



Project: PRD NM DIRECTIONAL PLANS (NAD 1983)
Site: RED TANK 30-31 STATE
Well: RED TANK 30-31 STATE 14H
Wellbore: WB00
Design: Permitting Plan

WELL DETAILS: RED TANK 30-31 STATE 14H

+N/-S
0.00

+E/-W
0.00

Northing
498931.08

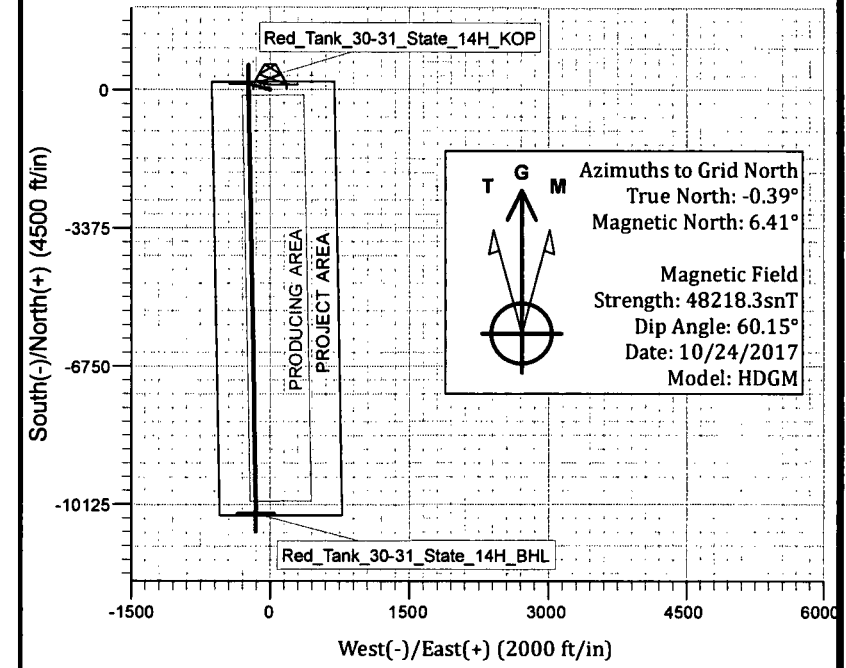
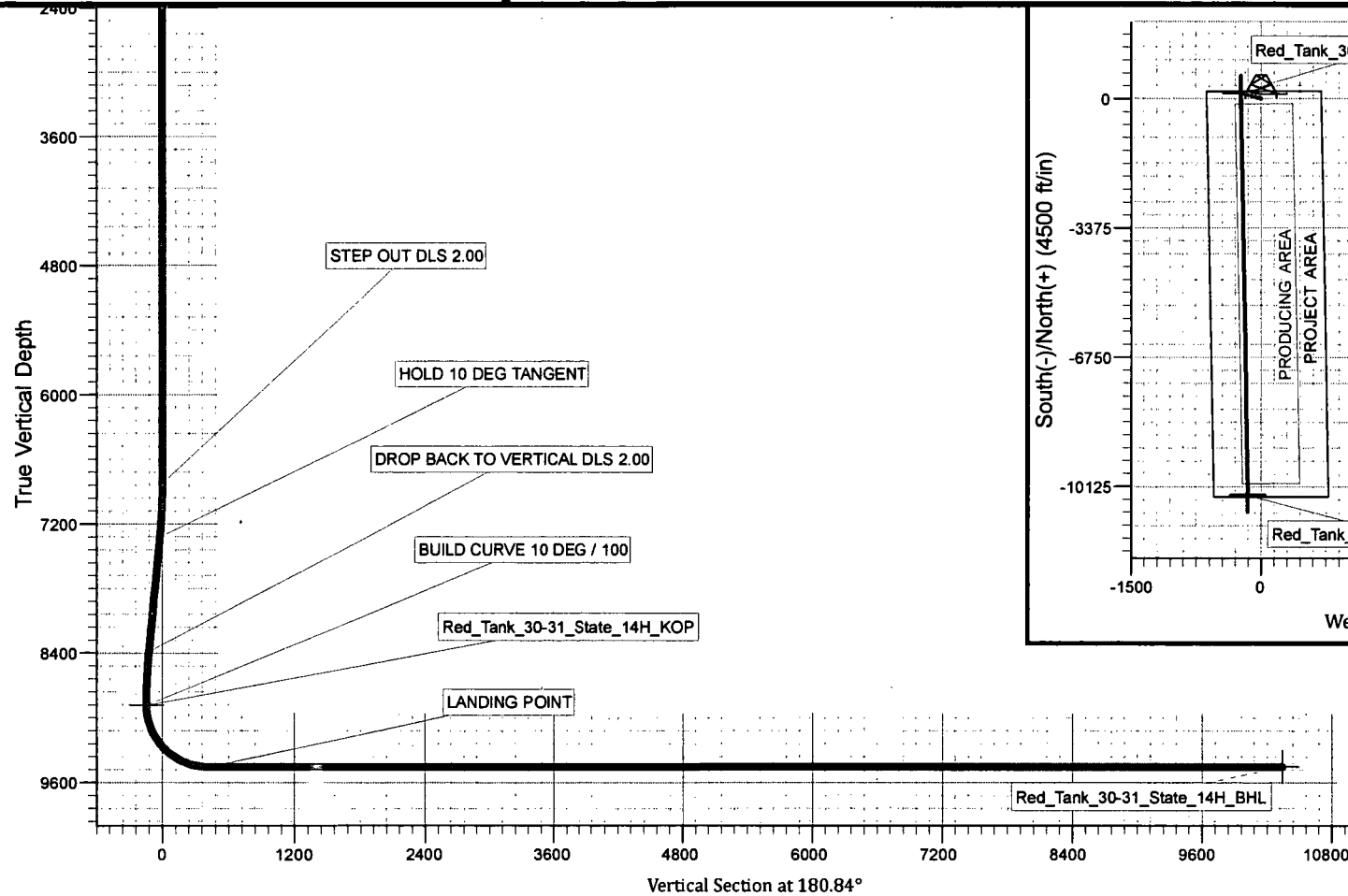
Ground Level: 3662.50

Easting
766095.00

Latitude
32° 22' 10.307471 N

Longitude
103° 36' 19.277314 W

Datum @ 3689.00ft



PROJECT DETAILS: NM DIRECTIONAL PLANS (NAD 1983)	
Geodetic System:	US State Plane 1983
Datum:	North American Datum 1983
Ellipsoid:	GRS 1980
Zone:	New Mexico Eastern Zone
System Datum:	Mean Sea Level

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
2	6825.00	0.00	0.00	6825.00	0.00	0.00	0.00	0.00	0.00		STEP OUT DLS 2.00
3	7324.95	10.00	302.76	7322.42	23.55	-36.59	2.00	302.76	-23.01		HOLD 10 DEG TANGENT
4	8407.60	10.00	302.76	8388.62	125.27	-194.68	0.00	0.00	-122.42		DROP BACK TO VERTICAL DLS 2.00
5	8907.55	0.00	179.56	8886.04	148.82	-231.27	2.00	180.00	-145.43		BUILD CURVE 10 DEG / 100
6	9807.55	90.00	179.56	9459.00	-424.13	-226.88	10.00	179.56	427.39		LANDING POINT
7	19725.07	90.00	179.56	9459.00	-10341.35	-150.89	0.00	0.00	10342.45		TD at 19725.07

Oxy Planning Report

Database:	HOPSPP	Local Co-ordinate Reference:	Well RED TANK 30-31 STATE 14H
Company:	ENGINEERING DESIGNS	TVD Reference:	Datum @ 3689.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	Datum @ 3689.00ft
Site:	RED TANK 30-31 STATE	North Reference:	Grid
Well:	RED TANK 30-31 STATE 14H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB00		
Design:	Permitting Plan		

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

Site		RED TANK 30-31 STATE			
Site Position:		Northing:	498,933.39 usft	Latitude:	32° 22' 10.302032 N
From:	Map	Easting:	766,514.99 usft	Longitude:	103° 36' 14.380295 W
Position Uncertainty:	50.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.39 °

Well	RED TANK 30-31 STATE 14H					
Well Position	+N/-S	-2.31 ft	Northing:	498,931.08 usft	Latitude:	32° 22' 10.307471 N
	+E/-W	-420.00 ft	Easting:	766,095.00 usft	Longitude:	103° 36' 19.277314 W
Position Uncertainty		2.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	3,662.50 ft

Wellbore	WB00				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	HDGM	10/24/2017	6.80	60.15	48,218

Design	Permitting Plan			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.00	0.00	0.00	180.84

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
6,825.00	0.00	0.00	6,825.00	0.00	0.00	0.00	0.00	0.00	0.00	
7,324.95	10.00	302.76	7,322.42	23.55	-36.59	2.00	2.00	0.00	302.76	
8,407.60	10.00	302.76	8,388.62	125.27	-194.68	0.00	0.00	0.00	0.00	
8,907.55	0.00	179.56	8,886.04	148.82	-231.27	2.00	-2.00	0.00	180.00	Red_Tank_30-31_S
9,807.55	90.00	179.56	9,459.00	-424.13	-226.88	10.00	10.00	0.00	179.56	
19,725.07	90.00	179.56	9,459.00	-10,341.35	-150.89	0.00	0.00	0.00	0.00	Red_Tank_30-31_S

Oxy Planning Report

Database: HOPSP
Company: ENGINEERING DESIGNS
Project: PRD NM DIRECTIONAL PLANS (NAD 1983)
Site: RED TANK 30-31 STATE
Well: RED TANK 30-31 STATE 14H
Wellbore: WB00
Design: Permitting Plan

Local Co-ordinate Reference: Well RED TANK 30-31 STATE 14H
TVD Reference: Datum @ 3689.00ft
MD Reference: Datum @ 3689.00ft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned Survey

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

Oxy Planning Report

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Site: RED TANK 30-31 STATE
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Wellbore: WB00
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Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00
5,600.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,700.00	0.00	0.00	0.00	0.00	0.00	0.00
5,800.00	0.00	0.00	5,800.00	0.00	0.00	0.00	0.00	0.00	0.00
5,900.00	0.00	0.00	5,900.00	0.00	0.00	0.00	0.00	0.00	0.00
6,000.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00	0.00
6,100.00	0.00	0.00	6,100.00	0.00	0.00	0.00	0.00	0.00	0.00
6,200.00	0.00	0.00	6,200.00	0.00	0.00	0.00	0.00	0.00	0.00
6,300.00	0.00	0.00	6,300.00	0.00	0.00	0.00	0.00	0.00	0.00
6,400.00	0.00	0.00	6,400.00	0.00	0.00	0.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,500.00	0.00	0.00	0.00	0.00	0.00	0.00
6,600.00	0.00	0.00	6,600.00	0.00	0.00	0.00	0.00	0.00	0.00
6,700.00	0.00	0.00	6,700.00	0.00	0.00	0.00	0.00	0.00	0.00
6,800.00	0.00	0.00	6,800.00	0.00	0.00	0.00	0.00	0.00	0.00
6,825.00	0.00	0.00	6,825.00	0.00	0.00	0.00	0.00	0.00	0.00
6,900.00	1.50	302.76	6,899.99	0.53	-0.83	-0.52	2.00	2.00	0.00
7,000.00	3.50	302.76	6,999.89	2.89	-4.49	-2.83	2.00	2.00	0.00
7,100.00	5.50	302.76	7,099.58	7.14	-11.09	-6.97	2.00	2.00	0.00
7,200.00	7.50	302.76	7,198.93	13.26	-20.61	-12.96	2.00	2.00	0.00
7,300.00	9.50	302.76	7,297.83	21.26	-33.04	-20.78	2.00	2.00	0.00
7,324.95	10.00	302.76	7,322.42	23.55	-36.59	-23.01	2.00	2.00	0.00
7,400.00	10.00	302.76	7,396.33	30.60	-47.55	-29.90	0.00	0.00	0.00
7,500.00	10.00	302.76	7,494.81	39.99	-62.15	-39.08	0.00	0.00	0.00
7,600.00	10.00	302.76	7,593.29	49.39	-76.75	-48.26	0.00	0.00	0.00
7,700.00	10.00	302.76	7,691.77	58.78	-91.36	-57.45	0.00	0.00	0.00
7,800.00	10.00	302.76	7,790.25	68.18	-105.96	-66.63	0.00	0.00	0.00
7,900.00	10.00	302.76	7,888.73	77.58	-120.56	-75.81	0.00	0.00	0.00
8,000.00	10.00	302.76	7,987.21	86.97	-135.16	-84.99	0.00	0.00	0.00
8,100.00	10.00	302.76	8,085.69	96.37	-149.76	-94.17	0.00	0.00	0.00
8,200.00	10.00	302.76	8,184.17	105.76	-164.36	-103.35	0.00	0.00	0.00
8,300.00	10.00	302.76	8,282.66	115.16	-178.96	-112.54	0.00	0.00	0.00
8,400.00	10.00	302.76	8,381.14	124.55	-193.57	-121.72	0.00	0.00	0.00
8,407.60	10.00	302.76	8,388.62	125.27	-194.68	-122.42	0.00	0.00	0.00
8,500.00	8.15	302.76	8,479.86	133.15	-206.93	-130.12	2.00	-2.00	0.00
8,600.00	6.15	302.76	8,579.08	139.89	-217.40	-136.70	2.00	-2.00	0.00
8,700.00	4.15	302.76	8,678.67	144.75	-224.95	-141.45	2.00	-2.00	0.00
8,800.00	2.15	302.76	8,778.51	147.72	-229.57	-144.36	2.00	-2.00	0.00
8,900.00	0.15	302.76	8,878.49	148.81	-231.26	-145.42	2.00	-2.00	0.00
8,907.55	0.00	179.56	8,886.04	148.82	-231.27	-145.43	2.00	-2.00	0.00
9,000.00	9.24	179.56	8,978.09	141.37	-231.21	-137.99	10.00	10.00	0.00
9,100.00	19.24	179.56	9,074.89	116.80	-231.02	-113.42	10.00	10.00	0.00
9,200.00	29.24	179.56	9,165.95	75.79	-230.71	-72.42	10.00	10.00	0.00
9,300.00	39.24	179.56	9,248.51	19.59	-230.28	-16.23	10.00	10.00	0.00
9,400.00	49.24	179.56	9,320.06	-50.09	-229.74	53.44	10.00	10.00	0.00
9,500.00	59.24	179.56	9,378.42	-131.14	-229.12	134.47	10.00	10.00	0.00
9,600.00	69.24	179.56	9,421.82	-221.09	-228.43	224.40	10.00	10.00	0.00
9,700.00	79.24	179.56	9,448.93	-317.20	-227.70	320.49	10.00	10.00	0.00
9,800.00	89.24	179.56	9,458.95	-416.57	-226.94	419.84	10.00	10.00	0.00
9,807.55	90.00	179.56	9,459.00	-424.13	-226.88	427.39	10.00	10.00	0.00
9,900.00	90.00	179.56	9,459.00	-516.57	-226.17	519.81	0.00	0.00	0.00
10,000.00	90.00	179.56	9,459.00	-616.57	-225.40	619.79	0.00	0.00	0.00
10,100.00	90.00	179.56	9,459.00	-716.56	-224.64	719.76	0.00	0.00	0.00
10,200.00	90.00	179.56	9,459.00	-816.56	-223.87	819.74	0.00	0.00	0.00

Oxy Planning Report

Database:	HOPSP	Local Co-ordinate Reference:	Well RED TANK 30-31 STATE 14H
Company:	ENGINEERING DESIGNS	TVD Reference:	Datum @ 3689.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	Datum @ 3689.00ft
Site:	RED TANK 30-31 STATE	North Reference:	Grid
Well:	RED TANK 30-31 STATE 14H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB00		
Design:	Permitting Plan		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,300.00	90.00	179.56	9,459.00	-916.56	-223.10	919.71	0.00	0.00	0.00
10,400.00	90.00	179.56	9,459.00	-1,016.55	-222.34	1,019.69	0.00	0.00	0.00
10,500.00	90.00	179.56	9,459.00	-1,116.55	-221.57	1,119.66	0.00	0.00	0.00
10,600.00	90.00	179.56	9,459.00	-1,216.55	-220.81	1,219.64	0.00	0.00	0.00
10,700.00	90.00	179.56	9,459.00	-1,316.55	-220.04	1,319.61	0.00	0.00	0.00
10,800.00	90.00	179.56	9,459.00	-1,416.54	-219.27	1,419.59	0.00	0.00	0.00
10,900.00	90.00	179.56	9,459.00	-1,516.54	-218.51	1,519.57	0.00	0.00	0.00
11,000.00	90.00	179.56	9,459.00	-1,616.54	-217.74	1,619.54	0.00	0.00	0.00
11,100.00	90.00	179.56	9,459.00	-1,716.53	-216.97	1,719.52	0.00	0.00	0.00
11,200.00	90.00	179.56	9,459.00	-1,816.53	-216.21	1,819.49	0.00	0.00	0.00
11,300.00	90.00	179.56	9,459.00	-1,916.53	-215.44	1,919.47	0.00	0.00	0.00
11,400.00	90.00	179.56	9,459.00	-2,016.52	-214.68	2,019.44	0.00	0.00	0.00
11,500.00	90.00	179.56	9,459.00	-2,116.52	-213.91	2,119.42	0.00	0.00	0.00
11,600.00	90.00	179.56	9,459.00	-2,216.52	-213.14	2,219.39	0.00	0.00	0.00
11,700.00	90.00	179.56	9,459.00	-2,316.52	-212.38	2,319.37	0.00	0.00	0.00
11,800.00	90.00	179.56	9,459.00	-2,416.51	-211.61	2,419.34	0.00	0.00	0.00
11,900.00	90.00	179.56	9,459.00	-2,516.51	-210.84	2,519.32	0.00	0.00	0.00
12,000.00	90.00	179.56	9,459.00	-2,616.51	-210.08	2,619.29	0.00	0.00	0.00
12,100.00	90.00	179.56	9,459.00	-2,716.50	-209.31	2,719.27	0.00	0.00	0.00
12,200.00	90.00	179.56	9,459.00	-2,816.50	-208.55	2,819.24	0.00	0.00	0.00
12,300.00	90.00	179.56	9,459.00	-2,916.50	-207.78	2,919.22	0.00	0.00	0.00
12,400.00	90.00	179.56	9,459.00	-3,016.50	-207.01	3,019.19	0.00	0.00	0.00
12,500.00	90.00	179.56	9,459.00	-3,116.49	-206.25	3,119.17	0.00	0.00	0.00
12,600.00	90.00	179.56	9,459.00	-3,216.49	-205.48	3,219.14	0.00	0.00	0.00
12,700.00	90.00	179.56	9,459.00	-3,316.49	-204.71	3,319.12	0.00	0.00	0.00
12,800.00	90.00	179.56	9,459.00	-3,416.48	-203.95	3,419.10	0.00	0.00	0.00
12,900.00	90.00	179.56	9,459.00	-3,516.48	-203.18	3,519.07	0.00	0.00	0.00
13,000.00	90.00	179.56	9,459.00	-3,616.48	-202.42	3,619.05	0.00	0.00	0.00
13,100.00	90.00	179.56	9,459.00	-3,716.47	-201.65	3,719.02	0.00	0.00	0.00
13,200.00	90.00	179.56	9,459.00	-3,816.47	-200.88	3,819.00	0.00	0.00	0.00
13,300.00	90.00	179.56	9,459.00	-3,916.47	-200.12	3,918.97	0.00	0.00	0.00
13,400.00	90.00	179.56	9,459.00	-4,016.47	-199.35	4,018.95	0.00	0.00	0.00
13,500.00	90.00	179.56	9,459.00	-4,116.46	-198.58	4,118.92	0.00	0.00	0.00
13,600.00	90.00	179.56	9,459.00	-4,216.46	-197.82	4,218.90	0.00	0.00	0.00
13,700.00	90.00	179.56	9,459.00	-4,316.46	-197.05	4,318.87	0.00	0.00	0.00
13,800.00	90.00	179.56	9,459.00	-4,416.45	-196.29	4,418.85	0.00	0.00	0.00
13,900.00	90.00	179.56	9,459.00	-4,516.45	-195.52	4,518.82	0.00	0.00	0.00
14,000.00	90.00	179.56	9,459.00	-4,616.45	-194.75	4,618.80	0.00	0.00	0.00
14,100.00	90.00	179.56	9,459.00	-4,716.45	-193.99	4,718.77	0.00	0.00	0.00
14,200.00	90.00	179.56	9,459.00	-4,816.44	-193.22	4,818.75	0.00	0.00	0.00
14,300.00	90.00	179.56	9,459.00	-4,916.44	-192.45	4,918.72	0.00	0.00	0.00
14,400.00	90.00	179.56	9,459.00	-5,016.44	-191.69	5,018.70	0.00	0.00	0.00
14,500.00	90.00	179.56	9,459.00	-5,116.43	-190.92	5,118.67	0.00	0.00	0.00
14,600.00	90.00	179.56	9,459.00	-5,216.43	-190.16	5,218.65	0.00	0.00	0.00
14,700.00	90.00	179.56	9,459.00	-5,316.43	-189.39	5,318.62	0.00	0.00	0.00
14,800.00	90.00	179.56	9,459.00	-5,416.42	-188.62	5,418.60	0.00	0.00	0.00
14,900.00	90.00	179.56	9,459.00	-5,516.42	-187.86	5,518.58	0.00	0.00	0.00
15,000.00	90.00	179.56	9,459.00	-5,616.42	-187.09	5,618.55	0.00	0.00	0.00
15,100.00	90.00	179.56	9,459.00	-5,716.42	-186.32	5,718.53	0.00	0.00	0.00
15,200.00	90.00	179.56	9,459.00	-5,816.41	-185.56	5,818.50	0.00	0.00	0.00
15,300.00	90.00	179.56	9,459.00	-5,916.41	-184.79	5,918.48	0.00	0.00	0.00
15,400.00	90.00	179.56	9,459.00	-6,016.41	-184.03	6,018.45	0.00	0.00	0.00
15,500.00	90.00	179.56	9,459.00	-6,116.40	-183.26	6,118.43	0.00	0.00	0.00
15,600.00	90.00	179.56	9,459.00	-6,216.40	-182.49	6,218.40	0.00	0.00	0.00

Oxy Planning Report

Database:	HOPSPP	Local Co-ordinate Reference:	Well RED TANK 30-31 STATE 14H
Company:	ENGINEERING DESIGNS	TVD Reference:	Datum @ 3689.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	Datum @ 3689.00ft
Site:	RED TANK 30-31 STATE	North Reference:	Grid
Well:	RED TANK 30-31 STATE 14H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB00		
Design:	Permitting Plan		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
15,700.00	90.00	179.56	9,459.00	-6,316.40	-181.73	6,318.38	0.00	0.00	0.00
15,800.00	90.00	179.56	9,459.00	-6,416.40	-180.96	6,418.35	0.00	0.00	0.00
15,900.00	90.00	179.56	9,459.00	-6,516.39	-180.19	6,518.33	0.00	0.00	0.00
16,000.00	90.00	179.56	9,459.00	-6,616.39	-179.43	6,618.30	0.00	0.00	0.00
16,100.00	90.00	179.56	9,459.00	-6,716.39	-178.66	6,718.28	0.00	0.00	0.00
16,200.00	90.00	179.56	9,459.00	-6,816.38	-177.90	6,818.25	0.00	0.00	0.00
16,300.00	90.00	179.56	9,459.00	-6,916.38	-177.13	6,918.23	0.00	0.00	0.00
16,400.00	90.00	179.56	9,459.00	-7,016.38	-176.36	7,018.20	0.00	0.00	0.00
16,500.00	90.00	179.56	9,459.00	-7,116.37	-175.60	7,118.18	0.00	0.00	0.00
16,600.00	90.00	179.56	9,459.00	-7,216.37	-174.83	7,218.15	0.00	0.00	0.00
16,700.00	90.00	179.56	9,459.00	-7,316.37	-174.06	7,318.13	0.00	0.00	0.00
16,800.00	90.00	179.56	9,459.00	-7,416.37	-173.30	7,418.10	0.00	0.00	0.00
16,900.00	90.00	179.56	9,459.00	-7,516.36	-172.53	7,518.08	0.00	0.00	0.00
17,000.00	90.00	179.56	9,459.00	-7,616.36	-171.77	7,618.06	0.00	0.00	0.00
17,100.00	90.00	179.56	9,459.00	-7,716.36	-171.00	7,718.03	0.00	0.00	0.00
17,200.00	90.00	179.56	9,459.00	-7,816.35	-170.23	7,818.01	0.00	0.00	0.00
17,300.00	90.00	179.56	9,459.00	-7,916.35	-169.47	7,917.98	0.00	0.00	0.00
17,400.00	90.00	179.56	9,459.00	-8,016.35	-168.70	8,017.96	0.00	0.00	0.00
17,500.00	90.00	179.56	9,459.00	-8,116.35	-167.93	8,117.93	0.00	0.00	0.00
17,600.00	90.00	179.56	9,459.00	-8,216.34	-167.17	8,217.91	0.00	0.00	0.00
17,700.00	90.00	179.56	9,459.00	-8,316.34	-166.40	8,317.88	0.00	0.00	0.00
17,800.00	90.00	179.56	9,459.00	-8,416.34	-165.64	8,417.86	0.00	0.00	0.00
17,900.00	90.00	179.56	9,459.00	-8,516.33	-164.87	8,517.83	0.00	0.00	0.00
18,000.00	90.00	179.56	9,459.00	-8,616.33	-164.10	8,617.81	0.00	0.00	0.00
18,100.00	90.00	179.56	9,459.00	-8,716.33	-163.34	8,717.78	0.00	0.00	0.00
18,200.00	90.00	179.56	9,459.00	-8,816.33	-162.57	8,817.76	0.00	0.00	0.00
18,300.00	90.00	179.56	9,459.00	-8,916.32	-161.80	8,917.73	0.00	0.00	0.00
18,400.00	90.00	179.56	9,459.00	-9,016.32	-161.04	9,017.71	0.00	0.00	0.00
18,500.00	90.00	179.56	9,459.00	-9,116.32	-160.27	9,117.68	0.00	0.00	0.00
18,600.00	90.00	179.56	9,459.00	-9,216.31	-159.51	9,217.66	0.00	0.00	0.00
18,700.00	90.00	179.56	9,459.00	-9,316.31	-158.74	9,317.63	0.00	0.00	0.00
18,800.00	90.00	179.56	9,459.00	-9,416.31	-157.97	9,417.61	0.00	0.00	0.00
18,900.00	90.00	179.56	9,459.00	-9,516.30	-157.21	9,517.59	0.00	0.00	0.00
19,000.00	90.00	179.56	9,459.00	-9,616.30	-156.44	9,617.56	0.00	0.00	0.00
19,100.00	90.00	179.56	9,459.00	-9,716.30	-155.67	9,717.54	0.00	0.00	0.00
19,200.00	90.00	179.56	9,459.00	-9,816.30	-154.91	9,817.51	0.00	0.00	0.00
19,300.00	90.00	179.56	9,459.00	-9,916.29	-154.14	9,917.49	0.00	0.00	0.00
19,400.00	90.00	179.56	9,459.00	-10,016.29	-153.38	10,017.46	0.00	0.00	0.00
19,500.00	90.00	179.56	9,459.00	-10,116.29	-152.61	10,117.44	0.00	0.00	0.00
19,600.00	90.00	179.56	9,459.00	-10,216.28	-151.84	10,217.41	0.00	0.00	0.00
19,700.00	90.00	179.56	9,459.00	-10,316.28	-151.08	10,317.39	0.00	0.00	0.00
19,725.07	90.00	179.56	9,459.00	-10,341.35	-150.89	10,342.45	0.00	0.00	0.00

Oxy

Planning Report

Database:	HOPSPP	Local Co-ordinate Reference:	Well RED TANK 30-31 STATE 14H
Company:	ENGINEERING DESIGNS	TVD Reference:	Datum @ 3689.00ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	Datum @ 3689.00ft
Site:	RED TANK 30-31 STATE	North Reference:	Grid
Well:	RED TANK 30-31 STATE 14H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB00		
Design:	Permitting Plan		

Design Targets

Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)		
- Shape									
Red_Tank_30-31_Stat	0.00	0.00	8,886.04	148.82	-231.27	499,079.89	765,863.74	32° 22' 11.795511 N	103° 36' 21.961880
- plan hits target center									
- Point									
Red_Tank_30-31_Stat	0.00	0.00	9,459.00	-10,341.35	-150.89	488,590.09	765,944.12	32° 20' 27.992919 N	103° 36' 21.855557
- plan hits target center									
- Point									

Plan Annotations

Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
6,825.00	6,825.00	0.00	0.00	STEP OUT DLS 2.00
7,324.95	7,322.42	23.55	-36.59	HOLD 10 DEG TANGENT
8,407.60	8,388.62	125.27	-194.68	DROP BACK TO VERTICAL DLS 2.00
8,907.55	8,886.04	148.82	-231.27	BUILD CURVE 10 DEG / 100
9,807.55	9,459.00	-424.13	-226.88	LANDING POINT
19,725.07	9,459.00	-10,341.35	-150.89	TD at 19725.07