

WCDSC Permian NM

Eddy County (NAD 83 NM Eastern)

Sec 27-T19S-R29E

Coral PWU 28-27 11H

Wellbore #1

Prelim Plan 1

**NM OIL CONSERVATION
ARTESIA DISTRICT**

MAY 10 2018

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Anticollision Report

09 May, 2018

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference	Well Coral PWU 28-27 11H
Project:	Eddy County (NAD 83 NM Eastern)	TVD Reference:	RKB @ 3333.00ft
Reference Site:	Sec 27-T19S-R29E	MD Reference:	RKB @ 3333.00ft
Site Error:	5.00 ft	North Reference:	Grid
Reference Well:	Coral PWU 28-27 11H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Prelim Plan 1	Offset TVD Reference:	Offset Datum

Reference	Prelim Plan 1		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method	MD Interval 100.00ft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 1,500.00 ft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	5/9/2018		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	17,086.67	Prelim Plan 1 (Wellbore #1)	MWD+HDGM	OWSG MWD + HDGM

Summary						
Site Name	Reference Measure	Offset Measure	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation	Warning
Offset Well - Wellbore - Design						
Sec 27-T19S-R29E						
Coral PWU 28-27 12H - Wellbore #1 - Prelim Plan 1	2,500.00	2,500.00	60.00	42.50	3.428	Alert, CC, ES
Coral PWU 28-27 12H - Wellbore #1 - Prelim Plan 1	2,600.00	2,599.06	61.43	43.24	3.376	Alert, SF
Coral PWU 28-27 62H - Wellbore #1 - Prelim Plan 1	2,500.00	2,500.00	30.00	12.50	1.714	Minor Risk, CC
Coral PWU 28-27 62H - Wellbore #1 - Prelim Plan 1	2,600.00	2,600.01	30.67	12.45	1.684	Minor Risk, ES, SF
Parkway West Unit #20 (Active) - Wellbore #1 - Wellbore	12,680.02	9,117.74	1,431.21	1,149.44	5.079	CC
Parkway West Unit #20 (Active) - Wellbore #1 - Wellbore	12,700.00	9,117.74	1,431.35	1,149.14	5.072	ES
Parkway West Unit #20 (Active) - Wellbore #1 - Wellbore	12,800.00	9,117.74	1,436.23	1,152.12	5.055	SF
Parkway West Unit 10 - Original Hole - Original Hole	15,371.26	9,193.07	1,023.85	812.12	4.836	Alert, CC
Parkway West Unit 10 - Original Hole - Original Hole	15,400.00	9,192.75	1,024.25	811.57	4.816	Alert, ES
Parkway West Unit 10 - Original Hole - Original Hole	15,500.00	9,191.61	1,031.91	817.01	4.802	Alert, SF
Parkway West Unit SWD - Wellbore #1 - Wellbore #1						Out of range
Turquoise PWU 27-10H - Wellbore #1 - Wellbore #1	13,855.10	11,017.42	893.52	683.19	4.248	Alert, CC
Turquoise PWU 27-10H - Wellbore #1 - Wellbore #1	17,086.67	14,223.00	901.33	503.85	2.268	Minor Risk, ES, SF
Turquoise PWU 27-4H - Wellbore #1 - Wellbore #1						Out of range
Turquoise PWU 27-5H - Wellbore #1 - Wellbore #1						Out of range
Turquoise PWU 27-1H - Wellbore #1 - Wellbore #1						Out of range
Turquoise PWU 27-3H - Wellbore #1 - Wellbore #1	17,086.67	12,110.74	1,076.52	962.03	9.403	CC, ES, SF
Turquoise PWU 27-61H - Wellbore #1 - Design #1						Out of range
Turquoise PWU 27-7H - Wellbore #1 - Wellbore #1						Out of range
Turquoise PWU 27-8H - Wellbore #1 - Wellbore #1						Out of range
Turquoise PWU 27-9H - Wellbore #1 - Design #1						Out of range

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference	Well Coral PWU 28-27 11H
Project:	Eddy County (NAD 83 NM Eastern)	TVD Reference:	RKB @ 3333.00ft
Reference Site:	Sec 27-T19S-R29E	MD Reference:	RKB @ 3333.00ft
Site Error:	5.00 ft	North Reference:	Grid
Reference Well:	Coral PWU 28-27 11H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Prelim Plan 1	Offset TVD Reference:	Offset Datum

Summary

Site Name	Reference Measure	Offset Measure	Distance Between Centres	Distance Between Ellipses	Separation	Warning
Offset Well - Wellbore - Design						
Sec 28-T19S-R29E						
Coral PWU 28-3H - Wellbore #1 - Wellbore #1	8,022.64	9,118.06	1,290.34	1,213.67	16.831	SF
Coral PWU 28-3H - Wellbore #1 - Wellbore #1	10,312.05	9,409.55	1,171.26	1,133.75	31.221	CC, ES
Coral PWU 28-4H - Wellbore #1 - Wellbore #1	11,144.56	9,380.31	1,155.59	1,114.03	27.806	CC, ES
Coral PWU 28-4H - Wellbore #1 - Wellbore #1	11,900.00	9,346.65	1,380.17	1,320.21	23.019	SF
Coral PWU 28-7H - Wellbore #1 - Wellbore #1	7,100.00	9,585.69	285.92	172.08	2.512	Alert, ES, SF
Coral PWU 28-7H - Wellbore #1 - Wellbore #1	7,103.34	9,586.09	285.91	172.15	2.513	Alert, CC
Parkway #021 (Active) - Wellbore #1 - Wellbore #1						Out of range
Parkway Unit 16 (Active) - Wellbore #1 - Wellbore #1	694.16	672.20	602.32	585.41	35.628	CC
Parkway Unit 16 (Active) - Wellbore #1 - Wellbore #1	700.00	677.87	602.32	585.40	35.602	ES
Parkway Unit 16 (Active) - Wellbore #1 - Wellbore #1	10,000.00	9,114.97	977.98	904.02	13.224	SF
Parkway Unit 16 (Active) - Wellbore #1 - Wellbore #1	8,099.54	8,023.72	1,077.11	925.99	7.127	CC
Parkway West Unit #3 - Wellbore #1 - Wellbore #1	8,600.00	8,524.18	1,077.19	916.93	6.722	ES
Parkway West Unit #3 - Wellbore #1 - Wellbore #1	8,700.00	8,623.97	1,081.83	919.76	6.675	SF
Parkway West Unit #3 - Wellbore #1 - Wellbore #1	13,854.29	11,016.58	893.81	683.55	4.251	Alert, CC
Turquoise PWU 27 10H - Original Hole - Actuals	17,086.67	14,223.00	902.10	505.29	2.273	Minor Risk, ES, SF
Turquoise PWU 27 10H - Original Hole - Actuals						

Offset Design													Offset Site Error: 5.00 ft
Survey Program: 0-MWD+HDGM													Offset Well Error: 0.50 ft
Sec 27-T19S-R29E - Coral PWU 28-27 12H - Wellbore #1 - Prelim Plan 1													
Reference	Offset	Semi Major Axis		Distance		Minimum Separation		Separation Factor		Warning			
Measured Depth (ft)	Vertical Depth (ft)	Reference	Offset	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning		
0.00	0.00	0.00	0.00	0.50	0.50	180.00	-60.00	0.00	60.00	58.96	1.04	57.943	
100.00	100.00	100.00	100.00	0.52	0.52	180.00	-60.00	0.00	60.00	58.60	1.40	42.729	
200.00	200.00	200.00	200.00	0.70	0.70	180.00	-60.00	0.00	60.00	58.03	1.97	30.385	
300.00	300.00	300.00	300.00	0.99	0.99	180.00	-60.00	0.00	60.00	57.38	2.62	22.917	
400.00	400.00	400.00	400.00	1.31	1.31	180.00	-60.00	0.00	60.00	56.71	3.29	18.225	
500.00	500.00	500.00	500.00	1.65	1.65	180.00	-60.00	0.00	60.00	56.02	3.98	15.071	
600.00	600.00	600.00	600.00	1.99	1.99	180.00	-60.00	0.00	60.00	55.32	4.68	12.824	
700.00	700.00	700.00	700.00	2.34	2.34	180.00	-60.00	0.00	60.00	54.62	5.38	11.150	
800.00	800.00	800.00	800.00	2.69	2.69	180.00	-60.00	0.00	60.00	53.91	6.09	9.857	
900.00	900.00	900.00	900.00	3.04	3.04	180.00	-60.00	0.00	60.00	53.20	6.80	8.830	
1,000.00	1,000.00	1,000.00	1,000.00	3.40	3.40	180.00	-60.00	0.00	60.00	52.49	7.51	7.994	
1,100.00	1,100.00	1,100.00	1,100.00	3.75	3.75	180.00	-60.00	0.00	60.00	51.78	8.22	7.303	
1,200.00	1,200.00	1,200.00	1,200.00	4.11	4.11	180.00	-60.00	0.00	60.00	51.07	8.93	6.720	
1,300.00	1,300.00	1,300.00	1,300.00	4.46	4.46	180.00	-60.00	0.00	60.00	50.36	9.64	6.223	
1,400.00	1,400.00	1,400.00	1,400.00	4.82	4.82	180.00	-60.00	0.00	60.00	49.65	10.35	5.795	
1,500.00	1,500.00	1,500.00	1,500.00	5.18	5.18	180.00	-60.00	0.00	60.00	48.93	11.07	5.421	
1,600.00	1,600.00	1,600.00	1,600.00	5.53	5.53	180.00	-60.00	0.00	60.00	48.22	11.78	5.092	
1,700.00	1,700.00	1,700.00	1,700.00	5.89	5.89	180.00	-60.00	0.00	60.00	47.50	12.50	4.801	Alert
1,800.00	1,800.00	1,800.00	1,800.00	6.25	6.25	180.00	-60.00	0.00	60.00	46.79	13.21	4.541	Alert
1,900.00	1,900.00	1,900.00	1,900.00	6.61	6.61	180.00	-60.00	0.00	60.00	46.07	13.93	4.308	Alert
2,000.00	2,000.00	2,000.00	2,000.00	6.96	6.96	180.00	-60.00	0.00	60.00	45.36	14.64	4.098	Alert
2,100.00	2,100.00	2,100.00	2,100.00	7.32	7.32	180.00	-60.00	0.00	60.00	44.64	15.36	3.907	Alert
2,200.00	2,200.00	2,200.00	2,200.00	7.68	7.68	180.00	-60.00	0.00	60.00	43.93	16.07	3.733	Alert
2,300.00	2,300.00	2,300.00	2,300.00	8.04	8.04	180.00	-60.00	0.00	60.00	43.21	16.79	3.574	Alert
2,400.00	2,400.00	2,400.00	2,400.00	8.39	8.39	180.00	-60.00	0.00	60.00	42.50	17.50	3.428	Alert, CC, ES
2,500.00	2,500.00	2,500.00	2,500.00	8.75	8.75	180.00	-60.00	0.00	60.00	41.79	18.21	3.283	Alert, CC, ES
2,600.00	2,599.99	2,599.06	2,599.06	9.11	9.09	-140.04	-60.76	-0.40	61.43	43.24	18.20	3.376	Alert, SF

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

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Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Prelim Plan 1	Offset TVD Reference:	Offset Datum

Offset Design Sec 27-T19S-R29E - Coral PWU 28-27 12H - Wellbore #1 - Prelim Plan 1														Offset Site Error:	5.00 ft
Survey Program: 0-MWD+HDGM														Offset Well Error:	0.50 ft
Reference	Offset	Semi Major Axis		Distance		Warning									
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor			
2,700.00	2,699.96	2,698.00	2,697.96	9.46	9.41	-140.41	-63.02	-1.60	65.73	46.86	18.87	3.484	Alert		
2,800.00	2,799.86	2,796.70	2,796.56	9.82	9.74	-140.93	-66.79	-3.59	72.88	53.35	19.54	3.731	Alert		
2,900.00	2,899.68	2,895.03	2,894.71	10.17	10.06	-141.50	-72.03	-6.37	82.90	62.69	20.20	4.103	Alert		
3,000.00	2,999.37	2,992.87	2,992.26	10.53	10.39	-142.05	-78.72	-9.91	95.75	74.89	20.87	4.589	Alert		
3,100.00	3,098.90	3,090.11	3,089.07	10.89	10.71	-142.53	-86.83	-14.21	111.44	89.92	21.52	5.177			
3,200.00	3,198.26	3,186.64	3,185.00	11.25	11.04	-142.93	-96.32	-19.23	129.93	107.75	22.18	5.858			
3,300.00	3,297.40	3,282.35	3,279.92	11.61	11.37	-143.26	-107.13	-24.95	151.20	128.37	22.83	6.623			
3,400.00	3,396.32	3,377.15	3,373.73	11.97	11.70	-143.55	-119.22	-31.36	175.11	151.64	23.47	7.460			
3,500.00	3,495.20	3,471.23	3,466.59	12.34	12.03	-143.64	-132.58	-38.43	200.63	176.52	24.11	8.321			
3,600.00	3,594.07	3,565.95	3,559.84	12.71	12.37	-143.52	-147.25	-46.20	227.37	202.60	24.77	9.180			
3,700.00	3,692.94	3,662.25	3,654.60	13.09	12.72	-143.39	-162.39	-54.21	254.32	228.87	25.46	9.990			
3,800.00	3,791.81	3,758.54	3,749.36	13.46	13.07	-143.28	-177.53	-62.23	281.28	255.13	26.15	10.755			
3,900.00	3,890.69	3,854.84	3,844.12	13.84	13.43	-143.19	-192.67	-70.24	308.24	281.39	26.85	11.479			
4,000.00	3,889.56	3,951.14	3,938.88	14.22	13.79	-143.12	-207.81	-78.26	335.20	307.64	27.55	12.166			
4,100.00	4,088.43	4,047.43	4,033.64	14.60	14.16	-143.06	-222.95	-86.28	362.15	333.90	28.26	12.816			
4,200.00	4,187.30	4,143.73	4,128.40	14.98	14.52	-143.00	-238.09	-94.29	389.11	360.15	28.96	13.434			
4,300.00	4,286.17	4,240.03	4,223.16	15.37	14.90	-142.96	-253.23	-102.31	416.07	386.40	29.67	14.021			
4,400.00	4,385.05	4,336.32	4,317.92	15.75	15.27	-142.92	-268.37	-110.33	443.03	412.64	30.39	14.580			
4,500.00	4,483.92	4,432.62	4,412.68	16.14	15.65	-142.88	-283.51	-118.34	469.99	438.89	31.10	15.112			
4,600.00	4,582.79	4,528.92	4,507.45	16.53	16.02	-142.85	-298.65	-126.36	496.95	465.13	31.82	15.619			
4,700.00	4,681.66	4,625.22	4,602.21	16.92	16.40	-142.82	-313.79	-134.37	523.91	491.37	32.54	16.102			
4,800.00	4,780.54	4,721.51	4,696.97	17.31	16.79	-142.79	-328.93	-142.39	550.87	517.61	33.26	16.564			
4,900.00	4,879.41	4,817.81	4,791.73	17.70	17.17	-142.77	-344.08	-150.41	577.83	543.85	33.98	17.005			
5,000.00	4,978.28	4,914.11	4,886.49	18.09	17.56	-142.75	-359.22	-158.42	604.79	570.08	34.70	17.427			
5,100.00	5,077.15	5,010.40	4,981.25	18.49	17.95	-142.73	-374.36	-166.44	631.75	596.32	35.43	17.832			
5,200.00	5,176.03	5,106.70	5,076.01	18.88	18.34	-142.71	-389.50	-174.46	658.71	622.55	36.16	18.219			
5,300.00	5,274.90	5,203.00	5,170.77	19.28	18.73	-142.69	-404.64	-182.47	685.67	648.78	36.88	18.590			
5,400.00	5,373.77	5,300.70	5,265.53	19.67	19.12	-142.67	-419.78	-190.49	712.63	675.01	37.62	18.943			
5,500.00	5,472.64	5,404.41	5,360.29	20.07	19.55	-142.66	-434.92	-198.50	739.59	701.21	38.38	19.271			
5,600.00	5,571.52	5,508.11	5,455.06	20.46	19.97	-142.65	-450.06	-206.52	766.55	727.41	39.14	19.586			
5,700.00	5,670.39	5,588.19	5,549.82	20.86	20.30	-142.63	-465.20	-214.54	793.51	753.70	39.81	19.932			
5,800.00	5,769.26	5,684.48	5,644.58	21.26	20.70	-142.62	-480.34	-222.55	820.47	779.92	40.54	20.236			
5,900.00	5,868.13	5,780.78	5,739.34	21.66	21.10	-142.61	-495.48	-230.57	847.43	806.15	41.28	20.529			
6,000.00	5,967.00	5,877.08	5,834.10	22.06	21.50	-142.60	-510.62	-238.58	874.39	832.37	42.02	20.811			
6,100.00	6,065.88	5,973.37	5,928.86	22.45	21.90	-142.59	-525.76	-246.60	901.35	858.59	42.75	21.083			
6,200.00	6,164.75	6,069.67	6,023.62	22.85	22.30	-142.58	-540.90	-254.62	928.31	884.82	43.49	21.345			
6,300.00	6,263.62	6,165.97	6,118.38	23.25	22.70	-142.57	-556.04	-262.63	955.27	911.04	44.23	21.598			
6,400.00	6,362.49	6,262.27	6,213.14	23.65	23.10	-142.57	-571.18	-270.65	982.23	937.26	44.97	21.842			
6,500.00	6,461.37	6,358.56	6,307.90	24.06	23.50	-142.56	-586.32	-278.67	1,009.19	963.48	45.71	22.078			
6,600.00	6,560.24	6,454.86	6,402.66	24.46	23.90	-142.55	-601.46	-286.68	1,036.15	989.70	46.45	22.306			
6,700.00	6,659.11	6,551.16	6,497.43	24.86	24.31	-142.54	-616.60	-294.70	1,063.11	1,015.92	47.19	22.527			
6,800.00	6,757.98	6,647.45	6,592.19	25.26	24.71	-142.54	-631.74	-302.71	1,090.07	1,042.13	47.94	22.740			
6,900.00	6,856.86	6,743.75	6,686.95	25.66	25.12	-142.53	-646.88	-310.73	1,117.03	1,068.35	48.68	22.947			
7,000.00	6,955.73	6,840.05	6,781.71	26.06	25.52	-142.53	-662.02	-318.75	1,143.99	1,094.57	49.42	23.147			
7,100.00	7,054.60	6,936.35	6,876.47	26.47	25.93	-142.52	-677.16	-326.76	1,170.95	1,120.78	50.17	23.341			
7,200.00	7,153.47	7,032.64	6,971.23	26.87	26.34	-142.51	-692.30	-334.78	1,197.91	1,147.00	50.91	23.529			
7,300.00	7,252.35	7,128.94	7,065.99	27.27	26.74	-142.51	-707.44	-342.80	1,224.87	1,173.21	51.66	23.711			
7,400.00	7,351.22	7,225.24	7,160.75	27.68	27.15	-142.50	-722.58	-350.81	1,251.83	1,199.43	52.40	23.888			
7,500.00	7,450.10	7,321.55	7,255.53	28.08	27.56	-142.55	-737.73	-358.83	1,278.74	1,225.59	53.15	24.059			
7,600.00	7,549.24	7,418.23	7,350.67	28.48	27.97	-142.74	-752.93	-366.88	1,304.25	1,250.36	53.89	24.200			
7,700.00	7,648.68	7,515.39	7,446.27	28.86	28.38	-142.83	-768.20	-374.97	1,327.74	1,273.11	54.63	24.302			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference	Well Coral PWU 28-27 11H
Project:	Eddy County (NAD 83 NM Eastern)	TVD Reference:	RKB @ 3333.00ft
Reference Site:	Sec 27-T19S-R29E	MD Reference:	RKB @ 3333.00ft
Site Error:	5.00 ft	North Reference:	Grid
Reference Well:	Coral PWU 28-27 11H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Prelim Plan 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error: 5.00 ft	
Survey Program: 0-MWD+HDGM													Offset Well Error: 0.50 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre		Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
							+N/-S (ft)	+E/-W (ft)						
7,800.00	7,748.36	7,612.96	7,542.29	29.23	28.80	-142.84	-783.54	-383.09	1,349.21	1,293.84	55.37	24.367		
7,900.00	7,848.22	7,730.43	7,657.98	29.59	29.29	-142.72	-801.56	-392.62	1,368.34	1,312.08	56.26	24.321		
8,000.00	7,948.18	7,873.68	7,799.75	29.94	29.88	-142.51	-819.66	-402.21	1,382.77	1,325.45	57.32	24.125		
8,100.00	8,048.18	8,018.57	7,943.82	30.28	30.44	177.64	-833.18	-409.37	1,392.17	1,333.86	58.31	23.874		
8,200.00	8,148.18	8,164.45	8,089.35	30.61	30.97	177.85	-841.90	-413.99	1,398.02	1,338.77	59.25	23.595		
8,300.00	8,248.18	8,310.86	8,235.70	30.95	31.47	177.94	-845.71	-416.00	1,400.58	1,340.45	60.13	23.294		
8,400.00	8,348.18	8,423.35	8,348.18	31.29	31.82	177.94	-845.89	-416.10	1,400.70	1,339.86	60.84	23.023		
8,500.00	8,448.18	8,523.35	8,448.18	31.62	32.13	177.94	-845.89	-416.10	1,400.70	1,339.18	61.51	22.771		
8,600.00	8,548.18	8,623.35	8,548.18	31.96	32.45	177.94	-845.89	-416.10	1,400.70	1,338.51	62.19	22.525		
8,700.00	8,647.97	8,716.46	8,641.16	32.29	32.73	123.33	-845.92	-412.50	1,403.47	1,340.66	62.82	22.342		
8,800.00	8,745.29	8,805.98	8,728.98	32.60	32.98	122.13	-846.04	-395.59	1,416.66	1,353.28	63.38	22.351		
8,900.00	8,836.77	8,893.66	8,811.41	32.88	33.19	119.93	-846.26	-365.97	1,440.22	1,376.33	63.89	22.543		
9,000.00	8,919.25	8,978.79	8,886.22	33.12	33.36	116.71	-846.56	-325.52	1,473.30	1,408.95	64.35	22.896		

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference	Well Coral PWU 28-27 11H
Project:	Eddy County (NAD 83 NM Eastern)	TVD Reference:	RKB @ 3333.00ft
Reference Site:	Sec 27-T19S-R29E	MD Reference:	RKB @ 3333.00ft
Site Error:	5.00 ft	North Reference:	Grid
Reference Well:	Coral PWU 28-27 11H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Prelim Plan 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error: 5.00 ft	
Sec 27-T19S-R29E - Coral PWU 28-27 62H - Wellbore #1 - Prelim Plan 1													Offset Well Error: 0.50 ft	
Survey Program: 0-MWD+HDGM														
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
0.00	0.00	0.00	0.00	0.50	0.50	180.00	-30.00	0.00	30.00					
100.00	100.00	100.00	100.00	0.52	0.52	180.00	-30.00	0.00	30.00	28.96	1.04	28.971		
200.00	200.00	200.00	200.00	0.70	0.70	180.00	-30.00	0.00	30.00	28.60	1.40	21.364		
300.00	300.00	300.00	300.00	0.99	0.99	180.00	-30.00	0.00	30.00	28.03	1.97	15.192		
400.00	400.00	400.00	400.00	1.31	1.31	180.00	-30.00	0.00	30.00	27.38	2.62	11.458		
500.00	500.00	500.00	500.00	1.65	1.65	180.00	-30.00	0.00	30.00	26.71	3.29	9.113		
600.00	600.00	600.00	600.00	1.99	1.99	180.00	-30.00	0.00	30.00	26.02	3.98	7.535		
700.00	700.00	700.00	700.00	2.34	2.34	180.00	-30.00	0.00	30.00	25.32	4.68	6.412		
800.00	800.00	800.00	800.00	2.69	2.69	180.00	-30.00	0.00	30.00	24.62	5.38	5.575		
900.00	900.00	900.00	900.00	3.04	3.04	180.00	-30.00	0.00	30.00	23.91	6.09	4.928 Alert		
1,000.00	1,000.00	1,000.00	1,000.00	3.40	3.40	180.00	-30.00	0.00	30.00	23.20	6.80	4.415 Alert		
1,100.00	1,100.00	1,100.00	1,100.00	3.75	3.75	180.00	-30.00	0.00	30.00	22.49	7.51	3.997 Alert		
1,200.00	1,200.00	1,200.00	1,200.00	4.11	4.11	180.00	-30.00	0.00	30.00	21.78	8.22	3.651 Alert		
1,300.00	1,300.00	1,300.00	1,300.00	4.46	4.46	180.00	-30.00	0.00	30.00	21.07	8.93	3.360 Alert		
1,400.00	1,400.00	1,400.00	1,400.00	4.82	4.82	180.00	-30.00	0.00	30.00	20.36	9.64	3.112 Alert		
1,500.00	1,500.00	1,500.00	1,500.00	5.18	5.18	180.00	-30.00	0.00	30.00	19.65	10.35	2.897 Alert		
1,600.00	1,600.00	1,600.00	1,600.00	5.53	5.53	180.00	-30.00	0.00	30.00	18.93	11.07	2.710 Alert		
1,700.00	1,700.00	1,700.00	1,700.00	5.89	5.89	180.00	-30.00	0.00	30.00	18.22	11.78	2.546 Alert		
1,800.00	1,800.00	1,800.00	1,800.00	6.25	6.25	180.00	-30.00	0.00	30.00	17.50	12.50	2.401 Minor Risk		
1,900.00	1,900.00	1,900.00	1,900.00	6.61	6.61	180.00	-30.00	0.00	30.00	16.79	13.21	2.271 Minor Risk		
2,000.00	2,000.00	2,000.00	2,000.00	6.96	6.96	180.00	-30.00	0.00	30.00	16.07	13.93	2.154 Minor Risk		
2,100.00	2,100.00	2,100.00	2,100.00	7.32	7.32	180.00	-30.00	0.00	30.00	15.36	14.64	2.049 Minor Risk		
2,200.00	2,200.00	2,200.00	2,200.00	7.68	7.68	180.00	-30.00	0.00	30.00	14.64	15.36	1.953 Minor Risk		
2,300.00	2,300.00	2,300.00	2,300.00	8.04	8.04	180.00	-30.00	0.00	30.00	13.93	16.07	1.867 Minor Risk		
2,400.00	2,400.00	2,400.00	2,400.00	8.39	8.39	180.00	-30.00	0.00	30.00	13.21	16.79	1.787 Minor Risk		
2,500.00	2,500.00	2,500.00	2,500.00	8.75	8.75	180.00	-30.00	0.00	30.00	12.50	17.50	1.714 Minor Risk, CC		
2,600.00	2,599.99	2,600.01	2,599.99	9.11	9.11	-140.95	-30.00	0.00	30.67	12.45	18.22	1.684 Minor Risk, ES, SF		
2,700.00	2,699.96	2,700.04	2,699.96	9.46	9.47	-143.82	-30.00	0.00	32.75	13.82	18.93	1.730 Minor Risk		
2,800.00	2,799.86	2,800.14	2,799.86	9.82	9.83	-147.86	-30.00	0.00	36.36	16.72	19.64	1.851 Minor Risk		
2,900.00	2,899.68	2,900.32	2,899.68	10.17	10.19	-152.31	-30.00	0.00	41.66	21.30	20.36	2.046 Minor Risk		
3,000.00	2,999.37	3,000.63	2,999.37	10.53	10.54	-156.57	-30.00	0.00	48.74	27.67	21.07	2.313 Minor Risk		
3,100.00	3,098.90	3,101.10	3,098.90	10.89	10.90	-160.32	-30.00	0.00	57.67	35.88	21.79	2.647 Alert		
3,200.00	3,198.26	3,201.74	3,198.26	11.25	11.26	-163.48	-30.00	0.00	68.44	45.94	22.50	3.042 Alert		
3,300.00	3,297.40	3,302.60	3,297.40	11.61	11.63	-166.08	-30.00	0.00	81.05	57.83	23.22	3.491 Alert		
3,400.00	3,396.32	3,403.68	3,396.32	11.97	11.99	-168.18	-30.00	0.00	95.34	71.41	23.93	3.984 Alert		
3,500.00	3,495.20	3,504.80	3,495.20	12.34	12.35	-169.77	-30.00	0.00	110.04	85.40	24.65	4.465 Alert		
3,600.00	3,594.07	3,605.93	3,594.07	12.71	12.71	-170.99	-30.00	0.00	124.81	99.45	25.37	4.921 Alert		
3,700.00	3,692.94	3,707.06	3,692.94	13.09	13.07	-171.96	-30.00	0.00	139.63	113.55	26.08	5.353		
3,800.00	3,791.81	3,808.19	3,791.81	13.46	13.44	-172.73	-30.00	0.00	154.47	127.67	26.80	5.764		
3,900.00	3,890.69	3,909.31	3,890.69	13.84	13.80	-173.37	-30.00	0.00	169.34	141.82	27.52	6.153		
4,000.00	3,989.56	3,989.56	3,989.56	14.22	14.09	-173.91	-30.00	0.00	184.23	156.06	28.17	6.541		
4,100.00	4,088.43	4,090.76	4,090.75	14.60	14.44	-174.17	-29.97	-0.90	198.61	169.72	28.88	6.876		
4,200.00	4,187.30	4,192.58	4,192.53	14.98	14.79	-173.90	-29.87	-4.04	211.70	182.11	29.59	7.154		
4,300.00	4,286.17	4,294.67	4,294.47	15.37	15.14	-173.18	-29.68	-9.46	223.51	193.21	30.30	7.376		
4,400.00	4,385.05	4,396.93	4,396.43	15.75	15.49	-172.08	-29.43	-17.17	234.10	203.09	31.01	7.548		
4,500.00	4,483.92	4,499.25	4,498.27	16.14	15.85	-170.63	-29.09	-27.15	243.56	211.83	31.73	7.677		
4,600.00	4,582.79	4,600.13	4,598.20	16.53	16.20	-168.94	-28.70	-38.82	252.19	219.74	32.45	7.772		
4,700.00	4,681.66	4,700.76	4,696.87	16.92	16.56	-167.35	-28.31	-50.55	260.92	227.75	33.17	7.866		
4,800.00	4,780.54	4,801.40	4,795.54	17.31	16.91	-165.86	-27.92	-62.29	269.84	235.93	33.90	7.959		
4,900.00	4,879.41	4,902.04	4,894.21	17.70	17.27	-164.47	-27.53	-74.02	278.92	244.29	34.63	8.054		
5,000.00	4,978.28	5,002.67	4,992.88	18.09	17.63	-163.17	-27.14	-85.75	288.16	252.79	35.37	8.148		

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference	Well Coral PWU 28-27 11H
Project:	Eddy County (NAD 83 NM Eastern)	TVD Reference:	RKB @ 3333.00ft
Reference Site:	Sec 27-T19S-R29E	MD Reference:	RKB @ 3333.00ft
Site Error:	5.00 ft	North Reference:	Grid
Reference Well:	Coral PWU 28-27 11H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Prelim Plan 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:		5.00 ft
Survey Program: 0-MWD+HDGM													Offset Well Error:		0.50 ft
Reference		Offset		Semi Major Axis			Distance						Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor			
5,100.00	5,077.15	5,103.31	5,091.55	18.49	17.99	-161.95	-26.75	-97.48	297.54	261.44	36.10	8.241			
5,200.00	5,176.03	5,196.06	5,190.21	18.88	18.32	-160.80	-26.35	-109.21	307.04	270.23	36.81	8.340			
5,300.00	5,274.90	5,304.58	5,288.88	19.28	18.72	-159.72	-25.96	-120.94	316.66	279.08	37.58	8.426			
5,400.00	5,373.77	5,405.22	5,387.55	19.67	19.08	-158.71	-25.57	-132.68	326.39	288.06	38.33	8.516			
5,500.00	5,472.64	5,505.85	5,486.22	20.07	19.45	-157.75	-25.18	-144.41	336.21	297.14	39.07	8.605			
5,600.00	5,571.52	5,606.49	5,584.89	20.46	19.82	-156.85	-24.79	-156.14	346.12	306.30	39.82	8.692			
5,700.00	5,670.39	5,707.12	5,683.55	20.86	20.19	-156.00	-24.40	-167.87	356.11	315.54	40.57	8.778			
5,800.00	5,769.26	5,807.76	5,782.22	21.26	20.56	-155.19	-24.00	-179.60	366.17	324.85	41.32	8.862			
5,900.00	5,868.13	5,908.40	5,880.89	21.66	20.93	-154.43	-23.61	-191.34	376.30	334.23	42.07	8.944			
6,000.00	5,967.00	6,009.03	5,979.56	22.06	21.30	-153.71	-23.22	-203.07	386.49	343.67	42.83	9.025			
6,100.00	6,065.88	6,109.67	6,078.23	22.45	21.67	-153.03	-22.83	-214.80	396.74	353.16	43.58	9.104			
6,200.00	6,164.75	6,189.70	6,176.90	22.85	21.97	-152.37	-22.44	-226.53	407.05	362.79	44.26	9.196			
6,300.00	6,263.62	6,289.06	6,275.56	23.25	22.34	-151.76	-22.05	-238.26	417.40	372.39	45.01	9.273			
6,400.00	6,362.49	6,388.42	6,374.23	23.65	22.71	-151.17	-21.65	-249.99	427.80	382.03	45.77	9.347			
6,500.00	6,461.37	6,487.79	6,472.90	24.06	23.08	-150.61	-21.26	-261.73	438.24	391.72	46.53	9.419			
6,600.00	6,560.24	6,587.15	6,571.57	24.46	23.45	-150.07	-20.87	-273.46	448.73	401.44	47.28	9.490			
6,700.00	6,659.11	6,686.52	6,670.24	24.86	23.82	-149.56	-20.48	-285.19	459.24	411.20	48.04	9.560			
6,800.00	6,757.98	6,785.88	6,768.91	25.26	24.20	-149.08	-20.09	-296.92	469.80	421.00	48.80	9.627			
6,900.00	6,856.86	6,885.24	6,867.57	25.66	24.57	-148.61	-19.70	-308.65	480.38	430.82	49.56	9.693			
7,000.00	6,955.73	6,984.61	6,966.24	26.06	24.94	-148.17	-19.30	-320.39	491.00	440.68	50.32	9.757			
7,100.00	7,054.60	7,083.97	7,064.91	26.47	25.32	-147.74	-18.91	-332.12	501.64	450.56	51.08	9.820			
7,200.00	7,153.47	7,183.34	7,163.58	26.87	25.69	-147.33	-18.52	-343.85	512.31	460.46	51.84	9.882			
7,300.00	7,252.35	7,282.70	7,262.25	27.27	26.07	-146.94	-18.13	-355.58	523.00	470.39	52.61	9.941			
7,400.00	7,351.22	7,382.06	7,360.92	27.68	26.45	-146.56	-17.74	-367.31	533.72	480.35	53.37	10.000			
7,500.00	7,450.10	7,481.43	7,459.59	28.08	26.82	-146.22	-17.35	-379.05	544.41	490.27	54.14	10.056			
7,600.00	7,549.24	7,580.72	7,558.18	28.48	27.20	-145.84	-16.95	-390.76	555.61	498.71	54.90	10.084			
7,700.00	7,648.68	7,678.42	7,655.36	28.86	27.57	-145.47	-16.62	-400.81	560.90	505.25	55.64	10.080			
7,800.00	7,748.36	7,776.35	7,753.00	29.23	27.93	-145.20	-16.37	-408.39	566.39	510.02	56.37	10.048			
7,900.00	7,848.22	7,874.45	7,850.95	29.59	28.28	-145.02	-16.20	-413.47	570.08	513.00	57.08	9.987			
8,000.00	7,948.18	7,972.63	7,949.11	29.94	28.63	-144.93	-16.11	-416.04	571.95	514.17	57.78	9.899			
8,100.00	8,048.18	8,071.71	8,048.18	30.28	28.97	-174.98	-16.10	-416.38	572.19	513.72	58.47	9.786			
8,200.00	8,148.18	8,171.71	8,148.18	30.61	29.32	-174.98	-16.10	-416.38	572.19	513.03	59.16	9.672			
8,300.00	8,248.18	8,271.71	8,248.18	30.95	29.67	-174.98	-16.10	-416.38	572.19	512.34	59.85	9.560			
8,400.00	8,348.18	8,371.71	8,348.18	31.29	30.02	-174.98	-16.10	-416.38	572.19	511.65	60.55	9.450			
8,500.00	8,448.18	8,471.71	8,448.18	31.62	30.36	-174.98	-16.10	-416.38	572.19	510.95	61.24	9.343			
8,600.00	8,548.18	8,571.71	8,548.18	31.96	30.71	-174.98	-16.10	-416.38	572.19	510.26	61.93	9.239			
8,700.00	8,647.97	8,665.86	8,642.19	32.29	31.03	-120.37	-16.10	-412.66	574.95	512.39	62.56	9.190			
8,800.00	8,745.29	8,756.80	8,731.34	32.60	31.30	-119.17	-16.12	-395.21	588.03	524.92	63.11	9.317			
8,900.00	8,836.77	8,845.86	8,814.91	32.88	31.55	-117.01	-16.16	-364.67	611.38	547.76	63.62	9.610			
9,000.00	8,919.25	8,932.32	8,890.56	33.12	31.79	-113.93	-16.21	-322.99	644.10	580.00	64.10	10.049			
9,100.00	8,989.86	9,015.87	8,956.92	33.30	32.03	-110.00	-16.27	-272.35	684.98	620.39	64.59	10.605			
9,200.00	9,046.15	9,096.64	9,013.41	33.44	32.30	-105.32	-16.33	-214.72	732.57	667.43	65.14	11.245			
9,300.00	9,086.96	9,176.01	9,060.51	33.55	32.63	-99.57	-16.41	-150.90	783.98	718.17	65.82	11.912			
9,400.00	9,117.56	9,261.72	9,100.93	33.98	33.09	-94.62	-16.49	-75.41	826.21	759.48	66.73	12.382			
9,500.00	9,138.42	9,354.65	9,131.52	34.73	33.72	-91.57	-16.59	-12.23	855.16	787.17	67.99	12.577			
9,600.00	9,148.83	9,452.67	9,148.00	35.65	34.57	-90.15	-16.71	-108.73	869.73	800.06	69.67	12.484			
9,700.00	9,150.00	9,552.60	9,150.00	36.69	35.62	-90.00	-16.82	-208.60	871.46	799.73	71.73	12.149			
9,800.00	9,150.00	9,652.60	9,150.00	37.90	36.83	-90.00	-16.94	-308.60	871.58	797.43	74.15	11.754			
9,900.00	9,150.00	9,752.60	9,150.00	39.28	38.22	-90.00	-17.05	-408.60	871.69	794.77	76.92	11.332			
10,000.00	9,150.00	9,852.60	9,150.00	40.81	39.78	-90.00	-17.17	-508.60	871.81	791.80	80.01	10.897			
10,100.00	9,150.00	9,952.60	9,150.00	42.48	41.47	-90.00	-17.28	-608.60	871.92	788.55	83.38	10.458			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference	Well Coral PWU 28-27 11H
Project:	Eddy County (NAD 83 NM Eastern)	TVD Reference:	RKB @ 3333.00ft
Reference Site:	Sec 27-T19S-R29E	MD Reference:	RKB @ 3333.00ft
Site Error:	5.00 ft	North Reference:	Grid
Reference Well:	Coral PWU 28-27 11H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Prelim Plan 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error: 5.00 ft	
Survey Program: 0-MWD+HDGM													Offset Well Error: 0.50 ft	
Sec 27-T19S-R29E - Coral PWU 28-27 62H - Wellbore #1 - Perlim Plan 1														
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Tooface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(")	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
10,200.00	9,150.00	10,052.60	9,150.00	44.27	43.28	90.00	-17.40	708.60	872.04	785.05	86.99	10.024		
10,300.00	9,150.00	10,152.60	9,150.00	46.17	45.21	90.00	-17.51	808.60	872.16	781.33	90.83	9.602		
10,400.00	9,150.00	10,252.60	9,150.00	48.16	47.23	90.00	-17.63	908.60	872.27	777.42	94.86	9.196		
10,500.00	9,150.00	10,352.60	9,150.00	50.23	49.33	90.00	-17.75	1,008.60	872.39	773.33	99.05	8.807		
10,600.00	9,150.00	10,452.60	9,150.00	52.38	51.51	90.00	-17.86	1,108.60	872.50	769.11	103.40	8.438		
10,700.00	9,150.00	10,552.60	9,150.00	54.60	53.76	90.00	-17.98	1,208.60	872.62	764.75	107.87	8.089		
10,800.00	9,150.00	10,652.60	9,150.00	56.87	56.06	90.00	-18.09	1,308.60	872.73	760.27	112.46	7.760		
10,900.00	9,150.00	10,752.60	9,150.00	59.20	58.41	90.00	-18.21	1,408.60	872.85	755.69	117.15	7.450		
11,000.00	9,150.00	10,852.60	9,150.00	61.57	60.81	90.00	-18.32	1,508.60	872.96	751.03	121.94	7.159		
11,100.00	9,150.00	10,952.60	9,150.00	63.98	63.24	90.00	-18.44	1,608.60	873.08	746.28	126.80	6.886		
11,200.00	9,150.00	11,052.60	9,150.00	66.43	65.71	90.00	-18.55	1,708.60	873.20	741.47	131.73	6.629		
11,300.00	9,150.00	11,152.60	9,150.00	68.90	68.21	90.00	-18.67	1,808.60	873.31	736.59	136.72	6.387		
11,400.00	9,150.00	11,252.60	9,150.00	71.41	70.74	90.00	-18.79	1,908.60	873.43	731.65	141.77	6.161		
11,500.00	9,150.00	11,352.60	9,150.00	73.95	73.30	90.00	-18.90	2,008.60	873.54	726.67	146.87	5.948		
11,600.00	9,150.00	11,452.60	9,150.00	76.51	75.88	90.00	-19.02	2,108.60	873.66	721.64	152.02	5.747		
11,700.00	9,150.00	11,552.60	9,150.00	79.09	78.47	90.00	-19.13	2,208.60	873.77	716.56	157.21	5.558		
11,800.00	9,150.00	11,652.60	9,150.00	81.69	81.09	90.00	-19.25	2,308.60	873.89	711.45	162.43	5.380		
11,900.00	9,150.00	11,752.60	9,150.00	84.30	83.72	90.00	-19.36	2,408.60	874.00	706.31	167.69	5.212		
12,000.00	9,150.00	11,852.60	9,150.00	86.93	86.37	90.00	-19.48	2,508.60	874.12	701.14	172.98	5.053		
12,100.00	9,150.00	11,952.60	9,150.00	89.58	89.03	90.00	-19.59	2,608.60	874.24	695.94	178.30	4.903 Alert		
12,200.00	9,150.00	12,052.60	9,150.00	92.24	91.71	90.00	-19.71	2,708.60	874.35	690.71	183.64	4.761 Alert		
12,300.00	9,150.00	12,152.60	9,150.00	94.91	94.39	90.00	-19.83	2,808.60	874.47	685.46	189.01	4.627 Alert		
12,400.00	9,150.00	12,252.60	9,150.00	97.60	97.09	90.00	-19.94	2,908.60	874.58	680.19	194.39	4.499 Alert		
12,500.00	9,150.00	12,352.60	9,150.00	100.29	99.79	90.00	-20.06	3,008.60	874.70	674.90	199.80	4.378 Alert		
12,600.00	9,150.00	12,452.60	9,150.00	102.99	102.51	90.00	-20.17	3,108.60	874.81	669.59	205.22	4.263 Alert		
12,700.00	9,150.00	12,552.60	9,150.00	105.70	105.23	90.00	-20.29	3,208.60	874.93	664.26	210.66	4.153 Alert		
12,800.00	9,150.00	12,652.60	9,150.00	108.42	107.96	90.00	-20.40	3,308.60	875.04	658.92	216.12	4.049 Alert		
12,900.00	9,150.00	12,752.60	9,150.00	111.15	110.70	90.00	-20.52	3,408.60	875.16	653.57	221.59	3.949 Alert		
13,000.00	9,150.00	12,852.60	9,150.00	113.89	113.44	90.00	-20.63	3,508.60	875.28	648.20	227.08	3.855 Alert		
13,100.00	9,150.00	12,952.60	9,150.00	116.63	116.19	90.00	-20.75	3,608.60	875.39	642.82	232.57	3.764 Alert		
13,200.00	9,150.00	13,052.60	9,150.00	119.37	118.95	90.00	-20.87	3,708.60	875.51	637.43	238.08	3.677 Alert		
13,300.00	9,150.00	13,152.60	9,150.00	122.13	121.71	90.00	-20.98	3,808.60	875.62	632.02	243.60	3.595 Alert		
13,400.00	9,150.00	13,252.60	9,150.00	124.88	124.48	90.00	-21.10	3,908.60	875.74	626.61	249.13	3.515 Alert		
13,500.00	9,150.00	13,352.60	9,150.00	127.65	127.25	90.00	-21.21	4,008.60	875.85	621.19	254.66	3.439 Alert		
13,600.00	9,150.00	13,452.60	9,150.00	130.41	130.02	90.00	-21.33	4,108.60	875.97	615.76	260.21	3.366 Alert		
13,700.00	9,150.00	13,552.60	9,150.00	133.18	132.80	90.00	-21.44	4,208.60	876.08	610.32	265.76	3.296 Alert		
13,800.00	9,150.00	13,652.60	9,150.00	135.96	135.58	90.00	-21.56	4,308.60	876.20	604.87	271.33	3.229 Alert		
13,900.00	9,150.00	13,752.60	9,150.00	138.74	138.37	90.00	-21.67	4,408.60	876.32	599.42	276.90	3.165 Alert		
14,000.00	9,150.00	13,852.60	9,150.00	141.52	141.16	90.00	-21.79	4,508.60	876.43	593.96	282.47	3.103 Alert		
14,100.00	9,150.00	13,952.59	9,150.00	144.31	143.95	90.00	-21.91	4,608.60	876.55	588.49	288.05	3.043 Alert		
14,200.00	9,150.00	14,052.59	9,150.00	147.10	146.75	90.00	-22.02	4,708.60	876.66	583.02	293.64	2.985 Alert		
14,300.00	9,150.00	14,152.59	9,150.00	149.89	149.54	90.00	-22.14	4,808.60	876.78	577.54	299.24	2.930 Alert		
14,400.00	9,150.00	14,252.59	9,150.00	152.68	152.34	90.00	-22.25	4,908.60	876.89	572.06	304.84	2.877 Alert		
14,500.00	9,150.00	14,352.59	9,150.00	155.48	155.15	90.00	-22.37	5,008.60	877.01	566.57	310.44	2.825 Alert		
14,600.00	9,150.00	14,452.59	9,150.00	158.28	157.95	90.00	-22.48	5,108.60	877.12	561.07	316.05	2.775 Alert		
14,700.00	9,150.00	14,552.59	9,150.00	161.09	160.76	90.00	-22.60	5,208.60	877.24	555.58	321.66	2.727 Alert		
14,800.00	9,150.00	14,652.59	9,150.00	163.89	163.57	90.00	-22.71	5,308.60	877.36	550.07	327.28	2.681 Alert		
14,900.00	9,150.00	14,752.59	9,150.00	166.70	166.38	90.00	-22.83	5,408.60	877.47	544.57	332.91	2.636 Alert		
15,000.00	9,150.00	14,852.59	9,150.00	169.51	169.20	90.00	-22.95	5,508.60	877.59	539.05	338.53	2.592 Alert		
15,100.00	9,150.00	14,952.59	9,150.00	172.32	172.01	90.00	-23.06	5,608.60	877.70	533.54	344.16	2.550 Alert		
15,200.00	9,150.00	15,052.59	9,150.00	175.13	174.83	90.00	-23.18	5,708.60	877.82	528.02	349.79	2.510 Alert		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference	Well Coral PWU 28-27 11H
Project:	Eddy County (NAD 83 NM Eastern)	TVD Reference:	RKB @ 3333.00ft
Reference Site:	Sec 27-T19S-R29E	MD Reference:	RKB @ 3333.00ft
Site Error:	5.00 ft	North Reference:	Grid
Reference Well:	Coral PWU 28-27 11H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Prelim Plan 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:		5.00 ft
Survey Program: 0-MWD+HDGM													Offset Well Error:		0.50 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		+N/-S (ft)	+E/-W (ft)							
15,300.00	9,150.00	15,152.59	9,150.00	177.95	177.65	90.00	-23.29	5,808.60	877.93	522.50	355.43	2.470	Minor Risk		
15,400.00	9,150.00	15,252.59	9,150.00	180.76	180.47	90.00	-23.41	5,908.60	878.05	516.98	361.07	2.432	Minor Risk		
15,500.00	9,150.00	15,352.59	9,150.00	183.58	183.30	90.00	-23.52	6,008.60	878.16	511.45	366.72	2.395	Minor Risk		
15,600.00	9,150.00	15,452.59	9,150.00	186.40	186.12	90.00	-23.64	6,108.60	878.28	505.92	372.36	2.359	Minor Risk		
15,700.00	9,150.00	15,552.59	9,150.00	189.22	188.94	90.00	-23.75	6,208.60	878.40	500.39	378.01	2.324	Minor Risk		
15,800.00	9,150.00	15,652.59	9,150.00	192.05	191.77	90.00	-23.87	6,308.60	878.51	494.85	383.66	2.290	Minor Risk		
15,900.00	9,150.00	15,752.59	9,150.00	194.87	194.60	90.00	-23.99	6,408.60	878.63	489.31	389.32	2.257	Minor Risk		
16,000.00	9,150.00	15,852.59	9,150.00	197.70	197.43	90.00	-24.10	6,508.60	878.74	483.77	394.97	2.225	Minor Risk		
16,100.00	9,150.00	15,952.59	9,150.00	200.52	200.26	90.00	-24.22	6,608.60	878.86	478.23	400.63	2.194	Minor Risk		
16,200.00	9,150.00	16,052.59	9,150.00	203.35	203.09	90.00	-24.33	6,708.60	878.97	472.68	406.29	2.163	Minor Risk		
16,300.00	9,150.00	16,152.59	9,150.00	206.18	205.92	90.00	-24.45	6,808.60	879.09	467.13	411.96	2.134	Minor Risk		
16,400.00	9,150.00	16,252.59	9,150.00	209.01	208.76	90.00	-24.56	6,908.60	879.20	461.58	417.62	2.105	Minor Risk		
16,500.00	9,150.00	16,352.59	9,150.00	211.84	211.59	90.00	-24.68	7,008.59	879.32	456.03	423.29	2.077	Minor Risk		
16,600.00	9,150.00	16,452.59	9,150.00	214.67	214.42	90.00	-24.79	7,108.59	879.44	450.48	428.96	2.050	Minor Risk		
16,700.00	9,150.00	16,552.59	9,150.00	217.51	217.26	90.00	-24.91	7,208.59	879.55	444.92	434.63	2.024	Minor Risk		
16,800.00	9,150.00	16,652.59	9,150.00	220.34	220.10	90.00	-25.03	7,308.59	879.67	439.37	440.30	1.998	Minor Risk		
16,900.00	9,150.00	16,752.59	9,150.00	223.18	222.94	90.00	-25.14	7,408.59	879.78	433.81	445.97	1.973	Minor Risk		
17,000.00	9,150.00	16,852.59	9,150.00	226.01	225.77	90.00	-25.26	7,508.59	879.90	428.25	451.65	1.948	Minor Risk		
17,086.67	9,150.00	16,939.27	9,150.00	228.47	228.24	90.00	-25.36	7,595.27	880.00	423.43	456.57	1.927	Minor Risk		

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference	Well Coral PWU 28-27 11H
Project:	Eddy County (NAD 83 NM Eastern)	TVD Reference:	RKB @ 3333.00ft
Reference Site:	Sec 27-T19S-R29E	MD Reference:	RKB @ 3333.00ft
Site Error:	5.00 ft	North Reference:	Grid
Reference Well:	Coral PWU 28-27 11H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Prelim Plan 1	Offset TVD Reference:	Offset Datum

Offset Design													Sec 27-T19S-R29E - Parkway West Unit #20 (Active) - Wellbore #1 - Wellbore #1		Offset Site Error:		5.00 ft
Survey Program:													412-INC-ONLY, 1338-MWD+IGRF, 3240-INC-ONLY		Offset Well Error:		10.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning				
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Tooface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor					
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(")	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)						
12,300.00	9,150.00	9,117.74	9,114.60	94.91	176.93	89.18	-576.42	3,189.63	1,480.80	1,210.30	270.50	5.474					
12,400.00	9,150.00	9,117.74	9,114.60	97.60	176.93	89.18	-576.42	3,189.63	1,458.35	1,184.42	273.93	5.324					
12,500.00	9,150.00	9,117.74	9,114.60	100.29	176.93	89.18	-576.42	3,189.63	1,442.49	1,165.42	277.06	5.206					
12,600.00	9,150.00	9,117.74	9,114.60	102.99	176.93	89.18	-576.42	3,189.63	1,433.45	1,153.60	279.84	5.122					
12,680.02	9,150.00	9,117.74	9,114.60	105.16	176.93	89.18	-576.42	3,189.63	1,431.21	1,149.44	281.77	5.079 CC					
12,700.00	9,150.00	9,117.74	9,114.60	105.70	176.93	89.18	-576.42	3,189.63	1,431.35	1,149.14	282.21	5.072 ES					
12,800.00	9,150.00	9,117.74	9,114.60	108.42	176.93	89.18	-576.42	3,189.63	1,436.23	1,152.12	284.11	5.055 SF					
12,900.00	9,150.00	9,117.74	9,114.60	111.15	176.93	89.18	-576.42	3,189.63	1,448.02	1,162.48	285.54	5.071					
13,000.00	9,150.00	9,117.74	9,114.60	113.89	176.93	89.18	-576.42	3,189.63	1,466.54	1,180.06	286.48	5.119					
13,100.00	9,150.00	9,117.74	9,114.60	116.63	176.93	89.18	-576.42	3,189.63	1,491.56	1,204.59	286.97	5.198					

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference	Well Coral PWU 28-27 11H
Project:	Eddy County (NAD 83 NM Eastern)	TVD Reference:	RKB @ 3333.00ft
Reference Site:	Sec 27-T19S-R29E	MD Reference:	RKB @ 3333.00ft
Site Error:	5.00 ft	North Reference:	Grid
Reference Well:	Coral PWU 28-27 11H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Prelim Plan 1	Offset TVD Reference:	Offset Datum

Offset Design Sec 27-T19S-R29E - Parkway West Unit 10 - Original Hole - Original Hole													Offset Site Error:	5.00 ft
Survey Program: 100-GYRO-NS-CT													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
14,300.00	9,150.00	9,205.02	9,201.62	149.89	32.15	-91.28	1,878.30	5,880.74	1,481.80	1,348.45	133.35	11.112		
14,400.00	9,150.00	9,203.92	9,200.52	152.68	32.14	-91.21	1,878.32	5,880.75	1,411.21	1,270.89	140.32	10.057		
14,500.00	9,150.00	9,202.82	9,199.42	155.48	32.14	-91.15	1,878.33	5,880.77	1,344.35	1,196.57	147.78	9.097		
14,600.00	9,150.00	9,201.71	9,198.31	158.28	32.14	-91.09	1,878.34	5,880.78	1,281.81	1,126.13	155.69	8.233		
14,700.00	9,150.00	9,200.60	9,197.20	161.09	32.13	-91.03	1,878.35	5,880.79	1,224.26	1,060.31	163.95	7.467		
14,800.00	9,150.00	9,199.49	9,196.09	163.89	32.13	-90.97	1,878.36	5,880.80	1,172.42	999.99	172.43	6.799		
14,900.00	9,150.00	9,198.37	9,194.97	166.70	32.13	-90.90	1,878.38	5,880.81	1,127.09	946.18	180.91	6.230		
15,000.00	9,150.00	9,197.26	9,193.85	169.51	32.12	-90.84	1,878.39	5,880.83	1,089.08	899.96	189.12	5.759		
15,100.00	9,150.00	9,196.13	9,192.73	172.32	32.12	-90.78	1,878.40	5,880.84	1,059.17	862.43	196.74	5.384		
15,200.00	9,150.00	9,195.01	9,191.61	175.13	32.11	-90.72	1,878.41	5,880.85	1,038.07	834.67	203.41	5.103		
15,300.00	9,150.00	9,193.88	9,190.48	177.95	32.11	-90.65	1,878.42	5,880.86	1,026.33	817.52	208.80	4.915 Alert		
15,371.26	9,150.00	9,193.07	9,189.67	179.95	32.11	-90.61	1,878.43	5,880.87	1,023.85	812.12	211.73	4.836 Alert, CC		
15,400.00	9,150.00	9,192.75	9,189.35	180.76	32.11	-90.59	1,878.44	5,880.88	1,024.25	811.57	212.68	4.816 Alert, ES		
15,500.00	9,150.00	9,191.61	9,188.21	183.58	32.10	-90.53	1,878.45	5,880.89	1,031.91	817.01	214.90	4.802 Alert, SF		
15,600.00	9,150.00	9,190.48	9,187.08	186.40	32.10	-90.46	1,878.46	5,880.90	1,049.09	833.62	215.47	4.869 Alert		
15,700.00	9,150.00	9,189.34	9,185.94	189.22	32.09	-90.40	1,878.47	5,880.91	1,075.32	860.80	214.53	5.012		
15,800.00	9,150.00	9,188.19	9,184.79	192.05	32.09	-90.33	1,878.48	5,880.93	1,109.98	897.67	212.31	5.228		
15,900.00	9,150.00	9,187.04	9,183.64	194.87	32.09	-90.27	1,878.50	5,880.94	1,152.30	943.21	209.10	5.511		
16,000.00	9,150.00	9,185.89	9,182.49	197.70	32.08	-90.21	1,878.51	5,880.95	1,201.47	996.31	205.16	5.856		
16,100.00	9,150.00	9,184.74	9,181.34	200.52	32.08	-90.14	1,878.52	5,880.96	1,256.69	1,055.93	200.76	6.260		
16,200.00	9,150.00	9,183.58	9,180.18	203.35	32.07	-90.08	1,878.53	5,880.98	1,317.19	1,121.09	196.10	6.717		
16,300.00	9,150.00	9,182.42	9,179.02	206.18	32.07	-90.01	1,878.54	5,880.99	1,382.29	1,190.92	191.36	7.223		
16,400.00	9,150.00	9,181.26	9,177.86	209.01	32.07	-89.95	1,878.56	5,881.00	1,451.36	1,264.70	186.65	7.776		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference	Well Coral PWU 28-27 11H
Project:	Eddy County (NAD 83 NM Eastern)	TVD Reference:	RKB @ 3333.00ft
Reference Site:	Sec 27-T19S-R29E	MD Reference:	RKB @ 3333.00ft
Site Error:	5.00 ft	North Reference:	Grid
Reference Well:	Coral PWU 28-27 11H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Prelim Plan 1	Offset TVD Reference:	Offset Datum

Offset Design Sec 27-T19S-R29E - Turquoise PWU 27-10H - Wellbore #1 - Wellbore #1													Offset Site Error: 5.00 ft	
Survey Program: 154-MWD+IGRF													Offset Well Error: 0.50 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
10,700.00	9,150.00	8,684.69	8,662.17	54.60	30.31	-61.68	1,782.33	2,197.25	1,444.26	1,375.90	68.36	21.128		
10,800.00	9,150.00	8,705.00	8,679.98	56.87	30.36	-62.53	1,781.88	2,207.00	1,377.47	1,306.93	70.53	19.529		
10,900.00	9,150.00	8,728.97	8,700.66	59.20	30.44	-63.53	1,781.27	2,219.11	1,314.07	1,240.96	73.11	17.974		
11,000.00	9,150.00	8,755.00	8,722.68	61.57	30.51	-64.62	1,780.51	2,232.96	1,254.38	1,178.30	76.08	16.488		
11,100.00	9,150.00	8,786.43	8,748.65	63.98	30.62	-65.92	1,779.44	2,250.64	1,198.76	1,119.32	79.45	15.089		
11,200.00	9,150.00	8,821.61	8,776.87	66.43	30.74	-67.36	1,778.04	2,271.59	1,147.53	1,064.35	83.18	13.796		
11,300.00	9,150.00	8,864.49	8,810.09	68.90	30.90	-69.10	1,776.01	2,298.62	1,100.86	1,013.63	87.23	12.620		
11,400.00	9,150.00	8,912.65	8,845.98	71.41	31.09	-71.01	1,773.17	2,330.60	1,058.68	967.14	91.54	11.565		
11,500.00	9,150.00	8,954.76	8,876.13	73.95	31.28	-72.67	1,770.69	2,359.89	1,021.55	925.53	96.01	10.640		
11,600.00	9,150.00	8,990.00	8,900.07	76.51	31.46	-74.01	1,768.95	2,385.68	990.35	889.77	100.58	9.846		
11,700.00	9,150.00	9,037.00	8,929.86	79.09	31.72	-75.73	1,767.11	2,421.97	965.19	860.04	105.15	9.179		
11,800.00	9,150.00	9,096.99	8,964.33	81.69	32.12	-77.75	1,765.11	2,471.01	945.55	835.91	109.65	8.624		
11,900.00	9,150.00	9,156.40	8,994.56	84.30	32.58	-79.56	1,763.50	2,522.11	930.98	816.97	114.01	8.166		
12,000.00	9,150.00	9,219.64	9,022.11	86.93	33.15	-81.24	1,762.54	2,579.01	921.23	803.01	118.22	7.792		
12,100.00	9,150.00	9,288.22	9,047.64	89.58	33.88	-82.82	1,762.66	2,642.64	915.79	793.45	122.34	7.486		
12,200.00	9,150.00	9,384.94	9,074.45	92.24	35.08	-84.49	1,763.00	2,735.50	912.94	786.41	126.52	7.216		
12,300.00	9,150.00	9,472.81	9,090.23	94.91	36.34	-85.48	1,762.20	2,821.92	910.47	779.77	130.71	6.966		
12,347.55	9,150.00	9,508.34	9,094.75	96.19	36.89	-85.76	1,762.30	2,857.16	910.15	777.48	132.67	6.860		
12,400.00	9,150.00	9,543.00	9,097.78	97.60	37.46	-85.96	1,762.91	2,891.68	910.71	775.93	134.78	6.757		
12,500.00	9,150.00	9,628.69	9,100.19	100.29	38.93	-86.12	1,765.63	2,977.28	913.66	774.63	139.03	6.572		
12,600.00	9,150.00	9,729.81	9,100.24	102.99	40.83	-86.14	1,769.44	3,078.33	917.41	773.79	143.63	6.387		
12,700.00	9,150.00	9,834.09	9,102.56	105.70	42.94	-86.29	1,772.49	3,182.53	920.17	771.73	148.44	6.199		
12,800.00	9,150.00	9,937.43	9,104.88	108.42	45.17	-86.45	1,776.01	3,285.79	923.45	770.07	153.38	6.020		
12,900.00	9,150.00	10,054.38	9,107.40	111.15	47.82	-86.62	1,777.90	3,402.70	924.90	766.23	158.68	5.829		
13,000.00	9,150.00	10,159.34	9,109.76	113.89	50.32	-86.76	1,778.48	3,507.63	925.32	761.44	163.88	5.646		
13,100.00	9,150.00	10,274.11	9,112.50	116.63	53.14	-86.93	1,778.07	3,622.36	924.85	755.52	169.32	5.462		
13,200.00	9,150.00	10,412.93	9,116.70	119.37	56.69	-87.18	1,773.68	3,761.03	921.59	746.50	175.10	5.263		
13,300.00	9,150.00	10,524.62	9,120.53	122.13	59.61	-87.40	1,766.26	3,872.41	914.72	734.15	180.57	5.066		
13,400.00	9,150.00	10,618.13	9,122.07	124.88	62.11	-87.48	1,760.21	3,965.72	908.18	722.24	185.95	4.884 Alert		
13,500.00	9,150.00	10,708.38	9,122.55	127.65	64.55	-87.49	1,755.07	4,055.82	902.48	711.15	191.32	4.717 Alert		
13,600.00	9,150.00	10,794.31	9,122.69	130.41	66.90	-87.49	1,751.27	4,141.66	898.07	701.40	196.67	4.566 Alert		
13,700.00	9,150.00	10,881.30	9,123.64	133.18	69.31	-87.54	1,748.93	4,228.61	895.31	693.28	202.03	4.432 Alert		
13,800.00	9,150.00	10,970.01	9,124.20	135.96	71.78	-87.58	1,747.57	4,317.30	893.76	686.35	207.41	4.309 Alert		
13,855.10	9,150.00	11,017.42	9,123.73	137.49	73.11	-87.55	1,747.34	4,364.71	893.52	683.19	210.33	4.248 Alert, CC		
13,900.00	9,150.00	11,058.26	9,122.83	138.74	74.27	-87.49	1,747.41	4,405.54	893.64	680.88	212.76	4.200 Alert		
14,000.00	9,150.00	11,152.04	9,119.77	141.52	76.93	-87.29	1,748.05	4,499.27	894.47	676.25	218.21	4.099 Alert		
14,100.00	9,150.00	11,247.53	9,117.71	144.31	79.65	-87.17	1,749.31	4,594.73	895.89	672.16	223.73	4.004 Alert		
14,200.00	9,150.00	11,340.53	9,116.20	147.10	82.32	-87.08	1,751.00	4,687.70	897.80	668.60	229.20	3.917 Alert		
14,300.00	9,150.00	11,426.01	9,112.88	149.89	84.78	-86.87	1,753.68	4,773.07	901.12	666.69	234.42	3.844 Alert		
14,400.00	9,150.00	11,522.47	9,108.99	152.68	87.57	-86.64	1,757.65	4,869.37	905.46	665.50	239.96	3.773 Alert		
14,500.00	9,150.00	11,651.54	9,107.37	155.48	91.34	-86.55	1,762.05	4,998.34	909.12	662.67	246.46	3.689 Alert		
14,600.00	9,150.00	11,775.20	9,112.13	158.28	94.97	-86.85	1,761.49	5,121.90	908.31	655.57	252.74	3.594 Alert		
14,700.00	9,150.00	11,882.44	9,119.32	161.09	98.14	-87.30	1,760.01	5,228.88	906.58	647.89	258.69	3.505 Alert		
14,800.00	9,150.00	11,966.15	9,125.20	163.89	100.62	-87.67	1,759.24	5,312.38	905.36	641.14	264.22	3.427 Alert		
14,818.33	9,150.00	11,981.75	9,126.28	164.41	101.08	-87.74	1,759.27	5,327.94	905.33	640.10	265.23	3.413 Alert		
14,900.00	9,150.00	12,054.19	9,130.94	166.70	103.24	-88.03	1,759.81	5,400.23	905.76	635.99	269.77	3.358 Alert		
15,000.00	9,150.00	12,166.09	9,137.61	169.51	106.57	-88.46	1,760.70	5,511.93	906.39	630.52	275.86	3.286 Alert		
15,100.00	9,150.00	12,266.93	9,143.02	172.32	109.58	-88.80	1,760.56	5,612.62	906.12	624.41	281.71	3.217 Alert		
15,200.00	9,150.00	12,371.98	9,147.58	175.13	112.73	-89.09	1,760.01	5,717.57	905.52	617.88	287.63	3.148 Alert		
15,300.00	9,150.00	12,475.71	9,151.94	177.95	115.85	-89.36	1,758.89	5,821.20	904.38	610.85	293.53	3.081 Alert		
15,400.00	9,150.00	12,573.22	9,155.34	180.76	118.79	-89.58	1,757.71	5,918.65	903.14	603.82	299.32	3.017 Alert		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference	Well Coral PWU 28-27 11H
Project:	Eddy County (NAD 83 NM Eastern)	TVD Reference:	RKB @ 3333.00ft
Reference Site:	Sec 27-T19S-R29E	MD Reference:	RKB @ 3333.00ft
Site Error:	5.00 ft	North Reference:	Grid
Reference Well:	Coral PWU 28-27 11H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Prelim Plan 1	Offset TVD Reference:	Offset Datum

Offset Design Sec 27-T19S-R29E - Turquoise PWU 27-10H - Wellbore #1 - Wellbore #1													Offset Site Error: 5.00 ft	
Survey Program: 154-MWD+IGRF													Offset Well Error: 0.50 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
15,500.00	9,150.00	12,665.62	9,157.74	183.58	121.58	-89.73	1,757.20	6,011.01	902.57	597.57	305.01	2.959	Alert	
15,520.36	9,150.00	12,684.59	9,158.15	184.16	122.16	-89.76	1,757.19	6,029.98	902.56	596.39	306.17	2.948	Alert	
15,600.00	9,150.00	12,762.01	9,159.54	186.40	124.50	-89.84	1,757.38	6,107.38	902.75	591.98	310.77	2.905	Alert	
15,700.00	9,150.00	12,863.39	9,160.90	189.22	127.57	-89.93	1,757.47	6,208.76	902.83	586.18	316.65	2.851	Alert	
15,800.00	9,150.00	12,959.31	9,160.56	192.05	130.47	-89.91	1,757.73	6,304.67	903.10	580.69	322.41	2.801	Alert	
15,900.00	9,150.00	13,053.36	9,160.67	194.87	133.33	-89.92	1,758.56	6,398.72	903.99	575.86	328.12	2.755	Alert	
16,000.00	9,150.00	13,156.97	9,161.56	197.70	136.48	-89.97	1,759.90	6,502.31	905.29	571.21	334.08	2.710	Alert	
16,100.00	9,150.00	13,265.10	9,163.14	200.52	139.77	-90.07	1,760.11	6,610.43	905.47	565.33	340.14	2.662	Alert	
16,200.00	9,150.00	13,380.43	9,164.31	203.35	143.29	-90.15	1,759.24	6,725.76	904.74	558.44	346.30	2.613	Alert	
16,300.00	9,150.00	13,473.29	9,165.09	206.18	146.12	-90.20	1,757.81	6,818.60	903.22	551.16	352.06	2.565	Alert	
16,400.00	9,150.00	13,566.21	9,164.77	209.01	148.96	-90.18	1,757.27	6,911.51	902.64	544.82	357.81	2.523	Alert	
16,500.00	9,150.00	13,671.33	9,162.81	211.84	152.18	-90.05	1,756.84	7,016.61	902.23	538.42	363.82	2.480	Minor Risk	
16,558.86	9,150.00	13,723.20	9,161.50	213.51	153.77	-89.97	1,756.63	7,068.47	901.99	534.85	367.14	2.457	Minor Risk	
16,600.00	9,150.00	13,759.26	9,160.61	214.67	154.87	-89.91	1,756.74	7,104.51	902.11	532.66	369.45	2.442	Minor Risk	
16,700.00	9,150.00	13,861.92	9,157.98	217.51	158.01	-89.74	1,757.24	7,207.14	902.61	527.20	375.42	2.404	Minor Risk	
16,800.00	9,150.00	13,968.29	9,155.12	220.34	161.28	-89.56	1,757.14	7,313.48	902.54	521.08	381.46	2.366	Minor Risk	
16,900.00	9,150.00	14,071.62	9,152.02	223.18	164.45	-89.37	1,756.42	7,416.75	901.86	514.43	387.43	2.328	Minor Risk	
17,000.00	9,150.00	14,169.68	9,149.26	226.01	167.46	-89.19	1,755.74	7,514.77	901.21	507.91	393.29	2.291	Minor Risk	
17,061.34	9,150.00	14,231.00	9,147.61	227.75	169.34	-89.08	1,755.37	7,576.07	900.86	503.94	396.91	2.270	Minor Risk	
17,086.67	9,150.00	14,223.00	9,147.82	228.47	169.10	-89.10	1,755.42	7,568.07	901.33	503.85	397.48	2.268	Minor Risk, ES, SF	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference	Well Coral PWU 28-27 11H
Project:	Eddy County (NAD 83 NM Eastern)	TVD Reference:	RKB @ 3333.00ft
Reference Site:	Sec 27-T19S-R29E	MD Reference:	RKB @ 3333.00ft
Site Error:	5.00 ft	North Reference:	Grid
Reference Well:	Coral PWU 28-27 11H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Prelim Plan 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error: 5.00 ft	
Survey Program: 100-NS-Gyro-DP, 7435-MWD+HDGM													Offset Well Error: 0.50 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
12,300.00	9,150.00	8,025.00	7,945.66	94.91	39.82	-10.93	1,087.12	3,597.90	1,457.46	1,400.77	56.69	25.708		
12,400.00	9,150.00	8,039.99	7,953.45	97.60	39.87	-10.99	1,086.81	3,610.71	1,405.52	1,349.10	56.42	24.911		
12,500.00	9,150.00	8,056.00	7,961.22	100.29	39.91	-11.05	1,086.55	3,624.70	1,357.82	1,301.57	56.24	24.141		
12,600.00	9,150.00	8,088.00	7,974.93	102.99	40.02	-11.16	1,086.32	3,653.60	1,314.82	1,258.42	56.40	23.312		
12,700.00	9,150.00	8,088.00	7,974.93	105.70	40.02	-11.16	1,086.32	3,653.60	1,276.69	1,220.48	56.21	22.711		
12,800.00	9,150.00	8,120.00	7,986.15	108.42	40.15	-11.27	1,086.36	3,683.56	1,243.56	1,186.95	56.61	21.966		
12,900.00	9,150.00	8,151.00	7,994.48	111.15	40.30	-11.34	1,086.25	3,713.41	1,216.37	1,159.25	57.12	21.295		
13,000.00	9,150.00	8,169.33	7,998.24	113.89	40.41	-11.36	1,085.95	3,731.35	1,194.82	1,137.13	57.69	20.710		
13,100.00	9,150.00	8,200.66	8,003.01	116.63	40.59	-11.36	1,084.96	3,762.29	1,179.12	1,120.59	58.53	20.145		
13,200.00	9,150.00	8,244.00	8,006.84	119.37	40.88	-11.29	1,082.81	3,805.40	1,168.95	1,109.45	59.50	19.646		
13,300.00	9,150.00	8,289.12	8,008.37	122.13	41.23	-11.16	1,079.64	3,850.38	1,163.62	1,103.08	60.54	19.222		
13,400.00	9,150.00	8,366.16	8,009.22	124.88	41.89	-10.89	1,073.91	3,927.19	1,161.11	1,099.74	61.36	18.922		
13,500.00	9,150.00	8,464.66	8,009.45	127.65	42.89	-10.59	1,067.79	4,025.50	1,159.71	1,097.61	62.10	18.675		
13,600.00	9,150.00	8,569.37	8,010.53	130.41	44.12	-10.44	1,064.57	4,130.15	1,158.14	1,095.09	63.06	18.366		
13,700.00	9,150.00	8,652.50	8,011.13	133.18	45.23	-10.40	1,063.50	4,213.27	1,157.18	1,092.89	64.29	17.998		
13,800.00	9,150.00	8,761.34	8,011.93	135.96	46.81	-10.42	1,063.75	4,322.11	1,156.50	1,090.94	65.57	17.638		
13,900.00	9,150.00	8,850.98	8,012.67	138.74	48.23	-10.49	1,065.08	4,411.73	1,155.94	1,088.91	67.04	17.243		
13,915.85	9,150.00	8,864.71	8,012.73	139.18	48.46	-10.50	1,065.31	4,425.46	1,155.93	1,088.65	67.28	17.181		
14,000.00	9,150.00	8,937.63	8,012.57	141.52	49.69	-10.55	1,066.41	4,498.38	1,156.34	1,087.79	68.55	16.869		
14,100.00	9,150.00	9,054.81	8,012.50	144.31	51.79	-10.60	1,067.29	4,615.55	1,156.53	1,086.57	69.97	16.530		
14,200.00	9,150.00	9,168.56	8,013.74	147.10	53.95	-10.60	1,067.26	4,729.29	1,155.46	1,084.07	71.39	16.184		
14,300.00	9,150.00	9,268.04	8,015.63	149.89	55.93	-10.59	1,066.50	4,828.75	1,153.46	1,080.62	72.83	15.837		
14,400.00	9,150.00	9,364.19	8,016.67	152.68	57.91	-10.55	1,065.58	4,924.89	1,152.21	1,077.93	74.27	15.513		
14,500.00	9,150.00	9,478.89	8,018.50	155.48	60.35	-10.47	1,063.71	5,039.56	1,150.36	1,074.72	75.64	15.208		
14,600.00	9,150.00	9,572.77	8,020.64	158.28	62.41	-10.41	1,061.95	5,133.39	1,147.79	1,070.72	77.07	14.893		
14,700.00	9,150.00	9,673.68	8,022.23	161.09	64.67	-10.32	1,059.78	5,234.27	1,145.86	1,067.40	78.45	14.606		
14,800.00	9,150.00	9,802.31	8,026.19	163.89	67.63	-10.27	1,058.05	5,362.82	1,142.62	1,062.71	79.91	14.299		
14,900.00	9,150.00	9,883.81	8,028.93	166.70	69.54	-10.24	1,056.97	5,444.27	1,139.02	1,057.56	81.46	13.982		
15,000.00	9,150.00	9,972.47	8,030.95	169.51	71.65	-10.18	1,055.44	5,532.90	1,136.47	1,053.51	82.96	13.699		
15,100.00	9,150.00	10,057.05	8,031.82	172.32	73.69	-10.10	1,053.67	5,617.45	1,135.09	1,050.67	84.42	13.446		
15,200.00	9,150.00	10,184.36	8,033.37	175.13	76.80	-9.91	1,049.66	5,744.68	1,133.38	1,047.74	85.64	13.234		
15,300.00	9,150.00	10,288.93	8,036.38	177.95	79.39	-9.74	1,045.68	5,849.13	1,129.89	1,042.98	86.91	13.001		
15,400.00	9,150.00	10,378.03	8,038.46	180.76	81.62	-9.57	1,041.85	5,938.13	1,126.86	1,038.69	88.18	12.780		
15,500.00	9,150.00	10,470.70	8,039.62	183.58	83.96	-9.35	1,037.44	6,030.68	1,124.83	1,035.47	89.36	12.588		
15,600.00	9,150.00	10,580.83	8,041.58	186.40	86.77	-9.13	1,032.71	6,140.69	1,122.37	1,031.86	90.51	12.401		
15,700.00	9,150.00	10,685.37	8,044.16	189.22	89.45	-9.00	1,029.68	6,245.15	1,119.48	1,027.62	91.86	12.187		
15,800.00	9,150.00	10,781.49	8,047.12	192.05	91.93	-8.96	1,028.34	6,341.22	1,116.23	1,022.83	93.40	11.951		
15,900.00	9,150.00	10,866.31	8,049.17	194.87	94.13	-9.03	1,029.40	6,426.00	1,114.04	1,018.84	95.21	11.701		
15,993.73	9,150.00	10,943.68	8,050.04	197.52	96.14	-9.12	1,031.09	6,503.34	1,113.33	1,016.36	96.97	11.481		
16,000.00	9,150.00	10,948.73	8,050.06	197.70	96.27	-9.12	1,031.20	6,508.39	1,113.33	1,016.25	97.09	11.467		
16,100.00	9,150.00	11,033.51	8,049.46	200.52	98.49	-9.20	1,032.75	6,593.16	1,114.29	1,015.37	98.92	11.265		
16,200.00	9,150.00	11,145.45	8,048.44	203.35	101.43	-9.24	1,033.82	6,705.09	1,115.36	1,014.64	100.71	11.075		
16,300.00	9,150.00	11,260.50	8,048.96	206.18	104.48	-9.26	1,034.11	6,820.14	1,114.93	1,012.49	102.45	10.883		
16,400.00	9,150.00	11,409.89	8,053.28	209.01	108.45	-9.30	1,034.13	6,969.44	1,112.23	1,008.02	104.20	10.674		
16,500.00	9,150.00	11,515.15	8,059.62	211.84	111.26	-9.34	1,033.95	7,074.52	1,106.24	1,000.24	106.01	10.436		
16,600.00	9,150.00	11,600.13	8,063.87	214.67	113.54	-9.36	1,033.62	7,159.39	1,101.21	993.43	107.78	10.217		
16,700.00	9,150.00	11,704.22	8,068.78	217.51	116.34	-9.35	1,032.51	7,263.36	1,096.38	986.94	109.44	10.018		
16,800.00	9,150.00	11,806.30	8,073.37	220.34	119.10	-9.28	1,030.41	7,365.31	1,091.61	980.65	110.96	9.838		
16,900.00	9,150.00	11,906.21	8,078.53	223.18	121.81	-9.17	1,027.56	7,465.04	1,086.06	973.68	112.38	9.664		
17,000.00	9,150.00	12,002.79	8,082.26	226.01	124.44	-9.01	1,023.81	7,561.48	1,081.61	967.97	113.64	9.518		
17,086.67	9,150.00	12,110.74	8,087.89	228.47	127.38	-8.80	1,018.93	7,669.17	1,076.52	962.03	114.49	9.403 CC, ES, SF		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference	Well Coral PWU 28-27 11H
Project:	Eddy County (NAD 83 NM Eastern)	TVD Reference:	RKB @ 3333.00ft
Reference Site:	Sec 27-T19S-R29E	MD Reference:	RKB @ 3333.00ft
Site Error:	5.00 ft	North Reference:	Grid
Reference Well:	Coral PWU 28-27 11H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Prelim Plan 1	Offset TVD Reference:	Offset Datum

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference	Well Coral PWU 28-27 11H
Project:	Eddy County (NAD 83 NM Eastern)	TVD Reference:	RKB @ 3333.00ft
Reference Site:	Sec 27-T19S-R29E	MD Reference:	RKB @ 3333.00ft
Site Error:	5.00 ft	North Reference:	Grid
Reference Well:	Coral PWU 28-27 11H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Prelim Plan 1	Offset TVD Reference:	Offset Datum

Offset Design Sec 28-T19S-R29E - Coral PWU 28-3H - Wellbore #1 - Wellbore #1													Offset Site Error: 5.00 ft	
Survey Program: 100-NS-Gyro-DP, 7342-MWD+IGRF													Offset Well Error: 0.50 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	5.02	5.02	135.87	-892.87	866.23	1,244.08					
100.00	100.00	89.82	89.82	5.03	5.03	135.87	-892.85	866.11	1,243.92	1,233.86	10.06	123.702		
200.00	200.00	192.45	192.45	5.05	5.08	135.89	-892.91	865.55	1,243.58	1,233.45	10.13	122.779		
300.00	300.00	290.26	290.25	5.10	5.19	135.93	-893.24	864.70	1,243.22	1,232.94	10.28	120.890		
400.00	400.00	390.65	390.64	5.17	5.35	135.97	-893.58	863.96	1,242.95	1,232.43	10.52	118.123		
500.00	500.00	490.52	490.51	5.26	5.57	135.98	-893.66	863.46	1,242.66	1,231.83	10.84	114.680		
600.00	600.00	592.08	592.06	5.38	5.83	135.99	-893.57	863.07	1,242.33	1,231.11	11.21	110.774		
700.00	700.00	689.02	689.01	5.52	6.09	135.98	-893.10	863.13	1,242.03	1,230.41	11.61	106.934		
757.02	757.02	744.04	744.02	5.61	6.25	135.95	-892.68	863.50	1,241.98	1,230.12	11.86	104.757		
800.00	800.00	785.50	785.48	5.68	6.37	135.93	-892.31	863.92	1,242.01	1,229.96	12.04	103.115		
900.00	900.00	879.95	879.91	5.85	6.66	135.85	-891.35	865.37	1,242.34	1,229.83	12.51	99.292		
1,000.00	1,000.00	973.44	973.38	6.05	6.97	135.75	-890.48	867.37	1,243.17	1,230.15	13.02	95.509		
1,100.00	1,100.00	1,073.91	1,073.82	6.25	7.33	135.65	-889.81	869.72	1,244.33	1,230.74	13.58	91.600		
1,200.00	1,200.00	1,171.15	1,171.04	6.47	7.71	135.56	-889.18	871.91	1,245.44	1,231.26	14.18	87.854		
1,300.00	1,300.00	1,272.60	1,272.46	6.70	8.12	135.47	-888.69	874.28	1,246.74	1,231.92	14.82	84.141		
1,400.00	1,400.00	1,372.31	1,372.14	6.95	8.53	135.38	-888.21	876.38	1,247.87	1,232.39	15.48	80.616		
1,500.00	1,500.00	1,471.66	1,471.47	7.20	8.97	135.31	-888.01	878.32	1,249.10	1,232.94	16.16	77.279		
1,600.00	1,600.00	1,571.51	1,571.31	7.46	9.41	135.25	-887.93	880.18	1,250.35	1,233.48	16.87	74.112		
1,700.00	1,700.00	1,671.77	1,671.55	7.73	9.87	135.19	-887.94	881.95	1,251.60	1,234.00	17.60	71.115		
1,800.00	1,800.00	1,774.35	1,774.11	8.00	10.35	135.14	-887.94	883.62	1,252.75	1,234.40	18.36	68.246		
1,900.00	1,900.00	1,876.20	1,875.95	8.28	10.84	135.10	-888.03	884.89	1,253.69	1,234.57	19.12	65.556		
2,000.00	2,000.00	1,979.01	1,978.76	8.57	11.34	135.08	-888.22	885.84	1,254.48	1,234.57	19.91	63.011		
2,100.00	2,100.00	2,078.90	2,078.64	8.87	11.83	135.06	-888.34	886.61	1,255.11	1,234.42	20.69	60.658		
2,200.00	2,200.00	2,175.97	2,175.72	9.16	12.31	135.04	-888.55	887.46	1,255.88	1,234.41	21.47	58.496		
2,300.00	2,300.00	2,274.38	2,274.12	9.46	12.80	135.02	-888.99	888.38	1,256.86	1,234.60	22.26	56.461		
2,400.00	2,400.00	2,374.69	2,374.42	9.77	13.30	135.01	-889.52	889.31	1,257.88	1,234.81	23.07	54.527		
2,500.00	2,500.00	2,479.45	2,479.18	10.08	13.83	134.99	-889.88	890.20	1,258.73	1,234.82	23.91	52.643		
2,600.00	2,599.99	2,583.48	2,583.20	10.39	14.37	175.07	-889.87	890.87	1,260.05	1,235.29	24.76	50.898		
2,700.00	2,699.96	2,687.15	2,686.87	10.70	14.90	175.06	-889.75	891.22	1,262.81	1,237.21	25.60	49.329		
2,800.00	2,799.86	2,784.10	2,783.82	11.02	15.40	175.06	-889.62	891.47	1,267.25	1,240.83	26.41	47.977		
2,900.00	2,899.68	2,881.55	2,881.28	11.33	15.91	175.06	-889.55	892.01	1,273.67	1,246.43	27.24	46.758		
3,000.00	2,999.37	2,982.96	2,982.68	11.66	16.44	175.07	-889.55	892.56	1,281.87	1,253.78	28.09	45.632		
3,100.00	3,098.90	3,084.38	3,084.10	11.98	16.98	175.08	-889.51	892.90	1,291.63	1,262.68	28.95	44.620		
3,200.00	3,198.26	3,181.92	3,181.64	12.31	17.49	175.11	-889.53	893.14	1,303.09	1,273.31	29.78	43.760		
3,300.00	3,297.40	3,283.57	3,283.29	12.64	17.99	175.15	-889.78	893.20	1,316.31	1,285.71	30.60	43.011		
3,400.00	3,396.32	3,384.57	3,384.29	12.98	18.46	175.22	-890.08	892.89	1,330.91	1,299.51	31.40	42.383		
3,500.00	3,495.20	3,478.97	3,478.69	13.32	18.91	175.29	-890.50	892.55	1,345.89	1,313.72	32.18	41.829		
3,600.00	3,594.07	3,576.00	3,575.72	13.66	19.38	175.36	-891.06	892.47	1,361.17	1,328.19	32.98	41.271		
3,700.00	3,692.94	3,675.23	3,674.95	14.01	19.88	175.44	-891.69	892.38	1,376.48	1,342.68	33.80	40.721		
3,800.00	3,791.81	3,773.89	3,773.60	14.36	20.36	175.52	-892.56	892.00	1,391.77	1,357.15	34.62	40.200		
3,900.00	3,890.69	3,875.51	3,875.21	14.72	20.86	175.63	-893.75	891.24	1,407.00	1,371.55	35.45	39.686		
4,000.00	3,989.56	3,970.92	3,970.60	15.07	21.33	175.74	-895.06	890.21	1,422.17	1,385.91	36.26	39.225		
4,100.00	4,088.43	4,070.02	4,069.69	15.43	21.82	175.85	-896.63	889.28	1,437.58	1,400.49	37.09	38.764		
4,200.00	4,187.30	4,179.59	4,179.25	15.80	22.36	175.96	-897.71	888.32	1,452.62	1,414.65	37.97	38.261		
4,300.00	4,286.17	4,281.19	4,280.84	16.16	22.85	176.02	-897.76	887.54	1,467.06	1,428.26	38.80	37.811		
4,400.00	4,385.05	4,385.28	4,384.94	16.53	23.35	176.09	-897.61	886.69	1,481.35	1,441.70	39.65	37.363		
4,500.00	4,483.92	4,483.69	4,483.33	16.90	23.83	176.14	-897.32	885.74	1,495.41	1,454.94	40.47	36.951		
7,200.00	7,153.47	9,052.18	7,966.74	27.33	46.14	133.69	494.79	824.15	1,486.80	1,423.54	63.26	23.503		
7,300.00	7,252.35	9,063.66	7,966.70	27.73	46.26	133.19	506.27	824.13	1,442.48	1,376.87	65.62	21.983		
7,400.00	7,351.22	9,075.24	7,966.66	28.13	46.39	132.69	517.86	824.10	1,403.82	1,335.91	67.91	20.673		
7,500.00	7,450.10	9,086.89	7,966.62	28.52	46.51	132.10	529.51	824.06	1,371.23	1,301.16	70.07	19.570		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference	Well Coral PWU 28-27 11H
Project:	Eddy County (NAD 83 NM Eastern)	TVD Reference:	RKB @ 3333.00ft
Reference Site:	Sec 27-T19S-R29E	MD Reference:	RKB @ 3333.00ft
Site Error:	5.00 ft	North Reference:	Grid
Reference Well:	Coral PWU 28-27 11H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Prelim Plan 1	Offset TVD Reference:	Offset Datum

Offset Design Sec 28-T19S-R29E - Coral PWU 28-3H - Wellbore #1 - Wellbore #1													Offset Site Error: 5.00 ft	
Survey Program: 100-NS-Gyro-DP, 7342-MWD+IGRF													Offset Well Error: 0.50 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
7,600.00	7,549.24	9,097.19	7,966.59	28.91	46.62	131.34	539.80	824.02	1,344.03	1,272.00	72.02	18.662		
7,700.00	7,648.68	9,105.47	7,966.57	29.29	46.71	130.72	548.09	823.99	1,322.07	1,248.37	73.70	17.939		
7,800.00	7,748.36	9,111.71	7,966.56	29.66	46.78	130.26	554.32	823.96	1,305.68	1,230.63	75.04	17.399		
7,900.00	7,848.22	9,115.85	7,966.55	30.01	46.82	129.95	558.46	823.94	1,295.10	1,219.08	76.02	17.036		
8,000.00	7,948.18	9,117.87	7,966.55	30.35	46.85	129.81	560.48	823.93	1,290.51	1,213.92	76.59	16.849		
8,022.64	7,970.82	9,118.06	7,966.55	30.43	46.85	129.80	560.67	823.92	1,290.34	1,213.67	76.66	16.831 SF		
8,100.00	8,048.18	9,118.00	7,966.55	30.69	46.85	89.70	560.61	823.92	1,292.18	1,215.43	76.75	16.836		
8,200.00	8,148.18	9,117.83	7,966.55	31.02	46.85	89.71	560.44	823.93	1,301.33	1,224.81	76.52	17.006		
8,300.00	8,248.18	9,117.66	7,966.55	31.35	46.84	89.72	560.27	823.93	1,318.02	1,242.09	75.94	17.357		
8,400.00	8,348.18	9,117.49	7,966.55	31.68	46.84	89.72	560.10	823.93	1,341.98	1,266.94	75.04	17.884		
8,500.00	8,448.18	9,117.32	7,966.55	32.02	46.84	89.73	559.93	823.93	1,372.82	1,298.95	73.87	18.583		
8,600.00	8,548.18	9,117.14	7,966.55	32.35	46.84	89.74	559.75	823.93	1,410.09	1,337.58	72.51	19.447		
8,700.00	8,647.97	9,119.99	7,966.55	32.68	46.87	33.43	562.60	823.91	1,449.80	1,378.80	71.00	20.421		
8,800.00	8,745.29	9,134.22	7,966.53	32.99	47.02	30.95	576.83	823.83	1,481.51	1,412.14	69.37	21.356		
9,300.00	9,086.96	9,329.62	7,965.98	33.92	49.27	20.98	772.22	822.45	1,485.36	1,425.10	60.26	24.649		
9,400.00	9,117.56	9,372.58	7,965.83	34.34	49.79	14.12	815.18	822.03	1,453.85	1,395.77	58.07	25.034		
9,500.00	9,138.42	9,401.51	7,965.76	35.09	50.14	7.81	844.11	821.74	1,414.74	1,359.25	55.49	25.495		
9,600.00	9,148.83	9,415.39	7,965.73	36.00	50.31	2.14	857.99	821.60	1,369.68	1,317.09	52.59	26.043		
9,700.00	9,150.00	9,416.00	7,965.73	37.03	50.32	-0.19	858.60	821.59	1,321.52	1,272.01	49.51	26.690		
9,800.00	9,150.00	9,414.95	7,965.73	38.23	50.31	-0.14	857.54	821.60	1,278.29	1,231.91	46.38	27.558		
9,900.00	9,150.00	9,413.89	7,965.73	39.60	50.30	-0.09	856.49	821.61	1,241.62	1,198.25	43.37	28.630		
10,000.00	9,150.00	9,412.83	7,965.73	41.12	50.28	-0.04	855.43	821.63	1,212.12	1,171.43	40.68	29.794		
10,100.00	9,150.00	9,411.78	7,965.73	42.77	50.27	0.01	854.38	821.64	1,190.30	1,151.69	38.61	30.830		
10,200.00	9,150.00	9,410.73	7,965.74	44.55	50.26	0.06	853.33	821.65	1,176.61	1,139.17	37.44	31.423		
10,300.00	9,150.00	9,409.68	7,965.74	46.44	50.24	0.12	852.28	821.66	1,171.33	1,133.89	37.43	31.292		
10,312.05	9,150.00	9,409.55	7,965.74	46.67	50.24	0.12	852.15	821.66	1,171.26	1,133.75	37.52	31.221 CC, ES		
10,400.00	9,150.00	9,408.63	7,965.74	48.42	50.23	0.17	851.23	821.67	1,174.56	1,135.92	38.64	30.397		
10,500.00	9,150.00	9,407.58	7,965.74	50.48	50.22	0.22	850.18	821.68	1,186.25	1,145.34	40.91	28.995		
10,600.00	9,150.00	9,406.53	7,965.75	52.62	50.21	0.27	849.13	821.69	1,206.14	1,162.20	43.93	27.453		
10,700.00	9,150.00	9,405.49	7,965.75	54.83	50.19	0.32	848.09	821.70	1,233.84	1,186.46	47.37	26.046		
10,800.00	9,150.00	9,404.45	7,965.75	57.09	50.18	0.37	847.05	821.71	1,268.83	1,217.89	50.94	24.907		
10,900.00	9,150.00	9,403.40	7,965.75	59.41	50.17	0.42	846.01	821.72	1,310.54	1,256.09	54.45	24.068		
11,000.00	9,150.00	9,402.37	7,965.75	61.77	50.16	0.47	844.97	821.73	1,358.34	1,300.57	57.77	23.511		
11,100.00	9,150.00	9,401.33	7,965.76	64.17	50.14	0.52	843.93	821.74	1,411.62	1,350.77	60.84	23.201		
11,200.00	9,150.00	9,400.29	7,965.76	66.61	50.13	0.57	842.89	821.75	1,469.77	1,406.15	63.63	23.100		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	WCDCS Permian NM	Local Co-ordinate Reference	Well Coral PWU 28-27 11H
Project:	Eddy County (NAD 83 NM Eastern)	TVD Reference:	RKB @ 3333.00ft
Reference Site:	Sec 27-T19S-R29E	MD Reference:	RKB @ 3333.00ft
Site Error:	5.00 ft	North Reference:	Grid
Reference Well:	Coral PWU 28-27 11H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Prelim Plan 1	Offset TVD Reference:	Offset Datum

Offset Design Sec 28-T19S-R29E - Coral PWU 28-4H - Wellbore #1 - Wellbore #1													Offset Site Error: 5.00 ft	
Survey Program: 200-NSG-GYC_Drop, 7387-MWD+IGRF													Offset Well Error: 0.50 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
10,200.00	9,150.00	9,414.96	7,987.84	44.55	44.94	0.47	845.25	1,652.67	1,492.03	1,435.11	56.92	26.214		
10,300.00	9,150.00	9,411.12	7,988.00	46.44	44.89	0.66	841.42	1,652.82	1,430.92	1,376.15	54.76	26.129		
10,400.00	9,150.00	9,407.14	7,988.16	48.42	44.83	0.85	837.45	1,652.99	1,374.36	1,321.87	52.49	26.183		
10,500.00	9,150.00	9,403.00	7,988.33	50.48	44.78	1.06	833.32	1,653.16	1,322.94	1,272.80	50.14	26.384		
10,600.00	9,150.00	9,399.00	7,988.50	52.62	44.72	1.26	829.32	1,653.33	1,277.28	1,229.48	47.80	26.722		
10,700.00	9,150.00	9,399.00	7,988.50	54.83	44.72	1.26	829.32	1,653.33	1,238.03	1,192.44	45.59	27.156		
10,800.00	9,150.00	9,392.45	7,988.77	57.09	44.63	1.58	822.78	1,653.61	1,205.78	1,162.15	43.63	27.638		
10,900.00	9,150.00	9,389.09	7,988.91	59.41	44.58	1.75	819.43	1,653.76	1,181.14	1,139.01	42.13	28.034		
11,000.00	9,150.00	9,385.61	7,989.04	61.77	44.54	1.92	815.95	1,653.92	1,164.58	1,123.29	41.29	28.203		
11,100.00	9,150.00	9,381.98	7,989.18	64.17	44.49	2.10	812.33	1,654.09	1,156.45	1,115.17	41.28	28.017		
11,144.56	9,150.00	9,380.31	7,989.25	65.26	44.46	2.18	810.67	1,654.17	1,155.59	1,114.03	41.56	27.806 CC, ES		
11,200.00	9,150.00	9,378.20	7,989.33	66.61	44.43	2.29	808.56	1,654.27	1,156.92	1,114.76	42.16	27.443		
11,300.00	9,150.00	9,374.26	7,989.47	69.09	44.38	2.48	804.63	1,654.46	1,165.98	1,122.11	43.87	26.580		
11,400.00	9,150.00	9,370.16	7,989.62	71.59	44.32	2.68	800.53	1,654.67	1,183.43	1,137.22	46.21	25.608		
11,500.00	9,150.00	9,365.87	7,989.77	74.12	44.27	2.90	796.25	1,654.88	1,208.92	1,159.97	48.95	24.698		
11,600.00	9,150.00	9,361.39	7,989.93	76.67	44.20	3.12	791.78	1,655.12	1,241.93	1,190.10	51.84	23.958		
11,700.00	9,150.00	9,356.70	7,990.08	79.24	44.14	3.35	787.10	1,655.36	1,281.90	1,227.20	54.71	23.432		
11,800.00	9,150.00	9,351.79	7,990.24	81.84	44.07	3.59	782.20	1,655.63	1,328.19	1,270.76	57.44	23.124		
11,900.00	9,150.00	9,346.65	7,990.40	84.45	44.00	3.85	777.07	1,655.92	1,380.17	1,320.21	59.96	23.019 SF		
12,000.00	9,150.00	9,341.25	7,990.56	87.08	43.93	4.11	771.68	1,656.22	1,437.21	1,374.97	62.24	23.092		
12,100.00	9,150.00	9,335.58	7,990.72	89.72	43.85	4.39	766.02	1,656.55	1,498.74	1,434.47	64.27	23.319		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference	Well Coral PWU 28-27 11H
Project:	Eddy County (NAD 83 NM Eastern)	TVD Reference:	RKB @ 3333.00ft
Reference Site:	Sec 27-T19S-R29E	MD Reference:	RKB @ 3333.00ft
Site Error:	5.00 ft	North Reference:	Grid
Reference Well:	Coral PWU 28-27 11H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Prelim Plan 1	Offset TVD Reference:	Offset Datum

Offset Design Sec 28-T19S-R29E - Coral PWU 28-7H - Wellbore #1 - Wellbore #1													Offset Site Error: 5.00 ft	
Survey Program: 0-NSG-GYC_Drop, 652S-MWD+IGRF													Offset Well Error: 0.50 ft	
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)			
5,700.00	5,670.39	9,394.28	7,014.51	21.45	82.30	73.81	761.50	-207.86	1,420.65	1,377.48	43.17	32.910		
5,800.00	5,769.26	9,409.88	7,015.18	21.84	82.76	71.64	761.50	-223.45	1,323.79	1,279.25	44.54	29.721		
5,900.00	5,868.13	9,425.21	7,015.83	22.23	83.21	69.40	761.50	-238.76	1,227.25	1,181.15	46.11	26.619		
6,000.00	5,967.00	9,440.28	7,016.44	22.62	83.66	67.09	761.50	-253.81	1,131.14	1,083.23	47.91	23.609		
6,100.00	6,065.88	9,455.08	7,017.03	23.00	84.09	64.73	761.49	-268.61	1,035.56	985.53	50.03	20.700		
6,200.00	6,164.75	9,469.64	7,017.59	23.39	84.52	62.31	761.48	-283.16	940.69	888.14	52.55	17.901		
6,300.00	6,263.62	9,483.96	7,018.13	23.79	84.95	59.85	761.47	-297.46	846.78	791.17	55.60	15.229		
6,400.00	6,362.49	9,498.03	7,018.64	24.18	85.36	57.34	761.45	-311.53	754.18	694.80	59.38	12.702		
6,500.00	6,461.37	9,510.96	7,019.09	24.57	85.75	54.98	761.48	-324.45	663.47	599.36	64.12	10.348		
6,600.00	6,560.24	9,524.01	7,019.52	24.96	86.13	52.53	761.53	-337.49	575.55	505.36	70.19	8.200		
6,700.00	6,659.11	9,536.81	7,019.92	25.36	86.51	50.09	761.60	-350.29	491.92	413.89	78.03	6.304		
6,800.00	6,757.98	9,549.36	7,020.30	25.75	86.89	47.65	761.69	-362.83	415.20	327.19	88.01	4.718	Alert	
6,900.00	6,856.86	9,561.68	7,020.65	26.14	87.25	45.23	761.81	-375.14	349.97	250.20	99.77	3.508	Alert	
7,000.00	6,955.73	9,573.76	7,020.98	26.54	87.61	42.84	761.94	-387.21	303.75	193.24	110.51	2.749	Alert	
7,100.00	7,054.60	9,585.69	7,021.29	26.94	87.96	40.47	762.09	-399.15	285.92	172.08	113.84	2.512	Alert, ES, SF	
7,103.34	7,057.91	9,586.09	7,021.30	26.95	87.98	40.39	762.10	-399.54	285.91	172.15	113.75	2.513	Alert, CC	
7,200.00	7,153.47	9,597.27	7,021.55	27.33	88.31	38.17	762.25	-410.72	301.58	195.77	105.81	2.850	Alert	
7,300.00	7,252.35	9,608.26	7,021.76	27.73	88.64	35.99	762.41	-421.70	346.24	254.73	91.51	3.783	Alert	
7,400.00	7,351.22	9,618.71	7,021.94	28.13	88.95	33.93	762.57	-432.15	410.57	332.87	77.70	5.284		
7,500.00	7,450.10	9,628.62	7,022.07	28.52	89.24	32.22	762.73	-442.07	486.88	419.99	66.89	7.279		
7,600.00	7,549.24	9,637.06	7,022.16	28.91	89.49	31.79	762.87	-450.50	571.16	511.99	59.17	9.652		
7,700.00	7,648.68	9,643.67	7,022.22	29.29	89.69	32.03	762.98	-457.10	660.68	606.81	53.88	12.263		
7,800.00	7,748.36	9,648.57	7,022.26	29.66	89.84	33.00	763.07	-462.01	753.58	703.30	50.28	14.988		
7,900.00	7,848.22	9,651.88	7,022.28	30.01	89.94	34.83	763.13	-465.32	848.73	800.88	47.84	17.739		
8,000.00	7,948.18	9,653.69	7,022.29	30.35	89.99	37.75	763.16	-467.13	945.41	899.21	46.20	20.462		
8,100.00	8,048.18	9,654.26	7,022.29	30.69	90.01	-0.35	763.17	-467.70	1,043.10	998.01	45.09	23.131		
8,200.00	8,148.18	9,654.63	7,022.29	31.02	90.02	-0.45	763.18	-468.07	1,141.24	1,096.95	44.29	25.765		
8,300.00	8,248.18	9,654.99	7,022.29	31.35	90.03	-0.55	763.18	-468.42	1,239.68	1,195.87	43.71	28.361		
8,400.00	8,348.18	9,655.33	7,022.29	31.68	90.04	-0.64	763.19	-468.76	1,338.36	1,295.06	43.29	30.916		
8,500.00	8,448.18	9,655.65	7,022.30	32.02	90.05	-0.73	763.19	-469.09	1,437.21	1,394.21	42.99	33.427		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference	Well Coral PWU 28-27 11H
Project:	Eddy County (NAD 83 NM Eastern)	TVD Reference:	RKB @ 3333.00ft
Reference Site:	Sec 27-T19S-R29E	MD Reference:	RKB @ 3333.00ft
Site Error:	5.00 ft	North Reference:	Grid
Reference Well:	Coral PWU 28-27 11H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Prelim Plan 1	Offset TVD Reference:	Offset Datum

Offset Design Sec 28-T19S-R29E - Parkway Unit 16 (Active) - Wellbore #1 - Wellbore #1													Offset Site Error: 5.00 ft		
Survey Program: 100-MWD														Offset Well Error: 10.00 ft	
Reference		Offset		Semi Major Axis			Distance							Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)				
0.00	0.00	0.00	0.00	5.02	11.18	112.41	-231.84	562.22	608.54						
100.00	100.00	84.58	84.58	5.03	11.18	112.42	-231.75	561.76	607.72	591.51	16.21	37.498			
200.00	200.00	187.53	187.51	5.05	11.19	112.45	-231.53	560.30	606.33	590.09	16.24	37.341			
300.00	300.00	284.24	284.22	5.10	11.21	112.51	-231.56	558.87	604.98	588.67	16.31	37.102			
400.00	400.00	383.57	383.53	5.17	11.24	112.58	-231.97	557.71	604.05	587.64	16.41	36.811			
500.00	500.00	482.91	482.87	5.26	11.28	112.66	-232.40	556.59	603.18	586.64	16.55	36.451			
600.00	600.00	580.74	580.70	5.38	11.34	112.72	-232.71	555.78	602.54	585.82	16.72	36.039			
694.16	694.16	672.20	672.16	5.51	11.39	112.73	-232.69	555.56	602.32	585.41	16.91	35.628 CC			
700.00	700.00	677.87	677.83	5.52	11.40	112.73	-232.68	555.56	602.32	585.40	16.92	35.602 ES			
800.00	800.00	774.31	774.26	5.68	11.47	112.70	-232.54	555.95	602.63	585.49	17.14	35.154			
900.00	900.00	866.76	866.71	5.85	11.54	112.65	-232.52	557.11	603.79	586.41	17.39	34.725			
1,000.00	1,000.00	963.41	963.32	6.05	11.62	112.58	-232.62	559.50	606.11	588.45	17.66	34.315			
1,100.00	1,100.00	1,062.78	1,062.67	6.25	11.72	112.49	-232.73	562.10	608.57	590.60	17.97	33.871			
1,200.00	1,200.00	1,162.83	1,162.68	6.47	11.83	112.42	-233.02	564.73	611.11	592.81	18.30	33.403			
1,300.00	1,300.00	1,263.07	1,262.89	6.70	11.95	112.37	-233.42	567.25	613.58	594.93	18.65	32.907			
1,400.00	1,400.00	1,364.18	1,363.97	6.95	12.08	112.31	-233.76	569.73	615.98	596.97	19.02	32.389			
1,500.00	1,500.00	1,463.77	1,463.53	7.20	12.22	112.24	-233.95	572.08	618.23	598.82	19.41	31.857			
1,600.00	1,600.00	1,566.53	1,566.26	7.46	12.37	112.18	-234.24	574.44	620.48	600.66	19.82	31.307			
1,700.00	1,700.00	1,671.06	1,670.78	7.73	12.53	112.14	-234.38	576.09	621.98	601.73	20.25	30.713			
1,800.00	1,800.00	1,776.66	1,776.37	8.00	12.70	112.10	-234.32	576.96	622.73	602.03	20.70	30.083			
1,900.00	1,900.00	1,879.36	1,879.07	8.28	12.88	112.08	-234.06	577.05	622.71	601.55	21.16	29.433			
2,000.00	2,000.00	1,981.18	1,980.90	8.57	13.05	112.06	-233.77	576.82	622.39	600.77	21.62	28.785			
2,100.00	2,100.00	2,084.61	2,084.32	8.87	13.24	112.05	-233.40	576.16	621.68	599.57	22.10	28.127			
2,200.00	2,200.00	2,189.88	2,189.58	9.16	13.44	112.05	-232.79	574.80	620.25	597.66	22.60	27.450			
2,300.00	2,300.00	2,291.86	2,291.54	9.46	13.64	112.06	-232.17	572.78	618.20	595.10	23.10	26.767			
2,400.00	2,400.00	2,391.87	2,391.52	9.77	13.84	112.09	-231.64	570.62	615.99	592.39	23.60	26.098			
2,500.00	2,500.00	2,491.16	2,490.79	10.08	14.05	112.13	-231.22	568.49	613.85	589.73	24.12	25.450			
2,600.00	2,599.99	2,590.39	2,590.00	10.39	14.26	152.33	-231.00	566.42	612.60	587.96	24.64	24.859			
2,627.50	2,627.49	2,617.97	2,617.57	10.48	14.32	152.37	-230.95	565.86	612.55	587.76	24.79	24.711			
2,700.00	2,699.96	2,691.05	2,690.63	10.70	14.48	152.49	-230.71	564.36	612.92	587.74	25.18	24.346			
2,800.00	2,799.86	2,791.25	2,790.81	11.02	14.71	152.69	-230.15	562.32	614.70	588.99	25.72	23.904			
2,900.00	2,899.68	2,895.17	2,894.70	11.33	14.95	152.95	-229.19	560.02	617.73	591.46	26.27	23.517			
3,000.00	2,999.37	2,995.55	2,995.04	11.66	15.19	153.25	-228.02	557.44	621.92	595.10	26.82	23.186			
3,100.00	3,098.90	3,094.68	3,094.14	11.98	15.43	153.62	-226.95	554.89	627.71	600.33	27.38	22.924			
3,200.00	3,198.26	3,192.79	3,192.21	12.31	15.67	154.04	-225.98	552.49	635.26	607.31	27.95	22.731			
3,300.00	3,297.40	3,291.51	3,290.90	12.64	15.91	154.52	-225.14	550.22	644.59	616.08	28.52	22.602			
3,400.00	3,396.32	3,391.24	3,390.60	12.98	16.17	155.06	-224.31	547.92	655.45	626.36	29.10	22.526			
3,500.00	3,495.20	3,490.74	3,490.07	13.32	16.42	155.63	-223.46	545.56	666.60	636.91	29.68	22.457			
3,600.00	3,594.07	3,590.24	3,589.53	13.66	16.68	156.18	-222.68	543.12	677.75	647.48	30.27	22.388			
3,700.00	3,692.94	3,689.67	3,688.93	14.01	16.95	156.71	-221.85	540.65	688.93	658.06	30.87	22.317			
3,800.00	3,791.81	3,788.82	3,788.04	14.36	17.22	157.24	-221.12	538.11	700.14	668.67	31.47	22.247			
3,900.00	3,890.69	3,890.44	3,889.63	14.72	17.49	157.75	-220.20	535.44	711.26	679.18	32.08	22.170			
4,000.00	3,989.56	3,990.46	3,989.60	15.07	17.77	158.21	-218.95	532.69	722.17	689.47	32.70	22.088			
4,100.00	4,088.43	4,090.05	4,089.14	15.43	18.05	158.66	-217.68	529.90	733.06	699.75	33.31	22.006			
4,200.00	4,187.30	4,189.77	4,188.81	15.80	18.33	159.10	-216.34	527.07	743.94	710.01	33.93	21.924			
4,300.00	4,286.17	4,290.38	4,289.37	16.16	18.61	159.54	-215.07	524.04	754.75	720.19	34.56	21.838			
4,400.00	4,385.05	4,392.01	4,390.94	16.53	18.90	159.98	-213.77	520.70	765.35	730.16	35.19	21.746			
4,500.00	4,483.92	4,493.20	4,492.05	16.90	19.20	160.40	-212.35	517.12	775.72	739.88	35.83	21.649			
4,600.00	4,582.79	4,593.37	4,592.14	17.27	19.49	160.83	-210.99	513.34	785.94	749.47	36.47	21.551			
4,700.00	4,681.66	4,693.30	4,691.98	17.64	19.79	161.24	-209.61	509.48	796.12	759.01	37.11	21.453			
4,800.00	4,780.54	4,794.31	4,792.91	18.02	20.09	161.63	-207.93	505.58	806.20	768.44	37.76	21.353			

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference	Well Coral PWU 28-27 11H
Project:	Eddy County (NAD 83 NM Eastern)	TVD Reference:	RKB @ 3333.00ft
Reference Site:	Sec 27-T19S-R29E	MD Reference:	RKB @ 3333.00ft
Site Error:	5.00 ft	North Reference:	Grid
Reference Well:	Coral PWU 28-27 11H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Prelim Plan 1	Offset TVD Reference:	Offset Datum

Offset Design Sec 28-T19S-R29E - Parkway Unit 16 (Active) - Wellbore #1 - Wellbore #1													Offset Site Error:	5.00 ft
Survey Program: 100-MWD													Offset Well Error:	10.00 ft
Reference		Offset		Semi Major Axis		Distance		Minimum Separation		Separation Factor		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
4,900.00	4,879.41	4,893.60	4,892.11	18.39	20.38	161.97	-205.79	501.93	816.21	777.80	38.40	21.254		
5,000.00	4,978.28	4,993.25	4,991.66	18.77	20.68	162.26	-203.19	498.54	826.23	787.18	39.05	21.158		
5,100.00	5,077.15	5,092.46	5,090.78	19.15	20.98	162.53	-200.36	495.32	836.28	796.57	39.70	21.064		
5,200.00	5,176.03	5,192.32	5,190.55	19.53	21.29	162.78	-197.39	492.14	846.33	805.97	40.36	20.971		
5,300.00	5,274.90	5,292.06	5,290.19	19.91	21.59	163.02	-194.33	488.97	856.34	815.33	41.01	20.880		
5,400.00	5,373.77	5,392.60	5,390.63	20.30	21.90	163.25	-191.11	485.77	866.30	824.62	41.67	20.788		
5,500.00	5,472.64	5,493.23	5,491.15	20.68	22.22	163.46	-187.68	482.53	876.13	833.80	42.34	20.694		
5,600.00	5,571.52	5,596.67	5,594.46	21.07	22.54	163.66	-183.78	479.12	885.70	842.69	43.01	20.593		
5,700.00	5,670.39	5,705.11	5,702.71	21.45	22.88	163.82	-178.69	475.26	894.55	850.86	43.70	20.472		
5,800.00	5,769.26	5,807.59	5,804.96	21.84	23.20	163.93	-173.04	471.37	902.77	858.40	44.37	20.346		
5,900.00	5,868.13	5,908.15	5,905.28	22.23	23.52	164.04	-167.40	467.38	910.78	865.74	45.04	20.221		
6,000.00	5,967.00	6,010.28	6,007.15	22.62	23.85	164.14	-161.43	463.24	918.60	872.88	45.72	20.092		
6,100.00	6,065.88	6,108.32	6,104.94	23.00	24.16	164.22	-155.57	459.34	926.39	880.00	46.39	19.970		
6,200.00	6,164.75	6,207.06	6,203.44	23.39	24.48	164.31	-149.87	455.40	934.31	887.25	47.06	19.852		
6,300.00	6,263.62	6,306.45	6,302.60	23.79	24.80	164.43	-144.47	451.28	942.29	894.55	47.74	19.738		
6,400.00	6,362.49	6,399.38	6,395.34	24.18	25.10	164.55	-139.90	447.55	950.67	902.26	48.40	19.641		
6,500.00	6,461.37	6,492.41	6,488.21	24.57	25.41	164.68	-135.75	444.28	959.72	910.66	49.06	19.561		
6,600.00	6,560.24	6,582.60	6,578.30	24.96	25.70	164.80	-132.00	441.80	969.59	919.87	49.71	19.503		
6,700.00	6,659.11	6,671.24	6,666.86	25.36	25.98	164.89	-128.59	440.29	980.48	930.13	50.36	19.471		
6,800.00	6,757.98	6,760.90	6,756.46	25.75	26.27	164.95	-125.28	439.85	992.45	941.46	50.99	19.462		
6,900.00	6,856.86	6,855.67	6,851.16	26.14	26.58	164.99	-121.87	440.22	1,005.19	953.54	51.65	19.461		
7,000.00	6,955.73	6,954.24	6,949.67	26.54	26.89	165.03	-118.47	440.70	1,018.10	965.77	52.33	19.456		
7,100.00	7,054.60	7,053.79	7,049.17	26.94	27.21	165.08	-115.16	441.11	1,031.02	978.01	53.01	19.450		
7,200.00	7,153.47	7,151.58	7,146.91	27.33	27.52	165.15	-112.16	441.32	1,043.92	990.24	53.68	19.445		
7,300.00	7,252.35	7,246.26	7,241.56	27.73	27.83	165.24	-109.92	441.40	1,057.13	1,002.78	54.35	19.452		
7,400.00	7,351.22	7,342.34	7,337.63	28.13	28.14	165.38	-108.47	441.42	1,070.78	1,015.76	55.01	19.464		
7,500.00	7,450.10	7,442.39	7,437.67	28.52	28.47	165.53	-107.06	441.42	1,084.41	1,028.71	55.70	19.468		
7,600.00	7,549.24	7,544.92	7,540.19	28.91	28.80	165.70	-105.71	441.13	1,096.12	1,039.71	56.40	19.434		
7,700.00	7,648.68	7,652.20	7,647.46	29.29	29.15	165.86	-104.52	440.03	1,104.83	1,047.71	57.13	19.341		
7,800.00	7,748.36	7,762.05	7,757.28	29.66	29.52	166.01	-103.44	437.64	1,110.15	1,052.30	57.85	19.189		
7,900.00	7,848.22	7,870.51	7,865.68	30.01	29.88	166.15	-102.25	434.24	1,112.09	1,053.52	58.57	18.987		
8,000.00	7,948.18	7,970.26	7,965.36	30.35	30.21	166.22	-100.90	430.74	1,111.05	1,051.80	59.25	18.752		
8,100.00	8,048.18	8,065.59	8,060.63	30.69	30.53	126.18	-99.84	427.57	1,108.05	1,048.15	59.90	18.497		
8,200.00	8,148.18	8,155.27	8,150.26	31.02	30.83	126.23	-99.28	424.94	1,105.32	1,044.79	60.53	18.260		
8,300.00	8,248.18	8,235.18	8,230.16	31.35	31.09	126.30	-99.68	423.19	1,103.89	1,042.79	61.10	18.066		
8,314.49	8,262.68	8,245.70	8,240.68	31.40	31.12	126.31	-99.82	423.06	1,103.87	1,042.69	61.18	18.043		
8,400.00	8,348.18	8,310.41	8,305.37	31.68	31.33	126.37	-101.16	422.94	1,104.76	1,043.14	61.63	17.927		
8,500.00	8,448.18	8,408.60	8,403.52	32.02	31.63	126.47	-103.84	423.41	1,106.77	1,044.49	62.27	17.773		
8,600.00	8,548.18	8,516.74	8,511.63	32.35	31.97	126.58	-106.58	423.62	1,108.42	1,045.44	62.98	17.600		
8,700.00	8,647.97	8,620.57	8,615.43	32.68	32.30	72.64	-108.96	423.27	1,108.10	1,044.44	63.66	17.408		
8,800.00	8,745.29	8,718.94	8,713.77	32.99	32.61	74.41	-111.22	422.68	1,102.52	1,038.22	64.30	17.147		
8,900.00	8,836.77	8,812.74	8,807.55	33.26	32.91	77.43	-113.26	421.94	1,092.75	1,027.83	64.93	16.831		
9,000.00	8,919.25	8,897.03	8,891.81	33.50	33.18	81.23	-114.96	421.07	1,080.95	1,015.43	65.52	16.497		
9,100.00	8,989.86	8,968.17	8,962.93	33.68	33.41	85.12	-116.30	420.21	1,070.00	1,003.89	66.10	16.187		
9,200.00	9,046.15	9,023.60	9,018.35	33.81	33.59	88.36	-117.29	419.48	1,062.99	996.30	66.69	15.940		
9,300.00	9,086.96	9,062.51	9,057.25	33.92	33.71	88.89	-117.97	418.96	1,061.28	993.98	67.29	15.771		
9,400.00	9,117.56	9,091.25	9,085.98	34.34	33.81	87.82	-118.48	418.58	1,054.36	986.36	67.99	15.507		
9,500.00	9,138.42	9,110.32	9,105.05	35.09	33.87	87.75	-118.81	418.32	1,040.30	971.50	68.80	15.121		
9,600.00	9,148.83	9,119.12	9,113.85	36.00	33.90	88.55	-118.96	418.20	1,019.86	950.15	69.71	14.631		
9,700.00	9,150.00	9,118.94	9,113.66	37.03	33.90	89.16	-118.96	418.21	995.80	925.12	70.68	14.089		
9,800.00	9,150.00	9,117.61	9,112.34	38.23	33.89	89.08	-118.94	418.23	979.74	907.99	71.75	13.655		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference	Well Coral PWU 28-27 11H
Project:	Eddy County (NAD 83 NM Eastern)	TVD Reference:	RKB @ 3333.00ft
Reference Site:	Sec 27-T19S-R29E	MD Reference:	RKB @ 3333.00ft
Site Error:	5.00 ft	North Reference:	Grid
Reference Well:	Coral PWU 28-27 11H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Prelim Plan 1	Offset TVD Reference:	Offset Datum

Offset Design Sec 28-T19S-R29E - Parkway Unit 16 (Active) - Wellbore #1 - Wellbore #1												Offset Site Error: 5.00 ft	
Survey Program: 100-MWD												Offset Well Error: 10.00 ft	
Reference				Offset		Semi Major Axis		Distance					
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Minimum Separation	Separation Factor	Warning
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	(ft)		
9,900.00	9,150.00	9,116.29	9,111.02	39.60	33.89	89.00	-118.91	418.24	973.74	900.88	72.86	13.364	
9,908.63	9,150.00	9,116.18	9,110.90	39.73	33.89	88.99	-118.91	418.24	973.70	900.74	72.97	13.345	
10,000.00	9,150.00	9,114.97	9,109.70	41.12	33.89	88.92	-118.89	418.26	977.98	904.02	73.96	13.224 SF	
10,100.00	9,150.00	9,113.64	9,108.37	42.77	33.88	88.84	-118.87	418.28	992.33	917.36	74.96	13.237	
10,200.00	9,150.00	9,112.32	9,107.05	44.55	33.88	88.77	-118.84	418.30	1,016.35	940.51	75.84	13.401	
10,300.00	9,150.00	9,110.99	9,105.72	46.44	33.87	88.69	-118.82	418.31	1,049.40	972.83	76.57	13.706	
10,400.00	9,150.00	9,109.71	9,104.44	48.42	33.87	88.61	-118.80	418.33	1,090.64	1,013.51	77.13	14.140	
10,500.00	9,150.00	9,108.38	9,103.11	50.48	33.86	88.54	-118.78	418.35	1,139.19	1,061.64	77.54	14.691	
10,600.00	9,150.00	9,107.04	9,101.77	52.62	33.86	88.46	-118.75	418.37	1,194.15	1,116.32	77.83	15.343	
10,700.00	9,150.00	9,105.71	9,100.44	54.83	33.86	88.38	-118.73	418.38	1,254.69	1,176.68	78.01	16.084	
10,800.00	9,150.00	9,104.37	9,099.10	57.09	33.85	88.30	-118.71	418.40	1,320.03	1,241.93	78.10	16.901	
10,900.00	9,150.00	9,103.03	9,097.77	59.41	33.85	88.22	-118.68	418.42	1,389.51	1,311.37	78.13	17.784	
11,000.00	9,150.00	9,101.70	9,096.43	61.77	33.84	88.14	-118.66	418.44	1,462.52	1,384.40	78.12	18.722	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference	Well Coral PWU 28-27 11H
Project:	Eddy County (NAD 83 NM Eastern)	TVD Reference:	RKB @ 3333.00ft
Reference Site:	Sec 27-T19S-R29E	MD Reference:	RKB @ 3333.00ft
Site Error:	5.00 ft	North Reference:	Grid
Reference Well:	Coral PWU 28-27 11H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Prelim Plan 1	Offset TVD Reference:	Offset Datum

Offset Design Sec 28-T19S-R29E - Parkway West Unit #3 - Wellbore #1 - Wellbore #1													Offset Site Error:	5.00 ft
Survey Program: 10-INC-ONLY													Offset Well Error:	10.00 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
0.00	0.00	0.00	0.00	5.02	11.18	-86.61	85.19	-1,436.29	1,439.01					
100.00	100.00	76.00	76.00	5.03	11.22	-86.61	85.19	-1,436.29	1,438.81	1,422.56	16.25	88.538		
200.00	200.00	176.00	176.00	5.05	11.45	-86.61	85.19	-1,436.29	1,438.81	1,422.31	16.50	87.187		
300.00	300.00	276.00	276.00	5.10	11.87	-86.61	85.19	-1,436.29	1,438.81	1,421.85	16.97	84.807		
400.00	400.00	376.00	376.00	5.17	12.45	-86.61	85.19	-1,436.29	1,438.81	1,421.19	17.62	81.654		
500.00	500.00	476.00	476.00	5.26	13.18	-86.61	85.19	-1,436.29	1,438.81	1,420.37	18.44	78.007		
600.00	600.00	576.00	576.00	5.38	14.03	-86.61	85.19	-1,436.29	1,438.81	1,419.40	19.41	74.115		
700.00	700.00	676.00	676.00	5.52	14.98	-86.61	85.19	-1,436.29	1,438.81	1,418.31	20.50	70.171		
800.00	800.00	776.00	776.00	5.68	16.02	-86.61	85.19	-1,436.29	1,438.81	1,417.11	21.70	66.309		
900.00	900.00	876.00	876.00	5.85	17.13	-86.61	85.19	-1,436.29	1,438.81	1,415.83	22.98	62.614		
1,000.00	1,000.00	976.00	976.00	6.05	18.29	-86.61	85.19	-1,436.29	1,438.81	1,414.48	24.33	59.134		
1,100.00	1,100.00	1,076.00	1,076.00	6.25	19.49	-86.61	85.19	-1,436.29	1,438.81	1,413.07	25.74	55.887		
1,200.00	1,200.00	1,176.00	1,176.00	6.47	20.74	-86.61	85.19	-1,436.29	1,438.81	1,411.60	27.21	52.879		
1,300.00	1,300.00	1,276.00	1,276.00	6.70	22.02	-86.61	85.19	-1,436.29	1,438.81	1,410.09	28.72	50.102		
1,400.00	1,400.00	1,376.00	1,376.00	6.95	23.32	-86.61	85.19	-1,436.29	1,438.81	1,408.55	30.26	47.544		
1,500.00	1,500.00	1,476.00	1,476.00	7.20	24.64	-86.61	85.19	-1,436.29	1,438.81	1,406.97	31.84	45.189		
1,600.00	1,600.00	1,576.00	1,576.00	7.46	25.99	-86.61	85.19	-1,436.29	1,438.81	1,405.37	33.44	43.021		
1,700.00	1,700.00	1,676.00	1,676.00	7.73	27.35	-86.61	85.19	-1,436.29	1,438.81	1,403.74	35.07	41.023		
1,800.00	1,800.00	1,776.00	1,776.00	8.00	28.72	-86.61	85.19	-1,436.29	1,438.81	1,402.09	36.72	39.181		
1,900.00	1,900.00	1,876.00	1,876.00	8.28	30.11	-86.61	85.19	-1,436.29	1,438.81	1,400.42	38.39	37.479		
2,000.00	2,000.00	1,976.00	1,976.00	8.57	31.50	-86.61	85.19	-1,436.29	1,438.81	1,398.74	40.07	35.904		
2,100.00	2,100.00	2,076.00	2,076.00	8.87	32.91	-86.61	85.19	-1,436.29	1,438.81	1,397.04	41.77	34.445		
2,200.00	2,200.00	2,176.00	2,176.00	9.16	34.32	-86.61	85.19	-1,436.29	1,438.81	1,395.33	43.48	33.090		
2,300.00	2,300.00	2,276.00	2,276.00	9.46	35.74	-86.61	85.19	-1,436.29	1,438.81	1,393.61	45.20	31.830		
2,400.00	2,400.00	2,376.00	2,376.00	9.77	37.16	-86.61	85.19	-1,436.29	1,438.81	1,391.88	46.93	30.656		
2,500.00	2,500.00	2,476.00	2,476.00	10.08	38.60	-86.61	85.19	-1,436.29	1,438.81	1,390.14	48.67	29.560		
2,600.00	2,599.99	2,575.99	2,575.99	10.39	40.03	-46.54	85.19	-1,436.29	1,438.21	1,387.79	50.42	28.524		
2,700.00	2,699.96	2,675.96	2,675.96	10.70	41.47	-46.62	85.19	-1,436.29	1,436.41	1,384.24	52.17	27.532		
2,800.00	2,799.86	2,775.86	2,775.86	11.02	42.92	-46.77	85.19	-1,436.29	1,433.42	1,379.49	53.93	26.580		
2,900.00	2,899.68	2,875.68	2,875.68	11.33	44.36	-46.98	85.19	-1,436.29	1,429.24	1,373.55	55.69	25.664		
3,000.00	2,999.37	2,975.37	2,975.37	11.66	45.81	-47.25	85.19	-1,436.29	1,423.89	1,366.44	57.46	24.783		
3,100.00	3,098.90	3,074.90	3,074.90	11.98	47.25	-47.58	85.19	-1,436.29	1,417.39	1,358.17	59.22	23.933		
3,200.00	3,198.26	3,174.26	3,174.26	12.31	48.70	-47.98	85.19	-1,436.29	1,409.76	1,348.76	60.99	23.113		
3,300.00	3,297.40	3,273.40	3,273.40	12.64	50.15	-48.44	85.19	-1,436.29	1,401.02	1,338.25	62.77	22.321		
3,400.00	3,396.32	3,372.32	3,372.32	12.98	51.59	-48.93	85.19	-1,436.29	1,391.29	1,326.74	64.54	21.556		
3,500.00	3,495.20	3,471.20	3,471.20	13.32	53.04	-49.40	85.19	-1,436.29	1,381.43	1,315.11	66.32	20.829		
3,600.00	3,594.07	3,570.07	3,570.07	13.66	54.49	-49.87	85.19	-1,436.29	1,371.67	1,303.56	68.11	20.140		
3,700.00	3,692.94	3,668.94	3,668.94	14.01	55.94	-50.35	85.19	-1,436.29	1,362.00	1,292.10	69.90	19.486		
3,800.00	3,791.81	3,767.81	3,767.81	14.36	57.39	-50.83	85.19	-1,436.29	1,352.43	1,280.74	71.69	18.864		
3,900.00	3,890.69	3,866.69	3,866.69	14.72	58.85	-51.32	85.19	-1,436.29	1,342.96	1,269.47	73.49	18.274		
4,000.00	3,989.56	3,965.56	3,965.56	15.07	60.30	-51.82	85.19	-1,436.29	1,333.59	1,258.29	75.30	17.711		
4,100.00	4,088.43	4,064.43	4,064.43	15.43	61.76	-52.33	85.19	-1,436.29	1,324.32	1,247.21	77.10	17.176		
4,200.00	4,187.30	4,163.30	4,163.30	15.80	63.21	-52.84	85.19	-1,436.29	1,315.15	1,236.24	78.91	16.666		
4,300.00	4,286.17	4,262.17	4,262.17	16.16	64.67	-53.36	85.19	-1,436.29	1,306.10	1,225.37	80.73	16.179		
4,400.00	4,385.05	4,361.05	4,361.05	16.53	66.13	-53.89	85.19	-1,436.29	1,297.15	1,214.60	82.55	15.714		
4,500.00	4,483.92	4,459.92	4,459.92	16.90	67.59	-54.42	85.19	-1,436.29	1,288.32	1,203.95	84.37	15.270		
4,600.00	4,582.79	4,558.79	4,558.79	17.27	69.05	-54.96	85.19	-1,436.29	1,279.59	1,193.40	86.19	14.846		
4,700.00	4,681.66	4,657.66	4,657.66	17.64	70.51	-55.51	85.19	-1,436.29	1,270.99	1,182.97	88.02	14.440		
4,800.00	4,780.54	4,756.54	4,756.54	18.02	71.98	-56.07	85.19	-1,436.29	1,262.51	1,172.66	89.85	14.052		
4,900.00	4,879.41	4,855.41	4,855.41	18.39	73.44	-56.63	85.19	-1,436.29	1,254.14	1,162.46	91.68	13.680		
5,000.00	4,978.28	4,954.28	4,954.28	18.77	74.91	-57.20	85.19	-1,436.29	1,245.90	1,152.39	93.52	13.323		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference	Well Coral PWU 28-27 11H
Project:	Eddy County (NAD 83 NM Eastern)	TVD Reference:	RKB @ 3333.00ft
Reference Site:	Sec 27-T19S-R29E	MD Reference:	RKB @ 3333.00ft
Site Error:	5.00 ft	North Reference:	Grid
Reference Well:	Coral PWU 28-27 11H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Prelim Plan 1	Offset TVD Reference:	Offset Datum

Offset Design Sec 28-T19S-R29E - Parkway West Unit #3 - Wellbore #1 - Wellbore #1													Offset Site Error:	5.00 ft
Survey Program: 10-INC-ONLY													Offset Well Error:	10.00 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
5,100.00	5,077.15	5,053.15	5,053.15	19.15	76.37	-57.78	85.19	-1,436.29	1,237.79	1,142.44	95.35	12.981		
5,200.00	5,176.03	5,152.03	5,152.03	19.53	77.84	-58.37	85.19	-1,436.29	1,229.81	1,132.61	97.19	12.653		
5,300.00	5,274.90	5,250.90	5,250.90	19.91	79.30	-58.96	85.19	-1,436.29	1,221.95	1,122.92	99.04	12.338		
5,400.00	5,373.77	5,349.77	5,349.77	20.30	80.77	-59.56	85.19	-1,436.29	1,214.23	1,113.35	100.88	12.036		
5,500.00	5,472.64	5,448.64	5,448.64	20.68	82.24	-60.17	85.19	-1,436.29	1,206.65	1,103.92	102.73	11.746		
5,600.00	5,571.52	5,547.52	5,547.52	21.07	83.70	-60.78	85.19	-1,436.29	1,199.21	1,094.63	104.58	11.467		
5,700.00	5,670.39	5,646.39	5,646.39	21.45	85.17	-61.41	85.19	-1,436.29	1,191.91	1,085.48	106.43	11.199		
5,800.00	5,769.26	5,745.26	5,745.26	21.84	86.64	-62.04	85.19	-1,436.29	1,184.75	1,076.47	108.28	10.941		
5,900.00	5,868.13	5,844.13	5,844.13	22.23	88.11	-62.67	85.19	-1,436.29	1,177.74	1,067.60	110.14	10.694		
6,000.00	5,967.00	5,943.00	5,943.00	22.62	89.58	-63.32	85.19	-1,436.29	1,170.88	1,058.88	111.99	10.455		
6,100.00	6,065.88	6,041.88	6,041.88	23.00	91.05	-63.97	85.19	-1,436.29	1,164.17	1,050.32	113.85	10.225		
6,200.00	6,164.75	6,140.75	6,140.75	23.39	92.52	-64.63	85.19	-1,436.29	1,157.61	1,041.90	115.71	10.004		
6,300.00	6,263.62	6,239.62	6,239.62	23.79	93.99	-65.30	85.19	-1,436.29	1,151.22	1,033.64	117.57	9.792		
6,400.00	6,362.49	6,338.49	6,338.49	24.18	95.46	-65.97	85.19	-1,436.29	1,144.98	1,025.54	119.44	9.587		
6,500.00	6,461.37	6,437.37	6,437.37	24.57	96.93	-66.65	85.19	-1,436.29	1,138.91	1,017.61	121.30	9.389		
6,600.00	6,560.24	6,536.24	6,536.24	24.96	98.40	-67.34	85.19	-1,436.29	1,133.00	1,009.83	123.17	9.199		
6,700.00	6,659.11	6,635.11	6,635.11	25.36	99.87	-68.04	85.19	-1,436.29	1,127.26	1,002.22	125.04	9.015		
6,800.00	6,757.98	6,733.98	6,733.98	25.75	101.34	-68.74	85.19	-1,436.29	1,121.69	994.78	126.91	8.839		
6,900.00	6,856.86	6,832.86	6,832.86	26.14	102.82	-69.45	85.19	-1,436.29	1,116.29	987.52	128.78	8.668		
7,000.00	6,955.73	6,931.73	6,931.73	26.54	104.29	-70.17	85.19	-1,436.29	1,111.07	980.42	130.65	8.504		
7,100.00	7,054.60	7,030.60	7,030.60	26.94	105.76	-70.89	85.19	-1,436.29	1,106.03	973.51	132.52	8.346		
7,200.00	7,153.47	7,129.47	7,129.47	27.33	107.24	-71.62	85.19	-1,436.29	1,101.17	966.77	134.40	8.193		
7,300.00	7,252.35	7,228.35	7,228.35	27.73	108.71	-72.35	85.19	-1,436.29	1,096.49	960.22	136.27	8.046		
7,400.00	7,351.22	7,327.22	7,327.22	28.13	110.18	-73.09	85.19	-1,436.29	1,091.99	953.85	138.15	7.904		
7,500.00	7,450.10	7,426.10	7,426.10	28.52	111.66	-73.82	85.19	-1,436.29	1,087.71	947.68	140.03	7.768		
7,600.00	7,549.24	7,525.24	7,525.24	28.91	113.13	-74.43	85.19	-1,436.29	1,084.09	942.19	141.90	7.640		
7,700.00	7,648.68	7,624.68	7,624.68	29.29	114.62	-74.92	85.19	-1,436.29	1,081.30	937.54	143.76	7.521		
7,800.00	7,748.36	7,724.36	7,724.36	29.66	116.10	-75.30	85.19	-1,436.29	1,079.27	933.65	145.62	7.411		
7,900.00	7,848.22	7,824.22	7,824.22	30.01	117.59	-75.55	85.19	-1,436.29	1,077.94	930.47	147.47	7.310		
8,000.00	7,948.18	7,924.18	7,924.18	30.35	119.08	-75.68	85.19	-1,436.29	1,077.28	927.97	149.30	7.215		
8,099.54	8,047.72	8,023.72	8,023.72	30.68	120.57	-115.81	85.19	-1,436.29	1,077.11	925.99	151.12	7.127 CC		
8,100.00	8,048.18	8,024.18	8,024.18	30.69	120.57	-115.79	85.19	-1,436.29	1,077.19	926.06	151.13	7.128		
8,200.00	8,148.18	8,124.18	8,124.18	31.02	122.06	-115.79	85.19	-1,436.29	1,077.19	924.24	152.95	7.043		
8,300.00	8,248.18	8,224.18	8,224.18	31.35	123.56	-115.79	85.19	-1,436.29	1,077.19	922.41	154.78	6.960		
8,400.00	8,348.18	8,324.18	8,324.18	31.68	125.05	-115.79	85.19	-1,436.29	1,077.19	920.59	156.60	6.878		
8,500.00	8,448.18	8,424.18	8,424.18	32.02	126.54	-115.79	85.19	-1,436.29	1,077.19	918.76	158.43	6.799		
8,600.00	8,548.18	8,524.18	8,524.18	32.35	128.03	-115.79	85.19	-1,436.29	1,077.19	916.93	160.26	6.722 ES		
8,700.00	8,647.97	8,623.97	8,623.97	32.68	129.52	-170.11	85.19	-1,436.29	1,081.83	919.76	162.07	6.675 SF		
8,800.00	8,745.29	8,721.29	8,721.29	32.99	130.97	-169.89	85.19	-1,436.29	1,103.88	940.03	163.85	6.737		
8,900.00	8,836.77	8,812.77	8,812.77	33.26	132.34	-169.43	85.19	-1,436.29	1,143.36	977.85	165.51	6.908		
9,000.00	8,919.25	8,895.25	8,895.25	33.50	133.57	-168.58	85.19	-1,436.29	1,198.95	1,031.95	167.00	7.179		
9,100.00	8,989.86	8,965.86	8,965.86	33.68	134.63	-167.05	85.19	-1,436.29	1,268.77	1,100.51	168.26	7.540		
9,200.00	9,046.15	9,022.15	9,022.15	33.81	135.47	-164.13	85.19	-1,436.29	1,350.42	1,181.16	169.26	7.978		
9,300.00	9,086.96	9,062.96	9,062.96	33.92	136.07	-170.90	85.19	-1,436.29	1,440.96	1,270.99	169.98	8.477		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference	Well Coral PWU 28-27 11H
Project:	Eddy County (NAD 83 NM Eastern)	TVD Reference:	RKB @ 3333.00ft
Reference Site:	Sec 27-T19S-R29E	MD Reference:	RKB @ 3333.00ft
Site Error:	5.00 ft	North Reference:	Grid
Reference Well:	Coral PWU 28-27 11H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Prelim Plan 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	5.00 ft
Survey Program: 154-MWD+IGRF													Offset Well Error:	0.00 ft
Reference														
Offset														
Semi Major Axis														
Distance														
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
10,700.00	9,150.00	8,684.66	8,662.14	54.83	30.71	-61.68	1,782.29	2,197.26	1,444.24	1,375.23	69.01	20.928		
10,800.00	9,150.00	8,705.00	8,679.98	57.09	30.77	-62.53	1,781.83	2,207.02	1,377.45	1,306.28	71.17	19.355		
10,900.00	9,150.00	8,728.93	8,700.62	59.41	30.84	-63.53	1,781.23	2,219.10	1,314.05	1,240.32	73.73	17.823		
11,000.00	9,150.00	8,755.00	8,722.68	61.77	30.92	-64.61	1,780.47	2,232.98	1,254.36	1,177.68	76.68	16.358		
11,100.00	9,150.00	8,786.38	8,748.60	64.17	31.02	-65.91	1,779.40	2,250.63	1,198.74	1,118.71	80.03	14.978		
11,200.00	9,150.00	8,821.55	8,776.82	66.61	31.14	-67.36	1,778.01	2,271.57	1,147.51	1,063.75	83.75	13.701		
11,300.00	9,150.00	8,864.41	8,810.02	69.09	31.29	-69.09	1,775.99	2,298.59	1,100.85	1,013.05	87.80	12.538		
11,400.00	9,150.00	8,912.58	8,845.92	71.59	31.49	-71.01	1,773.15	2,330.57	1,058.66	966.57	92.09	11.496		
11,500.00	9,150.00	8,954.70	8,876.08	74.12	31.67	-72.67	1,770.67	2,359.87	1,021.54	924.98	96.56	10.579		
11,600.00	9,150.00	8,990.00	8,900.07	76.67	31.84	-74.01	1,768.93	2,385.71	990.34	889.22	101.11	9.794		
11,700.00	9,150.00	9,037.00	8,929.86	79.24	32.11	-75.73	1,767.10	2,421.99	965.18	859.51	105.68	9.133		
11,800.00	9,150.00	9,096.89	8,964.28	81.84	32.50	-77.75	1,765.11	2,470.95	945.55	835.39	110.16	8.583		
11,900.00	9,150.00	9,156.30	8,994.51	84.45	32.95	-79.56	1,763.50	2,522.05	930.98	816.47	114.52	8.130		
12,000.00	9,150.00	9,219.53	9,022.06	87.08	33.51	-81.24	1,762.55	2,578.93	921.24	802.53	118.71	7.760		
12,100.00	9,150.00	9,288.09	9,047.60	89.72	34.22	-82.82	1,762.68	2,642.54	915.81	793.00	122.81	7.457		
12,200.00	9,150.00	9,384.76	9,074.41	92.38	35.39	-84.49	1,763.04	2,735.35	912.97	786.00	126.98	7.190		
12,300.00	9,150.00	9,472.68	9,090.21	95.04	36.64	-85.48	1,762.25	2,821.82	910.52	779.39	131.13	6.943		
12,347.18	9,150.00	9,507.94	9,094.71	96.31	37.18	-85.76	1,762.35	2,856.79	910.20	777.13	133.07	6.840		
12,400.00	9,150.00	9,543.00	9,097.78	97.72	37.74	-85.96	1,762.97	2,891.70	910.77	775.59	135.19	6.737		
12,500.00	9,150.00	9,628.55	9,100.19	100.41	39.18	-86.12	1,765.70	2,977.16	913.73	774.32	139.41	6.554		
12,600.00	9,150.00	9,729.62	9,100.24	103.11	41.06	-86.14	1,769.52	3,078.16	917.50	773.53	143.97	6.373		
12,700.00	9,150.00	9,833.94	9,102.56	105.82	43.13	-86.30	1,772.59	3,182.41	920.27	771.52	148.75	6.187		
12,800.00	9,150.00	9,937.22	9,104.87	108.54	45.33	-86.45	1,776.13	3,285.60	923.57	769.91	153.66	6.011		
12,900.00	9,150.00	10,054.20	9,107.40	111.26	47.95	-86.62	1,778.04	3,402.54	925.04	766.12	158.91	5.821		
13,000.00	9,150.00	10,159.18	9,109.75	114.00	50.41	-86.76	1,778.63	3,507.48	925.47	761.39	164.08	5.640		
13,100.00	9,150.00	10,273.90	9,112.50	116.73	53.20	-86.93	1,778.25	3,622.17	925.02	755.52	169.49	5.458		
13,200.00	9,150.00	10,412.70	9,116.69	119.48	56.71	-87.18	1,773.89	3,760.83	921.79	746.56	175.23	5.260		
13,300.00	9,150.00	10,524.48	9,120.53	122.23	59.61	-87.40	1,766.48	3,872.30	914.93	734.26	180.67	5.064		
13,400.00	9,150.00	10,618.00	9,122.07	124.98	62.08	-87.48	1,760.44	3,965.60	908.40	722.38	186.02	4.883 Alert		
13,500.00	9,150.00	10,708.25	9,122.55	127.74	64.50	-87.49	1,755.31	4,055.71	902.72	711.34	191.38	4.717 Alert		
13,600.00	9,150.00	10,794.19	9,122.69	130.51	66.83	-87.49	1,751.53	4,141.56	898.32	701.62	196.70	4.567 Alert		
13,700.00	9,150.00	10,881.16	9,123.64	133.28	69.22	-87.54	1,749.19	4,228.49	895.57	693.54	202.03	4.433 Alert		
13,800.00	9,150.00	10,969.87	9,124.20	136.05	71.67	-87.58	1,747.84	4,317.19	894.04	686.65	207.39	4.311 Alert		
13,854.29	9,150.00	11,016.58	9,123.74	137.56	72.97	-87.55	1,747.63	4,363.90	893.81	683.55	210.26	4.251 Alert, CC		
13,900.00	9,150.00	11,058.11	9,122.84	138.83	74.14	-87.49	1,747.70	4,405.42	893.93	681.22	212.72	4.202 Alert		
14,000.00	9,150.00	11,151.89	9,119.77	141.61	76.77	-87.29	1,748.35	4,499.14	894.77	676.62	218.15	4.102 Alert		
14,100.00	9,150.00	11,247.37	9,117.71	144.39	79.48	-87.17	1,749.63	4,594.60	896.21	672.57	223.64	4.007 Alert		
14,200.00	9,150.00	11,340.39	9,116.21	147.18	82.13	-87.08	1,751.33	4,687.59	898.13	669.04	229.09	3.920 Alert		
14,300.00	9,150.00	11,425.84	9,112.89	149.97	84.57	-86.87	1,754.02	4,772.93	901.46	667.17	234.29	3.848 Alert		
14,400.00	9,150.00	11,522.28	9,109.00	152.77	87.34	-86.64	1,758.01	4,869.21	905.82	666.02	239.81	3.777 Alert		
14,500.00	9,150.00	11,651.23	9,107.37	155.56	91.07	-86.56	1,762.43	4,998.06	909.50	663.23	246.27	3.693 Alert		
14,600.00	9,150.00	11,775.04	9,112.12	158.36	94.69	-86.85	1,761.90	5,121.76	908.71	656.17	252.53	3.598 Alert		
14,700.00	9,150.00	11,882.27	9,119.30	161.16	97.83	-87.30	1,760.43	5,228.74	906.99	648.53	258.46	3.509 Alert		
14,800.00	9,150.00	11,966.02	9,125.19	163.97	100.30	-87.67	1,759.67	5,312.27	905.78	641.81	263.97	3.431 Alert		
14,817.29	9,150.00	11,980.68	9,126.21	164.45	100.73	-87.74	1,759.69	5,326.90	905.76	640.84	264.92	3.419 Alert		
14,900.00	9,150.00	12,054.04	9,130.93	166.77	102.89	-88.04	1,760.25	5,400.10	906.20	636.69	269.50	3.362 Alert		
15,000.00	9,150.00	12,165.90	9,137.60	169.58	106.20	-88.46	1,761.15	5,511.76	906.84	631.27	275.58	3.291 Alert		
15,100.00	9,150.00	12,266.76	9,143.01	172.39	109.20	-88.80	1,761.03	5,612.48	906.59	625.20	281.40	3.222 Alert		
15,200.00	9,150.00	12,371.82	9,147.57	175.20	112.33	-89.09	1,760.50	5,717.43	906.00	618.70	287.30	3.153 Alert		
15,300.00	9,150.00	12,475.55	9,151.93	178.02	115.43	-89.36	1,759.40	5,821.07	904.89	611.70	293.18	3.086 Alert		
15,400.00	9,150.00	12,573.08	9,155.33	180.83	118.35	-89.58	1,758.23	5,918.53	903.66	604.71	298.95	3.023 Alert		

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

Company:	WCDSC Permian NM	Local Co-ordinate Reference	Well Coral PWU 28-27 11H
Project:	Eddy County (NAD 83 NM Eastern)	TVD Reference:	RKB @ 3333.00ft
Reference Site:	Sec 27-T19S-R29E	MD Reference:	RKB @ 3333.00ft
Site Error:	5.00 ft	North Reference:	Grid
Reference Well:	Coral PWU 28-27 11H	Survey Calculation Method:	Minimum Curvature
Well Error:	0.50 ft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM r5000.141_Prod US
Reference Design:	Prelim Plan 1	Offset TVD Reference:	Offset Datum

Offset Design													Offset Site Error:	5.00 ft
Survey Program: 154-MWD+IGRF													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Distance		Minimum Separation		Separation Factor		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor		
15,500.00	9,150.00	12,665.47	9,157.74	183.65	121.13	-89.73	1,757.74	6,010.88	903.11	598.49	304.62	2.965	Alert	
15,518.52	9,150.00	12,682.72	9,158.11	184.17	121.64	-89.75	1,757.73	6,028.13	903.10	597.42	305.67	2.954	Alert	
15,600.00	9,150.00	12,761.84	9,159.54	186.47	124.02	-89.84	1,757.93	6,107.23	903.30	592.93	310.36	2.910	Alert	
15,700.00	9,150.00	12,863.23	9,160.90	189.29	127.07	-89.93	1,758.03	6,208.62	903.39	587.17	316.22	2.857	Alert	
15,800.00	9,150.00	12,959.15	9,160.56	192.11	129.96	-89.91	1,758.31	6,304.54	903.68	581.71	321.97	2.807	Alert	
15,900.00	9,150.00	13,053.20	9,160.66	194.93	132.80	-89.92	1,759.15	6,398.58	904.58	576.92	327.66	2.761	Alert	
16,000.00	9,150.00	13,156.77	9,161.56	197.76	135.93	-89.97	1,760.51	6,502.14	905.90	572.30	333.60	2.716	Alert	
16,100.00	9,150.00	13,264.94	9,163.14	200.59	139.20	-90.07	1,760.73	6,610.29	906.10	566.46	339.64	2.668	Alert	
16,200.00	9,150.00	13,380.25	9,164.31	203.41	142.70	-90.15	1,759.88	6,725.60	905.39	559.61	345.78	2.618	Alert	
16,300.00	9,150.00	13,473.15	9,165.09	206.24	145.52	-90.20	1,758.47	6,818.48	903.88	552.35	351.52	2.571	Alert	
16,400.00	9,150.00	13,566.06	9,164.77	209.07	148.35	-90.18	1,757.94	6,911.38	903.31	546.05	357.25	2.528	Alert	
16,500.00	9,150.00	13,671.16	9,162.82	211.90	151.54	-90.05	1,757.53	7,016.47	902.92	539.68	363.24	2.486	Minor Risk	
16,557.91	9,150.00	13,722.23	9,161.52	213.54	153.10	-89.97	1,757.33	7,067.52	902.69	536.19	366.50	2.463	Minor Risk	
16,600.00	9,150.00	13,759.11	9,160.61	214.73	154.22	-89.91	1,757.43	7,104.39	902.81	533.95	368.86	2.448	Minor Risk	
16,700.00	9,150.00	13,861.75	9,157.99	217.56	157.34	-89.75	1,757.96	7,206.99	903.33	528.53	374.80	2.410	Minor Risk	
16,800.00	9,150.00	13,968.13	9,155.13	220.40	160.59	-89.56	1,757.88	7,313.33	903.27	522.44	380.83	2.372	Minor Risk	
16,900.00	9,150.00	14,071.46	9,152.03	223.23	163.74	-89.37	1,757.17	7,416.62	902.61	515.83	386.78	2.334	Minor Risk	
17,000.00	9,150.00	14,169.53	9,149.26	226.07	166.74	-89.19	1,756.51	7,514.64	901.97	509.34	392.63	2.297	Minor Risk	
17,061.49	9,150.00	14,230.99	9,147.61	227.81	168.61	-89.09	1,756.14	7,576.09	901.63	505.38	396.25	2.275	Minor Risk	
17,086.67	9,150.00	14,223.00	9,147.82	228.52	168.37	-89.10	1,756.19	7,568.09	902.10	505.29	396.81	2.273	Minor Risk, ES, SF	

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

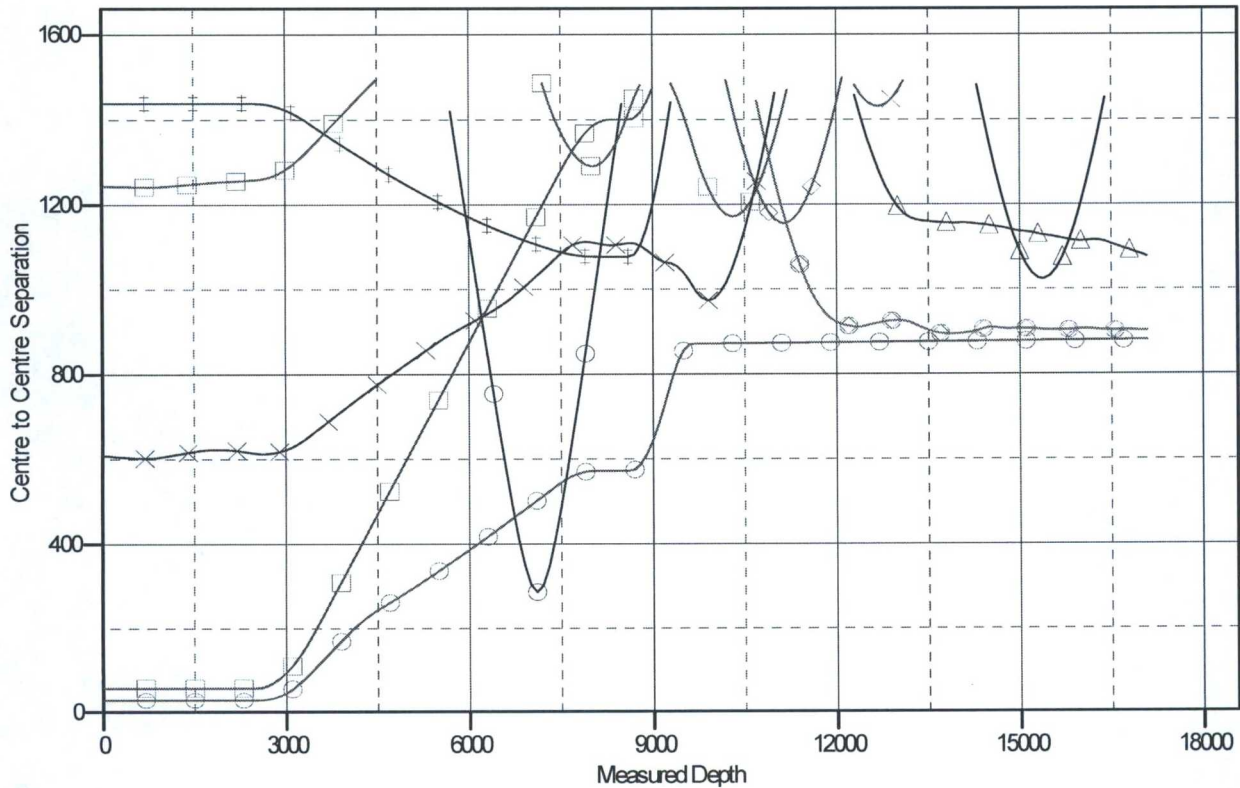
Company: WCDSC Permian NM
Project: Eddy County (NAD 83 NM Eastern)
Reference Site: Sec 27-T19S-R29E
Site Error: 5.00 ft
Reference Well: Coral PWU 28-27 11H
Well Error: 0.50 ft
Reference Wellbore: Wellbore #1
Reference Design: Prelim Plan 1

Local Co-ordinate Reference
TVD Reference: RKB @ 3333.00ft
MD Reference: RKB @ 3333.00ft
North Reference: Grid
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM r5000.141_Prod US
Offset TVD Reference: Offset Datum

Reference Depths are relative to RKB @ 3333.00ft
 Offset Depths are relative to Offset Datum
 Central Meridian is -104.333334

Coordinates are relative to: Coral PWU 28-27 11H
 Coordinate System is US State Plane 1983, New Mexico Eastern Zone
 Grid Convergence at Surface is: 0.14°

Ladder Plot



LEGEND

Turquoise PWU 27-3H, Wellbore #1, W ellbore #1 V0
 Turquoise PWU 27-10H, Wellbore #1, W ellbore #1 V0
 Parkway West Unit 10, Original Hole, Original Hole V0
 Coral PWU 28-27 62H, Wellbore #1, P relim Plan 1 V0

Coral PWU 28-27 12H, Wellbore #1, P relim Plan 1 V0
 Parkway West Unit #20 (Active), Well bore #1, Wellbore #1 V0
 Turquoise PWU 27 10H, Original Hole, Actuals V0
 Coral PWU 28-7H, Wellbore #1, Well bore #1 V0

Parkway West Unit #3, Wellbore #1, W ellbore #1 V0
 Coral PWU 28-4H, Wellbore #1, Well bore #1 V0
 Coral PWU 28-3H, Wellbore #1, Well bore #1 V0
 Parkway Unit 16 (Active), Wellbore #1, Wellbore #1 V0

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

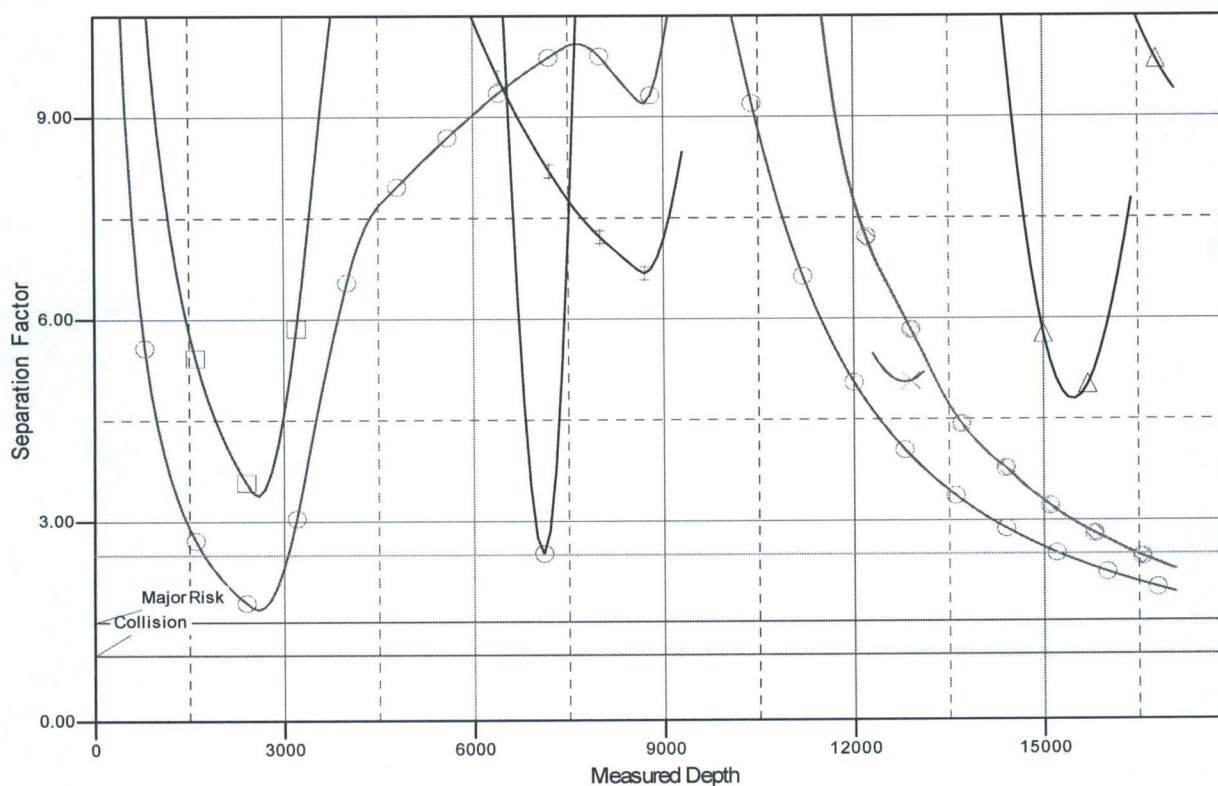
Company: WCDSC Permian NM
Project: Eddy County (NAD 83 NM Eastern)
Reference Site: Sec 27-T19S-R29E
Site Error: 5.00 ft
Reference Well: Coral PWU 28-27 11H
Well Error: 0.50 ft
Reference Wellbore Wellbore #1
Reference Design: Prelim Plan 1

Local Co-ordinate Reference
TVD Reference: Well Coral PWU 28-27 11H
MD Reference: RKB @ 3333.00ft
North Reference: RKB @ 3333.00ft
Survey Calculation Method: Grid
Output errors are at Minimum Curvature
Database: 2.00 sigma
Offset TVD Reference: EDM r5000.141_Prod US
Offset Datum Offset Datum

Reference Depths are relative to RKB @ 3333.00ft
 Offset Depths are relative to Offset Datum
 Central Meridian is -104.333334

Coordinates are relative to: Coral PWU 28-27 11H
 Coordinate System is US State Plane 1983, New Mexico Eastern Zone
 Grid Convergence at Surface is: 0.14°

Separation Factor Plot



LEGEND

Turquoise PWU 27-3H, Wellbore #1, Wellbore #1 V0
 Turquoise PWU 27-10H, Wellbore #1, Wellbore #1 V0
 Parkway West Unit 10, Original Hole, Original Hole V0
 Coral PWU 28-27 62H, Wellbore #1, Prelim Plan 1 V0

Coral PWU 28-27 12H, Wellbore #1, Prelim Plan 1 V0
 Parkway West Unit #20 (Active), Wellbore #1, Wellbore #1 V0
 Turquoise PWU 27 10H, Original Hole, Actuals V0
 Coral PWU 28-7H, Wellbore #1, Wellbore #1 V0

Parkway West Unit #3, Wellbore #1, Wellbore #1 V0
 Coral PWU 28-4H, Wellbore #1, Wellbore #1 V0
 Coral PWU 28-3H, Wellbore #1, Wellbore #1 V0
 Parkway Unit 16 (Active), Wellbore #1, Wellbore #1 V0

CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation