



# **Crestone Peak Resources**

**Sec 4 T2N-R67W**

**Sheley Pad**

**SHELEY 3H-4H-M267**

**Wellbore #1**

**Plan #3 25Jun18 kjs**

## **Anticollision Summary Report**

**29 June, 2018**

## Anticollision Summary Report

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

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

<b>Survey Tool Program</b>	<b>Date</b>	6/29/2018		
<b>From (usft)</b>	<b>To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>
0.00	12,358.76	Plan #3 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
Offset Well - Wellbore - Design						
Existing Wells (Sheley)						
AMES 1 - ENERGY MIN - No Survey	12,358.76	5,030.00	2,544.73	2,501.62	59.021	CC, ES, SF
BABCOCK 11N-33HZ - KMG - MWD	9,422.64	6,828.66	1,951.66	1,868.00	23.328	CC
BABCOCK 11N-33HZ - KMG - MWD	9,500.00	6,827.87	1,953.19	1,867.53	22.802	ES
BABCOCK 11N-33HZ - KMG - MWD	10,200.00	6,824.15	2,069.19	1,968.85	20.620	SF
BABCOCK 12N-33HZ - KMG - KMG	8,642.45	6,924.97	1,973.78	1,896.38	25.501	CC, ES
BABCOCK 12N-33HZ - KMG - KMG	9,200.00	6,926.85	2,087.36	1,998.84	23.580	SF
BABCOCK 13E-33HZ - KMG - MWD	8,747.95	6,930.27	1,949.41	1,872.09	25.214	CC
BABCOCK 13E-33HZ - KMG - MWD	8,800.00	6,930.09	1,950.56	1,872.03	24.839	ES
BABCOCK 13E-33HZ - KMG - MWD	9,300.00	6,926.60	2,056.30	1,967.34	23.113	SF
BABCOCK 14C-33HZ - KMG - MWD	9,931.58	6,929.66	1,944.68	1,847.72	20.056	CC
BABCOCK 14C-33HZ - KMG - MWD	10,000.00	6,929.81	1,945.89	1,847.33	19.743	ES
BABCOCK 14C-33HZ - KMG - MWD	10,500.00	6,930.94	2,026.05	1,918.08	18.764	SF
BABCOCK 19N-33HZ - KMG - MWD	8,935.49	6,825.79	1,965.67	1,888.48	25.464	CC
BABCOCK 19N-33HZ - KMG - MWD	9,000.00	6,825.70	1,966.71	1,887.93	24.965	ES
BABCOCK 19N-33HZ - KMG - MWD	9,500.00	6,822.52	2,074.90	1,985.23	23.139	SF
BABCOCK 22N-33HZ - KMG - MWD	9,241.26	6,838.33	1,964.55	1,884.06	24.407	CC, ES
BABCOCK 22N-33HZ - KMG - MWD	10,100.00	6,829.25	2,127.53	2,028.85	21.559	SF
BABCOCK 23N-33HZ - KMG - MWD	10,165.89	6,795.00	1,976.02	1,874.97	19.554	CC
BABCOCK 23N-33HZ - KMG - MWD	10,200.00	6,795.00	1,976.32	1,874.50	19.410	ES
BABCOCK 23N-33HZ - KMG - MWD	10,700.00	6,795.00	2,046.93	1,936.04	18.459	SF
BABCOCK 32N-33HZ - KMG - MWD	8,051.99	7,059.00	2,002.83	1,927.23	26.491	CC
BABCOCK 32N-33HZ - KMG - MWD	8,100.00	7,059.00	2,003.40	1,926.99	26.218	ES
BABCOCK 32N-33HZ - KMG - MWD	8,800.00	7,059.00	2,124.35	2,036.39	24.152	SF
BABCOCK 33C-33HZ - KMG - MWD	8,538.84	7,057.00	1,937.43	1,858.99	24.702	CC
BABCOCK 33C-33HZ - KMG - MWD	8,600.00	7,057.00	1,938.37	1,858.66	24.318	ES
BABCOCK 33C-33HZ - KMG - MWD	9,100.00	7,057.00	2,049.02	1,959.95	23.006	SF
BABCOCK 35C-33HZ - KMG - MWD	9,037.20	6,968.00	1,903.98	1,823.94	23.788	CC, ES
BABCOCK 35C-33HZ - KMG - MWD	9,700.00	6,968.00	2,052.95	1,958.62	21.762	SF
BARNES 2-4 - KAUFFMAN - Proposed	11,116.46	5,020.00	2,592.37	2,522.97	37.357	CC
BARNES 2-4 - KAUFFMAN - Proposed	11,200.00	5,020.00	2,593.71	2,522.97	36.664	ES
BARNES 2-4 - KAUFFMAN - Proposed	12,100.00	5,020.00	2,772.68	2,690.05	33.558	SF
BARNES 2-4X - KAUFFMAN - Proposed	11,144.76	5,022.00	2,596.26	2,526.22	37.068	CC
BARNES 2-4X - KAUFFMAN - Proposed	11,200.00	5,022.00	2,596.84	2,525.91	36.607	ES
BARNES 2-4X - KAUFFMAN - Proposed	12,100.00	5,022.00	2,766.41	2,683.54	33.381	SF
BARNES 34-4 - CPR - Gyro	11,018.86	7,274.91	121.78	-5.47	0.957	Level 3, CC, ES, SF
BUTTERBALL 12N-34HZ - KMG - MWD	12,358.76	8,505.90	1,266.47	1,205.12	20.642	CC, ES, SF
BUTTERBALL 22N-34HZ - KMG - MWD	12,358.76	8,610.30	1,570.49	1,508.12	25.181	CC, ES, SF

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

# Anticollision Summary Report

<b>Company:</b>	Crestone Peak Resources	<b>Local Co-ordinate Reference:</b>	Well SHELEY 3H-4H-M267
<b>Project:</b>	Sec 4 T2N-R67W	<b>TVD Reference:</b>	RKB @ 4934.00usft
<b>Reference Site:</b>	Sheley Pad	<b>MD Reference:</b>	RKB @ 4934.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	SHELEY 3H-4H-M267	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDM 5000.15 Single User Db
<b>Reference Design:</b>	Plan #3 25Jun18 kjs	<b>Offset TVD Reference:</b>	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 30C-10HZ - KMG - MWD	12,358.76	12,042.00	1,405.77	1,241.62	8.564	CC, ES, SF
BUTTERBALL 32C-34HZ - KMG - Proposed	12,358.76	8,756.74	934.37	868.20	14.122	CC, ES, SF
BUTTERBALL 40N-33HZ - KMG - Proposed	12,358.76	8,626.45	613.54	549.76	9.620	CC, ES, SF
Cowboy_21-5HZ - ?? - Proposed	11,604.89	21,398.20	281.73	131.77	1.879	CC
Cowboy_21-5HZ - ?? - Proposed	11,700.00	21,398.20	297.35	96.10	1.478	Level 3, ES
Cowboy_21-5HZ - ?? - Proposed	11,800.00	21,398.20	342.69	96.95	1.395	Level 3, SF
Cowboy_21-6HZ - ?? - Proposed	11,954.59	21,300.79	296.19	134.20	1.828	CC
Cowboy_21-6HZ - ?? - Proposed	12,100.00	21,300.79	329.96	104.89	1.466	Level 3, ES, SF
Cowboy_21-7HZ - ?? - Proposed	12,300.00	21,613.46	423.70	190.95	1.820	SF
Cowboy_21-7HZ - ?? - Proposed	12,358.76	21,613.46	397.74	180.48	1.831	CC, ES
Cowboy_21-8HZ - ?? - Proposed	12,358.76	21,443.33	510.14	226.77	1.800	CC, ES, SF
HOMESTEAD 22-4 - KMG - MWD	9,108.25	7,746.46	2,105.77	2,015.37	23.295	CC, ES
HOMESTEAD 22-4 - KMG - MWD	9,600.00	7,738.38	2,182.32	2,085.30	22.492	SF
HSR-DODERO 6-4A - KMG - Gyro	9,550.99	7,190.02	2,873.01	2,782.20	31.638	CC
HSR-DODERO 6-4A - KMG - Gyro	9,600.00	7,190.08	2,873.43	2,781.40	31.224	ES
HSR-DODERO 6-4A - KMG - Gyro	10,900.00	7,193.37	3,090.95	2,973.03	26.214	SF
HSR-RHOADES 8-5A - KMG - Gyro	5,420.92	5,232.47	2,679.41	2,633.53	58.396	CC
HSR-RHOADES 8-5A - KMG - Gyro	5,700.00	5,500.00	2,680.74	2,632.42	55.472	ES
HSR-RHOADES 8-5A - KMG - Gyro	8,800.00	7,265.18	3,130.45	3,059.58	44.170	SF
HSR-SATER 1-8A - KMG - Gyro	6,840.74	6,655.91	1,045.56	987.91	18.135	CC, ES
HSR-SATER 1-8A - KMG - Gyro	7,000.00	6,807.30	1,047.96	989.83	18.027	SF
HSR-STREAR 4-10A - KMG - Gyro	12,358.76	7,306.28	1,456.73	1,321.58	10.778	CC, ES, SF
LUHMAN 1 - CPR - Gyro	11,154.47	7,280.47	389.06	258.36	2.977	CC, ES, SF
LUHMAN 33-4 - CPR - Gyro	10,981.92	7,223.19	1,545.93	1,419.85	12.262	CC
LUHMAN 33-4 - CPR - Gyro	11,000.00	7,222.57	1,546.03	1,419.50	12.219	ES
LUHMAN 33-4 - CPR - Gyro	11,300.00	7,211.96	1,578.27	1,446.14	11.945	SF
LUHMAN 43-4 - CPR - Gyro	12,245.12	7,275.93	1,443.93	1,285.01	9.086	CC
LUHMAN 43-4 - CPR - Gyro	12,300.00	7,275.88	1,444.97	1,284.70	9.016	ES
LUHMAN 43-4 - CPR - Gyro	12,358.76	7,275.84	1,448.39	1,286.89	8.968	SF
LUHMAN 44-4 - CPR - Gyro	12,358.76	7,280.72	105.90	-40.36	0.724	Level 2, CC, ES, SF
Luhman 6-4-4 - CPR - MWD	11,815.60	7,274.64	1,992.26	1,845.32	13.558	CC
Luhman 6-4-4 - CPR - MWD	11,900.00	7,273.61	1,994.05	1,845.00	13.378	ES
Luhman 6-4-4 - CPR - MWD	12,200.00	7,269.99	2,029.00	1,874.27	13.113	SF
MCCLAY 5-4A - KMG - Gyro	600.13	550.52	2,397.50	2,393.77	644.032	CC
MCCLAY 5-4A - KMG - Gyro	700.00	634.45	2,397.88	2,393.45	540.984	ES
MCCLAY 5-4A - KMG - Gyro	9,300.00	7,237.79	2,757.13	2,674.79	33.483	SF
SATER 40N-5HZ - KMG - MWD	7,215.41	10,479.88	380.27	310.97	5.487	CC, ES
SATER 40N-5HZ - KMG - MWD	7,300.00	10,481.66	394.39	316.40	5.057	SF
SCOTT 1C-32HZ - KMG - MWD	5,419.57	5,244.00	2,144.73	2,098.49	46.381	CC
SCOTT 1C-32HZ - KMG - MWD	6,500.00	6,334.17	2,146.62	2,090.74	38.410	ES
SCOTT 1C-32HZ - KMG - MWD	7,000.00	6,766.49	2,159.29	2,100.73	36.877	SF
SCOTT 26N-32HZ - KMG - MWD	4,477.14	4,418.88	2,094.32	2,053.22	50.954	CC
SCOTT 26N-32HZ - KMG - MWD	4,500.00	4,435.10	2,094.36	2,053.08	50.734	ES
SCOTT 26N-32HZ - KMG - MWD	6,900.00	6,693.00	2,176.40	2,116.35	36.248	SF
SHELEY 1 - CPR - Gyro	9,020.44	7,248.09	765.85	686.22	9.618	CC, ES
SHELEY 1 - CPR - Gyro	9,100.00	7,246.85	771.06	689.80	9.488	SF
SHELEY 13-4 - CPR - Gyro	1,606.56	1,543.96	1,496.90	1,484.63	121.990	CC
SHELEY 13-4 - CPR - Gyro	1,700.00	1,627.66	1,497.25	1,484.19	114.626	ES
SHELEY 13-4 - CPR - Gyro	8,700.00	7,219.76	1,679.81	1,607.94	23.372	SF
SHELEY 14-4 - CPR - Gyro	8,389.70	7,260.73	49.11	-20.97	0.701	Level 2, CC, ES, SF
SHELEY 23-4 - CPR - Gyro	9,627.90	7,236.21	1,544.18	1,451.41	16.646	CC
SHELEY 23-4 - CPR - Gyro	9,700.00	7,235.64	1,545.82	1,451.20	16.336	ES
SHELEY 23-4 - CPR - Gyro	10,100.00	7,232.80	1,591.19	1,488.63	15.516	SF

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

## Anticollision Summary Report

<b>Company:</b>	Crestone Peak Resources	<b>Local Co-ordinate Reference:</b>	Well SHELEY 3H-4H-M267
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<b>Reference Site:</b>	Sheley Pad	<b>MD Reference:</b>	RKB @ 4934.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
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<b>Reference Design:</b>	Plan #3 25Jun18 kjs	<b>Offset TVD Reference:</b>	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 24-4 - MACHII-ROSS PET CO - Gyro	9,577.46	7,258.66	68.54	-23.06	0.748	Level 2, CC, ES, SF
SHELEY 24-4 (2) - CPR - Gyro	9,719.04	7,262.74	88.95	-6.08	0.936	Level 3, CC, ES, SF
SHELEY 3A-4H - CPR - MWD	539.64	531.34	28.41	25.13	8.653	CC
SHELEY 3A-4H - CPR - MWD	12,358.76	11,610.13	113.28	-145.68	0.437	Level 1, ES, SF
SHELEY 3B-4H - CPR - MWD	100.00	90.91	20.39	20.11	71.520	CC
SHELEY 3B-4H - CPR - MWD	400.00	390.81	22.35	20.02	9.604	ES
SHELEY 3B-4H - CPR - MWD	12,358.76	11,763.16	910.68	651.01	3.507	SF
Sheley 4-6-4 - CPR - MWD	10,333.50	7,390.36	733.57	622.27	6.591	CC, ES
Sheley 4-6-4 - CPR - MWD	10,400.00	7,388.89	736.58	623.53	6.515	SF
SPRAGUE 11-9 - CPR - Gyro	8,204.96	7,294.43	1,277.02	1,211.25	19.416	CC, ES
SPRAGUE 11-9 - CPR - Gyro	8,400.00	7,293.53	1,292.56	1,224.47	18.984	SF
SPRAGUE 31-9 - CPR - MWD	10,862.95	7,602.48	1,174.33	1,050.61	9.491	CC
SPRAGUE 31-9 - CPR - MWD	10,900.00	7,596.10	1,174.90	1,050.20	9.422	ES
SPRAGUE 31-9 - CPR - MWD	11,000.00	7,578.75	1,182.04	1,055.14	9.314	SF
SPRAGUE 3A-9H-N267 - CPR - MWD	8,025.84	12,788.00	172.76	99.70	2.365	CC
SPRAGUE 3A-9H-N267 - CPR - MWD	8,100.00	12,788.00	188.01	91.51	1.948	ES, SF
SPRAGUE 3AA-9H-N267 - CPR - MWD	7,845.05	12,991.00	202.52	135.37	3.016	CC, ES
SPRAGUE 3AA-9H-N267 - CPR - MWD	8,000.00	12,991.00	259.59	164.60	2.733	SF
SPRAGUE 3B-9H-N267 - CPR - MWD	8,259.53	12,950.00	201.34	132.87	2.941	CC, ES
SPRAGUE 3B-9H-N267 - CPR - MWD	8,400.00	12,950.00	245.88	152.83	2.642	SF
SPRAGUE 3C-9H-N267 - CPR - MWD	8,522.64	12,655.00	149.39	75.19	2.013	CC
SPRAGUE 3C-9H-N267 - CPR - MWD	8,600.00	12,655.00	168.24	70.95	1.729	ES, SF
SPRAGUE 3D-9H-N267 - CPR - MWD	8,849.34	12,595.00	291.70	214.39	3.773	CC
SPRAGUE 3D-9H-N267 - CPR - MWD	8,900.00	12,595.00	295.53	214.05	3.627	ES
SPRAGUE 3D-9H-N267 - CPR - MWD	9,000.00	12,595.00	327.19	230.93	3.399	SF
SPRAGUE 3E-9HX1-N267 - CPR - MWD	9,285.95	12,714.00	178.25	92.37	2.075	CC
SPRAGUE 3E-9HX1-N267 - CPR - MWD	9,300.00	12,714.00	178.35	89.10	1.998	ES
SPRAGUE 3E-9HX1-N267 - CPR - MWD	9,400.00	12,714.00	211.04	95.10	1.820	SF
SPRAGUE 3F-9H-N267 - CPR - MWD	9,578.98	12,921.00	292.09	205.14	3.359	CC
SPRAGUE 3F-9H-N267 - CPR - MWD	9,600.00	12,921.00	292.85	204.68	3.321	ES
SPRAGUE 3F-9H-N267 - CPR - MWD	9,700.00	12,921.00	316.52	215.49	3.133	SF
SPRAGUE 3G-9H-N267 - CPR - MWD	9,900.00	12,696.00	221.43	114.92	2.079	ES, SF
SPRAGUE 3G-9H-N267 - CPR - MWD	9,931.36	12,696.00	219.20	116.15	2.127	CC
SPRAGUE 3H-9H-N267 - CPR - MWD	10,200.00	12,946.00	345.33	232.69	3.066	SF
SPRAGUE 3H-9H-N267 - CPR - MWD	10,287.01	12,946.00	334.19	228.09	3.150	CC, ES
SPRAGUE 3I-9H-N267 - CPR - MWD	10,600.00	12,836.00	297.36	163.57	2.223	ES, SF
SPRAGUE 3I-9H-N267 - CPR - MWD	10,657.71	12,836.00	291.70	164.12	2.286	CC
SPRAGUE 3J-9H-N267 - CPR - MWD	11,100.00	13,145.00	474.45	335.07	3.404	SF
SPRAGUE 3J-9H-N267 - CPR - MWD	11,130.71	13,145.00	473.46	335.02	3.420	CC, ES
SPRAGUE 41-9 - CPR - Gyro	12,218.25	7,282.77	1,142.40	984.17	7.220	CC, ES
SPRAGUE 41-9 - CPR - Gyro	12,358.76	7,284.25	1,151.01	990.10	7.153	SF
TOWNSEND 44-5 - CPR - Gyro	6,645.70	6,451.86	84.57	27.95	1.494	Level 3, CC, ES
TOWNSEND 44-5 - CPR - Gyro	6,700.00	6,505.91	85.16	28.08	1.492	Level 3, SF
WHISTON 10N-33HZ - KMG - MWD	10,781.87	6,862.00	1,645.52	1,530.10	14.256	CC
WHISTON 10N-33HZ - KMG - MWD	10,800.00	6,862.00	1,645.62	1,529.70	14.197	ES
WHISTON 10N-33HZ - KMG - MWD	11,100.00	6,862.00	1,675.99	1,553.41	13.673	SF
WHISTON 15N-33HZ - KMG - MWD	11,526.89	6,956.00	1,457.31	1,325.41	11.048	CC, ES
WHISTON 15N-33HZ - KMG - MWD	11,700.00	6,956.00	1,467.56	1,332.31	10.851	SF
WHISTON 16N-33HZ - KMG - MWD	12,021.83	6,910.74	1,391.98	1,248.77	9.720	CC, ES
WHISTON 16N-33HZ - KMG - MWD	12,200.00	6,911.95	1,403.34	1,257.49	9.622	SF
WHISTON 20N-33HZ - KMG - MWD	11,565.84	6,894.16	1,549.10	1,415.15	11.565	CC
WHISTON 20N-33HZ - KMG - MWD	11,600.00	6,894.16	1,549.48	1,414.75	11.500	ES
WHISTON 20N-33HZ - KMG - MWD	11,800.00	6,894.16	1,566.70	1,428.34	11.323	SF

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

## Anticollision Summary Report

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

Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
<b>Offset Well - Wellbore - Design</b>						
Existing Wells (Sheley)						
WHISTON 23C-33HZ - KMG - MWD	10,570.28	7,017.63	1,457.66	1,344.84	12.919	CC
WHISTON 23C-33HZ - KMG - MWD	10,600.00	7,017.80	1,457.97	1,344.28	12.824	ES
WHISTON 23C-33HZ - KMG - MWD	10,900.00	7,019.56	1,494.49	1,373.98	12.402	SF
WHISTON 24C-33HZ - KMG - MWD	11,696.64	7,017.44	1,407.34	1,267.39	10.056	CC
WHISTON 24C-33HZ - KMG - MWD	11,700.00	7,017.46	1,407.34	1,267.32	10.051	ES
WHISTON 24C-33HZ - KMG - MWD	11,900.00	7,018.39	1,421.95	1,278.42	9.907	SF
WHISTON 25-4 - KMG - MWD	10,359.72	7,490.45	2,104.92	1,986.27	17.741	CC
WHISTON 25-4 - KMG - MWD	10,400.00	7,489.58	2,105.30	1,985.47	17.569	ES
WHISTON 25-4 - KMG - MWD	11,000.00	7,476.33	2,200.09	2,066.57	16.477	SF
WHISTON 25N-33HZ - KMG - MWD	10,442.88	6,963.00	1,473.70	1,364.60	13.507	CC
WHISTON 25N-33HZ - KMG - MWD	10,500.00	6,963.00	1,474.81	1,364.05	13.316	ES
WHISTON 25N-33HZ - KMG - MWD	10,800.00	6,963.00	1,516.35	1,398.89	12.909	SF
WHISTON 39C-33HZ - KMG - MWD	12,358.76	7,195.30	1,408.99	1,244.74	8.578	CC, ES, SF
WHISTON 40N-33HZ - KMG - MWD	12,358.76	7,146.00	1,556.43	1,393.64	9.561	CC, ES, SF
WHISTON 7-4 - KMG - No Survey	10,897.96	7,258.00	2,586.38	2,474.50	23.117	CC
WHISTON 7-4 - KMG - No Survey	11,000.00	7,258.00	2,588.39	2,473.98	22.623	ES
WHISTON 7-4 - KMG - No Survey	11,700.00	7,258.00	2,707.88	2,580.44	21.247	SF
WHISTON 8-4 - KMG - Gyro	12,337.86	7,246.78	2,656.99	2,495.76	16.480	CC
WHISTON 8-4 - KMG - Gyro	12,358.76	7,246.82	2,657.07	2,495.30	16.425	ES, SF
WHISTON 9N-33HZ - KMG - MWD	11,894.87	6,925.57	1,525.65	1,382.25	10.639	CC
WHISTON 9N-33HZ - KMG - MWD	11,900.00	6,925.67	1,525.66	1,382.14	10.631	ES
WHISTON 9N-33HZ - KMG - MWD	12,100.00	6,957.00	1,540.08	1,392.17	10.413	SF
Sheley Pad						
SHELEY 3C-4H-M267 - Wellbore #1 - Plan #3 25Jun18 k	200.00	198.00	49.91	48.92	50.626	CC, ES
SHELEY 3C-4H-M267 - Wellbore #1 - Plan #3 25Jun18 k	12,358.76	12,730.09	1,326.57	1,052.67	4.843	SF
SHELEY 3D-4H-M267 - Wellbore #1 - Plan #3 25Jun18 k	200.00	198.00	40.07	39.09	40.649	CC
SHELEY 3D-4H-M267 - Wellbore #1 - Plan #3 25Jun18 k	300.00	297.98	40.30	38.60	23.766	ES
SHELEY 3D-4H-M267 - Wellbore #1 - Plan #3 25Jun18 k	12,358.76	12,610.89	1,170.39	893.14	4.221	SF
SHELEY 3E-4H-M267 - Wellbore #1 - Plan #2 25Jun18 k	200.00	199.00	29.88	28.89	30.197	CC
SHELEY 3E-4H-M267 - Wellbore #1 - Plan #2 25Jun18 k	300.00	298.98	30.12	28.42	17.725	ES
SHELEY 3E-4H-M267 - Wellbore #1 - Plan #2 25Jun18 k	12,358.76	12,554.58	1,028.58	757.77	3.798	SF
SHELEY 3F-4H-M267 - Wellbore #1 - Plan #2 25Jun18 k	200.00	200.00	20.04	19.04	20.179	CC
SHELEY 3F-4H-M267 - Wellbore #1 - Plan #2 25Jun18 k	300.00	299.98	20.31	18.61	11.929	ES
SHELEY 3F-4H-M267 - Wellbore #1 - Plan #2 25Jun18 k	12,358.76	12,422.05	512.15	237.17	1.862	SF
SHELEY 3G-4H-M267 - Wellbore #1 - Plan #2 25Jun18 k	200.00	200.00	9.84	8.84	9.905	CC
SHELEY 3G-4H-M267 - Wellbore #1 - Plan #2 25Jun18 k	300.00	299.98	10.15	8.45	5.973	ES
SHELEY 3G-4H-M267 - Wellbore #1 - Plan #2 25Jun18 k	12,358.76	12,497.06	322.34	77.45	1.316	Level 3, SF



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<b>Reference Site:</b>	Sheley Pad	<b>MD Reference:</b>	RKB @ 4934.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	SHELEY 3H-4H-M267	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDM 5000.15 Single User Db
<b>Reference Design:</b>	Plan #3 25Jun18 kjs	<b>Offset TVD Reference:</b>	Offset Datum

Reference Depths are relative to RKB @ 4934.00usft

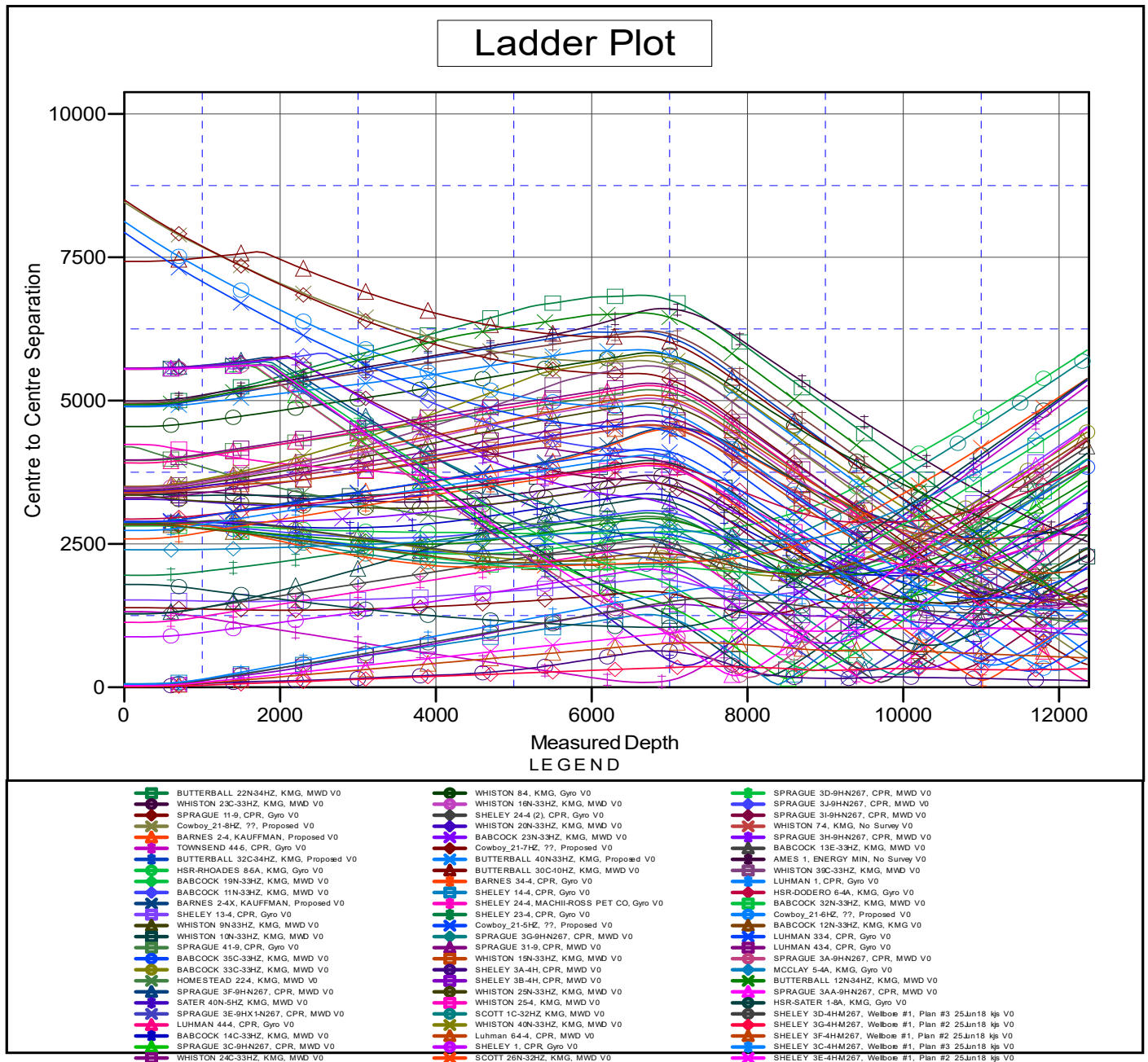
Offset Depths are relative to Offset Datum

Central Meridian is -105.500000

Coordinates are relative to: SHELEY 3H-4H-M267

Coordinate System is US State Plane 1983, Colorado Northern Zone

Grid Convergence at Surface is: 0.39°



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

<b>Company:</b>	Crestone Peak Resources	<b>Local Co-ordinate Reference:</b>	Well SHELEY 3H-4H-M267
<b>Project:</b>	Sec 4 T2N-R67W	<b>TVD Reference:</b>	RKB @ 4934.00usft
<b>Reference Site:</b>	Sheley Pad	<b>MD Reference:</b>	RKB @ 4934.00usft
<b>Site Error:</b>	0.00 usft	<b>North Reference:</b>	True
<b>Reference Well:</b>	SHELEY 3H-4H-M267	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.00 usft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	Wellbore #1	<b>Database:</b>	EDM 5000.15 Single User Db
<b>Reference Design:</b>	Plan #3 25Jun18 kjs	<b>Offset TVD Reference:</b>	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 3H-4H-M267  
Coordinate System is US State Plane 1983, Colorado Northern Zone  
Grid Convergence at Surface is: 0.39°

