

**NM OIL CONSERVATION
ARTESIA DISTRICT**

MAY 25 2018

RECEIVED

WCDSC Permian NM

Eddy County (NAD 83 NM Eastern)

Sec 27-T19S-R29E

Turquoise PWU 27-61H

Wellbore #1

30.015-44984

Plan: Design #1

Standard Planning Report - Geographic

09 May, 2018

Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference	Well Turquoise PWU 27-61H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3370.00ft
Project:	Eddy County (NAD 83 NM Eastern)	MD Reference:	RKB @ 3370.00ft
Site:	Sec 27-T19S-R29E	North Reference:	Grid
Well:	Turquoise PWU 27-61H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	Eddy County (NAD 83 NM Eastern)		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site	Sec 27-T19S-R29E		
Site Position:		Northing:	596,312.10 usft
From:	Map	Easting:	622,012.70 usft
Position Uncertainty:	5.00 ft	Slot Radius:	13-3/16 "
		Latitude:	32.639037
		Longitude:	-104.071247
		Grid Convergence:	0.14 °

Well	Turquoise PWU 27-61H		
Well Position	+N/-S	0.00 ft	Northing: 595,510.32 usft
	+E/-W	0.00 ft	Easting: 622,175.74 usft
Position Uncertainty		0.50 ft	Wellhead Elevation:
			Latitude: 32.636832
			Longitude: -104.070724
			Ground Level: 3,343.70 ft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2015	4/20/2018	7.13
			Dip Angle (°) 60.35
			Field Strength (nT) 48,043.32668267

Design	Design #1		
Audit Notes:			
Version:	Phase:	PROTOTYPE	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(ft)	(ft)	(ft)
	0.00	0.00	0.00
			Direction (°) 85.45

Plan Survey Tool Program	Date 5/9/2018		
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name
1	0.00	13,882.90 Design #1 (Wellbore #1)	MWD+HDGM
			OWSG MWD + HDGM

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	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	
4,133.40	7.92	191.59	4,131.39	-42.80	-8.78	1.25	1.25	0.00	191.59	
7,689.76	7.92	191.59	7,653.84	-522.70	-107.16	0.00	0.00	0.00	0.00	
8,217.59	0.00	0.00	8,180.00	-558.37	-114.47	1.50	-1.50	0.00	180.00	
8,560.69	0.00	0.00	8,523.10	-558.37	-114.47	0.00	0.00	0.00	0.00	
9,451.50	89.08	89.68	9,095.99	-555.26	449.28	10.00	10.00	0.00	89.68	PBHL - Turquoise P1
13,882.90	89.08	89.68	9,167.14	-530.82	4,880.04	0.00	0.00	0.00	0.00	PBHL - Turquoise P1

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Project:	Eddy County (NAD 83 NM Eastern)	MD Reference:	RKB @ 3370.00ft
Site:	Sec 27-T19S-R29E	North Reference:	Grid
Well:	Turquoise PWU 27-61H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.00	0.00	0.00	0.00	0.00	0.00	595,510.32	622,175.74	32.636832	-104.070724
100.00	0.00	0.00	100.00	0.00	0.00	595,510.32	622,175.74	32.636832	-104.070724
200.00	0.00	0.00	200.00	0.00	0.00	595,510.32	622,175.74	32.636832	-104.070724
300.00	0.00	0.00	300.00	0.00	0.00	595,510.32	622,175.74	32.636832	-104.070724
400.00	0.00	0.00	400.00	0.00	0.00	595,510.32	622,175.74	32.636832	-104.070724
500.00	0.00	0.00	500.00	0.00	0.00	595,510.32	622,175.74	32.636832	-104.070724
600.00	0.00	0.00	600.00	0.00	0.00	595,510.32	622,175.74	32.636832	-104.070724
700.00	0.00	0.00	700.00	0.00	0.00	595,510.32	622,175.74	32.636832	-104.070724
800.00	0.00	0.00	800.00	0.00	0.00	595,510.32	622,175.74	32.636832	-104.070724
900.00	0.00	0.00	900.00	0.00	0.00	595,510.32	622,175.74	32.636832	-104.070724
1,000.00	0.00	0.00	1,000.00	0.00	0.00	595,510.32	622,175.74	32.636832	-104.070724
1,100.00	0.00	0.00	1,100.00	0.00	0.00	595,510.32	622,175.74	32.636832	-104.070724
1,200.00	0.00	0.00	1,200.00	0.00	0.00	595,510.32	622,175.74	32.636832	-104.070724
1,300.00	0.00	0.00	1,300.00	0.00	0.00	595,510.32	622,175.74	32.636832	-104.070724
1,400.00	0.00	0.00	1,400.00	0.00	0.00	595,510.32	622,175.74	32.636832	-104.070724
1,500.00	0.00	0.00	1,500.00	0.00	0.00	595,510.32	622,175.74	32.636832	-104.070724
1,600.00	0.00	0.00	1,600.00	0.00	0.00	595,510.32	622,175.74	32.636832	-104.070724
1,700.00	0.00	0.00	1,700.00	0.00	0.00	595,510.32	622,175.74	32.636832	-104.070724
1,800.00	0.00	0.00	1,800.00	0.00	0.00	595,510.32	622,175.74	32.636832	-104.070724
1,900.00	0.00	0.00	1,900.00	0.00	0.00	595,510.32	622,175.74	32.636832	-104.070724
2,000.00	0.00	0.00	2,000.00	0.00	0.00	595,510.32	622,175.74	32.636832	-104.070724
2,100.00	0.00	0.00	2,100.00	0.00	0.00	595,510.32	622,175.74	32.636832	-104.070724
2,200.00	0.00	0.00	2,200.00	0.00	0.00	595,510.32	622,175.74	32.636832	-104.070724
2,300.00	0.00	0.00	2,300.00	0.00	0.00	595,510.32	622,175.74	32.636832	-104.070724
2,400.00	0.00	0.00	2,400.00	0.00	0.00	595,510.32	622,175.74	32.636832	-104.070724
2,500.00	0.00	0.00	2,500.00	0.00	0.00	595,510.32	622,175.74	32.636832	-104.070724
2,600.00	0.00	0.00	2,600.00	0.00	0.00	595,510.32	622,175.74	32.636832	-104.070724
2,700.00	0.00	0.00	2,700.00	0.00	0.00	595,510.32	622,175.74	32.636832	-104.070724
2,800.00	0.00	0.00	2,800.00	0.00	0.00	595,510.32	622,175.74	32.636832	-104.070724
2,900.00	0.00	0.00	2,900.00	0.00	0.00	595,510.32	622,175.74	32.636832	-104.070724
3,000.00	0.00	0.00	3,000.00	0.00	0.00	595,510.32	622,175.74	32.636832	-104.070724
3,100.00	0.00	0.00	3,100.00	0.00	0.00	595,510.32	622,175.74	32.636832	-104.070724
3,200.00	0.00	0.00	3,200.00	0.00	0.00	595,510.32	622,175.74	32.636832	-104.070724
3,300.00	0.00	0.00	3,300.00	0.00	0.00	595,510.32	622,175.74	32.636832	-104.070724
3,400.00	0.00	0.00	3,400.00	0.00	0.00	595,510.32	622,175.74	32.636832	-104.070724
3,500.00	0.00	0.00	3,500.00	0.00	0.00	595,510.32	622,175.74	32.636832	-104.070724
Begin Nudge									
3,600.00	1.25	191.59	3,599.99	-1.07	-0.22	595,509.25	622,175.52	32.636829	-104.070725
3,700.00	2.50	191.59	3,699.94	-4.27	-0.88	595,506.05	622,174.87	32.636820	-104.070727
3,800.00	3.75	191.59	3,799.79	-9.61	-1.97	595,500.71	622,173.77	32.636806	-104.070731
3,900.00	5.00	191.59	3,899.49	-17.09	-3.50	595,493.24	622,172.24	32.636785	-104.070736
4,000.00	6.25	191.59	3,999.01	-26.69	-5.47	595,483.63	622,170.27	32.636759	-104.070742
4,100.00	7.50	191.59	4,098.29	-38.41	-7.88	595,471.91	622,167.87	32.636727	-104.070750
4,133.40	7.92	191.59	4,131.39	-42.80	-8.78	595,467.52	622,166.97	32.636715	-104.070753
EOB									
4,200.00	7.92	191.59	4,197.35	-51.79	-10.62	595,458.53	622,165.13	32.636690	-104.070759
4,300.00	7.92	191.59	4,296.40	-65.28	-13.38	595,445.04	622,162.36	32.636653	-104.070768
4,400.00	7.92	191.59	4,395.44	-78.78	-16.15	595,431.54	622,159.59	32.636616	-104.070777
4,500.00	7.92	191.59	4,494.49	-92.27	-18.92	595,418.05	622,156.83	32.636579	-104.070786
4,600.00	7.92	191.59	4,593.54	-105.77	-21.68	595,404.56	622,154.06	32.636542	-104.070795
4,700.00	7.92	191.59	4,692.59	-119.26	-24.45	595,391.06	622,151.29	32.636505	-104.070805
4,800.00	7.92	191.59	4,791.63	-132.75	-27.22	595,377.57	622,148.53	32.636467	-104.070814
4,900.00	7.92	191.59	4,890.68	-146.25	-29.98	595,364.07	622,145.76	32.636430	-104.070823

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Project: Eddy County (NAD 83 NM Eastern)
Site: Sec 27-T19S-R29E
Well: Turquoise PWU 27-61H
Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference
TVD Reference: RKB @ 3370.00ft
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North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
5,000.00	7.92	191.59	4,989.73	-159.74	-32.75	595,350.58	622,142.99	32.636393	-104.070832
5,100.00	7.92	191.59	5,088.77	-173.24	-35.52	595,337.09	622,140.23	32.636356	-104.070841
5,200.00	7.92	191.59	5,187.82	-186.73	-38.28	595,323.59	622,137.46	32.636319	-104.070850
5,300.00	7.92	191.59	5,286.87	-200.23	-41.05	595,310.10	622,134.70	32.636282	-104.070859
5,400.00	7.92	191.59	5,385.91	-213.72	-43.82	595,296.60	622,131.93	32.636245	-104.070868
5,500.00	7.92	191.59	5,484.96	-227.21	-46.58	595,283.11	622,129.16	32.636208	-104.070877
5,600.00	7.92	191.59	5,584.01	-240.71	-49.35	595,269.62	622,126.40	32.636171	-104.070886
5,700.00	7.92	191.59	5,683.05	-254.20	-52.11	595,256.12	622,123.63	32.636134	-104.070895
5,800.00	7.92	191.59	5,782.10	-267.70	-54.88	595,242.63	622,120.86	32.636097	-104.070905
5,900.00	7.92	191.59	5,881.15	-281.19	-57.65	595,229.13	622,118.10	32.636060	-104.070914
6,000.00	7.92	191.59	5,980.19	-294.68	-60.41	595,215.64	622,115.33	32.636023	-104.070923
6,100.00	7.92	191.59	6,079.24	-308.18	-63.18	595,202.15	622,112.56	32.635986	-104.070932
6,200.00	7.92	191.59	6,178.29	-321.67	-65.95	595,188.65	622,109.80	32.635948	-104.070941
6,300.00	7.92	191.59	6,277.33	-335.17	-68.71	595,175.16	622,107.03	32.635911	-104.070950
6,400.00	7.92	191.59	6,376.38	-348.66	-71.48	595,161.66	622,104.26	32.635874	-104.070959
6,500.00	7.92	191.59	6,475.43	-362.15	-74.25	595,148.17	622,101.50	32.635837	-104.070968
6,600.00	7.92	191.59	6,574.47	-375.65	-77.01	595,134.68	622,098.73	32.635800	-104.070977
6,700.00	7.92	191.59	6,673.52	-389.14	-79.78	595,121.18	622,095.96	32.635763	-104.070986
6,800.00	7.92	191.59	6,772.57	-402.64	-82.55	595,107.69	622,093.20	32.635726	-104.070996
6,900.00	7.92	191.59	6,871.61	-416.13	-85.31	595,094.19	622,090.43	32.635689	-104.071005
7,000.00	7.92	191.59	6,970.66	-429.62	-88.08	595,080.70	622,087.67	32.635652	-104.071014
7,100.00	7.92	191.59	7,069.71	-443.12	-90.85	595,067.21	622,084.90	32.635615	-104.071023
7,200.00	7.92	191.59	7,168.75	-456.61	-93.61	595,053.71	622,082.13	32.635578	-104.071032
7,300.00	7.92	191.59	7,267.80	-470.11	-96.38	595,040.22	622,079.37	32.635541	-104.071041
7,400.00	7.92	191.59	7,366.85	-483.60	-99.14	595,026.72	622,076.60	32.635504	-104.071050
7,500.00	7.92	191.59	7,465.89	-497.09	-101.91	595,013.23	622,073.83	32.635467	-104.071059
7,600.00	7.92	191.59	7,564.94	-510.59	-104.68	594,999.74	622,071.07	32.635429	-104.071068
7,689.76	7.92	191.59	7,653.85	-522.70	-107.16	594,987.62	622,068.58	32.635396	-104.071076
EOH									
7,700.00	7.76	191.59	7,663.99	-524.07	-107.44	594,986.26	622,068.30	32.635392	-104.071077
7,800.00	6.26	191.59	7,763.24	-536.03	-109.89	594,974.29	622,065.85	32.635360	-104.071085
7,900.00	4.76	191.59	7,862.77	-545.44	-111.82	594,964.88	622,063.92	32.635334	-104.071092
8,000.00	3.26	191.59	7,962.52	-552.30	-113.23	594,958.02	622,062.52	32.635315	-104.071096
8,100.00	1.76	191.59	8,062.43	-556.60	-114.11	594,953.73	622,061.63	32.635303	-104.071099
8,200.00	0.26	191.59	8,162.41	-558.33	-114.47	594,951.99	622,061.28	32.635298	-104.071100
8,217.59	0.00	0.00	8,180.00	-558.37	-114.47	594,951.95	622,061.27	32.635298	-104.071100
Drop to Vertical									
8,300.00	0.00	0.00	8,262.41	-558.37	-114.47	594,951.95	622,061.27	32.635298	-104.071100
8,400.00	0.00	0.00	8,362.41	-558.37	-114.47	594,951.95	622,061.27	32.635298	-104.071100
8,500.00	0.00	0.00	8,462.41	-558.37	-114.47	594,951.95	622,061.27	32.635298	-104.071100
8,560.69	0.00	0.00	8,523.10	-558.37	-114.47	594,951.95	622,061.27	32.635298	-104.071100
KOP @ 8561' MD, 1358' FNL, 50' FWL									
8,600.00	3.93	89.68	8,562.38	-558.36	-113.13	594,951.96	622,062.62	32.635298	-104.071096
8,700.00	13.93	89.68	8,661.04	-558.28	-97.62	594,952.05	622,078.12	32.635298	-104.071046
8,800.00	23.93	89.68	8,755.51	-558.10	-65.22	594,952.23	622,110.52	32.635299	-104.070940
8,900.00	33.93	89.68	8,842.92	-557.83	-16.91	594,952.49	622,158.84	32.635299	-104.070784
8,929.20	36.85	89.68	8,866.72	-557.74	0.00	594,952.59	622,175.74	32.635299	-104.070729
1st Take Point @ 8929' MD, 1357' FNL, 165' FWL									
9,000.00	43.93	89.68	8,920.61	-557.49	45.85	594,952.84	622,221.59	32.635300	-104.070580
9,100.00	53.93	89.68	8,986.23	-557.07	121.14	594,953.25	622,296.89	32.635300	-104.070335
9,200.00	63.93	89.68	9,037.77	-556.60	206.69	594,953.73	622,382.43	32.635301	-104.070057
9,300.00	73.93	89.68	9,073.67	-556.08	299.88	594,954.24	622,475.63	32.635302	-104.069754
9,400.00	83.93	89.68	9,092.85	-555.54	397.90	594,954.78	622,573.64	32.635302	-104.069436

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9,451.50	89.08	89.68	9,095.99	-555.26	449.28	594,955.06	622,625.03	32.635303	-104.069269
Land Point									
9,500.00	89.08	89.68	9,096.76	-554.99	497.78	594,955.33	622,673.52	32.635303	-104.069112
9,600.00	89.08	89.68	9,098.37	-554.44	597.76	594,955.88	622,773.50	32.635304	-104.068787
9,700.00	89.08	89.68	9,099.98	-553.89	697.75	594,956.43	622,873.49	32.635305	-104.068462
9,800.00	89.08	89.68	9,101.58	-553.34	797.73	594,956.99	622,973.47	32.635306	-104.068137
9,900.00	89.08	89.68	9,103.19	-552.79	897.72	594,957.54	623,073.46	32.635307	-104.067812
10,000.00	89.08	89.68	9,104.79	-552.24	997.70	594,958.09	623,173.45	32.635307	-104.067488
10,100.00	89.08	89.68	9,106.40	-551.68	1,097.69	594,958.64	623,273.43	32.635308	-104.067163
10,200.00	89.08	89.68	9,108.00	-551.13	1,197.67	594,959.19	623,373.42	32.635309	-104.066838
10,300.00	89.08	89.68	9,109.61	-550.58	1,297.66	594,959.74	623,473.40	32.635310	-104.066513
10,400.00	89.08	89.68	9,111.21	-550.03	1,397.65	594,960.30	623,573.39	32.635311	-104.066188
10,500.00	89.08	89.68	9,112.82	-549.48	1,497.63	594,960.85	623,673.37	32.635312	-104.065863
10,600.00	89.08	89.68	9,114.43	-548.93	1,597.62	594,961.40	623,773.36	32.635312	-104.065539
10,700.00	89.08	89.68	9,116.03	-548.37	1,697.60	594,961.95	623,873.34	32.635313	-104.065214
10,800.00	89.08	89.68	9,117.64	-547.82	1,797.59	594,962.50	623,973.33	32.635314	-104.064889
10,900.00	89.08	89.68	9,119.24	-547.27	1,897.57	594,963.05	624,073.31	32.635315	-104.064564
11,000.00	89.08	89.68	9,120.85	-546.72	1,997.56	594,963.60	624,173.30	32.635316	-104.064239
11,100.00	89.08	89.68	9,122.45	-546.17	2,097.54	594,964.16	624,273.28	32.635317	-104.063915
11,200.00	89.08	89.68	9,124.06	-545.62	2,197.53	594,964.71	624,373.27	32.635317	-104.063590
11,300.00	89.08	89.68	9,125.67	-545.07	2,297.52	594,965.26	624,473.26	32.635318	-104.063265
11,400.00	89.08	89.68	9,127.27	-544.51	2,397.50	594,965.81	624,573.24	32.635319	-104.062940
11,500.00	89.08	89.68	9,128.88	-543.96	2,497.49	594,966.36	624,673.23	32.635320	-104.062615
11,600.00	89.08	89.68	9,130.48	-543.41	2,597.47	594,966.91	624,773.21	32.635321	-104.062291
11,700.00	89.08	89.68	9,132.09	-542.86	2,697.46	594,967.46	624,873.20	32.635321	-104.061966
11,800.00	89.08	89.68	9,133.69	-542.31	2,797.44	594,968.02	624,973.18	32.635322	-104.061641
11,900.00	89.08	89.68	9,135.30	-541.76	2,897.43	594,968.57	625,073.17	32.635323	-104.061316
12,000.00	89.08	89.68	9,136.90	-541.21	2,997.42	594,969.12	625,173.15	32.635324	-104.060991
12,100.00	89.08	89.68	9,138.51	-540.65	3,097.40	594,969.67	625,273.14	32.635325	-104.060667
12,200.00	89.08	89.68	9,140.12	-540.10	3,197.39	594,970.22	625,373.12	32.635325	-104.060342
12,300.00	89.08	89.68	9,141.72	-539.55	3,297.37	594,970.77	625,473.11	32.635326	-104.060017
12,400.00	89.08	89.68	9,143.33	-539.00	3,397.36	594,971.33	625,573.09	32.635327	-104.059692
12,500.00	89.08	89.68	9,144.93	-538.45	3,497.34	594,971.88	625,673.08	32.635328	-104.059367
12,600.00	89.08	89.68	9,146.54	-537.90	3,597.33	594,972.43	625,773.07	32.635329	-104.059043
12,700.00	89.08	89.68	9,148.14	-537.34	3,697.31	594,972.98	625,873.05	32.635330	-104.058718
12,800.00	89.08	89.68	9,149.75	-536.79	3,797.30	594,973.53	625,973.04	32.635330	-104.058393
12,900.00	89.08	89.68	9,151.36	-536.24	3,897.29	594,974.08	626,073.02	32.635331	-104.058068
13,000.00	89.08	89.68	9,152.96	-535.69	3,997.27	594,974.63	626,173.01	32.635332	-104.057743
13,100.00	89.08	89.68	9,154.57	-535.14	4,097.26	594,975.19	626,272.99	32.635333	-104.057419
13,200.00	89.08	89.68	9,156.17	-534.59	4,197.24	594,975.74	626,372.98	32.635334	-104.057094
13,300.00	89.08	89.68	9,157.78	-534.04	4,297.23	594,976.29	626,472.96	32.635334	-104.056769
13,400.00	89.08	89.68	9,159.38	-533.48	4,397.21	594,976.84	626,572.95	32.635335	-104.056444
13,500.00	89.08	89.68	9,160.99	-532.93	4,497.20	594,977.39	626,672.93	32.635336	-104.056119
13,600.00	89.08	89.68	9,162.60	-532.38	4,597.18	594,977.94	626,772.92	32.635337	-104.055794
13,700.00	89.08	89.68	9,164.20	-531.83	4,697.17	594,978.49	626,872.90	32.635338	-104.055470
13,782.89	89.08	89.68	9,165.53	-531.37	4,780.05	594,978.95	626,955.78	32.635338	-104.055200
Last Take Point @ 13783' MD, 1310' FNL, 330' FEL									
13,800.00	89.08	89.68	9,165.81	-531.28	4,797.16	594,979.05	626,972.89	32.635338	-104.055145
13,882.89	89.08	89.68	9,167.14	-530.82	4,880.03	594,979.50	627,055.77	32.635339	-104.054876
PBHL; 1310' FNL, 230' FEL									
13,882.90	89.08	89.68	9,167.14	-530.82	4,880.04	594,979.50	627,055.77	32.635339	-104.054876

Planning Report - Geographic

Database:	EDM r5000.141_Prod US	Local Co-ordinate Reference	Well Turquoise PWU 27-61H
Company:	WCDSC Permian NM	TVD Reference:	RKB @ 3370.00ft
Project:	Eddy County (NAD 83 NM Eastern)	MD Reference:	RKB @ 3370.00ft
Site:	Sec 27-T19S-R29E	North Reference:	Grid
Well:	Turquoise PWU 27-61H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

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									
PBHL - Turquoise PWL	0.00	0.00	0.00	-530.82	4,880.04	594,979.50	627,055.77	32.635339	-104.054876
- plan misses target center by 4908.82ft at 0.00ft MD (0.00 TVD, 0.00 N, 0.00 E)									
- Point									
Vertical Point - Turquoise	0.00	0.00	8,180.00	-508.37	-114.47	595,001.96	622,061.27	32.635436	-104.071100
- plan misses target center by 50.00ft at 8217.48ft MD (8179.89 TVD, -558.37 N, -114.47 E)									
- Point									

Plan Annotations

Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S	+E/-W	
(ft)	(ft)	(ft)	(ft)	
3,500.00	3,500.00	0.00	0.00	Begin Nudge
4,133.40	4,131.39	-42.80	-8.78	EOB
7,689.76	7,653.85	-522.70	-107.16	EOH
8,217.59	8,180.00	-558.37	-114.47	Drop to Vertical
8,560.69	8,523.10	-558.37	-114.47	KOP @ 8561' MD, 1358' FNL, 50' FWL
8,929.20	8,866.72	-557.74	0.00	1st Take Point @ 8929' MD, 1357' FNL, 165' FWL
9,451.50	9,095.99	-555.26	449.28	Land Point
13,782.89	9,165.53	-531.37	4,780.05	Last Take Point @ 13783' MD, 1310' FNL, 330' FEL
13,882.89	9,167.14	-530.82	4,880.03	PBHL; 1310' FNL, 230' FEL

WCDSC Permian NM

WELL DETAILS: Turquoise PWU 27-61H

RKB @ 3370.00ft
3343.70
Northing 595510.32 Easting 622175.74 Latitude 32.636832 Longitude -104.070724

SECTION DETAILS Design #1

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	Vsect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3500.00	0.00	0.00	3500.00	0.00	0.00	0.00	0.00	Begin Nudge
4133.40	7.92	191.59	4131.39	-42.80	-8.78	1.25	-12.15	EOB
7689.76	7.92	191.59	7653.84	-522.70	-107.16	0.00	-148.32	EOH
8217.59	0.00	0.00	8180.00	-558.37	-114.47	1.50	-158.44	Drop to Vertical
8560.69	0.00	0.00	8523.10	-558.37	-114.47	0.00	-158.44	KOP @ 8561' MD, 1358' FNL, 50' FWL
9451.50	89.08	89.68	9095.99	-555.26	449.28	10.00	403.78	Land Point
13882.90	89.08	89.68	9167.14	-530.82	4880.04	0.00	4822.50	PBHL: 1310' FNL, 230' FEL

