

Oxy Planning Report

30-025-44062

Database:	HOPSP	Local Co-ordinate Reference:	Well RED TANK 30-31 STATE 24H
Company:	ENGINEERING DESIGNS	TVD Reference:	Datum @ 3684.90ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	Datum @ 3684.90ft
Site:	RED TANK 30-31 STATE	North Reference:	Grid
Well:	RED TANK 30-31 STATE 24H	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:	0.00 ft	Slot Radius:	13.200 in	Grid Convergence:	0.39 °

Well		RED TANK 30-31 STATE 24H				
Well Position	+N/-S	0.00 ft	Northing:	498,933.39 usft	Latitude:	32° 22' 10.302032 N
	+E/-W	0.00 ft	Easting:	766,514.99 usft	Longitude:	103° 36' 14.380295 W
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	3,658.40 ft

Wellbore	WB00				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	9/13/2017	6.82	60.17	48,233

Design	Permitting Plan			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	180.07

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	
8,807.50	0.00	0.00	8,807.50	0.00	0.00	0.00	0.00	0.00	0.00	
9,307.26	10.00	328.63	9,304.73	37.13	-22.63	2.00	2.00	0.00	328.63	
9,815.05	10.00	328.63	9,804.81	112.38	-68.51	0.00	0.00	0.00	0.00	
10,314.81	0.00	179.56	10,302.04	149.51	-91.14	2.00	-2.00	0.00	180.00	RED_TANK_30-31_
11,214.81	90.00	179.56	10,875.00	-423.44	-86.75	10.00	10.00	0.00	179.56	
20,972.16	90.00	179.56	10,875.00	-10,180.49	-11.96	0.00	0.00	0.00	0.00	RED_TANK_30-31_

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Database:	HOPSPP	Local Co-ordinate Reference:	Well RED TANK 30-31 STATE 24H
Company:	ENGINEERING DESIGNS	TVD Reference:	Datum @ 3684.90ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	Datum @ 3684.90ft
Site:	RED TANK 30-31 STATE	North Reference:	Grid
Well:	RED TANK 30-31 STATE 24H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB00		
Design:	Permitting Plan		

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

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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
6,900.00	0.00	0.00	6,900.00	0.00	0.00	0.00	0.00	0.00	0.00
7,000.00	0.00	0.00	7,000.00	0.00	0.00	0.00	0.00	0.00	0.00
7,100.00	0.00	0.00	7,100.00	0.00	0.00	0.00	0.00	0.00	0.00
7,200.00	0.00	0.00	7,200.00	0.00	0.00	0.00	0.00	0.00	0.00
7,300.00	0.00	0.00	7,300.00	0.00	0.00	0.00	0.00	0.00	0.00
7,400.00	0.00	0.00	7,400.00	0.00	0.00	0.00	0.00	0.00	0.00
7,500.00	0.00	0.00	7,500.00	0.00	0.00	0.00	0.00	0.00	0.00
7,600.00	0.00	0.00	7,600.00	0.00	0.00	0.00	0.00	0.00	0.00
7,700.00	0.00	0.00	7,700.00	0.00	0.00	0.00	0.00	0.00	0.00
7,800.00	0.00	0.00	7,800.00	0.00	0.00	0.00	0.00	0.00	0.00
7,900.00	0.00	0.00	7,900.00	0.00	0.00	0.00	0.00	0.00	0.00
8,000.00	0.00	0.00	8,000.00	0.00	0.00	0.00	0.00	0.00	0.00
8,100.00	0.00	0.00	8,100.00	0.00	0.00	0.00	0.00	0.00	0.00
8,200.00	0.00	0.00	8,200.00	0.00	0.00	0.00	0.00	0.00	0.00
8,300.00	0.00	0.00	8,300.00	0.00	0.00	0.00	0.00	0.00	0.00
8,400.00	0.00	0.00	8,400.00	0.00	0.00	0.00	0.00	0.00	0.00
8,500.00	0.00	0.00	8,500.00	0.00	0.00	0.00	0.00	0.00	0.00
8,600.00	0.00	0.00	8,600.00	0.00	0.00	0.00	0.00	0.00	0.00
8,700.00	0.00	0.00	8,700.00	0.00	0.00	0.00	0.00	0.00	0.00
8,800.00	0.00	0.00	8,800.00	0.00	0.00	0.00	0.00	0.00	0.00
8,807.50	0.00	0.00	8,807.50	0.00	0.00	0.00	0.00	0.00	0.00
8,900.00	1.85	328.63	8,899.98	1.27	-0.78	-1.27	2.00	2.00	0.00
9,000.00	3.85	328.63	8,999.86	5.52	-3.37	-5.52	2.00	2.00	0.00
9,100.00	5.85	328.63	9,099.49	12.74	-7.77	-12.73	2.00	2.00	0.00
9,200.00	7.85	328.63	9,198.77	22.92	-13.97	-22.91	2.00	2.00	0.00
9,300.00	9.85	328.63	9,297.58	36.06	-21.98	-36.03	2.00	2.00	0.00
9,307.26	10.00	328.63	9,304.73	37.13	-22.63	-37.10	2.00	2.00	0.00
9,400.00	10.00	328.63	9,396.06	50.87	-31.01	-50.83	0.00	0.00	0.00
9,500.00	10.00	328.63	9,494.54	65.69	-40.05	-65.64	0.00	0.00	0.00
9,600.00	10.00	328.63	9,593.03	80.51	-49.08	-80.45	0.00	0.00	0.00
9,700.00	10.00	328.63	9,691.51	95.33	-58.12	-95.26	0.00	0.00	0.00
9,800.00	10.00	328.63	9,789.99	110.15	-67.15	-110.07	0.00	0.00	0.00
9,815.05	10.00	328.63	9,804.81	112.38	-68.51	-112.30	0.00	0.00	0.00
9,900.00	8.30	328.63	9,888.68	123.91	-75.54	-123.82	2.00	-2.00	0.00
10,000.00	6.30	328.63	9,987.86	134.75	-82.15	-134.65	2.00	-2.00	0.00
10,100.00	4.30	328.63	10,087.43	142.63	-86.95	-142.53	2.00	-2.00	0.00
10,200.00	2.30	328.63	10,187.26	147.54	-89.95	-147.44	2.00	-2.00	0.00
10,300.00	0.30	328.63	10,287.23	149.47	-91.12	-149.37	2.00	-2.00	0.00
10,314.81	0.00	179.56	10,302.04	149.51	-91.14	-149.40	2.00	-2.00	0.00

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 24H
Wellbore: WB00
Design: Permitting Plan

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well RED TANK 30-31 STATE 24H
 Datum @ 3684.90ft
 Datum @ 3684.90ft
 Grid
 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)
10,400.00	8.52	179.56	10,386.92	143.18	-91.09	-143.08	10.00	10.00	0.00
10,500.00	18.52	179.56	10,484.02	119.84	-90.92	-119.73	10.00	10.00	0.00
10,600.00	28.52	179.56	10,575.60	79.98	-90.61	-79.88	10.00	10.00	0.00
10,700.00	38.52	179.56	10,658.86	24.83	-90.19	-24.73	10.00	10.00	0.00
10,800.00	48.52	179.56	10,731.29	-43.94	-89.66	44.04	10.00	10.00	0.00
10,900.00	58.52	179.56	10,790.67	-124.24	-89.04	124.34	10.00	10.00	0.00
11,000.00	68.52	179.56	10,835.20	-213.63	-88.36	213.73	10.00	10.00	0.00
11,100.00	78.52	179.56	10,863.53	-309.40	-87.63	309.50	10.00	10.00	0.00
11,200.00	88.52	179.56	10,874.81	-408.63	-86.86	408.73	10.00	10.00	0.00
11,214.81	90.00	179.56	10,875.00	-423.44	-86.75	423.54	10.00	10.00	0.00
11,300.00	90.00	179.56	10,875.00	-508.62	-86.10	508.72	0.00	0.00	0.00
11,400.00	90.00	179.56	10,875.00	-608.62	-85.33	608.72	0.00	0.00	0.00
11,500.00	90.00	179.56	10,875.00	-708.62	-84.57	708.72	0.00	0.00	0.00
11,600.00	90.00	179.56	10,875.00	-808.62	-83.80	808.71	0.00	0.00	0.00
11,700.00	90.00	179.56	10,875.00	-908.61	-83.03	908.71	0.00	0.00	0.00
11,800.00	90.00	179.56	10,875.00	-1,008.61	-82.27	1,008.71	0.00	0.00	0.00
11,900.00	90.00	179.56	10,875.00	-1,108.61	-81.50	1,108.70	0.00	0.00	0.00
12,000.00	90.00	179.56	10,875.00	-1,208.60	-80.73	1,208.70	0.00	0.00	0.00
12,100.00	90.00	179.56	10,875.00	-1,308.60	-79.97	1,308.69	0.00	0.00	0.00
12,200.00	90.00	179.56	10,875.00	-1,408.60	-79.20	1,408.69	0.00	0.00	0.00
12,300.00	90.00	179.56	10,875.00	-1,508.59	-78.43	1,508.69	0.00	0.00	0.00
12,400.00	90.00	179.56	10,875.00	-1,608.59	-77.67	1,608.68	0.00	0.00	0.00
12,500.00	90.00	179.56	10,875.00	-1,708.59	-76.90	1,708.68	0.00	0.00	0.00
12,600.00	90.00	179.56	10,875.00	-1,808.59	-76.13	1,808.67	0.00	0.00	0.00
12,700.00	90.00	179.56	10,875.00	-1,908.58	-75.37	1,908.67	0.00	0.00	0.00
12,800.00	90.00	179.56	10,875.00	-2,008.58	-74.60	2,008.67	0.00	0.00	0.00
12,900.00	90.00	179.56	10,875.00	-2,108.58	-73.83	2,108.66	0.00	0.00	0.00
13,000.00	90.00	179.56	10,875.00	-2,208.57	-73.07	2,208.66	0.00	0.00	0.00
13,100.00	90.00	179.56	10,875.00	-2,308.57	-72.30	2,308.65	0.00	0.00	0.00
13,200.00	90.00	179.56	10,875.00	-2,408.57	-71.53	2,408.65	0.00	0.00	0.00
13,300.00	90.00	179.56	10,875.00	-2,508.57	-70.77	2,508.65	0.00	0.00	0.00
13,400.00	90.00	179.56	10,875.00	-2,608.56	-70.00	2,608.64	0.00	0.00	0.00
13,500.00	90.00	179.56	10,875.00	-2,708.56	-69.24	2,708.64	0.00	0.00	0.00
13,600.00	90.00	179.56	10,875.00	-2,808.56	-68.47	2,808.64	0.00	0.00	0.00
13,700.00	90.00	179.56	10,875.00	-2,908.55	-67.70	2,908.63	0.00	0.00	0.00
13,800.00	90.00	179.56	10,875.00	-3,008.55	-66.94	3,008.63	0.00	0.00	0.00
13,900.00	90.00	179.56	10,875.00	-3,108.55	-66.17	3,108.62	0.00	0.00	0.00
14,000.00	90.00	179.56	10,875.00	-3,208.54	-65.40	3,208.62	0.00	0.00	0.00
14,100.00	90.00	179.56	10,875.00	-3,308.54	-64.64	3,308.62	0.00	0.00	0.00
14,200.00	90.00	179.56	10,875.00	-3,408.54	-63.87	3,408.61	0.00	0.00	0.00
14,300.00	90.00	179.56	10,875.00	-3,508.54	-63.10	3,508.61	0.00	0.00	0.00
14,400.00	90.00	179.56	10,875.00	-3,608.53	-62.34	3,608.60	0.00	0.00	0.00
14,500.00	90.00	179.56	10,875.00	-3,708.53	-61.57	3,708.60	0.00	0.00	0.00
14,600.00	90.00	179.56	10,875.00	-3,808.53	-60.80	3,808.60	0.00	0.00	0.00
14,700.00	90.00	179.56	10,875.00	-3,908.52	-60.04	3,908.59	0.00	0.00	0.00
14,800.00	90.00	179.56	10,875.00	-4,008.52	-59.27	4,008.59	0.00	0.00	0.00
14,900.00	90.00	179.56	10,875.00	-4,108.52	-58.50	4,108.58	0.00	0.00	0.00
15,000.00	90.00	179.56	10,875.00	-4,208.52	-57.74	4,208.58	0.00	0.00	0.00
15,100.00	90.00	179.56	10,875.00	-4,308.51	-56.97	4,308.58	0.00	0.00	0.00
15,200.00	90.00	179.56	10,875.00	-4,408.51	-56.20	4,408.57	0.00	0.00	0.00
15,300.00	90.00	179.56	10,875.00	-4,508.51	-55.44	4,508.57	0.00	0.00	0.00
15,400.00	90.00	179.56	10,875.00	-4,608.50	-54.67	4,608.56	0.00	0.00	0.00
15,500.00	90.00	179.56	10,875.00	-4,708.50	-53.91	4,708.56	0.00	0.00	0.00
15,600.00	90.00	179.56	10,875.00	-4,808.50	-53.14	4,808.56	0.00	0.00	0.00

Oxy Planning Report

Database: HOPSPP
Company: ENGINEERING DESIGNS
Project: PRD NM DIRECTIONAL PLANS (NAD 1983)
Site: RED TANK 30-31 STATE
Well: RED TANK 30-31 STATE 24H
Wellbore: WB00
Design: Permitting Plan

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well RED TANK 30-31 STATE 24H
 Datum @ 3684.90ft
 Datum @ 3684.90ft
 Grid
 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)
15,700.00	90.00	179.56	10,875.00	-4,908.50	-52.37	4,908.55	0.00	0.00	0.00
15,800.00	90.00	179.56	10,875.00	-5,008.49	-51.61	5,008.55	0.00	0.00	0.00
15,900.00	90.00	179.56	10,875.00	-5,108.49	-50.84	5,108.55	0.00	0.00	0.00
16,000.00	90.00	179.56	10,875.00	-5,208.49	-50.07	5,208.54	0.00	0.00	0.00
16,100.00	90.00	179.56	10,875.00	-5,308.48	-49.31	5,308.54	0.00	0.00	0.00
16,200.00	90.00	179.56	10,875.00	-5,408.48	-48.54	5,408.53	0.00	0.00	0.00
16,300.00	90.00	179.56	10,875.00	-5,508.48	-47.77	5,508.53	0.00	0.00	0.00
16,400.00	90.00	179.56	10,875.00	-5,608.47	-47.01	5,608.53	0.00	0.00	0.00
16,500.00	90.00	179.56	10,875.00	-5,708.47	-46.24	5,708.52	0.00	0.00	0.00
16,600.00	90.00	179.56	10,875.00	-5,808.47	-45.47	5,808.52	0.00	0.00	0.00
16,700.00	90.00	179.56	10,875.00	-5,908.47	-44.71	5,908.51	0.00	0.00	0.00
16,800.00	90.00	179.56	10,875.00	-6,008.46	-43.94	6,008.51	0.00	0.00	0.00
16,900.00	90.00	179.56	10,875.00	-6,108.46	-43.17	6,108.51	0.00	0.00	0.00
17,000.00	90.00	179.56	10,875.00	-6,208.46	-42.41	6,208.50	0.00	0.00	0.00
17,100.00	90.00	179.56	10,875.00	-6,308.45	-41.64	6,308.50	0.00	0.00	0.00
17,200.00	90.00	179.56	10,875.00	-6,408.45	-40.87	6,408.49	0.00	0.00	0.00
17,300.00	90.00	179.56	10,875.00	-6,508.45	-40.11	6,508.49	0.00	0.00	0.00
17,400.00	90.00	179.56	10,875.00	-6,608.45	-39.34	6,608.49	0.00	0.00	0.00
17,500.00	90.00	179.56	10,875.00	-6,708.44	-38.57	6,708.48	0.00	0.00	0.00
17,600.00	90.00	179.56	10,875.00	-6,808.44	-37.81	6,808.48	0.00	0.00	0.00
17,700.00	90.00	179.56	10,875.00	-6,908.44	-37.04	6,908.48	0.00	0.00	0.00
17,800.00	90.00	179.56	10,875.00	-7,008.43	-36.28	7,008.47	0.00	0.00	0.00
17,900.00	90.00	179.56	10,875.00	-7,108.43	-35.51	7,108.47	0.00	0.00	0.00
18,000.00	90.00	179.56	10,875.00	-7,208.43	-34.74	7,208.46	0.00	0.00	0.00
18,100.00	90.00	179.56	10,875.00	-7,308.42	-33.98	7,308.46	0.00	0.00	0.00
18,200.00	90.00	179.56	10,875.00	-7,408.42	-33.21	7,408.46	0.00	0.00	0.00
18,300.00	90.00	179.56	10,875.00	-7,508.42	-32.44	7,508.45	0.00	0.00	0.00
18,400.00	90.00	179.56	10,875.00	-7,608.42	-31.68	7,608.45	0.00	0.00	0.00
18,500.00	90.00	179.56	10,875.00	-7,708.41	-30.91	7,708.44	0.00	0.00	0.00
18,600.00	90.00	179.56	10,875.00	-7,808.41	-30.14	7,808.44	0.00	0.00	0.00
18,700.00	90.00	179.56	10,875.00	-7,908.41	-29.38	7,908.44	0.00	0.00	0.00
18,800.00	90.00	179.56	10,875.00	-8,008.40	-28.61	8,008.43	0.00	0.00	0.00
18,900.00	90.00	179.56	10,875.00	-8,108.40	-27.84	8,108.43	0.00	0.00	0.00
19,000.00	90.00	179.56	10,875.00	-8,208.40	-27.08	8,208.42	0.00	0.00	0.00
19,100.00	90.00	179.56	10,875.00	-8,308.40	-26.31	8,308.42	0.00	0.00	0.00
19,200.00	90.00	179.56	10,875.00	-8,408.39	-25.54	8,408.42	0.00	0.00	0.00
19,300.00	90.00	179.56	10,875.00	-8,508.39	-24.78	8,508.41	0.00	0.00	0.00
19,400.00	90.00	179.56	10,875.00	-8,608.39	-24.01	8,608.41	0.00	0.00	0.00
19,500.00	90.00	179.56	10,875.00	-8,708.38	-23.24	8,708.40	0.00	0.00	0.00
19,600.00	90.00	179.56	10,875.00	-8,808.38	-22.48	8,808.40	0.00	0.00	0.00
19,700.00	90.00	179.56	10,875.00	-8,908.38	-21.71	8,908.40	0.00	0.00	0.00
19,800.00	90.00	179.56	10,875.00	-9,008.37	-20.95	9,008.39	0.00	0.00	0.00
19,900.00	90.00	179.56	10,875.00	-9,108.37	-20.18	9,108.39	0.00	0.00	0.00

Oxy Planning Report

Database:	HOPSP	Local Co-ordinate Reference:	Well RED TANK 30-31 STATE 24H
Company:	ENGINEERING DESIGNS	TVD Reference:	Datum @ 3684.90ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	Datum @ 3684.90ft
Site:	RED TANK 30-31 STATE	North Reference:	Grid
Well:	RED TANK 30-31 STATE 24H	Survey Calculation Method:	Minimum Curvature
Wellbore:	WB00		
Design:	Permitting Plan		

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
RED_TANK_30-31_S - hit/miss target - Shape	0.00	0.00	10,302.04	149.51	-91.14	499,082.89	766,423.85	32° 22' 11.787484 N	103° 36' 15.431058
- plan hits target center - Point									
RED_TANK_30-31_S - plan misses target center by 1072.15ft at 19900.00ft MD (10875.00 TVD, -9108.37 N, -20.18 E) - Point	0.00	0.00	10,875.00	-10,180.49	-11.96	488,753.25	766,503.03	32° 20' 29.569798 N	103° 36' 15.328086

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
8,807.50	8,807.50	0.00	0.00	STEP OUT DLS 2.00
9,307.26	9,304.73	37.13	-22.63	HOLD 10 DEG TANGENT
9,815.05	9,804.81	112.38	-68.51	DROP BACK TO VERTICAL DLS 2.00
10,314.81	10,302.04	149.51	-91.14	BUILD CURVE 10 DEG / 100
11,214.81	10,875.00	-423.44	-86.75	LANDING POINT
20,972.16	10,875.00	-10,180.49	-11.96	TD at 20972.15