

**NM OIL CONSERVATION
ARTESIA DISTRICT**

JUN 27 2018

WCDSC Permian NM RECEIVED

Eddy County (NAD 83 NM Eastern)

Sec 27-T19S-R29E

Coral PWU 28-27 11H

30.015-44960

Wellbore #1

Permit Plan 2

Anticollision Report

25 June, 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:	RKB1 @ 3325.90ft
Reference Site:	Sec 27-T19S-R29E	MD Reference:	RKB1 @ 3325.90ft
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:	Permit Plan 2	Offset TVD Reference:	Offset Datum

Reference	Permit Plan 2		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method	MD Interval 50.00ft	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	6/25/2018		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	17,056.59	Permit Plan 2 (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 - Permit Plan 2	2,525.14	2,532.32	29.99	12.30	1.695	Minor Risk, CC
Coral PWU 28-27 12H - Wellbore #1 - Permit Plan 2	2,650.00	2,657.40	30.36	11.80	1.636	Minor Risk, ES, SF
Coral PWU 28-27 62H - Wellbore #1 - Permit Plan 2	2,951.08	2,957.72	24.19	3.46	1.167	Major Risk, CC
Coral PWU 28-27 62H - Wellbore #1 - Permit Plan 2	3,000.00	3,006.47	24.53	3.45	1.163	Major Risk, ES, SF
Parkway West Unit #20 (Active) - Wellbore #1 - Wellbore #1						Out of range
Parkway West Unit 10 - Original Hole - Original Hole	15,341.10	9,200.27	1,023.78	812.71	4.850	Alert, CC
Parkway West Unit 10 - Original Hole - Original Hole	15,350.00	9,200.17	1,023.82	812.44	4.844	Alert, ES
Parkway West Unit 10 - Original Hole - Original Hole	15,450.00	9,199.05	1,029.55	815.63	4.813	Alert, SF
Parkway West Unit SWD - Wellbore #1 - Wellbore #1						Out of range
Turquoise PWU 27-10H - Wellbore #1 - Wellbore #1	13,824.31	11,016.71	893.86	684.30	4.265	Alert, CC
Turquoise PWU 27-10H - Wellbore #1 - Wellbore #1	17,050.00	14,223.00	901.28	504.69	2.273	Minor Risk, ES
Turquoise PWU 27-10H - Wellbore #1 - Wellbore #1	17,056.59	14,223.00	901.46	504.70	2.272	Minor Risk, 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 - Pilot Wellbore - Pilot Wellbore						Out of range
Turquoise PWU 27-1H - Wellbore #1 - Wellbore #1						Out of range
Turquoise PWU 27-3H - Wellbore #1 - Wellbore #1	17,056.59	12,111.26	1,083.43	969.33	9.495	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
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: Permit Plan 2

Local Co-ordinate Reference: Well Coral PWU 28-27 11H
TVD Reference: RKB1 @ 3325.90ft
MD Reference: RKB1 @ 3325.90ft
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

Summary

Site Name	Reference Measure	Offset Measure	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation	Warning
Offset Well - Wellbore - Design						
Sec 28-T19S-R29E						
Coral PWU 28-3H - Wellbore #1 - Wellbore #1	8,050.00	9,117.89	1,260.75	1,184.07	16.443	SF
Coral PWU 28-3H - Wellbore #1 - Wellbore #1	10,281.96	9,409.51	1,178.27	1,140.90	31.530	CC
Coral PWU 28-3H - Wellbore #1 - Wellbore #1	10,300.00	9,409.32	1,178.41	1,140.90	31.411	ES
Coral PWU 28-4H - Wellbore #1 - Wellbore #1	11,114.48	9,380.08	1,162.59	1,121.23	28.109	CC, ES
Coral PWU 28-4H - Wellbore #1 - Wellbore #1	11,900.00	9,344.83	1,402.62	1,342.39	23.286	SF
Coral PWU 28-7H - Wellbore #1 - Wellbore #1	7,090.74	9,563.65	287.78	174.86	2.549	Alert, CC, ES, SF
Onyx PWU 29-28 61H - Wellbore #1 - Wellbore #1						Out of range
Onyx PWU 29-28 62H - Wellbore #1 - Wellbore #1						Out of range
Onyx PWU 29-28011H - Wellbore #1 - Wellbore #1						Out of range
Parkway #021 (Active) - Wellbore #1 - Wellbore #1						Out of range
Parkway Unit 16 (Active) - Wellbore #1 - Wellbore #1	700.41	685.55	630.10	613.19	37.249	CC
Parkway Unit 16 (Active) - Wellbore #1 - Wellbore #1	750.00	732.74	630.19	613.17	37.017	ES
Parkway Unit 16 (Active) - Wellbore #1 - Wellbore #1	10,000.00	9,119.05	977.76	903.96	13.250	SF
Parkway West Unit #3 - Wellbore #1 - Wellbore #1	8,600.00	8,536.68	1,104.27	943.94	6.888	CC
Parkway West Unit #3 - Wellbore #1 - Wellbore #1	8,650.00	8,586.67	1,104.92	943.68	6.853	ES
Parkway West Unit #3 - Wellbore #1 - Wellbore #1	8,700.00	8,636.41	1,109.66	947.50	6.843	SF
Turquoise PWU 27 10H - Original Hole - Actuals	13,823.53	11,015.91	894.14	684.65	4.268	Alert, CC
Turquoise PWU 27 10H - Original Hole - Actuals	17,050.00	14,223.00	902.05	506.13	2.278	Minor Risk, ES
Turquoise PWU 27 10H - Original Hole - Actuals	17,056.59	14,223.00	902.23	506.15	2.278	Minor Risk, SF
Turquoise PWU 27 10H - Original Hole - P3v1	17,001.28	14,207.91	900.15	506.31	2.286	Minor Risk, CC, ES
Turquoise PWU 27 10H - Original Hole - P3v1	17,050.00	14,198.12	901.93	507.27	2.285	Minor Risk, SF
Turquoise PWU 27 10H - Original Hole - Plan 1	11,896.73	8,983.27	909.68	796.05	8.005	CC
Turquoise PWU 27 10H - Original Hole - Plan 1	17,000.00	14,131.09	925.47	542.56	2.417	Minor Risk, ES
Turquoise PWU 27 10H - Original Hole - Plan 1	17,050.00	14,131.09	927.16	543.01	2.414	Minor Risk, SF
Turquoise PWU 27 10H - Original Hole - PTL	12,368.53	9,562.71	912.78	778.19	6.782	CC
Turquoise PWU 27 10H - Original Hole - PTL	12,400.00	9,562.71	913.32	777.70	6.734	ES
Turquoise PWU 27 10H - Original Hole - PTL	12,500.00	9,562.71	922.20	784.08	6.677	SF
Turquoise PWU 27 10H - Original Hole - T&D	11,727.44	13,485.00	834.26	749.51	9.844	CC
Turquoise PWU 27 10H - Original Hole - T&D	11,750.00	13,485.00	834.56	749.07	9.762	ES
Turquoise PWU 27 10H - Original Hole - T&D	11,900.00	13,485.00	851.92	762.75	9.555	SF

Offset Design												Offset Site Error:	5.00 ft
Sec 27-T19S-R29E - Coral PWU 28-27 12H - Wellbore #1 - Permit Plan 2												Offset Well Error:	0.50 ft
Survey Program: 0-MWD+IFR1+MS													
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Offset Wellbore Centre		Distance		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)	Between Centres (ft)	Between Ellipses (ft)			
0.00	0.00	7.10	7.10	0.50	0.50	90.00	0.00	30.00	30.00				
50.00	50.00	57.10	57.10	0.50	0.51	90.00	0.00	30.00	30.00	28.99	1.01	29.795	
100.00	100.00	107.10	107.10	0.52	0.52	90.00	0.00	30.00	30.00	28.96	1.04	28.865	
150.00	150.00	157.10	157.10	0.59	0.60	90.00	0.00	30.00	30.00	28.81	1.19	25.253	
200.00	200.00	207.10	207.10	0.70	0.71	90.00	0.00	30.00	30.00	28.59	1.41	21.217	
250.00	250.00	257.10	257.10	0.84	0.85	90.00	0.00	30.00	30.00	28.31	1.69	17.788	
300.00	300.00	307.10	307.10	0.99	1.00	90.00	0.00	30.00	30.00	28.01	1.99	15.101	
350.00	350.00	357.10	357.10	1.14	1.16	90.00	0.00	30.00	30.00	27.70	2.30	13.024	
400.00	400.00	407.10	407.10	1.31	1.32	90.00	0.00	30.00	30.00	27.37	2.63	11.403	
450.00	450.00	457.10	457.10	1.47	1.49	90.00	0.00	30.00	30.00	27.03	2.97	10.116	
500.00	500.00	507.10	507.10	1.64	1.66	90.00	0.00	30.00	30.00	26.69	3.31	9.076	
550.00	550.00	557.10	557.10	1.82	1.83	90.00	0.00	30.00	30.00	26.35	3.65	8.222	
600.00	600.00	607.10	607.10	1.99	2.01	90.00	0.00	30.00	30.00	26.01	3.89	7.510	

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: Permit Plan 2

Local Co-ordinate Reference: Well Coral PWU 28-27 11H
TVD Reference: RKB1 @ 3325.90ft
MD Reference: RKB1 @ 3325.90ft
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

Offset Design Sec 27-T19S-R29E - Coral PWU 28-27 12H - Wellbore #1 - Permit Plan 2													Offset Site Error: 5.00 ft
Survey Program: 0-MWD+IFR1+MS													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	
650.00	650.00	657.10	657.10	2.16	2.18	90.00	0.00	30.00	30.00	25.66	4.34	6.908	
700.00	700.00	707.10	707.10	2.34	2.35	90.00	0.00	30.00	30.00	25.31	4.69	6.394	
750.00	750.00	757.10	757.10	2.51	2.53	90.00	0.00	30.00	30.00	24.96	5.04	5.949	
800.00	800.00	807.10	807.10	2.69	2.71	90.00	0.00	30.00	30.00	24.61	5.39	5.561	
850.00	850.00	857.10	857.10	2.87	2.88	90.00	0.00	30.00	30.00	24.25	5.75	5.220	
900.00	900.00	907.10	907.10	3.04	3.06	90.00	0.00	30.00	30.00	23.90	6.10	4.917	Alert
950.00	950.00	957.10	957.10	3.22	3.24	90.00	0.00	30.00	30.00	23.55	6.45	4.648	Alert
1,000.00	1,000.00	1,007.10	1,007.10	3.40	3.41	90.00	0.00	30.00	30.00	23.19	6.81	4.406	Alert
1,050.00	1,050.00	1,057.10	1,057.10	3.57	3.59	90.00	0.00	30.00	30.00	22.84	7.16	4.188	Alert
1,100.00	1,100.00	1,107.10	1,107.10	3.75	3.77	90.00	0.00	30.00	30.00	22.48	7.52	3.990	Alert
1,150.00	1,150.00	1,157.10	1,157.10	3.93	3.95	90.00	0.00	30.00	30.00	22.13	7.87	3.810	Alert
1,200.00	1,200.00	1,207.10	1,207.10	4.11	4.12	90.00	0.00	30.00	30.00	21.77	8.23	3.645	Alert
1,250.00	1,250.00	1,257.10	1,257.10	4.28	4.30	90.00	0.00	30.00	30.00	21.41	8.59	3.494	Alert
1,300.00	1,300.00	1,307.10	1,307.10	4.46	4.48	90.00	0.00	30.00	30.00	21.06	8.94	3.355	Alert
1,350.00	1,350.00	1,357.10	1,357.10	4.64	4.66	90.00	0.00	30.00	30.00	20.70	9.30	3.226	Alert
1,400.00	1,400.00	1,407.10	1,407.10	4.82	4.84	90.00	0.00	30.00	30.00	20.35	9.65	3.107	Alert
1,450.00	1,450.00	1,457.10	1,457.10	5.00	5.01	90.00	0.00	30.00	30.00	19.99	10.01	2.997	Alert
1,500.00	1,500.00	1,507.10	1,507.10	5.18	5.19	90.00	0.00	30.00	30.00	19.63	10.37	2.893	Alert
1,550.00	1,550.00	1,557.10	1,557.10	5.35	5.37	90.00	0.00	30.00	30.00	19.28	10.73	2.797	Alert
1,600.00	1,600.00	1,607.10	1,607.10	5.53	5.55	90.00	0.00	30.00	30.00	18.92	11.08	2.707	Alert
1,650.00	1,650.00	1,657.10	1,657.10	5.71	5.73	90.00	0.00	30.00	30.00	18.56	11.44	2.623	Alert
1,700.00	1,700.00	1,707.10	1,707.10	5.89	5.91	90.00	0.00	30.00	30.00	18.20	11.80	2.543	Alert
1,750.00	1,750.00	1,757.10	1,757.10	6.07	6.09	90.00	0.00	30.00	30.00	17.85	12.15	2.468	Minor Risk
1,800.00	1,800.00	1,807.10	1,807.10	6.25	6.26	90.00	0.00	30.00	30.00	17.49	12.51	2.398	Minor Risk
1,850.00	1,850.00	1,857.10	1,857.10	6.43	6.44	90.00	0.00	30.00	30.00	17.13	12.87	2.331	Minor Risk
1,900.00	1,900.00	1,907.10	1,907.10	6.60	6.62	90.00	0.00	30.00	30.00	16.77	13.23	2.268	Minor Risk
1,950.00	1,950.00	1,957.10	1,957.10	6.78	6.80	90.00	0.00	30.00	30.00	16.42	13.58	2.209	Minor Risk
2,000.00	2,000.00	2,007.10	2,007.10	6.96	6.98	90.00	0.00	30.00	30.00	16.06	13.94	2.152	Minor Risk
2,050.00	2,050.00	2,057.10	2,057.10	7.14	7.16	90.00	0.00	30.00	30.00	15.70	14.30	2.098	Minor Risk
2,100.00	2,100.00	2,107.10	2,107.10	7.32	7.34	90.00	0.00	30.00	30.00	15.34	14.66	2.047	Minor Risk
2,150.00	2,150.00	2,157.10	2,157.10	7.50	7.52	90.00	0.00	30.00	30.00	14.99	15.01	1.998	Minor Risk
2,200.00	2,200.00	2,207.10	2,207.10	7.68	7.69	90.00	0.00	30.00	30.00	14.63	15.37	1.952	Minor Risk
2,250.00	2,250.00	2,257.10	2,257.10	7.86	7.87	90.00	0.00	30.00	30.00	14.27	15.73	1.907	Minor Risk
2,300.00	2,300.00	2,307.10	2,307.10	8.03	8.05	90.00	0.00	30.00	30.00	13.91	16.09	1.865	Minor Risk
2,350.00	2,350.00	2,357.10	2,357.10	8.21	8.23	90.00	0.00	30.00	30.00	13.56	16.44	1.824	Minor Risk
2,400.00	2,400.00	2,407.10	2,407.10	8.39	8.41	90.00	0.00	30.00	30.00	13.20	16.80	1.785	Minor Risk
2,450.00	2,450.00	2,457.10	2,457.10	8.57	8.59	90.00	0.00	30.00	30.00	12.84	17.16	1.748	Minor Risk
2,500.00	2,500.00	2,507.12	2,507.12	8.75	8.77	90.01	0.00	30.00	30.00	12.48	17.52	1.713	Minor Risk
2,525.14	2,525.14	2,532.32	2,532.32	8.84	8.85	128.51	-0.08	29.96	29.99	12.30	17.69	1.695	Minor Risk, CC
2,550.00	2,550.00	2,557.24	2,557.24	8.93	8.94	127.09	-0.25	29.87	30.00	12.13	17.87	1.679	Minor Risk
2,600.00	2,599.99	2,607.34	2,607.33	9.11	9.11	129.31	-0.89	29.53	30.09	11.88	18.21	1.652	Minor Risk
2,650.00	2,649.98	2,657.40	2,657.38	9.28	9.27	132.88	-1.91	28.99	30.36	11.80	18.55	1.636	Minor Risk, ES, SF
2,700.00	2,699.96	2,707.42	2,707.38	9.46	9.43	137.71	-3.32	28.25	30.93	12.04	18.89	1.637	Minor Risk
2,750.00	2,749.92	2,757.37	2,757.28	9.64	9.60	143.55	-5.11	27.30	31.98	12.75	19.23	1.663	Minor Risk
2,800.00	2,799.86	2,807.24	2,807.09	9.82	9.76	150.09	-7.28	26.16	33.68	14.11	19.57	1.721	Minor Risk
2,850.00	2,849.78	2,857.00	2,856.77	9.99	9.92	156.88	-9.83	24.81	36.19	16.28	19.91	1.817	Minor Risk
2,900.00	2,899.68	2,906.65	2,906.31	10.17	10.09	163.51	-12.76	23.27	39.63	19.38	20.25	1.957	Minor Risk
2,950.00	2,949.54	2,956.17	2,955.69	10.35	10.25	169.67	-16.05	21.53	44.06	23.47	20.59	2.140	Minor Risk
3,000.00	2,999.37	3,005.54	3,004.89	10.53	10.42	175.17	-19.72	19.60	49.49	28.56	20.93	2.365	Minor Risk
3,050.00	3,049.16	3,054.75	3,053.89	10.71	10.58	179.95	-23.74	17.48	55.91	34.64	21.26	2.629	Alert
3,100.00	3,098.90	3,103.79	3,102.67	10.89	10.74	-175.96	-28.11	15.17	63.27	41.67	21.60	2.930	Alert

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: Permit Plan 2

Local Co-ordinate Reference: Well Coral PWU 28-27 11H
TVD Reference: RKB1 @ 3325.90ft
MD Reference: RKB1 @ 3325.90ft
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

Offset Design Sec 27-T19S-R29E - Coral PWU 28-27 12H - Wellbore #1 - Permit Plan 2													Offset Site Error:	5.00 ft
Survey Program: 0-MWD+IFR1+MS													Offset Well Error:	0.50 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	
3,150.00	3,148.61	3,152.63	3,151.22	11.07	10.91	-172.49	-32.84	12.68	71.55	49.62	21.93	3.263	Alert	
3,200.00	3,198.26	3,201.26	3,199.51	11.25	11.07	-169.55	-37.91	10.01	80.70	58.44	22.25	3.626	Alert	
3,250.00	3,247.86	3,249.67	3,247.54	11.43	11.23	-187.06	-43.32	7.15	90.69	68.11	22.58	4.018	Alert	
3,300.00	3,297.40	3,297.85	3,295.27	11.61	11.40	-164.95	-49.06	4.13	101.49	78.59	22.90	4.431	Alert	
3,350.00	3,346.91	3,345.81	3,342.74	11.79	11.56	-163.14	-55.12	0.93	112.96	89.74	23.23	4.863	Alert	
3,400.00	3,396.41	3,393.59	3,389.97	11.97	11.72	-161.54	-61.51	-2.44	124.81	101.27	23.55	5.301		
3,450.00	3,445.91	3,441.19	3,436.87	12.16	11.88	-160.10	-68.22	-5.98	137.03	113.17	23.87	5.742		
3,500.00	3,495.41	3,488.62	3,483.72	12.34	12.04	-158.79	-75.26	-9.69	149.61	125.43	24.18	6.187		
3,550.00	3,544.91	3,535.86	3,530.22	12.53	12.20	-157.59	-82.60	-13.56	162.55	138.05	24.50	6.636		
3,600.00	3,594.41	3,582.90	3,576.47	12.71	12.38	-156.48	-90.25	-17.60	175.85	151.04	24.81	7.088		
3,650.00	3,643.91	3,630.06	3,622.75	12.90	12.53	-155.45	-98.24	-21.81	189.50	164.37	25.13	7.541		
3,700.00	3,693.41	3,678.03	3,669.81	13.08	12.69	-154.52	-106.47	-26.15	203.28	177.82	25.46	7.983		
3,750.00	3,742.91	3,725.99	3,716.86	13.27	12.86	-153.70	-114.69	-30.48	217.11	191.31	25.80	8.415		
3,800.00	3,792.41	3,773.96	3,763.92	13.46	13.02	-152.99	-122.91	-34.82	230.97	204.83	26.14	8.836		
3,850.00	3,841.91	3,821.92	3,810.97	13.64	13.19	-152.35	-131.13	-39.16	244.86	218.38	26.46	9.247		
3,900.00	3,891.41	3,869.88	3,858.03	13.83	13.36	-151.78	-139.36	-43.49	258.78	231.96	26.82	9.648		
3,950.00	3,940.91	3,917.85	3,905.08	14.02	13.52	-151.28	-147.58	-47.83	272.72	245.55	27.16	10.039		
4,000.00	3,990.41	3,965.81	3,952.14	14.21	13.69	-150.82	-155.80	-52.17	286.67	259.17	27.51	10.421		
4,050.00	4,039.91	4,013.78	3,999.19	14.40	13.86	-150.40	-164.02	-56.50	300.65	272.79	27.85	10.794		
4,100.00	4,089.41	4,061.74	4,046.25	14.59	14.03	-150.02	-172.25	-60.84	314.63	286.43	28.20	11.158		
4,150.00	4,138.91	4,109.71	4,093.30	14.78	14.20	-149.67	-180.47	-65.17	328.63	300.08	28.54	11.513		
4,200.00	4,188.41	4,157.67	4,140.36	14.97	14.37	-149.35	-188.69	-69.51	342.63	313.74	28.89	11.860		
4,250.00	4,237.91	4,205.64	4,187.41	15.16	14.54	-149.06	-196.91	-73.85	356.65	327.41	29.24	12.198		
4,300.00	4,287.41	4,253.60	4,234.47	15.35	14.71	-148.78	-205.14	-78.18	370.67	341.09	29.59	12.529		
4,350.00	4,336.91	4,301.56	4,281.52	15.54	14.88	-148.53	-213.36	-82.52	384.70	354.77	29.93	12.852		
4,400.00	4,386.41	4,349.53	4,328.58	15.73	15.05	-148.30	-221.58	-86.86	398.74	368.46	30.28	13.167		
4,450.00	4,435.91	4,397.49	4,375.63	15.92	15.22	-148.08	-229.80	-91.19	412.78	382.15	30.63	13.475		
4,500.00	4,485.41	4,445.46	4,422.69	16.12	15.39	-147.87	-238.03	-95.53	426.83	395.85	30.98	13.776		
4,550.00	4,534.91	4,506.58	4,469.74	16.31	15.61	-147.68	-246.25	-99.87	440.88	409.50	31.38	14.049		
4,600.00	4,584.42	4,541.39	4,516.80	16.50	15.74	-147.50	-254.47	-104.20	454.94	423.25	31.69	14.358		
4,650.00	4,633.92	4,589.35	4,563.85	16.69	15.91	-147.34	-262.69	-108.54	469.00	436.96	32.04	14.639		
4,700.00	4,683.42	4,637.32	4,610.91	16.89	16.08	-147.18	-270.92	-112.87	483.07	450.68	32.39	14.914		
4,750.00	4,732.92	4,685.28	4,657.96	17.08	16.26	-147.03	-279.14	-117.21	497.13	464.39	32.74	15.183		
4,800.00	4,782.42	4,733.24	4,705.02	17.27	16.43	-146.88	-287.36	-121.55	511.20	478.11	33.10	15.446		
4,850.00	4,831.92	4,781.21	4,752.07	17.47	16.60	-146.75	-295.58	-125.88	525.28	491.83	33.45	15.703		
4,900.00	4,881.42	4,829.17	4,799.13	17.66	16.78	-146.62	-303.81	-130.22	539.35	505.55	33.80	15.955		
4,950.00	4,930.92	4,877.14	4,846.18	17.85	16.95	-146.50	-312.03	-134.56	553.43	519.27	34.16	16.202		
5,000.00	4,980.42	4,925.10	4,893.24	18.05	17.13	-146.39	-320.25	-138.89	567.51	533.00	34.51	16.443		
5,050.00	5,029.92	4,973.07	4,940.29	18.24	17.30	-146.28	-328.47	-143.23	581.59	546.73	34.87	16.680		
5,100.00	5,079.42	5,021.03	4,987.35	18.44	17.48	-146.18	-336.70	-147.56	595.68	560.45	35.22	16.911		
5,150.00	5,128.92	5,069.00	5,034.40	18.63	17.65	-146.08	-344.92	-151.90	609.76	574.18	35.58	17.138		
5,200.00	5,178.42	5,116.96	5,081.46	18.83	17.83	-145.98	-353.14	-156.24	623.85	587.91	35.94	17.360		
5,250.00	5,227.92	5,164.92	5,128.51	19.02	18.00	-145.89	-361.36	-160.57	637.94	601.65	36.29	17.577		
5,300.00	5,277.42	5,212.89	5,175.57	19.22	18.18	-145.80	-369.59	-164.91	652.03	615.38	36.65	17.791		
5,350.00	5,326.92	5,260.85	5,222.62	19.41	18.36	-145.72	-377.81	-169.25	666.12	629.12	37.01	18.000		
5,400.00	5,376.42	5,308.82	5,269.68	19.61	18.53	-145.64	-386.03	-173.58	680.22	642.85	37.36	18.205		
5,450.00	5,425.92	5,356.78	5,316.73	19.80	18.71	-145.57	-394.25	-177.92	694.31	656.59	37.72	18.406		
5,500.00	5,475.42	5,404.75	5,363.79	20.00	18.88	-145.49	-402.48	-182.26	708.40	670.32	38.08	18.603		
5,550.00	5,524.92	5,452.71	5,410.84	20.19	19.06	-145.42	-410.70	-186.59	722.50	684.06	38.44	18.796		
5,600.00	5,574.42	5,500.88	5,457.90	20.39	19.24	-145.35	-418.92	-190.93	736.60	697.80	38.80	18.986		
5,650.00	5,623.92	5,548.64	5,504.95	20.59	19.41	-145.29	-427.14	-195.26	750.70	711.54	39.16	19.171		

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: Permit Plan 2

Local Co-ordinate Reference
TVD Reference: RKB1 @ 3325.90ft
MD Reference: RKB1 @ 3325.90ft
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

Offset Design Sec 27-T19S-R29E - Coral PWU 28-27 12H - Wellbore #1 - Permit Plan 2													Offset Site Error: 5.00 ft
Survey Program: 0-MWD+IFR1+MS													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 Toelface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,700.00	5,673.42	5,603.40	5,552.01	20.78	19.62	-145.23	-435.37	-199.60	764.79	725.25	39.54	19.342	
5,750.00	5,722.92	5,644.57	5,599.06	20.98	19.77	-145.17	-443.59	-203.94	778.89	739.02	39.88	19.533	
5,800.00	5,772.42	5,707.47	5,646.12	21.18	20.00	-145.11	-451.81	-208.27	792.99	752.70	40.29	19.682	
5,850.00	5,821.93	5,740.50	5,693.17	21.37	20.12	-145.05	-460.03	-212.61	807.10	766.50	40.60	19.882	
5,900.00	5,871.43	5,788.46	5,740.23	21.57	20.30	-145.00	-468.26	-216.95	821.20	780.24	40.96	20.051	
5,950.00	5,920.93	5,836.43	5,787.28	21.77	20.48	-144.95	-476.48	-221.28	835.30	793.99	41.32	20.218	
6,000.00	5,970.43	5,884.39	5,834.34	21.96	20.66	-144.89	-484.70	-225.62	849.40	807.73	41.68	20.381	
6,050.00	6,019.93	5,932.36	5,881.39	22.18	20.84	-144.85	-492.92	-229.96	863.51	821.47	42.04	20.542	
6,100.00	6,069.43	5,980.32	5,928.45	22.36	21.01	-144.80	-501.15	-234.29	877.61	835.21	42.40	20.699	
6,150.00	6,118.93	6,028.28	5,975.50	22.55	21.19	-144.75	-509.37	-238.63	891.72	848.96	42.76	20.854	
6,200.00	6,168.43	6,076.25	6,022.56	22.75	21.37	-144.71	-517.59	-242.96	905.82	862.70	43.12	21.007	
6,250.00	6,217.93	6,124.21	6,069.61	22.95	21.55	-144.66	-525.81	-247.30	919.93	876.45	43.48	21.156	
6,300.00	6,267.43	6,172.18	6,116.67	23.15	21.73	-144.62	-534.04	-251.64	934.03	890.19	43.84	21.304	
6,350.00	6,316.93	6,220.14	6,163.72	23.34	21.91	-144.58	-542.26	-255.97	948.14	903.94	44.21	21.448	
6,400.00	6,366.43	6,268.11	6,210.78	23.54	22.09	-144.54	-550.48	-260.31	962.25	917.68	44.57	21.591	
6,450.00	6,415.93	6,316.07	6,257.83	23.74	22.26	-144.50	-558.70	-264.65	976.36	931.43	44.93	21.730	
6,500.00	6,465.43	6,364.04	6,304.89	23.94	22.44	-144.47	-566.93	-268.98	990.46	945.17	45.29	21.868	
6,550.00	6,514.93	6,412.00	6,351.94	24.14	22.62	-144.43	-575.15	-273.32	1,004.57	958.92	45.66	22.003	
6,600.00	6,564.43	6,459.96	6,399.00	24.33	22.80	-144.40	-583.37	-277.65	1,018.68	972.66	46.02	22.136	
6,650.00	6,613.93	6,507.93	6,446.05	24.53	22.98	-144.36	-591.59	-281.99	1,032.79	986.41	46.38	22.267	
6,700.00	6,663.43	6,555.89	6,493.11	24.73	23.16	-144.33	-599.82	-286.33	1,046.90	1,000.16	46.74	22.396	
6,750.00	6,712.93	6,603.86	6,540.16	24.93	23.34	-144.30	-608.04	-290.66	1,061.01	1,013.90	47.11	22.523	
6,800.00	6,762.43	6,651.82	6,587.22	25.13	23.52	-144.26	-616.26	-295.00	1,075.12	1,027.65	47.47	22.648	
6,850.00	6,811.93	6,699.79	6,634.27	25.32	23.70	-144.23	-624.48	-299.34	1,089.23	1,041.39	47.84	22.770	
6,900.00	6,861.43	6,747.75	6,681.33	25.52	23.88	-144.20	-632.71	-303.67	1,103.34	1,055.14	48.20	22.891	
6,950.00	6,910.93	6,804.29	6,728.38	25.72	24.09	-144.17	-640.93	-308.01	1,117.45	1,068.86	48.59	22.995	
7,000.00	6,960.43	6,843.68	6,775.44	25.92	24.24	-144.15	-649.15	-312.35	1,131.56	1,082.64	48.93	23.128	
7,050.00	7,009.93	6,908.36	6,822.49	26.12	24.46	-144.12	-657.37	-316.68	1,145.67	1,096.32	49.35	23.214	
7,100.00	7,059.44	6,939.61	6,869.55	26.32	24.60	-144.09	-665.60	-321.02	1,159.79	1,110.13	49.66	23.357	
7,150.00	7,108.94	6,987.57	6,916.60	26.52	24.78	-144.06	-673.82	-325.35	1,173.90	1,123.88	50.02	23.468	
7,200.00	7,158.44	7,035.54	6,963.66	26.71	24.96	-144.04	-682.04	-329.69	1,188.01	1,137.62	50.38	23.579	
7,250.00	7,207.94	7,083.50	7,010.71	26.91	25.14	-144.01	-690.26	-334.03	1,202.12	1,151.37	50.75	23.687	
7,300.00	7,257.44	7,131.47	7,057.77	27.11	25.32	-143.99	-698.49	-338.36	1,216.23	1,165.12	51.11	23.794	
7,350.00	7,306.94	7,179.43	7,104.82	27.31	25.50	-143.96	-706.71	-342.70	1,230.35	1,178.87	51.48	23.900	
7,400.00	7,356.44	7,227.40	7,151.88	27.51	25.68	-143.94	-714.93	-347.04	1,244.46	1,192.62	51.84	24.004	
7,450.00	7,405.94	7,275.36	7,198.93	27.71	25.86	-143.92	-723.15	-351.37	1,258.57	1,206.36	52.21	24.106	
7,500.00	7,455.44	7,323.32	7,245.99	27.91	26.04	-143.89	-731.38	-355.71	1,272.69	1,220.11	52.58	24.207	
7,550.00	7,504.97	7,371.34	7,293.10	28.11	26.23	-143.88	-739.61	-360.05	1,286.80	1,233.66	52.94	24.303	
7,600.00	7,554.59	7,419.50	7,340.34	28.30	26.41	-144.06	-747.86	-364.40	1,300.02	1,246.71	53.31	24.388	
7,650.00	7,604.29	7,467.79	7,387.71	28.49	26.59	-144.11	-756.14	-368.77	1,312.92	1,259.25	53.67	24.463	
7,700.00	7,654.05	7,516.20	7,435.20	28.68	26.77	-144.14	-764.44	-373.15	1,325.31	1,271.27	54.03	24.527	
7,750.00	7,703.87	7,564.72	7,482.81	28.87	26.96	-144.16	-772.76	-377.53	1,337.19	1,282.79	54.40	24.582	
7,800.00	7,753.75	7,613.35	7,530.51	29.06	27.14	-144.15	-781.10	-381.93	1,348.55	1,293.79	54.76	24.626	
7,850.00	7,803.66	7,662.41	7,578.37	29.24	27.40	-144.08	-789.46	-387.92	1,359.08	1,303.78	55.30	24.578	
7,900.00	7,853.61	7,714.07	7,626.01	29.42	27.67	-144.00	-797.80	-393.53	1,368.28	1,312.44	55.84	24.504	
7,950.00	7,903.59	7,763.31	7,674.44	29.59	27.94	-143.92	-806.14	-398.56	1,376.15	1,319.78	56.37	24.413	
8,000.00	7,953.58	7,812.56	7,723.56	29.76	28.20	-143.82	-814.48	-402.99	1,382.67	1,325.78	56.89	24.305	
8,050.00	8,003.58	7,862.21	7,773.26	29.93	28.47	-143.78	-822.82	-407.42	1,387.84	1,330.44	57.39	24.181	
8,100.00	8,053.58	7,911.99	7,823.42	30.10	28.74	-143.75	-831.16	-411.85	1,391.93	1,334.05	57.88	24.048	
8,150.00	8,103.58	7,961.40	7,873.93	30.27	29.00	-143.75	-839.50	-416.28	1,395.18	1,336.82	58.36	23.908	
8,200.00	8,153.58	8,011.29	7,924.42	30.44	29.27	-143.67	-847.84	-420.71	1,397.57	1,338.76	58.81	23.762	

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: Permit Plan 2

Local Co-ordinate Reference: Well Coral PWU 28-27 11H
TVD Reference: RKB1 @ 3325.90ft
MD Reference: RKB1 @ 3325.90ft
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

Offset Design													Offset Site Error:		5.00 ft
Survey Program: O-MWD+IFR1+MS													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)	Offset Wellbore Centre +E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor			
8,250.00	8,203.58	8,267.31	8,179.69	30.61	29.53	-179.63	-844.84	-415.55	1,399.11	1,339.85	59.26	23.611			
8,300.00	8,253.58	8,341.40	8,253.77	30.78	29.78	-179.60	-845.84	-416.07	1,399.79	1,340.11	59.68	23.454			
8,350.00	8,303.58	8,401.69	8,310.68	30.95	29.98	-179.60	-845.89	-416.10	1,399.82	1,339.77	60.05	23.310			
8,400.00	8,353.58	8,448.31	8,360.68	31.12	30.13	-179.60	-845.89	-416.10	1,399.82	1,339.44	60.38	23.184			
8,450.00	8,403.58	8,501.69	8,410.68	31.29	30.31	-179.60	-845.89	-416.10	1,399.82	1,339.09	60.73	23.050			
8,500.00	8,453.58	8,548.31	8,460.68	31.46	30.46	-179.60	-845.89	-416.10	1,399.82	1,338.77	61.06	22.926			
8,550.00	8,503.58	8,601.69	8,510.68	31.63	30.64	-179.60	-845.89	-416.10	1,399.82	1,338.42	61.41	22.795			
8,600.00	8,553.58	8,648.31	8,560.68	31.80	30.79	-179.60	-845.89	-416.10	1,399.82	1,338.09	61.74	22.674			
8,601.70	8,555.27	8,650.00	8,562.37	31.81	30.80	130.79	-845.89	-416.10	1,399.82	1,338.08	61.75	22.670			
8,650.00	8,603.57	8,698.25	8,610.60	31.97	30.95	130.73	-845.90	-415.12	1,400.26	1,338.19	62.07	22.558			
8,700.00	8,653.31	8,747.96	8,660.04	32.14	31.11	130.41	-845.93	-410.06	1,403.47	1,341.07	62.40	22.493			
8,750.00	8,702.35	8,797.22	8,708.41	32.30	31.27	129.79	-846.00	-400.84	1,409.76	1,347.05	62.71	22.480			
8,800.00	8,750.26	8,845.78	8,755.15	32.46	31.41	128.89	-846.10	-387.72	1,419.09	1,356.08	63.01	22.521			
8,850.00	8,796.59	8,893.44	8,799.78	32.61	31.55	127.69	-846.22	-371.03	1,431.36	1,368.06	63.30	22.613			
8,900.00	8,840.93	8,940.06	8,841.95	32.75	31.68	126.18	-846.37	-351.18	1,446.46	1,382.89	63.57	22.754			
8,950.00	8,882.87	8,985.53	8,881.39	32.89	31.79	124.36	-846.54	-328.58	1,464.26	1,400.44	63.82	22.943			
9,000.00	8,922.02	9,029.79	8,917.95	33.01	31.89	122.23	-846.72	-303.65	1,484.59	1,420.53	64.06	23.174			

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 PWJ 28-27 11H
Well Error: 0.50 ft
Reference Wellbore: Wellbore #1
Reference Design: Permit Plan 2

Local Co-ordinate Reference: Well Coral PWJ 28-27 11H
TVD Reference: RKB1 @ 3325.90ft
MD Reference: RKB1 @ 3325.90ft
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

Offset Design Sec 27-T19S-R29E - Coral PWJ 28-27 62H - Wellbore #1 - Permit Plan 2													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		
0.00	0.00	7.10	7.10	0.50	0.50	-90.00	0.00	-30.00	30.00					
50.00	50.00	57.10	57.10	0.50	0.50	-90.00	0.00	-30.00	30.00	28.99	1.01	29.803		
100.00	100.00	107.10	107.10	0.52	0.52	-90.00	0.00	-30.00	30.00	28.96	1.04	28.894		
150.00	150.00	157.10	157.10	0.59	0.60	-90.00	0.00	-30.00	30.00	28.81	1.19	25.295		
200.00	200.00	207.10	207.10	0.70	0.71	-90.00	0.00	-30.00	30.00	28.59	1.41	21.255		
250.00	250.00	257.10	257.10	0.84	0.85	-90.00	0.00	-30.00	30.00	28.32	1.68	17.818		
300.00	300.00	307.10	307.10	0.99	1.00	-90.00	0.00	-30.00	30.00	28.02	1.98	15.125		
350.00	350.00	357.10	357.10	1.14	1.16	-90.00	0.00	-30.00	30.00	27.70	2.30	13.042		
400.00	400.00	407.10	407.10	1.31	1.32	-90.00	0.00	-30.00	30.00	27.37	2.63	11.417		
450.00	450.00	457.10	457.10	1.47	1.49	-90.00	0.00	-30.00	30.00	27.04	2.96	10.127		
500.00	500.00	507.10	507.10	1.64	1.66	-90.00	0.00	-30.00	30.00	26.70	3.30	9.086		
550.00	550.00	557.10	557.10	1.82	1.83	-90.00	0.00	-30.00	30.00	26.35	3.65	8.230		
600.00	600.00	607.10	607.10	1.99	2.00	-90.00	0.00	-30.00	30.00	26.01	3.99	7.517		
650.00	650.00	657.10	657.10	2.16	2.18	-90.00	0.00	-30.00	30.00	25.66	4.34	6.914		
700.00	700.00	707.10	707.10	2.34	2.35	-90.00	0.00	-30.00	30.00	25.31	4.69	6.398		
750.00	750.00	757.10	757.10	2.51	2.53	-90.00	0.00	-30.00	30.00	24.96	5.04	5.953		
800.00	800.00	807.10	807.10	2.69	2.70	-90.00	0.00	-30.00	30.00	24.61	5.39	5.565		
850.00	850.00	857.10	857.10	2.87	2.88	-90.00	0.00	-30.00	30.00	24.26	5.74	5.223		
900.00	900.00	907.10	907.10	3.04	3.06	-90.00	0.00	-30.00	30.00	23.90	6.10	4.920 Alert		
950.00	950.00	957.10	957.10	3.22	3.23	-90.00	0.00	-30.00	30.00	23.55	6.45	4.650 Alert		
1,000.00	1,000.00	1,007.10	1,007.10	3.40	3.41	-90.00	0.00	-30.00	30.00	23.19	6.81	4.408 Alert		
1,050.00	1,050.00	1,057.10	1,057.10	3.57	3.59	-90.00	0.00	-30.00	30.00	22.84	7.16	4.190 Alert		
1,100.00	1,100.00	1,107.10	1,107.10	3.75	3.76	-90.00	0.00	-30.00	30.00	22.48	7.52	3.992 Alert		
1,150.00	1,150.00	1,157.10	1,157.10	3.93	3.94	-90.00	0.00	-30.00	30.00	22.13	7.87	3.812 Alert		
1,200.00	1,200.00	1,207.10	1,207.10	4.11	4.12	-90.00	0.00	-30.00	30.00	21.77	8.23	3.647 Alert		
1,250.00	1,250.00	1,257.10	1,257.10	4.28	4.30	-90.00	0.00	-30.00	30.00	21.42	8.58	3.496 Alert		
1,300.00	1,300.00	1,307.10	1,307.10	4.46	4.48	-90.00	0.00	-30.00	30.00	21.06	8.94	3.356 Alert		
1,350.00	1,350.00	1,357.10	1,357.10	4.64	4.65	-90.00	0.00	-30.00	30.00	20.71	9.29	3.228 Alert		
1,400.00	1,400.00	1,407.10	1,407.10	4.82	4.83	-90.00	0.00	-30.00	30.00	20.35	9.65	3.108 Alert		
1,450.00	1,450.00	1,457.10	1,457.10	5.00	5.01	-90.00	0.00	-30.00	30.00	19.99	10.01	2.998 Alert		
1,500.00	1,500.00	1,507.10	1,507.10	5.18	5.19	-90.00	0.00	-30.00	30.00	19.64	10.36	2.894 Alert		
1,550.00	1,550.00	1,557.10	1,557.10	5.35	5.37	-90.00	0.00	-30.00	30.00	19.28	10.72	2.798 Alert		
1,600.00	1,600.00	1,607.10	1,607.10	5.53	5.55	-90.00	0.00	-30.00	30.00	18.92	11.08	2.708 Alert		
1,650.00	1,650.00	1,657.10	1,657.10	5.71	5.72	-90.00	0.00	-30.00	30.00	18.56	11.44	2.623 Alert		
1,700.00	1,700.00	1,707.10	1,707.10	5.89	5.90	-90.00	0.00	-30.00	30.00	18.21	11.79	2.544 Alert		
1,750.00	1,750.00	1,757.10	1,757.10	6.07	6.08	-90.00	0.00	-30.00	30.00	17.85	12.15	2.469 Minor Risk		
1,800.00	1,800.00	1,807.10	1,807.10	6.25	6.26	-90.00	0.00	-30.00	30.00	17.49	12.51	2.399 Minor Risk		
1,850.00	1,850.00	1,857.10	1,857.10	6.43	6.44	-90.00	0.00	-30.00	30.00	17.14	12.86	2.332 Minor Risk		
1,900.00	1,900.00	1,907.10	1,907.10	6.60	6.62	-90.00	0.00	-30.00	30.00	16.78	13.22	2.269 Minor Risk		
1,950.00	1,950.00	1,957.10	1,957.10	6.78	6.80	-90.00	0.00	-30.00	30.00	16.42	13.58	2.209 Minor Risk		
2,000.00	2,000.00	2,007.10	2,007.10	6.96	6.98	-90.00	0.00	-30.00	30.00	16.06	13.94	2.153 Minor Risk		
2,050.00	2,050.00	2,057.10	2,057.10	7.14	7.15	-90.00	0.00	-30.00	30.00	15.71	14.29	2.099 Minor Risk		
2,100.00	2,100.00	2,107.10	2,107.10	7.32	7.33	-90.00	0.00	-30.00	30.00	15.35	14.65	2.047 Minor Risk		
2,150.00	2,150.00	2,157.10	2,157.10	7.50	7.51	-90.00	0.00	-30.00	30.00	14.99	15.01	1.999 Minor Risk		
2,200.00	2,200.00	2,207.10	2,207.10	7.68	7.69	-90.00	0.00	-30.00	30.00	14.63	15.37	1.952 Minor Risk		
2,250.00	2,250.00	2,257.10	2,257.10	7.86	7.87	-90.00	0.00	-30.00	30.00	14.27	15.73	1.908 Minor Risk		
2,300.00	2,300.00	2,307.10	2,307.10	8.03	8.05	-90.00	0.00	-30.00	30.00	13.92	16.08	1.865 Minor Risk		
2,350.00	2,350.00	2,357.10	2,357.10	8.21	8.23	-90.00	0.00	-30.00	30.00	13.56	16.44	1.825 Minor Risk		
2,400.00	2,400.00	2,407.10	2,407.10	8.39	8.41	-90.00	0.00	-30.00	30.00	13.20	16.80	1.786 Minor Risk		
2,450.00	2,450.00	2,457.10	2,457.10	8.57	8.59	-90.00	0.00	-30.00	30.00	12.84	17.16	1.749 Minor Risk		
2,500.00	2,500.00	2,507.10	2,507.10	8.75	8.76	-90.00	0.00	-30.00	30.00	12.49	17.51	1.713 Minor Risk		

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: Permit Plan 2

Local Co-ordinate Reference: Well Coral PWU 28-27 11H
 TVD Reference: RKB1 @ 3325.90ft
 MD Reference: RKB1 @ 3325.90ft
 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

Offset Design Sec 27-T19S-R29E - Coral PWU 28-27 62H - Wellbore #1 - Permit Plan 2													Offset Site Error: 5.00 ft
Survey Program: 0-MWD+HDGM													Offset Well Error: 0.50 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
2,550.00	2,550.00	2,557.10	2,557.10	8.93	8.94	-54.07	0.00	-30.00	29.87	12.00	17.87	1.671	Minor Risk
2,600.00	2,599.99	2,607.09	2,607.09	9.11	9.12	-55.10	0.00	-30.00	29.49	11.26	18.23	1.618	Minor Risk
2,650.00	2,649.98	2,657.08	2,657.08	9.28	9.30	-56.88	0.00	-30.00	28.88	10.30	18.58	1.554	Minor Risk
2,700.00	2,699.96	2,707.06	2,707.06	9.46	9.48	-59.50	0.00	-30.00	28.08	9.14	18.94	1.482	Major Risk
2,750.00	2,749.92	2,757.02	2,757.02	9.64	9.66	-63.08	0.00	-30.00	27.13	7.84	19.30	1.406	Major Risk
2,800.00	2,799.86	2,806.96	2,806.96	9.82	9.84	-67.78	0.00	-30.00	26.13	6.48	19.65	1.330	Major Risk
2,850.00	2,849.78	2,856.88	2,856.88	9.99	10.02	-73.76	0.00	-30.00	25.20	5.19	20.01	1.259	Major Risk
2,900.00	2,899.68	2,906.78	2,906.78	10.17	10.19	-81.11	0.00	-30.00	24.48	4.12	20.36	1.202	Major Risk
2,950.00	2,949.54	2,956.64	2,956.64	10.35	10.37	-89.80	0.00	-30.00	24.19	3.47	20.72	1.167	Major Risk
2,951.08	2,950.62	2,957.72	2,957.72	10.35	10.38	-90.00	0.00	-30.00	24.19	3.46	20.73	1.167	Major Risk, CC
3,000.00	2,999.37	3,006.47	3,006.47	10.53	10.55	-99.48	0.00	-30.00	24.53	3.45	21.08	1.163	Major Risk, ES, SF
3,050.00	3,049.16	3,056.26	3,056.26	10.71	10.73	-109.55	0.00	-30.00	25.68	4.24	21.44	1.198	Major Risk
3,100.00	3,098.90	3,106.00	3,106.00	10.89	10.91	-119.29	0.00	-30.00	27.77	5.97	21.80	1.274	Major Risk
3,150.00	3,148.61	3,155.71	3,155.71	11.07	11.09	-128.09	0.00	-30.00	30.81	8.66	22.15	1.391	Major Risk
3,200.00	3,198.26	3,205.36	3,205.36	11.25	11.26	-135.69	0.00	-30.00	34.76	12.25	22.51	1.544	Minor Risk
3,250.00	3,247.86	3,254.96	3,254.96	11.43	11.44	-142.04	0.00	-30.00	39.53	16.67	22.86	1.729	Minor Risk
3,300.00	3,297.40	3,304.50	3,304.50	11.61	11.62	-147.28	0.00	-30.00	45.06	21.84	23.22	1.940	Minor Risk
3,350.00	3,346.91	3,354.01	3,354.01	11.79	11.80	-151.53	0.00	-30.00	51.14	27.56	23.57	2.169	Minor Risk
3,400.00	3,396.41	3,403.51	3,403.51	11.97	11.97	-154.88	0.00	-30.00	57.44	33.52	23.93	2.401	Minor Risk
3,450.00	3,445.91	3,453.01	3,453.01	12.16	12.15	-157.56	0.00	-30.00	63.91	39.63	24.28	2.632	Alert
3,500.00	3,495.41	3,502.51	3,502.51	12.34	12.33	-159.74	0.00	-30.00	70.48	45.85	24.64	2.861	Alert
3,550.00	3,544.91	3,552.01	3,552.01	12.53	12.51	-161.56	0.00	-30.00	77.15	52.15	24.99	3.087	Alert
3,600.00	3,594.41	3,601.51	3,601.51	12.71	12.68	-163.08	0.00	-30.00	83.87	58.52	25.35	3.309	Alert
3,650.00	3,643.91	3,651.01	3,651.01	12.90	12.86	-164.37	0.00	-30.00	90.64	64.94	25.70	3.527	Alert
3,700.00	3,693.41	3,700.51	3,700.51	13.08	13.04	-165.49	0.00	-30.00	97.46	71.40	26.06	3.740	Alert
3,750.00	3,742.91	3,750.01	3,750.01	13.27	13.21	-166.46	0.00	-30.00	104.30	77.89	26.41	3.949	Alert
3,800.00	3,792.41	3,800.49	3,799.51	13.46	13.40	-167.31	0.00	-30.00	111.17	84.40	26.77	4.153	Alert
3,850.00	3,841.91	3,849.01	3,849.01	13.64	13.57	-168.06	0.00	-30.00	118.06	90.94	27.12	4.353	Alert
3,900.00	3,891.41	3,901.49	3,898.51	13.83	13.76	-168.73	0.00	-30.00	124.97	97.48	27.49	4.546	Alert
3,950.00	3,940.91	3,948.01	3,948.01	14.02	13.92	-169.33	0.00	-30.00	131.90	104.06	27.84	4.738	Alert
4,000.00	3,990.41	3,997.51	3,997.51	14.21	14.10	-169.87	0.00	-30.00	138.83	110.64	28.19	4.925	Alert
4,050.00	4,039.91	4,047.60	4,047.60	14.40	14.28	-170.27	-0.02	-30.25	145.69	117.14	28.55	5.103	
4,100.00	4,089.41	4,097.80	4,097.79	14.59	14.45	-170.45	-0.07	-31.04	152.33	123.43	28.90	5.270	
4,150.00	4,138.91	4,148.06	4,148.03	14.78	14.62	-170.42	-0.15	-32.39	158.76	129.50	29.26	5.426	
4,200.00	4,188.41	4,198.36	4,198.30	14.97	14.79	-170.23	-0.27	-34.28	164.98	135.37	29.61	5.572	
4,250.00	4,237.91	4,248.71	4,248.59	15.16	14.97	-169.87	-0.42	-36.73	170.99	141.02	29.96	5.707	
4,300.00	4,287.41	4,299.08	4,298.86	15.35	15.14	-169.37	-0.61	-39.73	176.79	146.48	30.32	5.832	
4,350.00	4,336.91	4,349.46	4,349.12	15.54	15.31	-168.74	-0.83	-43.29	182.41	151.74	30.67	5.947	
4,400.00	4,386.41	4,399.84	4,399.33	15.73	15.48	-167.99	-1.09	-47.39	187.85	156.83	31.03	6.055	
4,450.00	4,435.91	4,450.21	4,449.49	15.92	15.66	-167.13	-1.38	-52.05	193.14	161.76	31.38	6.154	
4,500.00	4,485.41	4,500.56	4,499.56	16.12	15.83	-166.17	-1.70	-57.25	198.29	166.54	31.74	6.247	
4,550.00	4,534.91	4,550.77	4,549.44	16.31	16.01	-165.11	-2.06	-62.98	203.32	171.22	32.10	6.334	
4,600.00	4,584.42	4,600.37	4,598.70	16.50	16.18	-164.06	-2.43	-68.84	208.36	175.89	32.46	6.419	
4,650.00	4,633.92	4,649.97	4,647.95	16.69	16.35	-163.06	-2.79	-74.70	213.46	180.64	32.82	6.504	
4,700.00	4,683.42	4,700.42	4,697.21	16.89	16.53	-162.11	-3.16	-80.55	218.62	185.44	33.18	6.588	
4,750.00	4,732.92	4,749.18	4,746.46	17.08	16.70	-161.20	-3.52	-86.41	223.85	190.30	33.54	6.673	
4,800.00	4,782.42	4,801.22	4,795.72	17.27	16.89	-160.33	-3.89	-92.27	229.12	195.21	33.91	6.756	
4,850.00	4,831.92	4,848.39	4,844.97	17.47	17.05	-159.50	-4.25	-98.13	234.45	200.18	34.27	6.842	
4,900.00	4,881.42	4,902.01	4,894.23	17.66	17.24	-158.71	-4.62	-103.98	239.82	205.18	34.64	6.922	
4,950.00	4,930.92	4,947.59	4,943.48	17.85	17.41	-157.85	-4.99	-109.84	245.24	210.24	34.99	7.008	
5,000.00	4,980.42	5,002.80	4,992.74	18.05	17.60	-157.23	-5.35	-115.70	250.69	215.31	35.38	7.086	

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: Permit Plan 2

Local Co-ordinate Reference: Well Coral PWU 28-27 11H
TVD Reference: RKB1 @ 3325.90ft
MD Reference: RKB1 @ 3325.90ft
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

Offset Design Sec 27-T19S-R29E - Coral PWU 28-27 62H - Wellbore #1 - Permit Plan 2													Offset Site Error:	5.00 ft
Survey Program: 0-MWD+HDMG													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		
5,050.00	5,029.92	5,046.80	5,041.99	18.24	17.76	-156.54	-5.72	-121.56	258.19	220.46	35.72	7.171		
5,100.00	5,079.42	5,103.60	5,091.25	18.44	17.96	-155.87	-6.08	-127.42	261.72	225.60	36.11	7.247		
5,150.00	5,128.92	5,146.01	5,140.50	18.63	18.12	-155.23	-6.45	-133.27	267.28	230.83	36.46	7.332		
5,200.00	5,178.42	5,204.39	5,189.76	18.83	18.32	-154.62	-6.81	-139.13	272.88	236.02	36.85	7.404		
5,250.00	5,227.92	5,245.21	5,239.01	19.02	18.47	-154.04	-7.18	-144.99	278.50	241.31	37.19	7.489		
5,300.00	5,277.42	5,305.18	5,288.27	19.22	18.69	-153.47	-7.55	-150.85	284.15	246.56	37.59	7.558		
5,350.00	5,326.92	5,344.42	5,337.52	19.41	18.83	-152.93	-7.91	-156.71	289.83	251.90	37.92	7.642		
5,400.00	5,376.42	5,405.98	5,386.78	19.61	19.05	-152.41	-8.28	-162.56	295.53	257.20	38.34	7.709		
5,450.00	5,425.92	5,443.63	5,436.03	19.80	19.19	-151.91	-8.64	-168.42	301.26	262.60	38.66	7.792		
5,500.00	5,475.42	5,506.77	5,485.29	20.00	19.42	-151.43	-9.01	-174.28	307.01	267.93	39.08	7.856		
5,550.00	5,524.92	5,542.83	5,534.54	20.19	19.55	-150.97	-9.37	-180.14	312.77	273.37	39.40	7.938		
5,600.00	5,574.42	5,607.56	5,583.80	20.39	19.79	-150.52	-9.74	-185.99	318.56	278.74	39.83	7.999		
5,650.00	5,623.92	5,642.04	5,633.05	20.59	19.91	-150.09	-10.11	-191.85	324.37	284.23	40.14	8.080		
5,700.00	5,673.42	5,708.36	5,682.31	20.78	20.16	-149.67	-10.47	-197.71	330.19	289.62	40.57	8.138		
5,750.00	5,722.92	5,741.25	5,731.56	20.98	20.28	-149.27	-10.84	-203.57	336.03	295.15	40.88	8.219		
5,800.00	5,772.42	5,809.15	5,780.81	21.18	20.53	-148.88	-11.20	-209.43	341.89	300.57	41.32	8.273		
5,850.00	5,821.93	5,840.45	5,830.07	21.37	20.64	-148.51	-11.57	-215.28	347.76	306.13	41.63	8.354		
5,900.00	5,871.43	5,890.06	5,879.32	21.57	20.82	-148.14	-11.94	-221.14	353.65	311.65	42.00	8.420		
5,950.00	5,920.93	5,939.66	5,928.58	21.77	21.01	-147.79	-12.30	-227.00	359.55	317.17	42.37	8.485		
6,000.00	5,970.43	5,989.26	5,977.83	21.96	21.19	-147.45	-12.67	-232.86	365.46	322.71	42.75	8.549		
6,050.00	6,019.93	6,038.87	6,027.09	22.16	21.37	-147.12	-13.03	-238.71	371.38	328.26	43.12	8.613		
6,100.00	6,069.43	6,088.47	6,076.34	22.36	21.56	-146.81	-13.40	-244.57	377.32	333.83	43.49	8.675		
6,150.00	6,118.93	6,138.07	6,125.60	22.55	21.74	-146.50	-13.76	-250.43	383.27	339.40	43.87	8.737		
6,200.00	6,168.43	6,187.68	6,174.85	22.75	21.92	-146.20	-14.13	-256.29	389.23	344.98	44.24	8.797		
6,250.00	6,217.93	6,237.28	6,224.11	22.95	22.11	-145.91	-14.50	-262.15	395.19	350.58	44.62	8.857		
6,300.00	6,267.43	6,286.88	6,273.36	23.15	22.29	-145.63	-14.86	-268.00	401.17	356.18	44.99	8.916		
6,350.00	6,316.93	6,336.49	6,322.62	23.34	22.48	-145.35	-15.23	-273.86	407.16	361.79	45.37	8.975		
6,400.00	6,366.43	6,386.09	6,371.87	23.54	22.66	-145.09	-15.59	-279.72	413.15	367.41	45.74	9.032		
6,450.00	6,415.93	6,435.69	6,421.13	23.74	22.85	-144.83	-15.96	-285.58	419.16	373.04	46.12	9.089		
6,500.00	6,465.43	6,485.30	6,470.38	23.94	23.03	-144.58	-16.32	-291.44	425.17	378.68	46.50	9.144		
6,550.00	6,514.93	6,534.90	6,519.64	24.14	23.22	-144.34	-16.69	-297.29	431.19	384.32	46.87	9.199		
6,600.00	6,564.43	6,584.50	6,568.89	24.33	23.40	-144.10	-17.06	-303.15	437.22	389.97	47.25	9.254		
6,650.00	6,613.93	6,634.11	6,618.15	24.53	23.59	-143.87	-17.42	-309.01	443.25	395.63	47.63	9.307		
6,700.00	6,663.43	6,683.71	6,667.40	24.73	23.77	-143.64	-17.79	-314.87	449.30	401.29	48.00	9.360		
6,750.00	6,712.93	6,733.31	6,716.66	24.93	23.96	-143.43	-18.15	-320.72	455.34	406.97	48.38	9.412		
6,800.00	6,762.43	6,782.92	6,765.91	25.13	24.15	-143.21	-18.52	-326.58	461.40	412.64	48.76	9.463		
6,850.00	6,811.93	6,832.52	6,815.17	25.32	24.33	-143.01	-18.89	-332.44	467.46	418.33	49.13	9.514		
6,900.00	6,861.43	6,882.12	6,864.42	25.52	24.52	-142.81	-19.25	-338.30	473.53	424.02	49.51	9.564		
6,950.00	6,910.93	6,931.73	6,913.68	25.72	24.71	-142.61	-19.62	-344.16	479.60	429.71	49.89	9.613		
7,000.00	6,960.43	6,981.33	6,962.93	25.92	24.89	-142.42	-19.98	-350.01	485.68	435.41	50.27	9.662		
7,050.00	7,009.93	7,030.93	7,012.19	26.12	25.08	-142.23	-20.35	-355.87	491.76	441.11	50.65	9.710		
7,100.00	7,059.44	7,080.54	7,061.44	26.32	25.27	-142.05	-20.71	-361.73	497.85	446.82	51.03	9.757		
7,150.00	7,108.94	7,130.14	7,110.70	26.52	25.45	-141.87	-21.08	-367.59	503.94	452.54	51.40	9.803		
7,200.00	7,158.44	7,179.74	7,159.95	26.71	25.64	-141.70	-21.45	-373.44	510.04	458.26	51.78	9.849		
7,250.00	7,207.94	7,229.35	7,209.21	26.91	25.83	-141.53	-21.81	-379.30	516.14	463.98	52.16	9.895		
7,300.00	7,257.44	7,278.95	7,258.46	27.11	26.02	-141.36	-22.18	-385.16	522.25	469.71	52.54	9.940		
7,350.00	7,306.94	7,328.55	7,307.72	27.31	26.20	-141.20	-22.54	-391.02	528.36	475.44	52.92	9.984		
7,400.00	7,356.44	7,378.16	7,356.97	27.51	26.39	-141.04	-22.91	-396.88	534.47	481.17	53.30	10.027		
7,450.00	7,405.94	7,427.76	7,406.23	27.71	26.58	-140.89	-23.27	-402.73	540.59	486.91	53.68	10.070		
7,500.00	7,455.44	7,477.36	7,455.48	27.91	26.77	-140.74	-23.64	-408.59	546.72	492.65	54.06	10.113		
7,550.00	7,504.97	7,526.98	7,504.75	28.11	26.96	-140.62	-24.01	-414.45	552.85	498.21	54.44	10.151		

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: Permit Plan 2

Local Co-ordinate Reference
TVD Reference: RKB1 @ 3325.90ft
MD Reference: RKB1 @ 3325.90ft
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

Offset Design Sec 27-T19S-R29E - Coral PWU 28-27 62H - Wellbore #1 - Permit Plan 2														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		Minimum Separation (ft)	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
7,600.00	7,554.59	7,576.75	7,554.17	28.30	27.14	-140.47	-24.37	-420.32	558.09	503.26	54.82	10.180		
7,650.00	7,604.29	7,627.34	7,604.46	28.49	27.33	-140.31	-24.72	-425.88	562.98	507.78	55.20	10.198		
7,700.00	7,654.05	7,678.03	7,654.90	28.68	27.52	-140.18	-25.03	-430.79	567.30	511.72	55.58	10.208		
7,750.00	7,703.87	7,728.80	7,705.49	28.87	27.71	-140.06	-25.29	-435.03	571.05	515.09	55.96	10.205		
7,800.00	7,753.75	7,779.84	7,756.21	29.06	27.90	-139.97	-25.51	-438.61	574.21	517.88	56.33	10.193		
7,850.00	7,803.66	7,830.54	7,807.03	29.24	28.08	-139.90	-25.70	-441.51	576.80	520.09	56.70	10.173		
7,900.00	7,853.61	7,881.49	7,857.93	29.42	28.26	-139.84	-25.84	-443.74	578.79	521.73	57.07	10.142		
7,950.00	7,903.59	7,932.47	7,908.88	29.59	28.44	-139.81	-25.93	-445.30	580.21	522.78	57.43	10.103		
8,000.00	7,953.58	7,983.48	7,959.88	29.76	28.62	-139.79	-25.99	-446.17	581.03	523.25	57.78	10.055		
8,050.00	8,003.58	8,034.28	8,010.68	29.93	28.80	-176.06	-26.00	-446.38	581.28	523.14	58.14	9.998		
8,100.00	8,053.58	8,084.28	8,060.68	30.10	28.97	-176.06	-26.00	-446.38	581.28	522.79	58.48	9.939		
8,150.00	8,103.58	8,134.28	8,110.68	30.27	29.15	-176.06	-26.00	-446.38	581.28	522.45	58.83	9.881		
8,200.00	8,153.58	8,184.28	8,160.68	30.44	29.32	-176.06	-26.00	-446.38	581.28	522.10	59.18	9.823		
8,250.00	8,203.58	8,234.28	8,210.68	30.61	29.49	-176.06	-26.00	-446.38	581.28	521.75	59.52	9.766		
8,300.00	8,253.58	8,284.28	8,260.68	30.78	29.67	-176.06	-26.00	-446.38	581.28	521.41	59.87	9.709		
8,350.00	8,303.58	8,334.28	8,310.68	30.95	29.84	-176.06	-26.00	-446.38	581.28	521.06	60.22	9.653		
8,400.00	8,353.58	8,384.28	8,360.68	31.12	30.01	-176.06	-26.00	-446.38	581.28	520.71	60.56	9.598		
8,450.00	8,403.58	8,434.28	8,410.68	31.29	30.19	-176.06	-26.00	-446.38	581.28	520.37	60.91	9.543		
8,500.00	8,453.58	8,484.28	8,460.68	31.46	30.36	-176.06	-26.00	-446.38	581.28	520.02	61.26	9.489		
8,550.00	8,503.58	8,534.28	8,510.68	31.63	30.54	-176.06	-26.00	-446.38	581.28	519.67	61.60	9.436		
8,600.00	8,553.58	8,584.28	8,560.68	31.80	30.71	-176.06	-26.00	-446.38	581.28	519.32	61.95	9.383		
8,650.00	8,603.58	8,634.28	8,610.68	31.97	30.89	-134.24	-26.00	-445.24	581.67	519.37	62.30	9.336		
8,700.00	8,653.31	8,684.28	8,660.68	32.14	31.05	-133.79	-26.00	-439.39	584.73	522.09	62.64	9.335		
8,750.00	8,702.35	8,733.14	8,710.07	32.30	31.21	-132.99	-26.00	-428.75	590.78	527.83	62.96	9.384		
8,800.00	8,752.26	8,783.17	8,760.06	32.46	31.36	-131.83	-26.00	-413.67	598.80	536.55	63.25	9.482		
8,850.00	8,796.59	8,827.12	8,804.01	32.61	31.50	-130.34	-26.00	-394.59	611.74	548.20	63.54	9.628		
8,900.00	8,840.93	8,871.79	8,848.68	32.75	31.64	-128.52	-25.99	-372.02	626.49	562.68	63.81	9.819		
8,950.00	8,885.27	8,916.09	8,892.89	32.89	31.77	-126.39	-25.99	-346.49	643.95	579.89	64.06	10.052		
9,000.00	8,929.02	8,960.05	8,936.86	33.01	31.91	-123.95	-25.99	-318.50	663.96	599.64	64.32	10.323		
9,050.00	8,973.04	9,004.09	8,979.90	33.12	32.05	-121.23	-25.99	-288.51	686.34	621.77	64.57	10.629		
9,100.00	8,990.60	9,021.45	9,000.70	33.22	32.19	-118.23	-25.98	-256.95	710.87	646.04	64.83	10.965		
9,150.00	9,019.40	9,050.22	9,030.12	33.32	32.35	-114.96	-25.98	-224.13	737.32	672.22	65.10	11.326		
9,200.00	9,044.59	9,075.37	9,054.67	33.41	32.53	-110.15	-25.98	-189.88	764.64	699.25	65.39	11.693		
9,250.00	9,067.40	9,098.85	9,077.29	33.51	32.74	-105.30	-25.98	-152.78	789.75	724.02	65.74	12.014		
9,300.00	9,087.75	9,119.79	9,097.64	33.65	32.98	-101.23	-25.97	-112.71	812.16	748.02	66.14	12.279		
9,350.00	9,105.47	9,137.06	9,115.25	33.84	33.27	-97.87	-25.97	-69.93	831.66	765.03	66.63	12.482		
9,400.00	9,120.38	9,151.49	9,129.65	34.11	33.61	-95.14	-25.97	-24.76	848.07	780.87	67.21	12.619		
9,450.00	9,132.37	9,163.83	9,140.44	34.44	34.00	-92.98	-25.96	22.35	861.26	793.37	67.88	12.687		
9,500.00	9,141.30	9,174.80	9,151.28	34.82	34.44	-91.33	-25.96	70.82	871.09	802.44	68.66	12.688		
9,550.00	9,147.11	9,180.28	9,156.00	35.25	35.06	-90.18	-25.96	119.94	877.50	807.84	69.66	12.597		
9,600.00	9,149.74	9,183.83	9,160.00	35.70	35.47	-89.58	-25.95	169.77	880.41	809.91	70.50	12.488		
9,650.00	9,149.91	9,184.06	9,160.00	36.20	36.18	-89.54	-25.95	219.77	880.59	808.87	71.71	12.279		
9,700.00	9,149.91	9,184.83	9,160.00	36.73	36.67	-89.54	-25.94	269.77	880.58	807.86	72.73	12.108		
9,750.00	9,149.91	9,185.06	9,160.00	37.33	37.49	-89.54	-25.94	319.77	880.58	806.42	74.16	11.874		
9,800.00	9,149.91	9,185.83	9,160.00	37.94	38.04	-89.54	-25.94	369.77	880.58	805.25	75.32	11.691		
9,850.00	9,149.91	9,186.17	9,160.00	38.62	38.97	-89.54	-25.93	419.77	880.57	803.63	76.95	11.444		
9,900.00	9,149.91	9,186.83	9,160.00	39.32	39.58	-89.54	-25.93	469.77	880.57	802.31	78.25	11.253		
9,950.00	9,149.91	9,187.17	9,160.00	40.08	40.60	-89.54	-25.92	519.77	880.56	800.52	80.05	11.000		
10,000.00	9,149.91	9,187.83	9,160.00	40.85	41.26	-89.54	-25.92	569.77	880.56	799.08	81.48	10.806		
10,050.00	9,149.91	10,006.17	9,160.00	41.69	42.36	-89.54	-25.92	619.77	880.56	797.13	83.43	10.554		

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: Permit Plan 2

Local Co-ordinate Reference: Well Coral PWU 28-27 11H
 TVD Reference: RKB1 @ 3325.90ft
 MD Reference: RKB1 @ 3325.90ft
 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

Offset Design Sec 27-T19S-R29E - Coral PWU 28-27 62H - Wellbore #1 - Permit Plan 2												Offset Site Error:	5.00 ft
Survey Program: 0-MWD+HDGM												Offset Well Error:	0.50 ft
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Semi Major Axis 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
10,100.00	9,149.91	10,043.83	9,150.00	42.53	43.07	89.54	-25.91	669.77	880.55	795.57	84.98	10.362	
10,150.00	9,149.91	10,106.17	9,150.00	43.42	44.24	89.54	-25.91	719.77	880.55	793.49	87.06	10.114	
10,200.00	9,149.91	10,143.83	9,150.00	44.32	44.99	89.54	-25.90	769.77	880.55	791.83	88.71	9.926	
10,250.00	9,149.91	10,206.17	9,150.00	45.27	46.22	89.54	-25.90	819.77	880.54	789.63	90.91	9.686	
10,300.00	9,149.91	10,243.83	9,150.00	46.22	47.00	89.54	-25.90	869.77	880.54	787.89	92.65	9.504	
10,350.00	9,149.91	10,306.17	9,150.00	47.22	48.29	89.54	-25.89	919.77	880.53	785.59	94.95	9.274	
10,400.00	9,149.91	10,343.83	9,150.00	48.22	49.10	89.54	-25.89	969.77	880.53	783.77	96.76	9.100	
10,450.00	9,149.91	10,406.17	9,150.00	49.26	50.44	89.54	-25.88	1,019.77	880.53	781.37	99.15	8.880	
10,500.00	9,149.91	10,443.83	9,150.00	50.30	51.27	89.54	-25.88	1,069.77	880.52	779.49	101.04	8.715	
10,550.00	9,149.91	10,506.17	9,150.00	51.38	52.66	89.54	-25.88	1,119.77	880.52	777.01	103.51	8.507	
10,600.00	9,149.91	10,543.83	9,150.00	52.46	53.51	89.54	-25.87	1,169.77	880.52	775.07	105.45	8.350	
10,650.00	9,149.91	10,606.17	9,150.00	53.57	54.93	89.54	-25.87	1,219.77	880.51	772.52	107.99	8.154	
10,700.00	9,149.91	10,643.83	9,150.00	54.68	55.81	89.54	-25.86	1,269.77	880.51	770.52	109.99	8.008	
10,750.00	9,149.91	10,706.17	9,150.00	55.82	57.26	89.54	-25.86	1,319.77	880.50	767.92	112.59	7.821	
10,800.00	9,149.91	10,743.83	9,150.00	56.96	58.16	89.54	-25.86	1,369.77	880.50	765.87	114.63	7.681	
10,850.00	9,149.91	10,806.17	9,150.00	58.12	59.64	89.54	-25.85	1,419.77	880.50	763.21	117.29	7.507	
10,900.00	9,149.91	10,843.83	9,150.00	59.29	60.55	89.54	-25.85	1,469.77	880.49	761.12	119.37	7.376	
10,950.00	9,149.91	10,906.17	9,150.00	60.47	62.06	89.54	-25.84	1,519.77	880.49	758.42	122.07	7.213	
11,000.00	9,149.91	10,943.83	9,150.00	61.66	62.98	89.54	-25.84	1,569.77	880.48	756.29	124.19	7.090	
11,050.00	9,149.91	11,006.17	9,150.00	62.87	64.52	89.54	-25.84	1,619.77	880.48	753.54	126.94	6.936	
11,100.00	9,149.91	11,043.83	9,150.00	64.08	65.45	89.54	-25.83	1,669.77	880.48	751.39	129.09	6.821	
11,150.00	9,149.91	11,106.17	9,150.00	65.30	67.01	89.54	-25.83	1,719.77	880.47	748.60	131.88	6.677	
11,200.00	9,149.91	11,143.83	9,150.00	66.53	67.95	89.54	-25.82	1,769.77	880.47	746.41	134.06	6.568	
11,250.00	9,149.91	11,206.17	9,150.00	67.77	69.52	89.54	-25.82	1,819.77	880.47	743.59	136.88	6.433	
11,300.00	9,149.91	11,243.83	9,150.00	69.01	70.48	89.54	-25.82	1,869.77	880.46	741.38	139.08	6.331	
11,350.00	9,149.91	11,306.17	9,150.00	70.27	72.07	89.54	-25.81	1,919.77	880.46	738.53	141.93	6.203	
11,400.00	9,149.91	11,343.83	9,150.00	71.52	73.03	89.54	-25.81	1,969.77	880.46	736.30	144.16	6.108	
11,450.00	9,149.91	11,406.17	9,150.00	72.79	74.64	89.54	-25.80	2,019.77	880.45	733.42	147.04	5.988	
11,500.00	9,149.91	11,443.83	9,150.00	74.06	75.61	89.54	-25.80	2,069.77	880.45	731.16	149.29	5.898	
11,550.00	9,149.91	11,506.17	9,150.00	75.34	77.22	89.54	-25.80	2,119.77	880.44	728.26	152.19	5.785	
11,600.00	9,149.91	11,543.83	9,150.00	76.62	78.21	89.54	-25.79	2,169.77	880.44	725.99	154.45	5.700	
11,650.00	9,149.91	11,606.17	9,150.00	77.91	79.83	89.54	-25.79	2,219.77	880.44	723.06	157.38	5.594	
11,700.00	9,149.91	11,643.83	9,150.00	79.20	80.82	89.54	-25.78	2,269.77	880.43	720.77	159.66	5.514	
11,750.00	9,149.91	11,706.17	9,150.00	80.51	82.46	89.54	-25.78	2,319.77	880.43	717.82	162.60	5.415	
11,800.00	9,149.91	11,743.83	9,150.00	81.81	83.45	89.54	-25.78	2,369.77	880.43	715.52	164.91	5.339	
11,850.00	9,149.91	11,806.17	9,150.00	83.12	85.10	89.54	-25.77	2,419.77	880.42	712.55	167.87	5.245	
11,900.00	9,149.91	11,843.83	9,150.00	84.42	86.10	89.54	-25.77	2,469.77	880.42	710.24	170.18	5.173	
11,950.00	9,149.91	11,906.17	9,150.00	85.74	87.76	89.54	-25.76	2,519.77	880.41	707.26	173.16	5.084	
12,000.00	9,149.91	11,943.83	9,150.00	87.06	88.76	89.54	-25.76	2,569.77	880.41	704.93	175.48	5.017	
12,050.00	9,149.91	12,006.17	9,150.00	88.38	90.42	89.54	-25.76	2,619.77	880.41	701.93	178.48	4.933 Alert	
12,100.00	9,149.91	12,043.83	9,150.00	89.71	91.43	89.54	-25.75	2,669.77	880.40	699.59	180.82	4.869 Alert	
12,150.00	9,149.91	12,106.17	9,150.00	91.04	93.10	89.54	-25.75	2,719.77	880.40	696.58	183.82	4.789 Alert	
12,200.00	9,149.91	12,143.83	9,150.00	92.37	94.12	89.54	-25.75	2,769.77	880.39	694.22	186.17	4.729 Alert	
12,250.00	9,149.91	12,206.17	9,150.00	93.71	95.80	89.54	-25.74	2,819.77	880.39	691.20	189.19	4.653 Alert	
12,300.00	9,149.91	12,243.83	9,150.00	95.04	96.81	89.54	-25.74	2,869.77	880.39	688.84	191.55	4.596 Alert	
12,350.00	9,149.91	12,306.17	9,150.00	96.39	98.50	89.54	-25.73	2,919.77	880.38	685.81	194.58	4.525 Alert	
12,400.00	9,149.91	12,343.83	9,150.00	97.73	99.52	89.54	-25.73	2,969.77	880.38	683.44	196.94	4.470 Alert	
12,450.00	9,149.91	12,406.17	9,150.00	99.08	101.21	89.54	-25.73	3,019.77	880.38	680.39	199.99	4.402 Alert	
12,500.00	9,149.91	12,443.83	9,150.00	100.42	102.23	89.54	-25.72	3,069.77	880.37	678.01	202.36	4.351 Alert	
12,550.00	9,149.91	12,506.17	9,150.00	101.78	103.93	89.54	-25.72	3,119.77	880.37	674.96	205.41	4.286 Alert	
12,600.00	9,149.91	12,543.83	9,150.00	103.13	104.95	89.54	-25.71	3,169.77	880.36	672.57	207.79	4.237 Alert	

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: Permit Plan 2

Local Co-ordinate Reference
TVD Reference: RKB1 @ 3325.90ft
MD Reference: RKB1 @ 3325.90ft
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

Offset Design Sec 27-T19S-R29E - Coral PWU 28-27 62H - Wellbore #1 - Permit Plan 2													Offset Site Error: 5.00 ft
Survey Program: 0-MWD+HDGM													Offset Well Error: 0.50 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
12,650.00	9,149.91	12,606.17	9,150.00	104.49	106.66	89.54	-25.71	3,219.77	880.36	669.51	210.85	4.175	Alert
12,700.00	9,149.91	12,643.83	9,150.00	105.84	107.68	89.54	-25.71	3,269.77	880.36	667.11	213.24	4.128	Alert
12,750.00	9,149.91	12,706.17	9,150.00	107.20	109.39	89.54	-25.70	3,319.77	880.35	664.04	216.31	4.070	Alert
12,800.00	9,149.91	12,743.83	9,150.00	108.56	110.42	89.54	-25.70	3,369.77	880.35	661.64	218.71	4.025	Alert
12,850.00	9,149.91	12,806.17	9,150.00	109.93	112.13	89.54	-25.69	3,419.77	880.35	658.56	221.78	3.969	Alert
12,900.00	9,149.91	12,843.83	9,150.00	111.29	113.17	89.54	-25.69	3,469.77	880.34	656.16	224.19	3.927	Alert
12,950.00	9,149.91	12,906.17	9,150.00	112.66	114.88	89.54	-25.69	3,519.77	880.34	653.07	227.27	3.874	Alert
13,000.00	9,149.91	12,943.83	9,150.00	114.03	115.91	89.54	-25.68	3,569.77	880.33	650.66	229.68	3.833	Alert
13,050.00	9,149.91	13,006.17	9,150.00	115.40	117.63	89.54	-25.68	3,619.77	880.33	647.56	232.77	3.782	Alert
13,100.00	9,149.91	13,043.83	9,150.00	116.77	118.67	89.54	-25.67	3,669.77	880.33	645.15	235.18	3.743	Alert
13,150.00	9,149.91	13,106.17	9,150.00	118.14	120.39	89.54	-25.67	3,719.77	880.32	642.05	238.28	3.695	Alert
13,200.00	9,149.91	13,143.83	9,150.00	119.52	121.43	89.54	-25.67	3,769.77	880.32	639.63	240.69	3.657	Alert
13,250.00	9,149.91	13,206.17	9,150.00	120.89	123.15	89.54	-25.66	3,819.77	880.32	636.52	243.79	3.611	Alert
13,300.00	9,149.91	13,243.83	9,150.00	122.27	124.20	89.54	-25.66	3,869.77	880.31	634.10	246.22	3.575	Alert
13,350.00	9,149.91	13,306.17	9,150.00	123.65	125.92	89.54	-25.65	3,919.77	880.31	630.98	249.32	3.531	Alert
13,400.00	9,149.91	13,343.83	9,150.00	125.03	126.97	89.54	-25.65	3,969.77	880.30	628.55	251.75	3.497	Alert
13,450.00	9,149.91	13,406.17	9,150.00	126.41	128.69	89.54	-25.65	4,019.77	880.30	625.44	254.86	3.454	Alert
13,500.00	9,149.91	13,443.83	9,150.00	127.79	129.74	89.54	-25.64	4,069.77	880.30	623.01	257.29	3.421	Alert
13,550.00	9,149.91	13,506.17	9,150.00	129.18	131.47	89.54	-25.64	4,119.77	880.29	619.88	260.41	3.380	Alert
13,600.00	9,149.91	13,543.83	9,150.00	130.56	132.52	89.54	-25.63	4,169.77	880.29	617.45	262.84	3.349	Alert
13,650.00	9,149.91	13,606.17	9,150.00	131.95	134.25	89.54	-25.63	4,219.77	880.29	614.32	265.96	3.310	Alert
13,700.00	9,149.91	13,643.83	9,150.00	133.33	135.30	89.54	-25.63	4,269.77	880.28	611.88	268.40	3.280	Alert
13,750.00	9,149.91	13,706.17	9,150.00	134.72	137.04	89.54	-25.62	4,319.77	880.28	608.75	271.53	3.242	Alert
13,800.00	9,149.91	13,743.83	9,150.00	136.11	138.09	89.54	-25.62	4,369.77	880.27	606.31	273.97	3.213	Alert
13,850.00	9,149.91	13,806.17	9,150.00	137.50	139.82	89.54	-25.61	4,419.77	880.27	603.17	277.10	3.177	Alert
13,900.00	9,149.91	13,843.83	9,150.00	138.89	140.88	89.54	-25.61	4,469.77	880.27	600.73	279.54	3.149	Alert
13,950.00	9,149.91	13,906.17	9,150.00	140.28	142.62	89.54	-25.61	4,519.77	880.26	597.59	282.67	3.114	Alert
14,000.00	9,149.91	13,943.83	9,150.00	141.67	143.67	89.54	-25.60	4,569.77	880.26	595.14	285.12	3.087	Alert
14,050.00	9,149.91	14,006.17	9,150.00	143.07	145.41	89.54	-25.60	4,619.77	880.26	592.00	288.26	3.054	Alert
14,100.00	9,149.91	14,043.83	9,150.00	144.46	146.46	89.54	-25.59	4,669.77	880.25	589.55	290.71	3.028	Alert
14,150.00	9,149.91	14,106.17	9,150.00	145.85	148.21	89.54	-25.59	4,719.77	880.25	586.40	293.85	2.996	Alert
14,200.00	9,149.91	14,143.83	9,150.00	147.25	149.26	89.54	-25.59	4,769.77	880.24	583.95	296.30	2.971	Alert
14,250.00	9,149.91	14,206.17	9,150.00	148.65	151.01	89.54	-25.58	4,819.77	880.24	580.80	299.44	2.940	Alert
14,300.00	9,149.91	14,243.83	9,150.00	150.04	152.06	89.54	-25.58	4,869.77	880.24	578.34	301.89	2.916	Alert
14,350.00	9,149.91	14,306.17	9,150.00	151.44	153.81	89.54	-25.57	4,919.77	880.23	575.19	305.04	2.888	Alert
14,400.00	9,149.91	14,343.83	9,150.00	152.84	154.86	89.54	-25.57	4,969.77	880.23	572.73	307.50	2.863	Alert
14,450.00	9,149.91	14,406.17	9,150.00	154.24	156.61	89.54	-25.57	5,019.77	880.23	569.58	310.65	2.834	Alert
14,500.00	9,149.91	14,443.83	9,150.00	155.64	157.67	89.54	-25.56	5,069.77	880.22	567.12	313.10	2.811	Alert
14,550.00	9,149.91	14,506.17	9,150.00	157.04	159.42	89.54	-25.56	5,119.77	880.22	563.96	316.25	2.783	Alert
14,600.00	9,149.91	14,543.83	9,150.00	158.44	160.48	89.54	-25.55	5,169.77	880.21	561.50	318.71	2.762	Alert
14,650.00	9,149.91	14,606.17	9,150.00	159.84	162.23	89.54	-25.55	5,219.77	880.21	558.34	321.87	2.735	Alert
14,700.00	9,149.91	14,643.83	9,150.00	161.24	163.29	89.54	-25.55	5,269.77	880.21	555.88	324.33	2.714	Alert
14,750.00	9,149.91	14,706.17	9,150.00	162.64	165.04	89.54	-25.54	5,319.77	880.20	552.72	327.49	2.688	Alert
14,800.00	9,149.91	14,743.83	9,150.00	164.05	166.10	89.54	-25.54	5,369.77	880.20	550.25	329.95	2.668	Alert
14,850.00	9,149.91	14,806.17	9,150.00	165.45	167.85	89.54	-25.54	5,419.77	880.20	547.09	333.11	2.642	Alert
14,900.00	9,149.91	14,843.83	9,150.00	166.86	168.91	89.54	-25.53	5,469.77	880.19	544.62	335.58	2.623	Alert
14,950.00	9,149.91	14,906.17	9,150.00	168.26	170.67	89.54	-25.53	5,519.77	880.19	541.45	338.74	2.598	Alert
15,000.00	9,149.91	14,943.83	9,150.00	169.67	171.73	89.54	-25.52	5,569.77	880.18	538.98	341.20	2.580	Alert
15,050.00	9,149.91	15,006.17	9,150.00	171.07	173.49	89.54	-25.52	5,619.77	880.18	535.81	344.37	2.556	Alert
15,100.00	9,149.91	15,043.83	9,150.00	172.48	174.55	89.54	-25.52	5,669.77	880.18	533.34	346.84	2.538	Alert
15,150.00	9,149.91	15,106.17	9,150.00	173.88	176.30	89.54	-25.51	5,719.77	880.17	530.17	350.00	2.515	Alert

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: Permit Plan 2

Local Co-ordinate Reference: Well Coral PWU 28-27 11H
 TVD Reference: RKB1 @ 3325.90ft
 MD Reference: RKB1 @ 3325.90ft
 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

Offset Design Sec 27-T19S-R29E - Coral PWU 28-27 62H - Wellbore #1 - Permit Plan 2													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	
15,200.00	9,149.91	15,143.83	9,150.00	175.29	177.37	89.54	-25.51	5,769.77	880.17	527.70	352.47	2.497	Minor Risk
15,250.00	9,149.91	15,206.17	9,150.00	176.70	179.12	89.54	-25.50	5,819.77	880.17	524.53	355.64	2.475	Minor Risk
15,300.00	9,149.91	15,243.83	9,150.00	178.11	180.19	89.54	-25.50	5,869.77	880.16	522.05	358.11	2.458	Minor Risk
15,350.00	9,149.91	15,306.17	9,150.00	179.52	181.95	89.54	-25.50	5,919.77	880.16	518.88	361.28	2.436	Minor Risk
15,400.00	9,149.91	15,343.83	9,150.00	180.92	183.01	89.54	-25.49	5,969.77	880.15	516.40	363.75	2.420	Minor Risk
15,450.00	9,149.91	15,406.17	9,150.00	182.33	184.77	89.54	-25.49	6,019.77	880.15	513.23	366.92	2.399	Minor Risk
15,500.00	9,149.91	15,443.83	9,150.00	183.74	185.83	89.54	-25.48	6,069.77	880.15	510.75	369.40	2.383	Minor Risk
15,550.00	9,149.91	15,506.17	9,150.00	185.15	187.59	89.54	-25.48	6,119.77	880.14	507.58	372.57	2.362	Minor Risk
15,600.00	9,149.91	15,543.83	9,150.00	186.56	188.68	89.54	-25.48	6,169.77	880.14	505.10	375.04	2.347	Minor Risk
15,650.00	9,149.91	15,606.17	9,150.00	187.97	190.42	89.54	-25.47	6,219.77	880.14	501.92	378.22	2.327	Minor Risk
15,700.00	9,149.91	15,643.83	9,150.00	189.38	191.48	89.54	-25.47	6,269.77	880.13	499.44	380.69	2.312	Minor Risk
15,750.00	9,149.91	15,706.17	9,150.00	190.80	193.25	89.54	-25.46	6,319.77	880.13	496.26	383.87	2.293	Minor Risk
15,800.00	9,149.91	15,743.83	9,150.00	192.21	194.31	89.54	-25.46	6,369.77	880.12	493.78	386.35	2.278	Minor Risk
15,850.00	9,149.91	15,806.17	9,150.00	193.62	196.07	89.54	-25.46	6,419.77	880.12	490.60	389.52	2.259	Minor Risk
15,900.00	9,149.91	15,843.83	9,150.00	195.03	197.14	89.54	-25.45	6,469.77	880.12	488.12	392.00	2.245	Minor Risk
15,950.00	9,149.91	15,906.17	9,150.00	196.45	198.90	89.54	-25.45	6,519.77	880.11	484.93	395.18	2.227	Minor Risk
16,000.00	9,149.91	15,943.83	9,150.00	197.86	199.97	89.54	-25.44	6,569.77	880.11	482.45	397.66	2.213	Minor Risk
16,050.00	9,149.91	16,006.17	9,150.00	199.27	201.73	89.54	-25.44	6,619.77	880.11	479.27	400.84	2.196	Minor Risk
16,100.00	9,149.91	16,043.83	9,150.00	200.69	202.80	89.54	-25.44	6,669.77	880.10	476.78	403.32	2.182	Minor Risk
16,150.00	9,149.91	16,106.17	9,150.00	202.10	204.57	89.54	-25.43	6,719.77	880.10	473.60	406.50	2.165	Minor Risk
16,200.00	9,149.91	16,143.83	9,150.00	203.51	205.63	89.54	-25.43	6,769.77	880.09	471.11	408.98	2.152	Minor Risk
16,250.00	9,149.91	16,206.17	9,150.00	204.93	207.40	89.54	-25.42	6,819.77	880.09	467.93	412.16	2.135	Minor Risk
16,300.00	9,149.91	16,243.83	9,150.00	206.34	208.47	89.54	-25.42	6,869.77	880.09	465.44	414.64	2.123	Minor Risk
16,350.00	9,149.91	16,306.17	9,150.00	207.76	210.23	89.54	-25.42	6,919.77	880.08	462.26	417.83	2.106	Minor Risk
16,400.00	9,149.91	16,343.83	9,150.00	209.17	211.30	89.54	-25.41	6,969.77	880.08	459.77	420.31	2.094	Minor Risk
16,450.00	9,149.91	16,406.17	9,150.00	210.59	213.07	89.54	-25.41	7,019.77	880.08	456.58	423.49	2.078	Minor Risk
16,500.00	9,149.91	16,443.83	9,150.00	212.01	214.13	89.54	-25.40	7,069.77	880.07	454.09	425.98	2.066	Minor Risk
16,550.00	9,149.91	16,506.17	9,150.00	213.42	215.90	89.54	-25.40	7,119.77	880.07	450.91	429.16	2.051	Minor Risk
16,600.00	9,149.91	16,543.83	9,150.00	214.84	216.97	89.54	-25.40	7,169.77	880.06	448.42	431.65	2.039	Minor Risk
16,650.00	9,149.91	16,606.17	9,150.00	216.25	218.74	89.54	-25.39	7,219.77	880.06	445.23	434.83	2.024	Minor Risk
16,700.00	9,149.91	16,643.83	9,150.00	217.67	219.81	89.54	-25.39	7,269.77	880.06	442.74	437.32	2.012	Minor Risk
16,750.00	9,149.91	16,706.17	9,150.00	219.09	221.58	89.54	-25.38	7,319.77	880.05	439.55	440.51	1.998	Minor Risk
16,800.00	9,149.91	16,743.83	9,150.00	220.51	222.65	89.54	-25.38	7,369.77	880.05	437.06	442.99	1.987	Minor Risk
16,850.00	9,149.91	16,806.17	9,150.00	221.92	224.41	89.54	-25.38	7,419.77	880.05	433.87	446.18	1.972	Minor Risk
16,900.00	9,149.91	16,843.83	9,150.00	223.34	225.48	89.54	-25.37	7,469.77	880.04	431.37	448.67	1.961	Minor Risk
16,950.00	9,149.91	16,906.17	9,150.00	224.76	227.25	89.54	-25.37	7,519.77	880.04	428.18	451.86	1.948	Minor Risk
17,000.00	9,149.91	16,943.83	9,150.00	226.18	228.32	89.54	-25.36	7,569.77	880.03	425.69	454.34	1.937	Minor Risk
17,050.00	9,149.91	16,983.83	9,150.00	227.59	229.74	89.54	-25.36	7,619.77	880.03	422.85	457.18	1.925	Minor Risk
17,056.59	9,149.91	17,000.42	9,150.00	227.78	229.93	89.54	-25.36	7,626.36	880.03	422.47	457.56	1.923	Minor Risk

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: Permit Plan 2

Local Co-ordinate Reference: Well Coral PWU 28-27 11H
TVD Reference: RKB1 @ 3325.90ft
MD Reference: RKB1 @ 3325.90ft
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

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		Highside Toolface (°)	Distance		Minimum Separation (ft)	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
14,250.00	9,149.91	9,212.24	9,208.84	148.65	32.17	-91.29	1,878.23	5,910.66	1,496.15	1,364.50	131.65	11.364		
14,300.00	9,149.91	9,211.67	9,208.26	150.04	32.17	-91.26	1,878.23	5,910.67	1,460.10	1,325.09	135.01	10.815		
14,350.00	9,149.91	9,211.10	9,207.70	151.44	32.17	-91.22	1,878.24	5,910.67	1,424.88	1,286.39	138.49	10.289		
14,400.00	9,149.91	9,210.69	9,207.29	152.84	32.17	-91.20	1,878.24	5,910.68	1,390.57	1,248.48	142.09	9.786		
14,450.00	9,149.91	9,210.14	9,206.74	154.24	32.17	-91.17	1,878.25	5,910.69	1,357.23	1,211.41	145.82	9.307		
14,500.00	9,149.91	9,209.60	9,206.19	155.64	32.16	-91.14	1,878.25	5,910.69	1,324.95	1,175.28	149.67	8.853		
14,550.00	9,149.91	9,209.05	9,205.64	157.04	32.16	-91.11	1,878.26	5,910.70	1,293.79	1,140.17	153.62	8.422		
14,600.00	9,149.91	9,208.50	9,205.10	158.44	32.16	-91.08	1,878.27	5,910.70	1,263.84	1,106.18	157.66	8.016		
14,650.00	9,149.91	9,207.95	9,204.55	159.84	32.16	-91.05	1,878.27	5,910.71	1,235.19	1,073.40	161.79	7.635		
14,700.00	9,149.91	9,207.40	9,203.99	161.24	32.16	-91.02	1,878.28	5,910.72	1,207.93	1,041.95	165.98	7.278		
14,750.00	9,149.91	9,206.85	9,203.44	162.64	32.16	-90.99	1,878.28	5,910.72	1,182.15	1,011.94	170.21	6.945		
14,800.00	9,149.91	9,206.29	9,202.89	164.05	32.15	-90.96	1,878.29	5,910.73	1,157.96	983.51	174.45	6.638		
14,850.00	9,149.91	9,205.74	9,202.34	165.45	32.15	-90.92	1,878.30	5,910.73	1,135.46	956.79	178.68	6.355		
14,900.00	9,149.91	9,205.19	9,201.79	166.86	32.15	-90.89	1,878.30	5,910.74	1,114.75	931.80	182.85	6.097		
14,950.00	9,149.91	9,204.63	9,201.23	168.26	32.15	-90.86	1,878.31	5,910.75	1,095.93	908.99	186.94	5.863		
15,000.00	9,149.91	9,204.08	9,200.68	169.67	32.15	-90.83	1,878.31	5,910.75	1,079.10	888.21	190.89	5.653		
15,050.00	9,149.91	9,203.52	9,200.12	171.07	32.14	-90.80	1,878.32	5,910.76	1,064.36	869.68	194.67	5.467		
15,100.00	9,149.91	9,202.96	9,199.56	172.48	32.14	-90.77	1,878.33	5,910.76	1,051.78	853.55	198.23	5.306		
15,150.00	9,149.91	9,202.41	9,199.01	173.88	32.14	-90.74	1,878.33	5,910.77	1,041.46	839.92	201.54	5.168		
15,200.00	9,149.91	9,201.85	9,198.45	175.29	32.14	-90.71	1,878.34	5,910.78	1,033.46	828.92	204.54	5.053		
15,250.00	9,149.91	9,201.29	9,197.89	176.70	32.14	-90.68	1,878.34	5,910.78	1,027.82	820.63	207.19	4.961	Alert	
15,300.00	9,149.91	9,200.73	9,197.33	178.11	32.13	-90.64	1,878.35	5,910.79	1,024.60	815.12	209.48	4.891	Alert	
15,341.10	9,149.91	9,200.27	9,196.87	179.26	32.13	-90.62	1,878.35	5,910.79	1,023.78	812.71	211.07	4.850	Alert, CC	
15,350.00	9,149.91	9,200.17	9,196.77	179.52	32.13	-90.61	1,878.36	5,910.79	1,023.82	812.44	211.38	4.844	Alert, ES	
15,400.00	9,149.91	9,199.61	9,196.21	180.92	32.13	-90.58	1,878.36	5,910.80	1,025.47	812.61	212.86	4.818	Alert	
15,450.00	9,149.91	9,199.05	9,195.64	182.33	32.13	-90.55	1,878.37	5,910.81	1,029.55	815.63	213.92	4.813	Alert, SF	
15,500.00	9,149.91	9,198.48	9,195.08	183.74	32.13	-90.52	1,878.37	5,910.81	1,036.04	821.46	214.57	4.828	Alert	
15,550.00	9,149.91	9,197.92	9,194.52	185.15	32.12	-90.49	1,878.38	5,910.82	1,044.87	830.06	214.82	4.864	Alert	
15,600.00	9,149.91	9,197.35	9,193.95	186.56	32.12	-90.46	1,878.39	5,910.83	1,056.00	841.33	214.67	4.919	Alert	
15,650.00	9,149.91	9,196.79	9,193.39	187.97	32.12	-90.42	1,878.39	5,910.83	1,069.36	855.19	214.17	4.993	Alert	
15,700.00	9,149.91	9,196.22	9,192.82	189.38	32.12	-90.39	1,878.40	5,910.84	1,084.86	871.52	213.33	5.085		
15,750.00	9,149.91	9,195.65	9,192.25	190.80	32.12	-90.36	1,878.40	5,910.84	1,102.41	890.21	212.20	5.195		
15,800.00	9,149.91	9,195.09	9,191.69	192.21	32.11	-90.33	1,878.41	5,910.85	1,121.91	911.11	210.80	5.322		
15,850.00	9,149.91	9,194.52	9,191.12	193.62	32.11	-90.30	1,878.42	5,910.86	1,143.27	934.10	209.18	5.466		
15,900.00	9,149.91	9,193.95	9,190.55	195.03	32.11	-90.26	1,878.42	5,910.86	1,166.39	959.03	207.36	5.625		
15,950.00	9,149.91	9,193.38	9,189.98	196.45	32.11	-90.23	1,878.43	5,910.87	1,191.15	985.77	205.38	5.800		
16,000.00	9,149.91	9,192.81	9,189.41	197.86	32.11	-90.20	1,878.43	5,910.88	1,217.46	1,014.19	203.28	5.989		
16,050.00	9,149.91	9,192.23	9,188.83	199.27	32.10	-90.17	1,878.44	5,910.88	1,245.23	1,044.16	201.08	6.193		
16,100.00	9,149.91	9,191.66	9,188.26	200.69	32.10	-90.14	1,878.45	5,910.89	1,274.36	1,075.55	198.80	6.410		
16,150.00	9,149.91	9,191.09	9,187.69	202.10	32.10	-90.10	1,878.45	5,910.89	1,304.75	1,108.27	196.48	6.641		
16,200.00	9,149.91	9,190.51	9,187.11	203.51	32.10	-90.07	1,878.46	5,910.90	1,336.32	1,142.19	194.13	6.884		
16,250.00	9,149.91	9,189.94	9,186.54	204.93	32.10	-90.04	1,878.46	5,910.91	1,368.99	1,177.22	191.77	7.139		
16,300.00	9,149.91	9,189.36	9,185.96	206.34	32.09	-90.01	1,878.47	5,910.91	1,402.68	1,213.27	189.41	7.405		
16,350.00	9,149.91	9,188.79	9,185.39	207.76	32.09	-89.98	1,878.48	5,910.92	1,437.32	1,250.25	187.07	7.683		
16,400.00	9,149.91	9,188.21	9,184.81	209.17	32.09	-89.94	1,878.48	5,910.93	1,472.84	1,288.09	184.75	7.972		

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: Permit Plan 2

Local Co-ordinate Reference: Well Coral PWU 28-27 11H
 TVD Reference: RKB1 @ 3325.90ft
 MD Reference: RKB1 @ 3325.90ft
 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

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				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)
10,600.00	9,149.91	8,674.26	8,652.92	52.46	30.28	-60.92	1,782.55	2,222.44	1,495.22	1,428.41	66.81	22.380	
10,650.00	9,149.91	8,683.44	8,661.06	53.57	30.30	-61.30	1,782.36	2,226.67	1,460.38	1,392.67	67.70	21.570	
10,700.00	9,149.91	8,693.07	8,669.55	54.68	30.33	-61.70	1,782.15	2,231.21	1,426.28	1,357.61	68.68	20.767	
10,750.00	9,149.91	8,705.00	8,679.98	55.82	30.36	-62.19	1,781.88	2,237.00	1,392.98	1,323.21	69.77	19.965	
10,800.00	9,149.91	8,705.00	8,679.98	56.96	30.36	-62.19	1,781.88	2,237.00	1,360.58	1,289.73	70.84	19.205	
10,850.00	9,149.91	8,726.87	8,698.86	58.12	30.43	-63.10	1,781.33	2,248.02	1,328.89	1,256.69	72.20	18.405	
10,900.00	9,149.91	8,739.75	8,709.84	59.29	30.47	-63.63	1,780.97	2,254.76	1,298.19	1,224.62	73.57	17.645	
10,950.00	9,149.91	8,755.00	8,722.68	60.47	30.51	-64.26	1,780.51	2,262.96	1,268.44	1,193.38	75.06	16.899	
11,000.00	9,149.91	8,767.87	8,733.40	61.66	30.58	-64.79	1,780.09	2,270.08	1,239.67	1,163.06	76.61	16.182	
11,050.00	9,149.91	8,783.24	8,746.04	62.87	30.61	-65.43	1,779.55	2,278.80	1,211.95	1,133.67	78.28	15.482	
11,100.00	9,149.91	8,800.00	8,759.63	64.08	30.66	-66.11	1,778.92	2,288.58	1,185.30	1,105.27	80.04	14.810	
11,150.00	9,149.91	8,817.55	8,773.65	65.30	30.72	-66.83	1,778.21	2,299.11	1,159.76	1,077.88	81.89	14.163	
11,200.00	9,149.91	8,836.66	8,788.67	66.53	30.79	-67.60	1,777.37	2,310.90	1,135.36	1,051.54	83.81	13.546	
11,250.00	9,149.91	8,858.71	8,805.68	67.77	30.87	-68.49	1,776.31	2,324.89	1,112.09	1,026.26	85.83	12.957	
11,300.00	9,149.91	8,884.03	8,824.83	69.01	30.97	-69.49	1,774.92	2,341.40	1,089.92	1,002.00	87.91	12.398	
11,350.00	9,149.91	8,907.26	8,842.03	70.27	31.07	-70.41	1,773.50	2,356.94	1,068.85	978.80	90.05	11.870	
11,400.00	9,149.91	8,929.38	8,858.10	71.52	31.17	-71.28	1,772.16	2,372.08	1,049.03	956.80	92.23	11.374	
11,450.00	9,149.91	8,943.00	8,867.84	72.79	31.23	-71.81	1,771.35	2,381.57	1,030.56	936.12	94.44	10.912	
11,500.00	9,149.91	8,968.31	8,885.49	74.06	31.35	-72.79	1,769.97	2,399.66	1,013.47	916.77	96.70	10.480	
11,550.00	9,149.91	8,990.00	8,900.07	75.34	31.46	-73.61	1,768.95	2,415.68	997.97	898.98	98.97	10.083	
11,600.00	9,149.91	9,009.29	8,912.59	76.62	31.57	-74.32	1,768.15	2,430.33	983.98	882.72	101.25	9.718	
11,650.00	9,149.91	9,037.00	8,929.88	77.91	31.72	-75.31	1,767.11	2,451.97	971.49	867.96	103.53	9.384	
11,700.00	9,149.91	9,059.38	8,943.19	79.20	31.87	-76.09	1,766.35	2,469.94	960.38	854.60	105.79	9.079	
11,750.00	9,149.91	9,084.00	8,957.21	80.51	32.03	-76.91	1,765.52	2,490.16	950.61	842.60	108.02	8.801	
11,800.00	9,149.91	9,117.38	8,975.15	81.81	32.27	-77.97	1,764.50	2,518.26	942.09	831.88	110.23	8.547	
11,850.00	9,149.91	9,146.89	8,990.01	83.12	32.50	-78.86	1,763.72	2,543.78	934.82	822.41	112.41	8.316	
11,900.00	9,149.91	9,179.00	9,004.90	84.42	32.77	-79.76	1,763.05	2,572.20	928.81	814.27	114.54	8.109	
11,950.00	9,149.91	9,208.67	9,017.62	85.74	33.05	-80.53	1,762.63	2,599.01	923.96	807.30	116.65	7.921	
12,000.00	9,149.91	9,241.20	9,030.60	87.06	33.37	-81.33	1,762.43	2,628.83	920.20	801.48	118.73	7.750	
12,050.00	9,149.91	9,274.38	9,042.86	88.38	33.72	-82.09	1,762.55	2,659.66	917.52	796.74	120.78	7.597	
12,100.00	9,149.91	9,314.61	9,056.13	89.71	34.18	-82.92	1,762.88	2,697.63	915.68	792.83	122.84	7.454	
12,150.00	9,149.91	9,365.06	9,069.91	91.04	34.81	-83.77	1,763.09	2,746.15	914.24	789.29	124.95	7.317	
12,200.00	9,149.91	9,419.76	9,081.43	92.37	35.55	-84.49	1,762.62	2,799.61	912.71	785.62	127.09	7.182	
12,250.00	9,149.91	9,458.45	9,088.07	93.71	36.12	-84.90	1,762.25	2,837.72	911.41	782.24	129.17	7.056	
12,300.00	9,149.91	9,495.99	9,093.33	95.04	36.70	-85.23	1,762.22	2,874.89	910.77	779.53	131.24	6.940	
12,320.11	9,149.91	9,511.00	9,095.04	95.58	36.94	-85.34	1,762.32	2,889.81	910.71	778.64	132.07	6.896	
12,350.00	9,149.91	9,529.11	9,096.75	96.39	37.23	-85.45	1,762.58	2,907.83	910.91	777.65	133.26	6.836	
12,400.00	9,149.91	9,565.91	9,098.96	97.73	37.84	-85.59	1,763.58	2,944.55	912.00	776.70	135.30	6.741	
12,450.00	9,149.91	9,611.82	9,100.01	99.08	38.63	-85.67	1,765.04	2,990.23	913.50	778.04	137.46	6.646	
12,500.00	9,149.91	9,656.69	9,100.33	100.42	39.44	-85.69	1,768.68	3,035.26	915.28	775.84	139.64	6.554	
12,550.00	9,149.91	9,706.14	9,100.21	101.78	40.37	-85.70	1,768.58	3,084.68	917.21	775.29	141.92	6.463	
12,600.00	9,149.91	9,765.70	9,100.71	103.13	41.54	-85.74	1,770.59	3,144.20	918.86	774.45	144.41	6.363	
12,650.00	9,149.91	9,816.77	9,102.09	104.49	42.58	-85.83	1,771.97	3,195.23	920.11	773.31	146.80	6.268	
12,700.00	9,149.91	9,860.66	9,103.23	105.84	43.50	-85.90	1,773.37	3,239.08	921.61	772.49	149.11	6.181	
12,750.00	9,149.91	9,912.12	9,104.34	107.20	44.61	-85.98	1,775.25	3,290.50	923.36	771.78	151.58	6.092	
12,800.00	9,149.91	9,976.18	9,105.71	108.56	46.02	-86.07	1,776.89	3,354.52	924.56	770.26	154.29	5.992	
12,850.00	9,149.91	10,032.45	9,106.94	109.93	47.32	-86.15	1,777.69	3,410.77	925.19	768.27	156.92	5.896	
12,900.00	9,149.91	10,087.94	9,108.10	111.29	48.60	-86.23	1,778.14	3,466.25	925.52	766.00	159.53	5.802	
12,950.00	9,149.91	10,138.93	9,109.26	112.66	49.83	-86.30	1,778.40	3,517.22	925.71	763.59	162.12	5.710	
13,000.00	9,149.91	10,192.80	9,110.60	114.03	51.13	-86.38	1,778.55	3,571.08	925.77	761.00	164.77	5.619	
13,050.00	9,149.91	10,250.51	9,111.97	115.40	52.56	-86.47	1,778.31	3,628.77	925.49	757.99	167.50	5.525	

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: Permit Plan 2

Local Co-ordinate Reference: Well Coral PWU 28-27 11H
 TVD Reference: RKB1 @ 3325.90ft
 MD Reference: RKB1 @ 3325.90ft
 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

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		Highside Toolface (°)	Offset Wellbore Centre		Distance		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)	Between Centres (ft)	Between Ellipses (ft)						
13,100.00	9,149.91	10,314.27	9,113.51	116.77	54.16	-86.56	1,777.36	3,692.50	924.68	754.35	170.33	5.429				
13,150.00	9,149.91	10,383.13	9,115.65	118.14	55.92	-86.68	1,775.13	3,761.29	922.99	749.77	173.21	5.329				
13,200.00	9,149.91	10,458.83	9,118.43	119.52	57.88	-86.84	1,770.81	3,836.81	920.04	743.93	176.11	5.224				
13,250.00	9,149.91	10,506.01	9,120.03	120.89	59.12	-86.93	1,767.52	3,883.85	916.46	737.67	178.79	5.126				
13,300.00	9,149.91	10,553.17	9,121.15	122.27	60.36	-86.99	1,764.35	3,930.89	913.03	731.57	181.47	5.031				
13,350.00	9,149.91	10,599.68	9,121.87	123.65	61.61	-87.02	1,761.35	3,977.30	909.78	725.62	184.16	4.940	Alert			
13,400.00	9,149.91	10,646.20	9,122.31	125.03	62.86	-87.04	1,758.51	4,023.73	906.70	719.86	186.85	4.853	Alert			
13,450.00	9,149.91	10,690.71	9,122.51	126.41	64.07	-87.05	1,756.00	4,068.17	903.87	714.33	189.54	4.769	Alert			
13,500.00	9,149.91	10,735.12	9,122.56	127.79	65.27	-87.04	1,753.75	4,112.52	901.34	709.12	192.22	4.689	Alert			
13,550.00	9,149.91	10,777.61	9,122.60	129.18	66.44	-87.04	1,751.90	4,154.97	899.16	704.28	194.88	4.614	Alert			
13,600.00	9,149.91	10,819.65	9,122.90	130.56	67.60	-87.05	1,750.45	4,196.99	897.42	699.88	197.54	4.543	Alert			
13,650.00	9,149.91	10,863.35	9,123.44	131.95	68.81	-87.08	1,749.32	4,240.66	896.10	695.87	200.22	4.475	Alert			
13,700.00	9,149.91	10,908.59	9,123.91	133.33	70.07	-87.11	1,748.40	4,285.90	895.06	692.13	202.93	4.411	Alert			
13,750.00	9,149.91	10,952.89	9,124.21	134.72	71.30	-87.13	1,747.74	4,330.18	894.30	688.68	205.62	4.349	Alert			
13,800.00	9,149.91	10,995.83	9,124.03	136.11	72.51	-87.12	1,747.40	4,373.13	893.91	685.63	208.27	4.292	Alert			
13,824.31	9,149.91	11,016.71	9,123.74	136.79	73.10	-87.10	1,747.34	4,394.01	893.86	684.30	209.56	4.265	Alert, CC			
13,850.00	9,149.91	11,039.52	9,123.28	137.50	73.74	-87.07	1,747.36	4,416.81	893.91	682.97	210.94	4.238	Alert			
13,900.00	9,149.91	11,086.14	9,122.04	138.89	75.06	-86.99	1,747.54	4,463.41	894.16	680.51	213.66	4.185	Alert			
13,950.00	9,149.91	11,132.89	9,120.41	140.28	76.38	-86.89	1,747.87	4,510.13	894.61	678.24	216.38	4.135	Alert			
14,000.00	9,149.91	11,180.46	9,118.96	141.67	77.74	-86.79	1,748.36	4,557.68	895.21	676.09	219.12	4.085	Alert			
14,050.00	9,149.91	11,228.17	9,118.01	143.07	79.10	-86.74	1,749.01	4,605.38	895.95	674.08	221.87	4.038	Alert			
14,100.00	9,149.91	11,276.52	9,117.26	144.46	80.48	-86.69	1,749.79	4,653.71	896.80	672.15	224.65	3.992	Alert			
14,150.00	9,149.91	11,323.69	9,116.55	145.85	81.84	-86.65	1,750.64	4,700.87	897.74	670.34	227.40	3.948	Alert			
14,200.00	9,149.91	11,365.61	9,115.49	147.25	83.04	-86.59	1,751.64	4,742.76	899.01	669.01	230.01	3.909	Alert			
14,250.00	9,149.91	11,407.46	9,113.79	148.65	84.25	-86.48	1,752.99	4,784.55	900.74	668.15	232.59	3.873	Alert			
14,300.00	9,149.91	11,454.14	9,111.59	150.04	85.60	-86.35	1,754.77	4,831.15	902.79	667.50	235.30	3.837	Alert			
14,350.00	9,149.91	11,501.43	9,109.71	151.44	86.96	-86.24	1,756.74	4,878.36	905.00	666.98	238.03	3.802	Alert			
14,400.00	9,149.91	11,554.94	9,108.11	152.84	88.52	-86.15	1,759.00	4,931.80	907.21	666.25	240.97	3.765	Alert			
14,450.00	9,149.91	11,615.08	9,107.22	154.24	90.27	-86.10	1,761.26	4,991.89	909.15	665.05	244.11	3.724	Alert			
14,500.00	9,149.91	11,707.03	9,108.82	155.64	92.06	-86.20	1,762.06	5,083.81	909.53	661.59	247.94	3.668	Alert			
14,550.00	9,149.91	11,754.56	9,110.96	157.04	94.36	-86.34	1,761.70	5,131.29	908.99	658.19	250.80	3.624	Alert			
14,600.00	9,149.91	11,807.80	9,114.22	158.44	95.93	-86.54	1,761.13	5,184.43	908.28	654.50	253.77	3.579	Alert			
14,650.00	9,149.91	11,861.57	9,117.85	159.84	97.52	-86.77	1,760.37	5,238.06	907.36	650.61	256.76	3.534	Alert			
14,700.00	9,149.91	11,908.12	9,121.13	161.24	98.90	-86.97	1,759.62	5,284.50	906.37	646.75	259.62	3.491	Alert			
14,750.00	9,149.91	11,949.92	9,124.07	162.64	100.14	-87.16	1,759.28	5,328.19	905.78	643.40	262.38	3.452	Alert			
14,791.95	9,149.91	11,985.47	9,126.54	163.82	101.19	-87.31	1,759.28	5,361.65	905.64	640.94	264.70	3.421	Alert			
14,800.00	9,149.91	11,992.59	9,127.02	164.05	101.41	-87.34	1,759.30	5,368.76	905.65	640.50	265.15	3.416	Alert			
14,850.00	9,149.91	12,036.90	9,129.89	165.45	102.72	-87.52	1,759.62	5,412.98	905.86	637.92	267.93	3.381	Alert			
14,900.00	9,149.91	12,084.55	9,132.71	166.86	104.14	-87.70	1,760.22	5,460.54	906.37	635.57	270.79	3.347	Alert			
14,950.00	9,149.91	12,143.24	9,136.20	168.26	105.89	-87.93	1,760.67	5,519.12	906.63	632.72	273.91	3.310	Alert			
15,000.00	9,149.91	12,196.61	9,139.43	169.67	107.48	-88.13	1,760.67	5,572.39	906.52	629.62	276.91	3.274	Alert			
15,050.00	9,149.91	12,246.89	9,142.08	171.07	108.98	-88.30	1,760.60	5,622.60	906.37	626.54	279.83	3.239	Alert			
15,100.00	9,149.91	12,298.86	9,144.46	172.48	110.54	-88.45	1,760.45	5,674.52	906.16	623.38	282.79	3.204	Alert			
15,150.00	9,149.91	12,351.37	9,146.72	173.88	112.12	-88.59	1,760.16	5,726.98	905.83	620.08	285.75	3.170	Alert			
15,200.00	9,149.91	12,403.90	9,148.92	175.29	113.69	-88.73	1,759.72	5,779.46	905.36	618.64	288.72	3.136	Alert			
15,250.00	9,149.91	12,456.42	9,151.15	176.70	115.27	-88.87	1,759.13	5,831.93	904.75	613.07	291.69	3.102	Alert			
15,300.00	9,149.91	12,506.15	9,153.10	178.11	116.77	-88.99	1,758.51	5,881.62	904.10	609.50	294.60	3.069	Alert			
15,350.00	9,149.91	12,555.11	9,154.78	179.52	118.25	-89.10	1,757.90	5,930.54	903.44	605.94	297.50	3.037	Alert			
15,400.00	9,149.91	12,601.09	9,156.14	180.92	119.63	-89.18	1,757.47	5,978.50	902.96	602.61	300.35	3.006	Alert			
15,450.00	9,149.91	12,647.23	9,157.32	182.33	121.03	-89.26	1,757.24	6,022.62	902.69	599.50	303.19	2.977	Alert			
15,492.28	9,149.91	12,686.59	9,158.19	183.53	122.22	-89.31	1,757.19	6,061.98	902.62	597.02	305.60	2.954	Alert			

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: Permit Plan 2

Local Co-ordinate Reference
TVD Reference: RKB1 @ 3325.90ft
MD Reference: RKB1 @ 3325.90ft
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

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 (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	9,149.91	12,893.78	9,158.33	183.74	122.43	-89.32	1,757.19	6,069.16	902.62	596.58	306.04	2.949	Alert	
15,550.00	9,149.91	12,741.42	9,159.20	185.15	123.87	-89.38	1,757.32	6,116.80	902.74	593.83	308.91	2.822	Alert	
15,600.00	9,149.91	12,793.41	9,160.04	186.56	125.45	-89.43	1,757.44	6,168.78	902.85	590.97	311.88	2.895	Alert	
15,650.00	9,149.91	12,844.07	9,160.75	187.97	126.98	-89.48	1,757.46	6,219.43	902.86	588.04	314.82	2.868	Alert	
15,700.00	9,149.91	12,892.68	9,160.95	189.38	128.45	-89.49	1,757.51	6,268.04	902.91	585.19	317.72	2.842	Alert	
15,750.00	9,149.91	12,940.58	9,160.65	190.80	129.91	-89.47	1,757.64	6,315.94	903.05	582.45	320.60	2.817	Alert	
15,800.00	9,149.91	12,987.55	9,160.50	192.21	131.33	-89.46	1,757.91	6,362.91	903.34	579.89	323.45	2.793	Alert	
15,850.00	9,149.91	13,034.61	9,160.58	193.62	132.76	-89.47	1,758.34	6,409.97	903.80	577.49	326.31	2.770	Alert	
15,900.00	9,149.91	13,081.78	9,160.83	195.03	134.19	-89.48	1,758.93	6,457.13	904.42	575.25	329.16	2.748	Alert	
15,950.00	9,149.91	13,133.87	9,161.29	196.45	135.77	-89.51	1,759.67	6,509.22	905.13	572.97	332.15	2.725	Alert	
16,000.00	9,149.91	13,192.13	9,162.08	197.86	137.55	-89.56	1,760.09	6,567.47	905.48	570.19	335.29	2.701	Alert	
16,050.00	9,149.91	13,244.71	9,162.89	199.27	139.15	-89.61	1,760.12	6,620.04	905.50	567.22	338.28	2.677	Alert	
16,100.00	9,149.91	13,296.13	9,163.45	200.69	140.71	-89.65	1,760.06	6,671.46	905.45	564.19	341.26	2.653	Alert	
16,150.00	9,149.91	13,356.45	9,164.04	202.10	142.55	-89.69	1,759.61	6,731.78	905.07	560.67	344.40	2.628	Alert	
16,200.00	9,149.91	13,410.31	9,164.65	203.51	144.20	-89.72	1,758.68	6,785.62	904.19	556.79	347.40	2.603	Alert	
16,250.00	9,149.91	13,455.37	9,165.01	204.93	145.58	-89.75	1,758.01	6,830.68	903.44	553.18	350.26	2.579	Alert	
16,300.00	9,149.91	13,500.96	9,165.14	206.34	146.97	-89.75	1,757.57	6,876.27	902.97	549.85	353.12	2.557	Alert	
16,350.00	9,149.91	13,547.57	9,164.95	207.76	148.39	-89.74	1,757.32	6,922.88	902.70	546.70	356.00	2.536	Alert	
16,400.00	9,149.91	13,596.41	9,164.36	209.17	149.89	-89.70	1,757.22	6,971.71	902.60	543.68	358.92	2.515	Alert	
16,450.00	9,149.91	13,649.85	9,163.33	210.59	151.52	-89.64	1,756.99	7,025.14	902.39	540.45	361.94	2.493	Minor Risk	
16,500.00	9,149.91	13,697.84	9,162.14	212.01	152.99	-89.56	1,756.68	7,073.11	902.08	537.23	364.84	2.473	Minor Risk	
16,527.56	9,149.91	13,721.99	9,161.53	212.79	153.73	-89.52	1,756.63	7,097.26	902.03	535.63	366.39	2.462	Minor Risk	
16,550.00	9,149.91	13,741.65	9,161.04	213.42	154.33	-89.49	1,756.66	7,116.91	902.06	534.41	367.65	2.454	Minor Risk	
16,600.00	9,149.91	13,788.80	9,159.88	214.84	155.78	-89.42	1,756.93	7,164.04	902.35	531.82	370.53	2.435	Minor Risk	
16,650.00	9,149.91	13,840.95	9,158.54	216.25	157.37	-89.34	1,757.18	7,216.18	902.60	529.07	373.53	2.416	Minor Risk	
16,700.00	9,149.91	13,893.72	9,157.13	217.67	158.99	-89.25	1,757.29	7,268.93	902.73	526.19	376.54	2.397	Minor Risk	
16,750.00	9,149.91	13,946.91	9,155.70	219.09	160.62	-89.16	1,757.22	7,322.10	902.68	523.12	379.56	2.378	Minor Risk	
16,800.00	9,149.91	13,999.60	9,154.23	220.51	162.24	-89.06	1,756.98	7,374.77	902.47	519.91	382.56	2.359	Minor Risk	
16,850.00	9,149.91	14,052.17	9,152.63	221.92	163.85	-88.96	1,756.58	7,427.31	902.12	516.56	385.56	2.340	Minor Risk	
16,900.00	9,149.91	14,100.71	9,151.16	223.34	165.34	-88.87	1,756.19	7,475.83	901.75	513.27	388.48	2.321	Minor Risk	
16,950.00	9,149.91	14,149.59	9,149.80	224.76	166.84	-88.78	1,755.86	7,524.69	901.44	510.04	391.40	2.303	Minor Risk	
17,000.00	9,149.91	14,199.57	9,148.45	226.18	168.38	-88.69	1,755.56	7,574.65	901.17	506.82	394.35	2.285	Minor Risk	
17,029.31	9,149.91	14,228.86	9,147.66	227.01	169.28	-88.64	1,755.38	7,603.93	901.00	504.93	396.07	2.275	Minor Risk	
17,050.00	9,149.91	14,223.00	9,147.82	227.59	169.10	-88.65	1,755.42	7,598.07	901.28	504.69	396.60	2.273	Minor Risk, ES	
17,056.59	9,149.91	14,223.00	9,147.82	227.78	169.10	-88.65	1,755.42	7,598.07	901.46	504.70	396.76	2.272	Minor Risk, 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: Permit Plan 2

Local Co-ordinate Reference Well Coral PWU 28-27 11H
TVD Reference: RKB1 @ 3325.90ft
MD Reference: RKB1 @ 3325.90ft
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

Offset Design Sec 27-T19S-R29E - Turquoise PWU 27-3H - Wellbore #1 - Wellbore #1												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		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)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)					
12,250.00	9,149.91	8,025.00	7,945.66	93.71	39.82	-10.87	1,087.12	3,627.90	1,474.08	1,417.29	56.79	25.956	
12,300.00	9,149.91	8,025.00	7,945.66	95.04	39.82	-10.87	1,087.12	3,627.90	1,447.27	1,390.77	56.50	25.613	
12,350.00	9,149.91	8,037.06	7,951.97	96.39	39.86	-10.91	1,086.86	3,638.18	1,421.48	1,365.05	56.43	25.189	
12,400.00	9,149.91	8,056.00	7,961.22	97.73	39.91	-10.98	1,086.55	3,654.70	1,396.88	1,340.40	56.48	24.731	
12,450.00	9,149.91	8,056.00	7,961.22	99.08	39.91	-10.98	1,086.55	3,654.70	1,373.05	1,316.80	56.25	24.408	
12,500.00	9,149.91	8,056.00	7,961.22	100.42	39.91	-10.98	1,086.55	3,654.70	1,350.66	1,294.61	56.05	24.097	
12,550.00	9,149.91	8,075.22	7,969.75	101.78	39.98	-11.05	1,086.37	3,671.82	1,329.12	1,272.96	56.17	23.663	
12,600.00	9,149.91	8,088.00	7,974.93	103.13	40.02	-11.10	1,086.32	3,683.60	1,308.98	1,252.77	56.21	23.287	
12,650.00	9,149.91	8,088.00	7,974.93	104.49	40.02	-11.10	1,086.32	3,683.60	1,290.17	1,234.07	56.10	22.997	
12,700.00	9,149.91	8,106.42	7,981.70	105.84	40.10	-11.16	1,086.33	3,700.73	1,272.47	1,216.19	56.29	22.607	
12,750.00	9,149.91	8,120.00	7,986.15	107.20	40.15	-11.20	1,086.36	3,713.56	1,256.22	1,199.79	56.43	22.260	
12,800.00	9,149.91	8,120.00	7,986.15	108.56	40.15	-11.20	1,086.36	3,713.56	1,241.46	1,185.00	56.46	21.988	
12,850.00	9,149.91	8,139.36	7,991.66	109.93	40.25	-11.25	1,086.34	3,732.12	1,227.88	1,171.13	56.75	21.635	
12,900.00	9,149.91	8,151.00	7,994.48	111.29	40.30	-11.27	1,086.25	3,743.41	1,215.90	1,158.90	57.00	21.330	
12,950.00	9,149.91	8,164.19	7,997.26	112.66	40.38	-11.29	1,086.06	3,756.30	1,205.37	1,148.06	57.31	21.032	
13,000.00	9,149.91	8,183.00	8,000.56	114.03	40.48	-11.30	1,085.58	3,774.81	1,196.32	1,138.63	57.69	20.738	
13,050.00	9,149.91	8,194.11	8,002.16	115.40	40.55	-11.30	1,085.20	3,785.80	1,188.61	1,130.54	58.08	20.465	
13,100.00	9,149.91	8,213.00	8,004.42	116.77	40.67	-11.28	1,084.45	3,804.54	1,182.31	1,123.78	58.53	20.200	
13,150.00	9,149.91	8,229.31	8,005.89	118.14	40.78	-11.26	1,083.67	3,820.76	1,177.34	1,118.32	59.02	19.947	
13,200.00	9,149.91	8,244.00	8,006.84	119.52	40.88	-11.23	1,082.81	3,835.40	1,173.74	1,114.17	59.57	19.704	
13,250.00	9,149.91	8,276.00	8,008.07	120.89	41.12	-11.13	1,080.61	3,867.30	1,171.23	1,111.20	60.03	19.511	
13,300.00	9,149.91	8,312.38	8,008.79	122.27	41.43	-11.01	1,077.91	3,903.57	1,169.53	1,109.08	60.46	19.345	
13,350.00	9,149.91	8,350.84	8,009.18	123.65	41.76	-10.88	1,075.05	3,941.92	1,168.33	1,107.47	60.87	19.195	
13,400.00	9,149.91	8,394.98	8,009.24	125.03	42.17	-10.72	1,071.84	3,985.95	1,167.57	1,106.33	61.24	19.067	
13,450.00	9,149.91	8,444.82	8,009.37	126.41	42.68	-10.58	1,068.80	4,035.69	1,166.88	1,105.27	61.60	18.941	
13,500.00	9,149.91	8,496.19	8,009.66	127.79	43.26	-10.47	1,066.43	4,087.00	1,166.18	1,104.15	62.02	18.802	
13,550.00	9,149.91	8,548.60	8,010.22	129.18	43.88	-10.40	1,064.91	4,139.39	1,165.39	1,102.87	62.51	18.642	
13,600.00	9,149.91	8,593.19	8,010.79	130.56	44.45	-10.37	1,064.20	4,183.97	1,164.62	1,101.52	63.10	18.457	
13,650.00	9,149.91	8,635.61	8,011.08	131.95	45.01	-10.34	1,063.68	4,226.39	1,164.17	1,100.46	63.71	18.274	
13,700.00	9,149.91	8,684.99	8,011.22	133.33	45.70	-10.33	1,063.30	4,275.76	1,163.96	1,099.65	64.31	18.099	
13,750.00	9,149.91	8,739.67	8,011.66	134.72	46.49	-10.34	1,063.49	4,330.44	1,163.60	1,098.65	64.95	17.914	
13,800.00	9,149.91	8,787.17	8,012.19	136.11	47.23	-10.37	1,064.08	4,377.93	1,163.17	1,097.50	65.66	17.714	
13,850.00	9,149.91	8,833.18	8,012.57	137.50	47.95	-10.41	1,064.78	4,423.94	1,162.90	1,096.51	66.39	17.516	
13,885.91	9,149.91	8,864.85	8,012.73	138.50	48.47	-10.44	1,065.31	4,455.61	1,162.83	1,095.90	66.93	17.374	
13,900.00	9,149.91	8,877.06	8,012.76	138.89	48.67	-10.45	1,065.51	4,467.81	1,162.84	1,095.70	67.14	17.320	
13,950.00	9,149.91	8,920.35	8,012.68	140.28	49.40	-10.48	1,066.17	4,511.09	1,163.06	1,095.17	67.89	17.132	
14,000.00	9,149.91	8,973.11	8,012.39	141.67	50.32	-10.51	1,066.84	4,563.85	1,163.46	1,094.84	68.62	16.955	
14,050.00	9,149.91	9,032.39	8,012.40	143.07	51.37	-10.53	1,067.23	4,623.13	1,163.51	1,094.19	69.32	16.784	
14,100.00	9,149.91	9,088.75	8,012.74	144.46	52.42	-10.54	1,067.35	4,679.48	1,163.22	1,093.19	70.04	16.609	
14,150.00	9,149.91	9,145.61	8,013.39	145.85	53.50	-10.54	1,067.33	4,736.34	1,162.66	1,091.91	70.75	16.433	
14,200.00	9,149.91	9,203.58	8,014.38	147.25	54.63	-10.54	1,067.05	4,794.31	1,161.78	1,090.31	71.46	16.257	
14,250.00	9,149.91	9,251.03	8,015.35	148.65	55.58	-10.53	1,066.65	4,841.75	1,160.70	1,088.52	72.18	16.080	
14,300.00	9,149.91	9,293.97	8,015.98	150.04	56.45	-10.51	1,066.28	4,884.68	1,159.91	1,086.99	72.91	15.908	
14,350.00	9,149.91	9,342.68	8,016.44	151.44	57.46	-10.50	1,065.83	4,933.38	1,159.35	1,085.72	73.63	15.745	
14,400.00	9,149.91	9,396.90	8,017.06	152.84	58.59	-10.47	1,065.10	4,987.59	1,158.67	1,084.34	74.33	15.589	
14,450.00	9,149.91	9,455.30	8,017.99	154.24	59.84	-10.43	1,064.11	5,045.98	1,157.74	1,082.73	75.01	15.435	
14,500.00	9,149.91	9,515.02	8,019.43	155.64	61.13	-10.39	1,063.08	5,105.67	1,156.39	1,080.70	75.70	15.277	
14,550.00	9,149.91	9,555.54	8,020.32	157.04	62.03	-10.36	1,062.30	5,146.17	1,155.12	1,078.70	76.42	15.115	
14,600.00	9,149.91	9,599.08	8,021.04	158.44	62.99	-10.32	1,061.37	5,189.69	1,154.11	1,076.99	77.12	14.965	
14,650.00	9,149.91	9,652.53	8,021.85	159.84	64.20	-10.27	1,060.20	5,243.13	1,153.17	1,075.36	77.81	14.821	
14,700.00	9,149.91	9,709.25	8,022.94	161.24	65.48	-10.23	1,059.12	5,299.83	1,152.06	1,073.56	78.50	14.675	

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: Permit Plan 2

Local Co-ordinate Reference
 TVD Reference: RKB1 @ 3325.90ft
 MD Reference: RKB1 @ 3325.90ft
 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

Offset Design Sec 27-T19S-R29E - Turquoise PWU 27-3H - Wellbore #1 - Wellbore #1													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	
14,750.00	9,149.91	9,776.13	8,025.06	162.64	67.02	-10.20	1,058.25	5,366.66	1,150.39	1,071.15	79.24	14.517	
14,800.00	9,149.91	9,823.52	8,026.97	164.05	68.13	-10.20	1,057.81	5,414.01	1,148.33	1,068.30	80.03	14.349	
14,850.00	9,149.91	9,866.72	8,028.43	165.45	69.14	-10.18	1,057.24	5,457.19	1,146.54	1,065.75	80.79	14.191	
14,900.00	9,149.91	9,910.63	8,029.64	166.86	70.18	-10.16	1,056.52	5,501.08	1,145.05	1,063.50	81.54	14.042	
14,950.00	9,149.91	9,954.94	8,030.62	168.26	71.23	-10.13	1,055.75	5,545.37	1,143.80	1,061.51	82.29	13.900	
15,000.00	9,149.91	9,998.15	8,031.35	169.67	72.26	-10.10	1,054.96	5,588.57	1,142.81	1,059.79	83.03	13.764	
15,050.00	9,149.91	10,040.29	8,031.75	171.07	73.28	-10.06	1,054.07	5,630.69	1,142.16	1,058.41	83.75	13.637	
15,100.00	9,149.91	10,089.73	8,031.88	172.48	74.48	-10.00	1,052.83	5,680.12	1,141.81	1,057.37	84.44	13.522	
15,150.00	9,149.91	10,161.38	8,032.83	173.88	76.23	-9.89	1,050.52	5,751.72	1,140.88	1,055.85	85.03	13.418	
15,200.00	9,149.91	10,218.00	8,034.26	175.29	77.63	-9.80	1,048.40	5,808.29	1,139.31	1,053.67	85.65	13.302	
15,250.00	9,149.91	10,273.58	8,035.94	176.70	79.00	-9.71	1,046.29	5,863.79	1,137.50	1,051.23	86.27	13.185	
15,300.00	9,149.91	10,316.00	8,037.11	178.11	80.06	-9.63	1,044.58	5,906.17	1,135.79	1,048.86	86.93	13.066	
15,350.00	9,149.91	10,360.62	8,038.13	179.52	81.18	-9.54	1,042.64	5,950.73	1,134.30	1,046.74	87.56	12.955	
15,400.00	9,149.91	10,404.83	8,038.90	180.92	82.29	-9.45	1,040.62	5,994.69	1,133.06	1,044.89	88.17	12.851	
15,450.00	9,149.91	10,448.63	8,039.41	182.33	83.40	-9.35	1,038.51	6,038.84	1,132.09	1,043.32	88.77	12.753	
15,500.00	9,149.91	10,505.37	8,040.09	183.74	84.84	-9.22	1,035.83	6,083.31	1,131.12	1,041.81	89.31	12.665	
15,550.00	9,149.91	10,562.84	8,041.20	185.15	86.30	-9.11	1,033.38	6,152.71	1,129.83	1,039.94	89.88	12.570	
15,600.00	9,149.91	10,611.56	8,042.28	186.56	87.55	-9.03	1,031.66	6,201.39	1,128.45	1,037.92	90.53	12.465	
15,650.00	9,149.91	10,663.97	8,043.57	187.97	88.90	-8.97	1,030.18	6,253.76	1,127.02	1,035.80	91.21	12.356	
15,700.00	9,149.91	10,718.25	8,045.15	189.38	90.30	-8.92	1,029.01	6,308.01	1,125.41	1,033.48	91.93	12.242	
15,750.00	9,149.91	10,764.53	8,046.63	190.80	91.49	-8.90	1,028.39	6,354.26	1,123.74	1,031.03	92.70	12.122	
15,800.00	9,149.91	10,807.56	8,047.84	192.21	92.61	-8.91	1,028.46	6,397.27	1,122.35	1,028.80	93.55	11.997	
15,850.00	9,149.91	10,849.84	8,048.85	193.62	93.70	-8.95	1,029.09	6,439.54	1,121.29	1,026.83	94.46	11.871	
15,900.00	9,149.91	10,891.46	8,049.57	195.03	94.78	-9.00	1,029.91	6,481.15	1,120.59	1,025.20	95.39	11.748	
15,950.00	9,149.91	10,932.71	8,049.99	196.45	95.85	-9.05	1,030.84	6,522.38	1,120.27	1,023.94	96.33	11.630	
15,963.75	9,149.91	10,943.78	8,050.04	196.83	96.14	-9.06	1,031.09	6,533.45	1,120.25	1,023.67	96.58	11.599	
16,000.00	9,149.91	10,972.96	8,050.04	197.86	96.91	-9.09	1,031.70	6,562.62	1,120.37	1,023.12	97.25	11.521	
16,050.00	9,149.91	11,013.20	8,049.73	199.27	97.96	-9.13	1,032.43	6,602.86	1,120.90	1,022.75	98.15	11.420	
16,100.00	9,149.91	11,065.92	8,049.08	200.69	99.34	-9.16	1,033.17	6,655.56	1,121.62	1,022.55	99.06	11.322	
16,150.00	9,149.91	11,121.10	8,048.57	202.10	100.79	-9.18	1,033.67	6,710.74	1,122.15	1,022.20	99.96	11.227	
16,200.00	9,149.91	11,182.16	8,048.43	203.51	102.40	-9.20	1,033.98	6,771.80	1,122.31	1,021.47	100.84	11.130	
16,250.00	9,149.91	11,239.01	8,048.76	204.93	103.91	-9.20	1,034.09	6,828.65	1,122.02	1,020.32	101.71	11.032	
16,300.00	9,149.91	11,293.16	8,049.31	206.34	105.34	-9.21	1,034.11	6,882.79	1,121.53	1,018.97	102.56	10.935	
16,350.00	9,149.91	11,382.68	8,051.86	207.76	107.73	-9.23	1,034.11	6,972.27	1,120.17	1,016.71	103.46	10.827	
16,400.00	9,149.91	11,445.63	8,055.31	209.17	109.40	-9.26	1,034.12	7,035.13	1,117.45	1,013.08	104.37	10.707	
16,450.00	9,149.91	11,504.23	8,059.00	210.59	110.97	-9.28	1,033.98	7,093.62	1,114.32	1,009.06	105.26	10.586	
16,500.00	9,149.91	11,539.71	8,061.00	212.01	111.92	-9.29	1,033.87	7,129.04	1,111.47	1,005.31	106.16	10.470	
16,550.00	9,149.91	11,580.01	8,062.98	213.42	113.00	-9.30	1,033.72	7,169.28	1,109.01	1,001.97	107.04	10.361	
16,600.00	9,149.91	11,632.91	8,065.37	214.84	114.42	-9.30	1,033.38	7,222.13	1,106.73	998.83	107.90	10.257	
16,650.00	9,149.91	11,686.80	8,067.95	216.25	115.87	-9.30	1,032.77	7,275.95	1,104.27	995.55	108.72	10.157	
16,700.00	9,149.91	11,733.10	8,070.11	217.67	117.12	-9.27	1,032.02	7,322.20	1,101.84	992.32	109.52	10.060	
16,750.00	9,149.91	11,782.83	8,072.29	219.09	118.46	-9.24	1,030.97	7,371.87	1,099.50	989.22	110.28	9.970	
16,800.00	9,149.91	11,842.75	8,075.20	220.51	120.09	-9.19	1,029.46	7,431.70	1,098.90	985.93	110.98	9.884	
16,850.00	9,149.91	11,890.51	8,077.77	221.92	121.38	-9.13	1,028.07	7,479.37	1,094.02	982.32	111.70	9.795	
16,900.00	9,149.91	11,930.59	8,079.58	223.34	122.47	-9.08	1,026.70	7,519.39	1,091.52	979.11	112.41	9.710	
16,950.00	9,149.91	11,977.32	8,081.26	224.76	123.74	-9.00	1,024.87	7,566.05	1,089.43	976.39	113.04	9.638	
17,000.00	9,149.91	12,042.21	8,084.07	226.18	125.51	-8.88	1,022.09	7,630.81	1,086.96	973.42	113.54	9.573	
17,050.00	9,149.91	12,103.33	8,087.44	227.59	127.18	-8.76	1,019.28	7,691.78	1,083.87	969.83	114.04	9.504	
17,056.59	9,149.91	12,111.26	8,087.92	227.78	127.39	-8.74	1,018.91	7,699.69	1,083.43	969.33	114.11	9.495 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
 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: Permit Plan 2

Local Co-ordinate Reference
 TVD Reference: RKB1 @ 3325.90ft
 MD Reference: RKB1 @ 3325.90ft
 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

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 Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Tooface (°)	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	134.89	-892.87	896.23	1,265.10				
50.00	50.00	45.57	45.57	5.03	5.03	134.89	-892.87	896.20	1,265.06	1,255.01	10.05	125.863	
100.00	100.00	97.24	97.24	5.03	5.03	134.90	-892.85	896.09	1,264.97	1,254.92	10.06	125.787	
150.00	150.00	148.83	148.83	5.03	5.05	134.90	-892.85	895.86	1,264.82	1,254.74	10.08	125.426	
200.00	200.00	200.00	200.00	5.05	5.09	134.92	-892.83	895.49	1,264.61	1,254.48	10.13	124.780	
250.00	250.00	248.72	248.71	5.07	5.13	134.94	-893.06	895.06	1,264.41	1,254.20	10.20	123.910	
300.00	300.00	297.43	297.43	5.10	5.20	134.96	-893.28	894.64	1,264.25	1,253.96	10.29	122.818	
350.00	350.00	347.65	347.64	5.13	5.28	134.98	-893.49	894.23	1,264.12	1,253.71	10.41	121.489	
400.00	400.00	397.96	397.95	5.17	5.37	134.99	-893.59	893.92	1,263.97	1,253.43	10.54	119.963	
450.00	450.00	447.86	447.85	5.21	5.47	135.00	-893.63	893.67	1,263.82	1,253.13	10.69	118.271	
500.00	500.00	497.74	497.73	5.26	5.59	135.01	-893.67	893.43	1,263.67	1,252.82	10.85	116.435	
550.00	550.00	548.54	548.53	5.32	5.72	135.01	-893.65	893.21	1,263.51	1,252.48	11.04	114.491	
600.00	600.00	599.38	599.37	5.38	5.85	135.02	-893.54	893.05	1,263.32	1,252.09	11.23	112.449	
650.00	650.00	647.57	647.56	5.45	5.98	135.01	-893.35	893.01	1,263.15	1,251.72	11.43	110.530	
700.00	700.00	695.72	695.71	5.52	6.11	135.00	-893.06	893.16	1,263.05	1,251.42	11.63	108.574	
743.18	743.18	737.30	737.28	5.59	6.23	134.98	-892.74	893.44	1,263.02	1,251.21	11.81	106.908	
750.00	750.00	743.86	743.85	5.60	6.25	134.97	-892.68	893.50	1,263.02	1,251.18	11.84	106.644	
800.00	800.00	791.99	791.97	5.68	6.39	134.94	-892.25	894.00	1,263.07	1,251.01	12.06	104.706	
850.00	850.00	839.14	839.11	5.76	6.53	134.91	-891.77	894.66	1,263.21	1,250.91	12.29	102.763	
900.00	900.00	886.08	886.04	5.85	6.68	134.87	-891.28	895.48	1,263.46	1,250.93	12.53	100.830	
950.00	950.00	932.79	932.74	5.95	6.83	134.82	-890.82	896.45	1,263.85	1,251.07	12.78	98.901	
1,000.00	1,000.00	979.41	979.35	6.04	6.99	134.77	-890.44	897.51	1,264.36	1,251.33	13.04	96.991	
1,050.00	1,050.00	1,028.86	1,028.78	6.15	7.17	134.73	-890.12	898.68	1,264.98	1,251.67	13.31	95.019	
1,100.00	1,100.00	1,080.56	1,080.47	6.25	7.36	134.68	-889.77	899.87	1,265.55	1,251.95	13.61	93.001	
1,150.00	1,150.00	1,129.68	1,129.57	6.36	7.54	134.63	-889.42	900.95	1,266.09	1,252.19	13.90	91.069	
1,200.00	1,200.00	1,177.24	1,177.12	6.47	7.73	134.59	-889.15	902.05	1,266.71	1,252.52	14.20	89.212	
1,250.00	1,250.00	1,227.18	1,227.04	6.58	7.93	134.54	-888.92	903.25	1,267.41	1,252.80	14.51	87.330	
1,300.00	1,300.00	1,279.31	1,279.17	6.70	8.14	134.50	-888.66	904.43	1,268.04	1,253.20	14.84	85.426	
1,350.00	1,350.00	1,329.61	1,329.45	6.82	8.35	134.45	-888.38	905.50	1,268.61	1,253.43	15.17	83.605	
1,400.00	1,400.00	1,378.69	1,378.52	6.94	8.56	134.42	-888.19	906.50	1,269.20	1,253.70	15.51	81.857	
1,450.00	1,450.00	1,428.25	1,428.06	7.07	8.78	134.38	-888.09	907.48	1,269.83	1,253.99	15.84	80.144	
1,500.00	1,500.00	1,478.17	1,477.98	7.20	9.00	134.35	-888.01	908.44	1,270.46	1,254.27	16.19	78.468	
1,550.00	1,550.00	1,528.11	1,527.91	7.33	9.22	134.32	-887.95	909.38	1,271.10	1,254.56	16.54	76.838	
1,600.00	1,600.00	1,578.07	1,577.86	7.46	9.44	134.29	-887.92	910.30	1,271.74	1,254.84	16.90	75.253	
1,650.00	1,650.00	1,628.18	1,627.95	7.59	9.67	134.26	-887.93	911.18	1,272.37	1,255.11	17.26	73.711	
1,700.00	1,700.00	1,678.37	1,678.15	7.73	9.90	134.23	-887.94	912.06	1,273.01	1,255.38	17.63	72.211	
1,750.00	1,750.00	1,729.48	1,729.24	7.86	10.14	134.20	-887.93	912.94	1,273.62	1,255.61	18.00	70.738	
1,800.00	1,800.00	1,781.26	1,781.02	8.00	10.39	134.18	-887.94	913.72	1,274.17	1,255.78	18.39	69.295	
1,850.00	1,850.00	1,832.36	1,832.12	8.14	10.63	134.16	-887.97	914.39	1,274.65	1,255.88	18.77	67.906	
1,900.00	1,900.00	1,883.07	1,882.83	8.28	10.87	134.14	-888.04	914.96	1,275.11	1,255.95	19.16	66.566	
1,950.00	1,950.00	1,934.42	1,934.18	8.43	11.12	134.13	-888.15	915.46	1,275.53	1,255.98	19.55	65.256	
2,000.00	2,000.00	1,986.10	1,985.85	8.57	11.37	134.12	-888.23	916.89	1,275.88	1,255.94	19.94	63.980	
2,050.00	2,050.00	2,036.18	2,035.93	8.72	11.62	134.11	-888.29	918.27	1,276.20	1,255.87	20.33	62.765	
2,100.00	2,100.00	2,085.68	2,085.43	8.86	11.86	134.10	-888.35	918.67	1,276.53	1,255.80	20.72	61.597	
2,150.00	2,150.00	2,134.30	2,134.05	9.01	12.10	134.09	-888.42	917.09	1,276.89	1,255.78	21.11	60.481	
2,200.00	2,200.00	2,182.56	2,182.30	9.16	12.34	134.08	-888.57	917.52	1,277.32	1,255.82	21.50	59.408	
2,250.00	2,250.00	2,231.62	2,231.36	9.31	12.58	134.07	-888.78	917.98	1,277.80	1,255.91	21.89	58.361	
2,300.00	2,300.00	2,281.13	2,280.87	9.46	12.83	134.07	-889.03	918.44	1,278.31	1,256.02	22.29	57.342	
2,350.00	2,350.00	2,331.18	2,330.92	9.62	13.08	134.06	-889.29	918.91	1,278.83	1,256.14	22.70	56.347	
2,400.00	2,400.00	2,381.57	2,381.30	9.77	13.33	134.06	-889.55	919.37	1,279.34	1,256.24	23.10	55.377	
2,450.00	2,450.00	2,433.68	2,433.39	9.92	13.60	134.05	-889.78	919.84	1,279.81	1,256.29	23.52	54.412	

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: Permit Plan 2

Local Co-ordinate Reference: Well Coral PWU 28-27 11H
TVD Reference: RKB1 @ 3325.90ft
MD Reference: RKB1 @ 3325.90ft
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

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 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		
2,500.00	2,500.00	2,486.75	2,486.48	10.08	13.87	134.04	-889.89	920.26	1,280.17	1,256.22	23.95	53.460		
2,550.00	2,550.00	2,538.87	2,538.60	10.23	14.14	170.30	-889.90	920.61	1,280.64	1,256.27	24.37	52.551		
2,600.00	2,599.99	2,590.67	2,590.40	10.39	14.40	170.29	-889.87	920.90	1,281.48	1,256.67	24.79	51.688		
2,650.00	2,649.98	2,642.57	2,642.29	10.54	14.67	170.29	-889.80	921.12	1,282.64	1,257.43	25.21	50.870		
2,700.00	2,699.96	2,694.48	2,694.20	10.70	14.94	170.29	-889.74	921.23	1,284.18	1,258.54	25.64	50.091		
2,750.00	2,749.92	2,742.85	2,742.58	10.86	15.19	170.30	-889.67	921.32	1,286.13	1,260.09	26.04	49.385		
2,800.00	2,799.88	2,790.78	2,790.51	11.02	15.43	170.31	-889.61	921.50	1,288.59	1,262.14	26.45	48.722		
2,850.00	2,849.78	2,839.48	2,839.20	11.18	15.69	170.31	-889.57	921.76	1,291.55	1,264.69	26.86	48.083		
2,900.00	2,899.68	2,888.33	2,888.05	11.34	15.94	170.32	-889.55	922.05	1,294.97	1,267.70	27.28	47.478		
2,950.00	2,949.54	2,938.96	2,938.68	11.50	16.21	170.33	-889.55	922.35	1,298.84	1,271.14	27.70	46.888		
3,000.00	2,999.37	2,990.13	2,989.85	11.66	16.48	170.35	-889.55	922.59	1,303.08	1,274.95	28.13	46.324		
3,050.00	3,049.16	3,040.89	3,040.61	11.82	16.75	170.37	-889.53	922.77	1,307.71	1,279.15	28.56	45.792		
3,100.00	3,098.90	3,091.53	3,091.25	11.98	17.01	170.39	-889.50	922.92	1,312.74	1,283.75	28.99	45.288		
3,150.00	3,148.61	3,140.36	3,140.09	12.14	17.27	170.42	-889.48	923.04	1,318.18	1,288.78	29.40	44.833		
3,200.00	3,198.26	3,188.79	3,188.51	12.31	17.52	170.45	-889.54	923.15	1,324.10	1,294.28	29.82	44.410		
3,250.00	3,247.86	3,239.54	3,239.26	12.47	17.77	170.49	-889.67	923.22	1,330.46	1,300.23	30.23	44.013		
3,300.00	3,297.40	3,290.97	3,290.69	12.64	18.02	170.53	-889.80	923.19	1,337.17	1,306.53	30.64	43.639		
3,350.00	3,346.91	3,341.57	3,341.29	12.81	18.26	170.58	-889.94	923.06	1,344.13	1,313.09	31.04	43.301		
3,400.00	3,396.41	3,392.00	3,391.72	12.98	18.49	170.65	-890.11	922.85	1,351.06	1,319.62	31.44	42.976		
3,450.00	3,445.91	3,439.26	3,438.98	13.15	18.72	170.70	-890.30	922.65	1,358.00	1,326.18	31.83	42.670		
3,500.00	3,495.41	3,485.89	3,485.61	13.32	18.94	170.76	-890.53	922.53	1,365.05	1,332.84	32.21	42.378		
3,550.00	3,544.91	3,534.26	3,533.97	13.49	19.18	170.82	-890.82	922.49	1,372.19	1,339.57	32.61	42.075		
3,600.00	3,594.41	3,583.39	3,583.10	13.66	19.42	170.87	-891.10	922.47	1,379.34	1,346.32	33.02	41.772		
3,650.00	3,643.91	3,633.01	3,632.73	13.83	19.67	170.93	-891.40	922.45	1,386.49	1,353.06	33.43	41.472		
3,700.00	3,693.41	3,682.90	3,682.61	14.01	19.91	170.99	-891.75	922.36	1,393.64	1,359.80	33.85	41.177		
3,750.00	3,742.91	3,732.38	3,732.09	14.18	20.16	171.05	-892.16	922.19	1,400.78	1,366.52	34.26	40.893		
3,800.00	3,792.41	3,781.64	3,781.35	14.36	20.40	171.11	-892.65	921.96	1,407.92	1,373.26	34.66	40.617		
3,850.00	3,841.91	3,832.32	3,832.02	14.53	20.65	171.19	-893.22	921.63	1,415.06	1,379.98	35.08	40.339		
3,900.00	3,891.41	3,883.84	3,883.54	14.71	20.90	171.26	-893.85	921.15	1,422.13	1,386.63	35.50	40.061		
3,950.00	3,840.91	3,831.98	3,831.67	14.89	21.13	171.34	-894.48	920.62	1,429.18	1,393.28	35.90	39.807		
4,000.00	3,990.41	3,978.54	3,978.23	15.06	21.36	171.41	-895.18	920.14	1,436.32	1,400.02	36.30	39.568		
4,050.00	4,039.91	4,027.48	4,027.16	15.24	21.61	171.49	-895.98	919.68	1,443.53	1,406.82	36.71	39.322		
4,100.00	4,089.41	4,078.49	4,078.16	15.42	21.86	171.57	-896.75	919.20	1,450.72	1,413.59	37.13	39.068		
4,150.00	4,138.91	4,132.62	4,132.28	15.60	22.13	171.64	-897.43	918.71	1,457.82	1,420.25	37.57	38.802		
4,200.00	4,188.41	4,189.10	4,188.76	15.78	22.40	171.71	-897.73	918.24	1,464.71	1,426.69	38.02	38.526		
4,250.00	4,237.91	4,240.04	4,239.70	15.96	22.65	171.76	-897.75	917.86	1,471.43	1,433.00	38.44	38.283		
4,300.00	4,287.41	4,289.65	4,289.30	16.14	22.89	171.81	-897.78	917.47	1,478.15	1,439.31	38.85	38.051		
4,350.00	4,336.91	4,341.70	4,341.35	16.33	23.14	171.86	-897.73	917.06	1,484.84	1,445.57	39.27	37.811		
4,400.00	4,386.41	4,394.42	4,394.07	16.51	23.40	171.91	-897.57	916.62	1,491.42	1,451.72	39.70	37.570		
4,450.00	4,435.91	4,443.56	4,443.21	16.69	23.64	171.96	-897.39	916.16	1,497.95	1,457.84	40.11	37.347		
7,150.00	7,108.94	9,045.60	7,966.77	26.98	46.07	130.17	488.22	854.16	1,485.29	1,423.41	61.88	24.002		
7,200.00	7,158.44	9,051.25	7,966.75	27.18	46.13	129.91	493.86	854.16	1,460.50	1,397.41	63.09	23.151		
7,250.00	7,207.94	9,056.92	7,966.72	27.37	46.19	129.66	499.53	854.15	1,437.00	1,372.72	64.28	22.354		
7,300.00	7,257.44	9,062.62	7,966.70	27.57	46.25	129.41	505.23	854.13	1,414.86	1,349.38	65.47	21.610		
7,350.00	7,306.94	9,068.34	7,966.68	27.77	46.32	129.15	510.96	854.12	1,394.13	1,327.49	66.65	20.919		
7,400.00	7,356.44	9,074.10	7,966.66	27.96	46.38	128.90	516.71	854.10	1,374.89	1,307.10	67.79	20.280		
7,450.00	7,405.94	9,079.88	7,966.64	28.16	46.44	128.64	522.49	854.09	1,357.20	1,288.29	68.91	19.695		
7,500.00	7,455.44	9,085.69	7,966.62	28.35	46.50	128.38	528.30	854.07	1,341.11	1,271.13	69.99	19.182		
7,550.00	7,504.97	9,091.31	7,966.61	28.55	46.56	127.97	533.92	854.05	1,326.55	1,255.53	71.02	18.680		
7,600.00	7,554.59	9,096.41	7,966.59	28.74	46.62	127.58	539.02	854.03	1,313.31	1,241.33	71.98	18.246		
7,650.00	7,604.29	9,100.98	7,966.58	28.93	46.66	127.23	543.59	854.01	1,301.45	1,228.58	72.87	17.860		

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: Permit Plan 2

Local Co-ordinate Reference: Well Coral PWU 28-27 11H
TVD Reference: RKB1 @ 3325.90ft
MD Reference: RKB1 @ 3325.90ft
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

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	
7,700.00	7,654.05	9,105.02	7,966.57	29.12	48.71	126.92	547.83	853.99	1,291.02	1,217.34	73.68	17.521	
7,750.00	7,703.87	9,108.51	7,966.57	29.30	46.75	126.65	551.12	853.97	1,282.06	1,207.65	74.41	17.230	
7,800.00	7,753.75	9,111.46	7,966.56	29.48	46.78	126.43	554.07	853.96	1,274.60	1,199.55	75.05	16.984	
7,850.00	7,803.66	9,113.86	7,966.56	29.66	46.80	126.25	556.47	853.95	1,268.68	1,193.09	75.58	16.786	
7,900.00	7,853.61	9,115.71	7,966.55	29.84	46.82	126.11	558.32	853.94	1,264.31	1,188.30	76.02	16.632	
7,950.00	7,903.59	9,117.00	7,966.55	30.01	46.84	126.02	559.61	853.93	1,261.53	1,185.19	76.34	16.524	
8,000.00	7,953.58	9,117.73	7,966.55	30.18	46.84	125.97	560.34	853.93	1,260.34	1,183.77	76.56	16.461	
8,012.05	7,965.62	9,117.82	7,966.55	30.22	46.84	125.97	560.43	853.93	1,260.29	1,183.69	76.60	16.453	
8,050.00	8,003.58	9,117.89	7,966.55	30.35	46.85	89.70	560.50	853.93	1,260.75	1,184.07	76.67	16.443 SF	
8,100.00	8,053.58	9,117.80	7,966.55	30.52	46.84	89.70	560.41	853.93	1,262.97	1,186.29	76.68	16.471	
8,150.00	8,103.58	9,117.72	7,966.55	30.68	46.84	89.71	560.33	853.93	1,267.17	1,190.58	76.58	16.546	
8,200.00	8,153.58	9,117.64	7,966.55	30.85	46.84	89.71	560.25	853.93	1,273.31	1,196.92	76.39	16.668	
8,250.00	8,203.58	9,117.55	7,966.55	31.02	46.84	89.72	560.16	853.93	1,281.38	1,205.27	76.11	16.836	
8,300.00	8,253.58	9,117.47	7,966.55	31.18	46.84	89.72	560.08	853.93	1,291.33	1,215.60	75.74	17.050	
8,350.00	8,303.58	9,117.38	7,966.55	31.35	46.84	89.72	559.99	853.93	1,303.13	1,227.85	75.29	17.309	
8,400.00	8,353.58	9,117.29	7,966.55	31.52	46.84	89.73	559.90	853.93	1,316.73	1,241.97	74.76	17.612	
8,450.00	8,403.58	9,117.21	7,966.55	31.69	46.84	89.73	559.82	853.93	1,332.06	1,257.89	74.17	17.959	
8,500.00	8,453.58	9,117.12	7,966.55	31.86	46.84	89.73	559.73	853.93	1,349.07	1,275.55	73.52	18.349	
8,550.00	8,503.58	9,117.03	7,966.55	32.02	46.84	89.74	559.64	853.93	1,367.70	1,294.87	72.83	18.780	
8,600.00	8,553.58	9,116.95	7,966.55	32.19	46.84	89.74	559.56	853.93	1,387.88	1,315.79	72.09	19.252	
8,650.00	8,603.57	9,117.34	7,966.55	32.36	46.84	39.25	559.95	853.93	1,409.09	1,337.77	71.32	19.758	
8,700.00	8,653.31	9,120.75	7,966.55	32.52	46.88	37.65	563.38	853.91	1,428.76	1,358.24	70.52	20.261	
8,750.00	8,702.35	9,127.54	7,966.54	32.69	46.95	36.12	570.15	853.87	1,446.41	1,376.71	69.70	20.752	
8,800.00	8,750.26	9,137.67	7,966.53	32.84	47.06	34.68	580.28	853.81	1,461.93	1,393.06	68.87	21.229	
8,850.00	8,796.59	9,148.65	7,966.51	32.99	47.18	33.41	591.26	853.75	1,475.18	1,407.18	68.00	21.694	
8,900.00	8,840.93	9,163.21	7,966.49	33.13	47.35	32.20	605.82	853.66	1,486.05	1,418.92	67.13	22.138	
8,950.00	8,882.87	9,180.36	7,966.46	33.27	47.54	31.08	622.97	853.56	1,494.41	1,428.16	66.24	22.559	
9,000.00	8,924.59	9,201.17	7,966.09	33.78	48.93	24.87	743.77	852.72	1,494.49	1,432.63	61.86	24.160	
9,250.00	9,067.40	9,326.51	7,965.99	33.89	49.23	21.15	769.11	852.48	1,485.82	1,424.93	60.89	24.402	
9,300.00	9,087.75	9,349.17	7,965.91	34.02	49.51	17.65	791.77	852.28	1,474.51	1,414.69	59.83	24.646	
9,350.00	9,105.47	9,368.81	7,965.84	34.21	49.75	14.35	811.41	852.07	1,460.74	1,402.08	58.66	24.900	
9,400.00	9,120.38	9,385.26	7,965.80	34.48	49.95	11.23	827.86	851.91	1,444.69	1,387.28	57.41	25.165	
9,450.00	9,132.37	9,398.36	7,965.76	34.80	50.11	8.29	840.96	851.77	1,426.54	1,370.47	56.07	25.444	
9,500.00	9,141.30	9,407.89	7,965.74	35.18	50.22	5.53	850.59	851.68	1,406.46	1,351.81	54.65	25.735	
9,550.00	9,147.11	9,414.06	7,965.73	35.60	50.30	2.94	856.66	851.61	1,384.64	1,331.46	53.18	26.038	
9,600.00	9,149.74	9,416.51	7,965.72	36.05	50.33	0.52	859.11	851.59	1,361.23	1,309.57	51.66	26.349	
9,650.00	9,149.91	9,416.17	7,965.73	36.54	50.32	-0.20	858.77	851.59	1,337.03	1,286.91	50.12	26.677	
9,700.00	9,149.91	9,415.84	7,965.73	37.07	50.32	-0.18	858.24	851.60	1,314.14	1,265.59	48.55	27.066	
9,750.00	9,149.91	9,415.11	7,965.73	37.66	50.31	-0.15	857.71	851.60	1,292.78	1,245.79	46.99	27.513	
9,800.00	9,149.91	9,414.58	7,965.73	38.26	50.30	-0.12	857.18	851.61	1,273.02	1,227.59	45.44	28.018	
9,850.00	9,149.91	9,414.06	7,965.73	38.95	50.30	-0.10	856.66	851.61	1,254.95	1,211.02	43.93	28.568	
9,900.00	9,149.91	9,413.53	7,965.73	39.64	50.29	-0.07	856.13	851.62	1,238.63	1,196.15	42.48	29.155	
9,950.00	9,149.91	9,413.00	7,965.73	40.39	50.28	-0.05	855.60	851.62	1,224.14	1,182.99	41.15	29.751	
10,000.00	9,149.91	9,412.47	7,965.73	41.16	50.28	-0.02	855.07	851.63	1,211.54	1,171.60	39.94	30.337	
10,050.00	9,149.91	9,411.95	7,965.73	41.99	50.27	0.00	854.55	851.63	1,200.89	1,161.98	38.91	30.867	
10,100.00	9,149.91	9,411.42	7,965.73	42.82	50.27	0.03	854.02	851.64	1,192.24	1,154.16	38.08	31.310	
10,150.00	9,149.91	9,410.89	7,965.74	43.71	50.26	0.05	853.49	851.65	1,185.64	1,148.13	37.51	31.612	
10,200.00	9,149.91	9,410.37	7,965.74	44.60	50.25	0.08	852.97	851.65	1,181.12	1,143.92	37.20	31.747	
10,250.00	9,149.91	9,409.84	7,965.74	45.55	50.25	0.11	852.44	851.66	1,178.71	1,141.50	37.21	31.678	
10,281.96	9,149.91	9,409.51	7,965.74	46.15	50.24	0.12	852.11	851.66	1,178.27	1,140.90	37.37	31.530 CC	
10,300.00	9,149.91	9,409.32	7,965.74	46.49	50.24	0.13	851.92	851.66	1,178.41	1,140.90	37.52	31.411 ES	

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: Permit Plan 2

Local Co-ordinate Reference: Well Coral PWU 28-27 11H
TVD Reference: RKB1 @ 3325.90ft
MD Reference: RKB1 @ 3325.90ft
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

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		
10,350.00	9,149.91	9,408.79	7,965.74	47.49	50.23	0.16	851.39	851.67	1,180.24	1,142.11	38.13	30.955		
10,400.00	9,149.91	9,409.27	7,965.74	48.48	50.23	0.18	850.87	851.67	1,184.17	1,145.16	39.01	30.352		
10,450.00	9,149.91	9,407.75	7,965.74	49.51	50.22	0.21	850.35	851.68	1,190.19	1,150.04	40.15	29.841		
10,500.00	9,149.91	9,407.22	7,965.74	50.55	50.21	0.23	849.82	851.68	1,198.28	1,156.78	41.49	28.879		
10,550.00	9,149.91	9,406.70	7,965.74	51.62	50.21	0.26	849.30	851.69	1,208.37	1,165.37	43.00	28.101		
10,600.00	9,149.91	9,406.18	7,965.75	52.70	50.20	0.28	848.78	851.69	1,220.44	1,175.81	44.62	27.349		
10,650.00	9,149.91	9,405.66	7,965.75	53.80	50.20	0.31	848.26	851.70	1,234.41	1,188.08	46.33	26.642		
10,700.00	9,149.91	9,405.13	7,965.75	54.91	50.19	0.33	847.73	851.70	1,250.23	1,202.14	48.09	25.999		
10,750.00	9,149.91	9,404.61	7,965.75	56.04	50.18	0.36	847.21	851.71	1,267.82	1,217.96	49.86	25.427		
10,800.00	9,149.91	9,404.09	7,965.75	57.18	50.18	0.39	846.69	851.72	1,287.11	1,235.49	51.63	24.931		
10,850.00	9,149.91	9,403.57	7,965.75	58.34	50.17	0.41	846.17	851.72	1,308.04	1,254.67	53.37	24.509		
10,900.00	9,149.91	9,403.05	7,965.75	59.50	50.16	0.44	845.65	851.73	1,330.51	1,275.44	55.07	24.160		
10,950.00	9,149.91	9,402.53	7,965.75	60.68	50.16	0.46	845.13	851.73	1,354.46	1,297.74	56.72	23.879		
11,000.00	9,149.91	9,402.01	7,965.76	61.86	50.15	0.49	844.61	851.74	1,379.80	1,321.49	58.31	23.663		
11,050.00	9,149.91	9,401.49	7,965.76	63.07	50.14	0.51	844.09	851.74	1,406.47	1,346.63	59.84	23.505		
11,100.00	9,149.91	9,400.98	7,965.76	64.27	50.14	0.54	843.58	851.75	1,434.38	1,373.09	61.29	23.402		
11,150.00	9,149.91	9,400.46	7,965.76	65.49	50.13	0.56	843.06	851.75	1,463.47	1,400.79	62.68	23.348		
11,200.00	9,149.91	9,399.94	7,965.76	66.72	50.13	0.59	842.54	851.76	1,493.66	1,429.67	63.99	23.341		

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: Permit Plan 2

Local Co-ordinate Reference Well Coral PWU 28-27 11H
TVD Reference: RKB1 @ 3325.90ft
MD Reference: RKB1 @ 3325.90ft
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

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		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)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
10,200.00	9,149.91	9,413.52	7,987.90	44.60	44.92	0.53	843.82	1,682.73	1,478.71	1,422.41	56.29	26.269		
10,250.00	9,149.91	9,411.60	7,987.98	45.55	44.90	0.63	841.90	1,682.80	1,448.37	1,393.15	55.21	26.233		
10,300.00	9,149.91	9,409.64	7,988.06	46.49	44.87	0.72	839.94	1,682.88	1,419.14	1,365.04	54.09	26.235		
10,350.00	9,149.91	9,407.64	7,988.14	47.49	44.84	0.82	837.94	1,682.97	1,391.09	1,338.14	52.95	26.271		
10,400.00	9,149.91	9,405.60	7,988.22	48.48	44.81	0.92	835.91	1,683.05	1,364.29	1,312.51	51.78	26.346		
10,450.00	9,149.91	9,403.52	7,988.31	49.51	44.78	1.02	833.83	1,683.14	1,338.83	1,288.22	50.61	26.456		
10,500.00	9,149.91	9,401.40	7,988.40	50.55	44.75	1.13	831.72	1,683.22	1,314.76	1,265.35	49.42	26.605		
10,550.00	9,149.91	9,399.24	7,988.49	51.62	44.72	1.23	829.58	1,683.32	1,292.19	1,243.95	48.24	26.786		
10,600.00	9,149.91	9,399.00	7,988.50	52.70	44.72	1.25	829.32	1,683.33	1,271.18	1,224.09	47.09	26.995		
10,650.00	9,149.91	9,399.00	7,988.50	53.80	44.72	1.25	829.32	1,683.33	1,251.81	1,205.83	45.98	27.226		
10,700.00	9,149.91	9,399.00	7,988.50	54.91	44.72	1.25	829.32	1,683.33	1,234.16	1,189.24	44.92	27.473		
10,750.00	9,149.91	9,392.87	7,988.75	56.04	44.64	1.55	823.21	1,683.59	1,218.30	1,174.37	43.93	27.734		
10,800.00	9,149.91	9,391.22	7,988.82	57.18	44.61	1.63	821.56	1,683.67	1,204.31	1,161.26	43.05	27.976		
10,850.00	9,149.91	9,389.54	7,988.89	58.34	44.59	1.71	819.88	1,683.74	1,192.25	1,149.95	42.30	28.187		
10,900.00	9,149.91	9,387.83	7,988.96	59.50	44.57	1.80	818.17	1,683.82	1,182.18	1,140.48	41.70	28.352		
10,950.00	9,149.91	9,386.08	7,989.03	60.68	44.54	1.88	816.43	1,683.90	1,174.15	1,132.87	41.28	28.446		
11,000.00	9,149.91	9,384.30	7,989.09	61.86	44.52	1.97	814.65	1,683.98	1,168.21	1,127.16	41.05	28.458		
11,050.00	9,149.91	9,382.48	7,989.17	63.07	44.49	2.06	812.84	1,684.07	1,164.38	1,123.33	41.04	28.370		
11,100.00	9,149.91	9,380.63	7,989.24	64.27	44.47	2.15	810.98	1,684.15	1,162.68	1,121.43	41.26	28.183		
11,114.48	9,149.91	9,380.08	7,989.26	64.63	44.46	2.18	810.44	1,684.18	1,162.59	1,121.23	41.36	28.109	CC, ES	
11,150.00	9,149.91	9,378.74	7,989.31	65.49	44.44	2.24	809.10	1,684.25	1,163.13	1,121.44	41.70	27.896		
11,200.00	9,149.91	9,376.80	7,989.38	66.72	44.42	2.34	807.17	1,684.34	1,165.73	1,123.38	42.35	27.527		
11,250.00	9,149.91	9,374.83	7,989.45	67.95	44.39	2.44	805.20	1,684.43	1,170.45	1,127.25	43.20	27.092		
11,300.00	9,149.91	9,372.82	7,989.53	69.19	44.36	2.54	803.19	1,684.53	1,177.27	1,133.05	44.22	26.620		
11,350.00	9,149.91	9,370.76	7,989.60	70.44	44.33	2.64	801.13	1,684.64	1,186.16	1,140.77	45.39	26.132		
11,400.00	9,149.91	9,368.66	7,989.68	71.70	44.30	2.74	799.04	1,684.74	1,197.07	1,150.41	46.67	25.651		
11,450.00	9,149.91	9,366.51	7,989.75	72.96	44.27	2.85	796.89	1,684.85	1,209.95	1,161.92	48.03	25.194		
11,500.00	9,149.91	9,364.31	7,989.83	74.23	44.24	2.95	794.70	1,684.96	1,224.73	1,175.29	49.43	24.776		
11,550.00	9,149.91	9,362.07	7,989.90	75.51	44.21	3.06	792.46	1,685.08	1,241.34	1,190.47	50.87	24.403		
11,600.00	9,149.91	9,359.77	7,989.98	76.79	44.18	3.18	790.17	1,685.20	1,259.71	1,207.41	52.30	24.084		
11,650.00	9,149.91	9,357.43	7,990.06	78.07	44.15	3.29	787.83	1,685.32	1,279.77	1,226.05	53.73	23.819		
11,700.00	9,149.91	9,355.02	7,990.14	79.36	44.12	3.41	785.43	1,685.45	1,301.44	1,246.32	55.12	23.610		
11,750.00	9,149.91	9,352.57	7,990.22	80.66	44.08	3.53	782.98	1,685.59	1,324.64	1,268.16	56.48	23.454		
11,800.00	9,149.91	9,350.05	7,990.30	81.96	44.05	3.66	780.48	1,685.73	1,349.29	1,291.50	57.79	23.350		
11,850.00	9,149.91	9,347.47	7,990.37	83.27	44.01	3.78	777.89	1,685.87	1,375.31	1,316.27	59.04	23.295		
11,900.00	9,149.91	9,344.83	7,990.45	84.57	43.98	3.91	775.26	1,686.02	1,402.62	1,342.39	60.23	23.286	SF	
11,950.00	9,149.91	9,342.13	7,990.53	85.89	43.94	4.04	772.56	1,686.17	1,431.15	1,369.78	61.37	23.320		
12,000.00	9,149.91	9,339.36	7,990.62	87.20	43.90	4.18	769.80	1,686.33	1,460.84	1,398.40	62.44	23.395		
12,050.00	9,149.91	9,336.52	7,990.70	88.52	43.86	4.32	766.96	1,686.50	1,491.60	1,428.15	63.46	23.506		

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: Permit Plan 2

Local Co-ordinate Reference: Well Coral PWU 28-27 11H
TVD Reference: RKB1 @ 3325.90ft
MD Reference: RKB1 @ 3325.90ft
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

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, 8525-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	
5,650.00	5,623.92	9,388.01	7,014.15	21.19	82.05	67.76	761.50	-169.60	1,459.31	1,416.69	42.63	34.235	
5,700.00	5,673.42	9,391.05	7,014.37	21.38	82.20	67.04	761.50	-174.63	1,410.72	1,367.48	43.23	32.631	
5,750.00	5,722.92	9,397.38	7,014.64	21.57	82.39	66.12	761.50	-180.96	1,362.20	1,318.30	43.89	31.035	
5,800.00	5,772.42	9,404.44	7,014.95	21.76	82.60	65.07	761.50	-188.01	1,313.75	1,269.15	44.60	29.454	
5,850.00	5,821.93	9,411.44	7,015.25	21.95	82.80	64.00	761.50	-195.00	1,265.40	1,220.03	45.37	27.893	
5,900.00	5,871.43	9,418.37	7,015.54	22.14	83.01	62.93	761.50	-201.93	1,217.14	1,170.96	46.18	26.356	
5,950.00	5,920.93	9,425.24	7,015.83	22.33	83.21	61.84	761.50	-208.79	1,168.99	1,121.93	47.06	24.840	
6,000.00	5,970.43	9,432.06	7,016.11	22.53	83.41	60.75	761.50	-215.60	1,120.96	1,072.96	48.01	23.350	
6,050.00	6,019.93	9,438.81	7,016.38	22.72	83.61	59.64	761.50	-222.35	1,073.08	1,024.04	49.04	21.883	
6,100.00	6,069.43	9,445.51	7,016.65	22.91	83.81	58.52	761.50	-229.05	1,025.36	975.20	50.15	20.444	
6,150.00	6,118.93	9,452.15	7,016.92	23.10	84.01	57.40	761.49	-235.68	977.82	926.44	51.38	19.032	
6,200.00	6,168.43	9,458.74	7,017.17	23.29	84.20	56.26	761.49	-242.26	930.50	877.78	52.72	17.650	
6,250.00	6,217.93	9,465.27	7,017.43	23.49	84.39	55.12	761.49	-248.79	883.43	829.23	54.20	16.300	
6,300.00	6,267.43	9,471.74	7,017.67	23.68	84.59	53.97	761.48	-255.26	836.65	780.81	55.83	14.985	
6,350.00	6,316.93	9,478.17	7,017.91	23.87	84.77	52.82	761.48	-261.68	790.21	732.56	57.66	13.706	
6,400.00	6,366.43	9,484.53	7,018.15	24.07	84.96	51.68	761.47	-268.04	744.19	684.50	59.69	12.467	
6,450.00	6,415.93	9,490.85	7,018.38	24.26	85.15	50.50	761.46	-274.35	698.66	636.68	61.98	11.273	
6,500.00	6,465.43	9,497.11	7,018.61	24.45	85.33	49.33	761.46	-280.61	653.72	589.17	64.56	10.127	
6,550.00	6,514.93	9,502.70	7,018.80	24.65	85.50	48.28	761.47	-286.19	609.52	542.06	67.47	9.034	
6,600.00	6,564.43	9,508.61	7,019.01	24.84	85.68	47.16	761.48	-292.10	566.23	495.45	70.78	8.000	
6,650.00	6,613.93	9,514.46	7,019.20	25.04	85.85	46.04	761.49	-297.95	524.06	449.52	74.54	7.031	
6,700.00	6,663.43	9,520.25	7,019.39	25.23	86.02	44.93	761.51	-303.74	483.31	404.51	78.81	6.133	
6,750.00	6,712.93	9,525.99	7,019.58	25.42	86.19	43.82	761.54	-309.47	444.39	360.77	83.62	5.315	
6,800.00	6,762.43	9,531.67	7,019.76	25.62	86.36	42.71	761.57	-315.15	407.80	318.84	88.96	4.584 Alert	
6,850.00	6,811.93	9,537.30	7,019.94	25.81	86.53	41.61	761.60	-320.77	374.24	279.51	94.74	3.950 Alert	
6,900.00	6,861.43	9,542.87	7,020.11	26.01	86.69	40.52	761.64	-326.34	344.60	243.93	100.68	3.423 Alert	
6,950.00	6,910.93	9,548.39	7,020.27	26.20	86.86	39.43	761.69	-331.86	319.97	213.70	106.27	3.011 Alert	
7,000.00	6,960.43	9,553.88	7,020.43	26.40	87.02	38.35	761.73	-337.32	301.58	190.86	110.72	2.724 Alert	
7,050.00	7,009.93	9,559.27	7,020.58	26.59	87.18	37.28	761.78	-342.74	290.61	177.54	113.07	2.570 Alert	
7,090.74	7,050.26	9,563.65	7,020.71	26.75	87.31	36.41	761.83	-347.11	287.78	174.86	112.92	2.549 Alert, CC, ES, SF	
7,100.00	7,059.44	9,564.64	7,020.73	26.79	87.34	36.22	761.84	-348.10	287.92	175.32	112.60	2.557 Alert	
7,150.00	7,108.94	9,569.95	7,020.88	26.98	87.50	35.17	761.90	-353.41	293.75	184.54	109.20	2.690 Alert	
7,200.00	7,158.44	9,575.21	7,021.02	27.18	87.65	34.13	761.96	-358.67	307.59	204.09	103.50	2.972 Alert	
7,250.00	7,207.94	9,580.43	7,021.15	27.37	87.81	33.10	762.02	-363.89	328.45	231.94	96.52	3.403 Alert	
7,300.00	7,257.44	9,585.60	7,021.29	27.57	87.96	32.08	762.09	-369.05	355.10	265.90	89.20	3.981 Alert	
7,350.00	7,306.94	9,590.49	7,021.40	27.77	88.11	31.12	762.16	-373.94	386.33	304.13	82.20	4.700 Alert	
7,400.00	7,356.44	9,595.33	7,021.51	27.96	88.25	30.17	762.23	-378.78	421.13	345.27	75.86	5.551	
7,450.00	7,405.94	9,600.05	7,021.61	28.16	88.39	29.25	762.29	-383.50	458.70	388.39	70.31	6.524	
7,500.00	7,455.44	9,604.66	7,021.70	28.35	88.53	28.35	762.36	-388.11	498.41	432.87	65.54	7.605	
7,550.00	7,504.97	9,609.03	7,021.78	28.55	88.66	27.67	762.43	-392.48	539.91	478.41	61.50	8.779	
7,600.00	7,554.59	9,612.97	7,021.84	28.74	88.78	27.78	762.48	-396.42	582.99	524.85	58.14	10.028	
7,650.00	7,604.29	9,616.49	7,021.90	28.93	88.88	27.75	762.54	-399.93	627.33	571.98	55.36	11.333	
7,700.00	7,654.05	9,619.59	7,021.95	29.12	88.97	27.86	762.59	-403.03	672.69	619.62	53.06	12.677	
7,750.00	7,703.87	9,622.30	7,021.99	29.30	89.05	28.13	762.63	-405.74	718.87	667.69	51.18	14.046	
7,800.00	7,753.75	9,624.62	7,022.02	29.48	89.12	28.58	762.67	-408.07	765.71	716.08	49.63	15.429	
7,850.00	7,803.66	9,626.58	7,022.04	29.66	89.18	29.22	762.70	-410.02	813.11	764.75	48.35	16.816	
7,900.00	7,853.61	9,628.17	7,022.06	29.84	89.23	30.07	762.72	-411.61	860.95	813.64	47.31	18.198	
7,950.00	7,903.59	9,629.42	7,022.08	30.01	89.27	31.17	762.74	-412.86	909.18	862.73	46.45	19.572	
8,000.00	7,953.58	9,630.33	7,022.09	30.18	89.29	32.54	762.76	-413.77	957.72	911.96	45.76	20.931	
8,050.00	8,003.58	9,630.91	7,022.10	30.35	89.31	-2.18	762.77	-414.35	1,006.52	961.33	45.19	22.274	
8,100.00	8,053.58	9,631.35	7,022.10	30.52	89.32	-2.30	762.78	-414.80	1,055.48	1,010.77	44.71	23.606	

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 PWJ 28-27 11H
Project:	Eddy County (NAD 83 NM Eastern)	TVD Reference:	RKB1 @ 3325.90ft
Reference Site:	Sec 27-T19S-R29E	MD Reference:	RKB1 @ 3325.90ft
Site Error:	5.00 ft	North Reference:	Grid
Reference Well:	Coral PWJ 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:	Permit Plan 2	Offset TVD Reference:	Offset Datum

Offset Design Sec 28-T19S-R29E - Coral PWJ 28-7H - Wellbore #1 - Wellbore #1													Offset Site Error:	5.00 ft
Survey Program: 0-NSG-GYC_Drop, 6525-MWD+IGRF													Offset Well Error:	0.50 ft
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		
8,150.00	8,103.58	9,631.79	7,022.11	30.68	89.34	-2.41	762.78	-415.23	1,104.54	1,060.23	44.31	24.929		
8,200.00	8,153.58	9,632.21	7,022.11	30.85	89.35	-2.53	762.79	-415.65	1,153.67	1,109.71	43.96	26.244		
8,250.00	8,203.58	9,632.62	7,022.12	31.02	89.36	-2.64	762.80	-416.06	1,202.88	1,159.21	43.66	27.548		
8,300.00	8,253.58	9,633.03	7,022.12	31.18	89.37	-2.75	762.80	-416.47	1,252.15	1,208.73	43.41	28.843		
8,350.00	8,303.58	9,633.43	7,022.13	31.35	89.39	-2.86	762.81	-416.87	1,301.47	1,258.27	43.20	30.127		
8,400.00	8,353.58	9,633.81	7,022.13	31.52	89.40	-2.97	762.82	-417.26	1,350.84	1,307.82	43.02	31.400		
8,450.00	8,403.58	9,634.20	7,022.13	31.69	89.41	-3.07	762.82	-417.64	1,400.26	1,357.39	42.87	32.662		
8,500.00	8,453.58	9,634.57	7,022.14	31.86	89.42	-3.18	762.83	-418.01	1,449.72	1,406.97	42.75	33.913		
8,550.00	8,503.58	9,634.94	7,022.14	32.02	89.43	-3.28	762.83	-418.38	1,499.21	1,456.57	42.65	35.152		

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: Permit Plan 2

Local Co-ordinate Reference: Well Coral PWU 28-27 11H
TVD Reference: RKB1 @ 3325.90ft
MD Reference: RKB1 @ 3325.90ft
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

Offset Design Sec 28-T19S-R29E - Parkway Unit 16 (Active) - Wellbore #1 - Wellbore #1													Offset Site Error:	5.00 ft
Survey Program: 100-GYRO-NS-CT, 9900-MWD+IGRF													Offset Well Error:	10.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Minimum Separation (ft)	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.00	0.00	0.00	0.00	5.02	11.18	111.38	-231.84	592.22	636.16					
50.00	50.00	37.65	37.65	5.03	11.18	111.38	-231.82	592.14	635.91	619.71	16.21	39.240		
100.00	100.00	91.27	91.27	5.03	11.18	111.39	-231.75	591.78	635.57	619.36	16.21	39.215		
150.00	150.00	143.50	143.50	5.03	11.18	111.39	-231.61	591.18	634.99	618.77	16.22	39.154		
200.00	200.00	195.46	195.44	5.05	11.19	111.40	-231.36	590.45	634.25	618.01	16.24	39.060		
250.00	250.00	244.75	244.73	5.07	11.20	111.41	-231.16	589.69	633.45	617.18	16.27	38.939		
300.00	300.00	293.79	293.77	5.10	11.21	111.43	-231.19	589.91	632.73	616.42	16.31	38.803		
350.00	350.00	342.17	342.14	5.13	11.23	111.47	-231.36	589.20	632.10	615.75	16.35	38.652		
400.00	400.00	390.46	390.43	5.17	11.24	111.51	-231.54	587.62	631.61	615.20	16.41	38.491		
450.00	450.00	439.42	439.38	5.21	11.26	111.54	-231.74	587.15	631.24	614.76	16.47	38.318		
500.00	500.00	488.54	488.50	5.26	11.28	111.57	-231.94	586.75	630.93	614.39	16.55	38.132		
550.00	550.00	538.44	538.40	5.32	11.31	111.59	-232.09	586.41	630.68	614.05	16.63	37.931		
600.00	600.00	588.57	588.54	5.38	11.34	111.60	-232.08	586.13	630.41	613.69	16.72	37.713		
650.00	650.00	637.10	637.06	5.45	11.36	111.60	-231.98	585.93	630.18	613.37	16.81	37.484		
700.00	700.00	685.16	685.12	5.52	11.40	111.60	-231.99	585.84	630.10	613.19	16.91	37.251		
700.41	700.41	685.55	685.51	5.52	11.40	111.60	-231.99	585.84	630.10	613.19	16.92	37.249 CC		
750.00	750.00	732.74	732.70	5.60	11.43	111.61	-232.09	585.89	630.19	613.17	17.02	37.017 ES		
800.00	800.00	780.11	780.07	5.68	11.46	111.60	-232.13	586.18	630.49	613.34	17.14	36.783		
850.00	850.00	826.44	826.40	5.76	11.50	111.58	-232.11	586.71	631.01	613.75	17.28	36.556		
900.00	900.00	872.01	871.96	5.85	11.54	111.55	-232.08	587.57	631.88	614.49	17.39	36.341		
950.00	950.00	919.29	919.22	5.95	11.58	111.51	-232.04	588.79	633.07	615.54	17.52	36.130		
1,000.00	1,000.00	969.31	969.23	6.04	11.63	111.47	-232.05	590.14	634.32	616.65	17.67	35.906		
1,050.00	1,050.00	1,019.23	1,019.13	6.15	11.68	111.43	-232.13	591.45	635.57	617.75	17.82	35.673		
1,100.00	1,100.00	1,068.99	1,068.87	6.25	11.73	111.39	-232.19	592.77	636.84	618.86	17.97	35.434		
1,150.00	1,150.00	1,119.01	1,118.87	6.36	11.79	111.35	-232.23	594.13	638.11	619.98	18.13	35.188		
1,200.00	1,200.00	1,169.49	1,169.33	6.47	11.85	111.31	-232.33	595.45	639.37	621.06	18.30	34.933		
1,250.00	1,250.00	1,219.60	1,219.42	6.58	11.91	111.29	-232.51	596.69	640.59	622.11	18.48	34.671		
1,300.00	1,300.00	1,269.14	1,268.95	6.70	11.97	111.27	-232.71	597.94	641.83	623.17	18.65	34.409		
1,350.00	1,350.00	1,318.77	1,318.56	6.82	12.03	111.24	-232.91	599.22	643.10	624.27	18.84	34.143		
1,400.00	1,400.00	1,368.55	1,368.32	6.94	12.10	111.21	-233.10	600.52	644.40	625.37	19.02	33.875		
1,450.00	1,450.00	1,418.55	1,418.30	7.07	12.17	111.19	-233.27	601.86	645.70	626.49	19.21	33.604		
1,500.00	1,500.00	1,468.92	1,468.66	7.20	12.24	111.16	-233.47	603.17	646.99	627.58	19.41	33.329		
1,550.00	1,550.00	1,520.23	1,519.95	7.33	12.32	111.14	-233.70	604.45	648.23	628.61	19.62	33.046		
1,600.00	1,600.00	1,573.07	1,572.78	7.46	12.39	111.12	-233.90	605.57	649.29	629.46	19.83	32.748		
1,650.00	1,650.00	1,625.41	1,625.12	7.59	12.48	111.10	-234.04	606.47	650.14	630.10	20.04	32.440		
1,700.00	1,700.00	1,677.25	1,676.95	7.73	12.56	111.08	-234.09	607.22	650.83	630.58	20.26	32.127		
1,750.00	1,750.00	1,729.81	1,729.50	7.86	12.64	111.06	-234.05	607.85	651.37	630.89	20.48	31.806		
1,800.00	1,800.00	1,782.93	1,782.63	8.00	12.73	111.04	-233.96	608.24	651.68	630.98	20.71	31.473		
1,850.00	1,850.00	1,834.49	1,834.18	8.14	12.82	111.02	-233.82	608.41	651.79	630.86	20.93	31.137		
1,900.00	1,900.00	1,885.30	1,884.99	8.28	12.90	111.01	-233.67	608.51	651.83	630.67	21.16	30.803		
1,950.00	1,950.00	1,936.85	1,936.55	8.43	12.99	110.99	-233.51	608.52	651.79	630.40	21.39	30.465		
2,000.00	2,000.00	1,988.71	1,988.41	8.57	13.08	110.98	-233.34	608.39	651.61	629.98	21.63	30.123		
2,050.00	2,050.00	2,039.85	2,039.54	8.72	13.18	110.97	-233.12	608.14	651.30	629.43	21.87	29.781		
2,100.00	2,100.00	2,090.79	2,090.48	8.86	13.27	110.96	-232.81	607.85	650.93	628.82	22.11	29.439		
2,150.00	2,150.00	2,142.60	2,142.29	9.01	13.37	110.94	-232.44	607.48	650.45	628.09	22.36	29.095		
2,200.00	2,200.00	2,194.60	2,194.29	9.16	13.47	110.93	-232.10	606.89	649.82	627.22	22.60	28.748		
2,250.00	2,250.00	2,246.01	2,245.69	9.31	13.57	110.93	-231.78	606.17	649.06	626.20	22.85	28.400		
2,300.00	2,300.00	2,297.35	2,297.02	9.46	13.68	110.92	-231.46	605.34	648.19	625.08	23.11	28.052		
2,350.00	2,350.00	2,348.39	2,348.05	9.62	13.78	110.92	-231.11	604.42	647.23	623.87	23.36	27.705		
2,400.00	2,400.00	2,399.41	2,399.06	9.77	13.89	110.92	-230.70	603.44	646.19	622.57	23.62	27.360		
2,450.00	2,450.00	2,449.78	2,449.41	9.92	13.99	110.92	-230.29	602.42	645.09	621.22	23.88	27.018		

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: Permit Plan 2

Local Co-ordinate Reference: Well Coral PWU 28-27 11H
TVD Reference: RKB1 @ 3325.90ft
MD Reference: RKB1 @ 3325.90ft
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

Offset Design Sec 28-T19S-R29E - Parkway Unit 16 (Active) - Wellbore #1 - Wellbore #1											Offset Site Error:	5.00 ft
Survey Program: 100-GYRO-NS-CT, 9900-MWD+IGRF											Offset Well Error:	10.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Minimum Separation (ft)	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)				Between Centres (ft)
2,500.00	2,500.00	2,500.14	2,499.76	10.08	14.10	110.93	-229.95	601.34	643.97	619.83	24.14	26.680
2,550.00	2,550.00	2,550.34	2,549.95	10.23	14.21	147.22	-229.66	600.21	643.01	618.61	24.40	26.355
2,600.00	2,599.99	2,600.54	2,600.13	10.39	14.32	147.27	-229.41	599.06	642.40	617.73	24.66	26.048
2,650.00	2,649.98	2,650.22	2,649.80	10.54	14.43	147.35	-229.19	597.91	642.16	617.23	24.93	25.762
2,655.60	2,655.58	2,655.79	2,655.37	10.56	14.44	147.36	-229.17	597.78	642.15	617.20	24.96	25.731
2,700.00	2,699.96	2,699.90	2,699.47	10.70	14.54	147.44	-229.01	596.77	642.31	617.11	25.19	25.496
2,750.00	2,749.92	2,748.78	2,748.34	10.86	14.65	147.55	-228.88	595.70	642.88	617.42	25.46	25.251
2,800.00	2,799.88	2,797.65	2,797.20	11.02	14.76	147.66	-228.71	594.72	643.92	618.19	25.73	25.027
2,850.00	2,849.78	2,848.89	2,848.43	11.18	14.88	147.82	-228.48	593.71	645.32	619.32	26.00	24.817
2,900.00	2,899.88	2,900.25	2,899.78	11.34	15.00	147.97	-228.06	592.66	646.99	620.71	26.28	24.620
2,950.00	2,949.54	2,951.58	2,951.09	11.50	15.12	148.13	-227.52	591.53	648.92	622.37	26.56	24.435
3,000.00	2,999.37	3,002.90	3,002.39	11.66	15.24	148.30	-226.89	590.33	651.12	624.29	26.84	24.263
3,050.00	3,049.16	3,051.81	3,051.28	11.82	15.36	148.49	-226.29	589.16	653.69	626.58	27.11	24.109
3,100.00	3,098.90	3,100.82	3,100.28	11.98	15.48	148.69	-225.76	588.03	656.71	629.31	27.39	23.974
3,150.00	3,148.61	3,150.91	3,150.35	12.14	15.61	148.92	-225.25	586.89	660.12	632.45	27.67	23.853
3,200.00	3,198.26	3,200.96	3,200.39	12.31	15.73	149.16	-224.72	585.73	663.90	635.94	27.96	23.746
3,250.00	3,247.86	3,250.32	3,249.73	12.47	15.85	149.41	-224.21	584.59	668.07	639.83	28.24	23.654
3,300.00	3,297.40	3,299.63	3,299.03	12.64	15.98	149.68	-223.77	583.44	672.66	644.13	28.53	23.579
3,350.00	3,346.91	3,349.57	3,348.95	12.81	16.10	149.98	-223.31	582.29	677.53	648.71	28.82	23.512
3,400.00	3,396.41	3,399.52	3,398.88	12.98	16.23	150.28	-222.79	581.14	682.40	653.29	29.11	23.445
3,450.00	3,445.91	3,449.15	3,448.50	13.15	16.36	150.57	-222.27	579.99	687.28	657.88	29.40	23.379
3,500.00	3,495.41	3,498.77	3,498.10	13.32	16.49	150.86	-221.79	578.82	692.17	662.49	29.69	23.315
3,550.00	3,544.91	3,548.30	3,547.62	13.49	16.62	151.14	-221.32	577.66	697.09	667.11	29.98	23.251
3,600.00	3,594.41	3,597.85	3,597.14	13.66	16.75	151.42	-220.78	576.53	702.04	671.76	30.28	23.188
3,650.00	3,643.91	3,648.26	3,647.54	13.83	16.88	151.69	-220.20	575.38	706.97	676.40	30.57	23.123
3,700.00	3,693.41	3,698.73	3,697.99	14.01	17.01	151.96	-219.60	574.17	711.87	680.99	30.87	23.058
3,750.00	3,742.91	3,747.96	3,747.21	14.18	17.15	152.23	-219.03	572.96	716.76	685.59	31.17	22.995
3,800.00	3,792.41	3,797.15	3,796.38	14.36	17.28	152.49	-218.52	571.76	721.70	690.23	31.47	22.933
3,850.00	3,841.91	3,848.07	3,847.28	14.53	17.42	152.76	-217.97	570.50	726.63	694.86	31.77	22.869
3,900.00	3,891.41	3,899.13	3,898.31	14.71	17.56	153.02	-217.33	569.17	731.49	699.41	32.08	22.803
3,950.00	3,940.91	3,949.00	3,948.17	14.89	17.69	153.27	-216.65	567.84	736.30	703.91	32.38	22.737
4,000.00	3,990.41	3,998.86	3,998.00	15.06	17.83	153.51	-215.94	566.51	741.11	708.42	32.69	22.672
4,050.00	4,039.91	4,047.55	4,046.67	15.24	17.97	153.75	-215.26	565.24	745.96	712.97	32.99	22.610
4,100.00	4,089.41	4,096.19	4,095.29	15.42	18.10	153.98	-214.61	564.02	750.89	717.59	33.30	22.552
4,150.00	4,138.91	4,147.09	4,146.17	15.60	18.24	154.22	-213.98	562.72	755.83	722.22	33.61	22.490
4,200.00	4,188.41	4,198.18	4,197.23	15.78	18.39	154.47	-213.40	561.28	760.69	726.77	33.92	22.427
4,250.00	4,237.91	4,247.75	4,246.78	15.96	18.53	154.71	-212.84	559.82	765.52	731.29	34.23	22.365
4,300.00	4,287.41	4,297.27	4,296.28	16.14	18.67	154.95	-212.21	558.42	770.37	735.83	34.54	22.304
4,350.00	4,336.91	4,347.79	4,346.77	16.33	18.81	155.18	-211.57	556.97	775.22	740.36	34.85	22.243
4,400.00	4,386.41	4,398.36	4,397.32	16.51	18.96	155.42	-210.98	555.41	780.02	744.85	35.17	22.180
4,450.00	4,435.91	4,450.18	4,449.10	16.69	19.11	155.67	-210.41	553.68	784.73	749.25	35.49	22.114
4,500.00	4,485.41	4,502.05	4,500.94	16.87	19.26	155.92	-209.83	551.80	789.32	753.52	35.81	22.045
4,550.00	4,534.91	4,552.71	4,551.56	17.06	19.41	156.16	-209.25	549.85	793.83	757.71	36.12	21.976
4,600.00	4,584.42	4,603.42	4,602.22	17.24	19.56	156.41	-208.67	547.82	798.28	761.84	36.44	21.906
4,650.00	4,633.92	4,652.00	4,650.76	17.43	19.70	156.64	-208.09	545.89	802.76	766.01	36.76	21.840
4,700.00	4,683.42	4,700.73	4,699.46	17.61	19.85	156.88	-207.48	544.05	807.31	770.24	37.07	21.777
4,750.00	4,732.92	4,750.63	4,749.32	17.80	20.00	157.08	-206.80	542.23	811.90	774.51	37.39	21.714
4,800.00	4,782.42	4,800.56	4,799.21	17.98	20.15	157.29	-206.04	540.43	816.48	778.77	37.71	21.651
4,850.00	4,831.92	4,851.99	4,850.59	18.17	20.30	157.50	-205.05	538.63	821.02	782.98	38.03	21.586
4,900.00	4,881.42	4,903.47	4,902.03	18.35	20.45	157.67	-203.73	536.91	825.46	787.10	38.36	21.520
4,950.00	4,930.92	4,952.73	4,951.24	18.54	20.60	157.83	-202.31	535.31	829.87	791.19	38.68	21.456

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: Permit Plan 2

Local Co-ordinate Reference
TVD Reference: RKB1 @ 3325.90ft
MD Reference: RKB1 @ 3325.90ft
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

Offset Design Sec 28-T19S-R29E - Parkway Unit 16 (Active) - Wellbore #1 - Wellbore #1													Offset Site Error: 5.00 ft
Survey Program: 100-GYRO-NS-CT, 9900-MWD-HGRF													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 Tooface (ft)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
5,000.00	4,980.42	5,002.14	5,000.60	18.73	20.75	157.98	-200.84	533.77	834.31	795.31	39.00	21.393	
5,050.00	5,029.92	5,051.49	5,049.91	18.92	20.90	158.13	-199.35	532.26	838.77	799.45	39.32	21.332	
5,100.00	5,079.42	5,100.86	5,098.23	19.10	21.05	158.27	-197.85	530.79	843.27	803.63	39.64	21.272	
5,150.00	5,128.92	5,151.29	5,149.62	19.29	21.20	158.41	-196.28	529.30	847.76	807.79	39.97	21.211	
5,200.00	5,178.42	5,201.75	5,200.03	19.48	21.36	158.55	-194.66	527.79	852.22	811.93	40.29	21.150	
5,250.00	5,227.92	5,252.35	5,250.58	19.67	21.51	158.69	-193.00	526.25	856.64	816.01	40.62	21.089	
5,300.00	5,277.42	5,302.97	5,301.15	19.86	21.67	158.82	-191.30	524.67	861.01	820.06	40.95	21.027	
5,350.00	5,326.92	5,352.12	5,350.25	20.05	21.82	158.95	-189.64	523.15	865.38	824.11	41.27	20.968	
5,400.00	5,376.42	5,401.38	5,399.45	20.24	21.97	159.08	-187.96	521.66	869.79	828.19	41.60	20.910	
5,450.00	5,425.92	5,451.36	5,449.39	20.42	22.13	159.20	-186.25	520.16	874.21	832.28	41.92	20.852	
5,500.00	5,475.42	5,501.41	5,499.38	20.61	22.28	159.33	-184.54	518.64	878.62	836.36	42.25	20.794	
5,550.00	5,524.92	5,553.63	5,551.54	20.80	22.44	159.45	-182.66	517.02	882.95	840.37	42.59	20.733	
5,600.00	5,574.42	5,606.13	5,603.97	20.99	22.61	159.57	-180.56	515.36	887.16	844.23	42.92	20.669	
5,650.00	5,623.92	5,660.68	5,658.43	21.19	22.78	159.67	-178.07	513.56	891.14	847.88	43.26	20.599	
5,700.00	5,673.42	5,715.29	5,712.93	21.38	22.95	159.75	-175.19	511.66	894.87	851.27	43.60	20.524	
5,750.00	5,722.92	5,765.59	5,763.13	21.57	23.12	159.83	-172.44	509.83	898.49	854.55	43.93	20.451	
5,800.00	5,772.42	5,816.72	5,814.15	21.76	23.28	159.90	-169.60	507.91	902.02	857.75	44.27	20.377	
5,850.00	5,821.93	5,867.62	5,864.93	21.95	23.44	159.98	-166.69	505.98	905.49	860.89	44.60	20.302	
5,900.00	5,871.43	5,918.31	5,915.49	22.14	23.61	160.04	-163.71	504.04	908.91	863.98	44.93	20.228	
5,950.00	5,920.93	5,968.63	5,965.68	22.33	23.77	160.11	-160.72	502.10	912.30	867.04	45.27	20.154	
6,000.00	5,970.43	6,018.47	6,015.40	22.53	23.93	160.17	-157.74	500.17	915.68	870.08	45.60	20.080	
6,050.00	6,019.93	6,067.54	6,064.34	22.72	24.09	160.22	-154.70	498.37	919.08	873.15	45.93	20.009	
6,100.00	6,069.43	6,116.40	6,113.07	22.91	24.25	160.26	-151.56	496.72	922.53	876.27	46.26	19.940	
6,150.00	6,118.93	6,164.84	6,161.39	23.10	24.41	160.31	-148.57	495.07	926.05	879.48	46.60	19.874	
6,200.00	6,168.43	6,213.83	6,210.27	23.29	24.57	160.37	-145.75	493.36	929.65	882.72	46.93	19.809	
6,250.00	6,217.93	6,264.29	6,260.62	23.49	24.74	160.43	-142.93	491.52	933.24	885.97	47.27	19.744	
6,300.00	6,267.43	6,314.26	6,310.48	23.68	24.90	160.51	-140.21	489.63	936.80	889.20	47.60	19.680	
6,350.00	6,316.93	6,363.00	6,359.12	23.87	25.06	160.59	-137.74	487.70	940.41	892.47	47.93	19.619	
6,400.00	6,366.43	6,411.04	6,407.07	24.07	25.22	160.68	-135.50	485.74	944.07	895.81	48.27	19.560	
6,450.00	6,415.93	6,456.93	6,452.87	24.26	25.37	160.77	-133.49	483.96	947.91	899.32	48.59	19.507	
6,500.00	6,465.43	6,502.78	6,498.65	24.45	25.53	160.86	-131.56	482.36	951.96	903.04	48.92	19.460	
6,550.00	6,514.93	6,547.99	6,543.81	24.65	25.67	160.94	-129.67	481.02	956.23	906.99	49.24	19.419	
6,600.00	6,564.43	6,593.21	6,588.97	24.84	25.82	161.00	-127.77	479.95	960.74	911.18	49.56	19.384	
6,650.00	6,613.93	6,637.51	6,633.22	25.04	25.96	161.06	-125.82	479.17	965.51	915.63	49.88	19.355	
6,700.00	6,663.43	6,681.60	6,677.28	25.23	26.10	161.11	-124.17	478.65	970.57	920.37	50.20	19.334	
6,750.00	6,712.93	6,726.17	6,721.82	25.42	26.25	161.16	-122.50	478.35	975.92	925.40	50.52	19.318	
6,800.00	6,762.43	6,771.07	6,766.69	25.62	26.39	161.21	-120.93	478.25	981.51	930.67	50.84	19.307	
6,850.00	6,811.93	6,817.48	6,813.08	25.81	26.53	161.26	-119.44	478.31	987.33	936.17	51.16	19.298	
6,900.00	6,861.43	6,866.69	6,862.27	26.01	26.69	161.31	-117.80	478.43	993.22	941.72	51.50	19.287	
6,950.00	6,910.93	6,916.03	6,911.58	26.20	26.84	161.37	-116.37	478.57	999.12	947.29	51.83	19.275	
7,000.00	6,960.43	6,965.63	6,961.15	26.40	27.00	161.41	-114.79	478.74	1,005.04	952.87	52.17	19.264	
7,050.00	7,009.93	7,015.15	7,010.65	26.59	27.16	161.46	-113.16	478.95	1,010.96	958.45	52.51	19.252	
7,100.00	7,059.44	7,064.50	7,059.97	26.79	27.31	161.50	-111.58	479.15	1,016.89	964.04	52.85	19.241	
7,150.00	7,108.94	7,113.68	7,109.12	26.98	27.47	161.56	-110.10	479.30	1,022.84	969.65	53.19	19.231	
7,200.00	7,158.44	7,162.39	7,157.82	27.18	27.62	161.61	-108.73	479.41	1,028.83	975.30	53.52	19.222	
7,250.00	7,207.94	7,210.67	7,206.08	27.37	27.78	161.67	-107.49	479.50	1,034.86	981.00	53.86	19.215	
7,300.00	7,257.44	7,257.47	7,252.87	27.57	27.92	161.74	-106.48	479.58	1,041.00	986.82	54.18	19.213	
7,350.00	7,306.94	7,304.50	7,299.89	27.77	28.07	161.82	-105.69	479.65	1,047.28	992.77	54.51	19.213	
7,400.00	7,356.44	7,354.26	7,349.65	27.96	28.23	161.90	-104.94	479.72	1,053.61	998.76	54.85	19.209	
7,450.00	7,405.94	7,404.09	7,399.48	28.16	28.39	161.98	-104.19	479.78	1,059.93	1,004.74	55.19	19.205	
7,500.00	7,455.44	7,454.70	7,450.07	28.35	28.55	162.07	-103.47	479.78	1,066.22	1,010.69	55.54	19.199	

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: Permit Plan 2

Local Co-ordinate Reference: Well Coral PWU 28-27 11H
 TVD Reference: RKB1 @ 3325.90ft
 MD Reference: RKB1 @ 3325.90ft
 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

Offset Design Sec 28-T19S-R29E - Parkway Unit 16 (Active) - Wellbore #1 - Wellbore #1													Offset Site Error: 5.00 ft
Survey Program: 100-GYRO-NS-CT, 9900-MWD+IGRF													Offset Well Error: 10.00 ft
Reference		Offset		Semi Major Axis			Distance						
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Tooface (ft)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
7,550.00	7,504.97	7,505.37	7,500.74	28.55	28.71	162.19	-102.82	479.66	1,072.23	1,016.35	55.88	19.188	
7,600.00	7,554.59	7,556.40	7,551.77	28.74	28.87	162.30	-102.26	479.40	1,077.57	1,021.35	56.23	19.165	
7,650.00	7,604.29	7,608.26	7,603.63	28.93	29.04	162.40	-101.78	478.99	1,082.23	1,025.65	56.58	19.129	
7,700.00	7,654.05	7,664.66	7,660.02	29.12	29.22	162.51	-101.26	478.24	1,086.05	1,029.11	56.95	19.072	
7,750.00	7,703.87	7,720.02	7,715.36	29.30	29.40	162.61	-100.70	477.13	1,088.96	1,031.66	57.31	19.002	
7,800.00	7,753.75	7,773.54	7,768.87	29.48	29.58	162.70	-100.18	475.79	1,091.06	1,033.40	57.66	18.922	
7,850.00	7,803.66	7,827.66	7,822.96	29.66	29.76	162.78	-99.67	474.20	1,092.38	1,034.35	58.01	18.829	
7,900.00	7,853.61	7,882.35	7,877.62	29.84	29.94	162.85	-99.03	472.40	1,092.84	1,034.46	58.37	18.722	
7,950.00	7,903.59	7,932.35	7,927.58	30.01	30.10	162.90	-98.37	470.63	1,092.54	1,033.83	58.71	18.610	
8,000.00	7,953.58	7,980.11	7,975.31	30.18	30.26	162.94	-97.80	469.00	1,091.70	1,032.67	59.03	18.493	
8,050.00	8,003.58	8,026.95	8,022.12	30.35	30.41	126.69	-97.32	467.47	1,090.38	1,031.00	59.36	18.369	
8,100.00	8,053.58	8,073.13	8,068.28	30.52	30.57	126.72	-96.96	466.07	1,088.91	1,029.24	59.68	18.247	
8,150.00	8,103.58	8,118.33	8,113.45	30.68	30.72	126.75	-96.75	464.80	1,087.65	1,027.66	59.99	18.130	
8,200.00	8,153.58	8,162.13	8,157.25	30.85	30.86	126.79	-96.75	463.71	1,086.65	1,026.36	60.30	18.021	
8,250.00	8,203.58	8,206.06	8,201.17	31.02	31.00	126.83	-96.98	462.76	1,085.94	1,025.34	60.60	17.919	
8,300.00	8,253.58	8,250.76	8,245.85	31.18	31.14	126.88	-97.46	461.89	1,085.49	1,024.57	60.91	17.820	
8,350.00	8,303.58	8,295.45	8,290.53	31.35	31.29	126.93	-98.20	461.10	1,085.28	1,024.06	61.22	17.727	
8,367.15	8,320.73	8,310.75	8,305.83	31.41	31.34	126.95	-98.51	460.85	1,085.27	1,023.94	61.33	17.697	
8,400.00	8,353.58	8,340.04	8,335.11	31.52	31.43	126.99	-99.14	460.44	1,085.32	1,023.79	61.53	17.640	
8,450.00	8,403.58	8,384.63	8,379.68	31.69	31.57	127.05	-100.20	459.96	1,085.61	1,023.78	61.83	17.557	
8,500.00	8,453.58	8,432.99	8,428.02	31.86	31.73	127.11	-101.42	459.63	1,086.09	1,023.93	62.16	17.473	
8,550.00	8,503.58	8,483.33	8,478.35	32.02	31.89	127.17	-102.62	459.33	1,086.57	1,024.08	62.50	17.386	
8,600.00	8,553.58	8,533.63	8,528.64	32.19	32.05	127.23	-103.73	459.08	1,087.04	1,024.21	62.83	17.301	
8,650.00	8,603.57	8,583.88	8,578.87	32.36	32.22	77.69	-104.76	458.87	1,087.36	1,024.19	63.17	17.214	
8,700.00	8,653.31	8,633.81	8,628.79	32.52	32.38	78.06	-105.75	458.67	1,086.77	1,023.27	63.50	17.114	
8,750.00	8,702.35	8,682.94	8,677.91	32.69	32.54	78.76	-106.80	458.41	1,085.24	1,021.42	63.83	17.003	
8,800.00	8,750.26	8,730.20	8,725.16	32.84	32.69	79.76	-107.87	458.09	1,082.95	1,018.80	64.15	16.882	
8,850.00	8,796.59	8,775.48	8,770.42	32.99	32.84	81.00	-108.96	457.78	1,080.11	1,015.65	64.46	16.757	
8,900.00	8,840.93	8,820.66	8,815.59	33.13	32.98	82.49	-110.07	457.45	1,076.97	1,012.20	64.77	16.627	
8,950.00	8,882.87	8,865.77	8,860.69	33.27	33.13	84.19	-111.09	457.04	1,073.72	1,008.62	65.09	16.496	
9,000.00	8,922.02	8,907.78	8,902.68	33.39	33.27	85.95	-111.91	456.57	1,070.68	1,005.27	65.40	16.371	
9,050.00	8,968.04	8,942.83	8,937.53	33.50	33.38	87.53	-112.57	456.16	1,068.31	1,002.62	65.69	16.264	
9,100.00	8,990.60	8,974.53	8,969.42	33.60	33.48	89.00	-113.17	455.77	1,067.01	1,001.04	65.97	16.174	
9,121.85	9,003.55	8,987.16	8,982.05	33.63	33.52	89.56	-113.41	455.61	1,066.87	1,000.77	66.10	16.141	
9,150.00	9,019.40	9,002.57	8,997.45	33.68	33.57	90.23	-113.70	455.42	1,067.13	1,000.87	66.26	16.106	
9,200.00	9,044.59	9,026.33	9,021.21	33.78	33.65	89.58	-114.15	455.12	1,068.13	1,001.59	66.54	16.053	
9,250.00	9,067.40	9,047.79	9,042.66	33.89	33.72	88.33	-114.58	454.84	1,067.21	1,000.38	66.84	15.968	
9,300.00	9,087.75	9,066.83	9,061.69	34.02	33.78	87.48	-114.96	454.60	1,064.25	997.10	67.15	15.849	
9,350.00	9,105.47	9,083.28	9,078.14	34.21	33.84	86.99	-115.30	454.40	1,059.40	991.91	67.49	15.697	
9,400.00	9,120.38	9,097.01	9,091.87	34.48	33.88	86.81	-115.58	454.22	1,052.79	984.93	67.85	15.515	
9,450.00	9,132.37	9,108.32	9,103.18	34.80	33.92	86.94	-115.82	454.08	1,044.56	976.32	68.25	15.306	
9,500.00	9,141.30	9,116.73	9,111.58	35.18	33.95	87.33	-115.99	453.97	1,034.85	966.19	68.66	15.071	
9,550.00	9,147.11	9,121.98	9,116.83	35.60	33.96	87.94	-116.10	453.91	1,023.78	954.68	69.10	14.815	
9,600.00	9,149.74	9,124.01	9,118.86	36.05	33.97	88.75	-116.14	453.88	1,011.44	941.88	69.56	14.541	
9,650.00	9,149.91	9,123.54	9,118.39	36.54	33.97	89.02	-116.13	453.89	998.73	928.69	70.04	14.259	
9,700.00	9,149.91	9,122.90	9,117.75	37.07	33.97	88.98	-116.12	453.90	988.20	917.67	70.53	14.011	
9,750.00	9,149.91	9,122.26	9,117.11	37.66	33.96	88.94	-116.10	453.90	980.11	909.04	71.08	13.790	
9,800.00	9,149.91	9,121.62	9,116.47	38.26	33.96	88.91	-116.09	453.91	974.53	902.93	71.60	13.611	
9,850.00	9,149.91	9,120.98	9,115.83	38.95	33.96	88.87	-116.08	453.92	971.48	899.31	72.17	13.460	
9,884.22	9,149.91	9,120.54	9,115.39	39.42	33.96	88.84	-116.07	453.93	970.88	898.33	72.55	13.383	
9,900.00	9,149.91	9,120.34	9,115.19	39.64	33.96	88.83	-116.07	453.93	971.01	898.30	72.71	13.354	

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: Permit Plan 2

Local Co-ordinate Reference: Well Coral PWU 28-27 11H
TVD Reference: RKB1 @ 3325.90ft
MD Reference: RKB1 @ 3325.90ft
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

Offset Design Sec 28-T19S-R29E - Parkway Unit 16 (Active) - Wellbore #1 - Wellbore #1													Offset Site Error:	5.00 ft
Survey Program: 100-GYRO-NS-CT, 9900-MWD+IGRF													Offset Well Error:	10.00 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth Depth (ft)	Vertical Depth (ft)	Measured Depth 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		
9,950.00	9,149.91	9,119.69	9,114.54	40.39	33.96	88.79	-116.05	453.94	973.11	899.83	73.28	13.280		
10,000.00	9,149.91	9,119.05	9,113.90	41.16	33.95	88.75	-116.04	453.94	977.76	903.96	73.79	13.250 SF		
10,050.00	9,149.91	9,118.40	9,113.25	41.99	33.95	88.72	-116.03	453.95	984.93	910.61	74.32	13.252		
10,100.00	9,149.91	9,117.76	9,112.61	42.82	33.95	88.68	-116.01	453.96	994.57	919.78	74.79	13.299		
10,150.00	9,149.91	9,117.11	9,111.96	43.71	33.95	88.64	-116.00	453.97	1,006.60	931.35	75.25	13.377		
10,200.00	9,149.91	9,116.46	9,111.31	44.60	33.94	88.60	-115.99	453.98	1,020.93	945.29	75.65	13.496		
10,250.00	9,149.91	9,115.81	9,110.66	45.55	33.94	88.56	-115.97	453.98	1,037.49	961.45	76.03	13.645		
10,300.00	9,149.91	9,115.15	9,110.00	46.49	33.94	88.52	-115.96	453.99	1,056.15	979.80	76.35	13.832		
10,350.00	9,149.91	9,114.50	9,109.35	47.49	33.94	88.49	-115.95	454.00	1,076.81	1,000.15	76.66	14.047		
10,400.00	9,149.91	9,113.84	9,108.69	48.48	33.94	88.45	-115.93	454.01	1,099.36	1,022.46	76.90	14.295		
10,450.00	9,149.91	9,113.19	9,108.04	49.51	33.93	88.41	-115.92	454.02	1,123.68	1,046.55	77.13	14.568		
10,500.00	9,149.91	9,112.53	9,107.38	50.55	33.93	88.37	-115.91	454.02	1,149.66	1,072.36	77.31	14.871		
10,550.00	9,149.91	9,111.87	9,106.72	51.62	33.93	88.33	-115.89	454.03	1,177.20	1,099.73	77.47	15.195		
10,600.00	9,149.91	9,111.21	9,106.06	52.70	33.93	88.29	-115.88	454.04	1,206.18	1,128.59	77.59	15.545		
10,650.00	9,149.91	9,110.55	9,105.40	53.80	33.93	88.25	-115.87	454.05	1,236.50	1,158.80	77.70	15.914		
10,700.00	9,149.91	9,109.89	9,104.74	54.91	33.92	88.21	-115.85	454.06	1,268.07	1,190.30	77.77	16.306		
10,750.00	9,149.91	9,109.22	9,104.07	56.04	33.92	88.17	-115.84	454.07	1,300.79	1,222.96	77.83	16.713		
10,800.00	9,149.91	9,108.56	9,103.41	57.18	33.92	88.13	-115.82	454.07	1,334.59	1,256.72	77.87	17.140		
10,850.00	9,149.91	9,107.89	9,102.74	58.34	33.92	88.10	-115.81	454.08	1,369.37	1,291.48	77.89	17.580		
10,900.00	9,149.91	9,107.22	9,102.07	59.50	33.91	88.06	-115.80	454.09	1,405.08	1,327.18	77.90	18.037		
10,950.00	9,149.91	9,106.55	9,101.40	60.68	33.91	88.02	-115.78	454.10	1,441.63	1,363.73	77.90	18.505		
11,000.00	9,149.91	9,105.88	9,100.73	61.86	33.91	87.98	-115.77	454.11	1,478.97	1,401.08	77.89	18.988		

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: Permit Plan 2

Local Co-ordinate Reference: Well Coral PWU 28-27 11H
TVD Reference: RKB1 @ 3325.90ft
MD Reference: RKB1 @ 3325.90ft
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

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	-86.53	85.19	-1,406.29	1,408.97				
50.00	50.00	33.10	33.10	5.03	11.19	-86.53	85.19	-1,406.29	1,408.87	1,392.68	16.21	86.909	
100.00	100.00	83.10	83.10	5.03	11.23	-86.53	85.19	-1,406.29	1,408.87	1,392.61	16.26	86.643	
150.00	150.00	133.10	133.10	5.03	11.33	-86.53	85.19	-1,406.29	1,408.87	1,392.50	16.37	86.085	
200.00	200.00	183.10	183.10	5.05	11.48	-86.53	85.19	-1,406.29	1,408.87	1,392.34	16.53	85.252	
250.00	250.00	233.10	233.10	5.07	11.67	-86.53	85.19	-1,406.29	1,408.87	1,392.13	16.74	84.169	
300.00	300.00	283.10	283.10	5.10	11.91	-86.53	85.19	-1,406.29	1,408.87	1,391.86	17.00	82.867	
350.00	350.00	333.10	333.10	5.13	12.18	-86.53	85.19	-1,406.29	1,408.87	1,391.55	17.31	81.380	
400.00	400.00	383.10	383.10	5.17	12.50	-86.53	85.19	-1,406.29	1,408.87	1,391.20	17.67	79.743	
450.00	450.00	433.10	433.10	5.21	12.85	-86.53	85.19	-1,406.29	1,408.87	1,390.80	18.06	77.990	
500.00	500.00	483.10	483.10	5.26	13.24	-86.53	85.19	-1,406.29	1,408.87	1,390.37	18.50	76.152	
550.00	550.00	533.10	533.10	5.32	13.65	-86.53	85.19	-1,406.29	1,408.87	1,389.89	18.97	74.259	
600.00	600.00	583.10	583.10	5.38	14.10	-86.53	85.19	-1,406.29	1,408.87	1,389.39	19.48	72.334	
650.00	650.00	633.10	633.10	5.45	14.56	-86.53	85.19	-1,406.29	1,408.87	1,388.85	20.01	70.401	
700.00	700.00	683.10	683.10	5.52	15.06	-86.53	85.19	-1,406.29	1,408.87	1,388.29	20.57	68.475	
750.00	750.00	733.10	733.10	5.60	15.57	-86.53	85.19	-1,406.29	1,408.87	1,387.70	21.16	66.573	
800.00	800.00	783.10	783.10	5.68	16.10	-86.53	85.19	-1,406.29	1,408.87	1,387.09	21.77	64.704	
850.00	850.00	833.10	833.10	5.76	16.64	-86.53	85.19	-1,406.29	1,408.87	1,386.46	22.41	62.877	
900.00	900.00	883.10	883.10	5.85	17.21	-86.53	85.19	-1,406.29	1,408.87	1,385.81	23.06	61.099	
950.00	950.00	933.10	933.10	5.95	17.78	-86.53	85.19	-1,406.29	1,408.87	1,385.14	23.73	59.374	
1,000.00	1,000.00	983.10	983.10	6.04	18.37	-86.53	85.19	-1,406.29	1,408.87	1,384.45	24.41	57.705	
1,050.00	1,050.00	1,033.10	1,033.10	6.15	18.97	-86.53	85.19	-1,406.29	1,408.87	1,383.75	25.12	56.094	
1,100.00	1,100.00	1,083.10	1,083.10	6.25	19.58	-86.53	85.19	-1,406.29	1,408.87	1,383.03	25.83	54.542	
1,150.00	1,150.00	1,133.10	1,133.10	6.36	20.20	-86.53	85.19	-1,406.29	1,408.87	1,382.31	26.56	53.047	
1,200.00	1,200.00	1,183.10	1,183.10	6.47	20.83	-86.53	85.19	-1,406.29	1,408.87	1,381.57	27.30	51.611	
1,250.00	1,250.00	1,233.10	1,233.10	6.58	21.46	-86.53	85.19	-1,406.29	1,408.87	1,380.82	28.05	50.231	
1,300.00	1,300.00	1,283.10	1,283.10	6.70	22.11	-86.53	85.19	-1,406.29	1,408.87	1,380.06	28.81	48.905	
1,350.00	1,350.00	1,333.10	1,333.10	6.82	22.76	-86.53	85.19	-1,406.29	1,408.87	1,379.29	29.58	47.633	
1,400.00	1,400.00	1,383.10	1,383.10	6.94	23.41	-86.53	85.19	-1,406.29	1,408.87	1,378.51	30.35	46.413	
1,450.00	1,450.00	1,433.10	1,433.10	7.07	24.07	-86.53	85.19	-1,406.29	1,408.87	1,377.73	31.14	45.242	
1,500.00	1,500.00	1,483.10	1,483.10	7.20	24.74	-86.53	85.19	-1,406.29	1,408.87	1,376.93	31.93	44.119	
1,550.00	1,550.00	1,533.10	1,533.10	7.33	25.41	-86.53	85.19	-1,406.29	1,408.87	1,376.13	32.73	43.041	
1,600.00	1,600.00	1,583.10	1,583.10	7.46	26.08	-86.53	85.19	-1,406.29	1,408.87	1,375.33	33.54	42.006	
1,650.00	1,650.00	1,633.10	1,633.10	7.59	26.76	-86.53	85.19	-1,406.29	1,408.87	1,374.51	34.35	41.013	
1,700.00	1,700.00	1,683.10	1,683.10	7.73	27.44	-86.53	85.19	-1,406.29	1,408.87	1,373.70	35.17	40.060	
1,750.00	1,750.00	1,733.10	1,733.10	7.86	28.13	-86.53	85.19	-1,406.29	1,408.87	1,372.87	35.99	39.144	
1,800.00	1,800.00	1,783.10	1,783.10	8.00	28.82	-86.53	85.19	-1,406.29	1,408.87	1,372.05	36.82	38.265	
1,850.00	1,850.00	1,833.10	1,833.10	8.14	29.51	-86.53	85.19	-1,406.29	1,408.87	1,371.21	37.65	37.419	
1,900.00	1,900.00	1,883.10	1,883.10	8.28	30.20	-86.53	85.19	-1,406.29	1,408.87	1,370.38	38.49	36.606	
1,950.00	1,950.00	1,933.10	1,933.10	8.43	30.90	-86.53	85.19	-1,406.29	1,408.87	1,369.54	39.33	35.824	
2,000.00	2,000.00	1,983.10	1,983.10	8.57	31.60	-86.53	85.19	-1,406.29	1,408.87	1,368.69	40.17	35.071	
2,050.00	2,050.00	2,033.10	2,033.10	8.72	32.30	-86.53	85.19	-1,406.29	1,408.87	1,367.85	41.02	34.347	
2,100.00	2,100.00	2,083.10	2,083.10	8.86	33.01	-86.53	85.19	-1,406.29	1,408.87	1,367.00	41.87	33.649	
2,150.00	2,150.00	2,133.10	2,133.10	9.01	33.71	-86.53	85.19	-1,406.29	1,408.87	1,366.14	42.72	32.976	
2,200.00	2,200.00	2,183.10	2,183.10	9.16	34.42	-86.53	85.19	-1,406.29	1,408.87	1,365.29	43.58	32.328	
2,250.00	2,250.00	2,233.10	2,233.10	9.31	35.13	-86.53	85.19	-1,406.29	1,408.87	1,364.43	44.44	31.703	
2,300.00	2,300.00	2,283.10	2,283.10	9.46	35.84	-86.53	85.19	-1,406.29	1,408.87	1,363.56	45.30	31.099	
2,350.00	2,350.00	2,333.10	2,333.10	9.62	36.55	-86.53	85.19	-1,406.29	1,408.87	1,362.70	46.17	30.517	
2,400.00	2,400.00	2,383.10	2,383.10	9.77	37.27	-86.53	85.19	-1,406.29	1,408.87	1,361.83	47.03	29.954	
2,450.00	2,450.00	2,433.10	2,433.10	9.92	37.98	-86.53	85.19	-1,406.29	1,408.87	1,360.96	47.90	29.411	
2,500.00	2,500.00	2,483.10	2,483.10	10.08	38.70	-86.53	85.19	-1,406.29	1,408.87	1,360.09	48.77	28.885	

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: Permit Plan 2

Local Co-ordinate Reference: Well Coral PWU 28-27 11H
TVD Reference: RKB1 @ 3325.90ft
MD Reference: RKB1 @ 3325.90ft
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

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	
2,550.00	2,550.00	2,533.10	2,533.10	10.23	39.42	-50.27	85.19	-1,406.29	1,408.73	1,359.08	49.65	28.375	
2,600.00	2,599.99	2,583.09	2,583.09	10.39	40.13	-50.30	85.19	-1,406.29	1,408.31	1,357.79	50.52	27.875	
2,650.00	2,649.98	2,633.08	2,633.08	10.54	40.85	-50.34	85.19	-1,406.29	1,407.61	1,356.21	51.40	27.387	
2,700.00	2,699.96	2,683.06	2,683.06	10.70	41.57	-50.39	85.19	-1,406.29	1,406.64	1,354.36	52.27	26.909	
2,750.00	2,749.92	2,733.02	2,733.02	10.86	42.30	-50.46	85.19	-1,406.29	1,405.39	1,352.23	53.15	26.441	
2,800.00	2,799.86	2,782.96	2,782.96	11.02	43.02	-50.55	85.19	-1,406.29	1,403.86	1,349.83	54.03	25.982	
2,850.00	2,849.78	2,832.88	2,832.88	11.18	43.74	-50.65	85.19	-1,406.29	1,402.06	1,347.15	54.91	25.533	
2,900.00	2,899.68	2,882.78	2,882.78	11.34	44.46	-50.77	85.19	-1,406.29	1,399.99	1,344.19	55.79	25.092	
2,950.00	2,949.54	2,932.64	2,932.64	11.50	45.19	-50.91	85.19	-1,406.29	1,397.64	1,340.97	56.68	24.660	
3,000.00	2,999.37	2,982.47	2,982.47	11.66	45.91	-51.06	85.19	-1,406.29	1,395.03	1,337.47	57.56	24.236	
3,050.00	3,049.16	3,032.26	3,032.26	11.82	46.63	-51.23	85.19	-1,406.29	1,392.15	1,333.71	58.44	23.820	
3,100.00	3,098.90	3,082.00	3,082.00	11.98	47.36	-51.41	85.19	-1,406.29	1,389.01	1,329.68	59.33	23.412	
3,150.00	3,148.61	3,131.71	3,131.71	12.14	48.08	-51.62	85.19	-1,406.29	1,385.61	1,325.40	60.21	23.011	
3,200.00	3,198.26	3,181.36	3,181.36	12.31	48.81	-51.83	85.19	-1,406.29	1,381.96	1,320.86	61.10	22.618	
3,250.00	3,247.86	3,230.96	3,230.96	12.47	49.53	-52.07	85.19	-1,406.29	1,378.05	1,316.06	61.99	22.231	
3,300.00	3,297.40	3,280.50	3,280.50	12.64	50.25	-52.32	85.19	-1,406.29	1,373.89	1,311.02	62.87	21.851	
3,350.00	3,346.91	3,330.01	3,330.01	12.81	50.98	-52.56	85.19	-1,406.29	1,369.57	1,305.81	63.76	21.479	
3,400.00	3,396.41	3,379.51	3,379.51	12.98	51.70	-52.80	85.19	-1,406.29	1,365.27	1,300.62	64.65	21.117	
3,450.00	3,445.91	3,429.01	3,429.01	13.15	52.42	-53.03	85.19	-1,406.29	1,360.99	1,295.45	65.54	20.765	
3,500.00	3,495.41	3,478.51	3,478.51	13.32	53.15	-53.27	85.19	-1,406.29	1,356.74	1,290.30	66.43	20.422	
3,550.00	3,544.91	3,528.01	3,528.01	13.49	53.87	-53.51	85.19	-1,406.29	1,352.50	1,285.18	67.33	20.088	
3,600.00	3,594.41	3,577.51	3,577.51	13.66	54.60	-53.74	85.19	-1,406.29	1,348.30	1,280.07	68.22	19.763	
3,650.00	3,643.91	3,627.01	3,627.01	13.83	55.32	-53.99	85.19	-1,406.29	1,344.11	1,274.99	69.12	19.447	
3,700.00	3,693.41	3,676.51	3,676.51	14.01	56.05	-54.23	85.19	-1,406.29	1,339.95	1,269.94	70.01	19.138	
3,750.00	3,742.91	3,726.01	3,726.01	14.18	56.78	-54.47	85.19	-1,406.29	1,335.81	1,264.90	70.91	18.837	
3,800.00	3,792.41	3,775.51	3,775.51	14.36	57.51	-54.72	85.19	-1,406.29	1,331.70	1,259.89	71.81	18.544	
3,850.00	3,841.91	3,825.01	3,825.01	14.53	58.23	-54.96	85.19	-1,406.29	1,327.61	1,254.90	72.71	18.258	
3,900.00	3,891.41	3,874.51	3,874.51	14.71	58.96	-55.21	85.19	-1,406.29	1,323.55	1,249.94	73.61	17.980	
3,950.00	3,940.91	3,924.01	3,924.01	14.89	59.69	-55.46	85.19	-1,406.29	1,319.51	1,245.00	74.52	17.708	
4,000.00	3,990.41	3,973.51	3,973.51	15.06	60.42	-55.71	85.19	-1,406.29	1,315.50	1,240.08	75.42	17.443	
4,050.00	4,039.91	4,023.01	4,023.01	15.24	61.15	-55.97	85.19	-1,406.29	1,311.52	1,235.19	76.32	17.184	
4,100.00	4,089.41	4,072.51	4,072.51	15.42	61.88	-56.22	85.19	-1,406.29	1,307.56	1,230.33	77.23	16.931	
4,150.00	4,138.91	4,122.01	4,122.01	15.60	62.60	-56.48	85.19	-1,406.29	1,303.62	1,225.49	78.13	16.685	
4,200.00	4,188.41	4,171.51	4,171.51	15.78	63.33	-56.73	85.19	-1,406.29	1,299.71	1,220.67	79.04	16.444	
4,250.00	4,237.91	4,221.01	4,221.01	15.96	64.06	-56.99	85.19	-1,406.29	1,295.83	1,215.88	79.95	16.208	
4,300.00	4,287.41	4,270.51	4,270.51	16.14	64.80	-57.25	85.19	-1,406.29	1,291.98	1,211.12	80.86	15.979	
4,350.00	4,336.91	4,320.01	4,320.01	16.33	65.53	-57.51	85.19	-1,406.29	1,288.15	1,206.38	81.77	15.754	
4,400.00	4,386.41	4,369.51	4,369.51	16.51	66.26	-57.78	85.19	-1,406.29	1,284.35	1,201.67	82.68	15.535	
4,450.00	4,435.91	4,419.01	4,419.01	16.69	66.99	-58.04	85.19	-1,406.29	1,280.58	1,196.99	83.59	15.320	
4,500.00	4,485.41	4,468.51	4,468.51	16.87	67.72	-58.31	85.19	-1,406.29	1,276.83	1,192.33	84.50	15.111	
4,550.00	4,534.91	4,518.01	4,518.01	17.06	68.45	-58.58	85.19	-1,406.29	1,273.12	1,187.71	85.41	14.906	
4,600.00	4,584.42	4,567.52	4,567.52	17.24	69.18	-58.85	85.19	-1,406.29	1,269.43	1,183.10	86.32	14.706	
4,650.00	4,633.92	4,617.02	4,617.02	17.43	69.91	-59.12	85.19	-1,406.29	1,265.77	1,178.53	87.24	14.510	
4,700.00	4,683.42	4,666.52	4,666.52	17.61	70.65	-59.39	85.19	-1,406.29	1,262.14	1,173.98	88.15	14.318	
4,750.00	4,732.92	4,716.02	4,716.02	17.80	71.38	-59.66	85.19	-1,406.29	1,258.53	1,169.47	89.07	14.130	
4,800.00	4,782.42	4,765.52	4,765.52	17.98	72.11	-59.94	85.19	-1,406.29	1,254.98	1,164.98	89.98	13.947	
4,850.00	4,831.92	4,815.02	4,815.02	18.17	72.84	-60.22	85.19	-1,406.29	1,251.42	1,160.52	90.90	13.767	
4,900.00	4,881.42	4,864.52	4,864.52	18.35	73.58	-60.50	85.19	-1,406.29	1,247.90	1,156.09	91.81	13.592	
4,950.00	4,930.92	4,914.02	4,914.02	18.54	74.31	-60.78	85.19	-1,406.29	1,244.42	1,151.69	92.73	13.420	
5,000.00	4,980.42	4,963.52	4,963.52	18.73	75.04	-61.06	85.19	-1,406.29	1,240.97	1,147.32	93.65	13.251	
5,050.00	5,029.92	5,013.02	5,013.02	18.92	75.78	-61.34	85.19	-1,406.29	1,237.54	1,142.97	94.57	13.086	

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: Permit Plan 2

Local Co-ordinate Reference: Well Coral PWU 28-27 11H
TVD Reference: RKB1 @ 3325.90ft
MD Reference: RKB1 @ 3325.90ft
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

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	5,079.42	5,062.52	5,062.52	19.10	76.51	-61.63	85.19	-1,406.29	1,234.15	1,138.66	95.49	12.925	
5,150.00	5,128.92	5,112.02	5,112.02	19.29	77.24	-61.91	85.19	-1,406.29	1,230.79	1,134.38	96.41	12.767	
5,200.00	5,178.42	5,161.52	5,161.52	19.48	77.98	-62.20	85.19	-1,406.29	1,227.48	1,130.13	97.33	12.612	
5,250.00	5,227.92	5,211.02	5,211.02	19.67	78.71	-62.49	85.19	-1,406.29	1,224.16	1,125.91	98.25	12.460	
5,300.00	5,277.42	5,260.52	5,260.52	19.86	79.44	-62.78	85.19	-1,406.29	1,220.90	1,121.73	99.17	12.311	
5,350.00	5,326.92	5,310.02	5,310.02	20.05	80.18	-63.08	85.19	-1,406.29	1,217.66	1,117.57	100.09	12.166	
5,400.00	5,376.42	5,359.52	5,359.52	20.24	80.91	-63.37	85.19	-1,406.29	1,214.46	1,113.45	101.01	12.023	
5,450.00	5,425.92	5,409.02	5,409.02	20.42	81.65	-63.67	85.19	-1,406.29	1,211.29	1,109.35	101.94	11.883	
5,500.00	5,475.42	5,458.52	5,458.52	20.61	82.38	-63.96	85.19	-1,406.29	1,208.15	1,105.29	102.86	11.746	
5,550.00	5,524.92	5,508.02	5,508.02	20.80	83.12	-64.26	85.19	-1,406.29	1,205.05	1,101.27	103.78	11.611	
5,600.00	5,574.42	5,557.52	5,557.52	20.99	83.85	-64.56	85.19	-1,406.29	1,201.98	1,097.27	104.71	11.479	
5,650.00	5,623.92	5,607.02	5,607.02	21.19	84.59	-64.86	85.19	-1,406.29	1,198.94	1,093.31	105.63	11.350	
5,700.00	5,673.42	5,656.52	5,656.52	21.38	85.32	-65.17	85.19	-1,406.29	1,195.94	1,089.38	106.56	11.223	
5,750.00	5,722.92	5,706.02	5,706.02	21.57	86.06	-65.47	85.19	-1,406.29	1,192.97	1,085.49	107.48	11.099	
5,800.00	5,772.42	5,755.52	5,755.52	21.76	86.79	-65.78	85.19	-1,406.29	1,190.04	1,081.63	108.41	10.977	
5,850.00	5,821.93	5,805.03	5,805.03	21.95	87.53	-66.09	85.19	-1,406.29	1,187.14	1,077.80	109.34	10.858	
5,900.00	5,871.43	5,854.53	5,854.53	22.14	88.26	-66.39	85.19	-1,406.29	1,184.27	1,074.01	110.26	10.741	
5,950.00	5,920.93	5,904.03	5,904.03	22.33	89.00	-66.71	85.19	-1,406.29	1,181.44	1,070.25	111.19	10.626	
6,000.00	5,970.43	5,953.53	5,953.53	22.53	89.73	-67.02	85.19	-1,406.29	1,178.65	1,066.53	112.12	10.513	
6,050.00	6,019.93	6,003.03	6,003.03	22.72	90.47	-67.33	85.19	-1,406.29	1,175.89	1,062.85	113.04	10.402	
6,100.00	6,069.43	6,052.53	6,052.53	22.91	91.21	-67.65	85.19	-1,406.29	1,173.17	1,059.20	113.97	10.293	
6,150.00	6,118.93	6,102.03	6,102.03	23.10	91.94	-67.96	85.19	-1,406.29	1,170.48	1,055.58	114.90	10.187	
6,200.00	6,168.43	6,151.53	6,151.53	23.29	92.68	-68.28	85.19	-1,406.29	1,167.83	1,052.00	115.83	10.082	
6,250.00	6,217.93	6,201.03	6,201.03	23.49	93.41	-68.60	85.19	-1,406.29	1,165.22	1,048.46	116.76	9.980	
6,300.00	6,267.43	6,250.53	6,250.53	23.68	94.15	-68.92	85.19	-1,406.29	1,162.64	1,044.95	117.69	9.879	
6,350.00	6,316.93	6,300.03	6,300.03	23.87	94.89	-69.24	85.19	-1,406.29	1,160.10	1,041.48	118.62	9.780	
6,400.00	6,366.43	6,349.53	6,349.53	24.07	95.62	-69.57	85.19	-1,406.29	1,157.60	1,038.05	119.55	9.683	
6,450.00	6,415.93	6,399.03	6,399.03	24.26	96.36	-69.89	85.19	-1,406.29	1,155.14	1,034.65	120.48	9.588	
6,500.00	6,465.43	6,448.53	6,448.53	24.45	97.10	-70.22	85.19	-1,406.29	1,152.71	1,031.30	121.41	9.494	
6,550.00	6,514.93	6,498.03	6,498.03	24.65	97.83	-70.54	85.19	-1,406.29	1,150.32	1,027.98	122.35	9.402	
6,600.00	6,564.43	6,547.53	6,547.53	24.84	98.57	-70.87	85.19	-1,406.29	1,147.97	1,024.69	123.28	9.312	
6,650.00	6,613.93	6,597.03	6,597.03	25.04	99.31	-71.20	85.19	-1,406.29	1,145.66	1,021.45	124.21	9.224	
6,700.00	6,663.43	6,646.53	6,646.53	25.23	100.04	-71.53	85.19	-1,406.29	1,143.39	1,018.24	125.14	9.137	
6,750.00	6,712.93	6,696.03	6,696.03	25.42	100.78	-71.87	85.19	-1,406.29	1,141.15	1,015.08	126.07	9.051	
6,800.00	6,762.43	6,745.53	6,745.53	25.62	101.52	-72.20	85.19	-1,406.29	1,138.96	1,011.95	127.01	8.968	
6,850.00	6,811.93	6,795.03	6,795.03	25.81	102.25	-72.54	85.19	-1,406.29	1,136.80	1,008.86	127.94	8.885	
6,900.00	6,861.43	6,844.53	6,844.53	26.01	102.99	-72.87	85.19	-1,406.29	1,134.69	1,005.81	128.87	8.805	
6,950.00	6,910.93	6,894.03	6,894.03	26.20	103.73	-73.21	85.19	-1,406.29	1,132.61	1,002.80	129.81	8.725	
7,000.00	6,960.43	6,943.53	6,943.53	26.40	104.47	-73.55	85.19	-1,406.29	1,130.58	999.83	130.74	8.647	
7,050.00	7,009.93	6,993.03	6,993.03	26.59	105.20	-73.89	85.19	-1,406.29	1,128.58	996.90	131.68	8.571	
7,100.00	7,059.44	7,042.54	7,042.54	26.79	105.94	-74.23	85.19	-1,406.29	1,126.63	994.02	132.61	8.496	
7,150.00	7,108.94	7,092.04	7,092.04	26.98	106.68	-74.57	85.19	-1,406.29	1,124.71	991.17	133.55	8.422	
7,200.00	7,158.44	7,141.54	7,141.54	27.18	107.41	-74.92	85.19	-1,406.29	1,122.84	988.36	134.48	8.349	
7,250.00	7,207.94	7,191.04	7,191.04	27.37	108.15	-75.26	85.19	-1,406.29	1,121.01	985.59	135.42	8.278	
7,300.00	7,257.44	7,240.54	7,240.54	27.57	108.89	-75.61	85.19	-1,406.29	1,119.22	982.87	136.35	8.208	
7,350.00	7,306.94	7,290.04	7,290.04	27.77	109.63	-75.95	85.19	-1,406.29	1,117.47	980.18	137.29	8.140	
7,400.00	7,356.44	7,339.54	7,339.54	27.96	110.37	-76.30	85.19	-1,406.29	1,115.77	977.54	138.22	8.072	
7,450.00	7,405.94	7,389.04	7,389.04	28.16	111.10	-76.65	85.19	-1,406.29	1,114.10	974.94	139.16	8.006	
7,500.00	7,455.44	7,438.54	7,438.54	28.35	111.84	-77.00	85.19	-1,406.29	1,112.48	972.38	140.10	7.941	
7,550.00	7,504.97	7,488.07	7,488.07	28.55	112.58	-77.32	85.19	-1,406.29	1,110.95	969.92	141.03	7.877	
7,600.00	7,554.59	7,537.69	7,537.69	28.74	113.32	-77.61	85.19	-1,406.29	1,109.61	967.64	141.97	7.816	

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: Permit Plan 2

Local Co-ordinate Reference
 TVD Reference: RKB1 @ 3325.90ft
 MD Reference: RKB1 @ 3325.90ft
 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

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 Tooface (ft)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
7,650.00	7,604.29	7,587.39	7,587.39	28.93	114.06	-77.87	85.19	-1,406.29	1,108.43	965.54	142.90	7.757	
7,700.00	7,654.05	7,637.15	7,637.15	29.12	114.80	-78.10	85.19	-1,406.29	1,107.42	963.59	143.83	7.700	
7,750.00	7,703.87	7,686.97	7,686.97	29.30	115.54	-78.30	85.19	-1,406.29	1,106.55	961.80	144.76	7.644	
7,800.00	7,753.75	7,736.85	7,736.85	29.48	116.29	-78.47	85.19	-1,406.29	1,105.84	960.15	145.68	7.591	
7,850.00	7,803.68	7,786.76	7,786.76	29.66	117.03	-78.60	85.19	-1,406.29	1,105.26	958.65	146.61	7.539	
7,900.00	7,853.61	7,836.71	7,836.71	29.84	117.78	-78.71	85.19	-1,406.29	1,104.82	957.29	147.53	7.489	
7,950.00	7,903.59	7,886.69	7,886.69	30.01	118.52	-78.79	85.19	-1,406.29	1,104.51	956.06	148.45	7.440	
8,000.00	7,953.58	7,936.68	7,936.68	30.18	119.27	-78.83	85.19	-1,406.29	1,104.33	954.96	149.37	7.393	
8,050.00	8,003.58	7,986.68	7,986.68	30.35	120.01	-115.12	85.19	-1,406.29	1,104.27	953.99	150.28	7.348	
8,100.00	8,053.58	8,036.68	8,036.68	30.52	120.76	-115.12	85.19	-1,406.29	1,104.27	953.08	151.19	7.304	
8,150.00	8,103.58	8,086.68	8,086.68	30.68	121.51	-115.12	85.19	-1,406.29	1,104.27	952.17	152.11	7.260	
8,200.00	8,153.58	8,136.68	8,136.68	30.85	122.25	-115.12	85.19	-1,406.29	1,104.27	951.25	153.02	7.217	
8,250.00	8,203.58	8,186.68	8,186.68	31.02	123.00	-115.12	85.19	-1,406.29	1,104.27	950.34	153.93	7.174	
8,300.00	8,253.58	8,236.68	8,236.68	31.18	123.74	-115.12	85.19	-1,406.29	1,104.27	949.43	154.85	7.131	
8,350.00	8,303.58	8,286.68	8,286.68	31.35	124.49	-115.12	85.19	-1,406.29	1,104.27	948.51	155.76	7.090	
8,400.00	8,353.58	8,336.68	8,336.68	31.52	125.24	-115.12	85.19	-1,406.29	1,104.27	947.60	156.67	7.048	
8,450.00	8,403.58	8,386.68	8,386.68	31.69	125.98	-115.12	85.19	-1,406.29	1,104.27	946.69	157.59	7.007	
8,500.00	8,453.58	8,436.68	8,436.68	31.86	126.73	-115.12	85.19	-1,406.29	1,104.27	945.77	158.50	6.967	
8,550.00	8,503.58	8,486.68	8,486.68	32.02	127.47	-115.12	85.19	-1,406.29	1,104.27	944.86	159.42	6.927	
8,600.00	8,553.58	8,536.68	8,536.68	32.19	128.22	-115.12	85.19	-1,406.29	1,104.27	943.94	160.33	6.888	CC
8,601.71	8,555.29	8,538.39	8,538.39	32.20	128.24	-164.73	85.19	-1,406.29	1,104.28	943.91	160.36	6.886	
8,650.00	8,603.57	8,586.67	8,586.67	32.36	128.97	-164.72	85.19	-1,406.29	1,104.92	943.68	161.24	6.853	ES
8,700.00	8,653.31	8,636.41	8,636.41	32.52	129.71	-164.65	85.19	-1,406.29	1,109.66	947.50	162.15	6.843	SF
8,750.00	8,702.35	8,685.45	8,685.45	32.69	130.44	-164.50	85.19	-1,406.29	1,118.94	955.89	163.05	6.863	
8,800.00	8,750.26	8,733.36	8,733.36	32.84	131.15	-164.28	85.19	-1,406.29	1,132.71	968.78	163.93	6.910	
8,850.00	8,796.59	8,779.69	8,779.69	32.99	131.85	-163.95	85.19	-1,406.29	1,150.83	986.05	164.78	6.984	
8,900.00	8,840.93	8,824.03	8,824.03	33.13	132.51	-163.50	85.19	-1,406.29	1,173.17	1,007.58	165.60	7.085	
8,950.00	8,882.87	8,865.97	8,865.97	33.27	133.13	-162.89	85.19	-1,406.29	1,199.53	1,033.17	166.36	7.210	
9,000.00	8,922.02	8,905.12	8,905.12	33.39	133.72	-162.08	85.19	-1,406.29	1,229.69	1,062.61	167.08	7.360	
9,050.00	8,958.04	8,941.14	8,941.14	33.50	134.26	-160.99	85.19	-1,406.29	1,263.38	1,095.64	167.74	7.532	
9,100.00	8,990.60	8,973.70	8,973.70	33.60	134.74	-159.52	85.19	-1,406.29	1,300.31	1,131.88	168.33	7.725	
9,150.00	9,019.40	9,002.50	9,002.50	33.69	135.17	-157.49	85.19	-1,406.29	1,340.16	1,171.30	168.86	7.937	
9,200.00	9,044.59	9,027.69	9,027.69	33.78	135.55	-162.18	85.19	-1,406.29	1,382.51	1,213.19	169.31	8.165	
9,250.00	9,067.40	9,050.50	9,050.50	33.89	135.89	-172.04	85.19	-1,406.29	1,426.73	1,257.02	169.71	8.407	
9,300.00	9,087.75	9,070.85	9,070.85	34.02	136.19	176.27	85.19	-1,406.29	1,472.37	1,302.31	170.06	8.658	

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: Permit Plan 2

Local Co-ordinate Reference: Well Coral PWU 28-27 11H
TVD Reference: RKB1 @ 3325.90ft
MD Reference: RKB1 @ 3325.90ft
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

Offset Design Sec 28-T19S-R29E - Turquoise PWU 27 10H - Original Hole - Actuals													Offset Site Error: 5.00 ft
Survey Program: 154-MWD+IGRF													Offset Well Error: 0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance				Minimum Separation (ft)	Separation Factor	Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)			
10,600.00	9,149.91	8,674.23	8,652.89	52.70	30.68	-60.92	1,782.50	2,222.45	1,495.21	1,427.73	67.47	22.160	
10,650.00	9,149.91	8,683.40	8,661.03	53.80	30.71	-61.30	1,782.31	2,226.67	1,460.36	1,392.00	68.36	21.363	
10,700.00	9,149.91	8,693.04	8,669.52	54.91	30.73	-61.70	1,782.10	2,231.22	1,426.27	1,356.94	69.33	20.574	
10,750.00	9,149.91	8,705.00	8,679.98	56.04	30.77	-62.19	1,781.83	2,237.02	1,392.97	1,322.55	70.41	19.783	
10,800.00	9,149.91	8,705.00	8,679.98	57.18	30.77	-62.19	1,781.83	2,237.02	1,360.56	1,289.09	71.47	19.036	
10,850.00	9,149.91	8,726.83	8,698.82	58.34	30.83	-63.10	1,781.29	2,248.02	1,328.88	1,256.05	72.83	18.247	
10,900.00	9,149.91	8,739.71	8,709.80	59.50	30.87	-63.83	1,780.93	2,254.75	1,298.17	1,223.98	74.19	17.499	
10,950.00	9,149.91	8,755.00	8,722.68	60.68	30.92	-64.26	1,780.47	2,262.98	1,268.42	1,192.75	75.66	16.764	
11,000.00	9,149.91	8,767.82	8,733.36	61.88	30.96	-64.79	1,780.05	2,270.07	1,239.66	1,162.45	77.21	16.056	
11,050.00	9,149.91	8,783.19	8,746.00	63.07	31.01	-65.42	1,779.52	2,278.79	1,211.93	1,133.06	78.87	15.366	
11,100.00	9,149.91	8,800.00	8,759.63	64.27	31.06	-66.11	1,778.89	2,288.60	1,185.29	1,104.67	80.62	14.702	
11,150.00	9,149.91	8,817.49	8,773.60	65.49	31.12	-66.82	1,778.18	2,299.10	1,159.75	1,077.28	82.47	14.063	
11,200.00	9,149.91	8,836.60	8,788.62	66.72	31.19	-67.60	1,777.34	2,310.88	1,135.34	1,050.95	84.39	13.454	
11,250.00	9,149.91	8,858.62	8,805.61	67.95	31.27	-68.48	1,776.29	2,324.86	1,112.08	1,025.68	86.40	12.872	
11,300.00	9,149.91	8,883.95	8,824.76	69.19	31.37	-69.49	1,774.89	2,341.36	1,089.90	1,001.43	88.47	12.319	
11,350.00	9,149.91	8,907.19	8,841.98	70.44	31.46	-70.41	1,773.48	2,356.91	1,068.83	978.23	90.61	11.797	
11,400.00	9,149.91	8,929.30	8,858.04	71.70	31.56	-71.28	1,772.14	2,372.05	1,049.02	956.24	92.78	11.307	
11,450.00	9,149.91	8,943.00	8,867.84	72.96	31.62	-71.81	1,771.33	2,381.59	1,030.55	935.56	94.99	10.849	
11,500.00	9,149.91	8,968.25	8,885.45	74.23	31.74	-72.79	1,769.85	2,399.63	1,013.48	916.22	97.24	10.422	
11,550.00	9,149.91	8,990.00	8,900.07	75.51	31.84	-73.61	1,768.93	2,415.71	997.96	898.45	99.51	10.029	
11,600.00	9,149.91	9,009.22	8,912.55	76.79	31.95	-74.32	1,768.13	2,430.30	983.97	882.18	101.78	9.667	
11,650.00	9,149.91	9,037.00	8,929.86	78.07	32.11	-75.31	1,767.10	2,451.99	971.48	867.43	104.05	9.336	
11,700.00	9,149.91	9,059.29	8,943.13	79.36	32.25	-76.09	1,766.34	2,469.88	960.38	854.07	106.31	9.034	
11,750.00	9,149.91	9,084.00	8,957.21	80.66	32.40	-76.91	1,765.52	2,490.18	950.61	842.07	108.54	8.758	
11,800.00	9,149.91	9,117.26	8,975.10	81.96	32.64	-77.97	1,764.50	2,518.20	942.09	831.35	110.74	8.507	
11,850.00	9,149.91	9,146.79	8,989.96	83.27	32.87	-78.86	1,763.72	2,543.70	934.83	821.91	112.92	8.279	
11,900.00	9,149.91	9,179.00	9,004.90	84.57	33.13	-79.76	1,763.06	2,572.22	928.82	813.77	115.05	8.074	
11,950.00	9,149.91	9,208.57	9,017.58	85.89	33.41	-80.53	1,762.65	2,598.93	923.97	806.82	117.15	7.887	
12,000.00	9,149.91	9,241.10	9,030.56	87.20	33.72	-81.33	1,762.45	2,628.75	920.22	801.00	119.22	7.719	
12,050.00	9,149.91	9,274.25	9,042.81	88.52	34.06	-82.09	1,762.57	2,659.56	917.54	796.28	121.26	7.567	
12,100.00	9,149.91	9,314.48	9,056.09	89.85	34.52	-82.91	1,762.91	2,697.53	915.70	792.39	123.31	7.426	
12,150.00	9,149.91	9,364.89	9,069.88	91.18	35.13	-83.77	1,763.12	2,746.01	914.27	788.86	125.41	7.290	
12,200.00	9,149.91	9,419.58	9,081.40	92.51	35.88	-84.49	1,762.67	2,799.46	912.75	785.21	127.53	7.157	
12,250.00	9,149.91	9,458.33	9,088.05	93.84	36.42	-84.90	1,762.30	2,837.63	911.46	781.85	129.60	7.033	
12,300.00	9,149.91	9,495.87	9,093.31	95.18	36.99	-85.23	1,762.27	2,874.79	910.82	779.16	131.66	6.918	
12,320.13	9,149.91	9,511.00	9,095.04	95.71	37.22	-85.34	1,762.38	2,889.83	910.76	778.28	132.48	6.875	
12,350.00	9,149.91	9,529.01	9,096.74	96.52	37.51	-85.45	1,762.64	2,907.75	910.96	777.29	133.67	6.815	
12,400.00	9,149.91	9,565.77	9,098.95	97.86	38.11	-85.59	1,763.64	2,944.43	912.06	776.36	135.70	6.721	
12,450.00	9,149.91	9,611.48	9,100.00	99.20	38.89	-85.67	1,765.10	2,990.11	913.57	775.73	137.84	6.628	
12,500.00	9,149.91	9,656.53	9,100.33	100.55	39.69	-85.69	1,766.75	3,035.13	915.36	775.35	140.01	6.538	
12,550.00	9,149.91	9,705.95	9,100.21	101.90	40.60	-85.70	1,768.66	3,084.51	917.29	775.03	142.27	6.448	
12,600.00	9,149.91	9,765.51	9,100.70	103.25	41.75	-85.74	1,770.67	3,144.03	918.95	774.21	144.74	6.349	
12,650.00	9,149.91	9,816.63	9,102.09	104.60	42.78	-85.83	1,772.07	3,195.11	920.21	773.09	147.12	6.255	
12,700.00	9,149.91	9,860.51	9,103.22	105.96	43.68	-85.90	1,773.47	3,238.96	921.71	772.30	149.41	6.169	
12,750.00	9,149.91	9,911.91	9,104.33	107.32	44.78	-85.98	1,775.36	3,290.31	923.47	771.61	151.86	6.081	
12,800.00	9,149.91	9,975.97	9,105.71	108.68	46.17	-86.07	1,777.01	3,354.33	924.68	770.13	154.56	5.983	
12,850.00	9,149.91	10,032.26	9,106.93	110.04	47.45	-86.15	1,777.82	3,410.61	925.32	768.16	157.16	5.888	
12,900.00	9,149.91	10,087.76	9,108.10	111.40	48.71	-86.23	1,778.28	3,466.09	925.67	765.91	159.75	5.794	
12,950.00	9,149.91	10,138.76	9,109.25	112.77	49.93	-86.30	1,778.55	3,517.07	925.86	763.52	162.33	5.703	
13,000.00	9,149.91	10,192.62	9,110.60	114.14	51.22	-86.38	1,778.71	3,570.91	925.93	760.97	164.97	5.613	
13,050.00	9,149.91	10,250.33	9,111.97	115.51	52.63	-86.47	1,778.48	3,628.61	925.66	757.98	167.68	5.520	

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: Permit Plan 2

Local Co-ordinate Reference
 TVD Reference: RKB1 @ 3325.90ft
 MD Reference: RKB1 @ 3325.90ft
 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

Offset Design Sec 28-T19S-R29E - Turquoise PWU 27 10H - Original Hole - Actuals													Offset Site Error: 5.00 ft
Survey Program: 154-MWD+IGRF													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	
13,100.00	9,149.91	10,314.06	9,113.50	116.88	54.21	-86.56	1,777.54	3,692.32	924.86	754.36	170.49	5.425	
13,150.00	9,149.91	10,382.90	9,115.65	118.25	55.95	-86.68	1,775.33	3,761.08	923.17	749.82	173.36	5.325	
13,200.00	9,149.91	10,458.81	9,118.42	119.62	57.89	-86.84	1,771.03	3,836.61	920.23	744.01	176.23	5.222	
13,250.00	9,149.91	10,505.87	9,120.03	121.00	59.12	-86.93	1,767.74	3,883.73	916.67	737.77	178.90	5.124	
13,300.00	9,149.91	10,553.03	9,121.15	122.37	60.35	-86.99	1,764.57	3,930.77	913.25	731.69	181.56	5.030	
13,350.00	9,149.91	10,599.54	9,121.86	123.75	61.59	-87.02	1,761.58	3,977.18	910.00	725.76	184.24	4.939	Alert
13,400.00	9,149.91	10,646.06	9,122.31	125.13	62.82	-87.04	1,758.75	4,023.62	906.93	720.01	186.92	4.852	Alert
13,450.00	9,149.91	10,690.58	9,122.51	126.51	64.02	-87.05	1,756.24	4,068.06	904.10	714.51	189.59	4.769	Alert
13,500.00	9,149.91	10,734.98	9,122.56	127.89	65.22	-87.04	1,754.00	4,112.41	901.58	709.32	192.26	4.689	Alert
13,550.00	9,149.91	10,777.49	9,122.60	129.27	66.37	-87.04	1,752.15	4,154.87	899.41	704.49	194.92	4.614	Alert
13,600.00	9,149.91	10,819.52	9,122.90	130.66	67.52	-87.05	1,750.70	4,196.88	897.67	700.11	197.56	4.544	Alert
13,650.00	9,149.91	10,863.21	9,123.44	132.04	68.72	-87.08	1,749.58	4,240.55	896.36	696.12	200.23	4.477	Alert
13,700.00	9,149.91	10,908.45	9,123.91	133.43	69.97	-87.11	1,748.67	4,285.78	895.33	692.40	202.93	4.412	Alert
13,750.00	9,149.91	10,952.75	9,124.21	134.81	71.20	-87.13	1,748.02	4,330.07	894.57	688.97	205.60	4.351	Alert
13,800.00	9,149.91	10,995.69	9,124.03	136.20	72.39	-87.12	1,747.68	4,373.02	894.19	685.94	208.25	4.294	Alert
13,823.53	9,149.91	11,015.91	9,123.75	136.85	72.95	-87.10	1,747.63	4,393.23	894.14	684.65	209.49	4.268	Alert, CC
13,850.00	9,149.91	11,039.37	9,123.29	137.59	73.61	-87.07	1,747.65	4,416.69	894.20	683.30	210.90	4.240	Alert
13,900.00	9,149.91	11,085.99	9,122.05	138.98	74.92	-86.99	1,747.83	4,463.28	894.46	680.85	213.61	4.187	Alert
13,950.00	9,149.91	11,132.73	9,120.42	140.37	76.23	-86.89	1,748.17	4,510.00	894.91	678.60	216.32	4.137	Alert
14,000.00	9,149.91	11,180.31	9,118.96	141.76	77.58	-86.80	1,748.67	4,557.55	895.52	676.47	219.05	4.088	Alert
14,050.00	9,149.91	11,228.01	9,118.01	143.15	78.92	-86.74	1,749.33	4,605.24	896.27	674.48	221.79	4.041	Alert
14,100.00	9,149.91	11,276.36	9,117.27	144.55	80.30	-86.69	1,750.11	4,653.58	897.12	672.56	224.56	3.995	Alert
14,150.00	9,149.91	11,323.55	9,116.55	145.94	81.64	-86.65	1,750.97	4,700.76	898.07	670.77	227.29	3.951	Alert
14,200.00	9,149.91	11,365.46	9,115.50	147.33	82.84	-86.59	1,751.98	4,742.64	899.35	669.46	229.89	3.912	Alert
14,250.00	9,149.91	11,407.31	9,113.80	148.73	84.04	-86.48	1,753.32	4,784.43	901.08	668.62	232.46	3.876	Alert
14,300.00	9,149.91	11,453.97	9,111.60	150.13	85.38	-86.35	1,755.12	4,831.01	903.14	667.98	235.16	3.841	Alert
14,350.00	9,149.91	11,501.26	9,109.71	151.52	86.73	-86.24	1,757.09	4,878.22	905.36	667.48	237.88	3.806	Alert
14,400.00	9,149.91	11,554.75	9,108.11	152.92	88.28	-86.15	1,759.36	4,931.63	907.57	666.77	240.81	3.769	Alert
14,450.00	9,149.91	11,614.76	9,107.22	154.32	90.01	-86.10	1,761.62	4,991.59	909.53	665.60	243.93	3.729	Alert
14,500.00	9,149.91	11,706.74	9,108.81	155.72	92.69	-86.21	1,762.45	5,083.55	909.92	662.17	247.75	3.673	Alert
14,550.00	9,149.91	11,754.39	9,110.95	157.12	94.08	-86.34	1,762.09	5,131.14	909.39	658.79	250.60	3.629	Alert
14,600.00	9,149.91	11,807.63	9,114.20	158.52	95.64	-86.54	1,761.54	5,184.28	908.68	655.12	253.56	3.584	Alert
14,650.00	9,149.91	11,861.40	9,117.84	159.92	97.22	-86.77	1,760.78	5,237.92	907.78	651.24	256.53	3.539	Alert
14,700.00	9,149.91	11,907.99	9,121.12	161.32	98.59	-86.97	1,760.04	5,284.39	906.79	647.40	259.38	3.496	Alert
14,750.00	9,149.91	11,949.78	9,124.06	162.72	99.82	-87.16	1,759.70	5,328.08	906.21	644.07	262.14	3.457	Alert
14,790.82	9,149.91	11,984.41	9,126.47	163.87	100.84	-87.31	1,759.70	5,360.61	906.07	641.68	264.39	3.427	Alert
14,800.00	9,149.91	11,992.45	9,127.01	164.12	101.08	-87.34	1,759.73	5,368.64	906.08	641.18	264.90	3.420	Alert
14,850.00	9,149.91	12,036.76	9,129.88	165.53	102.38	-87.53	1,760.06	5,412.85	906.29	638.62	267.87	3.386	Alert
14,900.00	9,149.91	12,084.36	9,132.69	166.93	103.79	-87.70	1,760.67	5,460.37	906.81	636.29	270.52	3.352	Alert
14,950.00	9,149.91	12,143.05	9,136.19	168.33	105.53	-87.93	1,761.13	5,518.95	907.09	633.46	273.63	3.315	Alert
15,000.00	9,149.91	12,196.45	9,139.42	169.74	107.11	-88.13	1,761.13	5,572.25	906.98	630.37	276.61	3.279	Alert
15,050.00	9,149.91	12,246.73	9,142.07	171.14	108.60	-88.30	1,761.07	5,622.46	906.84	627.31	279.52	3.244	Alert
15,100.00	9,149.91	12,298.69	9,144.46	172.55	110.15	-88.45	1,760.93	5,674.37	906.64	624.17	282.47	3.210	Alert
15,150.00	9,149.91	12,351.20	9,146.72	173.96	111.72	-88.59	1,760.65	5,726.83	906.32	620.89	285.43	3.175	Alert
15,200.00	9,149.91	12,403.73	9,148.91	175.36	113.28	-88.73	1,760.21	5,779.31	905.85	617.47	288.38	3.141	Alert
15,250.00	9,149.91	12,456.25	9,151.15	176.77	114.85	-88.87	1,759.63	5,831.79	905.26	613.92	291.34	3.107	Alert
15,300.00	9,149.91	12,506.00	9,153.10	178.18	116.34	-88.99	1,759.03	5,881.49	904.61	610.36	294.25	3.074	Alert
15,350.00	9,149.91	12,554.96	9,154.77	179.59	117.81	-89.10	1,758.42	5,930.42	903.96	606.82	297.14	3.042	Alert
15,400.00	9,149.91	12,600.95	9,156.14	180.99	119.19	-89.18	1,758.00	5,976.38	903.48	603.51	299.97	3.012	Alert
15,450.00	9,149.91	12,647.08	9,157.32	182.40	120.57	-89.26	1,757.78	6,022.50	903.22	600.41	302.81	2.983	Alert
15,490.46	9,149.91	12,684.74	9,158.15	183.54	121.70	-89.31	1,757.73	6,060.15	903.16	598.05	305.10	2.960	Alert

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: Permit Plan 2

Local Co-ordinate Reference: Well Coral PWU 28-27 11H
TVD Reference: RKB1 @ 3325.90ft
MD Reference: RKB1 @ 3325.90ft
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

Offset Design Sec 28-T19S-R29E - Turquoise PWU 27 10H - Original Hole - Actuals												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
15,500.00	9,149.91	12,693.63	9,158.33	183.81	121.97	-89.32	1,757.73	6,069.03	903.16	597.51	305.65	2.955 Alert	
15,550.00	9,149.91	12,741.25	9,159.20	185.22	123.40	-89.38	1,757.86	6,116.65	903.29	594.78	308.51	2.928 Alert	
15,600.00	9,149.91	12,793.24	9,160.04	186.63	124.97	-89.43	1,757.99	6,168.63	903.40	591.93	311.47	2.900 Alert	
15,650.00	9,149.91	12,843.91	9,160.75	188.04	126.49	-89.48	1,758.02	6,219.30	903.42	589.02	314.40	2.873 Alert	
15,700.00	9,149.91	12,892.52	9,160.95	189.45	127.95	-89.49	1,758.08	6,267.91	903.48	586.20	317.28	2.848 Alert	
15,750.00	9,149.91	12,940.42	9,160.66	190.86	129.40	-89.47	1,758.21	6,315.81	903.63	583.47	320.15	2.822 Alert	
15,800.00	9,149.91	12,987.39	9,160.50	192.27	130.81	-89.46	1,758.49	6,362.78	903.92	580.92	323.00	2.799 Alert	
15,850.00	9,149.91	13,034.45	9,160.58	193.68	132.23	-89.47	1,758.93	6,409.83	904.39	578.54	325.85	2.775 Alert	
15,900.00	9,149.91	13,081.62	9,160.83	195.10	133.66	-89.48	1,759.52	6,457.00	905.01	576.32	328.70	2.753 Alert	
15,950.00	9,149.91	13,133.67	9,161.29	196.51	135.23	-89.51	1,760.27	6,509.04	905.73	574.06	331.67	2.731 Alert	
16,000.00	9,149.91	13,191.94	9,162.07	197.92	136.99	-89.56	1,760.70	6,567.30	906.09	571.29	334.80	2.706 Alert	
16,050.00	9,149.91	13,244.54	9,162.89	199.33	138.58	-89.61	1,760.74	6,619.80	906.13	568.34	337.79	2.683 Alert	
16,100.00	9,149.91	13,295.96	9,163.45	200.75	140.14	-89.65	1,760.70	6,671.32	906.08	565.33	340.75	2.659 Alert	
16,150.00	9,149.91	13,356.27	9,164.04	202.16	141.97	-89.69	1,760.25	6,731.62	905.71	561.83	343.88	2.634 Alert	
16,200.00	9,149.91	13,410.18	9,164.65	203.58	143.61	-89.72	1,759.33	6,785.51	904.84	557.96	346.87	2.609 Alert	
16,250.00	9,149.91	13,455.23	9,165.01	204.99	144.98	-89.75	1,758.66	6,830.56	904.10	554.37	349.72	2.585 Alert	
16,300.00	9,149.91	13,500.82	9,165.14	206.40	146.36	-89.75	1,758.24	6,876.15	903.63	551.05	352.58	2.563 Alert	
16,350.00	9,149.91	13,547.42	9,164.95	207.82	147.78	-89.74	1,757.99	6,922.75	903.37	547.92	355.44	2.542 Alert	
16,400.00	9,149.91	13,596.24	9,164.36	209.23	149.26	-89.70	1,757.90	6,971.56	903.27	544.92	358.36	2.521 Alert	
16,450.00	9,149.91	13,649.69	9,163.33	210.65	150.89	-89.64	1,757.68	7,025.00	903.07	541.71	361.36	2.499 Minor Risk	
16,500.00	9,149.91	13,697.70	9,162.14	212.06	152.35	-89.56	1,757.38	7,073.00	902.77	538.51	364.26	2.478 Minor Risk	
16,526.62	9,149.91	13,721.02	9,161.55	212.82	153.06	-89.53	1,757.33	7,096.31	902.72	536.97	365.76	2.468 Minor Risk	
16,550.00	9,149.91	13,741.51	9,161.04	213.48	153.68	-89.49	1,757.36	7,116.80	902.76	535.69	367.06	2.459 Minor Risk	
16,600.00	9,149.91	13,788.62	9,159.88	214.90	155.12	-89.42	1,757.83	7,163.89	903.05	533.12	369.93	2.441 Minor Risk	
16,650.00	9,149.91	13,840.78	9,158.55	216.31	156.70	-89.34	1,757.89	7,216.03	903.32	530.39	372.92	2.422 Minor Risk	
16,700.00	9,149.91	13,893.55	9,157.13	217.73	158.31	-89.25	1,758.01	7,268.78	903.45	527.53	375.92	2.403 Minor Risk	
16,750.00	9,149.91	13,946.74	9,155.70	219.15	159.93	-89.16	1,757.95	7,321.96	903.41	524.48	378.93	2.384 Minor Risk	
16,800.00	9,149.91	13,999.43	9,154.24	220.56	161.54	-89.06	1,757.72	7,374.63	903.21	521.29	381.93	2.365 Minor Risk	
16,850.00	9,149.91	14,052.01	9,152.63	221.98	163.15	-88.96	1,757.33	7,427.18	902.87	517.95	384.91	2.346 Minor Risk	
16,900.00	9,149.91	14,100.56	9,151.16	223.40	164.63	-88.87	1,756.94	7,475.70	902.50	514.87	387.82	2.327 Minor Risk	
16,950.00	9,149.91	14,149.43	9,149.80	224.81	166.12	-88.78	1,756.62	7,524.55	902.20	511.46	390.74	2.309 Minor Risk	
17,000.00	9,149.91	14,199.41	9,148.46	226.23	167.65	-88.69	1,756.33	7,574.52	901.93	508.26	393.68	2.291 Minor Risk	
17,029.23	9,149.91	14,228.64	9,147.67	227.06	168.54	-88.64	1,756.15	7,603.73	901.78	506.38	395.39	2.281 Minor Risk	
17,050.00	9,149.91	14,223.00	9,147.82	227.65	168.37	-88.65	1,756.19	7,598.09	902.05	506.13	395.93	2.278 Minor Risk, ES	
17,056.59	9,149.91	14,223.00	9,147.82	227.84	168.37	-88.65	1,756.19	7,598.09	902.23	506.15	396.09	2.278 Minor Risk, SF	

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: Permit Plan 2

Local Co-ordinate Reference
 TVD Reference: RKB1 @ 3325.90ft
 MD Reference: RKB1 @ 3325.90ft
 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

Offset Design Sec 28-T19S-R29E - Turquoise PWU 27 10H - Original Hole - P3v1													Offset Site Error: 5.00 ft
Survey Program: 154-MWD+IGRF, 8178-													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 Tooface (ft)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	
10,600.00	9,149.91	8,682.74	8,681.54	52.70	30.71	-61.19	1,777.40	2,218.37	1,486.19	1,418.98	67.21	22.112	
10,650.00	9,149.91	8,700.00	8,676.82	53.80	30.76	-61.91	1,776.94	2,226.38	1,451.32	1,383.14	68.18	21.287	
10,700.00	9,149.91	8,700.00	8,676.82	54.91	30.76	-61.91	1,776.94	2,226.38	1,417.10	1,348.05	69.05	20.524	
10,750.00	9,149.91	8,712.23	8,687.55	56.04	30.80	-62.43	1,776.63	2,232.25	1,383.71	1,313.57	70.14	19.728	
10,800.00	9,149.91	8,722.99	8,696.91	57.18	30.83	-62.88	1,776.36	2,237.54	1,351.16	1,279.86	71.30	18.951	
10,850.00	9,149.91	8,734.27	8,706.65	58.34	30.86	-63.35	1,776.08	2,243.23	1,319.50	1,246.93	72.57	18.183	
10,900.00	9,149.91	8,750.00	8,720.10	59.50	30.91	-64.02	1,775.71	2,251.37	1,288.78	1,214.82	73.96	17.425	
10,950.00	9,149.91	8,750.00	8,720.10	60.68	30.91	-64.02	1,775.71	2,251.37	1,259.08	1,183.76	75.32	16.717	
11,000.00	9,149.91	8,771.55	8,738.27	61.86	30.97	-64.93	1,775.23	2,262.95	1,230.31	1,153.35	76.96	15.986	
11,050.00	9,149.91	8,785.25	8,748.66	63.07	31.01	-65.50	1,774.93	2,270.56	1,202.69	1,124.05	78.63	15.295	
11,100.00	9,149.91	8,800.00	8,761.78	64.27	31.06	-66.12	1,774.63	2,278.97	1,176.21	1,095.81	80.40	14.630	
11,150.00	9,149.91	8,814.83	8,773.81	65.49	31.11	-66.75	1,774.34	2,287.63	1,150.92	1,068.66	82.26	13.991	
11,200.00	9,149.91	8,830.81	8,786.59	66.72	31.17	-67.42	1,774.04	2,297.21	1,126.88	1,042.68	84.20	13.383	
11,250.00	9,149.91	8,850.00	8,801.69	67.95	31.23	-68.22	1,773.70	2,309.05	1,104.13	1,017.88	86.25	12.802	
11,300.00	9,149.91	8,865.38	8,813.60	69.19	31.29	-68.85	1,773.45	2,318.79	1,082.71	994.38	88.33	12.258	
11,350.00	9,149.91	8,884.10	8,827.83	70.44	31.36	-69.62	1,773.16	2,330.94	1,062.66	972.16	90.49	11.743	
11,400.00	9,149.91	8,900.00	8,839.70	71.70	31.42	-70.27	1,772.94	2,341.51	1,044.03	951.35	92.68	11.265	
11,450.00	9,149.91	8,924.71	8,857.74	72.96	31.53	-71.27	1,772.62	2,358.39	1,026.80	931.84	94.97	10.812	
11,500.00	9,149.91	8,950.00	8,875.67	74.23	31.63	-72.27	1,772.33	2,376.23	1,011.04	913.78	97.26	10.395	
11,550.00	9,149.91	8,969.95	8,889.42	75.51	31.73	-73.05	1,772.13	2,390.69	996.72	897.17	99.55	10.012	
11,600.00	9,149.91	8,994.48	8,905.83	76.79	31.85	-73.99	1,771.93	2,408.91	983.84	881.99	101.85	9.660	
11,650.00	9,149.91	9,020.36	8,922.55	78.07	31.99	-74.96	1,771.75	2,428.67	972.39	868.25	104.15	9.337	
11,700.00	9,149.91	9,050.00	8,940.92	79.36	32.16	-76.03	1,771.61	2,451.82	962.34	855.92	106.42	9.043	
11,750.00	9,149.91	9,076.42	8,956.57	80.66	32.33	-76.96	1,771.53	2,473.20	953.63	844.96	108.67	8.775	
11,800.00	9,149.91	9,106.69	8,973.66	81.96	32.52	-77.97	1,771.50	2,498.19	946.22	835.34	110.88	8.534	
11,850.00	9,149.91	9,138.50	8,990.61	83.27	32.76	-78.99	1,771.53	2,525.11	940.03	826.97	113.06	8.314	
11,900.00	9,149.91	9,171.88	9,007.25	84.57	33.02	-80.00	1,771.63	2,554.03	934.98	819.78	115.20	8.116	
11,950.00	9,149.91	9,206.81	9,023.40	85.89	33.32	-80.98	1,771.82	2,585.01	930.98	813.67	117.30	7.937	
12,000.00	9,149.91	9,243.28	9,038.83	87.20	33.66	-81.92	1,772.10	2,618.05	927.93	808.56	119.37	7.773	
12,050.00	9,149.91	9,281.23	9,053.31	88.52	34.05	-82.82	1,772.49	2,653.12	925.73	804.31	121.42	7.624	
12,100.00	9,149.91	9,322.92	9,067.27	89.85	34.52	-83.68	1,772.97	2,692.39	924.25	800.78	123.47	7.486	
12,150.00	9,149.91	9,367.84	9,079.75	91.18	35.06	-84.45	1,773.38	2,735.53	923.22	797.70	125.52	7.355	
12,200.00	9,149.91	9,414.24	9,088.78	92.51	35.67	-85.07	1,773.84	2,780.83	922.49	794.91	127.58	7.231	
12,250.00	9,149.91	9,461.81	9,097.01	93.84	36.33	-85.52	1,773.75	2,827.84	921.98	792.32	129.66	7.111	
12,300.00	9,149.91	9,510.14	9,101.14	95.18	37.06	-85.78	1,773.69	2,875.98	921.59	789.83	131.76	6.995	
12,350.00	9,149.91	9,559.34	9,102.30	96.52	37.84	-85.85	1,773.47	2,925.16	921.28	787.39	133.89	6.881	
12,400.00	9,149.91	9,609.33	9,102.89	97.86	38.67	-85.88	1,773.21	2,975.15	920.98	784.91	136.07	6.768	
12,450.00	9,149.91	9,659.33	9,103.48	99.20	39.56	-85.92	1,772.96	3,025.14	920.69	782.38	138.31	6.657	
12,500.00	9,149.91	9,709.32	9,104.08	100.55	40.47	-85.95	1,772.71	3,075.14	920.39	779.83	140.56	6.548	
12,550.00	9,149.91	9,759.32	9,104.67	101.90	41.44	-85.99	1,772.45	3,125.13	920.10	777.22	142.88	6.440	
12,600.00	9,149.91	9,809.32	9,105.26	103.25	42.42	-86.03	1,772.20	3,175.12	919.80	774.59	145.21	6.334	
12,650.00	9,149.91	9,859.31	9,105.86	104.60	43.45	-86.06	1,771.94	3,225.11	919.51	771.90	147.61	6.229	
12,700.00	9,149.91	9,909.31	9,106.45	105.96	44.50	-86.10	1,771.69	3,275.10	919.21	769.20	150.01	6.128	
12,750.00	9,149.91	9,959.30	9,107.04	107.32	45.59	-86.13	1,771.43	3,325.09	918.92	766.45	152.47	6.027	
12,800.00	9,149.91	10,009.30	9,107.64	108.68	46.70	-86.17	1,771.18	3,375.09	918.62	763.69	154.93	5.929	
12,850.00	9,149.91	10,059.30	9,108.23	110.04	47.84	-86.21	1,770.93	3,425.08	918.33	760.89	157.44	5.833	
12,900.00	9,149.91	10,109.29	9,108.82	111.40	48.99	-86.24	1,770.67	3,475.07	918.04	758.08	159.96	5.739	
12,950.00	9,149.91	10,159.29	9,109.42	112.77	50.18	-86.28	1,770.42	3,525.06	917.75	755.23	162.51	5.647	
13,000.00	9,149.91	10,209.28	9,110.01	114.14	51.38	-86.31	1,770.16	3,575.05	917.45	752.38	165.08	5.558	
13,050.00	9,149.91	10,259.28	9,110.60	115.51	52.60	-86.35	1,769.91	3,625.04	917.16	749.49	167.68	5.470	
13,100.00	9,149.91	10,309.27	9,111.20	116.88	53.83	-86.38	1,769.66	3,675.04	916.87	746.59	170.28	5.384	

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: Permit Plan 2

Local Co-ordinate Reference
TVD Reference: RKB1 @ 3325.90ft
MD Reference: RKB1 @ 3325.90ft
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

Offset Design													Sec 28-T19S-R29E - Turquoise PWU 27 10H - Original Hole - P3v1		Offset Site Error: 5.00 ft	
Survey Program: 154-MWD+IGRF, 8178-													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			
13,150.00	9,149.91	10,359.27	9,111.79	118.25	55.09	-86.42	1,769.40	3,725.03	916.58	743.67	172.91	5.301				
13,200.00	9,149.91	10,409.27	9,112.38	119.62	56.36	-86.46	1,769.15	3,775.02	916.29	740.73	175.55	5.219				
13,250.00	9,149.91	10,459.26	9,112.98	121.00	57.65	-86.49	1,768.89	3,825.01	916.00	737.78	178.22	5.140				
13,300.00	9,149.91	10,509.26	9,113.57	122.37	58.94	-86.53	1,768.64	3,875.00	915.71	734.82	180.89	5.062				
13,350.00	9,149.91	10,559.25	9,114.16	123.75	60.25	-86.57	1,768.38	3,924.99	915.42	731.83	183.58	4.988	Alert			
13,400.00	9,149.91	10,609.25	9,114.76	125.13	61.57	-86.60	1,768.13	3,974.99	915.13	728.85	186.28	4.913	Alert			
13,450.00	9,149.91	10,659.25	9,115.35	126.51	62.80	-86.64	1,767.88	4,024.98	914.84	725.84	189.00	4.840	Alert			
13,500.00	9,149.91	10,709.24	9,115.94	127.89	64.24	-86.67	1,767.62	4,074.97	914.55	722.83	191.72	4.770	Alert			
13,550.00	9,149.91	10,759.24	9,116.54	129.27	65.60	-86.71	1,767.37	4,124.96	914.26	719.80	194.46	4.701	Alert			
13,600.00	9,149.91	10,809.23	9,117.13	130.66	66.96	-86.75	1,767.11	4,174.95	913.98	716.77	197.21	4.635	Alert			
13,650.00	9,149.91	10,859.23	9,117.72	132.04	68.33	-86.78	1,766.88	4,224.94	913.69	713.72	199.97	4.569	Alert			
13,700.00	9,149.91	10,909.22	9,118.32	133.43	69.70	-86.82	1,766.61	4,274.94	913.40	710.67	202.73	4.506	Alert			
13,750.00	9,149.91	10,959.22	9,118.91	134.81	71.09	-86.85	1,766.35	4,324.93	913.11	707.61	205.51	4.443	Alert			
13,800.00	9,149.91	11,009.22	9,119.50	136.20	72.48	-86.89	1,766.10	4,374.92	912.83	704.54	208.28	4.383	Alert			
13,850.00	9,149.91	11,059.21	9,120.10	137.59	73.88	-86.93	1,765.84	4,424.91	912.54	701.46	211.08	4.323	Alert			
13,900.00	9,149.91	11,109.21	9,120.69	138.98	75.28	-86.96	1,765.59	4,474.90	912.26	698.38	213.87	4.265	Alert			
13,950.00	9,149.91	11,159.20	9,121.28	140.37	76.69	-87.00	1,765.34	4,524.89	911.97	695.29	216.68	4.209	Alert			
14,000.00	9,149.91	11,209.20	9,121.88	141.76	78.11	-87.04	1,765.08	4,574.89	911.69	692.20	219.49	4.154	Alert			
14,050.00	9,149.91	11,259.20	9,122.47	143.15	79.53	-87.07	1,764.83	4,624.88	911.40	689.09	222.31	4.100	Alert			
14,100.00	9,149.91	11,309.19	9,123.06	144.55	80.96	-87.11	1,764.57	4,674.87	911.12	685.99	225.13	4.047	Alert			
14,150.00	9,149.91	11,359.19	9,123.66	145.94	82.39	-87.15	1,764.32	4,724.86	910.83	682.87	227.96	3.996	Alert			
14,200.00	9,149.91	11,409.18	9,124.25	147.33	83.82	-87.18	1,764.06	4,774.85	910.55	679.76	230.79	3.945	Alert			
14,250.00	9,149.91	11,459.18	9,124.84	148.73	85.26	-87.22	1,763.81	4,824.84	910.27	676.64	233.63	3.896	Alert			
14,300.00	9,149.91	11,509.17	9,125.44	150.13	86.71	-87.26	1,763.56	4,874.84	909.98	673.51	236.47	3.848	Alert			
14,350.00	9,149.91	11,559.17	9,126.03	151.52	88.16	-87.29	1,763.30	4,924.83	909.70	670.38	239.32	3.801	Alert			
14,400.00	9,149.91	11,609.17	9,126.62	152.92	89.61	-87.33	1,763.05	4,974.82	909.42	667.24	242.18	3.755	Alert			
14,450.00	9,149.91	11,659.16	9,127.22	154.32	91.06	-87.37	1,762.79	5,024.81	909.14	664.10	245.03	3.710	Alert			
14,500.00	9,149.91	11,709.16	9,127.81	155.72	92.52	-87.40	1,762.54	5,074.80	908.86	660.96	247.89	3.666	Alert			
14,550.00	9,149.91	11,759.15	9,128.40	157.12	93.98	-87.44	1,762.29	5,124.79	908.58	657.82	250.76	3.623	Alert			
14,600.00	9,149.91	11,809.15	9,129.00	158.52	95.45	-87.48	1,762.03	5,174.79	908.30	654.67	253.63	3.581	Alert			
14,650.00	9,149.91	11,859.15	9,129.59	159.92	96.92	-87.51	1,761.78	5,224.78	908.02	651.51	256.50	3.540	Alert			
14,700.00	9,149.91	11,909.14	9,130.18	161.32	98.39	-87.55	1,761.52	5,274.77	907.74	648.36	259.38	3.500	Alert			
14,750.00	9,149.91	11,959.14	9,130.78	162.72	99.86	-87.59	1,761.27	5,324.76	907.46	645.20	262.26	3.460	Alert			
14,800.00	9,149.91	12,009.13	9,131.37	164.12	101.34	-87.62	1,761.01	5,374.75	907.18	642.04	265.14	3.422	Alert			
14,850.00	9,149.91	12,059.13	9,131.96	165.53	102.81	-87.66	1,760.76	5,424.74	906.90	638.87	268.03	3.384	Alert			
14,900.00	9,149.91	12,109.12	9,132.56	166.93	104.29	-87.70	1,760.51	5,474.74	906.62	635.71	270.91	3.347	Alert			
14,950.00	9,149.91	12,159.12	9,133.15	168.33	105.78	-87.73	1,760.25	5,524.73	906.34	632.54	273.80	3.310	Alert			
15,000.00	9,149.91	12,209.12	9,133.74	169.74	107.26	-87.77	1,760.00	5,574.72	906.07	629.37	276.70	3.275	Alert			
15,050.00	9,149.91	12,259.11	9,134.34	171.14	108.75	-87.81	1,759.74	5,624.71	905.79	626.19	279.59	3.240	Alert			
15,100.00	9,149.91	12,309.11	9,134.93	172.55	110.24	-87.84	1,759.49	5,674.70	905.51	623.02	282.49	3.205	Alert			
15,150.00	9,149.91	12,359.06	9,135.57	173.96	111.67	-87.90	1,759.35	5,722.54	905.33	619.98	285.35	3.173	Alert			
15,200.00	9,149.91	12,409.05	9,136.19	175.36	113.16	-87.95	1,759.23	5,772.53	905.18	616.92	288.26	3.140	Alert			
15,250.00	9,149.91	12,459.04	9,137.62	176.77	114.65	-88.01	1,759.11	5,822.51	905.02	613.85	291.17	3.108	Alert			
15,300.00	9,149.91	12,509.03	9,138.54	178.18	116.15	-88.07	1,758.98	5,872.49	904.87	610.79	294.08	3.077	Alert			
15,350.00	9,149.91	12,559.02	9,139.47	179.59	117.65	-88.13	1,758.86	5,922.47	904.71	607.72	296.99	3.046	Alert			
15,400.00	9,149.91	12,609.01	9,140.39	180.99	119.14	-88.19	1,758.74	5,972.46	904.56	604.66	299.90	3.016	Alert			
15,450.00	9,149.91	12,659.00	9,141.32	182.40	120.65	-88.25	1,758.61	6,022.44	904.41	601.59	302.82	2.987	Alert			
15,500.00	9,149.91	12,709.00	9,142.24	183.81	122.15	-88.30	1,758.49	6,072.42	904.26	598.52	305.73	2.958	Alert			
15,550.00	9,149.91	12,759.00	9,143.17	185.22	123.65	-88.36	1,758.37	6,122.40	904.11	595.45	308.65	2.929	Alert			
15,600.00	9,149.91	12,809.00	9,144.09	186.63	125.15	-88.42	1,758.24	6,172.39	903.96	592.38	311.57	2.901	Alert			
15,650.00	9,149.91	12,859.00	9,145.02	188.04	126.66	-88.48	1,758.12	6,222.37	903.81	589.31	314.50	2.874	Alert			

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: Permit Plan 2

Local Co-ordinate Reference: Well Coral PWU 28-27 11H
TVD Reference: RKB1 @ 3325.90ft
MD Reference: RKB1 @ 3325.90ft
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

Offset Design Sec 28-T19S-R29E - Turquoise PWU 27 10H - Original Hole - P3v1													Offset Site Error:	5.00 ft
Survey Program: 154-MWD+IGRF, 8178-													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 Tooface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning	
15,700.00	9,149.91	12,906.86	9,145.94	189.45	128.17	-88.54	1,758.00	6,272.35	903.66	586.24	317.42	2.847	Alert	
15,750.00	9,149.91	12,956.85	9,146.87	190.86	129.68	-88.60	1,757.87	6,322.34	903.51	583.17	320.34	2.820	Alert	
15,800.00	9,149.91	13,006.84	9,147.79	192.27	131.19	-88.65	1,757.75	6,372.32	903.37	580.10	323.27	2.794	Alert	
15,850.00	9,149.91	13,056.84	9,148.72	193.68	132.70	-88.71	1,757.63	6,422.30	903.22	577.03	326.20	2.769	Alert	
15,900.00	9,149.91	13,106.83	9,149.64	195.10	134.21	-88.77	1,757.50	6,472.28	903.08	573.95	329.12	2.744	Alert	
15,950.00	9,149.91	13,156.82	9,150.57	196.51	135.72	-88.83	1,757.38	6,522.27	902.94	570.88	332.06	2.719	Alert	
16,000.00	9,149.91	13,206.81	9,151.49	197.92	137.24	-88.89	1,757.26	6,572.25	902.79	567.81	334.99	2.695	Alert	
16,050.00	9,149.91	13,256.80	9,152.42	199.33	138.75	-88.95	1,757.14	6,622.23	902.65	564.74	337.92	2.671	Alert	
16,100.00	9,149.91	13,306.79	9,153.34	200.75	140.27	-89.01	1,757.01	6,672.21	902.51	561.66	340.85	2.648	Alert	
16,150.00	9,149.91	13,356.78	9,154.27	202.16	141.78	-89.06	1,756.89	6,722.20	902.37	558.59	343.78	2.625	Alert	
16,200.00	9,149.91	13,406.77	9,155.19	203.58	143.30	-89.12	1,756.77	6,772.18	902.24	555.52	346.72	2.602	Alert	
16,250.00	9,149.91	13,456.77	9,156.12	204.99	144.82	-89.18	1,756.64	6,822.16	902.10	552.44	349.65	2.580	Alert	
16,300.00	9,149.91	13,506.76	9,157.04	206.40	146.34	-89.24	1,756.52	6,872.14	901.96	549.37	352.59	2.558	Alert	
16,350.00	9,149.91	13,556.75	9,157.97	207.82	147.86	-89.30	1,756.40	6,922.13	901.83	546.30	355.53	2.537	Alert	
16,400.00	9,149.91	13,606.74	9,158.89	209.23	149.38	-89.36	1,756.27	6,972.11	901.69	543.23	358.47	2.515	Alert	
16,450.00	9,149.91	13,656.73	9,159.81	210.65	150.90	-89.42	1,756.15	7,022.09	901.56	540.16	361.40	2.495	Minor Risk	
16,500.00	9,149.91	13,706.72	9,160.74	212.06	152.42	-89.47	1,756.03	7,072.07	901.43	537.08	364.34	2.474	Minor Risk	
16,550.00	9,149.91	13,756.71	9,161.66	213.48	153.95	-89.53	1,755.90	7,122.06	901.30	534.01	367.28	2.454	Minor Risk	
16,600.00	9,149.91	13,806.70	9,162.59	214.90	155.47	-89.59	1,755.78	7,172.04	901.17	530.94	370.22	2.434	Minor Risk	
16,650.00	9,149.91	13,856.70	9,163.51	216.31	156.99	-89.65	1,755.66	7,222.02	901.04	527.87	373.17	2.415	Minor Risk	
16,700.00	9,149.91	13,906.69	9,164.44	217.73	158.52	-89.71	1,755.53	7,272.00	900.91	524.80	376.11	2.395	Minor Risk	
16,750.00	9,149.91	13,956.68	9,165.36	219.15	160.04	-89.77	1,755.41	7,321.99	900.78	521.73	379.05	2.376	Minor Risk	
16,800.00	9,149.91	14,006.67	9,166.29	220.56	161.57	-89.83	1,755.29	7,371.97	900.65	518.66	381.99	2.358	Minor Risk	
16,850.00	9,149.91	14,056.66	9,167.21	221.98	163.10	-89.89	1,755.16	7,421.95	900.53	515.59	384.94	2.339	Minor Risk	
16,900.00	9,149.91	14,106.65	9,168.14	223.40	164.62	-89.94	1,755.04	7,471.93	900.40	512.52	387.88	2.321	Minor Risk	
16,950.00	9,149.91	14,156.64	9,169.06	224.81	166.15	-90.00	1,754.92	7,521.92	900.28	509.45	390.82	2.304	Minor Risk	
17,000.00	9,149.91	14,206.63	9,169.99	226.23	167.68	-90.06	1,754.79	7,571.90	900.16	506.39	393.77	2.286	Minor Risk	
17,001.28	9,149.91	14,207.91	9,170.01	226.27	167.72	-90.06	1,754.79	7,573.18	900.15	506.31	393.84	2.286	Minor Risk, CC, ES	
17,050.00	9,149.91	14,198.12	9,169.83	227.65	167.42	-90.05	1,754.81	7,563.39	901.93	507.27	394.66	2.285	Minor Risk, SF	
17,056.59	9,149.91	14,198.12	9,169.83	227.84	167.42	-90.05	1,754.81	7,563.39	902.37	507.65	394.72	2.288	Minor Risk	

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:	RKB1 @ 3325.90ft
Reference Site:	Sec 27-T19S-R29E	MD Reference:	RKB1 @ 3325.90ft
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:	Permit Plan 2	Offset TVD Reference:	Offset Datum

Offset Design Sec 28-T19S-R29E - Turquoise PWU 27 10H - Original Hole - Plan 1												Offset Site Error:	5.00 ft
Survey Program: 0-MWD(OWSG)												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
10,650.00	9,149.91	8,717.60	8,713.88	53.80	31.40	-61.83	1,697.26	2,328.78	1,465.35	1,397.70	67.65	21.662	
10,700.00	9,149.91	8,722.47	8,718.47	54.91	31.42	-61.88	1,697.68	2,330.36	1,427.85	1,359.43	68.42	20.870	
10,750.00	9,149.91	8,727.59	8,723.27	56.04	31.44	-62.15	1,698.14	2,332.07	1,391.08	1,321.79	69.29	20.077	
10,800.00	9,149.91	8,732.95	8,728.29	57.18	31.45	-62.43	1,698.62	2,333.91	1,355.09	1,284.84	70.25	19.290	
10,850.00	9,149.91	8,750.00	8,744.11	58.34	31.51	-63.32	1,700.25	2,340.04	1,320.10	1,248.61	71.48	18.467	
10,900.00	9,149.91	8,750.00	8,744.11	59.50	31.51	-63.32	1,700.25	2,340.04	1,285.74	1,213.18	72.58	17.716	
10,950.00	9,149.91	8,750.00	8,744.11	60.68	31.51	-63.32	1,700.25	2,340.04	1,252.43	1,178.65	73.78	16.975	
11,000.00	9,149.91	8,750.00	8,744.11	61.86	31.51	-63.32	1,700.25	2,340.04	1,220.27	1,145.19	75.08	16.253	
11,050.00	9,149.91	8,764.37	8,757.29	63.07	31.56	-64.08	1,701.71	2,345.56	1,189.10	1,112.38	76.72	15.499	
11,100.00	9,149.91	8,771.74	8,764.00	64.27	31.59	-64.47	1,702.50	2,348.51	1,159.19	1,080.83	78.36	14.793	
11,150.00	9,149.91	8,779.55	8,771.06	65.49	31.61	-64.88	1,703.35	2,351.73	1,130.57	1,050.45	80.12	14.111	
11,200.00	9,149.91	8,800.00	8,789.34	66.72	31.68	-65.96	1,705.71	2,360.61	1,103.48	1,021.30	82.18	13.427	
11,250.00	9,149.91	8,800.00	8,789.34	67.95	31.68	-65.96	1,705.71	2,360.61	1,077.54	993.50	84.03	12.823	
11,300.00	9,149.91	8,800.00	8,789.34	69.19	31.68	-65.96	1,705.71	2,360.61	1,053.33	967.37	85.96	12.254	
11,350.00	9,149.91	8,815.89	8,803.30	70.44	31.74	-66.79	1,707.65	2,367.93	1,030.69	942.45	88.24	11.680	
11,400.00	9,149.91	8,826.48	8,812.49	71.70	31.78	-67.35	1,709.00	2,373.03	1,009.83	919.32	90.50	11.158	
11,450.00	9,149.91	8,837.79	8,822.19	72.96	31.82	-67.94	1,710.49	2,378.64	990.78	897.94	92.84	10.672	
11,500.00	9,149.91	8,850.00	8,832.54	74.23	31.86	-68.58	1,712.15	2,384.91	973.62	878.41	95.21	10.226	
11,550.00	9,149.91	8,862.82	8,843.25	75.51	31.91	-69.24	1,713.96	2,391.72	958.43	860.80	97.63	9.817	
11,600.00	9,149.91	8,876.69	8,854.65	76.79	31.96	-69.95	1,715.98	2,399.35	945.26	845.20	100.05	9.448	
11,650.00	9,149.91	8,900.00	8,873.38	78.07	32.04	-71.13	1,719.54	2,412.76	934.22	831.60	102.62	9.104	
11,700.00	9,149.91	8,900.00	8,873.38	79.36	32.04	-71.13	1,719.54	2,412.76	925.18	820.46	104.72	8.835	
11,750.00	9,149.91	8,924.77	8,892.64	80.66	32.14	-72.36	1,723.53	2,427.80	918.19	810.99	107.20	8.565	
11,800.00	9,149.91	8,950.00	8,911.56	81.96	32.23	-73.57	1,727.82	2,443.94	913.38	803.79	109.59	8.335	
11,850.00	9,149.91	8,963.23	8,921.17	83.27	32.29	-74.19	1,730.15	2,452.72	910.53	798.86	111.67	8.154	
11,896.73	9,149.91	8,983.27	8,935.34	84.49	32.37	-75.12	1,733.78	2,466.42	909.68	796.05	113.63	8.005 CC	
11,900.00	9,149.91	8,984.72	8,936.35	84.57	32.38	-75.18	1,734.05	2,467.44	909.69	795.92	113.77	7.996	
11,950.00	9,149.91	9,007.89	8,952.04	85.89	32.48	-76.21	1,738.42	2,483.90	910.74	794.96	115.78	7.866	
12,000.00	9,149.91	9,032.83	8,968.17	87.20	32.60	-77.26	1,743.30	2,502.29	913.58	795.89	117.69	7.762	
12,050.00	9,149.91	9,059.87	8,984.57	88.52	32.73	-78.34	1,748.74	2,522.82	918.07	798.56	119.52	7.682	
12,100.00	9,149.91	9,088.49	9,001.05	89.85	32.88	-79.43	1,754.81	2,545.67	924.08	802.82	121.26	7.621	
12,150.00	9,149.91	9,119.36	9,017.37	91.18	33.06	-80.51	1,761.53	2,571.00	931.44	808.51	122.93	7.577	
12,200.00	9,149.91	9,204.57	9,055.45	92.51	33.82	-82.99	1,778.34	2,645.26	938.95	813.45	125.50	7.482	
12,250.00	9,149.91	12,250.00	9,083.02	93.84	63.63	-84.75	1,790.28	2,725.66	944.29	789.36	154.93	6.095	
12,300.00	9,149.91	9,429.16	9,104.50	95.18	35.77	-86.09	1,798.91	2,861.98	946.52	816.00	130.52	7.252	
12,350.00	9,149.91	9,508.61	9,105.51	96.52	36.74	-86.15	1,798.82	2,924.20	946.34	813.60	132.74	7.129	
12,400.00	9,149.91	9,541.38	9,106.05	97.86	37.20	-86.18	1,798.62	2,974.19	946.10	811.56	134.54	7.032	
12,450.00	9,149.91	9,608.62	9,106.60	99.20	38.14	-86.22	1,798.41	3,024.18	945.88	809.03	136.83	6.913	
12,500.00	9,149.91	9,641.38	9,107.14	100.55	38.65	-86.25	1,798.21	3,074.18	945.63	806.94	138.69	6.818	
12,550.00	9,149.91	9,708.63	9,107.68	101.90	39.70	-86.28	1,798.01	3,124.17	945.39	804.29	141.10	6.700	
12,600.00	9,149.91	9,741.37	9,108.22	103.25	40.26	-86.31	1,797.81	3,174.16	945.15	802.14	143.02	6.609	
12,650.00	9,149.91	9,808.63	9,108.76	104.60	41.42	-86.34	1,797.61	3,224.16	944.92	799.38	145.54	6.493	
12,700.00	9,149.91	9,841.36	9,109.30	105.96	42.03	-86.38	1,797.41	3,274.15	944.68	797.18	147.50	6.405	
12,750.00	9,149.91	9,908.64	9,109.84	107.32	43.28	-86.41	1,797.20	3,324.14	944.45	794.33	150.12	6.291	
12,800.00	9,149.91	9,941.36	9,110.38	108.68	43.92	-86.44	1,797.00	3,374.14	944.21	792.09	152.12	6.207	
12,850.00	9,149.91	10,008.65	9,110.92	110.04	45.25	-86.47	1,796.80	3,424.13	943.97	789.15	154.82	6.097	
12,900.00	9,149.91	10,041.35	9,111.47	111.40	45.93	-86.50	1,796.60	3,474.12	943.74	786.88	156.88	6.016	
12,950.00	9,149.91	10,091.35	9,112.01	112.77	46.97	-86.54	1,796.40	3,524.12	943.51	784.24	159.27	5.924	
13,000.00	9,149.91	10,141.34	9,112.55	114.14	48.04	-86.57	1,796.19	3,574.11	943.27	781.56	161.71	5.833	
13,050.00	9,149.91	10,208.66	9,113.09	115.51	49.50	-86.60	1,795.99	3,624.10	943.04	778.49	164.55	5.731	
13,100.00	9,149.91	10,241.34	9,113.63	116.88	50.23	-86.63	1,795.79	3,674.10	942.80	776.15	166.65	5.657	

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: Permit Plan 2

Local Co-ordinate Reference
 TVD Reference: RKB1 @ 3325.90ft
 MD Reference: RKB1 @ 3325.90ft
 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

Offset Design Sec 28-T19S-R29E - Turquoise PWU 27 10H - Original Hole - Plan 1													Offset Site Error:	5.00 ft
Survey Program: 0-MWD(OWSG)													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis			Distance				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)	
13,150.00	9,149.91	10,308.67	9,114.17	118.25	51.75	-86.66	1,795.59	3,724.09	942.57	773.02	169.55	5.559		
13,200.00	9,149.91	10,341.33	9,114.71	119.62	52.50	-86.70	1,795.39	3,774.08	942.34	770.66	171.68	5.489		
13,250.00	9,149.91	10,408.67	9,115.25	121.00	54.07	-86.73	1,795.19	3,824.08	942.10	767.49	174.62	5.395		
13,300.00	9,149.91	10,441.32	9,115.79	122.37	54.84	-86.76	1,794.98	3,874.07	941.87	765.10	176.77	5.328		
13,350.00	9,149.91	10,508.68	9,116.33	123.75	56.44	-86.79	1,794.78	3,924.06	941.64	761.88	179.76	5.238		
13,400.00	9,149.91	10,541.32	9,116.88	125.13	57.24	-86.83	1,794.58	3,974.06	941.41	759.47	181.93	5.174		
13,450.00	9,149.91	10,608.69	9,117.42	126.51	58.88	-86.86	1,794.38	4,024.05	941.18	756.22	184.96	5.089		
13,500.00	9,149.91	10,641.31	9,117.96	127.89	59.68	-86.89	1,794.18	4,074.04	940.95	753.80	187.15	5.028		
13,550.00	9,149.91	10,691.31	9,118.50	129.27	60.92	-86.92	1,793.97	4,124.04	940.71	750.94	189.77	4.957 Alert		
13,600.00	9,149.91	10,741.30	9,119.04	130.66	62.18	-86.95	1,793.77	4,174.03	940.48	748.07	192.41	4.888 Alert		
13,650.00	9,149.91	10,808.70	9,119.58	132.04	63.88	-86.99	1,793.57	4,224.02	940.25	744.75	195.50	4.809 Alert		
13,700.00	9,149.91	10,841.30	9,120.12	133.43	64.71	-87.02	1,793.37	4,274.02	940.02	742.30	197.73	4.754 Alert		
13,750.00	9,149.91	10,908.71	9,120.66	134.81	66.43	-87.05	1,793.17	4,324.01	939.79	738.95	200.84	4.679 Alert		
13,800.00	9,149.91	10,941.29	9,121.20	136.20	67.28	-87.08	1,792.97	4,374.00	939.56	736.49	203.07	4.627 Alert		
13,850.00	9,149.91	11,008.71	9,121.74	137.59	69.02	-87.12	1,792.76	4,424.00	939.34	733.12	206.21	4.555 Alert		
13,900.00	9,149.91	11,041.28	9,122.29	138.98	69.88	-87.15	1,792.56	4,473.99	939.11	730.65	208.46	4.505 Alert		
13,950.00	9,149.91	11,108.72	9,122.83	140.37	71.64	-87.18	1,792.36	4,523.98	938.88	727.26	211.62	4.437 Alert		
14,000.00	9,149.91	11,141.28	9,123.37	141.76	72.50	-87.21	1,792.16	4,573.98	938.65	724.77	213.88	4.389 Alert		
14,050.00	9,149.91	11,208.73	9,123.91	143.15	74.29	-87.25	1,791.96	4,623.97	938.42	721.36	217.06	4.323 Alert		
14,100.00	9,149.91	11,241.27	9,124.45	144.55	75.16	-87.28	1,791.76	4,673.96	938.19	718.87	219.32	4.278 Alert		
14,150.00	9,149.91	11,308.73	9,124.99	145.94	76.96	-87.31	1,791.55	4,723.96	937.97	715.44	222.52	4.215 Alert		
14,200.00	9,149.91	11,341.28	9,125.53	147.33	77.83	-87.34	1,791.35	4,773.95	937.74	712.95	224.79	4.172 Alert		
14,250.00	9,149.91	11,408.74	9,126.07	148.73	79.65	-87.37	1,791.15	4,823.94	937.51	709.50	228.01	4.112 Alert		
14,300.00	9,149.91	11,441.26	9,126.61	150.13	80.53	-87.41	1,790.95	4,873.94	937.29	707.00	230.29	4.070 Alert		
14,350.00	9,149.91	11,508.75	9,127.15	151.52	82.36	-87.44	1,790.75	4,923.93	937.06	703.54	233.52	4.013 Alert		
14,400.00	9,149.91	11,541.25	9,127.70	152.92	83.24	-87.47	1,790.54	4,973.92	936.83	701.03	235.81	3.973 Alert		
14,450.00	9,149.91	11,608.75	9,128.24	154.32	85.08	-87.50	1,790.34	5,023.92	936.61	697.56	239.05	3.918 Alert		
14,500.00	9,149.91	11,641.24	9,128.78	155.72	85.97	-87.54	1,790.14	5,073.91	936.38	695.04	241.34	3.880 Alert		
14,550.00	9,149.91	11,708.76	9,129.32	157.12	87.83	-87.57	1,789.94	5,123.90	936.16	691.56	244.60	3.827 Alert		
14,600.00	9,149.91	11,741.24	9,129.86	158.52	88.72	-87.60	1,789.74	5,173.90	935.93	689.04	246.90	3.791 Alert		
14,650.00	9,149.91	11,808.77	9,130.40	159.92	90.58	-87.64	1,789.54	5,223.89	935.71	685.55	250.16	3.740 Alert		
14,700.00	9,149.91	11,841.23	9,130.94	161.32	91.48	-87.67	1,789.33	5,273.88	935.49	683.02	252.47	3.705 Alert		
14,750.00	9,149.91	11,908.77	9,131.48	162.72	93.35	-87.70	1,789.13	5,323.88	935.26	679.52	255.74	3.657 Alert		
14,800.00	9,149.91	11,941.22	9,132.02	164.12	94.25	-87.73	1,788.93	5,373.87	935.04	676.99	258.05	3.623 Alert		
14,850.00	9,149.91	12,008.78	9,132.56	165.53	96.13	-87.77	1,788.73	5,423.86	934.82	673.48	261.34	3.577 Alert		
14,900.00	9,149.91	12,041.22	9,133.11	166.93	97.04	-87.80	1,788.53	5,473.86	934.59	670.94	263.65	3.545 Alert		
14,950.00	9,149.91	12,108.79	9,133.65	168.33	98.92	-87.83	1,788.32	5,523.85	934.37	667.43	266.94	3.500 Alert		
15,000.00	9,149.91	12,141.21	9,134.19	169.74	99.83	-87.86	1,788.12	5,573.84	934.15	664.89	269.26	3.469 Alert		
15,050.00	9,149.91	12,191.21	9,134.73	171.14	101.23	-87.90	1,787.92	5,623.84	933.93	661.86	272.07	3.433 Alert		
15,100.00	9,149.91	12,241.35	9,135.28	172.55	102.64	-87.93	1,787.72	5,673.98	933.70	658.82	274.88	3.397 Alert		
15,150.00	9,149.91	12,291.45	9,136.20	173.96	104.05	-87.99	1,787.52	5,724.07	933.47	655.76	277.70	3.361 Alert		
15,200.00	9,149.91	12,341.45	9,137.12	175.36	105.46	-88.04	1,787.31	5,774.05	933.24	652.71	280.53	3.327 Alert		
15,250.00	9,149.91	12,408.56	9,138.05	176.77	107.35	-88.10	1,787.11	5,824.04	933.00	649.17	283.83	3.287 Alert		
15,300.00	9,149.91	12,441.43	9,138.97	178.18	108.28	-88.15	1,786.91	5,874.02	932.77	646.60	286.17	3.259 Alert		
15,350.00	9,149.91	12,508.58	9,139.90	179.59	110.18	-88.21	1,786.71	5,924.00	932.54	643.05	289.49	3.221 Alert		
15,400.00	9,149.91	12,541.41	9,140.82	180.99	111.11	-88.27	1,786.51	5,973.98	932.31	640.48	291.83	3.195 Alert		
15,450.00	9,149.91	12,608.60	9,141.75	182.40	113.01	-88.32	1,786.31	6,023.96	932.08	636.93	295.15	3.158 Alert		
15,500.00	9,149.91	12,641.39	9,142.67	183.81	113.94	-88.38	1,786.10	6,073.95	931.85	634.35	297.50	3.132 Alert		
15,550.00	9,149.91	12,708.62	9,143.60	185.22	115.85	-88.44	1,785.90	6,123.93	931.62	630.80	300.82	3.097 Alert		
15,600.00	9,149.91	12,741.37	9,144.52	186.63	116.78	-88.49	1,785.70	6,173.91	931.40	628.23	303.17	3.072 Alert		
15,650.00	9,149.91	12,808.64	9,145.45	188.04	118.70	-88.55	1,785.50	6,223.89	931.17	624.67	306.50	3.038 Alert		

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: Permit Plan 2

Local Co-ordinate Reference: Well Coral PWU 28-27 11H
TVD Reference: RKB1 @ 3325.90ft
MD Reference: RKB1 @ 3325.90ft
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

Offset Design Sec 28-T19S-R29E - Turquoise PWU 27 10H - Original Hole - Plan 1													Offset Site Error:	5.00 R
Survey Program: 0-MWD(OWSG)													Offset Well Error:	0.00 R
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		
15,700.00	9,149.91	12,841.36	9,146.37	189.45	119.63	-88.61	1,785.30	6,273.87	930.95	622.09	308.85	3.014	Alert	
15,750.00	9,149.91	12,908.65	9,147.30	190.86	121.55	-88.66	1,785.10	6,323.86	930.72	618.53	312.19	2.981	Alert	
15,800.00	9,149.91	12,941.34	9,148.22	192.27	122.49	-88.72	1,784.89	6,373.84	930.50	615.96	314.54	2.958	Alert	
15,850.00	9,149.91	13,008.67	9,149.15	193.68	124.41	-88.78	1,784.69	6,423.82	930.28	612.40	317.88	2.927	Alert	
15,900.00	9,149.91	13,041.32	9,150.07	195.10	125.35	-88.83	1,784.49	6,473.80	930.05	609.83	320.23	2.904	Alert	
15,950.00	9,149.91	13,108.69	9,151.00	196.51	127.27	-88.89	1,784.29	6,523.78	929.83	606.26	323.57	2.874	Alert	
16,000.00	9,149.91	13,141.30	9,151.92	197.92	128.21	-88.95	1,784.09	6,573.77	929.61	603.69	325.93	2.852	Alert	
16,050.00	9,149.91	13,208.71	9,152.85	199.33	130.14	-89.00	1,783.88	6,623.75	929.40	600.12	329.28	2.823	Alert	
16,100.00	9,149.91	13,241.28	9,153.77	200.75	131.08	-89.06	1,783.68	6,673.73	929.18	597.55	331.63	2.802	Alert	
16,150.00	9,149.91	13,308.73	9,154.70	202.16	133.01	-89.12	1,783.48	6,723.71	928.96	593.98	334.98	2.773	Alert	
16,200.00	9,149.91	13,341.27	9,155.62	203.58	133.95	-89.17	1,783.28	6,773.69	928.75	591.41	337.33	2.753	Alert	
16,250.00	9,149.91	13,408.74	9,156.55	204.99	135.89	-89.23	1,783.08	6,823.68	928.53	587.84	340.69	2.725	Alert	
16,300.00	9,149.91	13,441.25	9,157.47	206.40	136.83	-89.29	1,782.88	6,873.66	928.32	585.27	343.05	2.706	Alert	
16,350.00	9,149.91	13,508.76	9,158.40	207.82	138.77	-89.34	1,782.67	6,923.64	928.10	581.70	346.41	2.679	Alert	
16,400.00	9,149.91	13,541.23	9,159.32	209.23	139.71	-89.40	1,782.47	6,973.62	927.89	579.13	348.76	2.661	Alert	
16,450.00	9,149.91	13,608.78	9,160.25	210.65	141.66	-89.46	1,782.27	7,023.61	927.68	575.56	352.13	2.635	Alert	
16,500.00	9,149.91	13,641.21	9,161.17	212.06	142.59	-89.52	1,782.07	7,073.59	927.47	572.99	354.48	2.616	Alert	
16,550.00	9,149.91	13,708.80	9,162.09	213.48	144.54	-89.57	1,781.87	7,123.57	927.26	569.41	357.85	2.591	Alert	
16,600.00	9,149.91	13,741.19	9,163.02	214.90	145.48	-89.63	1,781.67	7,173.55	927.05	566.85	360.20	2.574	Alert	
16,650.00	9,149.91	13,808.82	9,163.94	216.31	147.43	-89.69	1,781.46	7,223.53	926.85	563.27	363.57	2.549	Alert	
16,700.00	9,149.91	13,841.18	9,164.87	217.73	148.37	-89.74	1,781.26	7,273.52	926.64	560.72	365.92	2.532	Alert	
16,750.00	9,149.91	13,908.83	9,165.79	219.15	150.33	-89.80	1,781.06	7,323.50	926.43	557.14	369.30	2.509	Alert	
16,800.00	9,149.91	13,941.16	9,166.72	220.56	151.26	-89.86	1,780.86	7,373.48	926.23	554.58	371.65	2.492	Minor Risk	
16,850.00	9,149.91	14,008.85	9,167.64	221.98	153.22	-89.92	1,780.66	7,423.46	926.02	551.00	375.03	2.469	Minor Risk	
16,900.00	9,149.91	14,041.14	9,168.57	223.40	154.16	-89.97	1,780.45	7,473.44	925.82	548.44	377.38	2.453	Minor Risk	
16,950.00	9,149.91	14,091.13	9,169.49	224.81	155.61	-90.03	1,780.25	7,523.43	925.62	545.38	380.24	2.434	Minor Risk	
16,993.06	9,149.91	14,134.19	9,170.29	226.04	156.85	-90.08	1,780.08	7,566.47	925.45	542.73	382.71	2.418	Minor Risk	
17,000.00	9,149.91	14,131.09	9,170.23	226.23	156.77	-90.08	1,780.09	7,563.38	925.47	542.56	382.91	2.417	Minor Risk, ES	
17,050.00	9,149.91	14,131.09	9,170.23	227.65	156.77	-90.08	1,780.09	7,563.38	927.16	543.01	384.15	2.414	Minor Risk, SF	
17,056.59	9,149.91	14,131.09	9,170.23	227.84	156.77	-90.08	1,780.09	7,563.38	927.59	543.35	384.24	2.414	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:	RKB1 @ 3325.90ft
Reference Site:	Sec 27-T19S-R29E	MD Reference:	RKB1 @ 3325.90ft
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:	Permit Plan 2	Offset TVD Reference:	Offset Datum

Offset Design Sec 28-T19S-R29E - Turquoise PWU 27 10H - Original Hole - PTL												Offset Site Error:	5.00 ft
Survey Program: 154-MWD+IGRF, 8755-												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
10,600.00	9,149.91	8,674.23	8,652.89	52.70	30.68	-60.92	1,782.50	2,222.45	1,495.21	1,428.08	67.13	22.274	
10,650.00	9,149.91	8,683.40	8,661.03	53.80	30.71	-61.30	1,782.31	2,226.67	1,460.36	1,392.35	68.01	21.473	
10,700.00	9,149.91	8,693.04	8,669.52	54.91	30.73	-61.70	1,782.10	2,231.22	1,426.27	1,357.30	68.97	20.679	
10,750.00	9,149.91	8,705.00	8,679.98	56.04	30.77	-62.19	1,781.83	2,237.02	1,392.97	1,322.91	70.06	19.884	
10,800.00	9,149.91	8,705.00	8,679.98	57.18	30.77	-62.19	1,781.83	2,237.02	1,360.56	1,289.46	71.10	19.136	
10,850.00	9,149.91	8,726.83	8,698.82	58.34	30.83	-63.10	1,781.29	2,248.02	1,328.88	1,256.41	72.47	18.338	
10,900.00	9,149.91	8,739.71	8,709.80	59.50	30.87	-63.63	1,780.93	2,254.75	1,298.17	1,224.34	73.83	17.584	
10,950.00	9,149.91	8,755.00	8,722.68	60.68	30.92	-64.26	1,780.47	2,262.98	1,268.42	1,193.11	75.31	16.842	
11,000.00	9,149.91	8,768.28	8,733.75	61.88	30.96	-64.81	1,780.06	2,270.30	1,239.65	1,162.79	76.86	16.128	
11,050.00	9,149.91	8,784.01	8,746.74	63.07	31.01	-65.46	1,779.57	2,279.15	1,211.92	1,133.38	78.54	15.431	
11,100.00	9,149.91	8,800.00	8,759.82	64.27	31.06	-66.12	1,779.09	2,288.35	1,185.25	1,104.96	80.30	14.761	
11,150.00	9,149.91	8,817.62	8,774.06	65.49	31.12	-66.86	1,778.58	2,298.70	1,159.71	1,077.55	82.16	14.115	
11,200.00	9,149.91	8,834.53	8,787.56	66.72	31.18	-67.56	1,778.09	2,308.88	1,135.35	1,051.25	84.10	13.501	
11,250.00	9,149.91	8,850.00	8,799.73	67.95	31.24	-68.19	1,777.85	2,318.42	1,112.24	1,026.14	86.10	12.917	
11,300.00	9,149.91	8,869.56	8,814.84	69.19	31.31	-69.00	1,777.10	2,330.82	1,090.43	1,002.23	88.20	12.363	
11,350.00	9,149.91	8,888.56	8,829.23	70.44	31.39	-69.77	1,776.58	2,343.21	1,069.96	979.61	90.35	11.842	
11,400.00	9,149.91	8,908.63	8,844.12	71.70	31.47	-70.58	1,776.03	2,356.67	1,050.86	958.30	92.58	11.354	
11,450.00	9,149.91	8,929.84	8,859.47	72.96	31.56	-71.42	1,775.47	2,371.29	1,033.15	938.34	94.81	10.897	
11,500.00	9,149.91	8,950.00	8,873.71	74.23	31.65	-72.21	1,774.94	2,385.55	1,016.84	919.77	97.07	10.475	
11,550.00	9,149.91	8,975.95	8,891.50	75.51	31.78	-73.21	1,774.27	2,404.43	1,001.92	902.54	99.38	10.082	
11,600.00	9,149.91	9,000.00	8,907.44	76.79	31.90	-74.11	1,773.67	2,422.43	988.41	886.74	101.67	9.722	
11,650.00	9,149.91	9,027.44	8,924.96	78.07	32.05	-75.12	1,773.01	2,443.53	976.27	872.29	103.98	9.389	
11,700.00	9,149.91	9,055.35	8,942.03	79.36	32.22	-76.11	1,772.35	2,465.61	965.47	859.22	106.25	9.087	
11,750.00	9,149.91	9,084.79	8,959.20	80.66	32.41	-77.11	1,771.68	2,489.51	955.96	847.45	108.51	8.810	
11,800.00	9,149.91	9,115.79	8,976.33	81.96	32.63	-78.13	1,771.00	2,515.34	947.68	838.95	110.73	8.558	
11,850.00	9,149.91	9,150.00	8,994.05	83.27	32.88	-79.18	1,770.29	2,544.59	940.56	827.64	112.92	8.329	
11,900.00	9,149.91	9,182.59	9,009.77	84.57	33.16	-80.13	1,769.65	2,573.13	934.52	819.44	115.08	8.120	
11,950.00	9,149.91	9,218.39	9,025.70	85.89	33.48	-81.09	1,768.98	2,605.18	929.48	812.25	117.21	7.930	
12,000.00	9,149.91	9,255.75	9,040.78	87.20	33.84	-82.01	1,768.33	2,639.34	925.29	805.99	119.30	7.756	
12,050.00	9,149.91	9,294.60	9,054.77	88.52	34.26	-82.87	1,767.71	2,675.58	921.90	800.52	121.38	7.595	
12,100.00	9,149.91	9,334.83	9,067.40	89.85	34.73	-83.65	1,767.12	2,713.77	919.19	795.75	123.44	7.446	
12,150.00	9,149.91	9,376.33	9,078.42	91.18	35.25	-84.33	1,766.57	2,753.77	917.07	791.57	125.51	7.307	
12,200.00	9,149.91	9,418.91	9,087.57	92.51	35.82	-84.89	1,766.08	2,795.35	915.45	787.88	127.57	7.176	
12,250.00	9,149.91	9,462.38	9,094.63	93.84	36.44	-85.33	1,765.65	2,838.23	914.25	784.60	129.65	7.052	
12,300.00	9,149.91	9,506.50	9,099.43	95.18	37.10	-85.63	1,765.29	2,882.08	913.41	781.67	131.74	6.934	
12,350.00	9,149.91	9,551.01	9,101.83	96.52	37.81	-85.78	1,765.00	2,926.53	912.88	779.04	133.85	6.820	
12,368.53	9,149.91	9,562.71	9,102.05	97.01	38.00	-85.79	1,764.94	2,938.22	912.78	778.19	134.59	6.782 CC	
12,400.00	9,149.91	9,562.71	9,102.05	97.86	38.00	-85.79	1,764.94	2,938.22	913.32	777.70	135.62	6.734 ES	
12,450.00	9,149.91	9,562.71	9,102.05	99.20	38.00	-85.79	1,764.94	2,938.22	916.41	779.38	137.02	6.688	
12,500.00	9,149.91	9,562.71	9,102.05	100.55	38.00	-85.79	1,764.94	2,938.22	922.20	784.08	138.12	6.677 SF	
12,550.00	9,149.91	9,562.71	9,102.05	101.90	38.00	-85.79	1,764.94	2,938.22	930.64	791.72	139.92	6.699	
12,600.00	9,149.91	9,562.71	9,102.05	103.25	38.00	-85.79	1,764.94	2,938.22	941.67	802.24	139.43	6.754	
12,650.00	9,149.91	9,562.71	9,102.05	104.60	38.00	-85.79	1,764.94	2,938.22	955.19	815.53	139.66	6.839	
12,700.00	9,149.91	9,562.71	9,102.05	105.96	38.00	-85.79	1,764.94	2,938.22	971.10	831.46	139.64	6.954	
12,750.00	9,149.91	9,562.71	9,102.05	107.32	38.00	-85.79	1,764.94	2,938.22	989.28	849.89	139.39	7.097	
12,800.00	9,149.91	9,562.71	9,102.05	108.68	38.00	-85.79	1,764.94	2,938.22	1,009.62	870.68	138.94	7.267	
12,850.00	9,149.91	9,562.71	9,102.05	110.04	38.00	-85.79	1,764.94	2,938.22	1,031.98	893.67	138.31	7.461	
12,900.00	9,149.91	9,562.71	9,102.05	111.40	38.00	-85.79	1,764.94	2,938.22	1,056.23	918.69	137.54	7.680	
12,950.00	9,149.91	9,562.71	9,102.05	112.77	38.00	-85.79	1,764.94	2,938.22	1,082.25	945.61	136.64	7.920	
13,000.00	9,149.91	9,562.71	9,102.05	114.14	38.00	-85.79	1,764.94	2,938.22	1,109.92	974.27	135.65	8.182	
13,050.00	9,149.91	9,562.71	9,102.05	115.51	38.00	-85.79	1,764.94	2,938.22	1,139.11	1,004.52	134.59	8.464	

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:	RKB1 @ 3325.90ft
Reference Site:	Sec 27-T19S-R29E	MD Reference:	RKB1 @ 3325.90ft
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:	Permit Plan 2	Offset TVD Reference:	Offset Datum

Offset Design													Sec 28-T19S-R29E - Turquoise PWU 27 10H - Original Hole - PTL		Offset Site Error:		5.00 ft	
Survey Program: 154-MWD+IGRF, 8755-															Offset Well Error:		0.00 ft	
Offset				Semi Major Axis			Distance											
Measured	Vertical	Measured	Vertical	Reference	Offset	Highside	Offset Wellbore Centre	Between	Between	Minimum	Separation	Warning						
Depth	Depth	Depth	Depth	Reference	Offset	Toolface	+N/-S	+E/-W	Centres	Ellipses	Separation		Factor					
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)							
13,100.00	9,149.91	9,562.71	9,102.05	116.88	38.00	-85.79	1,764.94	2,938.22	1,169.71	1,036.23	133.47	8.764						
13,150.00	9,149.91	9,562.71	9,102.05	118.25	38.00	-85.79	1,764.94	2,938.22	1,201.61	1,069.29	132.32	9.081						
13,200.00	9,149.91	9,562.71	9,102.05	119.62	38.00	-85.79	1,764.94	2,938.22	1,234.71	1,103.57	131.14	9.415						
13,250.00	9,149.91	9,562.71	9,102.05	121.00	38.00	-85.79	1,764.94	2,938.22	1,268.92	1,138.97	129.95	9.784						
13,300.00	9,149.91	9,562.71	9,102.05	122.37	38.00	-85.79	1,764.94	2,938.22	1,304.15	1,175.38	128.76	10.128						
13,350.00	9,149.91	9,562.71	9,102.05	123.75	38.00	-85.79	1,764.94	2,938.22	1,340.32	1,212.73	127.59	10.505						
13,400.00	9,149.91	9,562.71	9,102.05	125.13	38.00	-85.79	1,764.94	2,938.22	1,377.35	1,250.93	126.42	10.895						
13,450.00	9,149.91	9,562.71	9,102.05	126.51	38.00	-85.79	1,764.94	2,938.22	1,415.18	1,289.91	125.27	11.297						
13,500.00	9,149.91	9,562.71	9,102.05	127.89	38.00	-85.79	1,764.94	2,938.22	1,453.75	1,329.60	124.15	11.709						
13,550.00	9,149.91	9,562.71	9,102.05	129.27	38.00	-85.79	1,764.94	2,938.22	1,493.00	1,369.94	123.06	12.133						

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: Permit Plan 2

Local Co-ordinate Reference: Well Coral PWU 28-27 11H
TVD Reference: RKB1 @ 3325.90ft
MD Reference: RKB1 @ 3325.90ft
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

Offset Design													Offset Site Error:	5.00 ft
Survey Program:													Offset Well Error:	0.00 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Minimum Separation (ft)	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
10,500.00	9,149.91	13,485.00	9,165.12	50.55	-89.73	1,688.87	2,297.14	1,484.12	1,442.24	41.88	35.438			
10,550.00	9,149.91	13,485.00	9,165.12	51.62	-89.73	1,688.87	2,297.14	1,443.04	1,400.53	42.51	33.944			
10,600.00	9,149.91	13,485.00	9,165.12	52.70	-89.73	1,688.87	2,297.14	1,402.54	1,359.32	43.22	32.450			
10,650.00	9,149.91	13,485.00	9,165.12	53.80	-89.73	1,688.87	2,297.14	1,362.67	1,318.64	44.03	30.946			
10,700.00	9,149.91	13,485.00	9,165.12	54.91	-89.73	1,688.87	2,297.14	1,323.49	1,278.55	44.94	29.452			
10,750.00	9,149.91	13,485.00	9,165.12	56.04	-89.73	1,688.87	2,297.14	1,285.06	1,239.10	45.96	27.961			
10,800.00	9,149.91	13,485.00	9,165.12	57.18	-89.73	1,688.87	2,297.14	1,247.45	1,200.37	47.09	26.493			
10,850.00	9,149.91	13,485.00	9,165.12	58.34	-89.73	1,688.87	2,297.14	1,210.74	1,162.40	48.34	25.044			
10,900.00	9,149.91	13,485.00	9,165.12	59.50	-89.73	1,688.87	2,297.14	1,175.01	1,125.29	49.72	23.633			
10,950.00	9,149.91	13,485.00	9,165.12	60.68	-89.73	1,688.87	2,297.14	1,140.35	1,089.12	51.23	22.258			
11,000.00	9,149.91	13,485.00	9,165.12	61.86	-89.73	1,688.87	2,297.14	1,106.87	1,054.00	52.87	20.934			
11,050.00	9,149.91	13,485.00	9,165.12	63.07	-89.73	1,688.87	2,297.14	1,074.67	1,020.01	54.66	19.662			
11,100.00	9,149.91	13,485.00	9,165.12	64.27	-89.73	1,688.87	2,297.14	1,043.87	987.31	56.56	18.455			
11,150.00	9,149.91	13,485.00	9,165.12	65.49	-89.73	1,688.87	2,297.14	1,014.61	956.00	58.61	17.312			
11,200.00	9,149.91	13,485.00	9,165.12	66.72	-89.73	1,688.87	2,297.14	987.01	926.25	60.76	16.245			
11,250.00	9,149.91	13,485.00	9,165.12	67.95	-89.73	1,688.87	2,297.14	961.22	898.19	63.03	15.251			
11,300.00	9,149.91	13,485.00	9,165.12	69.19	-89.73	1,688.87	2,297.14	937.39	872.01	65.37	14.339			
11,350.00	9,149.91	13,485.00	9,165.12	70.44	-89.73	1,688.87	2,297.14	915.67	847.87	67.79	13.507			
11,400.00	9,149.91	13,485.00	9,165.12	71.70	-89.73	1,688.87	2,297.14	896.22	825.97	70.25	12.758			
11,450.00	9,149.91	13,485.00	9,165.12	72.96	-89.73	1,688.87	2,297.14	879.18	806.47	72.71	12.092			
11,500.00	9,149.91	13,485.00	9,165.12	74.23	-89.73	1,688.87	2,297.14	864.71	789.57	75.14	11.508			
11,550.00	9,149.91	13,485.00	9,165.12	75.51	-89.73	1,688.87	2,297.14	852.92	775.42	77.50	11.005			
11,600.00	9,149.91	13,485.00	9,165.12	76.79	-89.73	1,688.87	2,297.14	843.93	764.18	79.75	10.582			
11,650.00	9,149.91	13,485.00	9,165.12	78.07	-89.73	1,688.87	2,297.14	837.84	755.98	81.86	10.235			
11,700.00	9,149.91	13,485.00	9,165.12	79.36	-89.73	1,688.87	2,297.14	834.71	750.93	83.78	9.963			
11,727.44	9,149.91	13,485.00	9,165.12	80.07	-89.73	1,688.87	2,297.14	834.26	749.51	84.75	9.844 CC			
11,750.00	9,149.91	13,485.00	9,165.12	80.66	-89.73	1,688.87	2,297.14	834.56	749.07	85.49	9.762 ES			
11,800.00	9,149.91	13,485.00	9,165.12	81.96	-89.73	1,688.87	2,297.14	837.41	750.44	86.96	9.629			
11,850.00	9,149.91	13,485.00	9,165.12	83.27	-89.73	1,688.87	2,297.14	843.21	755.02	88.19	9.561			
11,900.00	9,149.91	13,485.00	9,165.12	84.57	-89.73	1,688.87	2,297.14	851.92	762.75	89.16	9.555 SF			
11,950.00	9,149.91	13,485.00	9,165.12	85.89	-89.73	1,688.87	2,297.14	863.43	773.54	89.89	9.606			
12,000.00	9,149.91	13,485.00	9,165.12	87.20	-89.73	1,688.87	2,297.14	877.65	787.28	90.37	9.712			
12,050.00	9,149.91	13,485.00	9,165.12	88.52	-89.73	1,688.87	2,297.14	894.44	803.81	90.63	9.869			
12,100.00	9,149.91	13,485.00	9,165.12	89.85	-89.73	1,688.87	2,297.14	913.66	822.97	90.69	10.075			
12,150.00	9,149.91	13,485.00	9,165.12	91.18	-89.73	1,688.87	2,297.14	935.17	844.60	90.57	10.325			
12,200.00	9,149.91	13,485.00	9,165.12	92.51	-89.73	1,688.87	2,297.14	958.80	868.50	90.30	10.618			
12,250.00	9,149.91	13,485.00	9,165.12	93.84	-89.73	1,688.87	2,297.14	984.40	894.51	89.90	10.950			
12,300.00	9,149.91	13,485.00	9,165.12	95.18	-89.73	1,688.87	2,297.14	1,011.83	922.44	89.39	11.319			
12,350.00	9,149.91	13,485.00	9,165.12	96.52	-89.73	1,688.87	2,297.14	1,040.94	952.15	88.80	11.723			
12,400.00	9,149.91	13,485.00	9,165.12	97.86	-89.73	1,688.87	2,297.14	1,071.60	983.46	88.14	12.158			
12,450.00	9,149.91	13,485.00	9,165.12	99.20	-89.73	1,688.87	2,297.14	1,103.66	1,016.23	87.43	12.624			
12,500.00	9,149.91	13,485.00	9,165.12	100.55	-89.73	1,688.87	2,297.14	1,137.03	1,050.34	86.68	13.117			
12,550.00	9,149.91	13,485.00	9,165.12	101.90	-89.73	1,688.87	2,297.14	1,171.57	1,085.66	85.92	13.636			
12,600.00	9,149.91	13,485.00	9,165.12	103.25	-89.73	1,688.87	2,297.14	1,207.20	1,122.06	85.14	14.179			
12,650.00	9,149.91	13,485.00	9,165.12	104.60	-89.73	1,688.87	2,297.14	1,243.82	1,159.47	84.35	14.745			
12,700.00	9,149.91	13,485.00	9,165.12	105.96	-89.73	1,688.87	2,297.14	1,281.35	1,197.77	83.57	15.332			
12,750.00	9,149.91	13,485.00	9,165.12	107.32	-89.73	1,688.87	2,297.14	1,319.70	1,236.90	82.80	15.939			
12,800.00	9,149.91	13,485.00	9,165.12	108.68	-89.73	1,688.87	2,297.14	1,358.81	1,276.77	82.04	16.564			
12,850.00	9,149.91	13,485.00	9,165.12	110.04	-89.73	1,688.87	2,297.14	1,398.61	1,317.32	81.29	17.206			
12,900.00	9,149.91	13,485.00	9,165.12	111.40	-89.73	1,688.87	2,297.14	1,439.05	1,358.50	80.56	17.864			
12,950.00	9,149.91	13,485.00	9,165.12	112.77	-89.73	1,688.87	2,297.14	1,480.08	1,400.23	79.85	18.537			

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

Anticollision Report

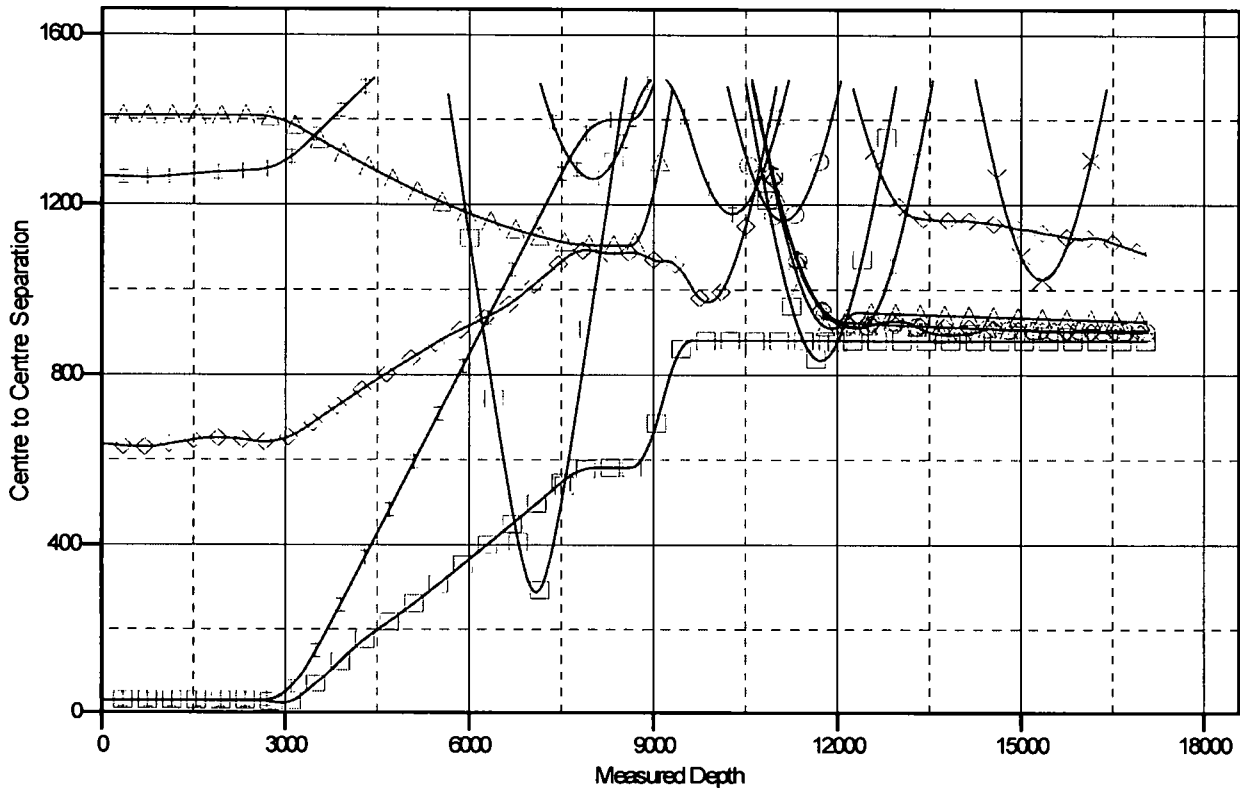
Company: WCDSC Permian NM
Project: Eddy County (NAD 83 NM Eastern)
Reference Site: Sec 27-T19S-R29E
Site Error: 5.00 ft
Reference Well: Coral PWU 28-27 11H
Well Error: 0.50 ft
Reference Wellbore: Wellbore #1
Reference Design: Permit Plan 2

Local Co-ordinate Reference: Well Coral PWU 28-27 11H
TVD Reference: RKB1 @ 3325.90ft
MD Reference: RKB1 @ 3325.90ft
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 RKB1 @ 3325.90ft
 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 27-34, 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, Permit Plan 2 V0 Coral PWU 28-27 12H, Wellbore #1, Permit Plan 2 V0	Turquoise PWU 27-10H, Original Hole, Plan 1 V0 Turquoise PWU 27-10H, Original Hole, Plan 1 V0 Turquoise PWU 27-10H, Original Hole, T&D V0 Turquoise PWU 27-10H, Original Hole, Actual V0	Coral PWU 28-34, Wellbore #1, Wellbore #1 V0 Parkway West Unit 18 (Active), Wellbore #1, Wellbore #1 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
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CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Anticollision Report

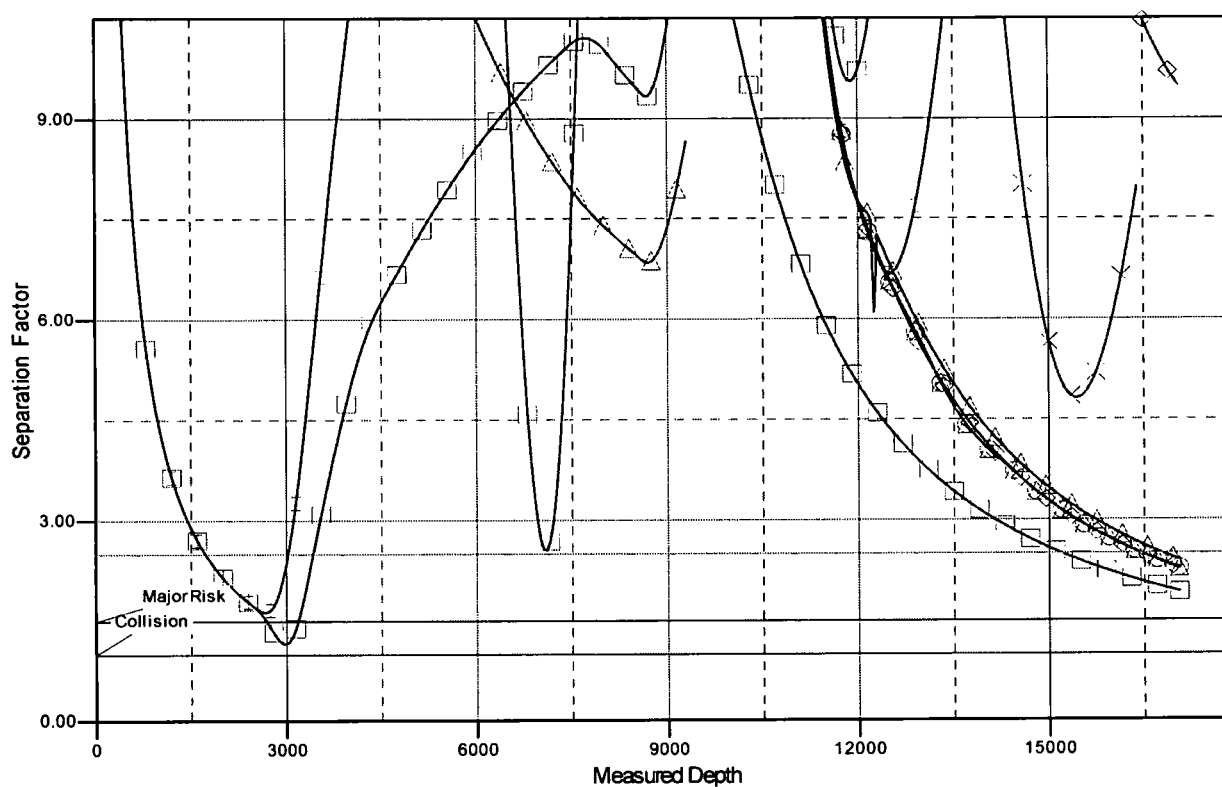
Company: WCDSC Permian NM
Project: Eddy County (NAD 83 NM Eastern)
Reference Site: Sec 27-T19S-R29E
Site Error: 5.00 ft
Reference Well: Coral PWU 28-27 11H
Well Error: 0.50 ft
Reference Wellbore: Wellbore #1
Reference Design: Permit Plan 2

Local Co-ordinate Reference: Well Coral PWU 28-27 11H
TVD Reference: RKB1 @ 3325.90ft
MD Reference: RKB1 @ 3325.90ft
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 RKB1 @ 3325.90ft
 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, Original Hole, P3=1 V0 | Coral PWU 28-3H, Wellbore #1, Wellbore #1 V0 |
| Turquoise PWU 27-10H, Wellbore #1, Wellbore #1 V0 | Turquoise PWU 27-10H, Original Hole, Plan 1 V0 | Parkway Unit 18 (Active), Wellbore #1, Wellbore #1 V0 |
| Parkway West Unit 10, Original Hole, Original Hole V0 | Turquoise PWU 27-10H, Original Hole, PTL V0 | Coral PWU 28-7H, Wellbore #1, Wellbore #1 V0 |
| Coral PWU 28-27 12H, Wellbore #1, Permit Plan 2 V0 | Turquoise PWU 27-10H, Original Hole, T&D V0 | Parkway West Unit #3, Wellbore #1, Wellbore #1 V0 |
| Coral PWU 28-27 12H, Wellbore #1, Permit Plan 2 V0 | Turquoise PWU 27-10H, Original Hole, Actuals V0 | Coral PWU 28-4H, Wellbore #1, Wellbore #1 V0 |

