



Crestone Peak Resources

Sec 4 T2N-R67W

Sheley Pad

SHELEY 3G-4H-M267

Wellbore #1

Plan #2 25Jun18 kjs

Anticollision Summary Report

29 June, 2018

Anticollision Summary Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well SHELEY 3G-4H-M267
Project:	Sec 4 T2N-R67W	TVD Reference:	RKB @ 4934.00usft
Reference Site:	Sheley Pad	MD Reference:	RKB @ 4934.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	SHELEY 3G-4H-M267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #2 25Jun18 kjs	Offset TVD Reference:	Offset Datum

Reference	Plan #2 25Jun18 kjs		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.00usft	Error Model:	ISCWSA
Depth Range:	Unlimited	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 9,999.98 usft	Error Surface:	Pedal Curve
Warning Levels Evaluated at:	2.00 Sigma	Casing Method:	Not applied

Survey Tool Program	Date	6/29/2018		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	12,598.33	Plan #2 25Jun18 kjs (Wellbore #1)	MWD	OWSG MWD - Standard

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Existing Wells (Sheley)						
AMES 1 - ENERGY MIN - No Survey	12,598.33	5,030.00	2,652.44	2,605.31	56.284	CC, ES, SF
BABCOCK 11N-33HZ - KMG - MWD	9,687.31	6,880.00	1,735.75	1,650.62	20.390	CC
BABCOCK 11N-33HZ - KMG - MWD	9,700.00	6,880.00	1,735.80	1,650.36	20.318	ES
BABCOCK 11N-33HZ - KMG - MWD	10,200.00	6,880.00	1,809.88	1,714.34	18.943	SF
BABCOCK 12N-33HZ - KMG - KMG	8,608.82	7,001.48	1,751.93	1,679.43	24.167	CC, ES
BABCOCK 12N-33HZ - KMG - KMG	9,300.00	7,003.66	1,883.34	1,797.42	21.920	SF
BABCOCK 13E-33HZ - KMG - MWD	8,783.24	6,971.00	1,739.80	1,666.44	23.716	CC
BABCOCK 13E-33HZ - KMG - MWD	8,800.00	6,971.00	1,739.88	1,666.14	23.594	ES
BABCOCK 13E-33HZ - KMG - MWD	9,400.00	6,971.00	1,845.89	1,759.88	21.463	SF
BABCOCK 14C-33HZ - KMG - MWD	10,047.25	6,972.00	1,703.79	1,609.09	17.991	CC
BABCOCK 14C-33HZ - KMG - MWD	10,100.00	6,972.00	1,704.60	1,608.71	17.775	ES
BABCOCK 14C-33HZ - KMG - MWD	10,500.00	6,972.00	1,762.92	1,659.59	17.062	SF
BABCOCK 19N-33HZ - KMG - MWD	9,037.00	6,879.00	1,771.37	1,696.60	23.691	CC
BABCOCK 19N-33HZ - KMG - MWD	9,100.00	6,879.00	1,772.49	1,696.23	23.243	ES
BABCOCK 19N-33HZ - KMG - MWD	9,700.00	6,879.00	1,891.38	1,803.04	21.410	SF
BABCOCK 22N-33HZ - KMG - MWD	9,488.64	6,879.00	1,759.64	1,678.04	21.565	CC
BABCOCK 22N-33HZ - KMG - MWD	9,500.00	6,879.00	1,759.68	1,677.81	21.494	ES
BABCOCK 22N-33HZ - KMG - MWD	10,100.00	6,879.00	1,862.82	1,768.88	19.830	SF
BABCOCK 23N-33HZ - KMG - MWD	10,281.11	6,885.00	1,751.93	1,652.91	17.693	CC
BABCOCK 23N-33HZ - KMG - MWD	10,300.00	6,885.00	1,752.03	1,652.60	17.621	ES
BABCOCK 23N-33HZ - KMG - MWD	10,700.00	6,885.00	1,801.31	1,694.70	16.896	SF
BABCOCK 32N-33HZ - KMG - MWD	8,104.59	7,105.28	1,744.80	1,672.18	24.026	CC, ES
BABCOCK 32N-33HZ - KMG - MWD	8,700.00	7,106.63	1,843.59	1,761.20	22.375	SF
BABCOCK 33C-33HZ - KMG - MWD	8,478.85	7,147.00	1,689.02	1,615.47	22.966	CC
BABCOCK 33C-33HZ - KMG - MWD	8,500.00	7,147.00	1,689.15	1,615.17	22.832	ES
BABCOCK 33C-33HZ - KMG - MWD	9,100.00	7,147.00	1,799.61	1,714.24	21.081	SF
BABCOCK 35C-33HZ - KMG - MWD	9,167.04	7,020.88	1,696.47	1,617.78	21.558	CC
BABCOCK 35C-33HZ - KMG - MWD	9,200.00	7,021.15	1,696.79	1,617.29	21.344	ES
BABCOCK 35C-33HZ - KMG - MWD	9,700.00	7,058.00	1,779.44	1,688.85	19.643	SF
BARNES 2-4 - KAUFFMAN - Proposed	11,243.28	5,020.00	2,610.80	2,550.06	42.977	CC
BARNES 2-4 - KAUFFMAN - Proposed	11,300.00	5,020.00	2,611.42	2,549.84	42.410	ES
BARNES 2-4 - KAUFFMAN - Proposed	12,300.00	5,020.00	2,805.14	2,731.74	38.220	SF
BARNES 2-4X - KAUFFMAN - Proposed	11,271.34	5,022.00	2,613.37	2,551.97	42.560	CC
BARNES 2-4X - KAUFFMAN - Proposed	11,300.00	5,022.00	2,613.53	2,551.71	42.273	ES
BARNES 2-4X - KAUFFMAN - Proposed	12,300.00	5,022.00	2,796.94	2,723.33	37.997	SF
BARNES 34-4 - CPR - Gyro	11,163.47	7,422.65	393.06	264.91	3.067	CC, ES, SF
BUTTERBALL 12N-34HZ - KMG - MWD	12,598.33	8,798.39	1,175.54	1,112.15	18.543	CC, ES, SF

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

Anticollision Summary Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well SHELEY 3G-4H-M267
Project:	Sec 4 T2N-R67W	TVD Reference:	RKB @ 4934.00usft
Reference Site:	Sheley Pad	MD Reference:	RKB @ 4934.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	SHELEY 3G-4H-M267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #2 25Jun18 kjs	Offset TVD Reference:	Offset Datum

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Existing Wells (Sheley)						
BUTTERBALL 22N-34HZ - KMG - MWD	12,598.33	8,900.95	1,479.16	1,414.50	22.875	CC, ES, SF
BUTTERBALL 30C-10HZ - KMG - MWD	12,598.33	12,042.00	1,608.47	1,440.52	9.577	CC, ES, SF
BUTTERBALL 32C-34HZ - KMG - Proposed	12,598.33	9,040.81	810.38	742.95	12.018	CC, ES, SF
BUTTERBALL 40N-33HZ - KMG - Proposed	12,598.33	8,911.57	515.23	452.90	8.267	CC, ES, SF
Cowboy_21-5HZ - ?? - Proposed	11,736.41	21,398.20	559.47	400.28	3.515	CC
Cowboy_21-5HZ - ?? - Proposed	11,900.00	21,398.20	582.90	387.13	2.977	ES
Cowboy_21-5HZ - ?? - Proposed	12,100.00	21,398.20	667.24	422.73	2.729	SF
Cowboy_21-6HZ - ?? - Proposed	12,085.92	21,300.79	562.42	398.90	3.439	CC
Cowboy_21-6HZ - ?? - Proposed	12,300.00	21,300.79	601.79	389.20	2.831	ES
Cowboy_21-6HZ - ?? - Proposed	12,400.00	21,300.79	644.18	407.09	2.717	SF
Cowboy_21-7HZ - ?? - Proposed	12,300.00	21,613.46	674.27	428.66	2.745	SF
Cowboy_21-7HZ - ?? - Proposed	12,500.00	21,613.46	598.22	392.59	2.909	ES
Cowboy_21-7HZ - ?? - Proposed	12,598.33	21,613.46	582.78	400.99	3.206	CC
Cowboy_21-8HZ - ?? - Proposed	12,598.33	21,443.33	672.42	424.41	2.711	CC, ES, SF
HOMESTEAD 22-4 - KMG - MWD	9,283.25	7,898.54	1,849.75	1,758.05	20.170	CC
HOMESTEAD 22-4 - KMG - MWD	9,300.00	7,898.36	1,849.83	1,757.93	20.129	ES
HOMESTEAD 22-4 - KMG - MWD	9,700.00	7,893.88	1,896.11	1,799.75	19.676	SF
HSR-DODERO 6-4A - KMG - Gyro	9,877.61	7,349.01	2,590.30	2,494.00	26.897	CC
HSR-DODERO 6-4A - KMG - Gyro	9,900.00	7,349.14	2,590.40	2,493.57	26.752	ES
HSR-DODERO 6-4A - KMG - Gyro	10,800.00	7,354.33	2,749.63	2,635.57	24.109	SF
HSR-RHOADES 8-5A - KMG - Gyro	7,233.38	7,022.83	2,369.22	2,309.79	39.863	CC, ES
HSR-RHOADES 8-5A - KMG - Gyro	7,500.00	7,216.78	2,378.65	2,318.67	39.658	SF
HSR-SATER 1-8A - KMG - Gyro	5,972.53	5,806.71	1,370.59	1,320.16	27.174	CC
HSR-SATER 1-8A - KMG - Gyro	6,400.00	6,227.96	1,372.33	1,318.09	25.300	ES
HSR-SATER 1-8A - KMG - Gyro	7,200.00	7,000.00	1,393.49	1,333.95	23.404	SF
HSR-STREAR 4-10A - KMG - Gyro	12,598.33	7,448.54	1,645.75	1,497.18	11.077	CC, ES, SF
LUHMAN 1 - CPR - Gyro	11,292.85	7,423.76	120.13	-11.31	0.914	Level 3, CC, ES, SF
LUHMAN 33-4 - CPR - Gyro	11,098.93	7,375.65	1,279.83	1,153.51	10.131	CC
LUHMAN 33-4 - CPR - Gyro	11,100.00	7,375.62	1,279.83	1,153.48	10.129	ES
LUHMAN 33-4 - CPR - Gyro	11,300.00	7,369.71	1,295.51	1,165.18	9.940	SF
LUHMAN 43-4 - CPR - Gyro	12,419.50	7,416.15	1,161.16	1,000.72	7.237	CC, ES
LUHMAN 43-4 - CPR - Gyro	12,500.00	7,416.16	1,163.95	1,001.99	7.187	SF
LUHMAN 44-4 - CPR - Gyro	12,544.88	7,430.69	379.98	216.22	2.320	CC, ES, SF
Luhman 6-4-4 - CPR - MWD	12,002.05	7,420.07	1,720.80	1,571.98	11.563	CC, ES
Luhman 6-4-4 - CPR - MWD	12,300.00	7,416.38	1,746.40	1,592.32	11.335	SF
MCCLAY 5-4A - KMG - Gyro	8,322.04	7,371.78	2,251.02	2,184.97	34.078	CC, ES
MCCLAY 5-4A - KMG - Gyro	9,300.00	7,383.29	2,454.26	2,374.50	30.773	SF
SATER 40N-5HZ - KMG - MWD	7,286.74	10,823.18	284.95	206.06	3.612	CC
SATER 40N-5HZ - KMG - MWD	7,300.00	10,823.85	285.38	204.55	3.530	ES
SATER 40N-5HZ - KMG - MWD	7,400.00	10,828.80	314.74	223.90	3.465	SF
SCOTT 1C-32HZ - KMG - MWD	6,931.10	6,726.18	1,817.00	1,758.51	31.062	CC, ES
SCOTT 1C-32HZ - KMG - MWD	7,000.00	6,780.00	1,817.54	1,758.79	30.935	SF
SCOTT 26N-32HZ - KMG - MWD	6,365.27	6,253.88	1,840.84	1,783.98	32.376	CC
SCOTT 26N-32HZ - KMG - MWD	6,600.00	6,476.89	1,842.36	1,783.51	31.303	ES
SCOTT 26N-32HZ - KMG - MWD	6,900.00	6,693.00	1,846.44	1,785.67	30.383	SF
SHELEY 1 - CPR - Gyro	9,154.81	7,396.43	510.91	430.51	6.355	CC, ES
SHELEY 1 - CPR - Gyro	9,200.00	7,395.46	512.90	431.73	6.318	SF
SHELEY 13-4 - CPR - Gyro	8,237.25	7,364.37	1,297.51	1,232.52	19.967	CC, ES
SHELEY 13-4 - CPR - Gyro	8,500.00	7,364.83	1,323.84	1,255.95	19.500	SF
SHELEY 14-4 - CPR - Gyro	100.00	76.26	70.40	70.13	256.854	CC, ES
SHELEY 14-4 - CPR - Gyro	8,535.80	7,407.96	250.38	179.38	3.526	SF
SHELEY 23-4 - CPR - Gyro	9,863.00	7,385.98	1,259.08	1,163.02	13.107	CC
SHELEY 23-4 - CPR - Gyro	9,900.00	7,385.49	1,259.63	1,162.72	12.998	ES

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

Anticollision Summary Report

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Reference Site:	Sheley Pad	MD Reference:	RKB @ 4934.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	SHELEY 3G-4H-M267	Survey Calculation Method:	Minimum Curvature
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Reference Design:	Plan #2 25Jun18 kjs	Offset TVD Reference:	Offset Datum

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Existing Wells (Sheley)						
SHELEY 23-4 - CPR - Gyro	10,100.00	7,382.89	1,281.19	1,180.60	12.736	SF
SHELEY 24-4 - MACHII-ROSS PET CO - Gyro	9,728.66	7,409.78	211.67	118.67	2.276	CC, ES, SF
SHELEY 24-4 (2) - CPR - Gyro	9,862.61	7,413.25	376.75	280.64	3.920	CC, ES
SHELEY 24-4 (2) - CPR - Gyro	9,900.00	7,412.39	378.60	281.96	3.918	SF
SHELEY 3A-4H - CPR - MWD	552.15	544.21	39.33	35.96	11.681	CC
SHELEY 3A-4H - CPR - MWD	12,598.33	11,695.00	231.51	23.03	1.110	Level 3, ES, SF
SHELEY 3B-4H - CPR - MWD	100.00	90.87	30.23	29.94	106.041	CC, ES
SHELEY 3B-4H - CPR - MWD	12,598.33	11,837.53	630.31	370.72	2.428	SF
Sheley 4-6-4 - CPR - MWD	10,466.93	7,541.96	452.64	340.81	4.047	CC, ES
Sheley 4-6-4 - CPR - MWD	10,500.00	7,541.23	453.85	341.06	4.024	SF
SPRAGUE 11-9 - CPR - Gyro	593.44	598.73	1,397.65	1,393.80	363.861	CC
SPRAGUE 11-9 - CPR - Gyro	900.00	898.45	1,398.46	1,392.26	225.442	ES
SPRAGUE 11-9 - CPR - Gyro	8,900.00	7,442.62	1,652.59	1,578.54	22.316	SF
SPRAGUE 31-9 - CPR - MWD	11,011.34	7,731.06	1,423.72	1,298.19	11.342	CC, ES
SPRAGUE 31-9 - CPR - MWD	11,300.00	7,699.52	1,452.18	1,320.93	11.064	SF
SPRAGUE 3A-9H-N267 - CPR - MWD	8,188.15	12,788.00	520.43	444.92	6.892	CC
SPRAGUE 3A-9H-N267 - CPR - MWD	8,300.00	12,788.00	532.31	443.41	5.988	ES
SPRAGUE 3A-9H-N267 - CPR - MWD	8,500.00	12,788.00	606.71	496.23	5.492	SF
SPRAGUE 3AA-9H-N267 - CPR - MWD	7,997.74	12,991.00	439.87	363.64	5.770	CC
SPRAGUE 3AA-9H-N267 - CPR - MWD	8,100.00	12,991.00	451.61	360.96	4.982	ES
SPRAGUE 3AA-9H-N267 - CPR - MWD	8,200.00	12,991.00	484.16	380.16	4.656	SF
SPRAGUE 3B-9H-N267 - CPR - MWD	8,419.03	12,950.00	427.21	351.31	5.629	CC
SPRAGUE 3B-9H-N267 - CPR - MWD	8,500.00	12,950.00	434.81	347.65	4.988	ES
SPRAGUE 3B-9H-N267 - CPR - MWD	8,700.00	12,950.00	511.32	398.63	4.537	SF
SPRAGUE 3C-9H-N267 - CPR - MWD	8,691.01	12,655.00	470.64	393.81	6.126	CC
SPRAGUE 3C-9H-N267 - CPR - MWD	8,700.00	12,655.00	470.72	393.05	6.060	ES
SPRAGUE 3C-9H-N267 - CPR - MWD	9,000.00	12,655.00	563.00	450.34	4.997	SF
SPRAGUE 3D-9H-N267 - CPR - MWD	9,009.05	12,595.00	504.98	423.81	6.221	CC
SPRAGUE 3D-9H-N267 - CPR - MWD	9,100.00	12,595.00	513.10	423.05	5.698	ES
SPRAGUE 3D-9H-N267 - CPR - MWD	9,300.00	12,595.00	582.80	471.32	5.228	SF
SPRAGUE 3E-9HX1-N267 - CPR - MWD	9,426.54	12,714.00	468.92	383.02	5.459	CC
SPRAGUE 3E-9HX1-N267 - CPR - MWD	9,500.00	12,714.00	474.64	382.40	5.146	ES
SPRAGUE 3E-9HX1-N267 - CPR - MWD	9,700.00	12,714.00	542.84	428.02	4.728	SF
SPRAGUE 3F-9H-N267 - CPR - MWD	9,715.34	12,921.00	512.18	418.81	5.486	CC, ES
SPRAGUE 3F-9H-N267 - CPR - MWD	10,000.00	12,921.00	585.96	467.94	4.965	SF
SPRAGUE 3G-9H-N267 - CPR - MWD	10,085.56	12,696.00	535.83	432.80	5.201	CC, ES
SPRAGUE 3G-9H-N267 - CPR - MWD	10,300.00	12,696.00	577.15	460.75	4.959	SF
SPRAGUE 3H-9H-N267 - CPR - MWD	10,300.00	12,946.00	585.11	464.92	4.868	SF
SPRAGUE 3H-9H-N267 - CPR - MWD	10,442.36	12,946.00	567.52	452.65	4.940	CC, ES
SPRAGUE 3I-9H-N267 - CPR - MWD	10,700.00	12,836.00	599.20	468.49	4.584	SF
SPRAGUE 3I-9H-N267 - CPR - MWD	10,800.00	12,836.00	588.57	461.57	4.635	ES
SPRAGUE 3I-9H-N267 - CPR - MWD	10,813.14	12,836.00	588.42	461.76	4.646	CC
SPRAGUE 3J-9H-N267 - CPR - MWD	11,200.00	13,145.00	704.47	555.26	4.721	SF
SPRAGUE 3J-9H-N267 - CPR - MWD	11,288.60	13,145.00	698.88	551.36	4.737	CC, ES
SPRAGUE 41-9 - CPR - Gyro	12,329.81	7,432.36	1,424.13	1,265.98	9.005	CC
SPRAGUE 41-9 - CPR - Gyro	12,400.00	7,433.25	1,425.85	1,265.84	8.911	ES
SPRAGUE 41-9 - CPR - Gyro	12,500.00	7,434.51	1,434.26	1,272.13	8.846	SF
TOWNSEND 44-5 - CPR - Gyro	6,741.70	6,552.40	249.76	192.57	4.368	CC
TOWNSEND 44-5 - CPR - Gyro	6,800.00	6,610.62	249.99	192.32	4.335	ES
TOWNSEND 44-5 - CPR - Gyro	6,900.00	6,711.53	251.27	192.95	4.309	SF
WHISTON 10N-33HZ - KMG - MWD	10,910.36	6,956.00	1,439.49	1,327.10	12.809	CC, ES
WHISTON 10N-33HZ - KMG - MWD	11,200.00	6,956.00	1,468.34	1,349.58	12.364	SF
WHISTON 15N-33HZ - KMG - MWD	11,700.00	7,050.00	1,272.60	1,144.34	9.922	CC, ES

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

Anticollision Summary Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well SHELEY 3G-4H-M267
Project:	Sec 4 T2N-R67W	TVD Reference:	RKB @ 4934.00usft
Reference Site:	Sheley Pad	MD Reference:	RKB @ 4934.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	SHELEY 3G-4H-M267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #2 25Jun18 kjs	Offset TVD Reference:	Offset Datum

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Existing Wells (Sheley)						
WHISTON 15N-33HZ - KMG - MWD	11,800.00	7,050.00	1,276.60	1,146.69	9.827	SF
WHISTON 16N-33HZ - KMG - MWD	12,194.44	6,957.00	1,214.02	1,080.29	9.078	CC
WHISTON 16N-33HZ - KMG - MWD	12,200.00	6,957.00	1,214.03	1,080.23	9.073	ES
WHISTON 16N-33HZ - KMG - MWD	12,300.00	6,957.00	1,218.60	1,083.76	9.038	SF
WHISTON 20N-33HZ - KMG - MWD	11,742.34	6,955.00	1,353.83	1,224.04	10.431	CC, ES
WHISTON 20N-33HZ - KMG - MWD	11,900.00	6,955.00	1,362.98	1,230.70	10.304	SF
WHISTON 23C-33HZ - KMG - MWD	10,696.02	7,106.73	1,243.12	1,133.67	11.358	CC
WHISTON 23C-33HZ - KMG - MWD	10,700.00	7,106.76	1,243.13	1,133.56	11.345	ES
WHISTON 23C-33HZ - KMG - MWD	10,900.00	7,108.05	1,259.75	1,145.12	10.990	SF
WHISTON 24C-33HZ - KMG - MWD	11,870.80	7,097.76	1,199.30	1,062.78	8.785	CC
WHISTON 24C-33HZ - KMG - MWD	11,900.00	7,097.95	1,199.65	1,062.63	8.755	ES
WHISTON 24C-33HZ - KMG - MWD	12,000.00	7,098.58	1,206.23	1,067.87	8.718	SF
WHISTON 25-4 - KMG - MWD	10,467.85	7,651.41	1,823.60	1,705.15	15.396	CC
WHISTON 25-4 - KMG - MWD	10,500.00	7,650.82	1,823.88	1,704.47	15.274	ES
WHISTON 25-4 - KMG - MWD	10,900.00	7,643.29	1,874.09	1,744.85	14.501	SF
WHISTON 25N-33HZ - KMG - MWD	10,569.53	7,017.29	1,272.41	1,168.51	12.246	CC
WHISTON 25N-33HZ - KMG - MWD	10,600.00	7,017.63	1,272.77	1,167.96	12.143	ES
WHISTON 25N-33HZ - KMG - MWD	10,800.00	7,019.85	1,293.11	1,183.24	11.770	SF
WHISTON 39C-33HZ - KMG - MWD	12,598.33	7,288.31	1,174.65	1,012.56	7.247	CC, ES, SF
WHISTON 40N-33HZ - KMG - MWD	12,598.33	7,202.31	1,329.93	1,171.18	8.378	CC, ES, SF
WHISTON 7-4 - KMG - No Survey	11,000.61	7,408.00	2,314.62	2,203.13	20.762	CC
WHISTON 7-4 - KMG - No Survey	11,100.00	7,408.00	2,316.75	2,202.81	20.333	ES
WHISTON 7-4 - KMG - No Survey	11,700.00	7,408.00	2,412.25	2,287.36	19.316	SF
WHISTON 8-4 - KMG - Gyro	12,542.99	7,393.75	2,372.03	2,208.46	14.501	CC
WHISTON 8-4 - KMG - Gyro	12,598.33	7,393.96	2,372.67	2,207.78	14.389	ES, SF
WHISTON 9N-33HZ - KMG - MWD	12,075.70	7,011.26	1,325.21	1,185.69	9.498	CC
WHISTON 9N-33HZ - KMG - MWD	12,100.00	7,011.91	1,325.44	1,185.48	9.470	ES
WHISTON 9N-33HZ - KMG - MWD	12,200.00	7,014.59	1,331.02	1,189.61	9.412	SF
Sheley Pad						
SHELEY 3C-4H-M267 - Wellbore #1 - Plan #3 25Jun18 k	200.00	198.00	40.07	39.09	40.649	CC, ES
SHELEY 3C-4H-M267 - Wellbore #1 - Plan #3 25Jun18 k	12,598.33	12,730.09	1,031.87	754.20	3.716	SF
SHELEY 3D-4H-M267 - Wellbore #1 - Plan #3 25Jun18 k	310.95	308.88	30.18	28.40	16.985	CC, ES
SHELEY 3D-4H-M267 - Wellbore #1 - Plan #3 25Jun18 k	12,598.33	12,613.32	891.14	613.33	3.208	SF
SHELEY 3E-4H-M267 - Wellbore #1 - Plan #2 25Jun18 k	355.22	354.18	19.92	17.83	9.510	CC
SHELEY 3E-4H-M267 - Wellbore #1 - Plan #2 25Jun18 k	400.00	398.83	20.11	17.70	8.343	ES
SHELEY 3E-4H-M267 - Wellbore #1 - Plan #2 25Jun18 k	12,598.33	12,648.71	729.68	451.07	2.619	SF
SHELEY 3F-4H-M267 - Wellbore #1 - Plan #2 25Jun18 k	325.62	325.61	10.16	8.27	5.378	CC
SHELEY 3F-4H-M267 - Wellbore #1 - Plan #2 25Jun18 k	400.00	399.93	10.57	8.16	4.379	ES
SHELEY 3F-4H-M267 - Wellbore #1 - Plan #2 25Jun18 k	12,598.33	12,489.69	266.26	28.08	1.118	Level 3, SF
SHELEY 3H-4H-M267 - Wellbore #1 - Plan #2 25Jun18 k	200.00	200.00	9.84	8.84	9.905	CC
SHELEY 3H-4H-M267 - Wellbore #1 - Plan #2 25Jun18 k	300.00	299.94	10.15	8.45	5.973	ES
SHELEY 3H-4H-M267 - Wellbore #1 - Plan #2 25Jun18 k	12,500.00	12,354.57	322.33	77.30	1.315	Level 3, SF

Anticollision Summary Report

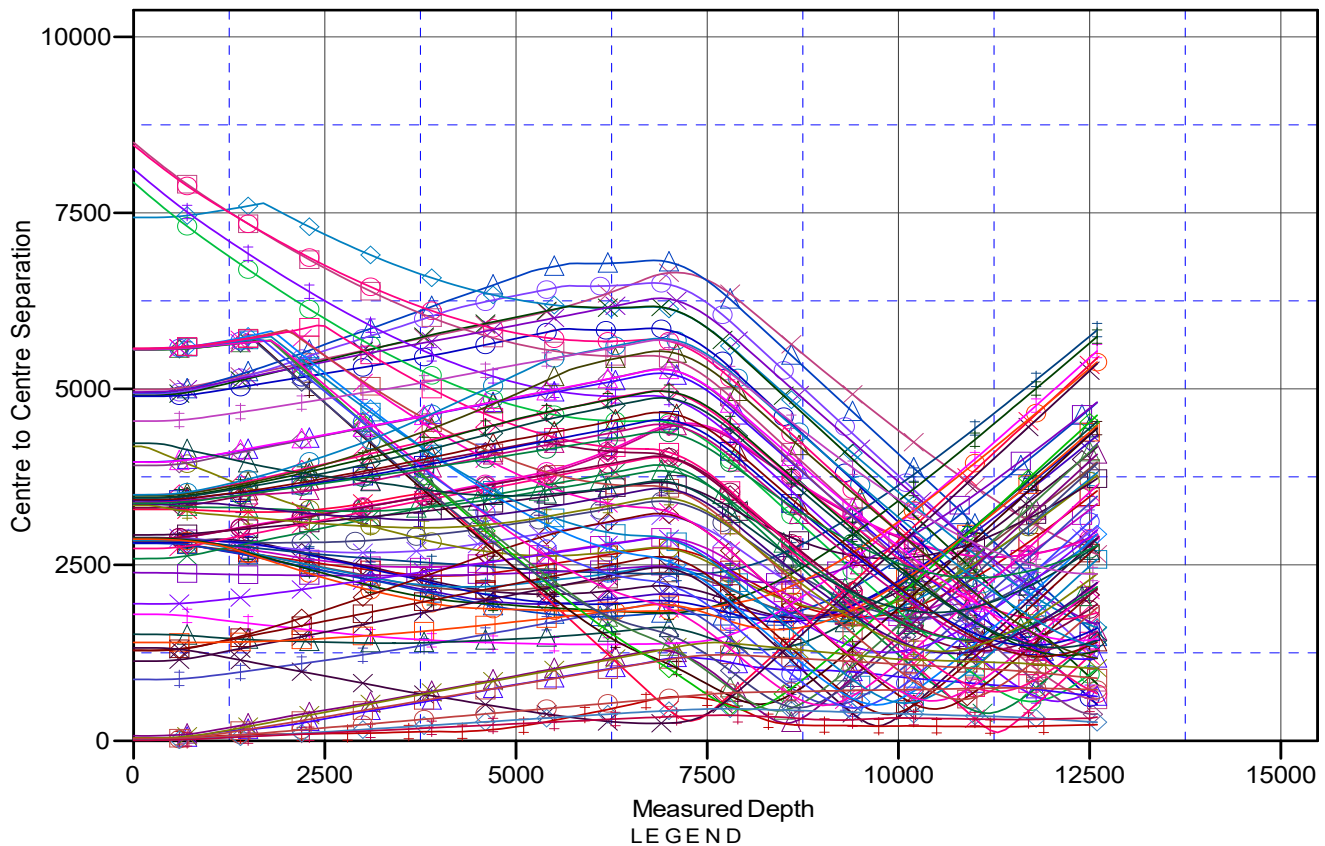
Company: Crestone Peak Resources
Project: Sec 4 T2N-R67W
Reference Site: Sheley Pad
Site Error: 0.00 usft
Reference Well: SHELEY 3G-4H-M267
Well Error: 0.00 usft
Reference Wellbore: Wellbore #1
Reference Design: Plan #2 25Jun18 kjs

Local Co-ordinate Reference: Well SHELEY 3G-4H-M267
TVD Reference: RKB @ 4934.00usft
MD Reference: RKB @ 4934.00usft
North Reference: True
Survey Calculation Method: Minimum Curvature
Output errors are at 2.00 sigma
Database: EDM 5000.15 Single User Db
Offset TVD Reference: Offset Datum

Reference Depths are relative to RKB @ 4934.00usft
 Offset Depths are relative to Offset Datum
 Central Meridian is -105.500000

Coordinates are relative to: SHELEY 3G-4H-M267
 Coordinate System is US State Plane 1983, Colorado Northern Zone
 Grid Convergence at Surface is: 0.39°

Ladder Plot



LEGEND

AMES 1, ENERGY MIN, No Survey V0	HSR-STREAR 410A, KMG, Gyro V0	SPRAGUE 3F-9HN267, CPR, MWD V0
BABCOCK 11N-33HZ, KMG, MWD V0	LUHMAN 1, CPR, Gyro V0	SPRAGUE 3G-9HN267, CPR, MWD V0
BABCOCK 12N-33HZ, KMG, MWD V0	LUHMAN 334, CPR, Gyro V0	SPRAGUE 3H-9HN267, CPR, MWD V0
BABCOCK 13E-33HZ, KMG, MWD V0	LUHMAN 434, CPR, Gyro V0	SPRAGUE 3I-9HN267, CPR, MWD V0
BABCOCK 14C-33HZ, KMG, MWD V0	Luhman 444, CPR, Gyro V0	SPRAGUE 3J-9HN267, CPR, MWD V0
BABCOCK 19N-33HZ, KMG, MWD V0	Luhman 64-4, CPR, MWD V0	SPRAGUE 41-9, CPR, Gyro V0
BABCOCK 22N-33HZ, KMG, MWD V0	MCCLAY 5-4A, KMG, Gyro V0	TOWNSEND 446, CPR, Gyro V0
BABCOCK 23N-33HZ, KMG, MWD V0	SATER 40N-5HZ, KMG, MWD V0	WHISTON 10N-33HZ, KMG, MWD V0
BABCOCK 23N-33HZ, KMG, MWD V0	SCOTT 1C-33HZ, KMG, MWD V0	WHISTON 19N-33HZ, KMG, MWD V0
BABCOCK 32N-33HZ, KMG, MWD V0	SCOTT 26N-33HZ, KMG, MWD V0	WHISTON 19N-33HZ, KMG, MWD V0
BABCOCK 33C-33HZ, KMG, MWD V0	SHELEY 1, CPR, Gyro V0	WHISTON 20N-33HZ, KMG, MWD V0
BABCOCK 35C-33HZ, KMG, MWD V0	SHELEY 13-4, CPR, Gyro V0	WHISTON 23C-33HZ, KMG, MWD V0
BARNES 2-4, KAUFFMAN, Proposed V0	SHELEY 14-4, CPR, Gyro V0	WHISTON 24C-33HZ, KMG, MWD V0
BARNES 2-4X, KAUFFMAN, Proposed V0	SHELEY 23-4, CPR, Gyro V0	WHISTON 254, KMG, MWD V0
BARNES 34-4, CPR, Gyro V0	SHELEY 24-4, MACHIROSS PET CO, Gyro V0	WHISTON 29N-33HZ, KMG, MWD V0
BUTTERBALL 12N-34HZ, KMG, MWD V0	SHELEY 24-4 (2), CPR, Gyro V0	WHISTON 32C-33HZ, KMG, MWD V0
BUTTERBALL 22N-34HZ, KMG, MWD V0	SHELEY 3A-4H, CPR, MWD V0	WHISTON 40N-33HZ, KMG, MWD V0
BUTTERBALL 30C-40HZ, KMG, Proposed V0	SHELEY 3B-4H, CPR, MWD V0	WHISTON 74, KMG, No Survey V0
BUTTERBALL 32C-34HZ, KMG, Proposed V0	Sheley 46-4, CPR, MWD V0	WHISTON 84, KMG, Gyro V0
BUTTERBALL 40N-33HZ, KMG, Proposed V0	SPRAGUE 11-9, CPR, Gyro V0	WHISTON 9N-33HZ, KMG, MWD V0
Cowboy_21-5HZ, ??, Proposed V0	SPRAGUE 31-9, CPR, MWD V0	SHELEY 3D-4HM267, Wellbore #1, Plan #3 25Jun18 kjs V0
Cowboy_21-7HZ, ??, Proposed V0	SPRAGUE 3A-9HN267, CPR, MWD V0	SHELEY 3E-4HM267, Wellbore #1, Plan #2 25Jun18 kjs V0
Cowboy_21-8HZ, ??, Proposed V0	SPRAGUE 3AA-9HN267, CPR, MWD V0	SHELEY 3F-4HM267, Wellbore #1, Plan #2 25Jun18 kjs V0
HOMESTEAD 224, KMG, MWD V0	SPRAGUE 3B-9HN267, CPR, MWD V0	SHELEY 3H-4HM267, Wellbore #1, Plan #2 25Jun18 kjs V0
HSR-ODDERO 6-4A, KMG, Gyro V0	SPRAGUE 3C-9HN267, CPR, MWD V0	

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well SHELEY 3G-4H-M267
Project:	Sec 4 T2N-R67W	TVD Reference:	RKB @ 4934.00usft
Reference Site:	Sheley Pad	MD Reference:	RKB @ 4934.00usft
Site Error:	0.00 usft	North Reference:	True
Reference Well:	SHELEY 3G-4H-M267	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.15 Single User Db
Reference Design:	Plan #2 25Jun18 kjs	Offset TVD Reference:	Offset Datum

Reference Depths are relative to RKB @ 4934.00usft
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000

Coordinates are relative to: SHELEY 3G-4H-M267
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.39°

