

C-104 Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024
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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: LOST TANK 30-19 FEDERAL COM 21H	Property Code: 322423
Mineral Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal	API Number: 30-0 25-47942
Pool Name: Bilbrey Basin; Bone Spring, South	Pool Code: 97366

Section 2 – Surface Location

UL	Section	Township	Range	Lot	Ft. from N/S	Ft. from E/W	Latitude	Longitude	County
C	19	22S	32E		368 FNL	2023 FWL	32.383261°	-103.716395°	LEA

Section 3 – Completion Information

Producing Method	Ready Date	Perforations MD	Perforations TVD
Gas lift	07/18/24	10650'-20759'MD	10351'-10624'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: 374365	Unit: ☐ Yes ☒ No, Order No.
Intermediate 1 Casing Action ID: 374365	Compulsory Pooling: ☐ Yes ☒ No, Order No.
Intermediate 2 Casing Action ID: NA	Down Hole Commingling: ☐ Yes ☒ No, Order No.
Production Casing Action ID: 374365	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 10/23/24

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 30-025-47942	Pool Code 97366	Pool Name Bilbrey Basin; Bone Spring, South
Property Code 322423	Property Name LOST TANK 30-19 FED COM	Well Number 21H
OGRID No. 16696	Operator Name OXY USA INC.	Ground Level Elevation 3618.5'
Surface Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal		Mineral Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal

Surface Location

UL C	Section 19	Township 22S	Range 32E	Lot	Ft. from N/S 368 NORTH	Ft. from E/W 2023 WEST	Latitude (NAD 83) 32.383261°	Longitude (NAD 83) -103.716395°	County LEA
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Bottom Hole Location

UL 4	Section 30	Township 22S	Range 32E	Lot	Ft. from N/S 53 SOUTH	Ft. from E/W 560 WEST	Latitude (NAD 83) 32.355341°	Longitude (NAD 83) -103.721118°	County LEA
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Dedicated Acres 678.92	Infill or Defining Well Infill	Defining Well API 30-025-47543	Overlapping Spacing Unit (Y/N)	Consolidation Code
Order Numbers.		Well setbacks are under Common Ownership: ☐ Yes ☐ No		

Kick Off Point (KOP)

UL 1	Section 19	Township 22S	Range 32E	Lot	Ft. from N/S 105 NORTH	Ft. from E/W 615 WEST	Latitude (NAD 83) 32.383964°	Longitude (NAD 83) -103.720956°	County LEA
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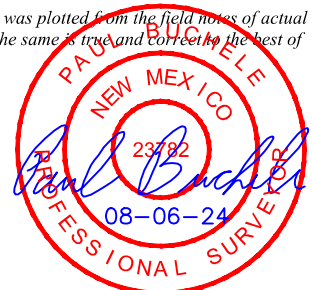
First Take Point (FTP)

UL 1	Section 19	Township 22S	Range 32E	Lot	Ft. from N/S 344 NORTH	Ft. from E/W 495 WEST	Latitude (NAD 83) 32.383304°	Longitude (NAD 83) -103.721344°	County LEA
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Last Take Point (LTP)

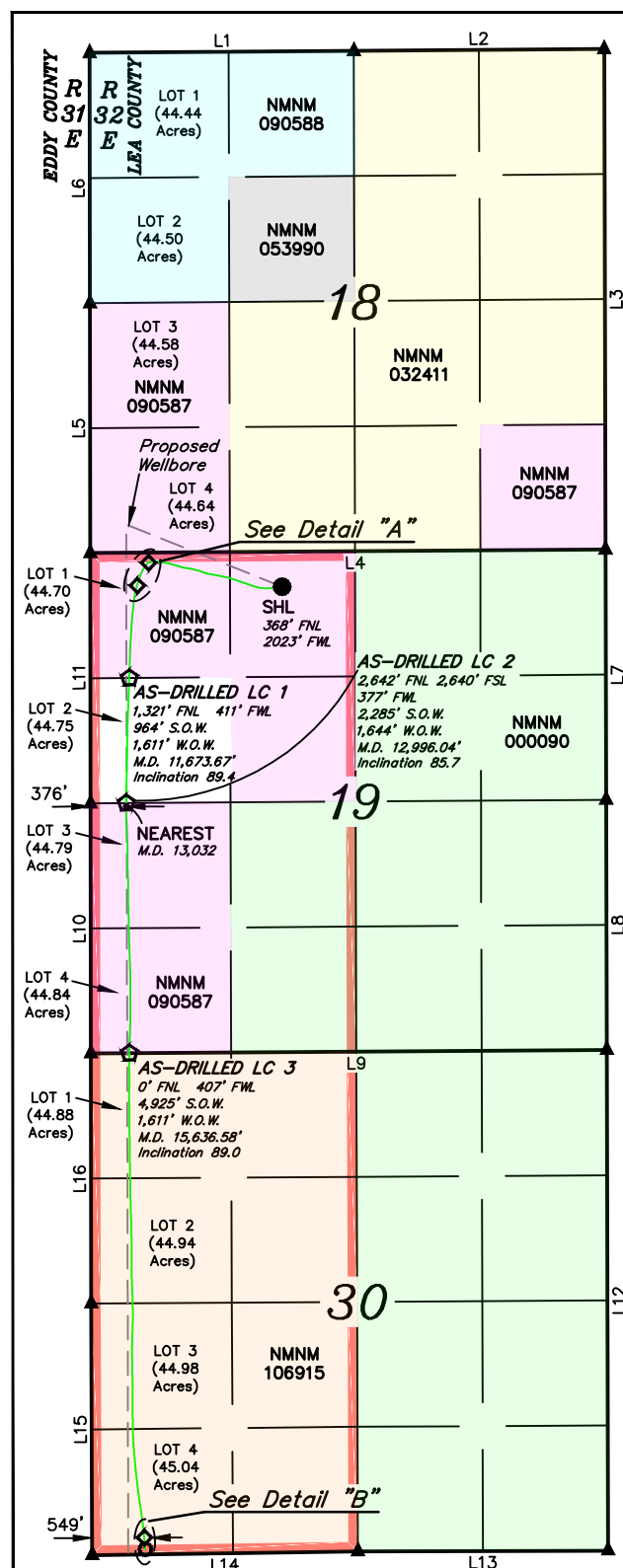
UL 4	Section 30	Township 22S	Range 32E	Lot	Ft. from N/S 176 SOUTH	Ft. from E/W 549 WEST	Latitude (NAD 83) 32.355680°	Longitude (NAD 83) -103.721151°	County LEA
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Unitized Area or Area of Uniform Interest	Spacing Unit Type ☒ Horizontal ☐ Vertical	Ground Floor Elevation:
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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> 10/23/24	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 Jana Mendiola	Signature and Seal of Professional Surveyor 23782 July 18, 2023
Printed Name janalyn_mendiola@oxy.com	Certificate Number Date of Survey
Email Address	

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 LOST TANK 30-19 FED COM	Well Number 21H	Drawn By C.S.C. 08-06-24	Revised By
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- = SURFACE HOLE LOCATION
 ◆ = AS-DRILLED KICK OFF POINT/TAKE POINTS
 ○ = AS-DRILLED LEASE CROSSING
 ○ = AS-DRILLED BOTTOM HOLE LOCATION
 ▲ = SECTION CORNER LOCATED
 — = HORIZONTAL SPACING UNIT
 — = AS-DRILLED WELLBORE
 N.O.W. = NORTH OF WELL.
 S.O.W. = SOUTH OF WELL.
 W.O.W. = WEST OF WELL.

Sheet 2 of 2

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NAD 83 (SURFACE HOLE LOCATION)	
LATITUDE = 32°22'59.74" (32.383261°)	
LONGITUDE = -103°42'59.02" (-103.716395°)	
NAD 27 (SURFACE HOLE LOCATION)	
LATITUDE = 32°22'59.30" (32.383138°)	
LONGITUDE = -103°42'57.27" (-103.715907°)	
STATE PLANE NAD 83 (N.M. EAST)	
N: 503711.02' E: 731782.68'	
STATE PLANE NAD 27 (N.M. EAST)	
N: 503650.61' E: 690600.29'	

NAD 83 (AS-DRILLED KOP)	
LATITUDE = 32°23'02.27" (32.383964°)	
LONGITUDE = -103°43'15.44" (-103.720956°)	
NAD 27 (AS-DRILLED KOP)	
LATITUDE = 32°23'01.83" (32.383841°)	
LONGITUDE = -103°43'13.68" (-103.720468°)	
STATE PLANE NAD 83 (N.M. EAST)	
N: 503958.71' E: 730373.29'	
STATE PLANE NAD 27 (N.M. EAST)	
N: 503898.29' E: 689190.91'	

NAD 83 (AS-DRILLED FTP)	
LATITUDE = 32°22'59.89" (32.383304°)	
LONGITUDE = -103°43'16.84" (-103.721344°)	
NAD 27 (AS-DRILLED FTP)	
LATITUDE = 32°22'59.45" (32.383181°)	
LONGITUDE = -103°43'15.08" (-103.720855°)	
STATE PLANE NAD 83 (N.M. EAST)	
N: 503717.80' E: 730254.99'	
STATE PLANE NAD 27 (N.M. EAST)	
N: 503657.39' E: 689072.61'	

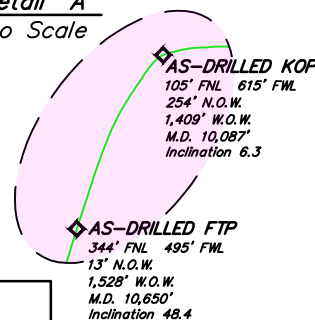
NAD 83 (AS-DRILLED LC 1)	
LATITUDE = 32°22'50.23" (32.380619°)	
LONGITUDE = -103°43'17.83" (-103.721618°)	
NAD 27 (AS-DRILLED LC 1)	
LATITUDE = 32°22'49.79" (32.380496°)	
LONGITUDE = -103°43'16.07" (-103.721130°)	
STATE PLANE NAD 83 (N.M. EAST)	
N: 502740.44' E: 730175.83'	
STATE PLANE NAD 27 (N.M. EAST)	
N: 502680.06' E: 688993.41'	

NAD 83 (AS-DRILLED LC 2)	
LATITUDE = 32°22'37.15" (32.376987°)	
LONGITUDE = -103°43'18.23" (-103.721731°)	
NAD 27 (AS-DRILLED LC 2)	
LATITUDE = 32°22'36.71" (32.376865°)	
LONGITUDE = -103°43'16.47" (-103.721242°)	
STATE PLANE NAD 83 (N.M. EAST)	
N: 501419.25' E: 730148.77'	
STATE PLANE NAD 27 (N.M. EAST)	
N: 501358.90' E: 688966.31'	

NAD 83 (AS-DRILLED LC 3)	
LATITUDE = 32°22'11.04" (32.369733°)	
LONGITUDE = -103°43'17.89" (-103.721636°)	
NAD 27 (AS-DRILLED LC 3)	
LATITUDE = 32°22'10.60" (32.369611°)	
LONGITUDE = -103°43'16.13" (-103.721148°)	
STATE PLANE NAD 83 (N.M. EAST)	
N: 498780.44' E: 730193.08'	
STATE PLANE NAD 27 (N.M. EAST)	
N: 498720.16' E: 689010.55'	

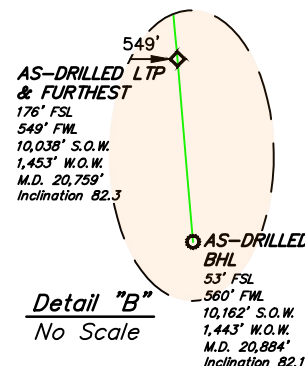
NAD 83 (AS-DRILLED LTP)	
LATITUDE = 32°21'20.45" (32.355680°)	
LONGITUDE = -103°43'16.14" (-103.721151°)	
NAD 27 (AS-DRILLED LTP)	
LATITUDE = 32°21'20.01" (32.355557°)	
LONGITUDE = -103°43'14.39" (-103.720664°)	
STATE PLANE NAD 83 (N.M. EAST)	
N: 493668.75' E: 730371.95'	
STATE PLANE NAD 27 (N.M. EAST)	
N: 493608.61' E: 689189.28'	

NAD 83 (AS-DRILLED BHL)	
LATITUDE = 32°21'19.23" (32.355341°)	
LONGITUDE = -103°43'16.02" (-103.721118°)	
NAD 27 (AS-DRILLED BHL)	
LATITUDE = 32°21'18.79" (32.355218°)	
LONGITUDE = -103°43'14.27" (-103.720630°)	
STATE PLANE NAD 83 (N.M. EAST)	
N: 493545.42' E: 730383.05'	
STATE PLANE NAD 27 (N.M. EAST)	
N: 493485.28' E: 689200.37'	

Detail "A"
No Scale

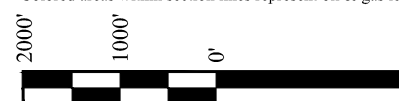
APPROXIMATE WELLBORE MEASURED DEPTH DISTANCE FROM FTP TO LTP	
TRACT	DISTANCE
NMNM 090587	3,664.21'
FEE	1,322.37'
NMNM 106915	5,122.42'
TOTAL	10,109.00'

LINE TABLE		
LINE	DIRECTION	LENGTH
L1	S89°32'13"W	2788.14'
L2	S89°33'52"W	2640.81'
L3	N00°09'21"W	5284.30'
L4	S89°36'19"W	5436.77'
L5	N00°04'43"W	2638.22'
L6	N00°03'46"W	2640.91'
L7	N00°08'14"W	2640.78'
L8	N00°09'30"W	2641.43'
L9	S89°36'36"W	5443.96'
L10	N00°04'10"W	2639.54'
L11	N00°04'12"W	2642.25'
L12	N00°08'37"W	5284.27'
L13	S89°49'38"W	2638.59'
L14	S89°11'42"W	2803.46'
L15	N00°14'43"W	2654.77'
L16	N00°05'09"W	2639.78'

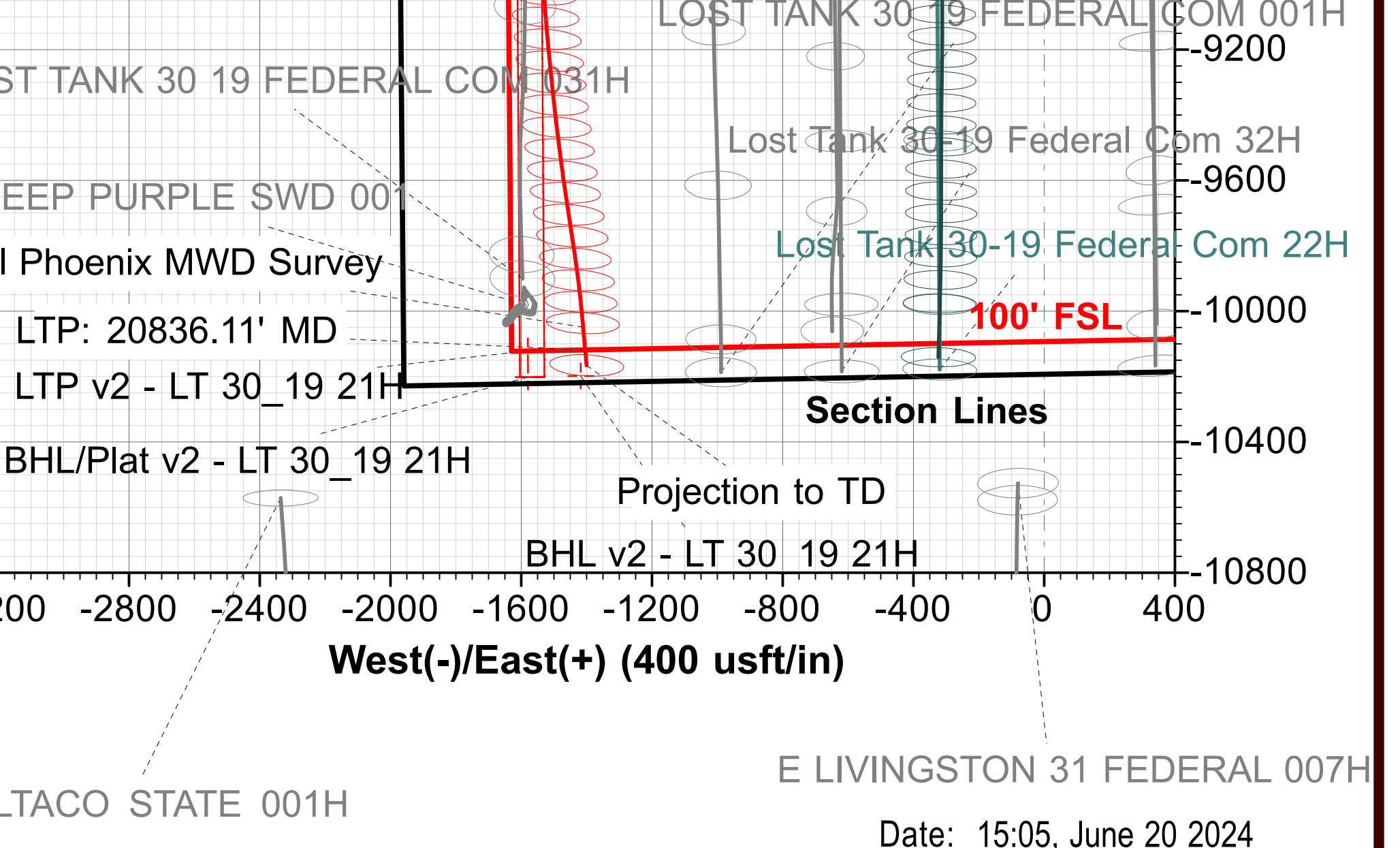
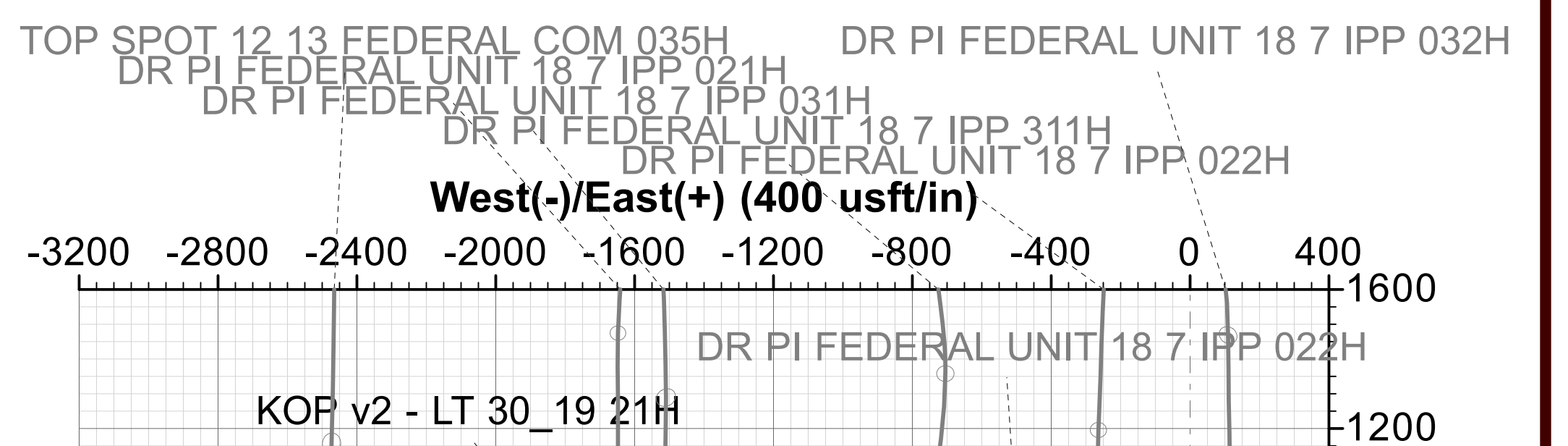
Detail "B"
No Scale

NOTE:

- Distances referenced on plat to section lines are perpendicular.
- Basis of Bearings is a Transverse Mercator Projection with a Central Meridian of W103°53'00" (NAD 83)
- As-Drilled well head has not been field verified.
- Wellbore data provided by Oxy USA Inc.
- Colored areas within section lines represent oil & gas leases.



SCALE





OXY USA INC.

**Lea County, NM (NAD83-NME)
Lost Tank 30-19
Lost Tank 30-19 Federal Com 21H
3002547942
OH / 74692**

Design: Surveys (Citadel 2)

Standard Survey Report

20 June, 2024





Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Lost Tank 30-19 Federal Com 21H
Project:	Lea County, NM (NAD83-NME)	TVD Reference:	RKB @ 3642.50usft (Citadel 2)
Site:	Lost Tank 30-19	MD Reference:	RKB @ 3642.50usft (Citadel 2)
Well:	Lost Tank 30-19 Federal Com 21H	North Reference:	Grid
Wellbore:	OH / 74692	Survey Calculation Method:	Minimum Curvature
Design:	Surveys (Citadel 2)	Database:	USAEDMDB

Project	Lea 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	Lost Tank 30-19		
Site Position:		Northing:	503,711.02 usft
From:	Map	Easting:	731,782.68 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32° 22' 59.739564 N
		Longitude:	103° 42' 59.023536 W

Well	Lost Tank 30-19 Federal Com 21H		
Well Position	+N/-S	0.00 usft	Northing: 503,711.02 usft
	+E/-W	0.00 usft	Easting: 731,782.68 usft
Position Uncertainty	2.00 usft	Wellhead Elevation:	usft
Grid Convergence:	0.330 °	Ground Level:	3,618.50 usft

Wellbore	OH / 74692				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IFR	5/15/2024	6.549	59.995	47,566.40000000

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	188.80	

Survey Program	Date	6/20/2024			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
24.00	1,017.82	Phoenix MWD Surveys - Surface - SQC (C	SQC_C705Mb_MWD+IFF MWD+IFR1+Sag+FDIR		
1,032.00	10,161.20	Phoenix MWD Surveys - Int - SQC (OH / 7	SQC_C705Mb_MWD+IFF MWD+IFR1+Sag+FDIR		
10,176.00	20,884.00	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	
44.10	0.05	140.72	44.10	-0.01	0.01	0.01	0.25	0.25	0.00	
58.80	0.06	140.68	58.80	-0.02	0.01	0.02	0.07	0.07	-0.27	
73.50	0.08	140.65	73.50	-0.03	0.03	0.03	0.14	0.14	-0.20	
88.20	0.09	140.61	88.20	-0.05	0.04	0.04	0.07	0.07	-0.27	
102.90	0.11	140.57	102.90	-0.07	0.06	0.06	0.14	0.14	-0.27	
117.60	0.12	140.53	117.60	-0.09	0.07	0.08	0.07	0.07	-0.27	



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Lost Tank 30-19 Federal Com 21H
Project:	Lea County, NM (NAD83-NME)	TVD Reference:	RKB @ 3642.50usft (Citadel 2)
Site:	Lost Tank 30-19	MD Reference:	RKB @ 3642.50usft (Citadel 2)
Well:	Lost Tank 30-19 Federal Com 21H	North Reference:	Grid
Wellbore:	OH / 74692	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)
132.30	0.14	140.50	132.30	-0.12	0.10	0.10	0.14	0.14	-0.20
147.00	0.15	140.46	147.00	-0.15	0.12	0.13	0.07	0.07	-0.27
First Phoenix MWD Survey									
160.57	0.17	138.29	160.57	-0.17	0.14	0.15	0.15	0.15	-15.99
174.14	0.18	136.43	174.14	-0.20	0.17	0.18	0.08	0.07	-13.71
187.71	0.20	134.82	187.71	-0.24	0.20	0.20	0.15	0.15	-11.86
201.29	0.21	133.42	201.29	-0.27	0.24	0.23	0.08	0.07	-10.31
214.86	0.22	132.19	214.86	-0.31	0.28	0.26	0.08	0.07	-9.06
228.43	0.24	131.10	228.43	-0.34	0.32	0.29	0.15	0.15	-8.03
242.00	0.25	130.13	242.00	-0.38	0.36	0.32	0.08	0.07	-7.15
255.57	0.25	131.74	255.57	-0.42	0.41	0.35	0.05	0.00	11.86
269.14	0.25	133.35	269.14	-0.46	0.45	0.38	0.05	0.00	11.86
282.71	0.25	134.95	282.71	-0.50	0.49	0.42	0.05	0.00	11.79
296.29	0.25	136.54	296.29	-0.54	0.53	0.45	0.05	0.00	11.71
309.86	0.25	138.12	309.86	-0.59	0.57	0.49	0.05	0.00	11.64
323.43	0.25	139.69	323.43	-0.63	0.61	0.53	0.05	0.00	11.57
337.00	0.25	141.24	337.00	-0.68	0.65	0.57	0.05	0.00	11.42
351.77	0.25	143.86	351.77	-0.73	0.69	0.61	0.08	0.00	17.74
366.54	0.24	146.62	366.54	-0.78	0.73	0.66	0.10	-0.07	18.69
381.31	0.24	149.51	381.31	-0.83	0.76	0.71	0.08	0.00	19.57
396.08	0.23	152.52	396.08	-0.88	0.79	0.75	0.11	-0.07	20.38
410.85	0.23	155.66	410.85	-0.94	0.81	0.80	0.09	0.00	21.26
425.62	0.22	158.91	425.62	-0.99	0.84	0.85	0.11	-0.07	22.00
440.38	0.22	162.24	440.38	-1.04	0.85	0.90	0.09	0.00	22.56
455.15	0.22	165.65	455.15	-1.10	0.87	0.95	0.09	0.00	23.09
469.92	0.22	169.11	469.92	-1.15	0.88	1.01	0.09	0.00	23.43
484.69	0.22	172.58	484.69	-1.21	0.89	1.06	0.09	0.00	23.49
499.46	0.22	176.06	499.46	-1.27	0.90	1.11	0.09	0.00	23.56
514.23	0.22	179.51	514.23	-1.32	0.90	1.17	0.09	0.00	23.36
529.00	0.22	182.91	529.00	-1.38	0.90	1.23	0.09	0.00	23.02
542.57	0.23	182.96	542.57	-1.43	0.90	1.28	0.07	0.07	0.37
556.14	0.24	183.00	556.14	-1.49	0.89	1.33	0.07	0.07	0.29
569.71	0.25	183.02	569.71	-1.55	0.89	1.39	0.07	0.07	0.15
583.29	0.26	183.05	583.29	-1.61	0.89	1.45	0.07	0.07	0.22
596.86	0.27	183.06	596.86	-1.67	0.88	1.51	0.07	0.07	0.07
610.43	0.28	183.08	610.43	-1.73	0.88	1.58	0.07	0.07	0.15
624.00	0.30	183.08	624.00	-1.80	0.88	1.65	0.15	0.15	0.00
637.57	0.31	183.80	637.57	-1.88	0.87	1.72	0.08	0.07	5.31
651.14	0.33	184.43	651.14	-1.95	0.87	1.80	0.15	0.15	4.64
664.71	0.35	185.00	664.71	-2.03	0.86	1.88	0.15	0.15	4.20
678.29	0.36	185.51	678.29	-2.11	0.85	1.96	0.08	0.07	3.76
691.86	0.38	185.97	691.86	-2.20	0.84	2.05	0.15	0.15	3.39
705.43	0.40	186.39	705.43	-2.29	0.83	2.14	0.15	0.15	3.10



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Lost Tank 30-19 Federal Com 21H
Project:	Lea County, NM (NAD83-NME)	TVD Reference:	RKB @ 3642.50usft (Citadel 2)
Site:	Lost Tank 30-19	MD Reference:	RKB @ 3642.50usft (Citadel 2)
Well:	Lost Tank 30-19 Federal Com 21H	North Reference:	Grid
Wellbore:	OH / 74692	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)
719.00	0.42	186.77	718.99	-2.39	0.82	2.24	0.15	0.15	2.80
732.57	0.43	187.83	732.56	-2.49	0.81	2.34	0.09	0.07	7.81
746.14	0.44	188.84	746.13	-2.59	0.79	2.44	0.09	0.07	7.44
759.71	0.45	189.78	759.70	-2.70	0.78	2.55	0.09	0.07	6.93
773.29	0.47	190.68	773.28	-2.80	0.76	2.65	0.16	0.15	6.63
786.86	0.48	191.52	786.85	-2.91	0.74	2.77	0.09	0.07	6.19
800.43	0.49	192.32	800.42	-3.03	0.71	2.88	0.09	0.07	5.90
814.00	0.51	193.07	813.99	-3.14	0.69	3.00	0.16	0.15	5.53
826.40	0.48	193.02	826.39	-3.25	0.66	3.11	0.24	-0.24	-0.40
838.80	0.46	192.96	838.79	-3.35	0.64	3.21	0.16	-0.16	-0.48
851.20	0.43	192.90	851.19	-3.44	0.62	3.30	0.24	-0.24	-0.48
863.60	0.40	192.82	863.59	-3.53	0.60	3.39	0.24	-0.24	-0.65
876.00	0.38	192.74	875.99	-3.61	0.58	3.48	0.16	-0.16	-0.65
890.18	0.32	196.50	890.17	-3.69	0.56	3.56	0.45	-0.42	26.52
904.36	0.27	201.84	904.35	-3.76	0.53	3.64	0.40	-0.35	37.66
918.55	0.21	209.84	918.54	-3.82	0.51	3.69	0.48	-0.42	56.38
932.73	0.17	222.44	932.72	-3.85	0.48	3.73	0.41	-0.28	88.86
946.91	0.14	242.23	946.90	-3.88	0.45	3.76	0.43	-0.21	139.56
961.09	0.13	268.43	961.08	-3.89	0.42	3.78	0.44	-0.07	184.77
975.27	0.15	292.58	975.26	-3.88	0.39	3.77	0.44	0.14	170.31
989.45	0.19	309.09	989.44	-3.86	0.35	3.76	0.44	0.28	116.43
1,003.64	0.24	319.45	1,003.63	-3.82	0.31	3.73	0.44	0.35	73.01
1,017.82	0.29	326.16	1,017.81	-3.77	0.27	3.68	0.41	0.35	47.32
1,032.00	0.35	330.75	1,031.99	-3.70	0.23	3.62	0.46	0.42	32.37
1,045.57	0.35	328.85	1,045.56	-3.63	0.19	3.56	0.09	0.00	-14.00
1,059.14	0.35	326.97	1,059.13	-3.56	0.15	3.49	0.08	0.00	-13.85
1,072.71	0.35	325.11	1,072.70	-3.49	0.10	3.43	0.08	0.00	-13.71
1,086.29	0.35	323.26	1,086.28	-3.42	0.05	3.37	0.08	0.00	-13.62
1,099.86	0.35	321.44	1,099.85	-3.36	0.00	3.32	0.08	0.00	-13.41
1,113.43	0.35	319.65	1,113.42	-3.29	-0.05	3.26	0.08	0.00	-13.19
1,127.00	0.36	317.88	1,126.99	-3.23	-0.11	3.21	0.11	0.07	-13.04
1,140.71	0.35	319.68	1,140.70	-3.16	-0.16	3.15	0.11	-0.07	13.13
1,154.43	0.35	321.55	1,154.42	-3.10	-0.22	3.10	0.08	0.00	13.63
1,168.14	0.34	323.48	1,168.13	-3.03	-0.27	3.04	0.11	-0.07	14.08
1,181.86	0.34	325.47	1,181.84	-2.97	-0.31	2.98	0.09	0.00	14.50
1,195.57	0.33	327.52	1,195.55	-2.90	-0.36	2.92	0.11	-0.07	14.95
1,209.29	0.33	329.62	1,209.27	-2.83	-0.40	2.86	0.09	0.00	15.31
1,223.00	0.32	331.78	1,222.98	-2.77	-0.44	2.80	0.12	-0.07	15.75
1,236.57	0.36	330.73	1,236.55	-2.70	-0.47	2.74	0.30	0.29	-7.74
1,250.14	0.40	329.87	1,250.12	-2.62	-0.52	2.67	0.30	0.29	-6.34
1,263.71	0.43	329.16	1,263.69	-2.53	-0.57	2.59	0.22	0.22	-5.23
1,277.29	0.47	328.56	1,277.27	-2.44	-0.62	2.51	0.30	0.29	-4.42
1,290.86	0.51	328.05	1,290.84	-2.34	-0.69	2.42	0.30	0.29	-3.76
1,304.43	0.54	327.61	1,304.41	-2.24	-0.75	2.33	0.22	0.22	-3.24



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Lost Tank 30-19 Federal Com 21H
Project:	Lea County, NM (NAD83-NME)	TVD Reference:	RKB @ 3642.50usft (Citadel 2)
Site:	Lost Tank 30-19	MD Reference:	RKB @ 3642.50usft (Citadel 2)
Well:	Lost Tank 30-19 Federal Com 21H	North Reference:	Grid
Wellbore:	OH / 74692	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)
1,318.00	0.58	327.23	1,317.98	-2.13	-0.82	2.23	0.30	0.29	-2.80
1,331.43	0.58	326.79	1,331.41	-2.01	-0.90	2.13	0.03	0.00	-3.28
1,344.86	0.59	326.37	1,344.84	-1.90	-0.97	2.02	0.08	0.07	-3.13
1,358.29	0.60	325.96	1,358.27	-1.78	-1.05	1.92	0.08	0.07	-3.05
1,371.71	0.60	325.56	1,371.69	-1.67	-1.13	1.82	0.03	0.00	-2.98
1,385.14	0.61	325.17	1,385.12	-1.55	-1.21	1.72	0.08	0.07	-2.90
1,398.57	0.62	324.80	1,398.55	-1.43	-1.29	1.61	0.08	0.07	-2.76
1,412.00	0.62	324.43	1,411.98	-1.31	-1.38	1.51	0.03	0.00	-2.76
1,425.57	0.64	325.10	1,425.55	-1.19	-1.46	1.40	0.16	0.15	4.94
1,439.14	0.66	325.74	1,439.11	-1.06	-1.55	1.29	0.16	0.15	4.72
1,452.71	0.67	326.36	1,452.68	-0.93	-1.64	1.17	0.09	0.07	4.57
1,466.29	0.69	326.95	1,466.26	-0.80	-1.73	1.05	0.16	0.15	4.34
1,479.86	0.70	327.51	1,479.83	-0.66	-1.82	0.93	0.09	0.07	4.13
1,493.43	0.72	328.05	1,493.40	-0.52	-1.91	0.80	0.16	0.15	3.98
1,507.00	0.74	328.57	1,506.97	-0.37	-2.00	0.67	0.16	0.15	3.83
1,520.57	0.74	331.34	1,520.54	-0.22	-2.08	0.53	0.26	0.00	20.41
1,534.14	0.74	334.08	1,534.11	-0.06	-2.16	0.39	0.26	0.00	20.19
1,547.71	0.75	336.79	1,547.68	0.10	-2.24	0.25	0.27	0.07	19.97
1,561.29	0.75	339.46	1,561.25	0.26	-2.30	0.09	0.26	0.00	19.66
1,574.86	0.76	342.07	1,574.82	0.43	-2.36	-0.06	0.26	0.07	19.23
1,588.43	0.77	344.62	1,588.39	0.60	-2.41	-0.23	0.26	0.07	18.79
1,602.00	0.79	347.10	1,601.96	0.78	-2.46	-0.40	0.29	0.15	18.28
1,615.57	0.77	346.77	1,615.53	0.96	-2.50	-0.57	0.15	-0.15	-2.43
1,629.14	0.76	346.44	1,629.10	1.14	-2.54	-0.74	0.08	-0.07	-2.43
1,642.71	0.75	346.11	1,642.67	1.31	-2.59	-0.90	0.08	-0.07	-2.43
1,656.29	0.74	345.76	1,656.25	1.48	-2.63	-1.07	0.08	-0.07	-2.58
1,669.86	0.73	345.40	1,669.82	1.65	-2.67	-1.23	0.08	-0.07	-2.65
1,683.43	0.72	345.04	1,683.38	1.82	-2.72	-1.38	0.08	-0.07	-2.65
1,697.00	0.71	344.66	1,696.95	1.98	-2.76	-1.54	0.08	-0.07	-2.80
1,710.57	0.70	344.14	1,710.52	2.14	-2.81	-1.69	0.09	-0.07	-3.83
1,724.14	0.70	343.62	1,724.09	2.30	-2.85	-1.84	0.05	0.00	-3.83
1,737.71	0.69	343.09	1,737.66	2.46	-2.90	-1.99	0.09	-0.07	-3.91
1,751.29	0.68	342.54	1,751.24	2.62	-2.95	-2.13	0.09	-0.07	-4.05
1,764.86	0.68	341.99	1,764.81	2.77	-3.00	-2.28	0.05	0.00	-4.05
1,778.43	0.67	341.43	1,778.38	2.92	-3.05	-2.42	0.09	-0.07	-4.13
1,792.00	0.66	340.86	1,791.95	3.07	-3.10	-2.56	0.09	-0.07	-4.20
1,805.43	0.67	343.89	1,805.38	3.22	-3.14	-2.70	0.27	0.07	22.56
1,818.86	0.68	346.87	1,818.80	3.37	-3.18	-2.85	0.27	0.07	22.19
1,832.29	0.69	349.77	1,832.23	3.53	-3.22	-3.00	0.27	0.07	21.59
1,845.71	0.70	352.59	1,845.65	3.69	-3.24	-3.15	0.27	0.07	21.01
1,859.14	0.71	355.31	1,859.08	3.85	-3.26	-3.31	0.26	0.07	20.25
1,872.57	0.72	357.94	1,872.51	4.02	-3.27	-3.47	0.26	0.07	19.58
1,886.00	0.74	0.46	1,885.94	4.19	-3.27	-3.64	0.28	0.15	18.76



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Lost Tank 30-19 Federal Com 21H
Project:	Lea County, NM (NAD83-NME)	TVD Reference:	RKB @ 3642.50usft (Citadel 2)
Site:	Lost Tank 30-19	MD Reference:	RKB @ 3642.50usft (Citadel 2)
Well:	Lost Tank 30-19 Federal Com 21H	North Reference:	Grid
Wellbore:	OH / 74692	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)
1,899.57	0.75	0.01	1,899.51	4.37	-3.27	-3.82	0.09	0.07	-3.32
1,913.14	0.76	359.56	1,913.08	4.55	-3.27	-3.99	0.09	0.07	-3.32
1,926.71	0.76	359.12	1,926.65	4.73	-3.27	-4.17	0.04	0.00	-3.24
1,940.29	0.77	358.70	1,940.22	4.91	-3.28	-4.35	0.08	0.07	-3.09
1,953.86	0.78	358.28	1,953.79	5.09	-3.28	-4.53	0.08	0.07	-3.10
1,967.43	0.79	357.88	1,967.36	5.28	-3.29	-4.71	0.08	0.07	-2.95
1,981.00	0.80	357.48	1,980.93	5.47	-3.29	-4.90	0.08	0.07	-2.95
1,994.43	0.78	358.56	1,994.36	5.65	-3.30	-5.08	0.19	-0.15	8.04
2,007.86	0.77	359.68	2,007.79	5.83	-3.30	-5.26	0.14	-0.07	8.34
2,021.29	0.75	0.85	2,021.22	6.01	-3.30	-5.44	0.19	-0.15	8.71
2,034.71	0.73	2.07	2,034.64	6.18	-3.30	-5.61	0.19	-0.15	9.09
2,048.14	0.72	3.34	2,048.06	6.35	-3.29	-5.78	0.14	-0.07	9.46
2,061.57	0.71	4.67	2,061.49	6.52	-3.28	-5.94	0.14	-0.07	9.90
2,075.00	0.69	6.05	2,074.92	6.68	-3.26	-6.11	0.19	-0.15	10.28
2,088.57	0.70	7.64	2,088.49	6.85	-3.24	-6.27	0.16	0.07	11.72
2,102.14	0.71	9.18	2,102.06	7.01	-3.22	-6.44	0.16	0.07	11.35
2,115.71	0.73	10.67	2,115.63	7.18	-3.19	-6.61	0.20	0.15	10.98
2,129.29	0.74	12.11	2,129.21	7.35	-3.16	-6.78	0.15	0.07	10.60
2,142.86	0.75	13.51	2,142.78	7.52	-3.12	-6.96	0.15	0.07	10.32
2,156.43	0.76	14.86	2,156.35	7.70	-3.07	-7.14	0.15	0.07	9.95
2,170.00	0.78	16.17	2,169.92	7.87	-3.02	-7.32	0.20	0.15	9.65
2,183.57	0.79	15.47	2,183.48	8.05	-2.97	-7.50	0.10	0.07	-5.16
2,197.14	0.80	14.80	2,197.05	8.23	-2.92	-7.69	0.10	0.07	-4.94
2,210.71	0.81	14.14	2,210.62	8.42	-2.88	-7.88	0.10	0.07	-4.86
2,224.29	0.83	13.51	2,224.20	8.61	-2.83	-8.07	0.16	0.15	-4.64
2,237.86	0.84	12.90	2,237.77	8.80	-2.78	-8.27	0.10	0.07	-4.50
2,251.43	0.85	12.31	2,251.34	8.99	-2.74	-8.47	0.10	0.07	-4.35
2,265.00	0.87	11.73	2,264.91	9.19	-2.70	-8.67	0.16	0.15	-4.27
2,278.43	0.86	12.74	2,278.33	9.39	-2.66	-8.88	0.14	-0.07	7.52
2,291.86	0.85	13.76	2,291.76	9.59	-2.61	-9.08	0.14	-0.07	7.59
2,305.29	0.85	14.80	2,305.19	9.78	-2.56	-9.27	0.11	0.00	7.74
2,318.71	0.84	15.86	2,318.61	9.97	-2.51	-9.47	0.14	-0.07	7.90
2,332.14	0.83	16.93	2,332.04	10.16	-2.45	-9.66	0.14	-0.07	7.97
2,345.57	0.83	18.02	2,345.47	10.34	-2.39	-9.86	0.12	0.00	8.12
2,359.00	0.82	19.12	2,358.90	10.53	-2.33	-10.05	0.14	-0.07	8.19
2,372.57	0.74	18.04	2,372.46	10.70	-2.27	-10.23	0.60	-0.59	-7.96
2,386.14	0.66	16.69	2,386.03	10.86	-2.22	-10.39	0.60	-0.59	-9.95
2,399.71	0.68	317.06	2,399.60	10.99	-2.26	-10.52	4.91	0.15	-439.43
2,413.29	0.74	310.60	2,413.18	11.11	-2.38	-10.62	0.74	0.44	-47.57
2,426.86	0.72	303.75	2,426.75	11.22	-2.52	-10.70	0.66	-0.15	-50.48
2,440.43	0.71	296.65	2,440.32	11.30	-2.66	-10.76	0.66	-0.07	-52.32
2,454.00	0.71	289.51	2,453.89	11.37	-2.82	-10.80	0.65	0.00	-52.62
2,467.57	0.73	289.04	2,467.46	11.42	-2.98	-10.83	0.15	0.15	-3.46



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Lost Tank 30-19 Federal Com 21H
Project:	Lea County, NM (NAD83-NME)	TVD Reference:	RKB @ 3642.50usft (Citadel 2)
Site:	Lost Tank 30-19	MD Reference:	RKB @ 3642.50usft (Citadel 2)
Well:	Lost Tank 30-19 Federal Com 21H	North Reference:	Grid
Wellbore:	OH / 74692	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)
2,481.14	0.75	288.58	2,481.03	11.48	-3.14	-10.86	0.15	0.15	-3.39
2,494.71	0.76	288.15	2,494.59	11.54	-3.31	-10.89	0.08	0.07	-3.17
2,508.29	0.78	287.74	2,508.17	11.59	-3.49	-10.92	0.15	0.15	-3.02
2,521.86	0.80	287.35	2,521.74	11.65	-3.67	-10.95	0.15	0.15	-2.87
2,535.43	0.81	286.97	2,535.31	11.70	-3.85	-10.98	0.08	0.07	-2.80
2,549.00	0.83	286.61	2,548.88	11.76	-4.03	-11.00	0.15	0.15	-2.65
2,562.43	0.84	287.61	2,562.31	11.82	-4.22	-11.03	0.13	0.07	7.45
2,575.86	0.86	288.59	2,575.74	11.88	-4.41	-11.07	0.18	0.15	7.30
2,589.29	0.87	289.53	2,589.16	11.95	-4.60	-11.10	0.13	0.07	7.00
2,602.71	0.89	290.44	2,602.58	12.02	-4.79	-11.14	0.18	0.15	6.78
2,616.14	0.90	291.33	2,616.01	12.09	-4.99	-11.19	0.13	0.07	6.63
2,629.57	0.92	292.19	2,629.44	12.17	-5.19	-11.23	0.18	0.15	6.40
2,643.00	0.93	293.02	2,642.87	12.25	-5.39	-11.28	0.12	0.07	6.18
2,656.57	0.95	295.32	2,656.44	12.34	-5.59	-11.34	0.31	0.15	16.95
2,670.14	0.96	297.53	2,670.00	12.45	-5.79	-11.41	0.28	0.07	16.29
2,683.71	0.98	299.66	2,683.57	12.56	-6.00	-11.49	0.30	0.15	15.70
2,697.29	1.01	301.70	2,697.15	12.68	-6.20	-11.58	0.34	0.22	15.02
2,710.86	1.03	303.66	2,710.72	12.81	-6.40	-11.68	0.30	0.15	14.44
2,724.43	1.05	305.54	2,724.29	12.95	-6.61	-11.78	0.29	0.15	13.85
2,738.00	1.08	307.33	2,737.85	13.10	-6.81	-11.90	0.33	0.22	13.19
2,751.43	1.05	309.08	2,751.28	13.25	-7.00	-12.02	0.33	-0.22	13.03
2,764.86	1.02	311.17	2,764.71	13.41	-7.19	-12.15	0.36	-0.22	15.56
2,778.29	0.99	313.49	2,778.14	13.56	-7.36	-12.28	0.38	-0.22	17.27
2,791.71	0.97	315.91	2,791.56	13.73	-7.53	-12.41	0.34	-0.15	18.03
2,805.14	0.94	318.29	2,804.98	13.89	-7.68	-12.55	0.37	-0.22	17.72
2,818.57	0.82	311.44	2,818.41	14.04	-7.82	-12.67	1.19	-0.89	-51.01
2,832.00	0.71	254.09	2,831.84	14.08	-7.98	-12.69	5.51	-0.82	-427.03
2,845.57	0.69	251.78	2,845.41	14.03	-8.14	-12.62	0.25	-0.15	-17.02
2,859.14	0.66	249.31	2,858.98	13.97	-8.29	-12.54	0.31	-0.22	-18.20
2,872.71	0.64	246.67	2,872.55	13.92	-8.43	-12.46	0.27	-0.15	-19.45
2,886.29	0.62	243.86	2,886.13	13.85	-8.56	-12.38	0.27	-0.15	-20.69
2,899.86	0.61	240.87	2,899.70	13.79	-8.69	-12.30	0.25	-0.07	-22.03
2,913.43	0.59	237.71	2,913.27	13.71	-8.82	-12.21	0.28	-0.15	-23.29
2,927.00	0.57	234.38	2,926.83	13.64	-8.93	-12.11	0.29	-0.15	-24.54
2,940.43	0.52	234.24	2,940.26	13.56	-9.03	-12.02	0.37	-0.37	-1.04
2,953.86	0.46	234.06	2,953.69	13.50	-9.13	-11.94	0.45	-0.45	-1.34
2,967.29	0.41	233.83	2,967.12	13.44	-9.21	-11.87	0.37	-0.37	-1.71
2,980.71	0.35	233.54	2,980.54	13.38	-9.28	-11.81	0.45	-0.45	-2.16
2,994.14	0.30	233.12	2,993.97	13.34	-9.34	-11.75	0.37	-0.37	-3.13
3,007.57	0.24	232.51	3,007.40	13.30	-9.39	-11.71	0.45	-0.45	-4.54
3,021.00	0.18	231.53	3,020.83	13.27	-9.43	-11.67	0.45	-0.45	-7.30
3,034.57	0.15	233.53	3,034.40	13.25	-9.46	-11.64	0.23	-0.22	14.74
3,048.14	0.11	236.93	3,047.97	13.23	-9.49	-11.62	0.30	-0.29	25.06
3,061.71	0.07	243.96	3,061.54	13.22	-9.51	-11.61	0.31	-0.29	51.81



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Lost Tank 30-19 Federal Com 21H
Project:	Lea County, NM (NAD83-NME)	TVD Reference:	RKB @ 3642.50usft (Citadel 2)
Site:	Lost Tank 30-19	MD Reference:	RKB @ 3642.50usft (Citadel 2)
Well:	Lost Tank 30-19 Federal Com 21H	North Reference:	Grid
Wellbore:	OH / 74692	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)	
3,075.29	0.04	265.06	3,075.12	13.21	-9.52	-11.60	0.26	-0.22	155.38	
3,088.86	0.03	338.80	3,088.69	13.22	-9.52	-11.60	0.32	-0.07	543.40	
3,102.43	0.06	18.31	3,102.26	13.23	-9.52	-11.61	0.31	0.22	291.16	
3,116.00	0.09	28.89	3,115.83	13.24	-9.52	-11.63	0.24	0.22	77.97	
3,129.57	0.09	41.94	3,129.40	13.26	-9.50	-11.65	0.15	0.00	96.17	
3,143.14	0.10	54.19	3,142.97	13.27	-9.49	-11.67	0.17	0.07	90.27	
3,156.71	0.11	64.77	3,156.54	13.29	-9.46	-11.68	0.16	0.07	77.97	
3,170.29	0.12	73.42	3,170.12	13.30	-9.44	-11.70	0.15	0.07	63.70	
3,183.86	0.13	80.33	3,183.69	13.30	-9.41	-11.71	0.13	0.07	50.92	
3,197.43	0.15	85.83	3,197.26	13.31	-9.38	-11.72	0.18	0.15	40.53	
3,211.00	0.17	90.24	3,210.83	13.31	-9.34	-11.72	0.17	0.15	32.50	
3,224.43	0.17	98.77	3,224.26	13.31	-9.30	-11.73	0.19	0.00	63.51	
3,237.86	0.18	106.63	3,237.69	13.30	-9.26	-11.72	0.19	0.07	58.53	
3,251.29	0.19	113.64	3,251.12	13.28	-9.22	-11.72	0.18	0.07	52.20	
3,264.71	0.21	119.75	3,264.54	13.26	-9.18	-11.70	0.22	0.15	45.53	
3,278.14	0.22	125.01	3,277.97	13.23	-9.14	-11.68	0.16	0.07	39.17	
3,291.57	0.24	129.52	3,291.40	13.20	-9.09	-11.65	0.20	0.15	33.58	
3,305.00	0.26	133.37	3,304.83	13.16	-9.05	-11.62	0.19	0.15	28.67	
3,318.57	0.26	139.05	3,318.40	13.12	-9.01	-11.59	0.19	0.00	41.86	
3,332.14	0.27	144.47	3,331.97	13.07	-8.97	-11.54	0.20	0.07	39.94	
3,345.71	0.28	149.57	3,345.54	13.01	-8.93	-11.49	0.19	0.07	37.58	
3,359.29	0.29	154.30	3,359.12	12.95	-8.90	-11.44	0.19	0.07	34.83	
3,372.86	0.31	158.64	3,372.69	12.89	-8.87	-11.38	0.22	0.15	31.98	
3,386.43	0.32	162.59	3,386.26	12.82	-8.85	-11.31	0.18	0.07	29.11	
3,400.00	0.34	166.16	3,399.83	12.74	-8.83	-11.24	0.21	0.15	26.31	
3,413.57	0.35	166.24	3,413.40	12.66	-8.81	-11.17	0.07	0.07	0.59	
3,427.14	0.36	166.31	3,426.97	12.58	-8.79	-11.09	0.07	0.07	0.52	
3,440.71	0.36	166.37	3,440.54	12.50	-8.77	-11.01	0.00	0.00	0.44	
3,454.29	0.37	166.43	3,454.12	12.42	-8.75	-10.93	0.07	0.07	0.44	
3,467.86	0.38	166.48	3,467.69	12.33	-8.73	-10.85	0.07	0.07	0.37	
3,481.43	0.39	166.53	3,481.26	12.24	-8.70	-10.76	0.07	0.07	0.37	
3,495.00	0.40	166.57	3,494.83	12.15	-8.68	-10.68	0.07	0.07	0.29	
3,508.57	0.47	162.41	3,508.40	12.05	-8.65	-10.58	0.57	0.52	-30.66	
3,522.14	0.55	159.40	3,521.97	11.94	-8.62	-10.48	0.62	0.59	-22.18	
3,535.71	0.63	157.13	3,535.54	11.81	-8.56	-10.36	0.61	0.59	-16.73	
3,549.29	0.71	155.36	3,549.12	11.66	-8.50	-10.22	0.61	0.59	-13.03	
3,562.86	0.79	153.94	3,562.68	11.50	-8.42	-10.08	0.61	0.59	-10.46	
3,576.43	0.87	152.78	3,576.25	11.32	-8.33	-9.92	0.60	0.59	-8.55	
3,590.00	0.95	151.82	3,589.82	11.13	-8.23	-9.74	0.60	0.59	-7.07	
3,603.43	1.14	146.63	3,603.25	10.92	-8.11	-9.56	1.58	1.41	-38.64	
3,616.86	1.33	142.91	3,616.68	10.69	-7.94	-9.35	1.53	1.41	-27.70	
3,630.29	1.53	140.15	3,630.10	10.43	-7.73	-9.12	1.57	1.49	-20.55	
3,643.71	1.72	138.02	3,643.52	10.14	-7.48	-8.88	1.49	1.42	-15.87	



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Lost Tank 30-19 Federal Com 21H
Project:	Lea County, NM (NAD83-NME)	TVD Reference:	RKB @ 3642.50usft (Citadel 2)
Site:	Lost Tank 30-19	MD Reference:	RKB @ 3642.50usft (Citadel 2)
Well:	Lost Tank 30-19 Federal Com 21H	North Reference:	Grid
Wellbore:	OH / 74692	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)
3,657.14	1.93	136.34	3,656.94	9.83	-7.19	-8.61	1.61	1.56	-12.51
3,670.57	2.13	134.97	3,670.36	9.49	-6.86	-8.33	1.53	1.49	-10.20
3,684.00	2.33	133.84	3,683.78	9.12	-6.49	-8.02	1.52	1.49	-8.41
3,697.57	2.53	131.43	3,697.34	8.73	-6.06	-7.70	1.65	1.47	-17.76
3,711.14	2.75	129.14	3,710.89	8.33	-5.58	-7.38	1.80	1.62	-16.88
3,724.71	3.00	127.14	3,724.45	7.91	-5.05	-7.04	1.98	1.84	-14.74
3,738.29	3.25	125.52	3,738.01	7.47	-4.45	-6.70	1.95	1.84	-11.93
3,751.86	3.48	124.31	3,751.55	7.01	-3.80	-6.35	1.77	1.69	-8.92
3,765.43	3.69	123.55	3,765.10	6.54	-3.10	-5.99	1.59	1.55	-5.60
3,779.00	3.85	123.31	3,778.64	6.05	-2.35	-5.62	1.18	1.18	-1.77
3,792.57	3.92	123.57	3,792.18	5.54	-1.58	-5.23	0.53	0.52	1.92
3,806.14	3.69	122.74	3,805.72	5.05	-0.83	-4.86	1.74	-1.69	-6.12
3,819.71	2.97	117.80	3,819.26	4.65	-0.15	-4.57	5.71	-5.31	-36.40
3,833.29	2.57	116.09	3,832.83	4.35	0.43	-4.37	3.01	-2.95	-12.59
3,846.86	2.54	118.29	3,846.38	4.08	0.97	-4.18	0.76	-0.22	16.21
3,860.43	2.51	120.50	3,859.94	3.78	1.49	-3.97	0.75	-0.22	16.29
3,874.00	1.96	138.50	3,873.50	3.46	1.90	-3.71	6.52	-4.05	132.65
3,887.43	1.34	160.35	3,886.93	3.14	2.11	-3.42	6.50	-4.62	162.70
3,900.86	1.21	169.01	3,900.35	2.85	2.19	-3.15	1.73	-0.97	64.48
3,914.29	1.19	171.79	3,913.78	2.57	2.23	-2.88	0.46	-0.15	20.70
3,927.71	1.16	174.39	3,927.20	2.30	2.27	-2.62	0.46	-0.22	19.37
3,941.14	1.13	176.40	3,940.62	2.03	2.29	-2.36	0.37	-0.22	14.97
3,954.57	1.09	177.30	3,954.05	1.77	2.30	-2.10	0.32	-0.30	6.70
3,968.00	0.90	198.19	3,967.48	1.54	2.28	-1.87	3.03	-1.41	155.55
3,981.57	1.09	245.56	3,981.05	1.39	2.13	-1.70	6.03	1.40	349.08
3,995.14	1.09	244.31	3,994.62	1.28	1.89	-1.55	0.18	0.00	-9.21
4,008.71	1.00	233.67	4,008.18	1.15	1.68	-1.40	1.57	-0.66	-78.41
4,022.29	0.94	219.77	4,021.76	1.00	1.51	-1.22	1.78	-0.44	-102.36
4,035.86	0.96	204.79	4,035.33	0.81	1.39	-1.01	1.83	0.15	-110.39
4,049.43	1.05	191.78	4,048.90	0.59	1.32	-0.78	1.80	0.66	-95.87
4,063.00	1.18	182.54	4,062.46	0.32	1.29	-0.52	1.63	0.96	-68.09
4,076.43	1.11	174.17	4,075.89	0.06	1.30	-0.25	1.35	-0.52	-62.32
4,089.86	1.18	161.65	4,089.32	-0.20	1.35	0.00	1.93	0.52	-93.22
4,103.29	1.28	155.77	4,102.75	-0.47	1.46	0.24	1.20	0.74	-43.78
4,116.71	1.40	150.84	4,116.16	-0.75	1.60	0.50	1.24	0.89	-36.74
4,130.14	1.53	146.71	4,129.59	-1.05	1.78	0.76	1.25	0.97	-30.75
4,143.57	1.67	143.24	4,143.01	-1.35	1.99	1.03	1.27	1.04	-25.84
4,157.00	1.81	140.29	4,156.44	-1.67	2.25	1.31	1.24	1.04	-21.97
4,170.57	1.82	138.25	4,170.00	-2.00	2.53	1.59	0.48	0.07	-15.03
4,184.14	1.84	136.37	4,183.56	-2.32	2.82	1.86	0.47	0.15	-13.85
4,197.71	1.86	134.59	4,197.13	-2.63	3.13	2.12	0.45	0.15	-13.12
4,211.29	1.88	132.84	4,210.70	-2.93	3.45	2.37	0.45	0.15	-12.89
4,224.86	1.91	131.06	4,224.26	-3.23	3.78	2.62	0.49	0.22	-13.12



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Lost Tank 30-19 Federal Com 21H
Project:	Lea County, NM (NAD83-NME)	TVD Reference:	RKB @ 3642.50usft (Citadel 2)
Site:	Lost Tank 30-19	MD Reference:	RKB @ 3642.50usft (Citadel 2)
Well:	Lost Tank 30-19 Federal Com 21H	North Reference:	Grid
Wellbore:	OH / 74692	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)
4,238.43	1.87	131.36	4,237.82	-3.53	4.12	2.86	0.30	-0.29	2.21
4,252.00	1.50	147.46	4,251.39	-3.83	4.38	3.11	4.40	-2.73	118.64
4,265.57	0.71	177.41	4,264.96	-4.06	4.48	3.33	7.02	-5.82	220.71
4,279.14	0.67	181.93	4,278.52	-4.22	4.48	3.49	0.50	-0.29	33.31
4,292.71	0.64	179.38	4,292.09	-4.38	4.48	3.64	0.31	-0.22	-18.79
4,306.29	0.61	176.56	4,305.67	-4.53	4.48	3.79	0.32	-0.22	-20.77
4,319.86	0.58	173.46	4,319.24	-4.67	4.50	3.92	0.32	-0.22	-22.84
4,333.43	0.59	190.79	4,332.81	-4.80	4.49	4.06	1.30	0.07	127.71
4,347.00	1.04	240.93	4,346.38	-4.93	4.37	4.20	5.91	3.32	369.49
4,360.57	1.63	271.64	4,359.95	-4.99	4.07	4.30	6.69	4.35	226.31
4,374.14	2.14	288.03	4,373.51	-4.90	3.64	4.29	5.43	3.76	120.78
4,387.71	2.22	288.87	4,387.07	-4.74	3.15	4.20	0.63	0.59	6.19
4,401.29	2.31	289.91	4,400.64	-4.56	2.64	4.10	0.73	0.66	7.66
4,414.86	2.41	290.58	4,414.20	-4.37	2.12	3.99	0.76	0.74	4.94
4,428.43	2.48	291.92	4,427.75	-4.16	1.58	3.87	0.67	0.52	9.87
4,442.00	2.85	297.66	4,441.31	-3.89	1.00	3.69	3.36	2.73	42.30
4,455.43	3.67	300.58	4,454.72	-3.52	0.34	3.42	6.23	6.11	21.74
4,468.86	4.17	299.69	4,468.12	-3.06	-0.46	3.09	3.75	3.72	-6.63
4,482.29	4.25	297.41	4,481.51	-2.59	-1.32	2.76	1.38	0.60	-16.98
4,495.71	4.34	294.87	4,494.89	-2.14	-2.22	2.46	1.57	0.67	-18.93
4,509.14	4.42	292.17	4,508.28	-1.73	-3.16	2.20	1.65	0.60	-20.10
4,522.57	4.56	289.67	4,521.67	-1.36	-4.15	1.98	1.79	1.04	-18.62
4,536.00	5.09	289.34	4,535.05	-0.98	-5.21	1.77	3.95	3.95	-2.46
4,549.57	5.79	285.86	4,548.56	-0.60	-6.44	1.57	5.70	5.16	-25.64
4,563.14	6.40	283.00	4,562.06	-0.24	-7.83	1.43	5.02	4.50	-21.08
4,576.71	6.59	279.54	4,575.54	0.06	-9.34	1.37	3.21	1.40	-25.50
4,590.29	6.44	275.27	4,589.03	0.26	-10.86	1.40	3.73	-1.10	-31.44
4,603.86	6.33	270.62	4,602.52	0.34	-12.37	1.56	3.89	-0.81	-34.27
4,617.43	6.44	266.72	4,616.00	0.30	-13.88	1.82	3.30	0.81	-28.74
4,631.00	7.14	266.68	4,629.48	0.21	-15.48	2.16	5.16	5.16	-0.29
4,644.57	7.66	268.34	4,642.94	0.14	-17.23	2.50	4.14	3.83	12.23
4,658.14	7.96	270.99	4,656.38	0.13	-19.07	2.79	3.45	2.21	19.53
4,671.71	7.98	267.57	4,669.82	0.10	-20.95	3.10	3.50	0.15	-25.20
4,685.29	8.01	263.41	4,683.27	-0.05	-22.83	3.54	4.27	0.22	-30.63
4,698.86	8.08	259.40	4,696.70	-0.33	-24.71	4.11	4.17	0.52	-29.55
4,712.43	8.28	257.34	4,710.14	-0.72	-26.60	4.78	2.61	1.47	-15.18
4,726.00	8.78	260.57	4,723.56	-1.10	-28.57	5.46	5.10	3.68	23.80
4,739.43	9.59	262.18	4,736.81	-1.42	-30.69	6.10	6.33	6.03	11.99
4,752.86	10.43	262.72	4,750.04	-1.73	-33.01	6.76	6.29	6.25	4.02
4,766.29	10.92	261.98	4,763.24	-2.06	-35.47	7.46	3.79	3.65	-5.51
4,779.71	11.11	260.66	4,776.41	-2.45	-38.01	8.23	2.35	1.42	-9.84
4,793.14	11.31	259.47	4,789.58	-2.90	-40.58	9.07	2.28	1.49	-8.86
4,806.57	11.54	258.45	4,802.75	-3.41	-43.19	9.97	2.28	1.71	-7.59
4,820.00	12.38	258.18	4,815.89	-3.97	-45.91	10.95	6.27	6.25	-2.01



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Lost Tank 30-19 Federal Com 21H
Project:	Lea County, NM (NAD83-NME)	TVD Reference:	RKB @ 3642.50usft (Citadel 2)
Site:	Lost Tank 30-19	MD Reference:	RKB @ 3642.50usft (Citadel 2)
Well:	Lost Tank 30-19 Federal Com 21H	North Reference:	Grid
Wellbore:	OH / 74692	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)
4,833.57	13.23	259.10	4,829.12	-4.57	-48.86	11.98	6.44	6.26	6.78
4,847.14	13.90	259.37	4,842.31	-5.16	-51.99	13.05	4.96	4.94	1.99
4,860.71	13.99	258.95	4,855.48	-5.77	-55.20	14.15	1.00	0.66	-3.10
4,874.29	14.08	258.59	4,868.65	-6.42	-58.43	15.28	0.92	0.66	-2.65
4,887.86	14.17	258.27	4,881.81	-7.08	-61.68	16.43	0.88	0.66	-2.36
4,901.43	14.45	258.41	4,894.96	-7.76	-64.96	17.60	2.08	2.06	1.03
4,915.00	15.22	259.71	4,908.08	-8.42	-68.37	18.77	6.18	5.67	9.58
4,928.43	15.84	261.47	4,921.02	-9.00	-71.92	19.90	5.80	4.62	13.10
4,941.86	15.98	261.28	4,933.94	-9.56	-75.56	21.00	1.11	1.04	-1.41
4,955.29	16.12	261.12	4,946.84	-10.12	-79.23	22.12	1.09	1.04	-1.19
4,968.71	16.26	260.98	4,959.73	-10.71	-82.93	23.26	1.08	1.04	-1.04
4,982.14	16.40	260.85	4,972.62	-11.30	-86.65	24.42	1.08	1.04	-0.97
4,995.57	16.58	261.10	4,985.50	-11.90	-90.42	25.59	1.44	1.34	1.86
5,009.00	17.17	263.58	4,998.35	-12.42	-94.28	26.69	6.93	4.39	18.47
5,022.57	17.68	264.77	5,011.29	-12.83	-98.32	27.72	4.58	3.76	8.77
5,036.14	17.72	264.64	5,024.22	-13.21	-102.43	28.72	0.41	0.29	-0.96
5,049.71	17.75	264.52	5,037.15	-13.60	-106.55	29.74	0.35	0.22	-0.88
5,063.29	17.78	264.42	5,050.08	-14.00	-110.67	30.76	0.32	0.22	-0.74
5,076.86	17.81	264.34	5,063.00	-14.41	-114.80	31.79	0.29	0.22	-0.59
5,090.43	17.85	264.28	5,075.92	-14.82	-118.93	32.83	0.32	0.29	-0.44
5,104.00	17.90	264.27	5,088.83	-15.23	-123.08	33.88	0.37	0.37	-0.07
5,117.57	18.00	264.32	5,101.74	-15.65	-127.24	34.93	0.75	0.74	0.37
5,131.14	18.11	264.40	5,114.64	-16.06	-131.43	35.97	0.83	0.81	0.59
5,144.71	18.23	264.51	5,127.54	-16.47	-135.64	37.02	0.92	0.88	0.81
5,158.29	18.36	264.64	5,140.43	-16.87	-139.88	38.07	1.00	0.96	0.96
5,171.86	18.49	264.79	5,153.31	-17.27	-144.15	39.11	1.02	0.96	1.11
5,185.43	18.61	264.95	5,166.17	-17.66	-148.45	40.15	0.96	0.88	1.18
5,199.00	18.71	265.13	5,179.03	-18.03	-152.78	41.18	0.85	0.74	1.33
5,212.57	18.94	267.23	5,191.87	-18.32	-157.15	42.14	5.27	1.69	15.48
5,226.14	19.08	269.91	5,204.70	-18.43	-161.56	42.92	6.51	1.03	19.75
5,239.71	19.14	270.70	5,217.52	-18.41	-166.01	43.58	1.96	0.44	5.82
5,253.29	19.20	271.01	5,230.35	-18.34	-170.46	44.20	0.87	0.44	2.28
5,266.86	19.25	271.33	5,243.16	-18.25	-174.93	44.79	0.86	0.37	2.36
5,280.43	19.30	271.61	5,255.97	-18.14	-179.41	45.36	0.77	0.37	2.06
5,294.00	19.34	271.80	5,268.78	-18.00	-183.90	45.92	0.55	0.29	1.40
5,307.43	19.46	274.46	5,281.45	-17.76	-188.35	46.36	6.64	0.89	19.81
5,320.86	19.22	276.64	5,294.12	-17.33	-192.78	46.61	5.66	-1.79	16.23
5,334.29	19.25	276.39	5,306.80	-16.83	-197.17	46.78	0.65	0.22	-1.86
5,347.71	19.26	276.07	5,319.47	-16.35	-201.57	46.98	0.79	0.07	-2.38
5,361.14	19.27	275.75	5,332.15	-15.89	-205.98	47.21	0.79	0.07	-2.38
5,374.57	19.26	275.49	5,344.83	-15.46	-210.39	47.45	0.64	-0.07	-1.94
5,388.00	19.24	275.36	5,357.50	-15.04	-214.80	47.71	0.35	-0.15	-0.97
5,401.57	19.18	275.50	5,370.32	-14.62	-219.24	47.97	0.56	-0.44	1.03



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Lost Tank 30-19 Federal Com 21H
Project:	Lea County, NM (NAD83-NME)	TVD Reference:	RKB @ 3642.50usft (Citadel 2)
Site:	Lost Tank 30-19	MD Reference:	RKB @ 3642.50usft (Citadel 2)
Well:	Lost Tank 30-19 Federal Com 21H	North Reference:	Grid
Wellbore:	OH / 74692	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)
5,415.14	19.10	275.79	5,383.14	-14.18	-223.67	48.22	0.92	-0.59	2.14
5,428.71	19.02	276.14	5,395.96	-13.72	-228.08	48.44	1.03	-0.59	2.58
5,442.29	18.61	277.30	5,408.82	-13.20	-232.43	48.60	4.09	-3.02	8.54
5,455.86	18.43	278.27	5,421.69	-12.62	-236.70	48.67	2.63	-1.33	7.15
5,469.43	18.36	278.68	5,434.56	-11.99	-240.93	48.70	1.08	-0.52	3.02
5,483.00	18.28	279.04	5,447.45	-11.33	-245.15	48.69	1.02	-0.59	2.65
5,496.57	18.38	280.90	5,460.33	-10.59	-249.35	48.61	4.37	0.74	13.71
5,510.14	18.39	283.54	5,473.20	-9.69	-253.53	48.35	6.14	0.07	19.45
5,523.71	18.46	286.10	5,486.08	-8.59	-257.68	47.90	5.98	0.52	18.87
5,537.29	18.54	287.09	5,498.96	-7.36	-261.81	47.32	2.39	0.59	7.29
5,550.86	18.47	287.03	5,511.83	-6.10	-265.92	46.70	0.53	-0.52	-0.44
5,564.43	18.40	286.95	5,524.70	-4.84	-270.03	46.08	0.55	-0.52	-0.59
5,578.00	18.34	286.89	5,537.58	-3.60	-274.12	45.48	0.46	-0.44	-0.44
5,591.57	18.30	286.89	5,550.46	-2.36	-278.20	44.88	0.29	-0.29	0.00
5,605.14	18.27	286.92	5,563.34	-1.12	-282.27	44.28	0.23	-0.22	0.22
5,618.71	18.24	286.98	5,576.23	0.12	-286.34	43.68	0.26	-0.22	0.44
5,632.29	18.22	287.06	5,589.13	1.36	-290.40	43.07	0.24	-0.15	0.59
5,645.86	18.20	287.16	5,602.02	2.61	-294.45	42.46	0.27	-0.15	0.74
5,659.43	18.18	287.27	5,614.91	3.86	-298.50	41.84	0.29	-0.15	0.81
5,673.00	18.16	287.40	5,627.81	5.12	-302.54	41.21	0.33	-0.15	0.96
5,686.43	18.13	287.54	5,640.57	6.38	-306.53	40.58	0.39	-0.22	1.04
5,699.86	18.10	287.70	5,653.33	7.64	-310.51	39.94	0.43	-0.22	1.19
5,713.29	18.07	287.86	5,666.10	8.92	-314.48	39.29	0.43	-0.22	1.19
5,726.71	18.05	288.03	5,678.86	10.20	-318.44	38.62	0.42	-0.15	1.27
5,740.14	18.04	288.21	5,691.63	11.49	-322.39	37.95	0.42	-0.07	1.34
5,753.57	18.04	288.37	5,704.40	12.80	-326.34	37.26	0.37	0.00	1.19
5,767.00	18.05	288.54	5,717.17	14.11	-330.29	36.57	0.40	0.07	1.27
5,780.43	18.09	288.70	5,729.93	15.44	-334.23	35.86	0.47	0.30	1.19
5,793.86	18.15	288.85	5,742.70	16.79	-338.19	35.13	0.57	0.45	1.12
5,807.29	18.22	288.99	5,755.46	18.15	-342.15	34.40	0.61	0.52	1.04
5,820.71	18.31	289.13	5,768.20	19.52	-346.13	33.65	0.75	0.67	1.04
5,834.14	18.41	289.24	5,780.95	20.91	-350.12	32.88	0.79	0.74	0.82
5,847.57	18.54	289.34	5,793.68	22.32	-354.14	32.11	1.00	0.97	0.74
5,861.00	18.69	289.41	5,806.41	23.74	-358.19	31.32	1.13	1.12	0.52
5,874.57	18.87	289.45	5,819.26	25.19	-362.31	30.52	1.33	1.33	0.29
5,888.14	19.08	289.46	5,832.09	26.66	-366.47	29.70	1.55	1.55	0.07
5,901.71	19.31	289.45	5,844.91	28.15	-370.67	28.87	1.70	1.69	-0.07
5,915.29	19.54	289.43	5,857.72	29.65	-374.93	28.04	1.69	1.69	-0.15
5,928.86	19.77	289.40	5,870.49	31.17	-379.24	27.20	1.70	1.69	-0.22
5,942.43	20.00	289.37	5,883.26	32.70	-383.59	26.35	1.70	1.69	-0.22
5,956.00	20.23	289.33	5,896.00	34.25	-387.99	25.50	1.70	1.69	-0.29
5,969.43	20.44	289.29	5,908.59	35.79	-392.40	24.65	1.57	1.56	-0.30
5,982.86	20.64	289.24	5,921.17	37.34	-396.85	23.79	1.49	1.49	-0.37



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Lost Tank 30-19 Federal Com 21H
Project:	Lea County, NM (NAD83-NME)	TVD Reference:	RKB @ 3642.50usft (Citadel 2)
Site:	Lost Tank 30-19	MD Reference:	RKB @ 3642.50usft (Citadel 2)
Well:	Lost Tank 30-19 Federal Com 21H	North Reference:	Grid
Wellbore:	OH / 74692	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)
5,996.29	20.83	289.19	5,933.73	38.91	-401.34	22.93	1.42	1.41	-0.37
6,009.71	21.01	289.13	5,946.26	40.48	-405.86	22.07	1.35	1.34	-0.45
6,023.14	21.17	289.06	5,958.79	42.06	-410.43	21.20	1.21	1.19	-0.52
6,036.57	21.32	288.97	5,971.31	43.65	-415.03	20.34	1.14	1.12	-0.67
6,050.00	21.44	288.85	5,983.82	45.24	-419.66	19.48	0.95	0.89	-0.89
6,063.57	21.51	288.70	5,996.44	46.83	-424.37	18.62	0.66	0.52	-1.11
6,077.14	21.56	288.52	6,009.07	48.42	-429.09	17.77	0.61	0.37	-1.33
6,090.71	21.59	288.33	6,021.69	50.00	-433.82	16.94	0.56	0.22	-1.40
6,104.29	21.61	288.15	6,034.31	51.57	-438.57	16.12	0.51	0.15	-1.33
6,117.86	21.62	287.96	6,046.93	53.11	-443.32	15.31	0.52	0.07	-1.40
6,131.43	21.62	287.79	6,059.54	54.65	-448.08	14.52	0.46	0.00	-1.25
6,145.00	21.63	287.66	6,072.16	56.17	-452.84	13.75	0.36	0.07	-0.96
6,158.57	21.57	287.64	6,084.78	57.69	-457.60	12.98	0.45	-0.44	-0.15
6,172.14	20.67	288.44	6,097.43	59.20	-462.25	12.19	6.96	-6.63	5.90
6,185.71	19.53	288.85	6,110.18	60.69	-466.67	11.40	8.46	-8.40	3.02
6,199.29	19.29	288.95	6,122.98	62.15	-470.94	10.61	1.78	-1.77	0.74
6,212.86	19.28	288.97	6,135.79	63.61	-475.18	9.81	0.09	-0.07	0.15
6,226.43	19.27	288.99	6,148.60	65.07	-479.42	9.02	0.09	-0.07	0.15
6,240.00	19.26	289.00	6,161.41	66.52	-483.65	8.23	0.08	-0.07	0.07
6,253.43	19.26	289.00	6,174.09	67.97	-487.84	7.45	0.00	0.00	0.00
6,266.86	19.26	288.97	6,186.77	69.41	-492.03	6.66	0.07	0.00	-0.22
6,280.29	19.25	288.94	6,199.45	70.84	-496.21	5.88	0.10	-0.07	-0.22
6,293.71	19.25	288.89	6,212.12	72.28	-500.40	5.10	0.12	0.00	-0.37
6,307.14	19.25	288.84	6,224.80	73.71	-504.59	4.33	0.12	0.00	-0.37
6,320.57	19.24	288.77	6,237.48	75.14	-508.78	3.56	0.19	-0.07	-0.52
6,334.00	19.23	288.69	6,250.16	76.56	-512.97	2.80	0.21	-0.07	-0.60
6,347.57	19.21	288.60	6,262.97	77.99	-517.20	2.03	0.26	-0.15	-0.66
6,361.14	19.19	288.49	6,275.79	79.41	-521.43	1.28	0.30	-0.15	-0.81
6,374.71	19.17	288.37	6,288.60	80.82	-525.66	0.53	0.33	-0.15	-0.88
6,388.29	19.15	288.24	6,301.43	82.22	-529.90	-0.20	0.35	-0.15	-0.96
6,401.86	19.14	288.08	6,314.25	83.60	-534.12	-0.93	0.39	-0.07	-1.18
6,415.43	19.15	287.89	6,327.07	84.98	-538.36	-1.64	0.47	0.07	-1.40
6,429.00	19.18	287.67	6,339.89	86.34	-542.60	-2.33	0.58	0.22	-1.62
6,442.57	19.25	287.38	6,352.70	87.68	-546.86	-3.01	0.87	0.52	-2.14
6,456.14	19.34	287.08	6,365.51	89.01	-551.14	-3.67	0.99	0.66	-2.21
6,469.71	19.46	285.24	6,378.31	90.26	-555.47	-4.25	4.59	0.88	-13.56
6,483.29	19.64	282.08	6,391.11	91.34	-559.88	-4.63	7.90	1.33	-23.27
6,496.86	19.76	281.79	6,403.88	92.28	-564.36	-4.88	1.14	0.88	-2.14
6,510.43	19.88	281.52	6,416.65	93.21	-568.87	-5.11	1.11	0.88	-1.99
6,524.00	19.99	281.29	6,429.40	94.13	-573.40	-5.32	1.00	0.81	-1.69
6,537.43	20.08	281.15	6,442.02	95.02	-577.91	-5.52	0.76	0.67	-1.04
6,550.86	20.16	281.06	6,454.63	95.91	-582.45	-5.70	0.64	0.60	-0.67
6,564.29	20.24	281.01	6,467.24	96.80	-587.00	-5.88	0.61	0.60	-0.37
6,577.71	20.31	280.99	6,479.82	97.69	-591.56	-6.06	0.52	0.52	-0.15



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Lost Tank 30-19 Federal Com 21H
Project:	Lea County, NM (NAD83-NME)	TVD Reference:	RKB @ 3642.50usft (Citadel 2)
Site:	Lost Tank 30-19	MD Reference:	RKB @ 3642.50usft (Citadel 2)
Well:	Lost Tank 30-19 Federal Com 21H	North Reference:	Grid
Wellbore:	OH / 74692	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)
6,591.14	20.39	280.97	6,492.42	98.58	-596.15	-6.24	0.60	0.60	-0.15
6,604.57	20.46	280.96	6,505.00	99.47	-600.75	-6.42	0.52	0.52	-0.07
6,618.00	19.84	280.94	6,517.61	100.35	-605.29	-6.59	4.62	-4.62	-0.15
6,631.57	18.81	281.74	6,530.42	101.23	-609.70	-6.79	7.84	-7.59	5.90
6,645.14	18.84	281.85	6,543.26	102.12	-613.98	-7.02	0.34	0.22	0.81
6,658.71	18.96	281.86	6,556.10	103.03	-618.28	-7.25	0.88	0.88	0.07
6,672.29	19.10	281.88	6,568.94	103.94	-622.62	-7.49	1.03	1.03	0.15
6,685.86	19.23	281.89	6,581.75	104.85	-626.98	-7.73	0.96	0.96	0.07
6,699.43	19.36	281.90	6,594.56	105.78	-631.36	-7.97	0.96	0.96	0.07
6,713.00	19.49	281.90	6,607.36	106.71	-635.78	-8.22	0.96	0.96	0.00
6,726.57	19.61	281.89	6,620.15	107.65	-640.22	-8.46	0.88	0.88	-0.07
6,740.14	19.71	281.85	6,632.93	108.58	-644.69	-8.71	0.74	0.74	-0.29
6,753.71	19.82	281.81	6,645.70	109.53	-649.18	-8.95	0.82	0.81	-0.29
6,767.29	19.92	281.75	6,658.47	110.47	-653.70	-9.19	0.75	0.74	-0.44
6,780.86	20.02	281.68	6,671.22	111.41	-658.24	-9.43	0.76	0.74	-0.52
6,794.43	20.12	281.59	6,683.97	112.35	-662.80	-9.66	0.77	0.74	-0.66
6,808.00	20.23	281.46	6,696.71	113.28	-667.39	-9.88	0.88	0.81	-0.96
6,821.43	20.34	281.29	6,709.30	114.20	-671.95	-10.09	0.93	0.82	-1.27
6,834.86	20.45	281.10	6,721.89	115.11	-676.54	-10.28	0.96	0.82	-1.41
6,848.29	20.56	280.88	6,734.47	116.01	-681.16	-10.46	1.00	0.82	-1.64
6,861.71	20.68	280.66	6,747.03	116.89	-685.80	-10.63	1.06	0.89	-1.64
6,875.14	20.80	280.44	6,759.59	117.76	-690.48	-10.77	1.07	0.89	-1.64
6,888.57	20.92	280.22	6,772.14	118.62	-695.18	-10.90	1.07	0.89	-1.64
6,902.00	21.05	280.02	6,784.68	119.46	-699.92	-11.01	1.11	0.97	-1.49
6,915.57	21.20	279.81	6,797.34	120.31	-704.74	-11.11	1.24	1.11	-1.55
6,929.14	21.35	279.62	6,809.98	121.14	-709.59	-11.19	1.22	1.11	-1.40
6,942.71	21.49	279.45	6,822.61	121.96	-714.48	-11.25	1.13	1.03	-1.25
6,956.29	21.62	279.29	6,835.24	122.77	-719.40	-11.30	1.05	0.96	-1.18
6,969.86	21.74	279.15	6,847.85	123.57	-724.35	-11.34	0.96	0.88	-1.03
6,983.43	21.36	279.03	6,860.48	124.36	-729.27	-11.36	2.82	-2.80	-0.88
6,997.00	20.97	279.02	6,873.13	125.13	-734.11	-11.38	2.87	-2.87	-0.07
7,010.57	20.98	278.94	6,885.80	125.89	-738.91	-11.40	0.22	0.07	-0.59
7,024.14	20.96	278.87	6,898.47	126.64	-743.70	-11.41	0.24	-0.15	-0.52
7,037.71	20.92	278.82	6,911.15	127.38	-748.50	-11.41	0.32	-0.29	-0.37
7,051.29	20.88	278.80	6,923.83	128.13	-753.28	-11.41	0.30	-0.29	-0.15
7,064.86	20.85	278.82	6,936.51	128.87	-758.06	-11.41	0.23	-0.22	0.15
7,078.43	20.76	279.36	6,949.20	129.63	-762.82	-11.44	1.56	-0.66	3.98
7,092.00	20.61	280.97	6,961.89	130.47	-767.54	-11.55	4.33	-1.11	11.86
7,105.43	20.62	281.51	6,974.46	131.40	-772.17	-11.75	1.42	0.07	4.02
7,118.86	20.63	281.84	6,987.03	132.35	-776.81	-11.99	0.87	0.07	2.46
7,132.29	20.65	282.21	6,999.60	133.34	-781.44	-12.26	0.98	0.15	2.76
7,145.71	20.66	282.58	7,012.16	134.35	-786.06	-12.55	0.98	0.07	2.76
7,159.14	20.67	282.94	7,024.72	135.40	-790.68	-12.88	0.95	0.07	2.68



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Lost Tank 30-19 Federal Com 21H
Project:	Lea County, NM (NAD83-NME)	TVD Reference:	RKB @ 3642.50usft (Citadel 2)
Site:	Lost Tank 30-19	MD Reference:	RKB @ 3642.50usft (Citadel 2)
Well:	Lost Tank 30-19 Federal Com 21H	North Reference:	Grid
Wellbore:	OH / 74692	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)
7,172.57	20.44	283.61	7,037.30	136.48	-795.27	-13.25	2.45	-1.71	4.99
7,186.00	19.63	285.41	7,049.92	137.64	-799.73	-13.70	7.58	-6.03	13.40
7,199.57	18.97	288.23	7,062.72	138.93	-804.02	-14.33	8.41	-4.86	20.78
7,213.14	18.90	288.38	7,075.56	140.31	-808.20	-15.06	0.63	-0.52	1.11
7,226.71	18.82	288.50	7,088.40	141.70	-812.36	-15.79	0.66	-0.59	0.88
7,240.29	18.74	288.60	7,101.26	143.09	-816.50	-16.53	0.64	-0.59	0.74
7,253.86	18.67	288.69	7,114.11	144.48	-820.63	-17.28	0.56	-0.52	0.66
7,267.43	18.61	288.77	7,126.97	145.88	-824.74	-18.02	0.48	-0.44	0.59
7,281.00	18.16	289.05	7,139.85	147.26	-828.78	-18.78	3.38	-3.32	2.06
7,294.57	17.18	290.14	7,152.78	148.64	-832.67	-19.55	7.62	-7.22	8.03
7,308.14	17.27	290.19	7,165.74	150.03	-836.44	-20.34	0.67	0.66	0.37
7,321.71	17.38	290.23	7,178.69	151.43	-840.23	-21.14	0.82	0.81	0.29
7,335.29	17.50	290.25	7,191.65	152.83	-844.05	-21.94	0.88	0.88	0.15
7,348.86	17.62	290.24	7,204.59	154.25	-847.89	-22.76	0.88	0.88	-0.07
7,362.43	17.73	290.19	7,217.52	155.67	-851.76	-23.57	0.82	0.81	-0.37
7,376.00	17.82	290.08	7,230.44	157.10	-855.65	-24.39	0.71	0.66	-0.81
7,389.57	17.85	289.88	7,243.36	158.52	-859.55	-25.19	0.50	0.22	-1.47
7,403.14	17.85	289.62	7,256.27	159.93	-863.47	-25.98	0.59	0.00	-1.92
7,416.71	17.85	289.32	7,269.19	161.31	-867.39	-26.75	0.68	0.00	-2.21
7,430.29	17.83	289.01	7,282.12	162.68	-871.32	-27.50	0.71	-0.15	-2.28
7,443.86	17.83	288.71	7,295.03	164.02	-875.25	-28.23	0.68	0.00	-2.21
7,457.43	17.83	288.33	7,307.95	165.34	-879.19	-28.93	0.86	0.00	-2.80
7,471.00	17.64	286.45	7,320.88	166.58	-883.13	-29.55	4.45	-1.40	-13.85
7,484.57	17.80	283.79	7,333.80	167.65	-887.12	-30.00	6.08	1.18	-19.60
7,498.14	17.93	283.60	7,346.72	168.64	-891.16	-30.36	1.05	0.96	-1.40
7,511.71	18.07	283.42	7,359.63	169.62	-895.24	-30.70	1.11	1.03	-1.33
7,525.29	18.21	283.25	7,372.53	170.59	-899.36	-31.04	1.10	1.03	-1.25
7,538.86	18.34	283.10	7,385.42	171.56	-903.50	-31.36	1.02	0.96	-1.11
7,552.43	18.43	282.97	7,398.29	172.53	-907.67	-31.68	0.73	0.66	-0.96
7,566.00	18.46	282.87	7,411.17	173.49	-911.85	-31.99	0.32	0.22	-0.74
7,579.57	18.39	282.82	7,424.04	174.44	-916.04	-32.29	0.53	-0.52	-0.37
7,593.14	18.26	282.79	7,436.92	175.39	-920.20	-32.59	0.96	-0.96	-0.22
7,606.71	18.10	282.77	7,449.82	176.32	-924.32	-32.88	1.18	-1.18	-0.15
7,620.29	17.94	282.73	7,462.73	177.25	-928.42	-33.17	1.18	-1.18	-0.29
7,633.86	17.79	282.67	7,475.64	178.17	-932.48	-33.45	1.11	-1.11	-0.44
7,647.43	17.58	282.56	7,488.57	179.07	-936.51	-33.73	1.57	-1.55	-0.81
7,661.00	17.04	282.75	7,501.53	179.95	-940.45	-34.00	4.00	-3.98	1.40
7,674.43	16.11	284.13	7,514.40	180.84	-944.17	-34.31	7.52	-6.92	10.28
7,687.86	15.10	284.18	7,527.34	181.72	-947.67	-34.65	7.52	-7.52	0.37
7,701.29	14.58	282.48	7,540.32	182.52	-951.02	-34.92	5.05	-3.87	-12.66
7,714.71	14.71	281.67	7,553.30	183.23	-954.34	-35.11	1.81	0.97	-6.04
7,728.14	14.86	280.85	7,566.29	183.90	-957.70	-35.26	1.92	1.12	-6.11
7,741.57	14.94	280.35	7,579.27	184.53	-961.09	-35.37	1.13	0.60	-3.72



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Lost Tank 30-19 Federal Com 21H
Project:	Lea County, NM (NAD83-NME)	TVD Reference:	RKB @ 3642.50usft (Citadel 2)
Site:	Lost Tank 30-19	MD Reference:	RKB @ 3642.50usft (Citadel 2)
Well:	Lost Tank 30-19 Federal Com 21H	North Reference:	Grid
Wellbore:	OH / 74692	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)
7,755.00	14.63	281.04	7,592.25	185.17	-964.46	-35.48	2.65	-2.31	5.14
7,768.57	14.61	278.95	7,605.38	185.76	-967.84	-35.55	3.89	-0.15	-15.40
7,782.14	14.72	278.61	7,618.51	186.29	-971.23	-35.55	1.03	0.81	-2.51
7,795.71	14.84	278.50	7,631.63	186.80	-974.65	-35.54	0.91	0.88	-0.81
7,809.29	14.97	278.44	7,644.75	187.32	-978.11	-35.52	0.96	0.96	-0.44
7,822.86	15.09	278.42	7,657.86	187.83	-981.59	-35.50	0.89	0.88	-0.15
7,836.43	15.20	278.40	7,670.96	188.35	-985.10	-35.47	0.81	0.81	-0.15
7,850.00	15.31	278.37	7,684.05	188.87	-988.63	-35.45	0.81	0.81	-0.22
7,863.57	15.39	278.30	7,697.14	189.39	-992.18	-35.42	0.61	0.59	-0.52
7,877.14	15.46	278.22	7,710.22	189.91	-995.76	-35.38	0.54	0.52	-0.59
7,890.71	15.52	278.14	7,723.29	190.43	-999.34	-35.34	0.47	0.44	-0.59
7,904.29	15.57	278.06	7,736.38	190.94	-1,002.95	-35.30	0.40	0.37	-0.59
7,917.86	15.63	278.01	7,749.45	191.45	-1,006.56	-35.25	0.45	0.44	-0.37
7,931.43	15.68	278.00	7,762.51	191.96	-1,010.18	-35.20	0.37	0.37	-0.07
7,945.00	15.74	278.04	7,775.58	192.47	-1,013.82	-35.15	0.45	0.44	0.29
7,958.43	15.81	278.18	7,788.50	192.99	-1,017.44	-35.11	0.59	0.52	1.04
7,971.86	15.88	278.36	7,801.42	193.51	-1,021.07	-35.07	0.64	0.52	1.34
7,985.29	15.95	278.57	7,814.34	194.06	-1,024.71	-35.05	0.67	0.52	1.56
7,998.71	15.80	279.65	7,827.24	194.64	-1,028.33	-35.07	2.47	-1.12	8.05
8,012.14	15.42	282.08	7,840.18	195.32	-1,031.88	-35.20	5.63	-2.83	18.09
8,025.57	15.42	282.48	7,853.13	196.08	-1,035.37	-35.42	0.79	0.00	2.98
8,039.00	15.41	282.70	7,866.07	196.85	-1,038.86	-35.65	0.44	-0.07	1.64
8,052.57	15.34	282.89	7,879.16	197.65	-1,042.36	-35.90	0.64	-0.52	1.40
8,066.14	14.99	283.32	7,892.25	198.46	-1,045.82	-36.17	2.71	-2.58	3.17
8,079.71	14.40	284.47	7,905.38	199.28	-1,049.16	-36.48	4.85	-4.35	8.47
8,093.29	14.03	285.60	7,918.54	200.15	-1,052.38	-36.84	3.41	-2.72	8.32
8,106.86	13.90	285.76	7,931.71	201.03	-1,055.54	-37.23	1.00	-0.96	1.18
8,120.43	13.78	285.90	7,944.89	201.92	-1,058.66	-37.63	0.92	-0.88	1.03
8,134.00	13.68	286.00	7,958.07	202.80	-1,061.76	-38.03	0.76	-0.74	0.74
8,147.43	13.65	286.01	7,971.12	203.68	-1,064.81	-38.43	0.22	-0.22	0.07
8,160.86	13.66	285.97	7,984.17	204.55	-1,067.85	-38.82	0.10	0.07	-0.30
8,174.29	13.70	285.90	7,997.22	205.42	-1,070.91	-39.22	0.32	0.30	-0.52
8,187.71	13.75	285.83	8,010.26	206.29	-1,073.97	-39.61	0.39	0.37	-0.52
8,201.14	13.81	285.76	8,023.30	207.16	-1,077.05	-40.00	0.46	0.45	-0.52
8,214.57	13.89	285.72	8,036.34	208.04	-1,080.14	-40.39	0.60	0.60	-0.30
8,228.00	13.96	285.73	8,049.38	208.91	-1,083.25	-40.78	0.52	0.52	0.07
8,241.57	14.04	285.81	8,062.54	209.80	-1,086.41	-41.18	0.61	0.59	0.59
8,255.14	14.11	285.94	8,075.71	210.71	-1,089.59	-41.58	0.57	0.52	0.96
8,268.71	14.19	286.09	8,088.86	211.62	-1,092.78	-42.00	0.65	0.59	1.11
8,282.29	14.09	285.72	8,102.03	212.53	-1,095.97	-42.41	0.99	-0.74	-2.72
8,295.86	14.16	285.86	8,115.19	213.43	-1,099.15	-42.81	0.57	0.52	1.03
8,309.43	14.23	285.97	8,128.35	214.34	-1,102.35	-43.23	0.55	0.52	0.81
8,323.00	14.22	286.55	8,141.50	215.28	-1,105.55	-43.66	1.05	-0.07	4.27
8,336.43	14.28	286.55	8,154.52	216.22	-1,108.72	-44.11	0.45	0.45	0.00



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Lost Tank 30-19 Federal Com 21H
Project:	Lea County, NM (NAD83-NME)	TVD Reference:	RKB @ 3642.50usft (Citadel 2)
Site:	Lost Tank 30-19	MD Reference:	RKB @ 3642.50usft (Citadel 2)
Well:	Lost Tank 30-19 Federal Com 21H	North Reference:	Grid
Wellbore:	OH / 74692	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)
8,349.86	14.33	286.51	8,167.53	217.16	-1,111.90	-44.55	0.38	0.37	-0.30
8,363.29	14.37	286.44	8,180.54	218.11	-1,115.10	-45.00	0.32	0.30	-0.52
8,376.71	14.42	286.35	8,193.54	219.05	-1,118.30	-45.44	0.41	0.37	-0.67
8,390.14	14.47	286.24	8,206.55	219.99	-1,121.51	-45.87	0.42	0.37	-0.82
8,403.57	14.52	286.13	8,219.55	220.93	-1,124.74	-46.31	0.43	0.37	-0.82
8,417.00	14.58	286.02	8,232.55	221.86	-1,127.98	-46.73	0.49	0.45	-0.82
8,430.57	14.65	285.91	8,245.68	222.80	-1,131.28	-47.16	0.55	0.52	-0.81
8,444.14	14.72	285.79	8,258.81	223.74	-1,134.58	-47.58	0.56	0.52	-0.88
8,457.71	14.80	285.68	8,271.93	224.68	-1,137.91	-48.00	0.62	0.59	-0.81
8,471.29	14.87	285.56	8,285.06	225.62	-1,141.26	-48.41	0.56	0.52	-0.88
8,484.86	14.94	285.45	8,298.17	226.55	-1,144.62	-48.82	0.56	0.52	-0.81
8,498.43	15.00	285.33	8,311.28	227.48	-1,148.00	-49.22	0.50	0.44	-0.88
8,512.00	15.05	285.22	8,324.38	228.41	-1,151.40	-49.62	0.42	0.37	-0.81
8,525.57	15.09	285.11	8,337.49	229.33	-1,154.80	-50.01	0.36	0.29	-0.81
8,539.14	15.11	285.00	8,350.59	230.25	-1,158.22	-50.40	0.26	0.15	-0.81
8,552.71	15.12	284.89	8,363.69	231.16	-1,161.64	-50.78	0.22	0.07	-0.81
8,566.29	15.12	284.77	8,376.80	232.07	-1,165.06	-51.15	0.23	0.00	-0.88
8,579.86	15.11	284.65	8,389.90	232.96	-1,168.48	-51.51	0.24	-0.07	-0.88
8,593.43	15.07	284.53	8,403.00	233.85	-1,171.90	-51.87	0.37	-0.29	-0.88
8,607.00	15.01	284.40	8,416.11	234.73	-1,175.31	-52.22	0.51	-0.44	-0.96
8,620.43	14.92	284.27	8,429.08	235.59	-1,178.67	-52.55	0.72	-0.67	-0.97
8,633.86	14.80	284.12	8,442.06	236.44	-1,182.01	-52.88	0.94	-0.89	-1.12
8,647.29	14.67	283.96	8,455.05	237.27	-1,185.32	-53.19	1.01	-0.97	-1.19
8,660.71	14.53	283.78	8,468.04	238.08	-1,188.61	-53.49	1.10	-1.04	-1.34
8,674.14	14.38	283.57	8,481.04	238.87	-1,191.86	-53.77	1.18	-1.12	-1.56
8,687.57	14.23	283.32	8,494.06	239.64	-1,195.09	-54.04	1.21	-1.12	-1.86
8,701.00	14.07	283.00	8,507.08	240.39	-1,198.29	-54.29	1.33	-1.19	-2.38
8,714.57	13.92	282.59	8,520.25	241.12	-1,201.49	-54.52	1.33	-1.11	-3.02
8,728.14	13.76	282.13	8,533.42	241.81	-1,204.66	-54.72	1.43	-1.18	-3.39
8,741.71	13.60	281.62	8,546.61	242.47	-1,207.80	-54.90	1.48	-1.18	-3.76
8,755.29	13.44	281.08	8,559.81	243.10	-1,210.91	-55.04	1.50	-1.18	-3.98
8,768.86	13.27	280.54	8,573.01	243.68	-1,213.99	-55.15	1.55	-1.25	-3.98
8,782.43	13.09	280.01	8,586.23	244.24	-1,217.04	-55.23	1.60	-1.33	-3.91
8,796.00	12.89	279.51	8,599.45	244.75	-1,220.04	-55.28	1.69	-1.47	-3.68
8,809.57	12.65	279.13	8,612.68	245.24	-1,223.00	-55.31	1.87	-1.77	-2.80
8,823.14	12.40	278.80	8,625.93	245.70	-1,225.91	-55.31	1.92	-1.84	-2.43
8,836.71	12.14	278.51	8,639.19	246.13	-1,228.76	-55.31	1.97	-1.92	-2.14
8,850.29	11.88	278.23	8,652.47	246.54	-1,231.56	-55.29	1.96	-1.91	-2.06
8,863.86	11.63	277.99	8,665.76	246.93	-1,234.29	-55.25	1.88	-1.84	-1.77
8,877.43	11.40	277.76	8,679.06	247.30	-1,236.98	-55.21	1.73	-1.69	-1.69
8,891.00	11.20	277.57	8,692.36	247.66	-1,239.61	-55.16	1.50	-1.47	-1.40
8,904.57	11.04	277.44	8,705.68	248.00	-1,242.21	-55.10	1.19	-1.18	-0.96
8,918.14	10.92	277.35	8,719.00	248.33	-1,244.77	-55.03	0.89	-0.88	-0.66



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Lost Tank 30-19 Federal Com 21H
Project:	Lea County, NM (NAD83-NME)	TVD Reference:	RKB @ 3642.50usft (Citadel 2)
Site:	Lost Tank 30-19	MD Reference:	RKB @ 3642.50usft (Citadel 2)
Well:	Lost Tank 30-19 Federal Com 21H	North Reference:	Grid
Wellbore:	OH / 74692	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)
8,931.71	10.81	277.27	8,732.33	248.66	-1,247.31	-54.97	0.82	-0.81	-0.59
8,945.29	10.78	276.58	8,745.67	248.97	-1,249.83	-54.89	0.98	-0.22	-5.08
8,958.86	10.98	276.41	8,758.99	249.26	-1,252.38	-54.78	1.49	1.47	-1.25
8,972.43	11.04	276.30	8,772.31	249.54	-1,254.95	-54.67	0.47	0.44	-0.81
8,986.00	10.97	276.28	8,785.63	249.83	-1,257.53	-54.56	0.52	-0.52	-0.15
8,999.43	10.90	276.26	8,798.82	250.10	-1,260.06	-54.45	0.52	-0.52	-0.15
9,012.86	10.83	276.26	8,812.01	250.38	-1,262.58	-54.33	0.52	-0.52	0.00
9,026.29	10.76	276.24	8,825.20	250.65	-1,265.08	-54.22	0.52	-0.52	-0.15
9,039.71	10.68	276.22	8,838.39	250.92	-1,267.56	-54.11	0.60	-0.60	-0.15
9,053.14	10.61	276.17	8,851.59	251.19	-1,270.02	-54.00	0.53	-0.52	-0.37
9,066.57	10.55	278.00	8,864.79	251.50	-1,272.47	-53.92	2.54	-0.45	13.63
9,080.00	10.65	279.08	8,877.99	251.86	-1,274.91	-53.91	1.66	0.74	8.04
9,093.57	10.57	278.94	8,891.33	252.25	-1,277.38	-53.92	0.62	-0.59	-1.03
9,107.14	10.48	278.78	8,904.67	252.64	-1,279.83	-53.92	0.70	-0.66	-1.18
9,120.71	10.39	278.60	8,918.01	253.01	-1,282.26	-53.92	0.71	-0.66	-1.33
9,134.29	10.30	278.38	8,931.37	253.37	-1,284.67	-53.91	0.72	-0.66	-1.62
9,147.86	10.20	278.12	8,944.73	253.71	-1,287.06	-53.88	0.81	-0.74	-1.92
9,161.43	10.11	277.79	8,958.08	254.05	-1,289.43	-53.85	0.79	-0.66	-2.43
9,175.00	10.42	281.13	8,971.44	254.44	-1,291.82	-53.88	4.94	2.28	24.61
9,188.43	10.59	283.28	8,984.64	254.96	-1,294.21	-54.02	3.18	1.27	16.01
9,201.86	10.49	282.70	8,997.84	255.51	-1,296.60	-54.20	1.09	-0.74	-4.32
9,215.29	10.38	282.04	9,011.05	256.04	-1,298.98	-54.36	1.21	-0.82	-4.91
9,228.71	10.27	281.33	9,024.25	256.52	-1,301.33	-54.48	1.25	-0.82	-5.29
9,242.14	10.16	280.57	9,037.47	256.98	-1,303.67	-54.57	1.30	-0.82	-5.66
9,255.57	10.05	279.77	9,050.69	257.39	-1,305.99	-54.62	1.33	-0.82	-5.96
9,269.00	10.09	279.93	9,063.92	257.79	-1,308.30	-54.67	0.36	0.30	1.19
9,282.57	9.95	279.12	9,077.28	258.18	-1,310.63	-54.70	1.46	-1.03	-5.97
9,296.14	9.80	278.28	9,090.65	258.54	-1,312.93	-54.69	1.53	-1.11	-6.19
9,309.71	9.65	277.39	9,104.02	258.85	-1,315.20	-54.65	1.56	-1.11	-6.56
9,323.29	9.50	276.46	9,117.41	259.12	-1,317.45	-54.58	1.59	-1.10	-6.85
9,336.86	9.35	275.49	9,130.80	259.35	-1,319.66	-54.47	1.61	-1.11	-7.15
9,350.43	9.22	274.48	9,144.19	259.54	-1,321.84	-54.33	1.54	-0.96	-7.44
9,364.00	9.10	273.41	9,157.59	259.69	-1,323.99	-54.14	1.54	-0.88	-7.89
9,377.57	8.99	272.33	9,170.99	259.80	-1,326.12	-53.92	1.49	-0.81	-7.96
9,391.14	8.89	271.22	9,184.40	259.86	-1,328.23	-53.66	1.47	-0.74	-8.18
9,404.71	8.80	270.09	9,197.81	259.89	-1,330.32	-53.37	1.44	-0.66	-8.33
9,418.29	8.72	268.96	9,211.23	259.87	-1,332.38	-53.04	1.40	-0.59	-8.32
9,431.86	8.63	267.84	9,224.64	259.81	-1,334.43	-52.67	1.41	-0.66	-8.25
9,445.43	8.53	266.77	9,238.06	259.72	-1,336.45	-52.26	1.39	-0.74	-7.89
9,459.00	8.41	265.77	9,251.48	259.59	-1,338.45	-51.83	1.40	-0.88	-7.37
9,472.43	8.25	264.98	9,264.77	259.43	-1,340.39	-51.38	1.46	-1.19	-5.88
9,485.86	8.08	264.27	9,278.06	259.25	-1,342.29	-50.91	1.47	-1.27	-5.29
9,499.29	7.89	263.63	9,291.36	259.06	-1,344.14	-50.43	1.56	-1.41	-4.77



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Lost Tank 30-19 Federal Com 21H
Project:	Lea County, NM (NAD83-NME)	TVD Reference:	RKB @ 3642.50usft (Citadel 2)
Site:	Lost Tank 30-19	MD Reference:	RKB @ 3642.50usft (Citadel 2)
Well:	Lost Tank 30-19 Federal Com 21H	North Reference:	Grid
Wellbore:	OH / 74692	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)
9,512.71	7.71	263.04	9,304.66	258.85	-1,345.95	-49.95	1.47	-1.34	-4.40
9,526.14	7.53	262.49	9,317.97	258.62	-1,347.72	-49.46	1.45	-1.34	-4.10
9,539.57	7.81	264.96	9,331.28	258.43	-1,349.50	-48.99	3.22	2.08	18.39
9,553.00	7.68	267.75	9,344.59	258.31	-1,351.30	-48.60	2.96	-0.97	20.77
9,566.57	7.55	268.66	9,358.04	258.25	-1,353.10	-48.27	1.31	-0.96	6.71
9,580.14	7.40	268.44	9,371.49	258.21	-1,354.87	-47.96	1.13	-1.11	-1.62
9,593.71	7.25	268.28	9,384.95	258.16	-1,356.59	-47.64	1.12	-1.11	-1.18
9,607.29	7.10	268.14	9,398.43	258.11	-1,358.29	-47.33	1.11	-1.10	-1.03
9,620.86	6.96	267.96	9,411.89	258.05	-1,359.95	-47.02	1.04	-1.03	-1.33
9,634.43	6.82	267.71	9,425.37	257.99	-1,361.58	-46.71	1.06	-1.03	-1.84
9,648.00	6.69	267.30	9,438.84	257.92	-1,363.17	-46.40	1.02	-0.96	-3.02
9,661.57	6.59	266.59	9,452.32	257.84	-1,364.74	-46.08	0.95	-0.74	-5.23
9,675.14	6.50	265.71	9,465.80	257.73	-1,366.28	-45.74	0.99	-0.66	-6.48
9,688.71	6.42	264.72	9,479.29	257.61	-1,367.80	-45.38	1.01	-0.59	-7.30
9,702.29	6.35	263.68	9,492.78	257.45	-1,369.31	-45.00	1.00	-0.52	-7.66
9,715.86	6.29	262.63	9,506.27	257.27	-1,370.79	-44.60	0.96	-0.44	-7.74
9,729.43	6.24	261.61	9,519.76	257.07	-1,372.26	-44.17	0.90	-0.37	-7.52
9,743.00	6.20	260.69	9,533.25	256.85	-1,373.71	-43.73	0.79	-0.29	-6.78
9,756.57	6.17	259.98	9,546.74	256.60	-1,375.15	-43.26	0.61	-0.22	-5.23
9,770.14	6.14	259.39	9,560.23	256.34	-1,376.58	-42.79	0.52	-0.22	-4.35
9,783.71	6.13	258.87	9,573.72	256.07	-1,378.00	-42.30	0.42	-0.07	-3.83
9,797.29	6.12	258.42	9,587.23	255.78	-1,379.43	-41.80	0.36	-0.07	-3.31
9,810.86	6.12	258.01	9,600.72	255.49	-1,380.84	-41.29	0.32	0.00	-3.02
9,824.43	6.12	257.64	9,614.21	255.18	-1,382.26	-40.77	0.29	0.00	-2.73
9,838.00	6.13	257.31	9,627.70	254.87	-1,383.67	-40.25	0.27	0.07	-2.43
9,851.43	6.16	257.03	9,641.06	254.55	-1,385.07	-39.72	0.32	0.22	-2.08
9,864.86	6.19	256.78	9,654.41	254.22	-1,386.48	-39.18	0.30	0.22	-1.86
9,878.29	6.23	256.56	9,667.76	253.89	-1,387.89	-38.63	0.35	0.30	-1.64
9,891.71	6.26	256.37	9,681.10	253.54	-1,389.31	-38.08	0.27	0.22	-1.42
9,905.14	6.29	256.21	9,694.45	253.20	-1,390.74	-37.51	0.26	0.22	-1.19
9,918.57	6.31	256.09	9,707.80	252.84	-1,392.17	-36.95	0.18	0.15	-0.89
9,924.75	6.31	256.09	9,713.94	252.68	-1,392.83	-36.69	0.00	0.00	0.00
FTP: 9924.75' MD, 6.31° Inc									
9,932.00	6.31	256.04	9,721.15	252.49	-1,393.60	-36.38	0.08	0.00	-0.69
9,945.71	6.28	256.10	9,734.78	252.13	-1,395.06	-35.80	0.22	-0.22	0.44
9,959.43	6.23	256.18	9,748.41	251.77	-1,396.51	-35.22	0.37	-0.36	0.58
9,973.14	6.17	256.22	9,762.04	251.41	-1,397.95	-34.65	0.44	-0.44	0.29
9,986.86	6.11	256.12	9,775.68	251.06	-1,399.37	-34.09	0.44	-0.44	-0.73
10,000.57	6.05	255.81	9,789.32	250.71	-1,400.78	-33.52	0.50	-0.44	-2.26
10,014.29	6.01	255.13	9,802.96	250.35	-1,402.18	-32.95	0.60	-0.29	-4.96
10,028.00	5.99	253.89	9,816.60	249.97	-1,403.56	-32.36	0.96	-0.15	-9.04
10,042.80	6.02	251.65	9,831.32	249.51	-1,405.04	-31.68	1.60	0.20	-15.14
10,057.60	6.08	248.89	9,846.03	248.98	-1,406.50	-30.94	2.01	0.41	-18.65
10,072.40	6.18	245.87	9,860.75	248.37	-1,407.96	-30.12	2.28	0.68	-20.41



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Lost Tank 30-19 Federal Com 21H
Project:	Lea County, NM (NAD83-NME)	TVD Reference:	RKB @ 3642.50usft (Citadel 2)
Site:	Lost Tank 30-19	MD Reference:	RKB @ 3642.50usft (Citadel 2)
Well:	Lost Tank 30-19 Federal Com 21H	North Reference:	Grid
Wellbore:	OH / 74692	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)
10,087.20	6.30	242.80	9,875.46	247.68	-1,409.41	-29.20	2.40	0.81	-20.74
10,102.00	6.42	239.80	9,890.17	246.89	-1,410.85	-28.21	2.39	0.81	-20.27
10,116.80	6.53	236.98	9,904.88	246.01	-1,412.27	-27.13	2.27	0.74	-19.05
10,131.60	6.62	234.42	9,919.58	245.06	-1,413.67	-25.97	2.07	0.61	-17.30
10,146.40	8.13	232.56	9,934.26	243.93	-1,415.19	-24.61	10.33	10.20	-12.57
10,161.20	10.22	230.44	9,948.87	242.45	-1,417.04	-22.88	14.30	14.12	-14.32
10,176.00	12.20	226.78	9,963.38	240.55	-1,419.19	-20.66	14.21	13.38	-24.73
10,189.57	14.07	224.34	9,976.60	238.39	-1,421.39	-18.19	14.37	13.78	-17.98
10,203.14	15.96	222.65	9,989.70	235.83	-1,423.81	-15.30	14.30	13.93	-12.45
10,216.71	17.68	220.32	10,002.69	232.89	-1,426.40	-11.99	13.61	12.68	-17.17
10,230.29	19.09	216.73	10,015.58	229.54	-1,429.07	-8.27	13.31	10.38	-26.44
10,243.86	20.75	215.05	10,028.34	225.79	-1,431.77	-4.16	12.94	12.23	-12.38
10,257.43	22.40	213.55	10,040.96	221.67	-1,434.58	0.35	12.82	12.16	-11.05
10,271.00	24.23	212.75	10,053.42	217.17	-1,437.52	5.24	13.69	13.49	-5.90
10,284.43	26.02	213.10	10,065.58	212.38	-1,440.62	10.44	13.37	13.33	2.61
10,297.86	27.08	213.94	10,077.59	207.38	-1,443.93	15.90	8.37	7.89	6.25
10,311.29	26.32	214.39	10,089.59	202.39	-1,447.32	21.35	5.86	-5.66	3.35
10,324.71	25.58	214.84	10,101.65	197.55	-1,450.66	26.64	5.71	-5.51	3.35
10,338.14	26.98	213.07	10,113.70	192.62	-1,453.98	32.02	11.95	10.42	-13.18
10,351.57	28.72	212.15	10,125.57	187.34	-1,457.36	37.76	13.35	12.96	-6.85
10,365.00	30.56	211.02	10,137.24	181.68	-1,460.83	43.88	14.32	13.70	-8.41
10,378.57	32.48	209.45	10,148.81	175.55	-1,464.40	50.49	15.39	14.15	-11.57
10,392.14	34.47	207.74	10,160.13	168.98	-1,467.98	57.53	16.23	14.66	-12.60
10,405.71	35.81	206.70	10,171.23	162.03	-1,471.55	64.94	10.81	9.87	-7.66
10,419.29	35.86	206.07	10,182.23	154.91	-1,475.09	72.52	2.74	0.37	-4.64
10,432.86	37.81	205.12	10,193.10	147.57	-1,478.60	80.31	14.97	14.37	-7.00
10,446.43	39.73	203.31	10,203.68	139.82	-1,482.08	88.50	16.43	14.15	-13.34
10,460.00	41.83	201.84	10,213.95	131.64	-1,485.48	97.10	17.02	15.48	-10.83
10,473.57	44.00	200.73	10,223.89	123.03	-1,488.83	106.13	16.93	15.99	-8.18
10,487.14	43.59	200.33	10,233.68	114.23	-1,492.13	115.32	3.65	-3.02	-2.95
10,500.71	43.12	199.92	10,243.55	105.48	-1,495.33	124.46	4.04	-3.46	-3.02
10,514.29	42.60	199.52	10,253.50	96.79	-1,498.45	133.53	4.32	-3.83	-2.95
10,527.86	43.91	198.14	10,263.39	87.99	-1,501.45	142.68	11.91	9.65	-10.17
10,541.43	43.67	197.94	10,273.18	79.06	-1,504.36	151.95	2.04	-1.77	-1.47
10,555.00	42.95	197.67	10,283.06	70.20	-1,507.20	161.14	5.48	-5.31	-1.99
10,568.57	43.65	197.82	10,292.93	61.33	-1,510.04	170.34	5.21	5.16	1.11
10,582.14	44.76	197.97	10,302.66	52.33	-1,512.95	179.68	8.22	8.18	1.11
10,595.71	43.72	198.00	10,312.38	43.33	-1,515.87	189.02	7.67	-7.66	0.22
10,609.29	42.95	198.01	10,322.26	34.46	-1,518.75	198.22	5.67	-5.67	0.07
10,622.86	44.66	197.83	10,332.05	25.53	-1,521.64	207.50	12.63	12.60	-1.33
10,636.43	46.52	197.96	10,341.55	16.30	-1,524.62	217.07	13.72	13.71	0.96
10,650.00	48.43	197.83	10,350.72	6.78	-1,527.69	226.94	14.09	14.08	-0.96
10,663.57	50.41	197.59	10,359.55	-3.03	-1,530.83	237.13	14.65	14.59	-1.77



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Lost Tank 30-19 Federal Com 21H
Project:	Lea County, NM (NAD83-NME)	TVD Reference:	RKB @ 3642.50usft (Citadel 2)
Site:	Lost Tank 30-19	MD Reference:	RKB @ 3642.50usft (Citadel 2)
Well:	Lost Tank 30-19 Federal Com 21H	North Reference:	Grid
Wellbore:	OH / 74692	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)	
10,677.14	52.31	196.84	10,368.02	-13.16	-1,533.96	247.61	14.65	14.00	-5.53	
10,690.71	52.53	195.90	10,376.30	-23.48	-1,536.99	258.27	5.72	1.62	-6.93	
10,704.29	52.64	194.95	10,384.55	-33.87	-1,539.86	268.98	5.61	0.81	-7.00	
10,717.86	54.29	193.93	10,392.63	-44.43	-1,542.58	279.83	13.58	12.16	-7.52	
10,731.43	56.14	192.70	10,400.37	-55.28	-1,545.15	290.94	15.53	13.63	-9.06	
10,745.00	57.87	191.46	10,407.76	-66.41	-1,547.53	302.31	14.87	12.75	-9.14	
10,758.57	59.56	190.13	10,414.80	-77.80	-1,549.70	313.89	15.01	12.45	-9.80	
10,772.14	60.64	189.15	10,421.57	-89.39	-1,551.67	325.66	10.13	7.96	-7.22	
10,785.71	60.22	188.51	10,428.27	-101.06	-1,553.48	337.46	5.14	-3.10	-4.72	
10,799.29	59.96	187.85	10,435.04	-112.71	-1,555.15	349.23	4.63	-1.91	-4.86	
10,812.86	61.76	187.29	10,441.64	-124.46	-1,556.71	361.08	13.75	13.26	-4.13	
10,826.43	63.77	187.02	10,447.85	-136.43	-1,558.22	373.14	14.92	14.81	-1.99	
10,840.00	65.62	186.41	10,453.65	-148.61	-1,559.65	385.40	14.23	13.63	-4.50	
10,853.43	67.13	186.46	10,459.04	-160.84	-1,561.03	397.69	11.25	11.24	0.37	
10,866.86	66.81	186.36	10,464.29	-173.12	-1,562.41	410.04	2.48	-2.38	-0.74	
10,880.29	66.43	185.88	10,469.62	-185.38	-1,563.72	422.35	4.33	-2.83	-3.57	
10,893.71	66.23	185.43	10,475.01	-197.61	-1,564.94	434.63	3.41	-1.49	-3.35	
10,907.14	67.92	185.27	10,480.24	-209.92	-1,566.09	446.97	12.63	12.58	-1.19	
10,920.57	69.98	185.38	10,485.06	-222.40	-1,567.25	459.48	15.36	15.34	0.82	
10,934.00	71.94	185.54	10,489.44	-235.04	-1,568.46	472.16	14.64	14.59	1.19	
10,947.57	73.78	186.25	10,493.44	-247.94	-1,569.79	485.11	14.45	13.56	5.23	
10,961.14	75.72	186.52	10,497.01	-260.95	-1,571.25	498.19	14.42	14.30	1.99	
10,974.71	77.84	186.73	10,500.11	-274.07	-1,572.77	511.39	15.70	15.62	1.55	
10,988.29	79.68	186.12	10,502.76	-287.30	-1,574.26	524.69	14.25	13.55	-4.49	
11,001.86	79.57	185.66	10,505.21	-300.58	-1,575.63	538.03	3.43	-0.81	-3.39	
11,015.43	79.53	185.20	10,507.67	-313.87	-1,576.89	551.35	3.35	-0.29	-3.39	
11,029.00	79.60	184.78	10,510.12	-327.16	-1,578.06	564.66	3.09	0.52	-3.10	
11,042.57	80.39	184.49	10,512.48	-340.48	-1,579.14	577.99	6.19	5.82	-2.14	
11,056.14	82.28	184.28	10,514.53	-353.86	-1,580.16	591.37	14.01	13.93	-1.55	
11,069.71	84.88	184.10	10,516.04	-367.30	-1,581.15	604.81	19.21	19.16	-1.33	
11,083.29	87.29	184.02	10,516.97	-380.82	-1,582.11	618.31	17.76	17.75	-0.59	
11,096.86	88.11	183.86	10,517.52	-394.34	-1,583.04	631.82	6.16	6.04	-1.18	
11,110.43	88.98	183.73	10,517.86	-407.88	-1,583.93	645.33	6.48	6.41	-0.96	
11,124.00	89.75	183.62	10,518.01	-421.42	-1,584.80	658.85	5.73	5.67	-0.81	
11,138.60	90.23	183.54	10,518.01	-435.99	-1,585.72	673.39	3.33	3.29	-0.55	
11,153.20	90.49	183.48	10,517.92	-450.56	-1,586.61	687.92	1.83	1.78	-0.41	
11,167.80	90.63	183.42	10,517.78	-465.14	-1,587.49	702.46	1.04	0.96	-0.41	
11,182.40	90.70	183.37	10,517.61	-479.71	-1,588.35	716.99	0.59	0.48	-0.34	
11,197.00	90.73	183.30	10,517.43	-494.29	-1,589.20	731.53	0.52	0.21	-0.48	
11,233.00	90.57	183.41	10,517.02	-530.22	-1,591.31	767.36	0.54	-0.44	0.31	
11,327.00	89.23	182.45	10,517.18	-624.09	-1,596.11	860.87	1.75	-1.43	-1.02	
11,422.00	89.67	181.82	10,518.09	-719.02	-1,599.65	955.22	0.81	0.46	-0.66	
11,516.00	89.64	181.57	10,518.66	-812.98	-1,602.43	1,048.50	0.27	-0.03	-0.27	
11,611.00	89.28	181.58	10,519.56	-907.94	-1,605.04	1,142.74	0.38	-0.38	0.01	



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Lost Tank 30-19 Federal Com 21H
Project:	Lea County, NM (NAD83-NME)	TVD Reference:	RKB @ 3642.50usft (Citadel 2)
Site:	Lost Tank 30-19	MD Reference:	RKB @ 3642.50usft (Citadel 2)
Well:	Lost Tank 30-19 Federal Com 21H	North Reference:	Grid
Wellbore:	OH / 74692	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)
11,706.00	89.42	181.73	10,520.63	-1,002.89	-1,607.79	1,236.99	0.22	0.15	0.16
11,801.00	90.06	181.90	10,521.06	-1,097.85	-1,610.80	1,331.29	0.70	0.67	0.18
11,896.00	90.78	181.89	10,520.37	-1,192.79	-1,613.94	1,425.60	0.76	0.76	-0.01
11,991.00	90.41	181.47	10,519.38	-1,287.74	-1,616.72	1,519.86	0.59	-0.39	-0.44
12,085.00	90.34	181.38	10,518.77	-1,381.71	-1,619.06	1,613.08	0.12	-0.07	-0.10
12,180.00	89.85	181.16	10,518.61	-1,476.69	-1,621.17	1,707.26	0.57	-0.52	-0.23
12,275.00	89.39	180.98	10,519.24	-1,571.67	-1,622.94	1,801.40	0.52	-0.48	-0.19
12,370.00	89.05	180.71	10,520.53	-1,666.65	-1,624.34	1,895.47	0.46	-0.36	-0.28
12,464.00	88.73	180.78	10,522.35	-1,760.63	-1,625.56	1,988.53	0.35	-0.34	0.07
12,559.00	87.71	180.95	10,525.30	-1,855.57	-1,627.00	2,082.57	1.09	-1.07	0.18
12,654.00	87.71	180.75	10,529.10	-1,950.48	-1,628.40	2,176.59	0.21	0.00	-0.21
12,748.00	86.60	181.10	10,533.77	-2,044.35	-1,629.92	2,269.58	1.24	-1.18	0.37
12,842.00	86.07	181.08	10,539.77	-2,138.14	-1,631.70	2,362.54	0.56	-0.56	-0.02
12,925.00	85.96	180.95	10,545.54	-2,220.93	-1,633.17	2,444.58	0.20	-0.13	-0.16
12,937.00	85.91	180.78	10,546.39	-2,232.90	-1,633.35	2,456.43	1.47	-0.42	-1.42
13,032.00	85.53	180.32	10,553.48	-2,327.63	-1,634.26	2,550.19	0.63	-0.40	-0.48
13,126.00	89.38	178.89	10,557.66	-2,421.51	-1,633.61	2,642.87	4.37	4.10	-1.52
13,221.00	92.81	175.01	10,555.84	-2,516.33	-1,628.56	2,735.80	5.45	3.61	-4.08
13,410.00	90.83	179.36	10,549.84	-2,704.95	-1,619.29	2,920.78	2.53	-1.05	2.30
13,424.54	90.88	179.22	10,549.62	-2,719.49	-1,619.11	2,935.12	1.02	0.34	-0.96
13,439.08	91.02	179.29	10,549.38	-2,734.02	-1,618.92	2,949.46	1.08	0.96	0.48
13,453.62	91.30	179.42	10,549.08	-2,748.56	-1,618.76	2,963.80	2.12	1.93	0.89
13,468.15	91.59	179.53	10,548.72	-2,763.08	-1,618.63	2,978.13	2.13	2.00	0.76
13,482.69	91.61	179.51	10,548.31	-2,777.62	-1,618.50	2,992.48	0.19	0.14	-0.14
13,497.23	91.47	179.39	10,547.92	-2,792.15	-1,618.36	3,006.82	1.27	-0.96	-0.83
13,511.77	91.33	179.08	10,547.56	-2,806.69	-1,618.17	3,021.15	2.34	-0.96	-2.13
13,526.31	91.21	178.79	10,547.24	-2,821.22	-1,617.90	3,035.47	2.16	-0.83	-1.99
13,540.85	91.23	178.85	10,546.93	-2,835.75	-1,617.60	3,049.79	0.43	0.14	0.41
13,555.38	91.23	178.92	10,546.62	-2,850.28	-1,617.32	3,064.10	0.48	0.00	0.48
13,569.92	91.24	178.95	10,546.31	-2,864.81	-1,617.05	3,078.42	0.22	0.07	0.21
13,584.46	91.26	178.98	10,545.99	-2,879.35	-1,616.78	3,092.75	0.25	0.14	0.21
13,599.00	91.29	179.06	10,545.67	-2,893.88	-1,616.54	3,107.07	0.59	0.21	0.55
13,612.57	91.36	179.25	10,545.35	-2,907.45	-1,616.34	3,120.45	1.49	0.52	1.40
13,626.14	91.48	179.25	10,545.02	-2,921.01	-1,616.16	3,133.82	0.88	0.88	0.00
13,639.71	91.59	179.18	10,544.65	-2,934.57	-1,615.97	3,147.20	0.96	0.81	-0.52
13,653.29	91.68	179.10	10,544.27	-2,948.15	-1,615.77	3,160.58	0.89	0.66	-0.59
13,666.86	91.73	179.03	10,543.86	-2,961.71	-1,615.55	3,173.95	0.63	0.37	-0.52
13,680.43	91.57	178.81	10,543.47	-2,975.27	-1,615.29	3,187.31	2.00	-1.18	-1.62
13,694.00	91.40	178.60	10,543.12	-2,988.83	-1,614.99	3,200.67	1.99	-1.25	-1.55
13,707.57	91.24	178.44	10,542.81	-3,002.40	-1,614.64	3,214.02	1.67	-1.18	-1.18
13,721.14	91.00	178.22	10,542.54	-3,015.96	-1,614.24	3,227.36	2.40	-1.77	-1.62
13,734.71	90.62	177.87	10,542.35	-3,029.52	-1,613.78	3,240.69	3.81	-2.80	-2.58
13,748.29	90.29	177.59	10,542.24	-3,043.09	-1,613.24	3,254.02	3.19	-2.43	-2.06



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Lost Tank 30-19 Federal Com 21H
Project:	Lea County, NM (NAD83-NME)	TVD Reference:	RKB @ 3642.50usft (Citadel 2)
Site:	Lost Tank 30-19	MD Reference:	RKB @ 3642.50usft (Citadel 2)
Well:	Lost Tank 30-19 Federal Com 21H	North Reference:	Grid
Wellbore:	OH / 74692	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)
13,761.86	90.04	177.39	10,542.20	-3,056.64	-1,612.64	3,267.32	2.36	-1.84	-1.47
13,775.43	89.86	177.36	10,542.21	-3,070.20	-1,612.02	3,280.62	1.34	-1.33	-0.22
13,789.00	89.75	177.50	10,542.26	-3,083.76	-1,611.41	3,293.93	1.31	-0.81	1.03
13,802.43	89.39	177.46	10,542.36	-3,097.17	-1,610.82	3,307.10	2.70	-2.68	-0.30
13,815.86	89.13	177.55	10,542.54	-3,110.59	-1,610.24	3,320.27	2.05	-1.94	0.67
13,829.29	89.17	178.00	10,542.73	-3,124.01	-1,609.72	3,333.45	3.36	0.30	3.35
13,842.71	89.23	178.46	10,542.92	-3,137.42	-1,609.30	3,346.64	3.46	0.45	3.43
13,856.14	89.31	179.09	10,543.09	-3,150.84	-1,609.02	3,359.86	4.73	0.60	4.69
13,869.57	89.48	179.72	10,543.23	-3,164.27	-1,608.88	3,373.11	4.86	1.27	4.69
13,883.00	89.83	180.15	10,543.32	-3,177.70	-1,608.86	3,386.38	4.13	2.61	3.20
13,896.57	90.01	180.39	10,543.33	-3,191.27	-1,608.93	3,399.80	2.21	1.33	1.77
13,910.14	90.10	180.47	10,543.32	-3,204.84	-1,609.03	3,413.23	0.89	0.66	0.59
13,923.71	90.09	180.57	10,543.30	-3,218.41	-1,609.15	3,426.65	0.74	-0.07	0.74
13,937.29	90.08	180.62	10,543.28	-3,231.99	-1,609.29	3,440.10	0.38	-0.07	0.37
13,950.86	89.99	180.22	10,543.27	-3,245.56	-1,609.39	3,453.52	3.02	-0.66	-2.95
13,964.43	89.83	179.58	10,543.29	-3,259.13	-1,609.37	3,466.93	4.86	-1.18	-4.72
13,978.00	89.88	179.28	10,543.33	-3,272.70	-1,609.23	3,480.32	2.24	0.37	-2.21
13,991.57	89.91	179.01	10,543.35	-3,286.27	-1,609.03	3,493.69	2.00	0.22	-1.99
14,005.14	89.88	178.74	10,543.38	-3,299.84	-1,608.76	3,507.06	2.00	-0.22	-1.99
14,018.71	89.85	178.49	10,543.41	-3,313.40	-1,608.44	3,520.42	1.86	-0.22	-1.84
14,032.29	89.82	178.26	10,543.45	-3,326.98	-1,608.05	3,533.77	1.71	-0.22	-1.69
14,045.86	89.78	177.98	10,543.49	-3,340.54	-1,607.61	3,547.11	2.08	-0.29	-2.06
14,059.43	89.73	177.71	10,543.55	-3,354.10	-1,607.10	3,560.43	2.02	-0.37	-1.99
14,073.00	89.82	177.56	10,543.61	-3,367.66	-1,606.54	3,573.74	1.29	0.66	-1.11
14,086.57	89.85	177.55	10,543.65	-3,381.21	-1,605.96	3,587.05	0.23	0.22	-0.07
14,100.14	89.81	177.64	10,543.69	-3,394.77	-1,605.39	3,600.36	0.73	-0.29	0.66
14,113.71	89.80	177.84	10,543.73	-3,408.33	-1,604.85	3,613.68	1.48	-0.07	1.47
14,127.29	89.82	178.10	10,543.78	-3,421.90	-1,604.37	3,627.02	1.92	0.15	1.91
14,140.86	89.88	178.39	10,543.81	-3,435.47	-1,603.96	3,640.36	2.18	0.44	2.14
14,154.43	89.98	178.67	10,543.83	-3,449.03	-1,603.61	3,653.71	2.19	0.74	2.06
14,168.00	89.99	178.75	10,543.83	-3,462.60	-1,603.30	3,667.07	0.59	0.07	0.59
14,181.43	90.01	178.75	10,543.83	-3,476.03	-1,603.01	3,680.30	0.15	0.15	0.00
14,194.86	90.04	178.71	10,543.83	-3,489.45	-1,602.71	3,693.52	0.37	0.22	-0.30
14,208.29	90.05	178.66	10,543.82	-3,502.88	-1,602.40	3,706.74	0.38	0.07	-0.37
14,221.71	90.06	178.58	10,543.80	-3,516.29	-1,602.08	3,719.95	0.60	0.07	-0.60
14,235.14	90.01	178.55	10,543.79	-3,529.72	-1,601.74	3,733.17	0.43	-0.37	-0.22
14,248.57	89.95	178.52	10,543.80	-3,543.15	-1,601.40	3,746.38	0.50	-0.45	-0.22
14,262.00	89.97	178.48	10,543.81	-3,556.57	-1,601.05	3,759.60	0.33	0.15	-0.30
14,275.57	89.97	178.47	10,543.82	-3,570.14	-1,600.69	3,772.95	0.07	0.00	-0.07
14,289.14	89.93	178.48	10,543.83	-3,583.70	-1,600.33	3,786.30	0.30	-0.29	0.07
14,302.71	89.85	178.40	10,543.85	-3,597.27	-1,599.96	3,799.65	0.83	-0.59	-0.59
14,316.29	89.77	178.33	10,543.90	-3,610.84	-1,599.57	3,813.00	0.78	-0.59	-0.52
14,329.86	89.74	178.34	10,543.96	-3,624.41	-1,599.18	3,826.35	0.23	-0.22	0.07



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Lost Tank 30-19 Federal Com 21H
Project:	Lea County, NM (NAD83-NME)	TVD Reference:	RKB @ 3642.50usft (Citadel 2)
Site:	Lost Tank 30-19	MD Reference:	RKB @ 3642.50usft (Citadel 2)
Well:	Lost Tank 30-19 Federal Com 21H	North Reference:	Grid
Wellbore:	OH / 74692	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)
14,343.43	89.72	178.36	10,544.02	-3,637.97	-1,598.78	3,839.69	0.21	-0.15	0.15
14,357.00	89.90	178.38	10,544.07	-3,651.53	-1,598.40	3,853.04	1.33	1.33	0.15
14,371.54	89.99	178.38	10,544.08	-3,666.07	-1,597.99	3,867.34	0.62	0.62	0.00
14,386.08	89.93	178.38	10,544.09	-3,680.60	-1,597.58	3,881.64	0.41	-0.41	0.00
14,400.62	89.93	178.31	10,544.11	-3,695.14	-1,597.16	3,895.94	0.48	0.00	-0.48
14,415.15	89.79	178.35	10,544.14	-3,709.66	-1,596.73	3,910.22	1.00	-0.96	0.28
14,429.69	89.79	178.46	10,544.20	-3,724.19	-1,596.33	3,924.53	0.76	0.00	0.76
14,444.23	89.80	178.46	10,544.25	-3,738.73	-1,595.94	3,938.83	0.07	0.07	0.00
14,458.77	89.97	178.43	10,544.28	-3,753.26	-1,595.54	3,953.13	1.19	1.17	-0.21
14,473.31	89.94	178.37	10,544.29	-3,767.80	-1,595.14	3,967.43	0.46	-0.21	-0.41
14,487.85	89.86	178.08	10,544.31	-3,782.33	-1,594.69	3,981.73	2.07	-0.55	-1.99
14,502.38	89.79	177.74	10,544.36	-3,796.85	-1,594.16	3,996.00	2.39	-0.48	-2.34
14,516.92	89.74	177.71	10,544.42	-3,811.38	-1,593.58	4,010.26	0.40	-0.34	-0.21
14,531.46	89.74	177.73	10,544.48	-3,825.91	-1,593.00	4,024.53	0.14	0.00	0.14
14,546.00	89.79	177.69	10,544.54	-3,840.44	-1,592.42	4,038.80	0.44	0.34	-0.28
14,560.62	89.77	177.84	10,544.60	-3,855.05	-1,591.85	4,053.15	1.04	-0.14	1.03
14,575.23	89.69	177.74	10,544.67	-3,869.64	-1,591.29	4,067.49	0.88	-0.55	-0.68
14,589.85	89.72	177.70	10,544.74	-3,884.25	-1,590.70	4,081.84	0.34	0.21	-0.27
14,604.46	89.70	177.66	10,544.82	-3,898.85	-1,590.11	4,096.18	0.31	-0.14	-0.27
14,619.08	89.61	177.65	10,544.91	-3,913.46	-1,589.52	4,110.52	0.62	-0.62	-0.07
14,633.69	89.63	177.38	10,545.00	-3,928.05	-1,588.88	4,124.85	1.85	0.14	-1.85
14,648.31	89.63	177.39	10,545.10	-3,942.66	-1,588.21	4,139.18	0.07	0.00	0.07
14,662.92	89.59	177.59	10,545.20	-3,957.25	-1,587.57	4,153.50	1.40	-0.27	1.37
14,677.54	89.55	177.45	10,545.31	-3,971.86	-1,586.94	4,167.84	1.00	-0.27	-0.96
14,692.15	89.58	177.45	10,545.42	-3,986.45	-1,586.29	4,182.17	0.21	0.21	0.00
14,706.77	89.50	177.61	10,545.54	-4,001.06	-1,585.66	4,196.50	1.22	-0.55	1.09
14,721.38	89.43	177.74	10,545.67	-4,015.66	-1,585.07	4,210.84	1.01	-0.48	0.89
14,736.00	89.38	177.76	10,545.82	-4,030.27	-1,584.50	4,225.19	0.37	-0.34	0.14
14,750.54	89.35	177.78	10,545.98	-4,044.79	-1,583.93	4,239.46	0.25	-0.21	0.14
14,765.08	89.46	178.06	10,546.14	-4,059.32	-1,583.40	4,253.74	2.07	0.76	1.93
14,779.62	89.59	178.42	10,546.26	-4,073.86	-1,582.96	4,268.03	2.63	0.89	2.48
14,794.15	89.74	178.78	10,546.34	-4,088.38	-1,582.60	4,282.33	2.68	1.03	2.48
14,808.69	89.77	178.88	10,546.40	-4,102.92	-1,582.30	4,296.65	0.72	0.21	0.69
14,823.23	89.76	178.91	10,546.46	-4,117.46	-1,582.02	4,310.97	0.22	-0.07	0.21
14,837.77	89.82	178.98	10,546.52	-4,131.99	-1,581.76	4,325.30	0.63	0.41	0.48
14,852.31	89.88	179.21	10,546.55	-4,146.53	-1,581.53	4,339.63	1.63	0.41	1.58
14,866.85	89.92	179.26	10,546.58	-4,161.07	-1,581.33	4,353.97	0.44	0.28	0.34
14,881.38	89.94	179.23	10,546.60	-4,175.60	-1,581.14	4,368.30	0.25	0.14	-0.21
14,895.92	89.84	179.33	10,546.63	-4,190.14	-1,580.96	4,382.64	0.97	-0.69	0.69
14,910.46	89.78	179.49	10,546.67	-4,204.68	-1,580.81	4,396.98	1.18	-0.41	1.10
14,925.00	89.87	179.67	10,546.72	-4,219.22	-1,580.70	4,411.33	1.38	0.62	1.24
14,938.57	89.87	179.67	10,546.75	-4,232.79	-1,580.62	4,424.73	0.00	0.00	0.00
14,952.14	89.73	179.64	10,546.80	-4,246.36	-1,580.54	4,438.13	1.06	-1.03	-0.22
14,965.71	89.44	179.63	10,546.89	-4,259.92	-1,580.46	4,451.53	2.14	-2.14	-0.07



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Lost Tank 30-19 Federal Com 21H
Project:	Lea County, NM (NAD83-NME)	TVD Reference:	RKB @ 3642.50usft (Citadel 2)
Site:	Lost Tank 30-19	MD Reference:	RKB @ 3642.50usft (Citadel 2)
Well:	Lost Tank 30-19 Federal Com 21H	North Reference:	Grid
Wellbore:	OH / 74692	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)
14,979.29	89.26	179.63	10,547.05	-4,273.50	-1,580.37	4,464.93	1.33	-1.33	0.00
14,992.86	89.07	179.59	10,547.25	-4,287.07	-1,580.28	4,478.33	1.43	-1.40	-0.29
15,006.43	88.84	179.62	10,547.49	-4,300.64	-1,580.18	4,491.72	1.71	-1.69	0.22
15,020.00	88.75	179.62	10,547.78	-4,314.21	-1,580.09	4,505.11	0.66	-0.66	0.00
15,033.43	88.96	179.68	10,548.05	-4,327.63	-1,580.01	4,518.37	1.63	1.56	0.45
15,046.86	89.25	179.70	10,548.26	-4,341.06	-1,579.94	4,531.63	2.16	2.16	0.15
15,060.29	89.42	179.71	10,548.41	-4,354.49	-1,579.87	4,544.89	1.27	1.27	0.07
15,073.71	89.52	179.72	10,548.54	-4,367.91	-1,579.80	4,558.14	0.75	0.75	0.07
15,087.14	89.65	179.70	10,548.63	-4,381.34	-1,579.73	4,571.40	0.98	0.97	-0.15
15,100.57	89.85	179.78	10,548.69	-4,394.77	-1,579.67	4,584.66	1.60	1.49	0.60
15,114.00	89.91	179.69	10,548.72	-4,408.20	-1,579.61	4,597.93	0.81	0.45	-0.67
15,127.57	89.91	179.62	10,548.74	-4,421.77	-1,579.53	4,611.32	0.52	0.00	-0.52
15,141.14	89.91	179.60	10,548.76	-4,435.34	-1,579.44	4,624.72	0.15	0.00	-0.15
15,154.71	89.94	179.74	10,548.78	-4,448.91	-1,579.36	4,638.12	1.06	0.22	1.03
15,168.29	89.95	179.84	10,548.79	-4,462.49	-1,579.31	4,651.53	0.74	0.07	0.74
15,181.86	89.75	179.83	10,548.83	-4,476.06	-1,579.27	4,664.93	1.48	-1.47	-0.07
15,195.43	89.75	179.91	10,548.89	-4,489.63	-1,579.24	4,678.34	0.59	0.00	0.59
15,209.00	89.81	180.03	10,548.94	-4,503.20	-1,579.23	4,691.75	0.99	0.44	0.88
15,222.57	89.92	180.26	10,548.97	-4,516.77	-1,579.27	4,705.16	1.88	0.81	1.69
15,236.14	90.01	180.47	10,548.98	-4,530.34	-1,579.35	4,718.59	1.68	0.66	1.55
15,249.71	89.98	180.37	10,548.98	-4,543.91	-1,579.45	4,732.01	0.77	-0.22	-0.74
15,263.29	89.99	180.50	10,548.99	-4,557.49	-1,579.55	4,745.45	0.96	0.07	0.96
15,276.86	90.02	180.64	10,548.99	-4,571.06	-1,579.69	4,758.88	1.06	0.22	1.03
15,290.43	89.99	180.71	10,548.98	-4,584.62	-1,579.85	4,772.31	0.56	-0.22	0.52
15,304.00	89.95	180.81	10,548.99	-4,598.19	-1,580.03	4,785.75	0.79	-0.29	0.74
15,317.57	89.95	181.07	10,549.00	-4,611.76	-1,580.25	4,799.19	1.92	0.00	1.92
15,331.14	89.94	181.15	10,549.02	-4,625.33	-1,580.51	4,812.64	0.59	-0.07	0.59
15,344.71	89.93	181.22	10,549.03	-4,638.90	-1,580.80	4,826.09	0.52	-0.07	0.52
15,358.29	89.95	181.46	10,549.05	-4,652.47	-1,581.11	4,839.56	1.77	0.15	1.77
15,371.86	89.98	181.70	10,549.05	-4,666.04	-1,581.49	4,853.02	1.78	0.22	1.77
15,385.43	90.04	182.00	10,549.05	-4,679.60	-1,581.93	4,866.49	2.25	0.44	2.21
15,399.00	90.10	182.20	10,549.03	-4,693.16	-1,582.42	4,879.97	1.54	0.44	1.47
15,412.43	90.11	182.33	10,549.01	-4,706.58	-1,582.95	4,893.31	0.97	0.07	0.97
15,425.86	89.95	182.40	10,549.00	-4,720.00	-1,583.51	4,906.65	1.30	-1.19	0.52
15,439.29	89.79	182.44	10,549.03	-4,733.42	-1,584.07	4,920.00	1.23	-1.19	0.30
15,452.71	89.64	182.44	10,549.10	-4,746.82	-1,584.65	4,933.34	1.12	-1.12	0.00
15,466.14	89.69	182.47	10,549.18	-4,760.24	-1,585.22	4,946.69	0.43	0.37	0.22
15,479.57	89.75	182.50	10,549.24	-4,773.66	-1,585.80	4,960.03	0.50	0.45	0.22
15,493.00	89.85	182.59	10,549.29	-4,787.08	-1,586.40	4,973.38	1.00	0.74	0.67
15,506.57	89.95	182.51	10,549.32	-4,800.63	-1,587.00	4,986.87	0.94	0.74	-0.59
15,520.14	89.91	182.24	10,549.33	-4,814.19	-1,587.57	5,000.36	2.01	-0.29	-1.99
15,533.71	89.70	181.76	10,549.38	-4,827.75	-1,588.04	5,013.83	3.86	-1.55	-3.54
15,547.29	89.53	181.45	10,549.47	-4,841.33	-1,588.42	5,027.31	2.60	-1.25	-2.28



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Lost Tank 30-19 Federal Com 21H
Project:	Lea County, NM (NAD83-NME)	TVD Reference:	RKB @ 3642.50usft (Citadel 2)
Site:	Lost Tank 30-19	MD Reference:	RKB @ 3642.50usft (Citadel 2)
Well:	Lost Tank 30-19 Federal Com 21H	North Reference:	Grid
Wellbore:	OH / 74692	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)
15,560.86	89.36	181.17	10,549.60	-4,854.89	-1,588.73	5,040.76	2.41	-1.25	-2.06
15,574.43	89.12	180.92	10,549.78	-4,868.46	-1,588.98	5,054.20	2.55	-1.77	-1.84
15,588.00	88.91	180.76	10,550.01	-4,882.03	-1,589.18	5,067.64	1.95	-1.55	-1.18
15,601.43	88.91	180.68	10,550.27	-4,895.45	-1,589.34	5,080.94	0.60	0.00	-0.60
15,614.86	88.96	180.47	10,550.52	-4,908.88	-1,589.48	5,094.22	1.61	0.37	-1.56
15,628.29	88.95	180.26	10,550.76	-4,922.31	-1,589.57	5,107.51	1.57	-0.07	-1.56
15,636.57	88.95	180.16	10,550.92	-4,930.59	-1,589.60	5,115.69	1.27	0.00	-1.27
SL: 15636.57' MD									
15,641.71	88.95	180.09	10,551.01	-4,935.72	-1,589.61	5,120.77	1.27	0.00	-1.27
15,655.14	89.05	180.15	10,551.24	-4,949.15	-1,589.63	5,134.05	0.87	0.74	0.45
15,668.57	89.09	180.10	10,551.46	-4,962.58	-1,589.66	5,147.32	0.48	0.30	-0.37
15,682.00	89.02	179.81	10,551.68	-4,976.01	-1,589.65	5,160.59	2.22	-0.52	-2.16
15,695.57	89.18	180.03	10,551.90	-4,989.58	-1,589.63	5,174.00	2.00	1.18	1.62
15,709.14	89.21	180.07	10,552.09	-5,003.15	-1,589.65	5,187.41	0.37	0.22	0.29
15,722.71	89.04	180.01	10,552.29	-5,016.71	-1,589.66	5,200.82	1.33	-1.25	-0.44
15,736.29	88.93	179.96	10,552.54	-5,030.29	-1,589.65	5,214.24	0.89	-0.81	-0.37
15,749.86	88.88	179.91	10,552.79	-5,043.86	-1,589.64	5,227.64	0.52	-0.37	-0.37
15,763.43	88.87	179.84	10,553.06	-5,057.43	-1,589.61	5,241.04	0.52	-0.07	-0.52
15,777.00	88.73	179.57	10,553.35	-5,070.99	-1,589.54	5,254.44	2.24	-1.03	-1.99
15,790.43	88.72	179.38	10,553.64	-5,084.42	-1,589.41	5,267.69	1.42	-0.07	-1.41
15,803.86	88.87	179.38	10,553.93	-5,097.85	-1,589.27	5,280.94	1.12	1.12	0.00
15,817.29	88.81	179.51	10,554.20	-5,111.27	-1,589.14	5,294.19	1.07	-0.45	0.97
15,830.71	88.77	179.59	10,554.48	-5,124.69	-1,589.03	5,307.43	0.67	-0.30	0.60
15,844.14	88.61	179.22	10,554.79	-5,138.11	-1,588.89	5,320.67	3.00	-1.19	-2.76
15,857.57	88.51	178.92	10,555.13	-5,151.54	-1,588.68	5,333.91	2.35	-0.74	-2.23
15,871.00	88.83	178.97	10,555.44	-5,164.96	-1,588.43	5,347.14	2.41	2.38	0.37
15,884.57	89.00	179.00	10,555.69	-5,178.53	-1,588.19	5,360.50	1.27	1.25	0.22
15,898.14	89.11	179.06	10,555.92	-5,192.09	-1,587.96	5,373.88	0.92	0.81	0.44
15,911.71	89.36	179.45	10,556.10	-5,205.66	-1,587.78	5,387.26	3.41	1.84	2.87
15,925.29	89.59	179.79	10,556.22	-5,219.24	-1,587.69	5,400.66	3.02	1.69	2.50
15,938.86	89.71	180.00	10,556.31	-5,232.81	-1,587.67	5,414.07	1.78	0.88	1.55
15,952.43	89.85	180.20	10,556.36	-5,246.38	-1,587.69	5,427.48	1.80	1.03	1.47
15,966.00	89.99	180.49	10,556.38	-5,259.95	-1,587.77	5,440.91	2.37	1.03	2.14
15,979.57	90.05	180.79	10,556.37	-5,273.52	-1,587.92	5,454.34	2.25	0.44	2.21
15,993.14	90.04	181.10	10,556.36	-5,287.09	-1,588.15	5,467.78	2.29	-0.07	2.28
16,006.71	89.95	181.27	10,556.36	-5,300.65	-1,588.43	5,481.23	1.42	-0.66	1.25
16,020.29	89.80	181.28	10,556.39	-5,314.23	-1,588.73	5,494.69	1.11	-1.10	0.07
16,033.86	89.76	181.40	10,556.45	-5,327.80	-1,589.05	5,508.15	0.93	-0.29	0.88
16,047.43	89.82	181.02	10,556.50	-5,341.36	-1,589.33	5,521.60	2.83	0.44	-2.80
16,061.00	89.97	180.89	10,556.52	-5,354.93	-1,589.56	5,535.04	1.46	1.11	-0.96
16,074.43	90.10	180.54	10,556.51	-5,368.36	-1,589.73	5,548.34	2.78	0.97	-2.61
16,087.86	90.11	179.99	10,556.49	-5,381.79	-1,589.79	5,561.62	4.10	0.07	-4.10
16,101.29	90.09	179.43	10,556.46	-5,395.22	-1,589.72	5,574.88	4.17	-0.15	-4.17



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Lost Tank 30-19 Federal Com 21H
Project:	Lea County, NM (NAD83-NME)	TVD Reference:	RKB @ 3642.50usft (Citadel 2)
Site:	Lost Tank 30-19	MD Reference:	RKB @ 3642.50usft (Citadel 2)
Well:	Lost Tank 30-19 Federal Com 21H	North Reference:	Grid
Wellbore:	OH / 74692	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)
16,114.71	90.09	178.86	10,556.44	-5,408.64	-1,589.52	5,588.11	4.25	0.00	-4.25
16,128.14	90.15	178.58	10,556.41	-5,422.07	-1,589.22	5,601.34	2.13	0.45	-2.08
16,141.57	90.17	178.34	10,556.38	-5,435.49	-1,588.86	5,614.55	1.79	0.15	-1.79
16,155.00	89.80	178.08	10,556.38	-5,448.91	-1,588.44	5,627.75	3.37	-2.76	-1.94
16,168.57	89.52	177.96	10,556.46	-5,462.48	-1,587.97	5,641.08	2.24	-2.06	-0.88
16,182.14	89.23	177.99	10,556.61	-5,476.04	-1,587.49	5,654.41	2.15	-2.14	0.22
16,195.71	89.24	178.25	10,556.79	-5,489.60	-1,587.05	5,667.74	1.92	0.07	1.92
16,209.29	89.23	178.54	10,556.97	-5,503.17	-1,586.67	5,681.10	2.14	-0.07	2.14
16,222.86	89.34	178.74	10,557.14	-5,516.74	-1,586.35	5,694.45	1.68	0.81	1.47
16,236.43	89.59	178.92	10,557.27	-5,530.30	-1,586.07	5,707.82	2.27	1.84	1.33
16,250.00	89.77	179.04	10,557.34	-5,543.87	-1,585.83	5,721.19	1.59	1.33	0.88
16,263.57	89.92	179.11	10,557.38	-5,557.44	-1,585.61	5,734.56	1.22	1.11	0.52
16,277.14	89.99	179.16	10,557.39	-5,571.01	-1,585.40	5,747.94	0.63	0.52	0.37
16,290.71	90.04	179.26	10,557.39	-5,584.58	-1,585.22	5,761.32	0.82	0.37	0.74
16,304.29	90.08	179.35	10,557.37	-5,598.16	-1,585.05	5,774.71	0.73	0.29	0.66
16,317.86	90.03	179.32	10,557.36	-5,611.72	-1,584.89	5,788.10	0.43	-0.37	-0.22
16,331.43	89.99	179.30	10,557.36	-5,625.29	-1,584.73	5,801.48	0.33	-0.29	-0.15
16,345.00	90.07	179.40	10,557.35	-5,638.86	-1,584.58	5,814.87	0.94	0.59	0.74
16,358.57	90.19	179.37	10,557.32	-5,652.43	-1,584.43	5,828.26	0.91	0.88	-0.22
16,372.14	90.29	179.31	10,557.26	-5,666.00	-1,584.28	5,841.64	0.86	0.74	-0.44
16,385.71	90.21	179.35	10,557.20	-5,679.57	-1,584.12	5,855.03	0.66	-0.59	0.29
16,399.29	90.12	179.38	10,557.17	-5,693.15	-1,583.97	5,868.42	0.70	-0.66	0.22
16,412.86	90.05	179.43	10,557.14	-5,706.72	-1,583.82	5,881.81	0.63	-0.52	0.37
16,426.43	89.93	179.42	10,557.15	-5,720.29	-1,583.69	5,895.20	0.89	-0.88	-0.07
16,440.00	89.83	179.41	10,557.18	-5,733.86	-1,583.55	5,908.59	0.74	-0.74	-0.07
16,453.43	89.86	179.45	10,557.21	-5,747.29	-1,583.42	5,921.84	0.37	0.22	0.30
16,466.86	89.92	179.50	10,557.24	-5,760.72	-1,583.29	5,935.09	0.58	0.45	0.37
16,480.29	89.78	179.51	10,557.27	-5,774.14	-1,583.18	5,948.35	1.05	-1.04	0.07
16,493.71	89.67	179.52	10,557.34	-5,787.56	-1,583.06	5,961.59	0.82	-0.82	0.07
16,507.14	89.75	179.59	10,557.41	-5,800.99	-1,582.96	5,974.85	0.79	0.60	0.52
16,520.57	89.85	179.60	10,557.45	-5,814.42	-1,582.86	5,988.10	0.75	0.74	0.07
16,534.00	89.84	179.57	10,557.49	-5,827.85	-1,582.77	6,001.36	0.24	-0.07	-0.22
16,547.57	89.73	179.54	10,557.54	-5,841.42	-1,582.66	6,014.75	0.84	-0.81	-0.22
16,561.14	89.68	179.43	10,557.61	-5,854.99	-1,582.54	6,028.15	0.89	-0.37	-0.81
16,574.71	89.66	179.31	10,557.69	-5,868.56	-1,582.39	6,041.53	0.90	-0.15	-0.88
16,588.29	89.66	179.19	10,557.77	-5,882.14	-1,582.21	6,054.92	0.88	0.00	-0.88
16,601.86	89.66	179.08	10,557.85	-5,895.71	-1,582.01	6,068.30	0.81	0.00	-0.81
16,615.43	89.77	179.02	10,557.92	-5,909.28	-1,581.78	6,081.67	0.92	0.81	-0.44
16,629.00	89.97	178.98	10,557.95	-5,922.84	-1,581.55	6,095.05	1.50	1.47	-0.29
16,642.57	90.22	179.06	10,557.92	-5,936.41	-1,581.31	6,108.42	1.93	1.84	0.59
16,656.14	90.48	179.13	10,557.84	-5,949.98	-1,581.10	6,121.80	1.98	1.92	0.52
16,669.71	90.71	179.13	10,557.70	-5,963.55	-1,580.89	6,135.17	1.69	1.69	0.00
16,683.29	90.92	179.19	10,557.51	-5,977.12	-1,580.69	6,148.56	1.61	1.55	0.44
16,696.86	91.15	179.22	10,557.26	-5,990.69	-1,580.51	6,161.94	1.71	1.69	0.22



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Lost Tank 30-19 Federal Com 21H
Project:	Lea County, NM (NAD83-NME)	TVD Reference:	RKB @ 3642.50usft (Citadel 2)
Site:	Lost Tank 30-19	MD Reference:	RKB @ 3642.50usft (Citadel 2)
Well:	Lost Tank 30-19 Federal Com 21H	North Reference:	Grid
Wellbore:	OH / 74692	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)
16,710.43	91.33	179.23	10,556.97	-6,004.26	-1,580.32	6,175.31	1.33	1.33	0.07
16,724.00	91.42	179.20	10,556.64	-6,017.82	-1,580.14	6,188.69	0.70	0.66	-0.22
16,737.57	91.37	179.04	10,556.31	-6,031.39	-1,579.93	6,202.06	1.23	-0.37	-1.18
16,751.14	91.21	178.83	10,556.01	-6,044.95	-1,579.68	6,215.43	1.95	-1.18	-1.55
16,764.71	90.90	178.61	10,555.76	-6,058.51	-1,579.37	6,228.79	2.80	-2.28	-1.62
16,778.29	90.54	178.40	10,555.59	-6,072.09	-1,579.02	6,242.15	3.07	-2.65	-1.55
16,791.86	90.30	178.29	10,555.49	-6,085.65	-1,578.63	6,255.49	1.95	-1.77	-0.81
16,805.43	90.01	178.20	10,555.45	-6,099.22	-1,578.21	6,268.83	2.24	-2.14	-0.66
16,819.00	89.56	178.08	10,555.50	-6,112.78	-1,577.77	6,282.17	3.43	-3.32	-0.88
16,832.43	89.22	178.13	10,555.64	-6,126.20	-1,577.33	6,295.37	2.56	-2.53	0.37
16,845.86	88.86	178.23	10,555.87	-6,139.62	-1,576.90	6,308.56	2.78	-2.68	0.74
16,859.29	88.51	178.33	10,556.18	-6,153.04	-1,576.50	6,321.77	2.71	-2.61	0.74
16,872.71	88.16	178.42	10,556.57	-6,166.45	-1,576.12	6,334.96	2.69	-2.61	0.67
16,886.14	87.79	178.54	10,557.04	-6,179.87	-1,575.76	6,348.16	2.90	-2.76	0.89
16,899.57	87.46	178.67	10,557.60	-6,193.28	-1,575.43	6,361.37	2.64	-2.46	0.97
16,913.00	87.16	178.77	10,558.23	-6,206.69	-1,575.14	6,374.58	2.35	-2.23	0.74
16,926.57	86.91	178.85	10,558.93	-6,220.24	-1,574.85	6,387.92	1.93	-1.84	0.59
16,940.14	86.70	178.92	10,559.69	-6,233.79	-1,574.59	6,401.27	1.63	-1.55	0.52
16,953.71	86.53	179.02	10,560.49	-6,247.33	-1,574.35	6,414.62	1.45	-1.25	0.74
16,967.29	86.42	179.11	10,561.32	-6,260.89	-1,574.13	6,427.98	1.05	-0.81	0.66
16,980.86	86.39	179.17	10,562.17	-6,274.43	-1,573.92	6,441.33	0.49	-0.22	0.44
16,994.43	86.45	179.17	10,563.02	-6,287.97	-1,573.73	6,454.68	0.44	0.44	0.00
17,008.00	86.63	179.14	10,563.84	-6,301.51	-1,573.53	6,468.04	1.34	1.33	-0.22
17,021.57	86.98	179.09	10,564.60	-6,315.06	-1,573.32	6,481.39	2.61	2.58	-0.37
17,035.14	87.44	179.03	10,565.26	-6,328.61	-1,573.09	6,494.75	3.42	3.39	-0.44
17,048.71	87.97	178.94	10,565.80	-6,342.17	-1,572.85	6,508.11	3.96	3.91	-0.66
17,062.29	88.49	178.95	10,566.22	-6,355.74	-1,572.60	6,521.48	3.83	3.83	0.07
17,075.86	88.78	179.09	10,566.54	-6,369.31	-1,572.37	6,534.85	2.37	2.14	1.03
17,089.43	89.05	178.87	10,566.80	-6,382.87	-1,572.13	6,548.22	2.57	1.99	-1.62
17,103.00	89.27	178.85	10,567.00	-6,396.44	-1,571.86	6,561.59	1.63	1.62	-0.15
17,116.57	89.40	178.84	10,567.16	-6,410.00	-1,571.59	6,574.95	0.96	0.96	-0.07
17,130.14	89.44	178.79	10,567.29	-6,423.57	-1,571.31	6,588.32	0.47	0.29	-0.37
17,143.71	89.22	178.88	10,567.45	-6,437.14	-1,571.03	6,601.68	1.75	-1.62	0.66
17,157.29	89.33	178.72	10,567.62	-6,450.71	-1,570.75	6,615.05	1.43	0.81	-1.18
17,170.86	89.48	178.71	10,567.77	-6,464.28	-1,570.44	6,628.41	1.11	1.11	-0.07
17,184.43	89.56	178.77	10,567.88	-6,477.84	-1,570.14	6,641.77	0.74	0.59	0.44
17,198.00	89.60	178.72	10,567.98	-6,491.41	-1,569.85	6,655.13	0.47	0.29	-0.37
17,211.43	89.65	178.59	10,568.07	-6,504.84	-1,569.53	6,668.35	1.04	0.37	-0.97
17,224.86	89.57	178.50	10,568.16	-6,518.26	-1,569.19	6,681.57	0.90	-0.60	-0.67
17,238.29	89.65	178.45	10,568.25	-6,531.69	-1,568.83	6,694.78	0.70	0.60	-0.37
17,251.71	89.72	178.38	10,568.32	-6,545.10	-1,568.46	6,707.98	0.74	0.52	-0.52
17,265.14	89.69	178.47	10,568.39	-6,558.53	-1,568.09	6,721.19	0.71	-0.22	0.67
17,278.57	89.54	178.55	10,568.48	-6,571.95	-1,567.74	6,734.41	1.27	-1.12	0.60



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Lost Tank 30-19 Federal Com 21H
Project:	Lea County, NM (NAD83-NME)	TVD Reference:	RKB @ 3642.50usft (Citadel 2)
Site:	Lost Tank 30-19	MD Reference:	RKB @ 3642.50usft (Citadel 2)
Well:	Lost Tank 30-19 Federal Com 21H	North Reference:	Grid
Wellbore:	OH / 74692	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)
17,292.00	89.41	178.49	10,568.61	-6,585.38	-1,567.40	6,747.62	1.07	-0.97	-0.45
17,305.57	89.22	178.26	10,568.77	-6,598.94	-1,567.01	6,760.97	2.20	-1.40	-1.69
17,319.14	89.22	177.96	10,568.95	-6,612.50	-1,566.56	6,774.30	2.21	0.00	-2.21
17,332.71	89.30	177.64	10,569.13	-6,626.06	-1,566.04	6,787.62	2.43	0.59	-2.36
17,346.29	89.38	177.32	10,569.28	-6,639.63	-1,565.45	6,800.93	2.43	0.59	-2.36
17,359.86	89.14	177.00	10,569.46	-6,653.18	-1,564.77	6,814.22	2.95	-1.77	-2.36
17,373.43	88.54	176.70	10,569.73	-6,666.72	-1,564.03	6,827.50	4.94	-4.42	-2.21
17,387.00	88.33	176.61	10,570.10	-6,680.27	-1,563.24	6,840.76	1.68	-1.55	-0.66
17,400.57	88.60	176.83	10,570.47	-6,693.81	-1,562.46	6,854.02	2.57	1.99	1.62
17,414.14	88.88	177.17	10,570.77	-6,707.36	-1,561.75	6,867.30	3.25	2.06	2.51
17,427.71	89.25	177.66	10,570.99	-6,720.91	-1,561.14	6,880.60	4.52	2.73	3.61
17,441.29	89.64	178.19	10,571.12	-6,734.48	-1,560.65	6,893.94	4.85	2.87	3.90
17,454.86	89.75	178.34	10,571.19	-6,748.05	-1,560.24	6,907.28	1.37	0.81	1.11
17,468.43	89.81	178.55	10,571.24	-6,761.61	-1,559.87	6,920.63	1.61	0.44	1.55
17,482.00	89.83	179.17	10,571.29	-6,775.18	-1,559.60	6,934.00	4.57	0.15	4.57
17,495.43	90.07	179.46	10,571.30	-6,788.61	-1,559.44	6,947.24	2.80	1.79	2.16
17,508.86	90.33	179.52	10,571.25	-6,802.04	-1,559.32	6,960.50	1.99	1.94	0.45
17,522.29	90.37	179.33	10,571.17	-6,815.46	-1,559.18	6,973.75	1.45	0.30	-1.41
17,535.71	90.41	179.13	10,571.08	-6,828.88	-1,559.00	6,986.98	1.52	0.30	-1.49
17,549.14	90.44	178.98	10,570.98	-6,842.31	-1,558.78	7,000.22	1.14	0.22	-1.12
17,562.57	90.38	178.85	10,570.88	-6,855.74	-1,558.53	7,013.45	1.07	-0.45	-0.97
17,576.00	90.35	178.77	10,570.80	-6,869.16	-1,558.25	7,026.67	0.64	-0.22	-0.60
17,589.43	90.32	178.73	10,570.72	-6,882.59	-1,557.96	7,039.90	0.37	-0.22	-0.30
17,602.86	90.25	178.70	10,570.65	-6,896.02	-1,557.65	7,053.12	0.57	-0.52	-0.22
17,616.29	89.95	178.59	10,570.63	-6,909.44	-1,557.34	7,066.34	2.38	-2.23	-0.82
17,629.71	89.59	178.46	10,570.68	-6,922.86	-1,556.99	7,079.54	2.85	-2.68	-0.97
17,643.14	89.59	178.60	10,570.78	-6,936.28	-1,556.65	7,092.76	1.04	0.00	1.04
17,656.57	89.69	178.77	10,570.86	-6,949.71	-1,556.34	7,105.98	1.47	0.74	1.27
17,670.00	89.86	178.97	10,570.92	-6,963.14	-1,556.07	7,119.21	1.95	1.27	1.49
17,683.57	89.86	179.14	10,570.95	-6,976.71	-1,555.85	7,132.58	1.25	0.00	1.25
17,697.14	89.90	179.31	10,570.98	-6,990.28	-1,555.67	7,145.96	1.29	0.29	1.25
17,710.71	89.92	179.39	10,571.00	-7,003.84	-1,555.51	7,159.35	0.61	0.15	0.59
17,724.29	89.93	179.49	10,571.02	-7,017.42	-1,555.38	7,172.75	0.74	0.07	0.74
17,737.86	89.94	179.74	10,571.03	-7,030.99	-1,555.29	7,186.14	1.84	0.07	1.84
17,751.43	89.90	179.92	10,571.05	-7,044.56	-1,555.25	7,199.55	1.36	-0.29	1.33
17,765.00	89.76	180.04	10,571.09	-7,058.13	-1,555.24	7,212.96	1.36	-1.03	0.88
17,778.43	89.56	180.18	10,571.17	-7,071.56	-1,555.27	7,226.23	1.82	-1.49	1.04
17,791.86	89.24	180.15	10,571.31	-7,084.99	-1,555.31	7,239.51	2.39	-2.38	-0.22
17,805.29	88.90	180.10	10,571.53	-7,098.42	-1,555.34	7,252.78	2.56	-2.53	-0.37
17,818.71	88.59	180.04	10,571.82	-7,111.84	-1,555.35	7,266.05	2.35	-2.31	-0.45
17,832.14	88.40	180.01	10,572.18	-7,125.26	-1,555.36	7,279.31	1.43	-1.41	-0.22
17,845.57	88.40	179.99	10,572.55	-7,138.69	-1,555.36	7,292.58	0.15	0.00	-0.15
17,859.00	88.60	179.97	10,572.90	-7,152.11	-1,555.35	7,305.85	1.50	1.49	-0.15



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Lost Tank 30-19 Federal Com 21H
Project:	Lea County, NM (NAD83-NME)	TVD Reference:	RKB @ 3642.50usft (Citadel 2)
Site:	Lost Tank 30-19	MD Reference:	RKB @ 3642.50usft (Citadel 2)
Well:	Lost Tank 30-19 Federal Com 21H	North Reference:	Grid
Wellbore:	OH / 74692	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)
17,872.57	89.15	179.93	10,573.17	-7,165.68	-1,555.34	7,319.25	4.06	4.05	-0.29
17,886.14	89.87	179.87	10,573.28	-7,179.25	-1,555.32	7,332.66	5.32	5.31	-0.44
17,899.71	90.41	179.79	10,573.25	-7,192.82	-1,555.28	7,346.06	4.02	3.98	-0.59
17,913.29	91.01	179.70	10,573.08	-7,206.40	-1,555.22	7,359.47	4.47	4.42	-0.66
17,926.86	91.62	179.56	10,572.77	-7,219.96	-1,555.13	7,372.87	4.61	4.50	-1.03
17,940.43	92.20	179.32	10,572.32	-7,233.53	-1,555.00	7,386.25	4.63	4.27	-1.77
17,954.00	92.60	179.01	10,571.75	-7,247.08	-1,554.80	7,399.62	3.73	2.95	-2.28
17,967.57	92.68	178.73	10,571.13	-7,260.64	-1,554.53	7,412.97	2.14	0.59	-2.06
17,981.14	92.61	178.42	10,570.50	-7,274.19	-1,554.20	7,426.31	2.34	-0.52	-2.28
17,994.71	92.38	178.15	10,569.91	-7,287.74	-1,553.79	7,439.64	2.61	-1.69	-1.99
18,008.29	92.08	177.88	10,569.38	-7,301.30	-1,553.32	7,452.97	2.97	-2.21	-1.99
18,021.86	91.72	177.63	10,568.93	-7,314.85	-1,552.79	7,466.28	3.23	-2.65	-1.84
18,035.43	91.35	177.42	10,568.57	-7,328.40	-1,552.20	7,479.58	3.13	-2.73	-1.55
18,049.00	90.98	177.33	10,568.29	-7,341.96	-1,551.58	7,492.88	2.81	-2.73	-0.66
18,062.43	90.67	177.30	10,568.10	-7,355.37	-1,550.95	7,506.04	2.32	-2.31	-0.22
18,075.86	90.41	177.32	10,567.97	-7,368.79	-1,550.32	7,519.20	1.94	-1.94	0.15
18,089.29	90.15	177.38	10,567.91	-7,382.20	-1,549.70	7,532.36	1.99	-1.94	0.45
18,102.71	90.17	177.61	10,567.87	-7,395.61	-1,549.12	7,545.52	1.72	0.15	1.71
18,116.14	90.24	177.83	10,567.82	-7,409.03	-1,548.58	7,558.70	1.72	0.52	1.64
18,129.57	90.18	177.76	10,567.77	-7,422.45	-1,548.06	7,571.89	0.69	-0.45	-0.52
18,143.00	90.20	177.69	10,567.73	-7,435.87	-1,547.53	7,585.07	0.54	0.15	-0.52
18,157.62	90.41	177.73	10,567.65	-7,450.47	-1,546.95	7,599.41	1.46	1.44	0.27
18,172.23	90.77	177.87	10,567.50	-7,465.07	-1,546.39	7,613.75	2.64	2.46	0.96
18,186.85	90.81	178.05	10,567.30	-7,479.68	-1,545.87	7,628.11	1.26	0.27	1.23
18,201.46	90.84	178.22	10,567.09	-7,494.28	-1,545.39	7,642.47	1.18	0.21	1.16
18,216.08	90.89	178.30	10,566.87	-7,508.89	-1,544.95	7,656.84	0.65	0.34	0.55
18,230.69	90.86	178.33	10,566.64	-7,523.50	-1,544.52	7,671.21	0.29	-0.21	0.21
18,245.31	90.69	178.26	10,566.44	-7,538.11	-1,544.08	7,685.58	1.26	-1.16	-0.48
18,259.92	90.67	178.26	10,566.27	-7,552.71	-1,543.64	7,699.94	0.14	-0.14	0.00
18,274.54	90.65	178.32	10,566.10	-7,567.32	-1,543.20	7,714.32	0.43	-0.14	0.41
18,289.15	90.59	178.41	10,565.94	-7,581.93	-1,542.79	7,728.68	0.74	-0.41	0.62
18,303.77	90.47	178.51	10,565.81	-7,596.54	-1,542.39	7,743.07	1.07	-0.82	0.68
18,318.38	90.28	178.68	10,565.71	-7,611.15	-1,542.03	7,757.44	1.75	-1.30	1.16
18,333.00	89.97	178.94	10,565.68	-7,625.76	-1,541.73	7,771.84	2.77	-2.12	1.78
18,346.43	89.53	179.05	10,565.74	-7,639.19	-1,541.50	7,785.08	3.38	-3.28	0.82
18,359.86	88.82	179.08	10,565.93	-7,652.62	-1,541.28	7,798.31	5.29	-5.29	0.22
18,373.29	88.22	179.30	10,566.28	-7,666.04	-1,541.09	7,811.55	4.76	-4.47	1.64
18,386.71	87.66	179.50	10,566.76	-7,679.45	-1,540.95	7,824.78	4.43	-4.17	1.49
18,400.14	87.10	179.71	10,567.38	-7,692.87	-1,540.85	7,838.02	4.45	-4.17	1.56
18,413.57	86.78	179.97	10,568.09	-7,706.28	-1,540.82	7,851.27	3.07	-2.38	1.94
18,427.00	86.74	180.21	10,568.85	-7,719.69	-1,540.84	7,864.52	1.81	-0.30	1.79
18,440.57	87.04	180.41	10,569.59	-7,733.24	-1,540.91	7,877.93	2.66	2.21	1.47
18,454.14	87.53	180.61	10,570.23	-7,746.79	-1,541.03	7,891.34	3.90	3.61	1.47
18,467.71	88.14	180.82	10,570.74	-7,760.35	-1,541.20	7,904.76	4.75	4.50	1.55



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Lost Tank 30-19 Federal Com 21H
Project:	Lea County, NM (NAD83-NME)	TVD Reference:	RKB @ 3642.50usft (Citadel 2)
Site:	Lost Tank 30-19	MD Reference:	RKB @ 3642.50usft (Citadel 2)
Well:	Lost Tank 30-19 Federal Com 21H	North Reference:	Grid
Wellbore:	OH / 74692	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)
18,481.29	88.78	181.02	10,571.11	-7,773.92	-1,541.42	7,918.21	4.94	4.71	1.47
18,494.86	88.89	181.11	10,571.39	-7,787.49	-1,541.67	7,931.66	1.05	0.81	0.66
18,508.43	89.20	181.21	10,571.61	-7,801.05	-1,541.94	7,945.10	2.40	2.28	0.74
18,522.00	89.62	181.30	10,571.75	-7,814.62	-1,542.24	7,958.56	3.17	3.10	0.66
18,535.57	89.97	181.42	10,571.80	-7,828.19	-1,542.56	7,972.01	2.73	2.58	0.88
18,549.14	90.00	181.40	10,571.80	-7,841.75	-1,542.90	7,985.47	0.27	0.22	-0.15
18,562.71	89.94	181.33	10,571.81	-7,855.32	-1,543.22	7,998.92	0.68	-0.44	-0.52
18,576.29	89.73	181.31	10,571.85	-7,868.89	-1,543.53	8,012.39	1.55	-1.55	-0.15
18,589.86	89.29	181.41	10,571.97	-7,882.46	-1,543.86	8,025.84	3.33	-3.24	0.74
18,603.43	88.90	181.47	10,572.18	-7,896.02	-1,544.20	8,039.30	2.91	-2.87	0.44
18,617.00	88.56	181.52	10,572.48	-7,909.59	-1,544.55	8,052.76	2.53	-2.51	0.37
18,630.43	88.47	181.54	10,572.83	-7,923.01	-1,544.91	8,066.07	0.69	-0.67	0.15
18,643.86	88.47	181.55	10,573.19	-7,936.43	-1,545.27	8,079.39	0.07	0.00	0.07
18,657.29	88.76	181.57	10,573.51	-7,949.85	-1,545.64	8,092.71	2.16	2.16	0.15
18,670.71	89.06	181.56	10,573.77	-7,963.26	-1,546.00	8,106.02	2.24	2.24	-0.07
18,684.14	89.10	181.36	10,573.98	-7,976.68	-1,546.35	8,119.34	1.52	0.30	-1.49
18,697.57	89.11	181.20	10,574.19	-7,990.11	-1,546.65	8,132.65	1.19	0.07	-1.19
18,711.00	89.41	181.08	10,574.37	-8,003.54	-1,546.91	8,145.96	2.41	2.23	-0.89
18,724.57	89.67	180.88	10,574.48	-8,017.10	-1,547.14	8,159.41	2.42	1.92	-1.47
18,738.14	89.74	180.55	10,574.55	-8,030.67	-1,547.31	8,172.84	2.49	0.52	-2.43
18,751.71	89.81	180.27	10,574.60	-8,044.24	-1,547.41	8,186.27	2.13	0.52	-2.06
18,765.29	89.82	180.02	10,574.64	-8,057.82	-1,547.45	8,199.69	1.84	0.07	-1.84
18,778.86	89.71	179.81	10,574.70	-8,071.39	-1,547.43	8,213.10	1.75	-0.81	-1.55
18,792.43	89.59	179.51	10,574.78	-8,084.96	-1,547.35	8,226.50	2.38	-0.88	-2.21
18,806.00	89.52	179.08	10,574.89	-8,098.53	-1,547.18	8,239.88	3.21	-0.52	-3.17
18,819.57	89.53	178.70	10,575.00	-8,112.10	-1,546.92	8,253.25	2.80	0.07	-2.80
18,833.14	89.53	178.65	10,575.11	-8,125.66	-1,546.60	8,266.60	0.37	0.00	-0.37
18,846.71	89.45	178.69	10,575.23	-8,139.23	-1,546.29	8,279.96	0.66	-0.59	0.29
18,860.29	89.41	178.71	10,575.37	-8,152.80	-1,545.98	8,293.33	0.33	-0.29	0.15
18,873.86	89.44	178.71	10,575.50	-8,166.37	-1,545.67	8,306.69	0.22	0.22	0.00
18,887.43	89.48	178.70	10,575.63	-8,179.94	-1,545.37	8,320.05	0.30	0.29	-0.07
18,901.00	89.56	178.73	10,575.74	-8,193.50	-1,545.06	8,333.41	0.63	0.59	0.22
18,914.57	89.73	178.82	10,575.83	-8,207.07	-1,544.77	8,346.77	1.42	1.25	0.66
18,928.14	89.93	178.99	10,575.87	-8,220.64	-1,544.51	8,360.14	1.93	1.47	1.25
18,941.71	89.78	178.95	10,575.90	-8,234.20	-1,544.27	8,373.51	1.14	-1.11	-0.29
18,955.29	89.72	178.93	10,575.96	-8,247.78	-1,544.02	8,386.89	0.47	-0.44	-0.15
18,968.86	89.69	179.01	10,576.03	-8,261.35	-1,543.77	8,400.26	0.63	-0.22	0.59
18,982.43	89.64	178.98	10,576.11	-8,274.92	-1,543.54	8,413.63	0.43	-0.37	-0.22
18,996.00	89.50	178.93	10,576.21	-8,288.48	-1,543.29	8,427.00	1.10	-1.03	-0.37
19,009.57	89.37	178.81	10,576.35	-8,302.05	-1,543.02	8,440.37	1.30	-0.96	-0.88
19,023.14	89.31	178.77	10,576.50	-8,315.62	-1,542.73	8,453.73	0.53	-0.44	-0.29
19,036.71	89.33	178.83	10,576.66	-8,329.18	-1,542.45	8,467.10	0.47	0.15	0.44
19,050.29	89.35	178.88	10,576.82	-8,342.76	-1,542.18	8,480.47	0.40	0.15	0.37



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Lost Tank 30-19 Federal Com 21H
Project:	Lea County, NM (NAD83-NME)	TVD Reference:	RKB @ 3642.50usft (Citadel 2)
Site:	Lost Tank 30-19	MD Reference:	RKB @ 3642.50usft (Citadel 2)
Well:	Lost Tank 30-19 Federal Com 21H	North Reference:	Grid
Wellbore:	OH / 74692	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)
19,063.86	89.41	178.95	10,576.97	-8,356.33	-1,541.92	8,493.84	0.68	0.44	0.52
19,077.43	89.49	179.12	10,577.10	-8,369.89	-1,541.69	8,507.21	1.38	0.59	1.25
19,091.00	89.64	179.45	10,577.20	-8,383.46	-1,541.52	8,520.59	2.67	1.11	2.43
19,104.57	89.61	179.46	10,577.29	-8,397.03	-1,541.39	8,533.98	0.23	-0.22	0.07
19,118.14	89.60	179.46	10,577.38	-8,410.60	-1,541.27	8,547.37	0.07	-0.07	0.00
19,131.71	89.45	179.37	10,577.50	-8,424.17	-1,541.13	8,560.76	1.29	-1.11	-0.66
19,145.29	89.44	179.33	10,577.63	-8,437.75	-1,540.97	8,574.16	0.30	-0.07	-0.29
19,158.86	89.61	179.39	10,577.74	-8,451.32	-1,540.82	8,587.54	1.33	1.25	0.44
19,172.43	89.51	179.34	10,577.84	-8,464.88	-1,540.67	8,600.93	0.82	-0.74	-0.37
19,186.00	89.28	179.34	10,577.99	-8,478.45	-1,540.52	8,614.31	1.69	-1.69	0.00
19,199.43	88.94	179.22	10,578.20	-8,491.88	-1,540.35	8,627.56	2.68	-2.53	-0.89
19,212.86	88.68	179.05	10,578.47	-8,505.31	-1,540.14	8,640.79	2.31	-1.94	-1.27
19,226.29	88.50	179.08	10,578.81	-8,518.73	-1,539.93	8,654.03	1.36	-1.34	0.22
19,239.71	88.31	179.09	10,579.18	-8,532.14	-1,539.71	8,667.25	1.42	-1.42	0.07
19,253.14	88.02	179.05	10,579.61	-8,545.56	-1,539.49	8,680.48	2.18	-2.16	-0.30
19,266.57	87.91	179.02	10,580.09	-8,558.98	-1,539.27	8,693.71	0.85	-0.82	-0.22
19,280.00	87.95	179.02	10,580.57	-8,572.40	-1,539.04	8,706.93	0.30	0.30	0.00
19,293.57	87.86	179.09	10,581.07	-8,585.96	-1,538.81	8,720.30	0.84	-0.66	0.52
19,307.14	87.82	179.19	10,581.58	-8,599.52	-1,538.61	8,733.67	0.79	-0.29	0.74
19,320.71	87.82	179.32	10,582.09	-8,613.08	-1,538.43	8,747.04	0.96	0.00	0.96
19,334.29	87.89	179.46	10,582.60	-8,626.65	-1,538.29	8,760.43	1.15	0.52	1.03
19,347.86	88.40	179.66	10,583.04	-8,640.21	-1,538.19	8,773.81	4.04	3.76	1.47
19,361.43	88.92	179.78	10,583.36	-8,653.78	-1,538.12	8,787.21	3.93	3.83	0.88
19,375.00	89.43	179.87	10,583.55	-8,667.35	-1,538.08	8,800.61	3.82	3.76	0.66
19,388.57	89.92	179.90	10,583.63	-8,680.92	-1,538.05	8,814.02	3.62	3.61	0.22
19,402.14	90.10	179.77	10,583.63	-8,694.49	-1,538.01	8,827.42	1.64	1.33	-0.96
19,415.71	90.22	179.57	10,583.59	-8,708.06	-1,537.93	8,840.82	1.72	0.88	-1.47
19,429.29	90.32	179.36	10,583.53	-8,721.64	-1,537.81	8,854.22	1.71	0.74	-1.55
19,442.86	90.37	179.35	10,583.45	-8,735.20	-1,537.65	8,867.61	0.38	0.37	-0.07
19,456.43	90.37	179.33	10,583.36	-8,748.77	-1,537.50	8,880.99	0.15	0.00	-0.15
19,470.00	90.29	179.21	10,583.28	-8,762.34	-1,537.32	8,894.38	1.06	-0.59	-0.88
19,483.57	90.25	179.18	10,583.22	-8,775.91	-1,537.13	8,907.76	0.37	-0.29	-0.22
19,497.14	90.19	179.12	10,583.16	-8,789.48	-1,536.93	8,921.13	0.63	-0.44	-0.44
19,510.71	90.08	179.01	10,583.13	-8,803.05	-1,536.71	8,934.51	1.15	-0.81	-0.81
19,524.29	89.97	178.91	10,583.13	-8,816.62	-1,536.46	8,947.89	1.09	-0.81	-0.74
19,537.86	89.88	178.91	10,583.14	-8,830.19	-1,536.21	8,961.26	0.66	-0.66	0.00
19,551.43	89.75	178.87	10,583.19	-8,843.76	-1,535.94	8,974.62	1.00	-0.96	-0.29
19,565.00	89.61	178.82	10,583.26	-8,857.33	-1,535.67	8,987.99	1.10	-1.03	-0.37
19,578.43	89.54	178.76	10,583.36	-8,870.75	-1,535.39	9,001.21	0.69	-0.52	-0.45
19,591.86	89.51	178.69	10,583.47	-8,884.18	-1,535.09	9,014.44	0.57	-0.22	-0.52
19,605.29	89.52	178.61	10,583.59	-8,897.60	-1,534.77	9,027.66	0.60	0.07	-0.60
19,618.71	89.55	178.52	10,583.70	-8,911.02	-1,534.44	9,040.86	0.71	0.22	-0.67
19,632.14	89.60	178.43	10,583.80	-8,924.45	-1,534.08	9,054.08	0.77	0.37	-0.67



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Lost Tank 30-19 Federal Com 21H
Project:	Lea County, NM (NAD83-NME)	TVD Reference:	RKB @ 3642.50usft (Citadel 2)
Site:	Lost Tank 30-19	MD Reference:	RKB @ 3642.50usft (Citadel 2)
Well:	Lost Tank 30-19 Federal Com 21H	North Reference:	Grid
Wellbore:	OH / 74692	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)
19,645.57	89.67	178.33	10,583.88	-8,937.87	-1,533.70	9,067.28	0.91	0.52	-0.74
19,659.00	89.46	178.21	10,583.98	-8,951.29	-1,533.29	9,080.49	1.80	-1.56	-0.89
19,672.57	89.29	178.07	10,584.13	-8,964.85	-1,532.85	9,093.82	1.62	-1.25	-1.03
19,686.14	89.21	177.74	10,584.31	-8,978.41	-1,532.36	9,107.15	2.50	-0.59	-2.43
19,699.71	89.13	177.39	10,584.51	-8,991.97	-1,531.78	9,120.46	2.65	-0.59	-2.58
19,713.29	89.25	176.99	10,584.70	-9,005.53	-1,531.11	9,133.76	3.07	0.88	-2.95
19,726.86	89.42	176.59	10,584.86	-9,019.08	-1,530.35	9,147.03	3.20	1.25	-2.95
19,740.43	89.55	176.28	10,584.98	-9,032.62	-1,529.51	9,160.28	2.48	0.96	-2.28
19,754.00	89.68	176.21	10,585.07	-9,046.16	-1,528.62	9,173.53	1.09	0.96	-0.52
19,767.57	89.80	176.23	10,585.13	-9,059.71	-1,527.73	9,186.77	0.90	0.88	0.15
19,781.14	89.83	175.95	10,585.17	-9,073.24	-1,526.80	9,200.01	2.08	0.22	-2.06
19,794.71	89.64	175.80	10,585.24	-9,086.78	-1,525.83	9,213.24	1.78	-1.40	-1.11
19,808.29	89.56	175.49	10,585.33	-9,100.32	-1,524.79	9,226.46	2.36	-0.59	-2.28
19,821.86	89.52	175.14	10,585.44	-9,113.84	-1,523.69	9,239.66	2.60	-0.29	-2.58
19,835.43	89.48	174.88	10,585.56	-9,127.36	-1,522.51	9,252.83	1.94	-0.29	-1.92
19,849.00	89.41	174.93	10,585.69	-9,140.88	-1,521.30	9,266.01	0.63	-0.52	0.37
19,862.57	89.44	174.90	10,585.83	-9,154.39	-1,520.10	9,279.18	0.31	0.22	-0.22
19,876.14	89.49	174.88	10,585.95	-9,167.91	-1,518.89	9,292.35	0.40	0.37	-0.15
19,889.71	89.56	174.88	10,586.07	-9,181.42	-1,517.68	9,305.52	0.52	0.52	0.00
19,903.29	89.62	174.89	10,586.16	-9,194.95	-1,516.47	9,318.70	0.45	0.44	0.07
19,916.86	89.66	174.79	10,586.25	-9,208.46	-1,515.25	9,331.87	0.79	0.29	-0.74
19,930.43	89.65	174.59	10,586.33	-9,221.98	-1,513.99	9,345.03	1.48	-0.07	-1.47
19,944.00	89.64	174.38	10,586.41	-9,235.48	-1,512.69	9,358.18	1.55	-0.07	-1.55
19,957.43	89.77	174.36	10,586.48	-9,248.85	-1,511.37	9,371.19	0.98	0.97	-0.15
19,970.86	89.87	174.39	10,586.53	-9,262.21	-1,510.05	9,384.19	0.78	0.74	0.22
19,984.29	89.75	174.23	10,586.57	-9,275.58	-1,508.72	9,397.20	1.49	-0.89	-1.19
19,997.71	89.66	174.13	10,586.64	-9,288.93	-1,507.36	9,410.18	1.00	-0.67	-0.75
20,011.14	89.62	174.07	10,586.72	-9,302.29	-1,505.98	9,423.17	0.54	-0.30	-0.45
20,024.57	89.51	173.96	10,586.83	-9,315.64	-1,504.58	9,436.16	1.16	-0.82	-0.82
20,038.00	89.40	173.97	10,586.95	-9,329.00	-1,503.17	9,449.14	0.82	-0.82	0.07
20,051.57	89.31	173.88	10,587.11	-9,342.49	-1,501.73	9,462.25	0.94	-0.66	-0.66
20,065.14	89.33	173.78	10,587.27	-9,355.98	-1,500.27	9,475.36	0.75	0.15	-0.74
20,078.71	89.25	173.60	10,587.44	-9,369.47	-1,498.78	9,488.46	1.45	-0.59	-1.33
20,092.29	89.20	173.52	10,587.62	-9,382.96	-1,497.26	9,501.56	0.69	-0.37	-0.59
20,105.86	89.20	173.48	10,587.81	-9,396.44	-1,495.72	9,514.65	0.29	0.00	-0.29
20,119.43	89.24	173.40	10,587.99	-9,409.92	-1,494.17	9,527.74	0.66	0.29	-0.59
20,133.00	89.27	173.30	10,588.17	-9,423.40	-1,492.60	9,540.82	0.77	0.22	-0.74
20,146.57	89.31	173.13	10,588.34	-9,436.87	-1,491.00	9,553.89	1.29	0.29	-1.25
20,160.14	89.34	172.94	10,588.50	-9,450.34	-1,489.35	9,566.94	1.42	0.22	-1.40
20,173.71	89.38	172.84	10,588.65	-9,463.81	-1,487.67	9,579.99	0.79	0.29	-0.74
20,187.29	89.46	172.80	10,588.79	-9,477.28	-1,485.98	9,593.05	0.66	0.59	-0.29
20,200.86	89.42	172.72	10,588.92	-9,490.74	-1,484.27	9,606.09	0.66	-0.29	-0.59
20,214.43	89.35	172.80	10,589.06	-9,504.20	-1,482.56	9,619.13	0.78	-0.52	0.59
20,228.00	89.31	172.82	10,589.22	-9,517.66	-1,480.86	9,632.18	0.33	-0.29	0.15



Phoenix Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Lost Tank 30-19 Federal Com 21H
Project:	Lea County, NM (NAD83-NME)	TVD Reference:	RKB @ 3642.50usft (Citadel 2)
Site:	Lost Tank 30-19	MD Reference:	RKB @ 3642.50usft (Citadel 2)
Well:	Lost Tank 30-19 Federal Com 21H	North Reference:	Grid
Wellbore:	OH / 74692	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)
20,241.43	89.35	172.71	10,589.38	-9,530.99	-1,479.17	9,645.08	0.87	0.30	-0.82
20,254.86	89.35	172.56	10,589.53	-9,544.30	-1,477.45	9,657.98	1.12	0.00	-1.12
20,268.29	89.30	172.39	10,589.69	-9,557.62	-1,475.69	9,670.87	1.32	-0.37	-1.27
20,281.71	89.27	172.29	10,589.86	-9,570.92	-1,473.90	9,683.74	0.78	-0.22	-0.75
20,295.14	89.20	172.24	10,590.04	-9,584.22	-1,472.09	9,696.61	0.64	-0.52	-0.37
20,308.57	89.21	172.09	10,590.22	-9,597.53	-1,470.26	9,709.48	1.12	0.07	-1.12
20,322.00	89.19	171.91	10,590.41	-9,610.83	-1,468.39	9,722.33	1.35	-0.15	-1.34
20,335.57	89.13	171.74	10,590.61	-9,624.26	-1,466.46	9,735.31	1.33	-0.44	-1.25
20,349.14	89.04	171.55	10,590.83	-9,637.68	-1,464.49	9,748.28	1.55	-0.66	-1.40
20,362.71	88.89	171.34	10,591.07	-9,651.10	-1,462.47	9,761.23	1.90	-1.11	-1.55
20,376.29	88.70	171.29	10,591.36	-9,664.52	-1,460.42	9,774.18	1.45	-1.40	-0.37
20,389.86	88.60	171.24	10,591.68	-9,677.93	-1,458.36	9,787.11	0.82	-0.74	-0.37
20,403.43	88.45	171.22	10,592.03	-9,691.33	-1,456.29	9,800.05	1.12	-1.11	-0.15
20,417.00	88.24	171.13	10,592.42	-9,704.74	-1,454.21	9,812.97	1.68	-1.55	-0.66
20,430.57	87.94	171.06	10,592.87	-9,718.14	-1,452.11	9,825.89	2.27	-2.21	-0.52
20,444.14	87.62	171.13	10,593.40	-9,731.53	-1,450.01	9,838.81	2.41	-2.36	0.52
20,457.71	87.26	171.19	10,594.00	-9,744.93	-1,447.93	9,851.73	2.69	-2.65	0.44
20,471.29	86.85	171.31	10,594.70	-9,758.33	-1,445.87	9,864.66	3.15	-3.02	0.88
20,484.86	86.44	171.43	10,595.49	-9,771.73	-1,443.84	9,877.59	3.15	-3.02	0.88
20,498.43	86.04	171.56	10,596.38	-9,785.12	-1,441.83	9,890.51	3.10	-2.95	0.96
20,512.00	85.67	171.69	10,597.37	-9,798.51	-1,439.86	9,903.45	2.89	-2.73	0.96
20,525.57	85.34	171.83	10,598.43	-9,811.90	-1,437.92	9,916.38	2.64	-2.43	1.03
20,539.14	85.05	171.96	10,599.57	-9,825.28	-1,436.02	9,929.32	2.34	-2.14	0.96
20,552.71	84.78	172.10	10,600.77	-9,838.67	-1,434.14	9,942.26	2.24	-1.99	1.03
20,566.29	84.53	172.24	10,602.03	-9,852.06	-1,432.30	9,955.22	2.11	-1.84	1.03
20,579.86	84.30	172.40	10,603.35	-9,865.45	-1,430.49	9,968.17	2.06	-1.69	1.18
20,593.43	84.09	172.55	10,604.73	-9,878.83	-1,428.73	9,981.12	1.90	-1.55	1.11
20,607.00	83.92	172.72	10,606.14	-9,892.22	-1,427.00	9,994.08	1.77	-1.25	1.25
20,620.43	83.80	172.91	10,607.58	-9,905.47	-1,425.33	10,006.92	1.67	-0.89	1.41
20,633.86	83.70	173.10	10,609.04	-9,918.72	-1,423.70	10,019.77	1.59	-0.74	1.41
20,647.29	83.62	173.31	10,610.53	-9,931.97	-1,422.12	10,032.62	1.66	-0.60	1.56
20,660.71	83.54	173.51	10,612.03	-9,945.22	-1,420.59	10,045.48	1.60	-0.60	1.49
20,674.14	83.46	173.71	10,613.55	-9,958.48	-1,419.11	10,058.36	1.60	-0.60	1.49
20,687.57	83.36	173.91	10,615.09	-9,971.74	-1,417.67	10,071.25	1.66	-0.74	1.49
20,701.00	83.22	174.10	10,616.66	-9,985.01	-1,416.27	10,084.14	1.75	-1.04	1.41
20,714.00	83.03	174.28	10,618.21	-9,997.85	-1,414.97	10,096.63	2.01	-1.46	1.38
20,727.00	82.81	174.44	10,619.82	-10,010.69	-1,413.70	10,109.13	2.09	-1.69	1.23
20,740.00	82.58	174.59	10,621.47	-10,023.52	-1,412.47	10,121.62	2.11	-1.77	1.15
20,753.00	82.35	174.73	10,623.17	-10,036.35	-1,411.27	10,134.12	2.07	-1.77	1.08
20,766.00	82.14	174.86	10,624.93	-10,049.18	-1,410.10	10,146.62	1.90	-1.62	1.00
Final Phoenix MWD Survey									
20,836.11	82.14	174.86	10,634.52	-10,118.35	-1,403.88	10,214.02	0.00	0.00	0.00
LTP: 20836.11' MD									



Phoenix
Survey Report



Company:	OXY USA INC.	Local Co-ordinate Reference:	Well Lost Tank 30-19 Federal Com 21H
Project:	Lea County, NM (NAD83-NME)	TVD Reference:	RKB @ 3642.50usft (Citadel 2)
Site:	Lost Tank 30-19	MD Reference:	RKB @ 3642.50usft (Citadel 2)
Well:	Lost Tank 30-19 Federal Com 21H	North Reference:	Grid
Wellbore:	OH / 74692	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)
20,884.00	82.14	174.86	10,641.06	-10,165.60	-1,399.63	10,260.07	0.00	0.00	0.00
Projection to TD									

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
147.00	147.00	-0.15	0.12	First Phoenix MWD Survey	
9,924.75	9,713.94	252.68	-1,392.83	FTP: 9924.75' MD, 6.31° Inc	
15,636.57	10,550.92	-4,930.59	-1,589.60	SL: 15636.57' MD	
20,766.00	10,624.93	-10,049.18	-1,410.10	Final Phoenix MWD Survey	
20,836.11	10,634.52	-10,118.35	-1,403.88	LTP: 20836.11' MD	
20,884.00	10,641.06	-10,165.60	-1,399.63	Projection to TD	

C-105 Submit Electronically Via OCD Permitting	State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION	Revised July 9, 2024
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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: LOST TANK 30-19 FEDERAL COM 21H	Property Code: 322423
Mineral Owner: ☐ State ☐ Fee ☐ Tribal ☒ Federal	API Number: 30-0 25-47942
Pool Name: Bilbrey Basin; Bone Spring, South	Pool Code: 97366

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:	C	19	22S	32E		368	N	2023	W	LEA
BHL	4	30	22S	32E		53	S	560	W	LEA

Section 3 – Completion Information

Date T.D. Reached 06/08/24	Total Measured Depth of Well 20884'MD	Acid Volume (bbls)	☒ Directional Survey Submitted ☐ Deviation Survey Submitted
Date Rig Released 06/09/24	Plug-Back Measured Depth 20839'MD	Completion Fluid Used (bbls) 357638 BBL	Were Logs Ran (Y/N) Y
Completion Date 07/18/24	Perforations (MD and TVD) 10650'-20759'MD/10351'-10624'TVD	Completion Proppant Used (lbs) 25347491#	List Type of Logs Ran if applicable: CBL

Section 4 – Action IDs for Submissions and Order Numbers

Surface Casing Action ID: 374365	UIC Permit/Order (UIC wells only) ☐ Yes ☒ No, Order No.
Intermediate 1 Casing Action ID: 374365	NOI Recomplete Action ID (if applicable):
Intermediate 2 Casing Action ID: NA	NOI Plugback Action ID (if applicable):
Production Casing Action ID: 374365	Cement Squeeze Action ID (if applicable):
Tubing Action ID: 395296	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 07/22/24	Production Method Gas lift	Well Status Producing	Gas – Oil Ratio 1152
Date of Test 09/30/24	Choke Size	Flowing Tubing Pressure	Casing Pressure 218
24 hr Oil (bbls) 1398	24 hr Gas (MCF) 1611	24 hr Water (bbls) 2208	Oil Gravity - API
Disposition of Gas: sold			

Section 6 – Pits

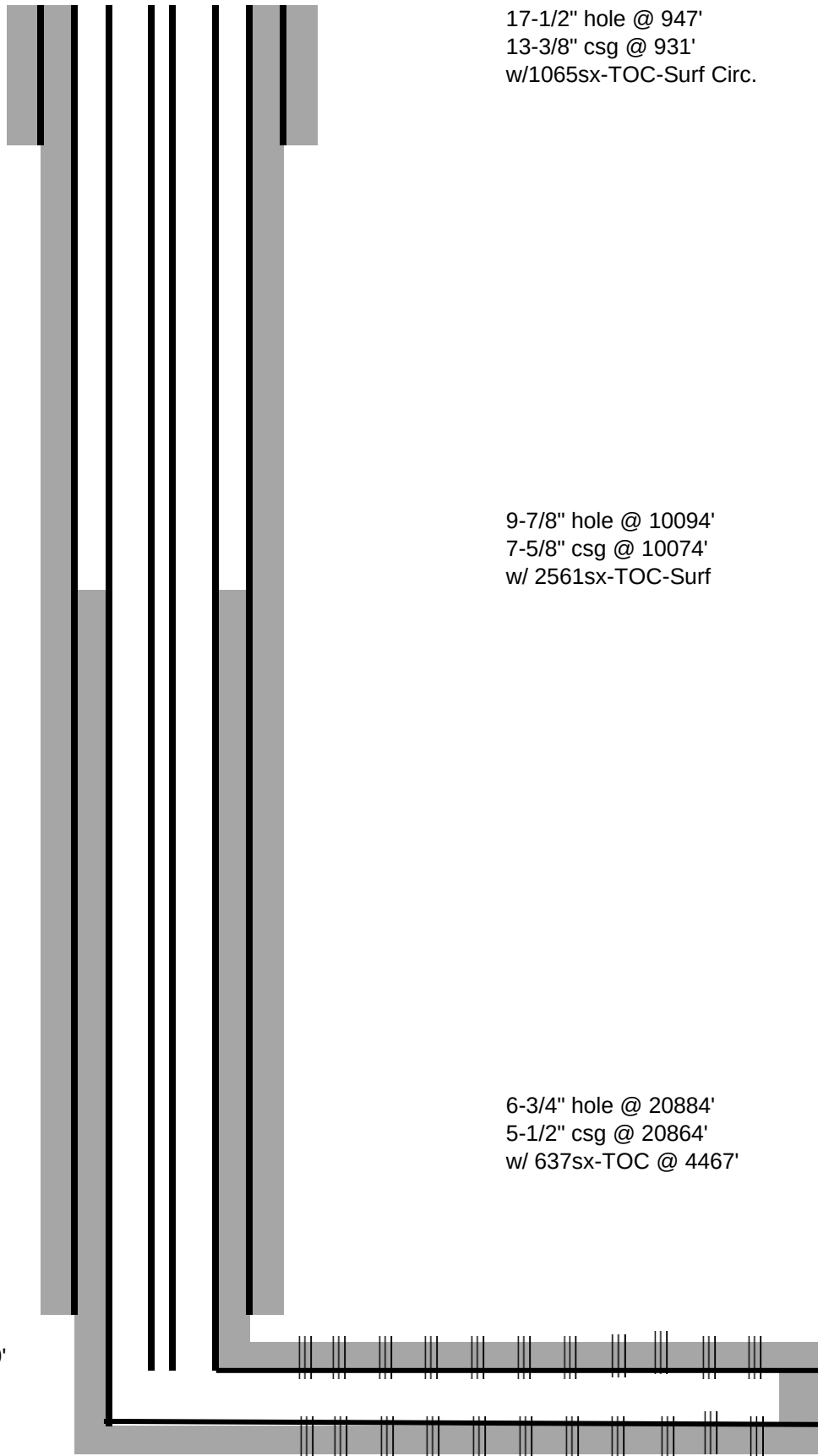
☐ A temporary pit was used at the well. If so, attach a plat with the location of the temporary pit.
☒ A Closed Loop System was used.
☐ If an on-site burial was used at the well, report the exact location of the on-site burial: LAT: _____ LONG: _____

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 10/23/24

South Formations				North Formations			
Formation/Zone	MD	TVD	W/O/G	Formation/Zone	MD	TVD	W/O/G
T. Anhy	856	856	W	T. San Jose			
T. Salt	1151	1151		T. Nacimiento			
B. Salt	2870	2870		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	4632	4630	o/g				
T. Bell Canyon	4662	4660	o/g				
T. Cherry Canyon	5553	5514	o/g				
T. Brushy Canyon	6784	6674	o/g				
T. Bone Springs	8636	8444	o/g				
T. 1st BS Sand	9707	9498	o/g				
T. 2nd BS Carbonate							
T. 2nd BS Sand	10381	10150	o/g				
T. 3rd BS Carbonate							
T. 3rd BS Sand							

OXY USA Inc.
Lost Tank 30-19 Federal Com 21H
API No. 30-025-47942



17-1/2" hole @ 947'
13-3/8" csg @ 931'
w/1065sx-TOC-Surf Circ.

9-7/8" hole @ 10094'
7-5/8" csg @ 10074'
w/ 2561sx-TOC-Surf

6-3/4" hole @ 20884'
5-1/2" csg @ 20864'
w/ 637sx-TOC @ 4467'

2-3/8" tbg & gas lift @ 10559'

Perfs @ 10650-20759'

TD- 20884'M 10641'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 395306

ACKNOWLEDGMENTS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 395306
	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.

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

CONDITIONS

Action 395306

CONDITIONS

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 395306
	Action Type: [C-104] Completion Packet - New Well (C-104NW)

CONDITIONS

Created By	Condition	Condition Date
plmartinez	File 3160-4 Completion Report and 3160-5 Completion Sundry within 10 days of BLM approval.	1/13/2025