30-015-37897

OCCIDENTAL PERMIAN LTD.

Lost Tank Delaware, West
Eddy County, NM
Lost Tank 10 Federal #3
VH - Job #32K111057

Survey: Actual

SDI Standard Survey Report

27 January, 2011

This survey is correct to the best of my knowledge and is supported by actual field data.

R L Martin

Notarized this date 27th of January, 2011.

Carrie Reed

Notary Signature
County of Midland
State of Texas

NOTARY PUBLIC STATE OF TEXAS
CARRIE REED
My Commission Expires
October 4, 2011

Scientific Drilling International, Inc.

SDI Standard Survey Report

Company:	OCCIDENTAL PERMIAN LTD.	**Local Co-ordinate Reference:**	Well Lost Tank 10 Federal #3
Project:	Lost Tank Delaware, West	**TVD Reference:**	WELL @ 0.0usft (Original Well Elev)
Site:	Eddy County, NM	**MD Reference:**	WELL @ 0 0usft (Original Well Elev)
Well:	Lost Tank 10 Federal #3	**North Reference:**	Grid
Wellbore:	VH - Job #32K111057	**Survey Calculation Method:**	Minimum Curvature
Design:	VH - Job #32K111057	**Database:**	EDM-Regulatory

Project Lost Tank Delaware, West

Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site Eddy County, NM

Site Position:		**Northing:**	515,232.05 usft	**Latitude:**	32° 24' 54.705 N
From:	Lat/Long	**Easting:**	676,005.63 usft	**Longitude:**	103° 45' 46.737 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16"	**Grid Convergence:**	0.31 °

Well Lost Tank 10 Federal #3, Directional (Baker Inteq)

Well Position	**+N/-S**	0 0 usft	**Northing:**	515,302 75 usft	**Latitude:**	32° 24' 55.401 N
	+E/-W	0.0 usft	**Easting:**	676,076.33 usft	**Longitude:**	103° 45' 45 908 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	0.0 usft

Wellbore VH - Job #32K111057

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2010	1/22/2011	7.79	60.35	48,812

Design VH - Job #32K111057

Audit Notes:

Version:	1.0	**Phase:**	ACTUAL	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0 0	222 43

Survey Program **Date** 1/27/2011

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
84.1	646 0	Actual (VH - Job #32K111057)	Keeper	Keeper Surface Readout

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	True Vertical Depth	North/South (usft)	East/West (usft)	Closure Azimuth (°)	Closure Distance (usft)
0 0	0 00	0 00	0.0	0 0	0 0	0 00	0 0
84 1	0 10	188 36	84.1	-0 1	0.0	188 36	0 1
113.9	0 07	204 48	113.9	-0.1	0 0	190.84	0 1
203 4	0 08	159.69	203 4	-0 2	0 0	185.87	0.2
287.8	0.13	275.98	287 8	-0.3	-0 1	200 00	0 3
377 3	0.23	275 59	377.3	-0.2	-0 4	237.50	0.4
466 9	0 27	296 18	466 9	-0 1	-0.7	260 13	0.8
556.4	0 25	302 01	556 4	0.1	-1.1	273.47	1 1
646.0	0.29	341.15	646 0	0 4	-1 3	286 03	1 4

Scientific Drilling
Directional Drilling Operations

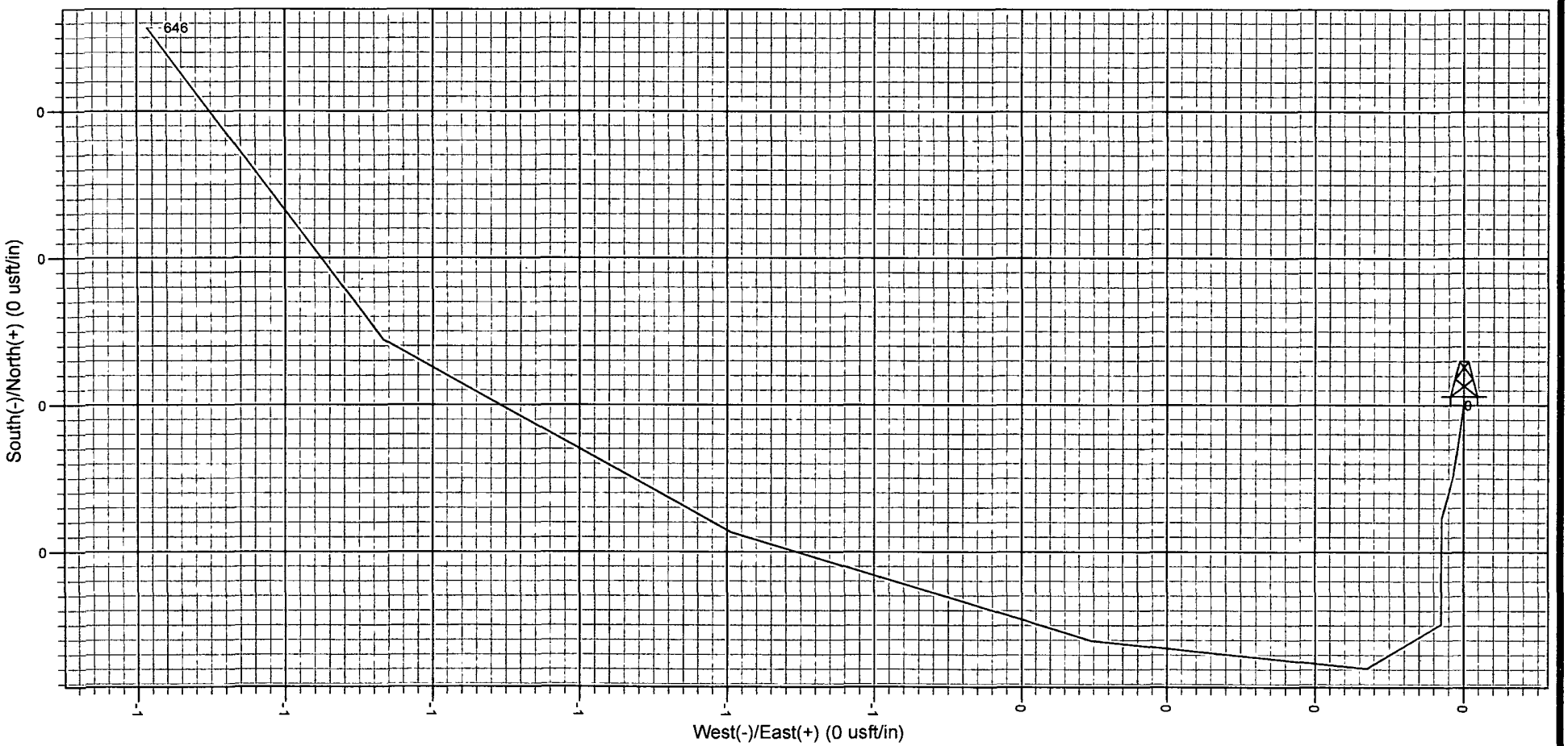
Project: Lost Tank Delaware, West
Eddy County, NM
Well: Lost Tank 10 Federal #3
Wellbore: VH - Job #32K111057
Design: VH - Job #32K111057

Azimuths to Grid North
True North: -0.31°
Magnetic North: 7.49°

Magnetic Field
Strength: 48811.7snT
Dip Angle: 60.35°
Date: 1/22/2011
Model: BGGM2010

WELL DETAILS: Lost Tank 10 Federal #3
WELL @ 0.0usft (Original Well Elev)
Ground Level: 0.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	515302.75	676076.33	32° 24' 55.401 N	103° 45' 45.908 W	



PROJECT DETAILS: Lost Tank Delaware, West
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

SITE DETAILS: Eddy County, NM
Site Centre Latitude: 32° 24' 54.705 N
Longitude: 103° 45' 46.737 W
Positional Uncertainity: 0.0
Convergence: 0.31
Local North: Grid

BAKER HUGHES
INTEQ

Reset Form

INTEQ

2105 MARKET STREET
MIDLAND, TX 79703
24 HR (432) 694-9517

STATE OF NEW MEXICO

COUNTY OF EDDY

I, Dominic Tenney , DD Field Service Engineer, certify that I am employed by INTEQ ; did conduct or supervise on the the day(s) of 01/24/2011 through Feb 14, 2011 the taking of a MWD survey from a depth of 751 feet to a depth of 9,158 feet; that the data is true, correct, complete and within the limitations of the tool as set forth by Baker Hughes INTEQ ; that I am authorized and qualified to make this report ; that this survey was conducted at the request of: OXY Permian for the Lost Tank 10 FED #3 Well, API No. 30-015-37897 in EDDY County, New Mexico;and that I have reviewed this report and find that it conforms to the principles and procedures as set forth by INTEQ.

Dominic Tenney

Field Service Engineer: Dominic Tenney

OXY Permian

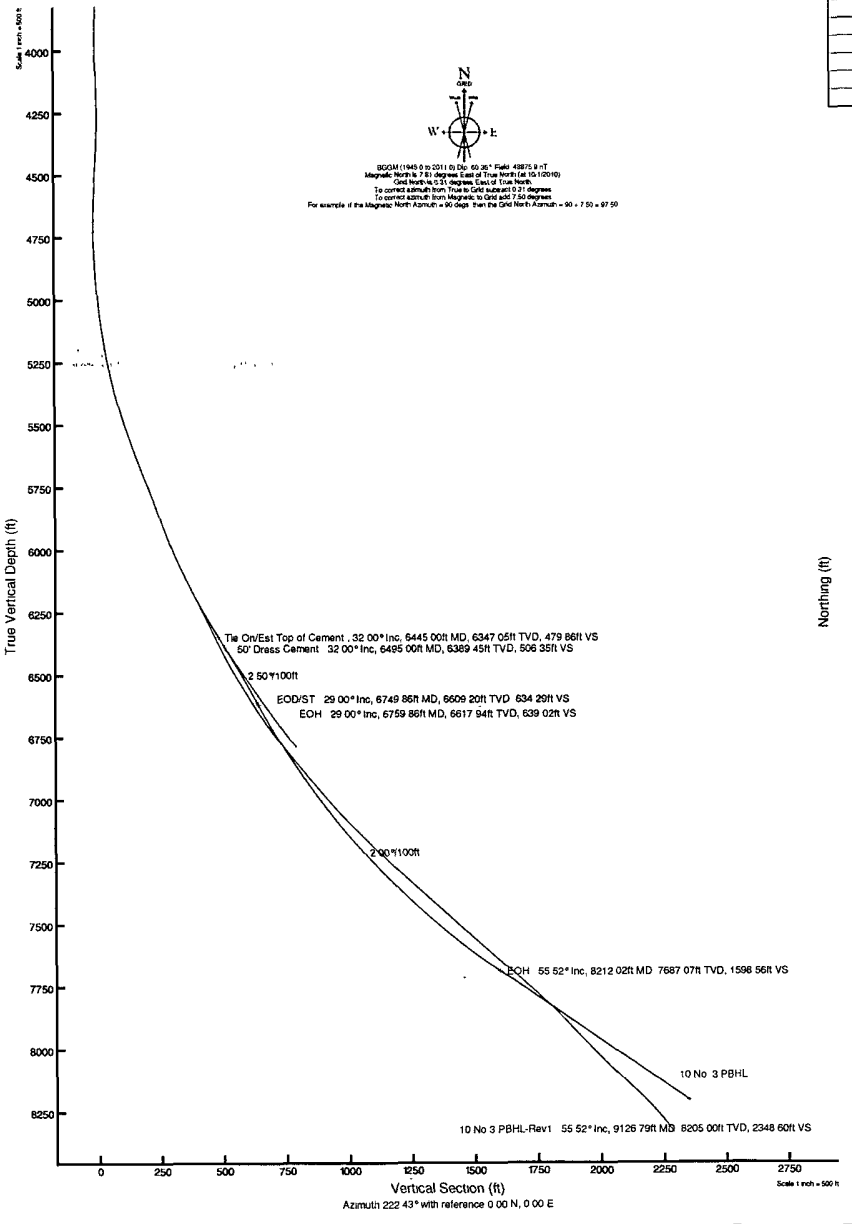
Location Eddy County, NM_1
Field Lost Tank
Facility Lost Tank Pad B

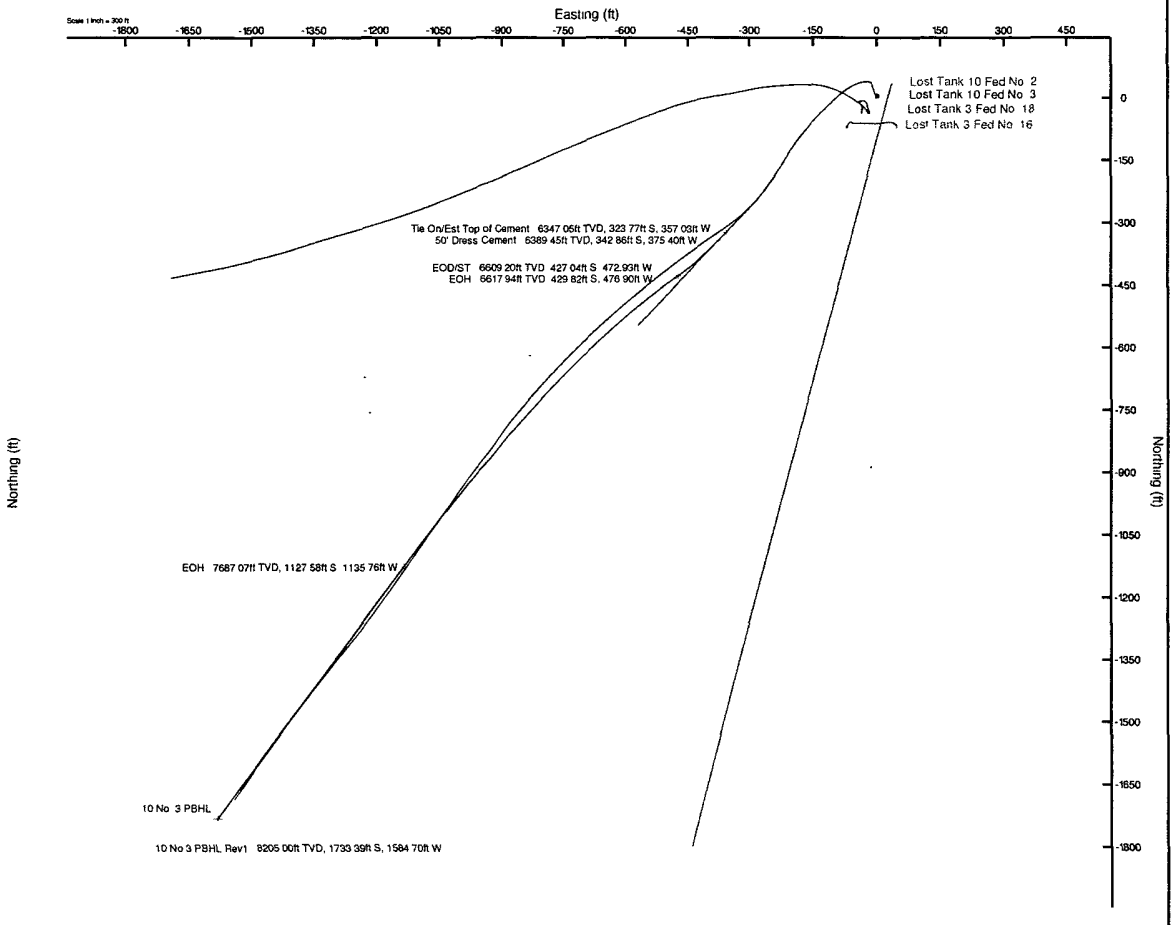
Slot Lost Tank 10 Fed No 3
Well 10 Fed No 3
Wellbore 10 Fed No 3 PWB ST01

BAKER HUGHES INTEQ

Well Profile Data

Design Comment	MD (ft)	Inc (°)	Az (°)	TVD (ft)	Local N (ft)	Local E (ft)	DLS (°/100ft)	VS (ft)
Tie On/Est Top of Cement	6445 00	32 000	223 900	6347 05	-323 77	-357 03	0 00	479 86
50' Dress Cement	6495 00	32 000	223 900	6389.45	-342 86	-375 40	0 00	506 35
EOD/ST	6749 86	29 000	235 000	6609 20	-427 04	-472 93	2 50	634 29
EOH	6759 86	29 000	235 000	6617 94	-429 82	-476 90	0 00	639 02
EOH	8212 02	55.515	216 541	7687 07	-1127 58	-1135 76	2 00	1598 56
10 No 3 PBHL-Rev1	9126 79	55 515	216 541	8205 00	-1733 39	-1584 70	0 00	2348 60





Plot reference wellpath is Plan #2 ST01	
True vertical depths are referenced to Rig on Lost Tank 10 Fed No 3 (KB)	Grid System NAD27 / TM New Mexico State Planes, Eastern Zone (3001), US feet
Measured depths are referenced to Rig on Lost Tank 10 Fed No 3 (KB)	North Reference Grid north
Rig on Lost Tank 10 Fed No 3 (KB) to Mean Sea Level 3510 1 feet	Scale True distance
Mean Sea Level to Mud line (Facility Lost Tank Pad B) 0 feet	Depths are in feet
Coordinates are In feet referenced to Slot	Created by gomeoscr on 2/6/2011

Actual Wellpath Report

10 Fed No.3 AWB ST01

BAKER HUGHES INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	**OXY Permian**	Slot	**Lost Tank 10 Fed No. 3**
Area	**Eddy County, NM**	Well	**10 Fed No. 3**
Field	**Lost Tank**	Wellbore	**10 Fed No.3 AWB ST01**
Facility	**Lost Tank Pad B**	Sidetrack from	**10 Fed No.3 AWB at 6175.00 MD**

REPORT SETUP INFORMATION			
Projection System	**NAD27 / TM New Mexico State Planes, Eastern Zone (3001), US feet**	Software System	**WellArchitect® 2.0**
North Reference	**Grid**	User	**Gentbry**
Scale	**0.999945**	Report Generated	**2/14/2011 at 7:49:45 AM**
Convergence at slot	**0.31° East**	Database/Source file	**WA_Midland/10_Fed_No.3_AWB_ST01.xml**

WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	**East[ft]**	**Easting[USft]**	**Northing[USft]**	**Latitude**	**Longitude**
Slot Location	70.70	70.70	**676076.30**	**515302.70**	32°24'55.400"N	103°45'45.908"W
Facility Reference Pt			**676005.60**	**515232.00**	32°24'54.704"N	103°45'46.737"W
Field Reference Pt			**677702.20**	**514850.60**	32°24'50.840"N	103°45'26.970"W

WELLPATH DATUM

Calculation method	**Minimum curvature**	Rig on Lost Tank 10 Fed No. 3 (KB) to Facility Vertical Datum	**3510.10ft**
Horizontal Reference Pt	**Slot**	Rig on Lost Tank 10 Fed No. 3 (KB) to Mean Sea Level	**3510.10ft**
Vertical Reference Pt	**Rig on Lost Tank 10 Fed No. 3 (KB)**	Facility Vertical Datum to Mud Line (Facility)	**0.00ft**
MD Reference Pt	**Rig on Lost Tank 10 Fed No. 3 (KB)**	Section Origin	**N 0.00, E 0.00 ft**
Field Vertical Reference	**Mean Sea Level**	Section Azimuth	**222.46°**

Actual Wellpath Report

10 Fed No.3 AWB ST01

BAKER HUGHES INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	**OXY Permian**	Slot	**Lost Tank 10 Fed No. 3**
Area	**Eddy County, NM**	Well	**10 Fed No. 3**
Field	**Lost Tank**	Wellbore	**10 Fed No.3 AWB ST01**
Facility	**Lost Tank Pad B**	Sidetrack from	**10 Fed No.3 AWB** at **6175.00 MD**

WELLPATH DATA (75 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
0.00†	0.000	188.360	0.00	0.00	0.00	0.00	676076.30	515302.70	32°24'55.400"N	103°45'45.908"W	0.00	
16.50	0.000	188.360	16.50	0.00	0.00	0.00	676076.30	515302.70	32°24'55.400"N	103°45'45.908"W	0.00	
84.10	0.100	188.360	84.10	0.05	-0.06	-0.01	676076.29	515302.64	32°24'55.400"N	103°45'45.908"W	0.15	
113.90	0.070	204.480	113.90	0.09	-0.10	-0.02	676076.28	515302.60	32°24'55.399"N	103°45'45.908"W	0.13	
203.40	0.080	159.690	203.40	0.17	-0.21	-0.02	676076.28	515302.49	32°24'55.398"N	103°45'45.909"W	0.06	
287.80	0.130	275.980	287.80	0.25	-0.25	-0.10	676076.20	515302.45	32°24'55.398"N	103°45'45.909"W	0.21	
377.30	0.230	275.590	377.30	0.42	-0.23	-0.38	676075.92	515302.47	32°24'55.398"N	103°45'45.913"W	0.11	
466.90	0.270	296.180	466.90	0.59	-0.12	-0.74	676075.56	515302.58	32°24'55.399"N	103°45'45.917"W	0.11	
556.40	0.250	302.010	556.40	0.68	0.08	-1.10	676075.20	515302.78	32°24'55.401"N	103°45'45.921"W	0.04	
646.00	0.290	341.150	646.00	0.61	0.40	-1.34	676074.96	515303.10	32°24'55.404"N	103°45'45.924"W	0.21	
751.00	0.300	4.600	751.00	0.26	0.92	-1.40	676074.90	515303.62	32°24'55.410"N	103°45'45.925"W	0.11	
886.00	0.600	11.000	885.99	-0.62	1.97	-1.24	676075.06	515304.67	32°24'55.420"N	103°45'45.923"W	0.22	
1021.00	0.700	16.500	1020.98	-1.96	3.46	-0.87	676075.43	515306.16	32°24'55.435"N	103°45'45.918"W	0.09	
1157.00	0.600	7.400	1156.97	-3.29	4.96	-0.54	676075.76	515307.66	32°24'55.449"N	103°45'45.914"W	0.11	
1292.00	0.800	7.600	1291.96	-4.64	6.59	-0.33	676075.97	515309.29	32°24'55.466"N	103°45'45.912"W	0.15	
1427.00	0.100	333.900	1426.96	-5.46	7.63	-0.25	676076.05	515310.33	32°24'55.476"N	103°45'45.911"W	0.53	
1562.00	0.300	264.500	1561.96	-5.24	7.71	-0.66	676075.64	515310.40	32°24'55.477"N	103°45'45.915"W	0.21	
1697.00	0.200	246.700	1696.96	-4.76	7.58	-1.22	676075.08	515310.28	32°24'55.475"N	103°45'45.922"W	0.09	
1833.00	0.100	315.500	1832.96	-4.55	7.57	-1.53	676074.77	515310.27	32°24'55.475"N	103°45'45.926"W	0.14	
1968.00	0.100	266.100	1967.96	-4.47	7.64	-1.73	676074.57	515310.34	32°24'55.476"N	103°45'45.928"W	0.06	
2103.00	0.100	341.100	2102.96	-4.45	7.75	-1.88	676074.42	515310.45	32°24'55.477"N	103°45'45.930"W	0.09	
2238.00	0.100	57.500	2237.96	-4.62	7.92	-1.82	676074.48	515310.62	32°24'55.479"N	103°45'45.929"W	0.09	
2373.00	0.600	66.000	2372.95	-5.38	8.27	-1.08	676075.22	515310.97	32°24'55.482"N	103°45'45.920"W	0.37	
2509.00	0.700	69.500	2508.94	-6.77	8.85	0.35	676076.65	515311.55	32°24'55.488"N	103°45'45.904"W	0.08	
2644.00	0.900	110.400	2643.93	-7.90	8.77	2.12	676078.42	515311.47	32°24'55.487"N	103°45'45.883"W	0.44	
2779.00	1.100	135.100	2778.91	-8.24	7.49	4.03	676080.33	515310.19	32°24'55.474"N	103°45'45.861"W	0.35	
2915.00	0.900	165.000	2914.89	-7.61	5.53	5.23	676081.53	515308.23	32°24'55.455"N	103°45'45.847"W	0.41	
3050.00	0.600	242.300	3049.88	-6.37	4.18	4.87	676081.17	515306.88	32°24'55.441"N	103°45'45.851"W	0.72	
3186.00	0.300	228.800	3185.88	-5.35	3.61	3.98	676080.28	515306.31	32°24'55.436"N	103°45'45.862"W	0.23	
3321.00	0.800	153.700	3320.87	-4.66	2.53	4.13	676080.43	515305.23	32°24'55.425"N	103°45'45.860"W	0.58	
3456.00	0.900	240.100	3455.86	-3.30	1.16	3.63	676079.93	515303.86	32°24'55.412"N	103°45'45.866"W	0.86	
3591.00	0.800	350.300	3590.85	-2.87	1.56	2.55	676078.85	515304.26	32°24'55.416"N	103°45'45.878"W	1.03	
3727.00	1.100	19.400	3726.84	-4.66	3.73	2.82	676079.12	515306.43	32°24'55.437"N	103°45'45.875"W	0.41	
3862.00	1.100	67.000	3861.81	-7.03	5.46	4.44	676080.74	515308.16	32°24'55.454"N	103°45'45.856"W	0.66	
3997.00	0.700	182.900	3996.81	-7.57	5.14	5.60	676081.90	515307.84	32°24'55.451"N	103°45'45.843"W	1.14	
4072.00	1.400	222.400	4071.79	-6.30	4.01	4.96	676081.25	515306.70	32°24'55.440"N	103°45'45.850"W	1.29	
4189.00	1.900	231.400	4188.74	-2.95	1.74	2.48	676078.78	515304.44	32°24'55.417"N	103°45'45.879"W	0.48	
4325.00	3.900	330.900	4324.62	-2.19	4.38	-1.54	676074.76	515307.08	32°24'55.444"N	103°45'45.926"W	3.39	
4460.00	7.000	342.800	4459.00	-7.80	16.25	-6.20	676070.10	515318.95	32°24'55.561"N	103°45'45.980"W	2.43	
4550.00	6.800	342.800	4548.35	-13.26	26.58	-9.40	676066.90	515329.28	32°24'55.664"N	103°45'46.016"W	0.22	
4685.00	2.600	322.800	4682.87	-17.85	36.66	-13.62	676062.68	515339.35	32°24'55.764"N	103°45'46.065"W	3.29	
4821.00	5.100	271.400	4818.59	-14.43	39.26	-21.53	676054.77	515341.96	32°24'55.790"N	103°45'46.157"W	2.96	
4956.00	5.800	258.600	4952.98	-4.98	38.06	-34.22	676042.09	515340.76	32°24'55.779"N	103°45'46.305"W	1.04	
5091.00	8.700	245.900	5086.90	9.90	32.54	-50.23	676026.08	515335.24	32°24'55.725"N	103°45'46.492"W	2.44	
5227.00	11.700	235.800	5220.74	32.77	20.59	-71.03	676005.28	515323.29	32°24'55.608"N	103°45'46.735"W	2.56	

Actual Wellpath Report

10 Fed No.3 AWB ST01

OXY Permian

BAKER HUGHES INTEQ

REFERENCE WELLPATH IDENTIFICATION			
Operator	**OXY Permian**	Slot	**Lost Tank 10 Fed No. 3**
Area	**Eddy County, NM**	Well	**10 Fed No. 3**
Field	**Lost Tank**	Wellbore	**10 Fed No.3 AWB ST01**
Facility	**Lost Tank Pad B**	Sidetrack from	**10 Fed No.3 AWB at 6175.00 MD**

WELLPATH DATA (75 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [srv ft]	Grid North [srv ft]	Latitude	Longitude	DLS [°/100ft]	Comments
5362.00	14.300	225.900	5352.29	62.74	1.28	-94.33	675981.98	515303.98	32°24'55.418"N	103°45'47.008"W	2.53	
5497.00	17.900	225.200	5481.97	100.11	-24.95	-121.03	675955.28	515277.76	32°24'55.160"N	103°45'47.322"W	2.67	
5632.00	20.800	221.400	5609.34	144.81	-57.55	-151.61	675924.70	515245.15	32°24'54.839"N	103°45'47.680"W	2.34	
5769.00	22.600	216.900	5736.63	195.34	-96.86	-183.51	675892.80	515205.85	32°24'54.452"N	103°45'48.055"W	1.79	
5904.00	19.300	209.000	5862.72	242.88	-137.13	-209.91	675866.40	515165.58	32°24'54.054"N	103°45'48.365"W	3.21	
6040.00	23.100	213.300	5989.50	291.10	-179.10	-235.47	675840.85	515123.61	32°24'53.640"N	103°45'48.666"W	3.02	
6175.00	26.700	216.800	6111.93	347.44	-225.54	-268.19	675808.13	515077.17	32°24'53.183"N	103°45'49.051"W	2.88	
6309.00	26.700	226.400	6231.70	407.46	-270.43	-308.04	675768.28	515032.29	32°24'52.741"N	103°45'49.518"W	3.22	
6444.00	27.000	235.600	6352.20	467.59	-308.67	-355.31	675721.01	514994.04	32°24'52.365"N	103°45'50.072"W	3.08	
6580.00	30.200	236.000	6471.59	530.92	-345.25	-409.15	675667.17	514957.47	32°24'52.006"N	103°45'50.702"W	2.36	
6715.00	32.400	233.000	6586.94	599.51	-386.01	-466.20	675610.13	514916.71	32°24'51.605"N	103°45'51.370"W	2.00	
6850.00	35.100	231.700	6699.18	673.39	-431.85	-525.55	675550.78	514870.88	32°24'51.155"N	103°45'52.066"W	2.07	
6986.00	38.800	230.000	6807.85	754.25	-483.49	-588.90	675487.43	514819.24	32°24'50.647"N	103°45'52.808"W	2.82	
7121.00	40.200	227.500	6912.03	839.59	-540.11	-653.43	675422.90	514762.62	32°24'50.090"N	103°45'53.564"W	1.57	
7256.00	41.300	225.300	7014.30	927.50	-600.89	-717.23	675359.11	514701.84	32°24'49.492"N	103°45'54.312"W	1.34	
7392.00	44.900	222.700	7113.59	1020.36	-667.76	-781.70	675294.64	514634.98	32°24'48.834"N	103°45'55.068"W	2.95	
7527.00	45.700	220.600	7208.56	1116.30	-739.46	-845.46	675230.89	514563.28	32°24'48.128"N	103°45'55.816"W	1.25	
7662.00	47.700	216.600	7301.16	1214.28	-816.25	-906.68	675169.67	514486.50	32°24'47.371"N	103°45'56.535"W	2.62	
7798.00	49.000	216.400	7391.54	1315.34	-897.94	-967.13	675109.23	514404.82	32°24'46.566"N	103°45'57.245"W	0.96	
7933.00	48.300	214.300	7480.73	1415.90	-980.58	-1025.76	675050.60	514322.18	32°24'45.751"N	103°45'57.934"W	1.28	
8068.00	48.800	214.800	7570.10	1516.12	-1063.92	-1083.15	674993.21	514238.84	32°24'44.930"N	103°45'58.609"W	0.46	
8203.00	48.100	215.200	7659.64	1616.29	-1146.68	-1141.10	674935.27	514156.09	32°24'44.114"N	103°45'59.290"W	0.56	
8293.00	48.500	215.200	7719.51	1682.95	-1201.59	-1179.83	674896.54	514101.18	32°24'43.573"N	103°45'59.745"W	0.44	
8427.00	47.300	218.900	7809.36	1781.89	-1280.93	-1239.69	674836.68	514021.84	32°24'42.791"N	103°46'00.448"W	2.24	
8562.00	42.900	218.000	7904.63	1877.26	-1355.78	-1299.16	674777.21	513947.00	32°24'42.053"N	103°46'01.146"W	3.29	
8698.00	44.400	217.800	8003.04	1970.84	-1429.86	-1356.82	674719.55	513872.93	32°24'41.323"N	103°46'01.824"W	1.11	
8834.00	46.400	216.000	8098.53	2067.20	-1507.30	-1414.94	674661.44	513795.49	32°24'40.560"N	103°46'02.506"W	1.75	
8970.00	46.400	216.000	8192.32	2165.06	-1586.98	-1472.83	674603.56	513715.81	32°24'39.775"N	103°46'03.186"W	0.00	
9113.00	37.500	215.000	8298.56	2259.86	-1664.68	-1528 34	674548.05	513638.12	32°24'39.009"N	103°46'03.839"W	6.24	
9158.00	37.500	215.000	8334.26	2287.02	-1687.12	-1544.05	674532.34	513615.68	32°24'38.787"N	103°46'04.023"W	0.00	Projection to Bit

WELLPATH COMPOSITION Ref Wellbore: 10 Fed No.3 AWB ST01 Ref Wellpath: 10 Fed No.3 AWB ST01

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
16.50	646.00	Generic gyro - northseeking (Standard)	Gyro	10 Fed No.3 AWB
646.00	6175.00	NaviTrak (Standard)	MWD	10 Fed No.3 AWB
6175.00	9158.00	NaviTrak (Standard)	MWD	10 Fed No.3 AWB ST01