69	7,247.80	-270.92	-459.33	-229.79	0.67	-0.44	-2.36
7,323.86	12.36	237.41	7,261.05	-272.49	-461.79	-231.13	0.58	-0.37	-2.06
7,337.43	12.31	237.22	7,274.31	-274.05	-464.23	-232.47	0.47	-0.37	-1.40
7,351.00	12.29	237.17	7,287.57	-275.62	-466.66	-233.82	0.17	-0.15	-0.37
7,364.57	12.30	237.34	7,300.83	-277.18	-469.09	-235.17	0.28	0.07	1.25
7,378.14	12.34	237.64	7,314.08	-278.74	-471.53	-236.50	0.56	0.29	2.21
7,391.71	12.38	238.00	7,327.34	-280.28	-473.99	-237.83	0.64	0.29	2.65
7,405.29	12.43	238.38	7,340.60	-281.82	-476.47	-239.14	0.70	0.37	2.80
7,418.86	12.48	238.73	7,353.85	-283.35	-478.97	-240.45	0.67	0.37	2.58
7,432.43	12.52	239.01	7,367.10	-284.87	-481.48	-241.74	0.54	0.29	2.06
7,446.00	12.67	239.80	7,380.34	-286.37	-484.03	-243.02	1.68	1.11	5.82
7,459.57	12.86	242.09	7,393.58	-287.83	-486.65	-244.24	3.98	1.40	16.88
7,473.14	12.74	243.70	7,406.81	-289.20	-489.32	-245.37	2.77	-0.88	11.86
7,486.71	12.71	243.30	7,420.05	-290.53	-492.00	-246.47	0.69	-0.22	-2.95
7,500.29	12.66	242.81	7,433.30	-291.88	-494.66	-247.58	0.87	-0.37	-3.61
7,513.86	12.61	242.29	7,446.54	-293.25	-497.29	-248.71	0.92	-0.37	-3.83
7,527.43	12.56	241.78	7,459.78	-294.64	-499.90	-249.87	0.90	-0.37	-3.76
7,541.00	12.51	241.35	7,473.03	-296.04	-502.49	-251.04	0.78	-0.37	-3.17
7,554.43	12.45	241.11	7,486.14	-297.44	-505.04	-252.21	0.59	-0.45	-1.79
7,567.86	12.40	240.97	7,499.26	-298.83	-507.56	-253.38	0.43	-0.37	-1.04
7,581.29	12.35	240.89	7,512.37	-300.23	-510.08	-254.55	0.39	-0.37	-0.60
7,594.71	12.30	240.84	7,525.49	-301.63	-512.58	-255.72	0.38	-0.37	-0.37
7,608.14	12.25	240.81	7,538.61	-303.02	-515.07	-256.89	0.38	-0.37	-0.22
7,621.57	12.21	240.78	7,551.73	-304.41	-517.56	-258.06	0.30	-0.30	-0.22
7,635.00	12.16	240.71	7,564.86	-305.79	-520.03	-259.22	0.39	-0.37	-0.52
7,648.57	12.13	240.58	7,578.13	-307.19	-522.52	-260.40	0.30	-0.22	-0.96
7,662.14	12.09	240.41	7,591.39	-308.59	-525.00	-261.58	0.39	-0.29	-1.25
7,675.71	12.06	240.22	7,604.66	-310.00	-527.46	-262.76	0.37	-0.22	-1.40
7,689.29	12.04	240.02	7,617.95	-311.41	-529.92	-263.96	0.34	-0.15	-1.47
7,702.86	12.02	239.82	7,631.22	-312.83	-532.37	-265.16	0.34	-0.15	-1.47
7,716.43	12.02	239.62	7,644.49	-314.26	-534.81	-266.36	0.31	0.00	-1.47
7,730.00	12.03	239.43	7,657.76	-315.69	-537.25	-267.58	0.30	0.07	-1.40
7,743.43	12.07	239.27	7,670.90	-317.12	-539.66	-268.79	0.39	0.30	-1.19
7,756.86	12.12	239.13	7,684.03	-318.56	-542.08	-270.02	0.43	0.37	-1.04
7,770.29	12.18	238.99	7,697.16	-320.01	-544.50	-271.25	0.50	0.45	-1.04
7,783.71	12.24	238.85	7,710.27	-321.48	-546.93	-272.50	0.50	0.45	-1.04
7,797.14	12.30	238.72	7,723.40	-322.96	-549.37	-273.76	0.49	0.45	-0.97
7,810.57	12.36	238.57	7,736.52	-324.45	-551.82	-275.03	0.51	0.45	-1.12
7,824.00	12.41	238.40	7,749.63	-325.96	-554.28	-276.32	0.46	0.37	-1.27
7,837.57	12.45	238.20	7,762.89	-327.49	-556.76	-277.63	0.43	0.29	-1.47



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Top Spot 12_13 Fed Com 25H
Project:	Eddy County, NM (NAD83-NME)	TVD Reference:	RKB @ 3607.50usft (Citadel 2)
Site:	Top Spot 12_13	MD Reference:	RKB @ 3607.50usft (Citadel 2)
Well:	Top Spot 12_13 Fed Com 25H	North Reference:	Grid
Wellbore:	OH / 74975	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Citadel 2)	Database:	USAEDMDB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,851.14	12.48	237.98	7,776.14	-329.04	-559.25	-278.95	0.41	0.22	-1.62
7,864.71	12.49	237.76	7,789.39	-330.60	-561.73	-280.29	0.36	0.07	-1.62
7,878.29	12.50	237.55	7,802.64	-332.17	-564.21	-281.64	0.34	0.07	-1.55
7,891.86	12.50	237.38	7,815.89	-333.75	-566.69	-283.00	0.27	0.00	-1.25
7,905.43	12.49	237.25	7,829.14	-335.34	-569.16	-284.36	0.22	-0.07	-0.96
7,919.00	12.46	237.20	7,842.39	-336.92	-571.63	-285.73	0.23	-0.22	-0.37
7,932.57	12.41	237.27	7,855.64	-338.50	-574.08	-287.09	0.38	-0.37	0.52
7,946.14	12.35	237.43	7,868.90	-340.07	-576.53	-288.44	0.51	-0.44	1.18
7,959.71	12.28	237.65	7,882.15	-341.63	-578.97	-289.77	0.62	-0.52	1.62
7,973.29	12.20	237.91	7,895.43	-343.16	-581.41	-291.09	0.72	-0.59	1.91
7,986.86	12.12	238.21	7,908.69	-344.67	-583.84	-292.38	0.75	-0.59	2.21
8,000.43	12.04	238.54	7,921.96	-346.16	-586.25	-293.66	0.78	-0.59	2.43
8,014.00	11.96	239.00	7,935.23	-347.63	-588.67	-294.90	0.92	-0.59	3.39
8,027.57	11.84	239.92	7,948.51	-349.05	-591.08	-296.11	1.65	-0.88	6.78
8,041.14	11.77	240.40	7,961.80	-350.43	-593.48	-297.27	0.89	-0.52	3.54
8,054.71	11.70	240.90	7,975.08	-351.78	-595.89	-298.41	0.91	-0.52	3.68
8,068.29	11.63	241.40	7,988.38	-353.11	-598.29	-299.52	0.91	-0.52	3.68
8,081.86	11.58	241.87	8,001.67	-354.40	-600.70	-300.60	0.79	-0.37	3.46
8,095.43	11.53	242.26	8,014.97	-355.68	-603.10	-301.66	0.68	-0.37	2.87
8,109.00	11.44	244.52	8,028.27	-356.89	-605.51	-302.66	3.38	-0.66	16.65
8,122.43	10.96	247.90	8,041.44	-357.94	-607.90	-303.50	6.05	-3.57	25.17
8,135.86	10.77	249.04	8,054.63	-358.87	-610.25	-304.22	2.14	-1.41	8.49
8,149.29	10.77	248.99	8,067.82	-359.77	-612.60	-304.91	0.07	0.00	-0.37
8,162.71	10.78	248.89	8,081.01	-360.67	-614.94	-305.60	0.16	0.07	-0.75
8,176.14	10.80	248.75	8,094.20	-361.58	-617.28	-306.30	0.25	0.15	-1.04
8,189.57	10.82	248.58	8,107.39	-362.50	-619.63	-307.01	0.28	0.15	-1.27
8,203.00	10.84	248.40	8,120.58	-363.42	-621.98	-307.73	0.29	0.15	-1.34
8,216.57	10.85	248.21	8,133.91	-364.36	-624.35	-308.46	0.27	0.07	-1.40
8,230.14	10.87	248.01	8,147.24	-365.32	-626.72	-309.20	0.31	0.15	-1.47
8,243.71	10.89	247.79	8,160.56	-366.28	-629.09	-309.96	0.34	0.15	-1.62
8,257.29	10.90	247.55	8,173.90	-367.26	-631.47	-310.72	0.34	0.07	-1.77
8,270.86	10.92	247.30	8,187.22	-368.24	-633.84	-311.50	0.38	0.15	-1.84
8,284.43	11.01	247.04	8,200.55	-369.24	-636.22	-312.29	0.76	0.66	-1.92
8,298.00	10.90	246.72	8,213.87	-370.26	-638.59	-313.09	0.93	-0.81	-2.36
8,311.57	10.94	246.34	8,227.19	-371.28	-640.95	-313.90	0.61	0.29	-2.80
8,325.14	10.99	245.94	8,240.52	-372.32	-643.31	-314.74	0.67	0.37	-2.95
8,338.71	11.05	245.52	8,253.83	-373.39	-645.67	-315.59	0.74	0.44	-3.10
8,352.29	11.10	245.11	8,267.16	-374.48	-648.04	-316.47	0.69	0.37	-3.02
8,365.86	11.15	244.72	8,280.48	-375.59	-650.42	-317.37	0.67	0.37	-2.87
8,379.43	11.19	244.38	8,293.79	-376.72	-652.79	-318.29	0.57	0.29	-2.51
8,393.00	11.21	244.10	8,307.10	-377.87	-655.16	-319.22	0.43	0.15	-2.06
8,406.43	11.22	243.94	8,320.28	-379.01	-657.51	-320.16	0.24	0.07	-1.19
8,419.86	11.20	243.85	8,333.45	-380.16	-659.86	-321.10	0.20	-0.15	-0.67
8,433.29	11.18	243.79	8,346.62	-381.31	-662.19	-322.04	0.17	-0.15	-0.45



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Top Spot 12_13 Fed Com 25H
Project:	Eddy County, NM (NAD83-NME)	TVD Reference:	RKB @ 3607.50usft (Citadel 2)
Site:	Top Spot 12_13	MD Reference:	RKB @ 3607.50usft (Citadel 2)
Well:	Top Spot 12_13 Fed Com 25H	North Reference:	Grid
Wellbore:	OH / 74975	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Citadel 2)	Database:	USAEDMDB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
8,446.71	11.14	243.74	8,359.79	-382.46	-664.52	-322.98	0.31	-0.30	-0.37
8,460.14	11.08	243.68	8,372.97	-383.60	-666.84	-323.92	0.45	-0.45	-0.45
8,473.57	11.02	243.58	8,386.15	-384.75	-669.15	-324.85	0.47	-0.45	-0.74
8,487.00	10.93	243.42	8,399.33	-385.89	-671.44	-325.79	0.71	-0.67	-1.19
8,500.57	10.80	243.13	8,412.66	-387.04	-673.72	-326.74	1.04	-0.96	-2.14
8,514.14	10.67	242.75	8,425.99	-388.19	-675.97	-327.69	1.09	-0.96	-2.80
8,527.71	10.51	242.31	8,439.33	-389.34	-678.19	-328.64	1.32	-1.18	-3.24
8,541.29	10.36	241.83	8,452.69	-390.49	-680.36	-329.60	1.28	-1.10	-3.53
8,554.86	10.20	241.30	8,466.04	-391.64	-682.49	-330.56	1.37	-1.18	-3.91
8,568.43	10.04	240.75	8,479.40	-392.80	-684.58	-331.53	1.38	-1.18	-4.05
8,582.00	9.89	240.19	8,492.76	-393.95	-686.62	-332.50	1.32	-1.11	-4.13
8,595.57	9.75	239.66	8,506.13	-395.11	-688.62	-333.48	1.23	-1.03	-3.91
8,609.14	9.61	239.13	8,519.51	-396.28	-690.59	-334.47	1.22	-1.03	-3.91
8,622.71	9.48	238.59	8,532.89	-397.44	-692.51	-335.46	1.16	-0.96	-3.98
8,636.29	9.35	238.03	8,546.29	-398.61	-694.40	-336.46	1.17	-0.96	-4.12
8,649.86	9.21	237.46	8,559.68	-399.77	-696.25	-337.46	1.23	-1.03	-4.20
8,663.43	9.07	236.87	8,573.08	-400.94	-698.06	-338.46	1.24	-1.03	-4.35
8,677.00	8.91	236.24	8,586.48	-402.11	-699.83	-339.47	1.38	-1.18	-4.64
8,690.43	8.74	235.63	8,599.75	-403.27	-701.54	-340.47	1.44	-1.27	-4.54
8,703.86	8.55	234.99	8,613.03	-404.41	-703.20	-341.47	1.59	-1.41	-4.77
8,717.29	8.35	234.33	8,626.32	-405.56	-704.81	-342.47	1.66	-1.49	-4.91
8,730.71	8.16	233.65	8,639.60	-406.69	-706.37	-343.46	1.59	-1.42	-5.07
8,744.14	7.96	232.97	8,652.89	-407.81	-707.88	-344.45	1.65	-1.49	-5.06
8,757.57	7.78	232.29	8,666.20	-408.93	-709.34	-345.44	1.51	-1.34	-5.06
8,771.00	7.61	231.64	8,679.51	-410.04	-710.76	-346.42	1.42	-1.27	-4.84
8,784.57	7.45	231.11	8,692.96	-411.15	-712.15	-347.40	1.29	-1.18	-3.91
8,798.14	7.31	230.63	8,706.42	-412.25	-713.50	-348.38	1.13	-1.03	-3.54
8,811.71	7.18	230.17	8,719.88	-413.34	-714.82	-349.35	1.05	-0.96	-3.39
8,825.29	7.06	229.72	8,733.35	-414.42	-716.10	-350.32	0.97	-0.88	-3.31
8,838.86	6.94	229.26	8,746.82	-415.50	-717.36	-351.28	0.98	-0.88	-3.39
8,852.43	6.82	228.78	8,760.30	-416.56	-718.59	-352.23	0.98	-0.88	-3.54
8,866.00	6.71	228.25	8,773.77	-417.62	-719.79	-353.18	0.93	-0.81	-3.91
8,879.57	6.59	227.66	8,787.25	-418.67	-720.95	-354.13	1.02	-0.88	-4.35
8,893.14	6.48	227.02	8,800.73	-419.72	-722.09	-355.07	0.97	-0.81	-4.72
8,906.71	6.37	226.36	8,814.22	-420.76	-723.19	-356.01	0.98	-0.81	-4.86
8,920.29	6.26	225.71	8,827.71	-421.80	-724.27	-356.95	0.97	-0.81	-4.79
8,933.86	6.15	225.09	8,841.20	-422.83	-725.31	-357.89	0.95	-0.81	-4.57
8,947.43	6.04	224.54	8,854.70	-423.85	-726.33	-358.82	0.92	-0.81	-4.05
8,961.00	5.94	224.11	8,868.19	-424.86	-727.32	-359.74	0.81	-0.74	-3.17
8,974.57	5.84	223.94	8,881.69	-425.86	-728.29	-360.65	0.75	-0.74	-1.25
8,988.14	5.74	223.90	8,895.19	-426.85	-729.24	-361.55	0.74	-0.74	-0.29
9,001.71	5.64	223.95	8,908.70	-427.82	-730.17	-362.43	0.74	-0.74	0.37
9,015.29	5.55	224.06	8,922.21	-428.77	-731.09	-363.30	0.67	-0.66	0.81



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Top Spot 12_13 Fed Com 25H
Project:	Eddy County, NM (NAD83-NME)	TVD Reference:	RKB @ 3607.50usft (Citadel 2)
Site:	Top Spot 12_13	MD Reference:	RKB @ 3607.50usft (Citadel 2)
Well:	Top Spot 12_13 Fed Com 25H	North Reference:	Grid
Wellbore:	OH / 74975	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Citadel 2)	Database:	USAEDMDB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,028.86	5.45	224.18	8,935.72	-429.70	-732.00	-364.15	0.74	-0.74	0.88
9,042.43	5.37	224.27	8,949.23	-430.62	-732.89	-364.99	0.59	-0.59	0.66
9,056.00	5.28	224.29	8,962.74	-431.52	-733.77	-365.81	0.66	-0.66	0.15
9,069.43	5.21	224.11	8,976.11	-432.40	-734.62	-366.61	0.54	-0.52	-1.34
9,082.86	5.14	223.84	8,989.49	-433.27	-735.46	-367.41	0.55	-0.52	-2.01
9,096.29	5.06	223.52	9,002.87	-434.14	-736.29	-368.20	0.63	-0.60	-2.38
9,109.71	4.99	223.19	9,016.23	-434.99	-737.10	-368.98	0.56	-0.52	-2.46
9,123.14	4.92	222.88	9,029.61	-435.84	-737.89	-369.75	0.56	-0.52	-2.31
9,136.57	4.85	222.64	9,043.00	-436.68	-738.66	-370.52	0.54	-0.52	-1.79
9,150.00	4.76	222.52	9,056.38	-437.51	-739.42	-371.28	0.67	-0.67	-0.89
9,163.57	4.66	222.65	9,069.90	-438.33	-740.18	-372.03	0.74	-0.74	0.96
9,177.14	4.56	222.92	9,083.43	-439.13	-740.92	-372.76	0.75	-0.74	1.99
9,190.71	4.45	223.26	9,096.96	-439.91	-741.65	-373.48	0.83	-0.81	2.51
9,204.29	4.33	223.63	9,110.50	-440.66	-742.36	-374.17	0.91	-0.88	2.72
9,217.86	4.22	223.95	9,124.03	-441.39	-743.06	-374.83	0.83	-0.81	2.36
9,231.43	4.11	224.16	9,137.56	-442.10	-743.75	-375.48	0.82	-0.81	1.55
9,245.00	4.00	224.14	9,151.10	-442.79	-744.42	-376.10	0.81	-0.81	-0.15
9,258.57	3.90	223.59	9,164.64	-443.46	-745.06	-376.72	0.79	-0.74	-4.05
9,272.14	3.81	222.75	9,178.18	-444.13	-745.69	-377.33	0.78	-0.66	-6.19
9,285.71	3.72	221.66	9,191.72	-444.79	-746.29	-377.93	0.85	-0.66	-8.03
9,299.29	3.64	220.38	9,205.27	-445.45	-746.86	-378.54	0.84	-0.59	-9.43
9,312.86	3.57	218.94	9,218.81	-446.10	-747.40	-379.14	0.84	-0.52	-10.61
9,326.43	3.52	217.35	9,232.36	-446.76	-747.92	-379.76	0.81	-0.37	-11.72
9,340.00	3.48	215.65	9,245.90	-447.43	-748.41	-380.38	0.82	-0.29	-12.53
9,353.43	3.46	213.91	9,259.31	-448.10	-748.88	-381.00	0.80	-0.15	-12.96
9,366.86	3.45	212.08	9,272.71	-448.78	-749.32	-381.64	0.82	-0.07	-13.63
9,380.29	3.46	210.22	9,286.12	-449.47	-749.74	-382.29	0.84	0.07	-13.85
9,393.71	3.48	208.35	9,299.51	-450.18	-750.13	-382.96	0.86	0.15	-13.93
9,407.14	3.50	206.51	9,312.92	-450.90	-750.51	-383.65	0.85	0.15	-13.70
9,420.57	3.53	204.72	9,326.32	-451.64	-750.87	-384.36	0.85	0.22	-13.33
9,434.00	3.56	203.01	9,339.73	-452.40	-751.20	-385.09	0.82	0.22	-12.73
9,447.57	3.56	201.34	9,353.27	-453.18	-751.52	-385.84	0.76	0.00	-12.31
9,461.14	3.57	199.74	9,366.81	-453.97	-751.82	-386.60	0.74	0.07	-11.79
9,474.71	3.58	198.21	9,380.36	-454.77	-752.09	-387.37	0.71	0.07	-11.27
9,488.29	3.59	196.74	9,393.91	-455.58	-752.35	-388.16	0.68	0.07	-10.82
9,501.86	3.60	195.34	9,407.45	-456.40	-752.58	-388.95	0.65	0.07	-10.32
9,515.43	3.62	194.04	9,421.00	-457.23	-752.80	-389.76	0.62	0.15	-9.58
9,529.00	3.65	192.87	9,434.54	-458.06	-753.00	-390.57	0.59	0.22	-8.62
9,542.43	3.68	191.84	9,447.94	-458.90	-753.18	-391.39	0.54	0.22	-7.67
9,555.86	3.72	190.94	9,461.35	-459.75	-753.35	-392.22	0.53	0.30	-6.70
9,569.29	3.77	190.14	9,474.75	-460.62	-753.51	-393.07	0.54	0.37	-5.96
9,582.71	3.82	189.44	9,488.14	-461.49	-753.67	-393.93	0.51	0.37	-5.22
9,596.14	3.87	188.83	9,501.54	-462.38	-753.81	-394.80	0.48	0.37	-4.54



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Top Spot 12_13 Fed Com 25H
Project:	Eddy County, NM (NAD83-NME)	TVD Reference:	RKB @ 3607.50usft (Citadel 2)
Site:	Top Spot 12_13	MD Reference:	RKB @ 3607.50usft (Citadel 2)
Well:	Top Spot 12_13 Fed Com 25H	North Reference:	Grid
Wellbore:	OH / 74975	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Citadel 2)	Database:	USAEDMDB

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,609.57	3.91	188.33	9,514.94	-463.28	-753.94	-395.69	0.39	0.30	-3.72
9,623.00	3.94	187.96	9,528.33	-464.19	-754.07	-396.58	0.29	0.22	-2.76
9,636.57	3.97	187.77	9,541.87	-465.12	-754.20	-397.49	0.24	0.22	-1.40
9,650.14	3.99	187.68	9,555.41	-466.05	-754.33	-398.41	0.15	0.15	-0.66
9,663.71	3.99	187.64	9,568.95	-466.99	-754.45	-399.33	0.02	0.00	-0.29
9,677.29	4.00	187.63	9,582.49	-467.92	-754.58	-400.26	0.07	0.07	-0.07
9,690.86	3.99	187.60	9,596.03	-468.86	-754.71	-401.18	0.08	-0.07	-0.22
9,704.43	3.98	187.52	9,609.57	-469.80	-754.83	-402.10	0.08	-0.07	-0.59
9,718.00	3.97	187.34	9,623.11	-470.73	-754.95	-403.02	0.12	-0.07	-1.33
9,731.80	3.94	186.94	9,636.87	-471.67	-755.07	-403.95	0.30	-0.22	-2.90
9,745.60	3.90	186.44	9,650.64	-472.61	-755.18	-404.87	0.38	-0.29	-3.62
9,759.40	3.84	185.90	9,664.41	-473.54	-755.28	-405.79	0.51	-0.43	-3.91
9,773.20	3.77	185.37	9,678.18	-474.45	-755.37	-406.69	0.57	-0.51	-3.84
9,787.00	3.67	184.93	9,691.95	-475.34	-755.45	-407.57	0.75	-0.72	-3.19
9,801.00	3.52	184.76	9,705.92	-476.21	-755.52	-408.43	1.07	-1.07	-1.21
9,815.00	3.35	184.74	9,719.90	-477.05	-755.59	-409.26	1.21	-1.21	-0.14
9,829.00	3.16	184.81	9,733.87	-477.84	-755.66	-410.04	1.36	-1.36	0.50
9,843.00	2.96	184.91	9,747.85	-478.59	-755.72	-410.78	1.43	-1.43	0.71
9,857.00	2.75	185.01	9,761.84	-479.28	-755.78	-411.47	1.50	-1.50	0.71
9,871.00	2.55	185.05	9,775.82	-479.93	-755.84	-412.10	1.43	-1.43	0.29
9,885.00	2.35	184.93	9,789.81	-480.52	-755.89	-412.69	1.43	-1.43	-0.86
9,899.00	2.17	184.51	9,803.80	-481.07	-755.94	-413.24	1.29	-1.29	-3.00
9,913.00	1.66	183.09	9,817.79	-481.54	-755.97	-413.70	3.66	-3.64	-10.14
9,926.57	0.08	7.87	9,831.36	-481.73	-755.98	-413.88	12.82	-11.64	-1,291.23
9,940.14	2.35	341.01	9,844.92	-481.45	-756.07	-413.60	16.79	16.73	-197.94
9,953.71	4.95	340.16	9,858.47	-480.64	-756.36	-412.77	19.16	19.16	-6.26
9,967.29	7.27	343.86	9,871.97	-479.26	-756.80	-411.36	17.32	17.08	27.25
9,980.86	9.72	343.79	9,885.39	-477.34	-757.35	-409.39	18.05	18.05	-0.52
9,994.43	11.40	343.35	9,898.73	-474.95	-758.06	-406.95	12.39	12.38	-3.24
10,008.00	13.16	341.83	9,911.99	-472.20	-758.92	-404.14	13.19	12.97	-11.20
10,021.43	14.42	342.47	9,925.03	-469.15	-759.90	-401.02	9.45	9.38	4.77
10,034.86	15.02	345.60	9,938.02	-465.87	-760.84	-397.67	7.42	4.47	23.31
10,048.29	16.28	347.29	9,950.95	-462.35	-761.69	-394.08	9.98	9.38	12.58
10,061.71	17.87	347.78	9,963.78	-458.50	-762.54	-390.18	11.90	11.85	3.65
10,075.14	17.99	347.50	9,976.56	-454.46	-763.42	-386.08	1.10	0.89	-2.08
10,088.57	18.91	347.29	9,989.30	-450.32	-764.35	-381.86	6.87	6.85	-1.56
10,102.00	21.01	347.89	10,001.92	-445.84	-765.33	-377.32	15.71	15.64	4.47
10,115.57	23.05	348.71	10,014.50	-440.86	-766.36	-372.26	15.20	15.03	6.04
10,129.14	24.86	349.69	10,026.90	-435.44	-767.40	-366.78	13.66	13.34	7.22
10,142.71	26.73	349.25	10,039.11	-429.64	-768.48	-360.90	13.85	13.78	-3.24
10,156.29	28.31	348.66	10,051.16	-423.48	-769.68	-354.66	11.81	11.63	-4.34
10,156.66	28.31	348.64	10,051.48	-423.31	-769.71	-354.49	2.09	0.80	-4.07
FTP: 10156.66° MD, 28.31° Inc									
10,169.86	28.42	348.11	10,063.10	-417.17	-770.98	-348.26	2.09	0.81	-4.05



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Top Spot 12_13 Fed Com 25H
Project:	Eddy County, NM (NAD83-NME)	TVD Reference:	RKB @ 3607.50usft (Citadel 2)
Site:	Top Spot 12_13	MD Reference:	RKB @ 3607.50usft (Citadel 2)
Well:	Top Spot 12_13 Fed Com 25H	North Reference:	Grid
Wellbore:	OH / 74975	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Citadel 2)	Database:	USAEDMDB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,183.43	29.68	347.66	10,074.96	-410.72	-772.36	-341.72	9.42	9.29	-3.32
10,197.00	31.69	348.33	10,086.63	-403.95	-773.80	-334.85	15.02	14.81	4.94
10,210.57	33.76	348.10	10,098.05	-396.77	-775.30	-327.56	15.28	15.25	-1.69
10,224.14	35.55	347.41	10,109.21	-389.23	-776.94	-319.91	13.50	13.19	-5.08
10,237.71	37.26	346.89	10,120.13	-381.38	-778.73	-311.93	12.80	12.60	-3.83
10,251.29	39.07	346.89	10,130.81	-373.21	-780.63	-303.62	13.33	13.33	0.00
10,264.86	39.59	346.72	10,141.30	-364.83	-782.59	-295.11	3.91	3.83	-1.25
10,278.43	39.83	346.37	10,151.74	-356.40	-784.61	-286.54	2.42	1.77	-2.58
10,292.00	40.54	345.44	10,162.11	-347.91	-786.74	-277.89	6.85	5.23	-6.85
10,305.43	41.80	346.32	10,172.22	-339.33	-788.90	-269.16	10.33	9.38	6.55
10,318.86	43.68	347.54	10,182.08	-330.46	-790.96	-260.14	15.30	14.00	9.08
10,332.29	45.75	348.16	10,191.62	-321.22	-792.95	-250.76	15.75	15.41	4.62
10,345.71	46.68	347.89	10,200.91	-311.74	-794.96	-241.14	7.08	6.93	-2.01
10,359.14	46.75	347.14	10,210.12	-302.20	-797.07	-231.45	4.10	0.52	-5.58
10,372.57	46.83	346.57	10,219.31	-292.66	-799.30	-221.76	3.15	0.60	-4.24
10,386.00	47.25	348.22	10,228.47	-283.07	-801.44	-212.02	9.52	3.13	12.29
10,399.57	48.61	348.75	10,237.56	-273.20	-803.45	-202.01	10.43	10.02	3.91
10,413.14	49.02	348.02	10,246.49	-263.20	-805.51	-191.87	5.05	3.02	-5.38
10,426.71	50.08	346.76	10,255.30	-253.12	-807.76	-181.63	10.53	7.81	-9.29
10,440.29	50.02	346.42	10,264.02	-243.00	-810.18	-171.33	1.97	-0.44	-2.50
10,453.86	49.95	346.09	10,272.74	-232.90	-812.65	-161.06	1.93	-0.52	-2.43
10,467.43	49.90	345.78	10,281.48	-222.83	-815.17	-150.81	1.79	-0.37	-2.28
10,481.00	51.10	346.00	10,290.11	-212.67	-817.72	-140.47	8.93	8.84	1.62
10,494.57	53.32	346.29	10,298.43	-202.26	-820.29	-129.87	16.45	16.36	2.14
10,508.14	55.69	347.06	10,306.31	-191.51	-822.83	-118.94	18.07	17.46	5.67
10,521.71	57.86	347.80	10,313.74	-180.43	-825.30	-107.69	16.63	15.99	5.45
10,535.29	60.07	348.23	10,320.74	-169.05	-827.72	-96.14	16.50	16.27	3.17
10,548.86	62.39	348.69	10,327.27	-157.40	-830.10	-84.32	17.35	17.10	3.39
10,562.43	64.24	349.94	10,333.37	-145.48	-832.35	-72.26	15.92	13.63	9.21
10,576.00	66.20	351.23	10,339.05	-133.33	-834.36	-59.97	16.83	14.44	9.51
10,589.57	68.29	352.46	10,344.30	-120.94	-836.13	-47.48	17.52	15.40	9.06
10,603.14	69.32	353.09	10,349.21	-108.39	-837.72	-34.84	8.74	7.59	4.64
10,616.71	69.46	352.76	10,353.98	-95.79	-839.29	-22.14	2.50	1.03	-2.43
10,630.29	69.62	352.42	10,358.73	-83.17	-840.93	-9.43	2.63	1.18	-2.50
10,643.86	69.76	352.08	10,363.44	-70.56	-842.65	3.28	2.57	1.03	-2.51
10,657.43	69.88	351.75	10,368.12	-57.95	-844.44	16.00	2.45	0.88	-2.43
10,671.00	71.40	352.80	10,372.62	-45.26	-846.16	28.79	13.37	11.20	7.74
10,684.57	73.44	354.16	10,376.72	-32.41	-847.63	41.72	17.81	15.03	10.02
10,698.14	75.81	354.83	10,380.32	-19.39	-848.88	54.80	18.10	17.46	4.94
10,711.71	75.69	354.52	10,383.66	-6.29	-850.10	67.95	2.38	-0.88	-2.28
10,725.29	75.54	354.21	10,387.03	6.80	-851.39	81.10	2.47	-1.10	-2.28
10,738.86	75.38	353.88	10,390.44	19.86	-852.76	94.24	2.63	-1.18	-2.43
10,752.43	75.25	353.54	10,393.88	32.91	-854.19	107.36	2.61	-0.96	-2.51



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Top Spot 12_13 Fed Com 25H
Project:	Eddy County, NM (NAD83-NME)	TVD Reference:	RKB @ 3607.50usft (Citadel 2)
Site:	Top Spot 12_13	MD Reference:	RKB @ 3607.50usft (Citadel 2)
Well:	Top Spot 12_13 Fed Com 25H	North Reference:	Grid
Wellbore:	OH / 74975	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Citadel 2)	Database:	USAEDMDB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,766.00	75.27	353.34	10,397.33	45.95	-855.69	120.48	1.43	0.15	-1.47
10,779.43	76.42	355.14	10,400.62	58.90	-857.00	133.50	15.56	8.56	13.40
10,792.86	77.68	356.68	10,403.63	71.96	-857.93	146.59	14.59	9.38	11.47
10,806.29	79.08	357.38	10,406.33	85.09	-858.61	159.73	11.61	10.42	5.21
10,819.71	79.47	356.81	10,408.83	98.26	-859.28	172.91	5.09	2.91	-4.25
10,833.14	80.87	356.99	10,411.12	111.47	-860.00	186.13	10.51	10.42	1.34
10,846.57	83.29	358.01	10,412.97	124.76	-860.58	199.42	19.53	18.02	7.59
10,860.00	85.61	359.25	10,414.27	138.12	-860.90	212.76	19.57	17.27	9.23
10,873.57	88.08	0.08	10,415.02	151.67	-860.98	226.26	19.20	18.20	6.12
10,887.14	89.13	0.49	10,415.35	165.24	-860.91	239.77	8.31	7.74	3.02
10,900.71	88.90	0.10	10,415.58	178.81	-860.84	253.28	3.34	-1.69	-2.87
10,914.29	88.64	359.71	10,415.87	192.38	-860.86	266.81	3.45	-1.91	-2.87
10,927.86	88.38	359.33	10,416.23	205.95	-860.97	280.33	3.39	-1.92	-2.80
10,941.43	88.18	358.96	10,416.63	219.51	-861.18	293.86	3.10	-1.47	-2.73
10,955.00	88.08	358.59	10,417.08	233.07	-861.47	307.39	2.82	-0.74	-2.73
10,970.00	88.18	358.22	10,417.56	248.06	-861.88	322.36	2.55	0.67	-2.47
10,985.00	88.38	357.86	10,418.02	263.04	-862.40	337.33	2.74	1.33	-2.40
11,000.00	88.61	357.52	10,418.41	278.02	-863.00	352.31	2.74	1.53	-2.27
11,015.00	88.78	357.18	10,418.75	293.00	-863.69	367.29	2.53	1.13	-2.27
11,026.50	88.78	356.91	10,419.00	304.49	-864.29	378.78	2.35	0.00	-2.35
11,038.00	88.73	356.66	10,419.25	315.96	-864.93	390.27	2.22	-0.43	-2.17
11,049.50	88.66	356.42	10,419.51	327.44	-865.63	401.77	2.17	-0.61	-2.09
11,061.00	88.58	356.21	10,419.78	338.91	-866.36	413.26	1.95	-0.70	-1.83
11,074.71	88.53	356.00	10,420.13	352.59	-867.30	426.96	1.57	-0.36	-1.53
11,088.43	88.49	355.84	10,420.49	366.27	-868.27	440.68	1.20	-0.29	-1.17
11,102.14	88.47	355.71	10,420.85	379.94	-869.28	454.38	0.96	-0.15	-0.95
11,115.86	88.46	355.59	10,421.22	393.61	-870.32	468.10	0.88	-0.07	-0.87
11,129.57	88.45	355.50	10,421.59	407.28	-871.39	481.80	0.66	-0.07	-0.66
11,143.29	88.58	355.42	10,421.94	420.95	-872.47	495.51	1.11	0.95	-0.58
11,157.00	88.72	355.37	10,422.27	434.61	-873.57	509.22	1.08	1.02	-0.36
11,170.57	88.77	355.33	10,422.56	448.13	-874.67	522.79	0.47	0.37	-0.29
11,184.14	88.80	355.31	10,422.85	461.65	-875.78	536.35	0.27	0.22	-0.15
11,197.71	88.80	355.29	10,423.14	475.17	-876.89	549.92	0.15	0.00	-0.15
11,211.29	88.80	355.28	10,423.42	488.71	-878.01	563.50	0.07	0.00	-0.07
11,224.86	88.83	355.28	10,423.70	502.23	-879.12	577.06	0.22	0.22	0.00
11,238.43	88.85	355.29	10,423.98	515.75	-880.24	590.63	0.16	0.15	0.07
11,252.00	88.83	355.32	10,424.25	529.27	-881.35	604.20	0.27	-0.15	0.22
11,265.57	88.81	355.32	10,424.53	542.79	-882.46	617.77	0.15	-0.15	0.00
11,279.14	88.78	355.41	10,424.81	556.31	-883.55	631.33	0.70	-0.22	0.66
11,292.71	88.75	355.48	10,425.11	569.84	-884.63	644.90	0.56	-0.22	0.52
11,306.29	88.74	355.42	10,425.40	583.37	-885.71	658.47	0.45	-0.07	-0.44
11,319.86	88.73	355.44	10,425.70	596.90	-886.79	672.04	0.16	-0.07	0.15
11,333.43	88.73	355.35	10,426.00	610.42	-887.88	685.61	0.66	0.00	-0.66



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Top Spot 12_13 Fed Com 25H
Project:	Eddy County, NM (NAD83-NME)	TVD Reference:	RKB @ 3607.50usft (Citadel 2)
Site:	Top Spot 12_13	MD Reference:	RKB @ 3607.50usft (Citadel 2)
Well:	Top Spot 12_13 Fed Com 25H	North Reference:	Grid
Wellbore:	OH / 74975	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Citadel 2)	Database:	USAEDMDB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,347.00	88.74	355.35	10,426.30	623.94	-888.98	699.17	0.07	0.07	0.00
11,360.57	88.76	355.38	10,426.60	637.46	-890.07	712.74	0.27	0.15	0.22
11,374.14	88.77	355.38	10,426.89	650.99	-891.17	726.31	0.07	0.07	0.00
11,387.71	88.77	355.37	10,427.18	664.51	-892.26	739.87	0.07	0.00	-0.07
11,401.29	88.72	355.34	10,427.48	678.04	-893.36	753.45	0.43	-0.37	-0.22
11,414.86	88.62	355.29	10,427.80	691.56	-894.47	767.02	0.82	-0.74	-0.37
11,428.43	88.51	355.24	10,428.14	705.08	-895.59	780.58	0.89	-0.81	-0.37
11,442.00	88.38	355.19	10,428.50	718.60	-896.72	794.15	1.03	-0.96	-0.37
11,455.57	88.20	355.13	10,428.91	732.11	-897.86	807.71	1.40	-1.33	-0.44
11,469.14	88.06	355.07	10,429.35	745.63	-899.02	821.27	1.12	-1.03	-0.44
11,482.71	87.96	354.91	10,429.82	759.14	-900.21	834.83	1.39	-0.74	-1.18
11,496.29	88.06	354.61	10,430.30	772.65	-901.45	848.41	2.33	0.74	-2.21
11,509.86	88.34	354.28	10,430.72	786.15	-902.76	861.97	3.19	2.06	-2.43
11,523.43	88.50	354.05	10,431.10	799.65	-904.14	875.53	2.06	1.18	-1.69
11,537.00	88.72	353.99	10,431.42	813.14	-905.55	889.10	1.68	1.62	-0.44
11,550.57	88.82	353.84	10,431.72	826.63	-906.99	902.66	1.33	0.74	-1.11
11,564.14	88.88	353.63	10,431.99	840.12	-908.47	916.22	1.61	0.44	-1.55
11,577.71	88.85	353.16	10,432.26	853.59	-910.03	929.79	3.47	-0.22	-3.46
11,591.29	88.84	353.34	10,432.53	867.08	-911.63	943.36	1.33	-0.07	1.33
11,604.86	88.84	353.52	10,432.81	880.55	-913.18	956.92	1.33	0.00	1.33
11,618.43	88.91	353.78	10,433.07	894.04	-914.68	970.48	1.98	0.52	1.92
11,632.00	88.92	353.83	10,433.33	907.53	-916.14	984.05	0.38	0.07	0.37
11,645.57	88.90	353.93	10,433.59	921.02	-917.59	997.61	0.75	-0.15	0.74
11,659.14	88.94	354.09	10,433.84	934.51	-919.00	1,011.18	1.22	0.29	1.18
11,672.71	89.28	353.99	10,434.05	948.01	-920.41	1,024.75	2.61	2.51	-0.74
11,686.29	89.41	354.18	10,434.21	961.51	-921.81	1,038.32	1.70	0.96	1.40
11,699.86	89.51	354.35	10,434.34	975.01	-923.17	1,051.89	1.45	0.74	1.25
11,713.43	89.60	354.77	10,434.44	988.52	-924.46	1,065.46	3.17	0.66	3.10
11,727.00	89.58	355.26	10,434.54	1,002.04	-925.63	1,079.03	3.61	-0.15	3.61
11,740.43	89.50	355.73	10,434.65	1,015.43	-926.69	1,092.46	3.55	-0.60	3.50
11,753.86	89.13	356.13	10,434.81	1,028.82	-927.64	1,105.89	4.06	-2.76	2.98
11,767.29	89.06	356.14	10,435.02	1,042.22	-928.55	1,119.31	0.53	-0.52	0.07
11,780.71	88.99	356.20	10,435.25	1,055.61	-929.44	1,132.73	0.69	-0.52	0.45
11,794.14	88.93	356.34	10,435.49	1,069.01	-930.32	1,146.15	1.13	-0.45	1.04
11,807.57	88.89	356.54	10,435.75	1,082.41	-931.15	1,159.57	1.52	-0.30	1.49
11,821.00	88.96	356.91	10,436.00	1,095.82	-931.92	1,173.00	2.80	0.52	2.76
11,834.57	89.08	357.32	10,436.23	1,109.37	-932.60	1,186.55	3.15	0.88	3.02
11,848.14	89.24	357.82	10,436.43	1,122.92	-933.18	1,200.11	3.87	1.18	3.68
11,861.71	89.43	358.36	10,436.59	1,136.48	-933.63	1,213.66	4.22	1.40	3.98
11,875.29	89.68	358.91	10,436.69	1,150.06	-933.95	1,227.21	4.45	1.84	4.05
11,888.86	90.01	359.85	10,436.73	1,163.63	-934.10	1,240.74	7.34	2.43	6.93
11,902.43	90.27	0.58	10,436.70	1,177.20	-934.05	1,254.25	5.71	1.92	5.38
11,916.00	90.51	1.28	10,436.60	1,190.77	-933.83	1,267.75	5.45	1.77	5.16
11,929.57	90.64	1.70	10,436.47	1,204.33	-933.48	1,281.23	3.24	0.96	3.10



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Top Spot 12_13 Fed Com 25H
Project:	Eddy County, NM (NAD83-NME)	TVD Reference:	RKB @ 3607.50usft (Citadel 2)
Site:	Top Spot 12_13	MD Reference:	RKB @ 3607.50usft (Citadel 2)
Well:	Top Spot 12_13 Fed Com 25H	North Reference:	Grid
Wellbore:	OH / 74975	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Citadel 2)	Database:	USAEDMDB

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
11,943.14	90.69	1.91	10,436.31	1,217.89	-933.05	1,294.71	1.59	0.37	1.55
11,956.71	90.79	2.19	10,436.14	1,231.45	-932.56	1,308.17	2.19	0.74	2.06
11,970.29	90.82	2.38	10,435.94	1,245.02	-932.02	1,321.64	1.42	0.22	1.40
11,983.86	90.73	2.07	10,435.76	1,258.58	-931.49	1,335.10	2.38	-0.66	-2.28
11,997.43	90.70	1.98	10,435.59	1,272.14	-931.01	1,348.57	0.70	-0.22	-0.66
12,011.00	90.60	2.05	10,435.44	1,285.70	-930.54	1,362.04	0.90	-0.74	0.52
12,024.43	90.48	2.16	10,435.31	1,299.12	-930.04	1,375.36	1.21	-0.89	0.82
12,037.86	90.46	2.27	10,435.20	1,312.54	-929.53	1,388.69	0.83	-0.15	0.82
12,051.29	90.45	2.41	10,435.09	1,325.96	-928.98	1,402.00	1.05	-0.07	1.04
12,064.71	90.44	2.55	10,434.99	1,339.37	-928.40	1,415.31	1.05	-0.07	1.04
12,078.14	90.45	2.69	10,434.89	1,352.78	-927.78	1,428.62	1.05	0.07	1.04
12,091.57	90.45	2.81	10,434.78	1,366.20	-927.14	1,441.93	0.89	0.00	0.89
12,105.00	90.41	2.84	10,434.68	1,379.61	-926.48	1,455.23	0.37	-0.30	0.22
12,118.57	90.45	2.90	10,434.58	1,393.16	-925.80	1,468.67	0.53	0.29	0.44
12,132.14	90.49	2.87	10,434.47	1,406.71	-925.11	1,482.11	0.37	0.29	-0.22
12,145.71	90.54	2.88	10,434.34	1,420.27	-924.43	1,495.55	0.38	0.37	0.07
12,159.29	90.58	2.87	10,434.21	1,433.83	-923.75	1,509.01	0.30	0.29	-0.07
12,172.86	90.61	2.87	10,434.07	1,447.38	-923.07	1,522.45	0.22	0.22	0.00
12,186.43	90.63	2.74	10,433.92	1,460.93	-922.41	1,535.89	0.97	0.15	-0.96
12,200.00	90.64	2.51	10,433.77	1,474.49	-921.79	1,549.34	1.70	0.07	-1.69
12,213.57	90.62	2.34	10,433.62	1,488.05	-921.21	1,562.79	1.26	-0.15	-1.25
12,227.14	90.38	2.42	10,433.51	1,501.60	-920.65	1,576.25	1.86	-1.77	0.59
12,240.71	90.10	2.55	10,433.45	1,515.16	-920.06	1,589.71	2.27	-2.06	0.96
12,254.29	89.86	2.60	10,433.45	1,528.73	-919.45	1,603.17	1.81	-1.77	0.37
12,267.86	90.00	2.65	10,433.47	1,542.28	-918.83	1,616.62	1.10	1.03	0.37
12,281.43	90.10	2.42	10,433.46	1,555.84	-918.23	1,630.07	1.85	0.74	-1.69
12,295.00	90.17	2.19	10,433.43	1,569.40	-917.68	1,643.53	1.77	0.52	-1.69
12,308.43	90.32	1.99	10,433.37	1,582.82	-917.19	1,656.85	1.86	1.12	-1.49
12,321.86	90.08	2.17	10,433.32	1,596.24	-916.71	1,670.18	2.23	-1.79	1.34
12,335.29	89.87	2.27	10,433.33	1,609.66	-916.19	1,683.51	1.73	-1.56	0.74
12,348.71	89.78	2.33	10,433.37	1,623.07	-915.65	1,696.82	0.81	-0.67	0.45
12,362.14	89.72	2.30	10,433.43	1,636.49	-915.11	1,710.14	0.50	-0.45	-0.22
12,375.57	89.72	2.25	10,433.49	1,649.91	-914.57	1,723.46	0.37	0.00	-0.37
12,389.00	89.72	2.13	10,433.56	1,663.33	-914.06	1,736.78	0.89	0.00	-0.89
12,402.57	89.68	1.93	10,433.63	1,676.89	-913.58	1,750.25	1.50	-0.29	-1.47
12,416.14	89.62	1.70	10,433.71	1,690.45	-913.15	1,763.72	1.75	-0.44	-1.69
12,429.71	89.37	1.56	10,433.83	1,704.02	-912.76	1,777.20	2.11	-1.84	-1.03
12,443.29	89.04	1.41	10,434.02	1,717.59	-912.41	1,790.69	2.67	-2.43	-1.10
12,456.86	88.61	1.26	10,434.30	1,731.15	-912.09	1,804.18	3.36	-3.17	-1.11
12,470.43	88.61	1.09	10,434.63	1,744.72	-911.82	1,817.66	1.25	0.00	-1.25
12,484.00	88.86	0.89	10,434.93	1,758.28	-911.58	1,831.16	2.36	1.84	-1.47
12,497.57	88.99	0.86	10,435.18	1,771.85	-911.37	1,844.65	0.98	0.96	-0.22
12,511.14	89.14	0.83	10,435.40	1,785.41	-911.17	1,858.15	1.13	1.11	-0.22



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Top Spot 12_13 Fed Com 25H
Project:	Eddy County, NM (NAD83-NME)	TVD Reference:	RKB @ 3607.50usft (Citadel 2)
Site:	Top Spot 12_13	MD Reference:	RKB @ 3607.50usft (Citadel 2)
Well:	Top Spot 12_13 Fed Com 25H	North Reference:	Grid
Wellbore:	OH / 74975	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Citadel 2)	Database:	USAEDMDB

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
12,524.71	89.34	0.76	10,435.58	1,798.98	-910.99	1,871.65	1.56	1.47	-0.52
12,538.29	89.45	0.73	10,435.73	1,812.56	-910.81	1,885.16	0.84	0.81	-0.22
12,551.86	89.61	0.74	10,435.84	1,826.13	-910.64	1,898.66	1.18	1.18	0.07
12,565.43	89.72	0.56	10,435.92	1,839.70	-910.48	1,912.17	1.55	0.81	-1.33
12,579.00	89.51	0.59	10,436.01	1,853.27	-910.35	1,925.67	1.56	-1.55	0.22
12,592.57	89.49	0.47	10,436.13	1,866.84	-910.22	1,939.18	0.90	-0.15	-0.88
12,606.14	89.49	0.42	10,436.25	1,880.40	-910.11	1,952.68	0.37	0.00	-0.37
12,619.71	89.51	0.43	10,436.37	1,893.97	-910.01	1,966.19	0.16	0.15	0.07
12,633.29	89.49	0.41	10,436.49	1,907.55	-909.91	1,979.71	0.21	-0.15	-0.15
12,646.86	89.49	0.51	10,436.61	1,921.12	-909.81	1,993.22	0.74	0.00	0.74
12,660.43	89.52	0.59	10,436.72	1,934.69	-909.68	2,006.73	0.63	0.22	0.59
12,674.00	89.58	0.53	10,436.83	1,948.26	-909.54	2,020.23	0.63	0.44	-0.44
12,687.43	89.64	0.48	10,436.92	1,961.69	-909.42	2,033.60	0.58	0.45	-0.37
12,700.86	89.62	0.57	10,437.01	1,975.12	-909.30	2,046.97	0.69	-0.15	0.67
12,714.29	89.55	0.70	10,437.11	1,988.55	-909.15	2,060.33	1.10	-0.52	0.97
12,727.71	89.59	0.67	10,437.21	2,001.97	-908.99	2,073.68	0.37	0.30	-0.22
12,741.14	89.63	0.67	10,437.30	2,015.39	-908.83	2,087.05	0.30	0.30	0.00
12,754.57	89.50	0.80	10,437.40	2,028.82	-908.66	2,100.41	1.37	-0.97	0.97
12,768.00	89.48	1.03	10,437.52	2,042.25	-908.45	2,113.77	1.72	-0.15	1.71
12,781.57	89.46	1.32	10,437.64	2,055.82	-908.17	2,127.26	2.14	-0.15	2.14
12,795.14	89.53	1.57	10,437.76	2,069.38	-907.83	2,140.74	1.91	0.52	1.84
12,808.71	89.56	1.80	10,437.87	2,082.95	-907.43	2,154.22	1.71	0.22	1.69
12,822.29	89.50	2.00	10,437.98	2,096.52	-906.98	2,167.70	1.54	-0.44	1.47
12,835.86	89.71	2.25	10,438.08	2,110.08	-906.48	2,181.16	2.41	1.55	1.84
12,849.43	89.68	2.48	10,438.15	2,123.64	-905.92	2,194.62	1.71	-0.22	1.69
12,863.00	89.70	2.73	10,438.22	2,137.19	-905.30	2,208.07	1.85	0.15	1.84
12,876.57	89.72	2.82	10,438.29	2,150.75	-904.64	2,221.52	0.68	0.15	0.66
12,890.14	89.74	2.86	10,438.36	2,164.30	-903.97	2,234.96	0.33	0.15	0.29
12,903.71	89.77	2.85	10,438.41	2,177.85	-903.29	2,248.40	0.23	0.22	-0.07
12,917.29	89.58	2.66	10,438.49	2,191.42	-902.64	2,261.86	1.98	-1.40	-1.40
12,930.86	89.53	2.69	10,438.60	2,204.97	-902.01	2,275.30	0.43	-0.37	0.22
12,944.43	89.53	2.79	10,438.71	2,218.53	-901.36	2,288.75	0.74	0.00	0.74
12,958.00	89.48	3.01	10,438.82	2,232.08	-900.67	2,302.19	1.66	-0.37	1.62
12,971.43	89.47	3.18	10,438.95	2,245.49	-899.95	2,315.49	1.27	-0.07	1.27
12,984.86	89.54	3.25	10,439.06	2,258.90	-899.19	2,328.78	0.74	0.52	0.52
12,998.29	89.62	3.34	10,439.16	2,272.30	-898.42	2,342.07	0.90	0.60	0.67
13,011.71	89.55	3.10	10,439.26	2,285.70	-897.67	2,355.35	1.86	-0.52	-1.79
13,025.14	89.47	2.84	10,439.37	2,299.11	-896.97	2,368.65	2.03	-0.60	-1.94
13,038.57	89.60	3.00	10,439.48	2,312.53	-896.29	2,381.95	1.54	0.97	1.19
13,052.00	89.64	3.05	10,439.57	2,325.94	-895.58	2,395.25	0.48	0.30	0.37
13,065.57	89.68	3.09	10,439.65	2,339.49	-894.85	2,408.68	0.42	0.29	0.29
13,079.14	89.49	3.18	10,439.75	2,353.04	-894.11	2,422.11	1.55	-1.40	0.66
13,092.71	89.45	2.98	10,439.88	2,366.59	-893.38	2,435.55	1.50	-0.29	-1.47



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Top Spot 12_13 Fed Com 25H
Project:	Eddy County, NM (NAD83-NME)	TVD Reference:	RKB @ 3607.50usft (Citadel 2)
Site:	Top Spot 12_13	MD Reference:	RKB @ 3607.50usft (Citadel 2)
Well:	Top Spot 12_13 Fed Com 25H	North Reference:	Grid
Wellbore:	OH / 74975	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Citadel 2)	Database:	USAEDMDB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
13,106.29	89.44	3.14	10,440.01	2,380.15	-892.66	2,448.99	1.18	-0.07	1.18
13,119.86	89.42	3.36	10,440.14	2,393.69	-891.89	2,462.42	1.63	-0.15	1.62
13,133.43	89.45	3.38	10,440.28	2,407.24	-891.09	2,475.85	0.27	0.22	0.15
13,147.00	89.55	3.41	10,440.40	2,420.78	-890.29	2,489.27	0.77	0.74	0.22
13,160.57	89.57	3.53	10,440.50	2,434.33	-889.46	2,502.69	0.90	0.15	0.88
13,174.14	89.59	3.59	10,440.60	2,447.87	-888.62	2,516.11	0.47	0.15	0.44
13,187.71	89.60	3.64	10,440.69	2,461.42	-887.77	2,529.53	0.38	0.07	0.37
13,201.29	89.62	3.74	10,440.79	2,474.97	-886.89	2,542.95	0.75	0.15	0.74
13,214.86	89.64	3.85	10,440.87	2,488.51	-885.99	2,556.36	0.82	0.15	0.81
13,228.43	89.45	4.05	10,440.98	2,502.04	-885.06	2,569.76	2.03	-1.40	1.47
13,242.00	89.45	4.19	10,441.11	2,515.58	-884.08	2,583.16	1.03	0.00	1.03
13,255.43	89.49	4.33	10,441.24	2,528.97	-883.09	2,596.41	1.08	0.30	1.04
13,268.86	89.47	4.54	10,441.36	2,542.36	-882.05	2,609.66	1.57	-0.15	1.56
13,282.29	89.40	4.83	10,441.49	2,555.74	-880.95	2,622.90	2.22	-0.52	2.16
13,295.71	89.45	4.99	10,441.63	2,569.11	-879.80	2,636.12	1.25	0.37	1.19
13,309.14	89.50	5.14	10,441.75	2,582.49	-878.62	2,649.34	1.18	0.37	1.12
13,322.57	89.55	5.19	10,441.86	2,595.87	-877.41	2,662.56	0.53	0.37	0.37
13,336.00	89.60	5.17	10,441.96	2,609.24	-876.20	2,675.78	0.40	0.37	-0.15
13,349.57	89.67	5.07	10,442.05	2,622.76	-874.99	2,689.14	0.90	0.52	-0.74
13,363.14	89.45	5.00	10,442.15	2,636.27	-873.79	2,702.50	1.70	-1.62	-0.52
13,376.71	89.16	4.91	10,442.32	2,649.79	-872.62	2,715.86	2.24	-2.14	-0.66
13,390.29	89.25	5.12	10,442.50	2,663.32	-871.44	2,729.23	1.68	0.66	1.55
13,403.86	89.33	5.28	10,442.67	2,676.83	-870.21	2,742.59	1.32	0.59	1.18
13,417.43	89.41	5.12	10,442.82	2,690.35	-868.98	2,755.94	1.32	0.59	-1.18
13,431.00	89.48	5.07	10,442.95	2,703.86	-867.77	2,769.30	0.63	0.52	-0.37
13,444.57	89.54	5.12	10,443.07	2,717.38	-866.57	2,782.66	0.58	0.44	0.37
13,458.14	89.61	5.06	10,443.17	2,730.89	-865.36	2,796.02	0.68	0.52	-0.44
13,471.71	89.67	5.08	10,443.25	2,744.41	-864.16	2,809.38	0.47	0.44	0.15
13,485.29	89.70	5.22	10,443.33	2,757.93	-862.94	2,822.75	1.05	0.22	1.03
13,498.86	89.73	5.36	10,443.40	2,771.45	-861.69	2,836.10	1.06	0.22	1.03
13,512.43	89.83	5.48	10,443.45	2,784.96	-860.41	2,849.44	1.15	0.74	0.88
13,526.00	90.02	5.66	10,443.47	2,798.46	-859.09	2,862.78	1.93	1.40	1.33
13,539.43	90.21	5.76	10,443.44	2,811.83	-857.76	2,875.98	1.60	1.41	0.74
13,552.86	90.22	5.72	10,443.39	2,825.19	-856.41	2,889.17	0.31	0.07	-0.30
13,566.29	90.11	5.59	10,443.35	2,838.55	-855.09	2,902.37	1.27	-0.82	-0.97
13,579.71	89.97	5.60	10,443.34	2,851.91	-853.78	2,915.56	1.05	-1.04	0.07
13,593.14	89.91	5.57	10,443.36	2,865.27	-852.48	2,928.76	0.50	-0.45	-0.22
13,606.57	89.92	5.43	10,443.38	2,878.64	-851.19	2,941.97	1.05	0.07	-1.04
13,620.00	89.92	5.28	10,443.39	2,892.01	-849.93	2,955.18	1.12	0.00	-1.12
13,633.57	89.90	5.13	10,443.42	2,905.53	-848.70	2,968.53	1.12	-0.15	-1.11
13,647.14	89.88	4.95	10,443.44	2,919.05	-847.51	2,981.89	1.33	-0.15	-1.33
13,660.71	89.87	4.73	10,443.47	2,932.57	-846.37	2,995.26	1.62	-0.07	-1.62
13,674.29	89.84	4.56	10,443.51	2,946.10	-845.27	3,008.65	1.27	-0.22	-1.25
13,687.86	89.83	4.37	10,443.54	2,959.63	-844.21	3,022.04	1.40	-0.07	-1.40



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Top Spot 12_13 Fed Com 25H
Project:	Eddy County, NM (NAD83-NME)	TVD Reference:	RKB @ 3607.50usft (Citadel 2)
Site:	Top Spot 12_13	MD Reference:	RKB @ 3607.50usft (Citadel 2)
Well:	Top Spot 12_13 Fed Com 25H	North Reference:	Grid
Wellbore:	OH / 74975	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Citadel 2)	Database:	USAEDMDB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
13,701.43	89.83	4.14	10,443.58	2,973.16	-843.20	3,035.43	1.69	0.00	-1.69
13,715.00	89.74	3.97	10,443.64	2,986.70	-842.24	3,048.83	1.42	-0.66	-1.25
13,728.57	89.57	3.81	10,443.72	3,000.24	-841.32	3,062.24	1.72	-1.25	-1.18
13,742.14	89.59	3.61	10,443.82	3,013.78	-840.45	3,075.65	1.48	0.15	-1.47
13,755.71	89.65	3.38	10,443.91	3,027.32	-839.62	3,089.07	1.75	0.44	-1.69
13,769.29	89.75	3.12	10,443.98	3,040.88	-838.85	3,102.51	2.05	0.74	-1.91
13,782.86	89.81	2.81	10,444.03	3,054.43	-838.15	3,115.95	2.33	0.44	-2.28
13,796.43	89.85	2.53	10,444.07	3,067.99	-837.51	3,129.40	2.08	0.29	-2.06
13,810.00	89.87	2.24	10,444.10	3,081.55	-836.95	3,142.85	2.14	0.15	-2.14
13,823.43	89.84	2.03	10,444.14	3,094.97	-836.45	3,156.18	1.58	-0.22	-1.56
13,836.86	89.81	1.92	10,444.18	3,108.39	-835.99	3,169.51	0.85	-0.22	-0.82
13,850.29	89.80	1.60	10,444.22	3,121.81	-835.57	3,182.85	2.38	-0.07	-2.38
13,863.71	89.79	1.48	10,444.27	3,135.23	-835.21	3,196.18	0.90	-0.07	-0.89
13,877.14	89.91	1.46	10,444.31	3,148.65	-834.87	3,209.52	0.91	0.89	-0.15
13,890.57	89.87	1.41	10,444.33	3,162.08	-834.53	3,222.87	0.48	-0.30	-0.37
13,904.00	89.98	1.17	10,444.35	3,175.51	-834.23	3,236.22	1.97	0.82	-1.79
13,917.57	90.17	0.92	10,444.33	3,189.07	-833.98	3,249.71	2.31	1.40	-1.84
13,931.14	90.28	0.79	10,444.28	3,202.64	-833.78	3,263.21	1.25	0.81	-0.96
13,944.71	90.52	0.74	10,444.18	3,216.21	-833.60	3,276.71	1.81	1.77	-0.37
13,958.29	90.78	0.69	10,444.03	3,229.79	-833.43	3,290.22	1.95	1.91	-0.37
13,971.86	90.99	0.59	10,443.82	3,243.36	-833.28	3,303.72	1.71	1.55	-0.74
13,985.43	91.18	0.47	10,443.56	3,256.92	-833.15	3,317.23	1.66	1.40	-0.88
13,999.00	91.39	0.42	10,443.26	3,270.49	-833.05	3,330.73	1.59	1.55	-0.37
14,012.57	91.47	0.38	10,442.92	3,284.06	-832.95	3,344.24	0.66	0.59	-0.29
14,026.14	91.92	0.26	10,442.52	3,297.62	-832.88	3,357.74	3.43	3.32	-0.88
14,039.71	92.14	0.20	10,442.04	3,311.18	-832.82	3,371.25	1.68	1.62	-0.44
14,053.29	92.01	0.25	10,441.55	3,324.75	-832.77	3,384.76	1.03	-0.96	0.37
14,066.86	91.98	0.23	10,441.08	3,338.31	-832.71	3,398.27	0.27	-0.22	-0.15
14,080.43	91.94	0.23	10,440.61	3,351.87	-832.66	3,411.77	0.29	-0.29	0.00
14,094.00	91.92	0.35	10,440.15	3,365.44	-832.59	3,425.28	0.90	-0.15	0.88
14,107.43	91.92	0.35	10,439.70	3,378.86	-832.51	3,438.64	0.00	0.00	0.00
14,120.86	91.94	0.30	10,439.25	3,392.28	-832.43	3,452.01	0.40	0.15	-0.37
14,134.29	91.94	0.30	10,438.80	3,405.70	-832.36	3,465.37	0.00	0.00	0.00
14,147.71	91.94	0.35	10,438.34	3,419.12	-832.28	3,478.72	0.37	0.00	0.37
14,161.14	92.04	0.41	10,437.88	3,432.54	-832.20	3,492.09	0.87	0.74	0.45
14,174.57	92.08	0.35	10,437.39	3,445.96	-832.11	3,505.45	0.54	0.30	-0.45
14,188.00	91.91	0.37	10,436.93	3,459.38	-832.02	3,518.81	1.27	-1.27	0.15
14,201.57	91.85	0.51	10,436.48	3,472.94	-831.92	3,532.31	1.12	-0.44	1.03
14,215.14	91.87	0.70	10,436.04	3,486.50	-831.77	3,545.81	1.41	0.15	1.40
14,228.71	91.95	0.71	10,435.59	3,500.07	-831.61	3,559.31	0.59	0.59	0.07
14,242.29	91.99	0.79	10,435.12	3,513.64	-831.43	3,572.81	0.66	0.29	0.59
14,255.86	92.04	0.79	10,434.64	3,527.20	-831.24	3,586.30	0.37	0.37	0.00
14,269.43	92.07	0.84	10,434.16	3,540.76	-831.05	3,599.79	0.43	0.22	0.37



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Top Spot 12_13 Fed Com 25H
Project:	Eddy County, NM (NAD83-NME)	TVD Reference:	RKB @ 3607.50usft (Citadel 2)
Site:	Top Spot 12_13	MD Reference:	RKB @ 3607.50usft (Citadel 2)
Well:	Top Spot 12_13 Fed Com 25H	North Reference:	Grid
Wellbore:	OH / 74975	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Citadel 2)	Database:	USAEDMDB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,283.00	91.92	0.88	10,433.69	3,554.32	-830.85	3,613.28	1.14	-1.11	0.29
14,296.57	91.91	0.87	10,433.23	3,567.88	-830.64	3,626.78	0.10	-0.07	-0.07
14,310.14	91.90	0.86	10,432.78	3,581.44	-830.44	3,640.27	0.10	-0.07	-0.07
14,323.71	91.92	0.84	10,432.33	3,595.00	-830.23	3,653.76	0.21	0.15	-0.15
14,337.29	91.88	0.79	10,431.88	3,608.57	-830.04	3,667.26	0.47	-0.29	-0.37
14,350.86	91.99	0.65	10,431.42	3,622.13	-829.87	3,680.76	1.31	0.81	-1.03
14,364.43	91.99	0.57	10,430.95	3,635.69	-829.73	3,694.25	0.59	0.00	-0.59
14,378.00	91.90	0.51	10,430.49	3,649.25	-829.60	3,707.75	0.80	-0.66	-0.44
14,391.57	91.89	0.45	10,430.04	3,662.82	-829.48	3,721.25	0.45	-0.07	-0.44
14,405.14	91.80	0.46	10,429.60	3,676.38	-829.38	3,734.75	0.67	-0.66	0.07
14,418.71	91.80	0.42	10,429.18	3,689.94	-829.27	3,748.25	0.29	0.00	-0.29
14,432.29	91.86	0.35	10,428.74	3,703.51	-829.18	3,761.77	0.68	0.44	-0.52
14,445.86	91.88	0.31	10,428.30	3,717.08	-829.10	3,775.27	0.33	0.15	-0.29
14,459.43	91.90	0.29	10,427.85	3,730.64	-829.03	3,788.78	0.21	0.15	-0.15
14,473.00	91.94	0.19	10,427.40	3,744.20	-828.98	3,802.28	0.79	0.29	-0.74
14,486.57	91.99	0.06	10,426.93	3,757.76	-828.95	3,815.79	1.03	0.37	-0.96
14,500.14	92.02	359.95	10,426.46	3,771.33	-828.94	3,829.30	0.84	0.22	-0.81
14,513.71	92.04	359.85	10,425.98	3,784.89	-828.97	3,842.81	0.75	0.15	-0.74
14,527.29	91.99	359.78	10,425.50	3,798.46	-829.01	3,856.33	0.63	-0.37	-0.52
14,540.86	92.03	359.97	10,425.02	3,812.02	-829.04	3,869.85	1.43	0.29	1.40
14,554.43	92.04	0.02	10,424.54	3,825.58	-829.04	3,883.36	0.38	0.07	0.37
14,568.00	91.83	0.08	10,424.08	3,839.14	-829.03	3,896.87	1.61	-1.55	0.44
14,581.43	91.57	0.13	10,423.68	3,852.57	-829.01	3,910.24	1.97	-1.94	0.37
14,594.86	91.65	0.35	10,423.31	3,865.99	-828.95	3,923.60	1.74	0.60	1.64
14,608.29	91.75	0.60	10,422.91	3,879.42	-828.84	3,936.97	2.00	0.74	1.86
14,621.71	91.70	0.41	10,422.51	3,892.83	-828.72	3,950.32	1.46	-0.37	-1.42
14,635.14	91.72	0.22	10,422.10	3,906.25	-828.65	3,963.68	1.42	0.15	-1.41
14,648.57	91.75	0.05	10,421.70	3,919.68	-828.62	3,977.05	1.28	0.22	-1.27
14,662.00	91.72	359.88	10,421.29	3,933.10	-828.62	3,990.43	1.28	-0.22	-1.27
14,675.57	91.63	359.81	10,420.89	3,946.67	-828.66	4,003.94	0.84	-0.66	-0.52
14,689.14	91.47	359.78	10,420.53	3,960.23	-828.71	4,017.46	1.20	-1.18	-0.22
14,702.71	91.29	359.75	10,420.20	3,973.80	-828.76	4,030.98	1.34	-1.33	-0.22
14,716.29	91.30	359.43	10,419.89	3,987.37	-828.86	4,044.51	2.36	0.07	-2.36
14,729.86	91.43	359.27	10,419.57	4,000.94	-829.02	4,058.04	1.52	0.96	-1.18
14,743.43	91.64	359.12	10,419.21	4,014.50	-829.21	4,071.57	1.90	1.55	-1.11
14,757.00	91.89	359.00	10,418.79	4,028.06	-829.43	4,085.10	2.04	1.84	-0.88
14,770.57	92.05	358.99	10,418.32	4,041.62	-829.67	4,098.63	1.18	1.18	-0.07
14,784.14	92.04	359.07	10,417.84	4,055.18	-829.90	4,112.15	0.59	-0.07	0.59
14,797.71	92.14	359.10	10,417.34	4,068.74	-830.11	4,125.68	0.77	0.74	0.22
14,811.29	92.29	358.95	10,416.82	4,082.31	-830.34	4,139.22	1.56	1.10	-1.10
14,824.86	92.40	358.89	10,416.26	4,095.87	-830.60	4,152.74	0.92	0.81	-0.44
14,838.43	92.41	359.05	10,415.69	4,109.42	-830.84	4,166.27	1.18	0.07	1.18
14,852.00	92.47	359.16	10,415.12	4,122.98	-831.05	4,179.79	0.92	0.44	0.81



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Top Spot 12_13 Fed Com 25H
Project:	Eddy County, NM (NAD83-NME)	TVD Reference:	RKB @ 3607.50usft (Citadel 2)
Site:	Top Spot 12_13	MD Reference:	RKB @ 3607.50usft (Citadel 2)
Well:	Top Spot 12_13 Fed Com 25H	North Reference:	Grid
Wellbore:	OH / 74975	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Citadel 2)	Database:	USAEDMDB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,865.43	92.62	359.17	10,414.52	4,136.39	-831.25	4,193.17	1.12	1.12	0.07
14,878.86	92.73	359.17	10,413.89	4,149.81	-831.44	4,206.55	0.82	0.82	0.00
14,892.29	92.71	359.18	10,413.26	4,163.22	-831.64	4,219.93	0.17	-0.15	0.07
14,905.71	92.62	359.06	10,412.63	4,176.62	-831.84	4,233.30	1.12	-0.67	-0.89
14,919.14	92.54	358.94	10,412.03	4,190.04	-832.08	4,246.69	1.07	-0.60	-0.89
14,932.57	92.54	358.93	10,411.43	4,203.45	-832.33	4,260.07	0.07	0.00	-0.07
14,946.00	92.53	358.94	10,410.84	4,216.87	-832.58	4,273.46	0.11	-0.07	0.07
14,959.57	92.51	358.94	10,410.24	4,230.42	-832.83	4,286.98	0.15	-0.15	0.00
14,973.14	92.52	358.94	10,409.65	4,243.98	-833.08	4,300.51	0.07	0.07	0.00
14,986.71	92.53	358.93	10,409.05	4,257.53	-833.33	4,314.03	0.10	0.07	-0.07
15,000.29	92.45	358.91	10,408.46	4,271.10	-833.59	4,327.57	0.61	-0.59	-0.15
15,013.86	92.36	358.88	10,407.89	4,284.65	-833.85	4,341.09	0.70	-0.66	-0.22
15,027.43	92.38	358.72	10,407.33	4,298.21	-834.13	4,354.62	1.19	0.15	-1.18
15,041.00	92.41	358.46	10,406.76	4,311.76	-834.46	4,368.15	1.93	0.22	-1.92
15,054.57	92.49	358.44	10,406.18	4,325.31	-834.83	4,381.68	0.61	0.59	-0.15
15,068.14	92.55	358.53	10,405.58	4,338.87	-835.19	4,395.22	0.80	0.44	0.66
15,081.71	92.59	358.53	10,404.98	4,352.42	-835.54	4,408.75	0.29	0.29	0.00
15,095.29	92.69	358.44	10,404.35	4,365.98	-835.90	4,422.29	0.99	0.74	-0.66
15,108.86	92.81	358.38	10,403.70	4,379.53	-836.27	4,435.82	0.99	0.88	-0.44
15,122.43	92.91	358.26	10,403.02	4,393.08	-836.67	4,449.35	1.15	0.74	-0.88
15,136.00	93.01	358.09	10,402.32	4,406.62	-837.10	4,462.88	1.45	0.74	-1.25
15,149.43	93.05	358.12	10,401.61	4,420.02	-837.54	4,476.27	0.37	0.30	0.22
15,162.86	92.94	358.25	10,400.91	4,433.43	-837.97	4,489.66	1.27	-0.82	0.97
15,176.29	92.83	358.40	10,400.23	4,446.84	-838.36	4,503.05	1.38	-0.82	1.12
15,189.71	92.88	358.46	10,399.56	4,460.23	-838.73	4,516.43	0.58	0.37	0.45
15,203.14	92.75	358.52	10,398.91	4,473.64	-839.08	4,529.82	1.07	-0.97	0.45
15,216.57	92.79	358.56	10,398.26	4,487.05	-839.42	4,543.21	0.42	0.30	0.30
15,230.00	92.69	358.59	10,397.61	4,500.46	-839.76	4,556.60	0.78	-0.74	0.22
15,243.57	92.58	358.55	10,396.99	4,514.02	-840.10	4,570.13	0.86	-0.81	-0.29
15,257.14	92.51	358.45	10,396.39	4,527.57	-840.45	4,583.66	0.90	-0.52	-0.74
15,270.71	92.51	358.30	10,395.79	4,541.12	-840.84	4,597.19	1.10	0.00	-1.11
15,284.29	92.50	358.15	10,395.20	4,554.68	-841.26	4,610.74	1.11	-0.07	-1.10
15,297.86	92.52	358.05	10,394.61	4,568.23	-841.71	4,624.27	0.75	0.15	-0.74
15,311.43	92.50	358.05	10,394.01	4,581.78	-842.17	4,637.81	0.15	-0.15	0.00
15,325.00	92.43	358.18	10,393.43	4,595.33	-842.61	4,651.35	1.09	-0.52	0.96
15,338.43	92.41	358.34	10,392.86	4,608.74	-843.02	4,664.74	1.20	-0.15	1.19
15,351.86	92.43	358.42	10,392.29	4,622.15	-843.40	4,678.14	0.61	0.15	0.60
15,365.29	92.44	358.56	10,391.72	4,635.57	-843.75	4,691.53	1.04	0.07	1.04
15,378.71	92.54	358.69	10,391.14	4,648.97	-844.07	4,704.91	1.22	0.75	0.97
15,392.14	92.66	358.79	10,390.53	4,662.38	-844.37	4,718.30	1.16	0.89	0.74
15,405.57	92.72	358.79	10,389.90	4,675.79	-844.65	4,731.68	0.45	0.45	0.00
15,419.00	92.59	358.87	10,389.28	4,689.21	-844.93	4,745.07	1.14	-0.97	0.60
15,432.57	92.45	358.84	10,388.68	4,702.76	-845.20	4,758.60	1.06	-1.03	-0.22
15,446.14	92.38	358.80	10,388.11	4,716.32	-845.48	4,772.12	0.59	-0.52	-0.29



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Top Spot 12_13 Fed Com 25H
Project:	Eddy County, NM (NAD83-NME)	TVD Reference:	RKB @ 3607.50usft (Citadel 2)
Site:	Top Spot 12_13	MD Reference:	RKB @ 3607.50usft (Citadel 2)
Well:	Top Spot 12_13 Fed Com 25H	North Reference:	Grid
Wellbore:	OH / 74975	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Citadel 2)	Database:	USAEDMDB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
15,459.71	92.31	358.72	10,387.55	4,729.87	-845.77	4,785.65	0.78	-0.52	-0.59
15,473.29	92.25	358.92	10,387.01	4,743.44	-846.05	4,799.19	1.54	-0.44	1.47
15,486.86	92.26	358.96	10,386.48	4,757.00	-846.30	4,812.72	0.30	0.07	0.29
15,487.47	92.26	358.96	10,386.46	4,757.60	-846.31	4,813.33	0.00	0.00	0.00
SL: 15487.47' MD									
15,500.43	92.30	358.95	10,385.94	4,770.55	-846.55	4,826.25	0.32	0.31	-0.08
15,514.00	92.33	358.92	10,385.39	4,784.11	-846.80	4,839.77	0.31	0.22	-0.22
15,527.57	92.35	358.78	10,384.84	4,797.67	-847.07	4,853.30	1.04	0.15	-1.03
15,541.14	92.40	358.68	10,384.28	4,811.22	-847.37	4,866.83	0.82	0.37	-0.74
15,554.71	92.46	358.54	10,383.70	4,824.77	-847.70	4,880.36	1.12	0.44	-1.03
15,568.29	92.51	358.58	10,383.11	4,838.34	-848.04	4,893.90	0.47	0.37	0.29
15,581.86	92.57	358.65	10,382.51	4,851.89	-848.37	4,907.43	0.68	0.44	0.52
15,595.43	92.55	358.67	10,381.90	4,865.44	-848.69	4,920.96	0.21	-0.15	0.15
15,609.00	92.63	358.65	10,381.29	4,878.99	-849.00	4,934.49	0.61	0.59	-0.15
15,622.43	92.59	358.63	10,380.68	4,892.41	-849.32	4,947.88	0.33	-0.30	-0.15
15,635.86	92.46	358.60	10,380.09	4,905.82	-849.65	4,961.27	0.99	-0.97	-0.22
15,649.29	92.45	358.66	10,379.51	4,919.23	-849.97	4,974.66	0.45	-0.07	0.45
15,662.71	92.39	358.75	10,378.95	4,932.64	-850.27	4,988.04	0.81	-0.45	0.67
15,676.14	92.36	358.83	10,378.39	4,946.05	-850.55	5,001.43	0.64	-0.22	0.60
15,689.57	92.41	358.88	10,377.83	4,959.47	-850.82	5,014.82	0.53	0.37	0.37
15,703.00	92.45	358.98	10,377.26	4,972.89	-851.07	5,028.20	0.80	0.30	0.74
15,716.57	92.47	359.09	10,376.68	4,986.44	-851.30	5,041.73	0.82	0.15	0.81
15,730.14	92.45	359.19	10,376.10	5,000.00	-851.50	5,055.25	0.75	-0.15	0.74
15,743.71	92.42	359.29	10,375.52	5,013.55	-851.68	5,068.77	0.77	-0.22	0.74
15,757.29	92.40	359.43	10,374.95	5,027.12	-851.84	5,082.30	1.04	-0.15	1.03
15,770.86	92.37	359.53	10,374.38	5,040.68	-851.96	5,095.81	0.77	-0.22	0.74
15,784.43	92.34	359.61	10,373.83	5,054.24	-852.06	5,109.33	0.63	-0.22	0.59
15,798.00	92.21	359.60	10,373.29	5,067.80	-852.15	5,122.84	0.96	-0.96	-0.07
15,811.43	92.11	359.57	10,372.78	5,081.22	-852.25	5,136.22	0.78	-0.74	-0.22
15,824.86	92.17	359.71	10,372.28	5,094.64	-852.34	5,149.60	1.13	0.45	1.04
15,838.29	92.27	359.61	10,371.76	5,108.06	-852.42	5,162.97	1.05	0.74	-0.74
15,851.71	92.31	359.55	10,371.22	5,121.46	-852.51	5,176.34	0.54	0.30	-0.45
15,865.14	92.31	359.51	10,370.68	5,134.88	-852.62	5,189.72	0.30	0.00	-0.30
15,878.57	92.29	359.43	10,370.14	5,148.30	-852.75	5,203.09	0.61	-0.15	-0.60
15,892.00	92.24	359.35	10,369.61	5,161.72	-852.89	5,216.47	0.70	-0.37	-0.60
15,905.57	92.06	359.37	10,369.10	5,175.28	-853.04	5,230.00	1.33	-1.33	0.15
15,919.14	91.81	359.43	10,368.65	5,188.84	-853.18	5,243.52	1.89	-1.84	0.44
15,932.71	91.64	359.41	10,368.24	5,202.40	-853.32	5,257.04	1.26	-1.25	-0.15
15,946.29	91.37	359.39	10,367.88	5,215.98	-853.46	5,270.58	1.99	-1.99	-0.15
15,959.86	91.05	359.32	10,367.59	5,229.55	-853.62	5,284.10	2.41	-2.36	-0.52
15,973.43	90.39	359.31	10,367.42	5,243.11	-853.78	5,297.63	4.86	-4.86	-0.07
15,987.00	89.67	359.31	10,367.42	5,256.68	-853.94	5,311.16	5.31	-5.31	0.00
16,000.57	89.01	359.27	10,367.57	5,270.25	-854.11	5,324.70	4.87	-4.86	-0.29



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Top Spot 12_13 Fed Com 25H
Project:	Eddy County, NM (NAD83-NME)	TVD Reference:	RKB @ 3607.50usft (Citadel 2)
Site:	Top Spot 12_13	MD Reference:	RKB @ 3607.50usft (Citadel 2)
Well:	Top Spot 12_13 Fed Com 25H	North Reference:	Grid
Wellbore:	OH / 74975	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Citadel 2)	Database:	USAEDMDB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
16,014.14	88.47	359.24	10,367.87	5,283.82	-854.29	5,338.22	3.99	-3.98	-0.22
16,027.71	88.39	359.55	10,368.24	5,297.38	-854.43	5,351.75	2.36	-0.59	2.28
16,041.29	88.29	359.55	10,368.64	5,310.95	-854.54	5,365.28	0.74	-0.74	0.00
16,054.86	88.18	359.39	10,369.05	5,324.52	-854.66	5,378.80	1.43	-0.81	-1.18
16,068.43	88.06	359.24	10,369.50	5,338.08	-854.82	5,392.33	1.42	-0.88	-1.11
16,082.00	87.93	359.12	10,369.97	5,351.64	-855.02	5,405.85	1.30	-0.96	-0.88
16,095.43	87.78	359.22	10,370.48	5,365.06	-855.21	5,419.24	1.34	-1.12	0.74
16,108.86	87.66	359.20	10,371.01	5,378.48	-855.40	5,432.62	0.91	-0.89	-0.15
16,122.29	87.68	359.20	10,371.56	5,391.89	-855.58	5,446.00	0.15	0.15	0.00
16,135.71	87.75	359.22	10,372.09	5,405.30	-855.77	5,459.38	0.54	0.52	0.15
16,149.14	87.62	359.18	10,372.63	5,418.72	-855.96	5,472.76	1.01	-0.97	-0.30
16,162.57	87.42	359.16	10,373.22	5,432.14	-856.15	5,486.14	1.50	-1.49	-0.15
16,176.00	86.95	359.31	10,373.88	5,445.55	-856.33	5,499.52	3.67	-3.50	1.12
16,189.57	86.89	359.05	10,374.60	5,459.10	-856.52	5,513.03	1.96	-0.44	-1.92
16,203.14	86.90	358.88	10,375.34	5,472.64	-856.77	5,526.55	1.25	0.07	-1.25
16,216.71	86.89	358.76	10,376.07	5,486.19	-857.05	5,540.07	0.89	-0.07	-0.88
16,230.29	86.86	358.68	10,376.81	5,499.75	-857.35	5,553.60	0.63	-0.22	-0.59
16,243.86	86.84	358.58	10,377.56	5,513.29	-857.67	5,567.12	0.75	-0.15	-0.74
16,257.43	86.87	358.47	10,378.30	5,526.84	-858.02	5,580.65	0.84	0.22	-0.81
16,271.00	86.92	358.33	10,379.04	5,540.38	-858.40	5,594.17	1.09	0.37	-1.03
16,284.43	86.98	358.13	10,379.75	5,553.79	-858.82	5,607.56	1.55	0.45	-1.49
16,297.86	86.92	358.03	10,380.47	5,567.19	-859.27	5,620.95	0.87	-0.45	-0.74
16,311.29	86.90	358.04	10,381.19	5,580.59	-859.73	5,634.35	0.17	-0.15	0.07
16,324.71	86.87	358.09	10,381.92	5,593.99	-860.18	5,647.73	0.43	-0.22	0.37
16,338.14	86.84	358.15	10,382.66	5,607.39	-860.62	5,661.12	0.50	-0.22	0.45
16,351.57	86.80	358.24	10,383.40	5,620.79	-861.04	5,674.50	0.73	-0.30	0.67
16,365.00	86.69	358.18	10,384.17	5,634.19	-861.46	5,687.89	0.93	-0.82	-0.45
16,378.57	86.61	358.18	10,384.96	5,647.73	-861.89	5,701.42	0.59	-0.59	0.00
16,392.14	86.56	358.17	10,385.77	5,661.27	-862.32	5,714.94	0.38	-0.37	-0.07
16,405.71	86.49	358.21	10,386.59	5,674.81	-862.75	5,728.47	0.59	-0.52	0.29
16,419.29	86.61	358.21	10,387.41	5,688.36	-863.17	5,742.00	0.88	0.88	0.00
16,432.86	86.75	358.21	10,388.19	5,701.90	-863.60	5,755.53	1.03	1.03	0.00
16,446.43	86.77	358.24	10,388.96	5,715.44	-864.01	5,769.05	0.27	0.15	0.22
16,460.00	86.80	358.25	10,389.72	5,728.98	-864.43	5,782.58	0.23	0.22	0.07
16,473.57	86.60	358.24	10,390.50	5,742.53	-864.84	5,796.11	1.48	-1.47	-0.07
16,487.14	86.49	358.21	10,391.32	5,756.06	-865.26	5,809.63	0.84	-0.81	-0.22
16,500.71	86.62	358.22	10,392.14	5,769.60	-865.69	5,823.15	0.96	0.96	0.07
16,514.29	86.73	358.32	10,392.92	5,783.15	-866.10	5,836.69	1.09	0.81	0.74
16,527.86	86.84	358.44	10,393.68	5,796.70	-866.48	5,850.21	1.20	0.81	0.88
16,541.43	86.87	358.49	10,394.43	5,810.24	-866.84	5,863.74	0.43	0.22	0.37
16,555.00	86.79	358.52	10,395.18	5,823.79	-867.19	5,877.26	0.63	-0.59	0.22
16,568.43	86.62	358.61	10,395.95	5,837.19	-867.53	5,890.64	1.43	-1.27	0.67
16,581.86	86.59	358.64	10,396.75	5,850.59	-867.85	5,904.02	0.32	-0.22	0.22
16,595.29	86.61	358.65	10,397.54	5,864.00	-868.17	5,917.40	0.17	0.15	0.07



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Top Spot 12_13 Fed Com 25H
Project:	Eddy County, NM (NAD83-NME)	TVD Reference:	RKB @ 3607.50usft (Citadel 2)
Site:	Top Spot 12_13	MD Reference:	RKB @ 3607.50usft (Citadel 2)
Well:	Top Spot 12_13 Fed Com 25H	North Reference:	Grid
Wellbore:	OH / 74975	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Citadel 2)	Database:	USAEDMDB

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
16,608.71	86.77	358.64	10,398.32	5,877.39	-868.49	5,930.77	1.19	1.19	-0.07
16,622.14	86.94	358.63	10,399.05	5,890.80	-868.81	5,944.15	1.27	1.27	-0.07
16,635.57	87.13	358.59	10,399.75	5,904.20	-869.13	5,957.54	1.45	1.41	-0.30
16,649.00	87.22	358.54	10,400.41	5,917.61	-869.47	5,970.93	0.77	0.67	-0.37
16,662.57	87.34	358.48	10,401.06	5,931.16	-869.82	5,984.46	0.99	0.88	-0.44
16,676.14	87.49	358.46	10,401.67	5,944.71	-870.18	5,997.99	1.12	1.11	-0.15
16,689.71	87.49	358.41	10,402.26	5,958.27	-870.55	6,011.52	0.37	0.00	-0.37
16,703.29	87.72	358.30	10,402.83	5,971.83	-870.94	6,025.07	1.88	1.69	-0.81
16,716.86	87.93	358.18	10,403.34	5,985.38	-871.36	6,038.60	1.78	1.55	-0.88
16,730.43	88.20	358.10	10,403.80	5,998.94	-871.80	6,052.15	2.08	1.99	-0.59
16,744.00	88.54	358.10	10,404.19	6,012.50	-872.25	6,065.69	2.51	2.51	0.00
16,757.43	88.63	358.18	10,404.52	6,025.91	-872.68	6,079.10	0.90	0.67	0.60
16,770.86	88.77	358.29	10,404.82	6,039.33	-873.10	6,092.50	1.33	1.04	0.82
16,784.29	88.80	358.46	10,405.11	6,052.76	-873.48	6,105.90	1.29	0.22	1.27
16,797.71	88.74	358.69	10,405.40	6,066.17	-873.81	6,119.29	1.77	-0.45	1.71
16,811.14	88.70	358.92	10,405.70	6,079.59	-874.09	6,132.69	1.74	-0.30	1.71
16,824.57	88.72	359.10	10,406.00	6,093.02	-874.32	6,146.09	1.35	0.15	1.34
16,838.00	88.72	359.26	10,406.30	6,106.44	-874.52	6,159.48	1.19	0.00	1.19
16,851.57	88.77	359.35	10,406.60	6,120.01	-874.68	6,173.00	0.76	0.37	0.66
16,865.14	88.69	359.44	10,406.90	6,133.57	-874.82	6,186.53	0.89	-0.59	0.66
16,878.71	88.71	359.51	10,407.21	6,147.14	-874.95	6,200.06	0.54	0.15	0.52
16,892.29	88.57	359.65	10,407.53	6,160.72	-875.05	6,213.59	1.46	-1.03	1.03
16,905.86	88.48	359.76	10,407.88	6,174.28	-875.12	6,227.11	1.05	-0.66	0.81
16,919.43	88.50	359.85	10,408.23	6,187.85	-875.16	6,240.63	0.68	0.15	0.66
16,933.00	88.37	359.89	10,408.61	6,201.41	-875.19	6,254.14	1.00	-0.96	0.29
16,946.57	88.26	359.98	10,409.00	6,214.97	-875.21	6,267.66	1.05	-0.81	0.66
16,960.14	88.10	0.18	10,409.44	6,228.54	-875.19	6,281.16	1.89	-1.18	1.47
16,973.71	88.22	0.25	10,409.87	6,242.10	-875.14	6,294.67	1.02	0.88	0.52
16,987.29	88.30	0.31	10,410.28	6,255.67	-875.07	6,308.19	0.74	0.59	0.44
17,000.86	88.38	0.36	10,410.68	6,269.24	-874.99	6,321.69	0.70	0.59	0.37
17,014.43	88.46	0.40	10,411.05	6,282.80	-874.90	6,335.20	0.66	0.59	0.29
17,028.00	88.35	0.48	10,411.43	6,296.37	-874.80	6,348.70	1.00	-0.81	0.59
17,041.43	88.39	0.45	10,411.81	6,309.79	-874.69	6,362.06	0.37	0.30	-0.22
17,054.86	88.42	0.45	10,412.18	6,323.22	-874.59	6,375.43	0.22	0.22	0.00
17,068.29	88.47	0.65	10,412.55	6,336.64	-874.46	6,388.79	1.53	0.37	1.49
17,081.71	88.48	0.57	10,412.91	6,350.05	-874.31	6,402.14	0.60	0.07	-0.60
17,095.14	88.49	0.56	10,413.26	6,363.48	-874.18	6,415.50	0.11	0.07	-0.07
17,108.57	88.49	0.57	10,413.61	6,376.90	-874.05	6,428.86	0.07	0.00	0.07
17,122.00	88.43	0.42	10,413.98	6,390.33	-873.93	6,442.23	1.20	-0.45	-1.12
17,135.57	88.23	0.26	10,414.37	6,403.89	-873.85	6,455.73	1.89	-1.47	-1.18
17,149.14	88.18	0.22	10,414.80	6,417.46	-873.80	6,469.24	0.47	-0.37	-0.29
17,162.71	88.21	0.24	10,415.22	6,431.02	-873.74	6,482.75	0.27	0.22	0.15
17,176.29	88.23	0.27	10,415.65	6,444.59	-873.68	6,496.26	0.27	0.15	0.22



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Top Spot 12_13 Fed Com 25H
Project:	Eddy County, NM (NAD83-NME)	TVD Reference:	RKB @ 3607.50usft (Citadel 2)
Site:	Top Spot 12_13	MD Reference:	RKB @ 3607.50usft (Citadel 2)
Well:	Top Spot 12_13 Fed Com 25H	North Reference:	Grid
Wellbore:	OH / 74975	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Citadel 2)	Database:	USAEDMDB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
17,189.86	88.27	0.30	10,416.06	6,458.16	-873.61	6,509.77	0.37	0.29	0.22
17,203.43	88.40	0.33	10,416.45	6,471.72	-873.54	6,523.27	0.98	0.96	0.22
17,217.00	88.54	0.43	10,416.82	6,485.28	-873.45	6,536.78	1.27	1.03	0.74
17,230.57	88.58	0.50	10,417.16	6,498.85	-873.34	6,550.28	0.59	0.29	0.52
17,244.14	88.64	0.57	10,417.49	6,512.42	-873.21	6,563.79	0.68	0.44	0.52
17,257.71	88.80	0.59	10,417.79	6,525.98	-873.07	6,577.29	1.19	1.18	0.15
17,271.29	88.73	0.56	10,418.08	6,539.56	-872.94	6,590.80	0.56	-0.52	-0.22
17,284.86	88.67	0.56	10,418.39	6,553.12	-872.81	6,604.30	0.44	-0.44	0.00
17,298.43	88.83	0.67	10,418.69	6,566.69	-872.66	6,617.80	1.43	1.18	0.81
17,312.00	89.00	0.80	10,418.94	6,580.26	-872.49	6,631.30	1.58	1.25	0.96
17,325.57	88.94	0.84	10,419.19	6,593.82	-872.29	6,644.80	0.53	-0.44	0.29
17,339.14	88.85	0.86	10,419.45	6,607.39	-872.09	6,658.30	0.68	-0.66	0.15
17,352.71	88.66	0.90	10,419.74	6,620.95	-871.88	6,671.79	1.43	-1.40	0.29
17,366.29	88.54	0.93	10,420.08	6,634.53	-871.67	6,685.30	0.91	-0.88	0.22
17,379.86	88.44	0.94	10,420.43	6,648.09	-871.44	6,698.79	0.74	-0.74	0.07
17,393.43	88.43	0.78	10,420.80	6,661.65	-871.24	6,712.28	1.18	-0.07	-1.18
17,407.00	88.48	0.68	10,421.17	6,675.22	-871.07	6,725.78	0.82	0.37	-0.74
17,420.43	88.63	0.58	10,421.51	6,688.64	-870.92	6,739.14	1.34	1.12	-0.74
17,433.86	88.87	0.41	10,421.80	6,702.07	-870.80	6,752.51	2.19	1.79	-1.27
17,447.29	89.16	0.41	10,422.03	6,715.50	-870.71	6,765.87	2.16	2.16	0.00
17,460.71	89.47	0.39	10,422.19	6,728.92	-870.61	6,779.23	2.31	2.31	-0.15
17,474.14	89.68	0.41	10,422.29	6,742.35	-870.52	6,792.60	1.57	1.56	0.15
17,487.57	89.88	0.50	10,422.34	6,755.77	-870.41	6,805.97	1.63	1.49	0.67
17,501.00	90.04	0.61	10,422.35	6,769.20	-870.28	6,819.34	1.45	1.19	0.82
17,514.57	90.19	0.72	10,422.33	6,782.77	-870.13	6,832.84	1.37	1.11	0.81
17,528.14	90.32	0.84	10,422.27	6,796.34	-869.94	6,846.34	1.30	0.96	0.88
17,541.71	90.41	0.98	10,422.18	6,809.91	-869.73	6,859.84	1.23	0.66	1.03
17,555.29	90.48	1.12	10,422.07	6,823.49	-869.48	6,873.34	1.15	0.52	1.03
17,568.86	90.53	1.27	10,421.95	6,837.05	-869.19	6,886.83	1.17	0.37	1.11
17,582.43	90.56	1.42	10,421.83	6,850.62	-868.88	6,900.32	1.13	0.22	1.11
17,596.00	90.57	1.56	10,421.69	6,864.18	-868.52	6,913.80	1.03	0.07	1.03
17,609.57	90.57	1.69	10,421.56	6,877.75	-868.14	6,927.28	0.96	0.00	0.96
17,623.14	90.55	1.82	10,421.42	6,891.31	-867.72	6,940.75	0.97	-0.15	0.96
17,636.71	90.52	1.92	10,421.30	6,904.87	-867.28	6,954.23	0.77	-0.22	0.74
17,650.29	90.32	1.90	10,421.20	6,918.45	-866.83	6,967.71	1.48	-1.47	-0.15
17,663.86	90.33	1.79	10,421.12	6,932.01	-866.39	6,981.18	0.81	0.07	-0.81
17,677.43	90.24	1.82	10,421.05	6,945.57	-865.96	6,994.65	0.70	-0.66	0.22
17,691.00	90.24	1.93	10,421.00	6,959.13	-865.52	7,008.13	0.81	0.00	0.81
17,704.43	90.31	1.99	10,420.93	6,972.56	-865.06	7,021.46	0.69	0.52	0.45
17,717.86	90.49	1.93	10,420.84	6,985.98	-864.60	7,034.79	1.41	1.34	-0.45
17,731.29	90.61	1.97	10,420.71	6,999.40	-864.14	7,048.12	0.94	0.89	0.30
17,744.71	90.57	2.01	10,420.57	7,012.81	-863.68	7,061.44	0.42	-0.30	0.30
17,758.14	90.81	2.04	10,420.41	7,026.23	-863.20	7,074.77	1.80	1.79	0.22



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Top Spot 12_13 Fed Com 25H
Project:	Eddy County, NM (NAD83-NME)	TVD Reference:	RKB @ 3607.50usft (Citadel 2)
Site:	Top Spot 12_13	MD Reference:	RKB @ 3607.50usft (Citadel 2)
Well:	Top Spot 12_13 Fed Com 25H	North Reference:	Grid
Wellbore:	OH / 74975	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Citadel 2)	Database:	USAEDMDB

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
17,771.57	90.50	1.88	10,420.26	7,039.65	-862.74	7,088.09	2.60	-2.31	-1.19
17,785.00	90.18	1.66	10,420.18	7,053.08	-862.33	7,101.43	2.89	-2.38	-1.64
17,798.57	89.88	1.46	10,420.17	7,066.64	-861.96	7,114.91	2.66	-2.21	-1.47
17,812.14	90.07	1.54	10,420.17	7,080.21	-861.60	7,128.39	1.52	1.40	0.59
17,825.71	90.42	1.75	10,420.12	7,093.77	-861.21	7,141.87	3.01	2.58	1.55
17,839.29	90.59	1.81	10,420.00	7,107.34	-860.79	7,155.36	1.33	1.25	0.44
17,852.86	90.71	1.85	10,419.84	7,120.91	-860.36	7,168.83	0.93	0.88	0.29
17,866.43	90.77	1.81	10,419.67	7,134.47	-859.93	7,182.30	0.53	0.44	-0.29
17,880.00	90.72	1.76	10,419.49	7,148.03	-859.50	7,195.78	0.52	-0.37	-0.37
17,893.57	90.42	1.50	10,419.36	7,161.59	-859.12	7,209.25	2.93	-2.21	-1.92
17,907.14	90.15	1.28	10,419.29	7,175.16	-858.79	7,222.74	2.57	-1.99	-1.62
17,920.71	90.08	1.26	10,419.26	7,188.73	-858.49	7,236.23	0.54	-0.52	-0.15
17,934.29	90.00	1.23	10,419.25	7,202.30	-858.19	7,249.73	0.63	-0.59	-0.22
17,947.86	89.91	1.18	10,419.26	7,215.87	-857.91	7,263.22	0.76	-0.66	-0.37
17,961.43	89.83	1.13	10,419.29	7,229.44	-857.63	7,276.71	0.70	-0.59	-0.37
17,975.00	89.75	1.05	10,419.34	7,243.00	-857.38	7,290.20	0.83	-0.59	-0.59
17,988.57	89.69	0.96	10,419.41	7,256.57	-857.14	7,303.70	0.80	-0.44	-0.66
18,002.14	89.48	1.01	10,419.51	7,270.14	-856.90	7,317.19	1.59	-1.55	0.37
18,015.71	89.21	1.10	10,419.66	7,283.71	-856.65	7,330.69	2.10	-1.99	0.66
18,029.29	89.12	0.90	10,419.86	7,297.28	-856.42	7,344.19	1.61	-0.66	-1.47
18,042.86	89.09	0.80	10,420.07	7,310.85	-856.22	7,357.69	0.77	-0.22	-0.74
18,056.43	89.09	0.72	10,420.29	7,324.42	-856.04	7,371.19	0.59	0.00	-0.59
18,070.00	89.09	0.68	10,420.50	7,337.98	-855.87	7,384.69	0.29	0.00	-0.29
18,083.43	88.91	0.57	10,420.74	7,351.41	-855.72	7,398.05	1.57	-1.34	-0.82
18,096.86	88.56	0.44	10,421.03	7,364.84	-855.61	7,411.42	2.78	-2.61	-0.97
18,110.29	88.39	0.50	10,421.39	7,378.26	-855.49	7,424.78	1.34	-1.27	0.45
18,123.71	88.43	0.58	10,421.76	7,391.68	-855.37	7,438.13	0.67	0.30	0.60
18,137.14	88.74	0.42	10,422.10	7,405.10	-855.25	7,451.49	2.60	2.31	-1.19
18,150.57	89.20	0.17	10,422.34	7,418.53	-855.18	7,464.87	3.90	3.43	-1.86
18,164.00	89.63	0.02	10,422.47	7,431.96	-855.16	7,478.24	3.39	3.20	-1.12
18,177.57	89.56	359.97	10,422.57	7,445.53	-855.16	7,491.76	0.63	-0.52	-0.37
18,191.14	89.36	0.01	10,422.70	7,459.10	-855.16	7,505.28	1.50	-1.47	0.29
18,204.71	88.99	0.12	10,422.89	7,472.67	-855.15	7,518.79	2.84	-2.73	0.81
18,218.29	89.08	0.27	10,423.12	7,486.24	-855.10	7,532.31	1.29	0.66	1.10
18,231.86	89.16	0.43	10,423.33	7,499.81	-855.02	7,545.82	1.32	0.59	1.18
18,245.43	89.24	0.58	10,423.52	7,513.38	-854.90	7,559.33	1.25	0.59	1.11
18,259.00	89.31	0.73	10,423.69	7,526.95	-854.74	7,572.83	1.22	0.52	1.11
18,272.57	89.37	0.87	10,423.85	7,540.52	-854.55	7,586.33	1.12	0.44	1.03
18,286.14	89.43	1.00	10,423.99	7,554.08	-854.33	7,599.83	1.06	0.44	0.96
18,299.71	89.48	1.13	10,424.12	7,567.65	-854.08	7,613.32	1.03	0.37	0.96
18,313.29	89.53	1.25	10,424.24	7,581.23	-853.80	7,626.82	0.96	0.37	0.88
18,326.86	89.57	1.37	10,424.34	7,594.79	-853.49	7,640.31	0.93	0.29	0.88
18,340.43	89.62	1.48	10,424.44	7,608.36	-853.15	7,653.79	0.89	0.37	0.81
18,354.00	89.19	1.37	10,424.58	7,621.92	-852.81	7,667.28	3.27	-3.17	-0.81



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Top Spot 12_13 Fed Com 25H
Project:	Eddy County, NM (NAD83-NME)	TVD Reference:	RKB @ 3607.50usft (Citadel 2)
Site:	Top Spot 12_13	MD Reference:	RKB @ 3607.50usft (Citadel 2)
Well:	Top Spot 12_13 Fed Com 25H	North Reference:	Grid
Wellbore:	OH / 74975	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Citadel 2)	Database:	USAEDMDB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
18,367.43	89.05	1.33	10,424.79	7,635.35	-852.50	7,680.62	1.08	-1.04	-0.30
18,380.86	89.09	1.40	10,425.00	7,648.77	-852.18	7,693.97	0.60	0.30	0.52
18,394.29	89.13	1.45	10,425.21	7,662.20	-851.84	7,707.31	0.48	0.30	0.37
18,407.71	89.17	1.49	10,425.41	7,675.61	-851.50	7,720.64	0.42	0.30	0.30
18,421.14	89.21	1.50	10,425.60	7,689.04	-851.15	7,733.99	0.31	0.30	0.07
18,434.57	89.23	1.41	10,425.78	7,702.46	-850.81	7,747.33	0.69	0.15	-0.67
18,448.00	89.26	1.20	10,425.96	7,715.89	-850.50	7,760.68	1.58	0.22	-1.56
18,461.57	89.25	1.06	10,426.14	7,729.45	-850.23	7,774.17	1.03	-0.07	-1.03
18,475.14	89.27	0.97	10,426.31	7,743.02	-849.99	7,787.66	0.68	0.15	-0.66
18,488.71	89.29	0.78	10,426.48	7,756.59	-849.79	7,801.16	1.41	0.15	-1.40
18,502.29	89.31	0.51	10,426.65	7,770.16	-849.63	7,814.67	1.99	0.15	-1.99
18,515.86	89.29	0.27	10,426.82	7,783.73	-849.54	7,828.18	1.77	-0.15	-1.77
18,529.43	89.25	359.81	10,426.99	7,797.30	-849.53	7,841.70	3.40	-0.29	-3.39
18,543.00	89.21	359.20	10,427.17	7,810.87	-849.65	7,855.22	4.50	-0.29	-4.50
18,556.57	89.26	358.65	10,427.35	7,824.44	-849.90	7,868.76	4.07	0.37	-4.05
18,570.14	89.32	358.40	10,427.52	7,838.00	-850.25	7,882.30	1.89	0.44	-1.84
18,583.71	89.26	358.22	10,427.69	7,851.56	-850.65	7,895.85	1.40	-0.44	-1.33
18,597.29	89.30	358.05	10,427.86	7,865.13	-851.10	7,909.41	1.29	0.29	-1.25
18,610.86	89.32	357.91	10,428.02	7,878.70	-851.57	7,922.96	1.04	0.15	-1.03
18,624.43	89.42	357.73	10,428.17	7,892.25	-852.09	7,936.51	1.52	0.74	-1.33
18,638.00	89.28	357.30	10,428.33	7,905.81	-852.68	7,950.07	3.33	-1.03	-3.17
18,651.43	89.20	356.89	10,428.50	7,919.22	-853.36	7,963.49	3.11	-0.60	-3.05
18,664.86	89.38	356.74	10,428.67	7,932.63	-854.11	7,976.91	1.74	1.34	-1.12
18,678.29	89.35	356.41	10,428.82	7,946.04	-854.91	7,990.33	2.47	-0.22	-2.46
18,691.71	89.57	356.17	10,428.95	7,959.43	-855.78	8,003.75	2.43	1.64	-1.79
18,705.14	89.79	356.06	10,429.02	7,972.83	-856.69	8,017.18	1.83	1.64	-0.82
18,718.57	90.01	355.98	10,429.04	7,986.22	-857.62	8,030.60	1.74	1.64	-0.60
18,732.00	90.10	356.03	10,429.03	7,999.62	-858.55	8,044.03	0.77	0.67	0.37
18,745.57	90.03	356.11	10,429.02	8,013.16	-859.48	8,057.60	0.78	-0.52	0.59
18,759.14	89.86	356.24	10,429.03	8,026.70	-860.39	8,071.17	1.58	-1.25	0.96
18,772.71	89.99	356.33	10,429.05	8,040.24	-861.27	8,084.73	1.17	0.96	0.66
18,786.29	90.03	356.02	10,429.04	8,053.79	-862.17	8,098.31	2.30	0.29	-2.28
18,799.86	90.27	356.00	10,429.01	8,067.33	-863.12	8,111.88	1.77	1.77	-0.15
18,813.43	90.46	356.04	10,428.92	8,080.86	-864.06	8,125.45	1.43	1.40	0.29
18,827.00	90.64	356.08	10,428.79	8,094.40	-864.99	8,139.01	1.36	1.33	0.29
18,840.57	90.81	356.11	10,428.62	8,107.94	-865.92	8,152.58	1.27	1.25	0.22
18,854.14	90.89	356.12	10,428.42	8,121.48	-866.84	8,166.15	0.59	0.59	0.07
18,867.71	90.83	356.14	10,428.22	8,135.01	-867.75	8,179.71	0.47	-0.44	0.15
18,881.29	90.62	356.20	10,428.04	8,148.56	-868.66	8,193.29	1.61	-1.55	0.44
18,894.86	90.15	356.26	10,427.95	8,162.10	-869.55	8,206.85	3.49	-3.46	0.44
18,908.43	89.74	356.29	10,427.97	8,175.64	-870.43	8,220.42	3.03	-3.02	0.22
18,922.00	89.96	356.14	10,428.00	8,189.18	-871.33	8,233.99	1.96	1.62	-1.11
18,935.43	89.96	356.11	10,428.01	8,202.58	-872.24	8,247.41	0.22	0.00	-0.22



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Top Spot 12_13 Fed Com 25H
Project:	Eddy County, NM (NAD83-NME)	TVD Reference:	RKB @ 3607.50usft (Citadel 2)
Site:	Top Spot 12_13	MD Reference:	RKB @ 3607.50usft (Citadel 2)
Well:	Top Spot 12_13 Fed Com 25H	North Reference:	Grid
Wellbore:	OH / 74975	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Citadel 2)	Database:	USAEDMDB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
18,948.86	90.02	356.04	10,428.01	8,215.98	-873.16	8,260.84	0.69	0.45	-0.52
18,962.29	89.89	355.99	10,428.02	8,229.38	-874.09	8,274.27	1.04	-0.97	-0.37
18,975.71	89.75	356.01	10,428.07	8,242.77	-875.02	8,287.69	1.05	-1.04	0.15
18,989.14	89.66	356.07	10,428.13	8,256.16	-875.95	8,301.12	0.81	-0.67	0.45
19,002.57	89.99	356.31	10,428.18	8,269.56	-876.84	8,314.54	3.04	2.46	1.79
19,016.00	89.91	356.47	10,428.19	8,282.97	-877.69	8,327.97	1.33	-0.60	1.19
19,029.57	89.64	356.72	10,428.24	8,296.51	-878.50	8,341.53	2.71	-1.99	1.84
19,043.14	89.48	357.01	10,428.34	8,310.06	-879.24	8,355.09	2.44	-1.18	2.14
19,056.71	89.93	357.13	10,428.41	8,323.62	-879.93	8,368.66	3.43	3.32	0.88
19,070.29	90.24	357.32	10,428.39	8,337.18	-880.59	8,382.23	2.68	2.28	1.40
19,083.86	90.21	357.53	10,428.34	8,350.74	-881.20	8,395.78	1.56	-0.22	1.55
19,097.43	90.22	357.79	10,428.29	8,364.29	-881.75	8,409.34	1.92	0.07	1.92
19,111.00	90.20	358.18	10,428.24	8,377.86	-882.23	8,422.89	2.88	-0.15	2.87
19,124.43	90.17	358.44	10,428.20	8,391.28	-882.63	8,436.30	1.95	-0.22	1.94
19,137.86	90.23	358.56	10,428.15	8,404.71	-882.98	8,449.70	1.00	0.45	0.89
19,151.29	90.38	358.79	10,428.08	8,418.13	-883.29	8,463.10	2.04	1.12	1.71
19,164.71	90.32	359.07	10,428.00	8,431.55	-883.54	8,476.49	2.13	-0.45	2.09
19,178.14	90.26	359.35	10,427.93	8,444.98	-883.72	8,489.89	2.13	-0.45	2.08
19,191.57	90.23	359.78	10,427.87	8,458.41	-883.83	8,503.27	3.21	-0.22	3.20
19,205.00	90.16	0.13	10,427.83	8,471.84	-883.84	8,516.65	2.66	-0.52	2.61
19,218.57	90.14	0.42	10,427.79	8,485.41	-883.77	8,530.16	2.14	-0.15	2.14
19,232.14	90.21	0.56	10,427.75	8,498.98	-883.66	8,543.67	1.15	0.52	1.03
19,245.71	90.28	0.63	10,427.69	8,512.55	-883.51	8,557.18	0.73	0.52	0.52
19,259.29	90.34	0.74	10,427.62	8,526.12	-883.35	8,570.69	0.92	0.44	0.81
19,272.86	90.40	0.85	10,427.53	8,539.69	-883.16	8,584.19	0.92	0.44	0.81
19,286.43	90.45	0.88	10,427.43	8,553.26	-882.96	8,597.69	0.43	0.37	0.22
19,300.00	90.51	0.86	10,427.32	8,566.83	-882.75	8,611.19	0.47	0.44	-0.15
19,313.43	90.64	0.95	10,427.18	8,580.26	-882.54	8,624.54	1.18	0.97	0.67
19,326.86	90.67	1.07	10,427.03	8,593.68	-882.30	8,637.90	0.92	0.22	0.89
19,340.29	90.56	1.23	10,426.88	8,607.11	-882.03	8,651.25	1.45	-0.82	1.19
19,353.71	90.39	1.41	10,426.77	8,620.53	-881.73	8,664.59	1.84	-1.27	1.34
19,367.14	90.46	1.50	10,426.67	8,633.95	-881.38	8,677.93	0.85	0.52	0.67
19,380.57	90.36	1.56	10,426.58	8,647.38	-881.03	8,691.28	0.87	-0.74	0.45
19,394.00	90.26	1.57	10,426.50	8,660.80	-880.66	8,704.62	0.75	-0.74	0.07
19,407.57	90.15	1.54	10,426.45	8,674.37	-880.29	8,718.10	0.84	-0.81	-0.22
19,421.14	89.67	1.47	10,426.48	8,687.93	-879.93	8,731.58	3.57	-3.54	-0.52
19,434.71	89.38	1.38	10,426.59	8,701.50	-879.60	8,745.06	2.24	-2.14	-0.66
19,448.29	89.44	1.19	10,426.73	8,715.07	-879.29	8,758.56	1.47	0.44	-1.40
19,461.86	89.44	1.00	10,426.86	8,728.64	-879.03	8,772.05	1.40	0.00	-1.40
19,475.43	89.47	0.83	10,426.99	8,742.21	-878.82	8,785.55	1.27	0.22	-1.25
19,489.00	89.77	0.59	10,427.08	8,755.77	-878.65	8,799.05	2.83	2.21	-1.77
19,502.43	89.77	0.39	10,427.13	8,769.20	-878.53	8,812.42	1.49	0.00	-1.49
19,515.86	89.72	0.23	10,427.19	8,782.63	-878.46	8,825.79	1.25	-0.37	-1.19



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Top Spot 12_13 Fed Com 25H
Project:	Eddy County, NM (NAD83-NME)	TVD Reference:	RKB @ 3607.50usft (Citadel 2)
Site:	Top Spot 12_13	MD Reference:	RKB @ 3607.50usft (Citadel 2)
Well:	Top Spot 12_13 Fed Com 25H	North Reference:	Grid
Wellbore:	OH / 74975	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Citadel 2)	Database:	USAEDMDB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
19,529.29	89.78	0.02	10,427.25	8,796.06	-878.43	8,839.17	1.63	0.45	-1.56
19,542.71	89.80	359.80	10,427.30	8,809.48	-878.45	8,852.54	1.65	0.15	-1.64
19,556.14	89.68	359.62	10,427.36	8,822.91	-878.52	8,865.92	1.61	-0.89	-1.34
19,569.57	89.83	359.49	10,427.42	8,836.34	-878.62	8,879.31	1.48	1.12	-0.97
19,583.00	90.16	359.41	10,427.42	8,849.77	-878.75	8,892.70	2.53	2.46	-0.60
19,596.57	90.51	359.51	10,427.34	8,863.34	-878.88	8,906.23	2.68	2.58	0.74
19,610.14	90.64	359.66	10,427.21	8,876.91	-878.98	8,919.75	1.46	0.96	1.11
19,623.71	90.61	359.79	10,427.06	8,890.48	-879.05	8,933.28	0.98	-0.22	0.96
19,637.29	90.59	0.05	10,426.92	8,904.06	-879.06	8,946.81	1.92	-0.15	1.91
19,650.86	90.15	0.48	10,426.83	8,917.63	-879.00	8,960.32	4.53	-3.24	3.17
19,664.43	90.06	0.79	10,426.80	8,931.20	-878.85	8,973.82	2.38	-0.66	2.28
19,678.00	90.16	0.87	10,426.78	8,944.77	-878.65	8,987.32	0.94	0.74	0.59
19,691.57	89.99	0.95	10,426.76	8,958.33	-878.44	9,000.82	1.38	-1.25	0.59
19,705.14	89.78	0.89	10,426.79	8,971.90	-878.22	9,014.32	1.61	-1.55	-0.44
19,718.71	90.07	0.97	10,426.80	8,985.47	-878.00	9,027.81	2.22	2.14	0.59
19,732.29	90.23	0.91	10,426.77	8,999.05	-877.78	9,041.32	1.26	1.18	-0.44
19,745.86	90.30	0.84	10,426.71	9,012.62	-877.57	9,054.82	0.73	0.52	-0.52
19,759.43	90.24	0.88	10,426.64	9,026.19	-877.37	9,068.32	0.53	-0.44	0.29
19,773.00	90.05	0.93	10,426.61	9,039.75	-877.15	9,081.82	1.45	-1.40	0.37
19,786.43	90.04	0.91	10,426.60	9,053.18	-876.94	9,095.17	0.17	-0.07	-0.15
19,799.86	90.23	0.96	10,426.57	9,066.61	-876.72	9,108.53	1.46	1.41	0.37
19,813.29	90.47	1.08	10,426.48	9,080.04	-876.48	9,121.89	2.00	1.79	0.89
19,826.71	90.69	1.19	10,426.35	9,093.45	-876.21	9,135.23	1.83	1.64	0.82
19,840.14	90.71	1.40	10,426.18	9,106.88	-875.91	9,148.58	1.57	0.15	1.56
19,853.57	90.66	1.51	10,426.02	9,120.30	-875.57	9,161.92	0.90	-0.37	0.82
19,867.00	90.55	1.54	10,425.88	9,133.73	-875.21	9,175.26	0.85	-0.82	0.22
19,880.57	90.63	1.46	10,425.74	9,147.29	-874.86	9,188.75	0.83	0.59	-0.59
19,894.14	90.67	1.37	10,425.59	9,160.86	-874.52	9,202.23	0.73	0.29	-0.66
19,907.71	90.45	1.32	10,425.45	9,174.42	-874.20	9,215.72	1.66	-1.62	-0.37
19,921.29	90.13	1.27	10,425.39	9,188.00	-873.90	9,229.21	2.38	-2.36	-0.37
19,934.86	89.63	1.14	10,425.41	9,201.57	-873.61	9,242.70	3.81	-3.68	-0.96
19,948.43	89.87	1.05	10,425.47	9,215.13	-873.35	9,256.20	1.89	1.77	-0.66
19,962.00	90.22	0.89	10,425.46	9,228.70	-873.12	9,269.69	2.84	2.58	-1.18
19,975.57	90.38	0.79	10,425.39	9,242.27	-872.92	9,283.19	1.39	1.18	-0.74
19,989.14	90.39	0.77	10,425.30	9,255.84	-872.74	9,296.69	0.16	0.07	-0.15
20,002.71	90.43	0.76	10,425.20	9,269.41	-872.56	9,310.19	0.30	0.29	-0.07
20,016.29	90.42	0.72	10,425.10	9,282.99	-872.38	9,323.70	0.30	-0.07	-0.29
20,029.86	90.33	0.70	10,425.01	9,296.56	-872.21	9,337.21	0.68	-0.66	-0.15
20,043.43	90.32	0.64	10,424.94	9,310.12	-872.05	9,350.71	0.45	-0.07	-0.44
20,057.00	90.28	0.64	10,424.87	9,323.69	-871.90	9,364.21	0.29	-0.29	0.00
20,070.43	90.17	0.62	10,424.81	9,337.12	-871.75	9,377.58	0.83	-0.82	-0.15
20,083.86	90.26	0.60	10,424.76	9,350.55	-871.61	9,390.94	0.69	0.67	-0.15
20,097.29	90.24	0.57	10,424.70	9,363.98	-871.47	9,404.31	0.27	-0.15	-0.22
20,110.71	90.06	0.58	10,424.67	9,377.40	-871.34	9,417.67	1.34	-1.34	0.07



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Top Spot 12_13 Fed Com 25H
Project:	Eddy County, NM (NAD83-NME)	TVD Reference:	RKB @ 3607.50usft (Citadel 2)
Site:	Top Spot 12_13	MD Reference:	RKB @ 3607.50usft (Citadel 2)
Well:	Top Spot 12_13 Fed Com 25H	North Reference:	Grid
Wellbore:	OH / 74975	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Citadel 2)	Database:	USAEDMDB

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
20,124.14	90.00	0.60	10,424.66	9,390.83	-871.20	9,431.03	0.47	-0.45	0.15
20,137.57	90.15	0.62	10,424.64	9,404.26	-871.06	9,444.40	1.13	1.12	0.15
20,151.00	90.23	0.67	10,424.60	9,417.69	-870.91	9,457.76	0.70	0.60	0.37
20,164.57	90.20	0.68	10,424.55	9,431.26	-870.75	9,471.26	0.23	-0.22	0.07
20,178.14	90.23	0.73	10,424.50	9,444.83	-870.58	9,484.77	0.43	0.22	0.37
20,191.71	90.32	0.83	10,424.43	9,458.39	-870.40	9,498.27	0.99	0.66	0.74
20,205.29	90.34	0.95	10,424.35	9,471.97	-870.19	9,511.78	0.90	0.15	0.88
20,218.86	90.05	1.18	10,424.31	9,485.54	-869.93	9,525.27	2.73	-2.14	1.69
20,232.43	90.18	1.28	10,424.28	9,499.11	-869.64	9,538.76	1.21	0.96	0.74
20,246.00	90.00	1.29	10,424.26	9,512.67	-869.34	9,552.25	1.33	-1.33	0.07
20,259.43	89.76	1.50	10,424.29	9,526.10	-869.01	9,565.59	2.37	-1.79	1.56
20,272.86	89.98	1.59	10,424.32	9,539.52	-868.65	9,578.94	1.77	1.64	0.67
20,286.29	90.00	1.59	10,424.32	9,552.95	-868.28	9,592.28	0.15	0.15	0.00
20,299.71	90.06	1.60	10,424.31	9,566.36	-867.90	9,605.61	0.45	0.45	0.07
20,313.14	90.28	1.57	10,424.27	9,579.79	-867.53	9,618.95	1.65	1.64	-0.22
20,326.57	90.47	1.64	10,424.19	9,593.21	-867.15	9,632.29	1.51	1.41	0.52
20,340.00	90.16	1.57	10,424.11	9,606.64	-866.78	9,645.63	2.37	-2.31	-0.52
20,353.57	89.74	1.50	10,424.12	9,620.20	-866.41	9,659.11	3.14	-3.10	-0.52
20,367.14	89.53	1.43	10,424.21	9,633.77	-866.07	9,672.59	1.63	-1.55	-0.52
20,380.71	89.76	1.55	10,424.29	9,647.33	-865.71	9,686.08	1.91	1.69	0.88
20,394.29	89.93	1.28	10,424.33	9,660.91	-865.38	9,699.57	2.35	1.25	-1.99
20,407.86	90.09	1.14	10,424.33	9,674.48	-865.09	9,713.06	1.57	1.18	-1.03
20,421.43	90.26	1.10	10,424.29	9,688.04	-864.83	9,726.55	1.29	1.25	-0.29
20,435.00	90.36	1.10	10,424.21	9,701.61	-864.57	9,740.05	0.74	0.74	0.00
20,448.57	90.42	1.01	10,424.12	9,715.18	-864.32	9,753.54	0.80	0.44	-0.66
20,462.14	90.34	1.07	10,424.03	9,728.74	-864.07	9,767.03	0.74	-0.59	0.44
20,475.71	90.32	1.09	10,423.95	9,742.31	-863.82	9,780.53	0.21	-0.15	0.15
20,489.29	90.14	1.09	10,423.90	9,755.89	-863.56	9,794.03	1.33	-1.33	0.00
20,502.86	90.21	1.01	10,423.86	9,769.46	-863.31	9,807.53	0.78	0.52	-0.59
20,516.43	90.48	1.19	10,423.78	9,783.02	-863.05	9,821.02	2.39	1.99	1.33
20,530.00	90.31	1.19	10,423.68	9,796.59	-862.77	9,834.51	1.25	-1.25	0.00
20,544.60	90.17	1.13	10,423.62	9,811.19	-862.47	9,849.02	1.04	-0.96	-0.41
20,559.20	90.15	1.12	10,423.58	9,825.79	-862.18	9,863.54	0.15	-0.14	-0.07
20,573.80	90.14	1.11	10,423.54	9,840.38	-861.90	9,878.06	0.10	-0.07	-0.07
20,588.40	90.14	1.00	10,423.51	9,854.98	-861.63	9,892.57	0.75	0.00	-0.75
20,603.00	90.17	0.94	10,423.47	9,869.58	-861.38	9,907.10	0.46	0.21	-0.41
Final Phoenix MWD Survey									
20,671.80	90.17	0.94	10,423.26	9,938.37	-860.26	9,975.52	0.00	0.00	0.00
LTP: 20671.80' MD									
20,720.00	90.17	0.94	10,423.12	9,986.56	-859.46	10,023.46	0.00	0.00	0.00
Projection to TD									



Phoenix
Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Top Spot 12_13 Fed Com 25H
Project:	Eddy County, NM (NAD83-NME)	TVD Reference:	RKB @ 3607.50usft (Citadel 2)
Site:	Top Spot 12_13	MD Reference:	RKB @ 3607.50usft (Citadel 2)
Well:	Top Spot 12_13 Fed Com 25H	North Reference:	Grid
Wellbore:	OH / 74975	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Citadel 2)	Database:	USAEDMDB

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
826.00	825.93	-4.35	6.89	Tie In
983.00	982.93	-3.91	6.75	First Phoenix MWD Survey
10,156.66	10,051.48	-423.31	-769.71	FTP: 10156.66' MD, 28.31° Inc
15,487.47	10,386.46	4,757.60	-846.31	SL: 15487.47' MD
20,603.00	10,423.47	9,869.58	-861.38	Final Phoenix MWD Survey
20,671.80	10,423.26	9,938.37	-860.26	LTP: 20671.80' MD
20,720.00	10,423.12	9,986.56	-859.46	Projection to TD

C-105	State of New Mexico	Revised July 9, 2024
Submit Electronically Via OCD Permitting	Energy, Minerals & Natural Resources Department	
OIL CONSERVATION DIVISION		

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

Section 1 - Operator and Well Information

Submittal Type: ☒ New Well ☐ Workover ☐ Deepening ☐ Plugback ☐ Different Reservoir ☐ C-144 Closure Attachment ☐ Other	
Operator Name: OXY USA INC	OGRID: 16696
Property Name and Well Number: TOP SPOT 12-13 FEDERAL COM 25H	Property Code: 329719
Mineral Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal	API Number: 30-0 15-47639
Pool Name: Bilbrey Basin; Bone Spring	Pool Code: 5695

Section 2 – Well Location

	UI or lot no.	Section	Township	Range	Lot Id	Feet from	N/S Line	Feet from	E/W Line	County
SHL:	O	13	22S	31E		520	S	1375	E	EDDY
BHL	B	12	22S	31E		52	N	2182	E	EDDY

Section 3 – Completion Information

Date T.D. Reached 07/17/24	Total Measured Depth of Well 20720'MD	Acid Volume (bbls)	☒ Directional Survey Submitted ☐ Deviation Survey Submitted
Date Rig Released 07/20/24	Plug-Back Measured Depth 20676'MD	Completion Fluid Used (bbls) 347267 BBL	Were Logs Ran (Y/N) Y
Completion Date 08/27/24	Perforations (MD and TVD) 10598-20593'MD/10347-10423'TVD	Completion Proppant Used (lbs) 24840926#	List Type of Logs Ran if applicable: CBL, Gamma Ray

Section 4 – Action IDs for Submissions and Order Numbers

Surface Casing Action ID: 392348	UIC Permit/Order (UIC wells only) ☐ Yes ☒ No, Order No.
Intermediate 1 Casing Action ID: 392367	NOI Recomplete Action ID (if applicable):
Intermediate 2 Casing Action ID: NA	NOI Plugback Action ID (if applicable):
Production Casing Action ID: 392367	Cement Squeeze Action ID (if applicable):
Tubing Action ID: 407740	All casing was pressure tested in accordance with NMAC ☒ Yes ☐ No
Liner 1 Action ID: NA	Casing was installed prior to Action ID system (Y/N): N

Section 5 – Test Data

Date First Production 08/30/24	Production Method Gas lift	Well Status Producing	Gas – Oil Ratio 1090
Date of Test 09/12/24	Choke Size	Flowing Tubing Pressure	Casing Pressure 1083
24 hr Oil (bbls) 2710	24 hr Gas (MCF) 2955	24 hr Water (bbls) 5042	Oil Gravity - API
Disposition of Gas: sold			

Section 6 – Pits

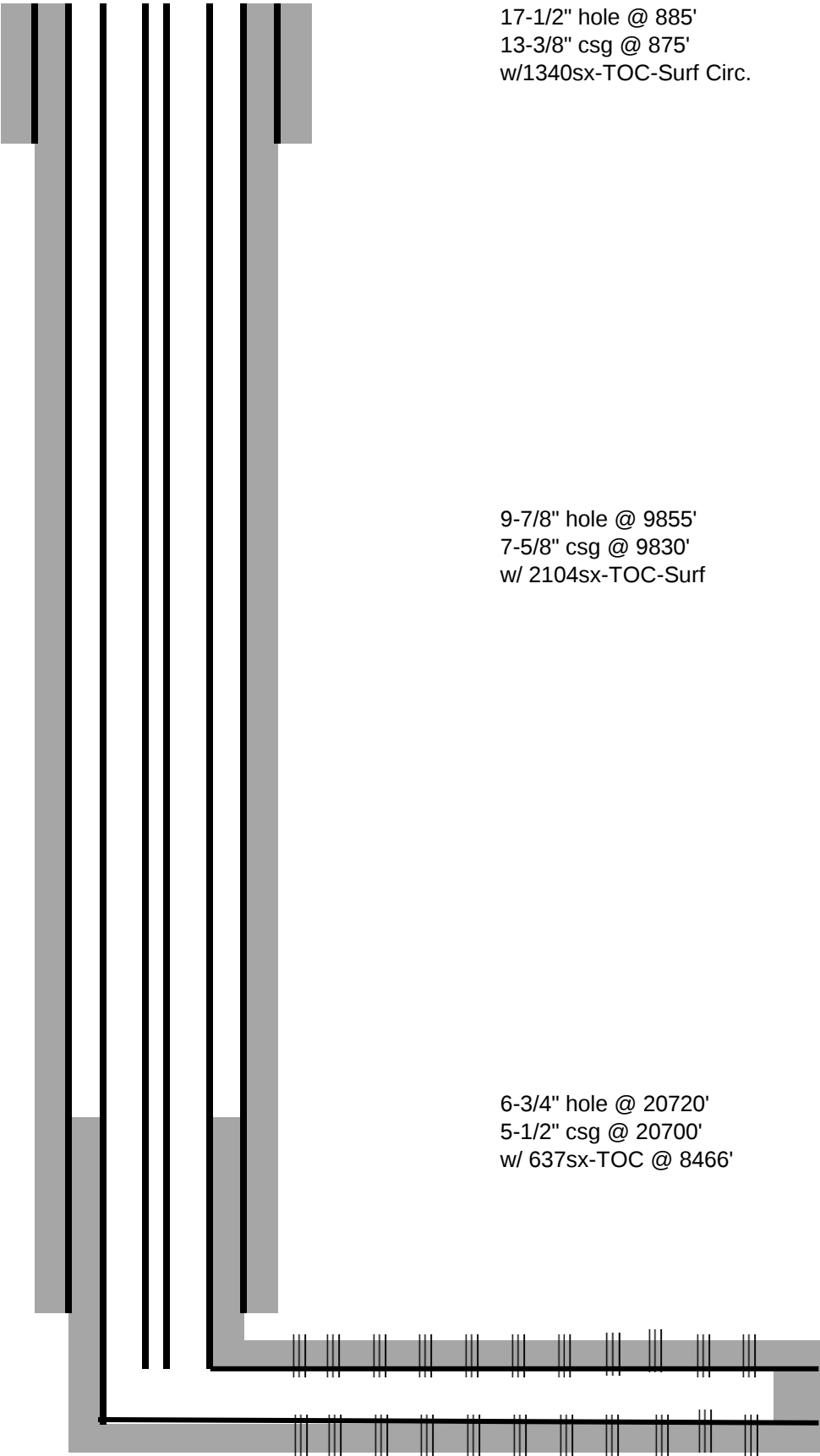
☐ A temporary pit was used at the well. If so, attach a plat with the location of the temporary pit.
☒ A Closed Loop System was used.
☐ If an on-site burial was used at the well, report the exact location of the on-site burial: LAT: LONG:

Section 7 - Operator Signature and Certification

☒ I hereby certify that the required Water Use Report has been, or will be, submitted for this well’s completion.	
☒ I hereby certify that the required Fracfocus disclosure has been, or will be, submitted for this well’s completion.	
☒ I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.	
Name Jana Mendiola	<i>Jana Mendiola</i>
Title Regulatory Advisor	Date 12/03/24

South Formations				North Formations			
Formation/Zone	MD	TVD	W/O/G	Formation/Zone	MD	TVD	W/O/G
T. Anhy	840	840	W	T. San Jose			
T. Salt	1140	1140		T. Nacimiento			
B. Salt	2887	2887		T. Ojo Alamo			
T. Yates				T. Kirtland			
T. 7 Rivers				T. Fruitland			
T. Queen				T. Pictured Cliffs			
T. Grayburg				T. Lewis Shale			
T. San Andres				T. Chacra			
T. Glorieta				T. Cliff House			
T. Yeso				T. Menefee			
T. Paddock				T. Point Lookout			
T. Blinebry				T. Mancos			
T.Tubb				T. Gallup			
T. Drinkard				T. Greenhorn			
T. Abo				T. Graneros			
T. Wolfcamp				T. Dakota			
T. Penn				T. Morrison			
T. Cisco				T. Bluff			
T. Canyon				T.Todilto			
T. Strawn				T. Entrada			
T. Atoka				T. Wingate			
T. Morrow				T. Chinle			
T. Barnett Shale				T. Permian			
T. Miss				T. Penn A"			
T. Woodford Shale				T. Penn. "B"			
T. Devonian				T. Penn. "C"			
T. Silurian				T. Penn. "D"			
T. Fusselman				T. Leadville			
T. Montoya				T. Madison			
T. Simpson				T. Elbert			
T. McKee				T. McCracken			
T. Waddell				T. Ignacio Otzte			
T. Connel				T. Granite			
T. Ellenburger				T. Hermosa			
T. Gr. Wash				T. De Chelly			
T. Delaware Sand				T. Pinkerton			
T. Lamar Lime	4504	4502	o/g				
T. Bell Canyon	4535	4533	o/g				
T. Cherry Canyon	5426	5419	o/g				
T. Brushy Canyon	6697	6651	o/g				
T. Bone Springs	8476	8389	o/g				
T. 1st BS Sand	9635	9541	o/g				
T. 2nd BS Carbonate							
T. 2nd BS Sand	10253	10132	o/g				
T. 3rd BS Carbonate							
T. 3rd BS Sand							

OXY USA Inc.
Top Spot 12-13 Federal Com 25H
API No. 30-015-47639



2-3/8" tbg & gas lift @ 10289'

17-1/2" hole @ 885'
13-3/8" csg @ 875'
w/1340sx-TOC-Surf Circ.

9-7/8" hole @ 9855'
7-5/8" csg @ 9830'
w/ 2104sx-TOC-Surf

6-3/4" hole @ 20720'
5-1/2" csg @ 20700'
w/ 637sx-TOC @ 8466'

Perfs @ 10598-20593'

TD- 20720'M 10423'V

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

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

ACKNOWLEDGMENTS

Action 408088

ACKNOWLEDGMENTS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 408088
	Action Type: [C-104] Completion Packet - New Well (C-104NW)

ACKNOWLEDGMENTS

☒	I hereby certify that the required Water Use Report has been, or will be, submitted for this wells completion.
☒	I hereby certify that the required FracFocus disclosure has been, or will be, submitted for this wells completion.
☒	I hereby certify that the rules of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/oed/contact-us>

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

CONDITIONS

Action 408088

CONDITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 408088
	Action Type: [C-104] Completion Packet - New Well (C-104NW)

CONDITIONS

Created By	Condition	Condition Date
plmartinez	File 3160-5 Completion Sundry within 10 days of BLM approval.	7/31/2025