



Crestone Peak Resources

Sec 20 T1N-R67W

Herbers Pad

HERBERS 1B-20H-B167

Wellbore #1

Design #1 06Aug18 kjs

Anticollision Summary Report

15 August, 2018

Anticollision Summary Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HERBERS 1B-20H-B167
Project:	Sec 20 T1N-R67W	TVD Reference:	WELL @ 5130.28usft (Original Well Elev)
Reference Site:	Herbers Pad	MD Reference:	WELL @ 5130.28usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	HERBERS 1B-20H-B167	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:	Design #1 06Aug18 kjs	Offset TVD Reference:	Offset Datum

Reference	Design #1 06Aug18 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	8/9/2018		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	15,108.64	Design #1 06Aug18 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 (Herbers)						
BLANCHE C 4 - KAUFFMAN - No Survey	200.00	211.72	944.87	943.99	1,079.599	CC
BLANCHE C 4 - KAUFFMAN - No Survey	600.00	610.85	945.50	942.45	310.390	ES
BLANCHE C 4 - KAUFFMAN - No Survey	5,100.00	5,005.00	1,247.64	1,218.02	42.111	SF
BLANCHE C HOPKINS 2 - KAUFFMAN - No Survey	200.00	199.72	1,444.01	1,443.16	1,691.686	CC
BLANCHE C HOPKINS 2 - KAUFFMAN - No Survey	300.00	299.72	1,444.40	1,443.01	1,038.345	ES
BLANCHE C HOPKINS 2 - KAUFFMAN - No Survey	11,200.00	4,990.00	3,298.06	3,251.75	71.217	SF
GRIFFITHS 14N-20HZ - KMG - MWD	12,477.37	17,328.00	1,041.09	782.03	4.019	CC, ES
GRIFFITHS 14N-20HZ - KMG - MWD	12,500.00	17,328.00	1,041.34	782.15	4.018	SF
GRIFFITHS 36C-20HZ - KMG - MWD	8,081.94	12,388.39	640.12	524.23	5.523	CC
GRIFFITHS 36C-20HZ - KMG - MWD	10,900.00	15,196.84	688.63	500.74	3.665	ES
GRIFFITHS 36C-20HZ - KMG - MWD	11,900.00	16,151.38	744.03	527.50	3.436	SF
HEINZE 1 - PETERSON - No Survey	11,098.28	5,092.00	2,854.63	2,804.87	57.364	CC
HEINZE 1 - PETERSON - No Survey	11,100.00	5,092.00	2,854.63	2,804.85	57.339	ES
HEINZE 1 - PETERSON - No Survey	12,200.00	5,092.00	3,059.85	2,998.52	49.890	SF
HEINZE 1A - PETERSON - No Survey	200.00	156.72	2,456.64	2,455.86	3,163.124	CC
HEINZE 1A - PETERSON - No Survey	300.00	256.72	2,457.04	2,455.72	1,869.680	ES
HEINZE 1A - PETERSON - No Survey	12,100.00	4,980.00	2,854.39	2,805.84	58.795	SF
HEINZE 2 - DENVER EAST - No Survey	12,317.96	5,090.00	2,485.96	2,437.37	51.159	CC, ES
HEINZE 2 - DENVER EAST - No Survey	13,200.00	5,090.00	2,637.80	2,581.16	46.567	SF
HEINZE HERBER 33-20 - PDC ENERGY - Gyro	10,915.39	7,539.65	99.45	15.44	1.184	Level 3, CC, ES, SF
HEINZE-HERBERS B 1 - PDC ENERGY - Gyro	11,876.14	7,540.40	973.36	874.26	9.822	CC
HEINZE-HERBERS B 1 - PDC ENERGY - Gyro	11,900.00	7,540.54	973.65	874.12	9.782	ES
HEINZE-HERBERS B 1 - PDC ENERGY - Gyro	12,000.00	7,541.12	981.21	880.25	9.719	SF
HERBERS 1 - CPR - Gyro	9,155.69	7,534.36	1,062.77	1,001.57	17.366	CC, ES
HERBERS 1 - CPR - Gyro	9,300.00	7,538.85	1,072.51	1,009.86	17.117	SF
HERBERS 2 - DENVER EAST - No Survey	200.00	172.72	1,249.91	1,249.11	1,551.464	CC
HERBERS 2 - DENVER EAST - No Survey	300.00	272.72	1,250.28	1,248.94	930.770	ES
HERBERS 2 - DENVER EAST - No Survey	11,000.00	5,090.00	2,835.31	2,793.33	67.530	SF
HERBERS 31-20 - KMG - Gyro	8,319.20	7,597.74	53.57	-2.91	0.948	Level 3, CC, ES, SF
HOWARD 10-29 - KMG - MWD	15,108.64	7,663.64	1,110.16	1,040.54	15.946	CC, ES, SF
HOWARD 10C-29HZ - KMG - MWD	15,108.64	12,351.00	1,001.74	934.92	14.992	CC, ES, SF
HOWARD 24-29 - KMG - MWD	15,108.64	7,756.58	948.96	804.90	6.587	CC, ES, SF
HOWARD 24N-29HZ - KMG - MWD	15,108.64	12,081.00	1,387.01	1,222.31	8.422	CC, ES, SF
HOWARD 28N-29HZ - KMG - MWD	13,994.38	14,184.05	625.36	395.59	2.722	CC
HOWARD 28N-29HZ - KMG - MWD	14,000.00	14,178.84	625.36	395.58	2.722	ES, SF
HOWARD 30C-28HZ - KMG - MWD	14,991.37	10,811.72	2,193.94	2,009.12	11.871	CC
HOWARD 30C-28HZ - KMG - MWD	15,000.00	10,807.13	2,193.95	2,009.03	11.864	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 HERBERS 1B-20H-B167
Project:	Sec 20 T1N-R67W	TVD Reference:	WELL @ 5130.28usft (Original Well Elev)
Reference Site:	Herbers Pad	MD Reference:	WELL @ 5130.28usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	HERBERS 1B-20H-B167	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:	Design #1 06Aug18 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 (Herbers)						
HOWARD 30C-28HZ - KMG - MWD	15,108.64	10,737.46	2,195.31	2,009.35	11.805	SF
HOWARD 30N-21HZX - KMG - MWD	12,271.19	7,965.28	2,165.31	2,057.10	20.009	CC
HOWARD 30N-21HZX - KMG - MWD	12,400.00	7,876.57	2,166.58	2,056.61	19.701	ES
HOWARD 30N-21HZX - KMG - MWD	13,100.00	7,482.46	2,234.77	2,116.32	18.867	SF
HOWARD 30N-21HZX - KMG Wellbore#2 - MWD	8,142.39	12,103.00	2,132.48	2,020.02	18.961	CC, ES
HOWARD 30N-21HZX - KMG Wellbore#2 - MWD	13,100.00	7,482.46	2,234.77	2,116.32	18.867	SF
HOWARD 3C-29HZ - KMG - MWD	14,048.70	14,353.98	1,092.52	866.55	4.835	CC, ES
HOWARD 3C-29HZ - KMG - MWD	14,100.00	14,308.96	1,092.67	866.62	4.834	SF
HOWARD 4C-21HZ - KMG - MWD	12,553.73	7,842.82	2,591.18	2,478.75	23.049	CC
HOWARD 4C-21HZ - KMG - MWD	12,600.00	7,828.00	2,591.36	2,478.19	22.898	ES
HOWARD 4C-21HZ - KMG - MWD	13,300.00	7,602.49	2,673.90	2,551.33	21.815	SF
HOWARD 4N-28HZ - KMG - MWD	12,943.22	12,586.00	2,624.92	2,441.52	14.313	CC
HOWARD 4N-28HZ - KMG - MWD	13,000.00	12,586.00	2,625.53	2,440.95	14.224	ES
HOWARD 4N-28HZ - KMG - MWD	13,100.00	12,556.98	2,629.44	2,443.48	14.140	SF
HOWARD 9-29 - KMG - MWD	15,108.64	7,619.85	1,721.26	1,591.59	13.274	CC, ES, SF
HOWARD 9C-29HZ - KMG - MWD	15,108.64	12,440.00	1,866.40	1,675.19	9.761	CC, ES, SF
HSR-UNDERHILL 15-17A - KMG - Gyro	7,019.68	6,923.19	558.06	507.70	11.083	CC, ES
HSR-UNDERHILL 15-17A - KMG - Gyro	7,100.00	7,003.56	561.90	511.07	11.056	SF
MARK 1 - VESSELS - No Survey	3,879.79	3,791.70	1,624.90	1,601.51	69.462	CC
MARK 1 - VESSELS - No Survey	4,200.00	4,107.07	1,625.85	1,600.44	63.989	ES
MARK 1 - VESSELS - No Survey	5,400.00	5,063.00	1,661.52	1,629.30	51.573	SF
MARK 1-A - CHAPARRAL - No Survey	2,138.18	2,088.39	339.19	326.73	27.229	CC
MARK 1-A - CHAPARRAL - No Survey	2,200.00	2,149.28	339.36	326.52	26.421	ES
MARK 1-A - CHAPARRAL - No Survey	3,700.00	3,626.62	433.81	412.38	20.242	SF
NGL C2B - NGL WATER - MWD	15,108.64	9,445.42	2,872.89	2,709.04	17.534	CC, ES, SF
PAUL HEINZE 1 - KPK - No Survey	200.00	172.72	2,462.83	2,462.02	3,057.270	CC
PAUL HEINZE 1 - KPK - No Survey	300.00	272.72	2,463.26	2,461.91	1,833.743	ES
PAUL HEINZE 1 - KPK - No Survey	12,000.00	5,000.00	3,101.43	3,048.14	58.195	SF
SCHEIDT STATE VV16-13 - KMG - Gyro	7,222.65	7,145.84	2,570.79	2,515.79	46.742	CC, ES
SCHEIDT STATE VV16-13 - KMG - Gyro	7,400.00	7,306.19	2,576.35	2,520.90	46.460	SF
UNDERHILL 1N-17HZ - KMG - MWD	5,349.52	5,228.18	1,564.52	1,519.80	34.984	CC
UNDERHILL 1N-17HZ - KMG - MWD	7,431.40	7,493.71	1,567.95	1,507.96	26.137	ES, SF
UNDERHILL 27C-17HZ - KMG - MWD	7,605.29	7,639.00	1,132.52	1,072.98	19.022	CC, ES, SF
UNDERHILL 27N-17HZ - KMG - MWD	7,400.00	7,376.21	745.92	686.18	12.487	SF
UNDERHILL 27N-17HZ - KMG - MWD	7,456.86	7,401.58	744.13	684.71	12.523	CC, ES
UNDERHILL 28N-17HZ - KMG - MWD	6,050.87	6,066.59	92.84	39.73	1.748	CC, ES, SF
UNDERHILL 2C-17HZ - KMG - MWD	7,532.08	7,473.85	139.75	79.41	2.316	CC, ES, SF
UNDERHILL STATE 26C-17HZ - KMG - MWD	3,959.39	3,733.11	1,894.83	1,863.33	60.156	CC
UNDERHILL STATE 26C-17HZ - KMG - MWD	4,000.00	3,767.00	1,894.98	1,863.14	59.505	ES
UNDERHILL STATE 26C-17HZ - KMG - MWD	7,500.00	7,407.51	2,044.78	1,984.35	33.837	SF
UPRR 42 PAN AM AN 4 - KAUFFMAN - No Survey	10,943.46	4,961.00	3,778.65	3,722.23	66.973	CC
UPRR 42 PAN AM AN 4 - KAUFFMAN - No Survey	11,000.00	4,961.00	3,779.08	3,721.88	66.075	ES
UPRR 42 PAN AM AN 4 - KAUFFMAN - No Survey	12,700.00	4,961.00	4,166.97	4,090.96	54.818	SF
UPRR 42 PAN AM N 4 - KAUFFMAN - MWD	5,159.75	5,115.00	1,372.21	1,331.86	34.001	CC, ES
UPRR 42 PAN AM N 4 - KAUFFMAN - MWD	5,200.00	5,115.00	1,372.80	1,332.35	33.938	SF
UPRR 42 PAN AM-AN 1 - KAUFFMAN - No Survey	12,158.35	4,985.00	3,770.84	3,698.78	52.335	CC
UPRR 42 PAN AM-AN 1 - KAUFFMAN - No Survey	12,200.00	4,985.00	3,771.07	3,698.40	51.900	ES
UPRR 42 PAN AM-AN 1 - KAUFFMAN - No Survey	13,600.00	4,985.00	4,037.02	3,948.32	45.513	SF
UPRR 43 PAN AM GU K 1 - KMG - Gyro	14,518.25	7,528.82	1,051.90	908.53	7.337	CC, ES
UPRR 43 PAN AM GU K 1 - KMG - Gyro	14,600.00	7,527.62	1,055.07	910.40	7.293	SF
UPRR 43 PAN AM-G 12 - KAUFFMAN - No Survey	15,108.64	5,018.00	3,208.98	3,119.76	35.966	CC, ES, SF
UPRR 43 PAN AM-G 3 - KAUFFMAN - Gyro	14,743.90	7,546.12	1,272.65	1,124.34	8.581	CC, ES
UPRR 43 PAN AM-G 3 - KAUFFMAN - Gyro	14,800.00	7,544.47	1,273.89	1,124.91	8.551	SF

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

Anticollision Summary Report

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Project:	Sec 20 T1N-R67W	TVD Reference:	WELL @ 5130.28usft (Original Well Elev)
Reference Site:	Herbers Pad	MD Reference:	WELL @ 5130.28usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	HERBERS 1B-20H-B167	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:	Design #1 06Aug18 kjs	Offset TVD Reference:	Offset Datum

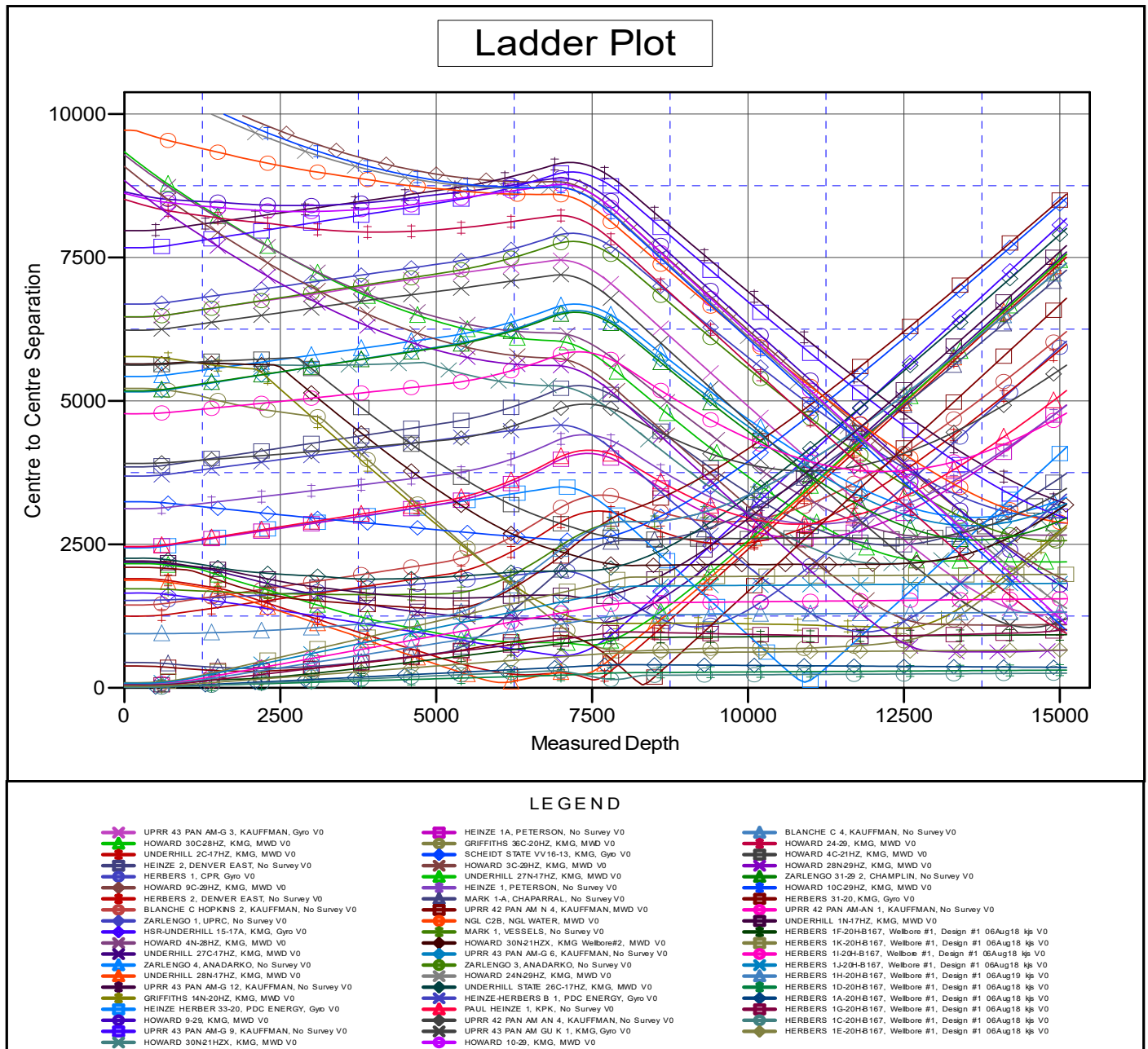
Summary						
Site Name	Reference Measured Depth (usft)	Offset Measured Depth (usft)	Distance Between Centres (usft)	Distance Between Ellipses (usft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
Existing Wells (Herbers)						
UPRR 43 PAN AM-G 6 - KAUFFMAN - No Survey	13,576.44	5,005.00	2,825.45	2,756.69	41.092	CC
UPRR 43 PAN AM-G 6 - KAUFFMAN - No Survey	13,600.00	5,005.00	2,825.55	2,756.52	40.934	ES
UPRR 43 PAN AM-G 6 - KAUFFMAN - No Survey	14,300.00	5,005.00	2,916.63	2,841.29	38.715	SF
UPRR 43 PAN AM-G 9 - KAUFFMAN - No Survey	15,108.64	4,975.00	2,955.34	2,879.75	39.094	CC, ES, SF
ZARLENGO 1 - UPRC - No Survey	14,941.24	4,960.00	2,963.63	2,873.51	32.885	CC
ZARLENGO 1 - UPRC - No Survey	15,000.00	4,960.00	2,964.22	2,873.31	32.608	ES
ZARLENGO 1 - UPRC - No Survey	15,108.64	4,960.00	2,968.36	2,876.08	32.167	SF
ZARLENGO 3 - ANADARKO - No Survey	14,944.40	4,990.00	2,561.44	2,492.95	37.396	CC
ZARLENGO 3 - ANADARKO - No Survey	15,000.00	4,990.00	2,562.04	2,492.93	37.071	ES
ZARLENGO 3 - ANADARKO - No Survey	15,108.64	4,990.00	2,566.70	2,496.45	36.535	SF
ZARLENGO 31-29 2 - CHAMPLIN - No Survey	13,651.23	4,990.00	2,576.02	2,517.54	44.044	CC
ZARLENGO 31-29 2 - CHAMPLIN - No Survey	13,700.00	4,990.00	2,576.49	2,517.46	43.648	ES
ZARLENGO 31-29 2 - CHAMPLIN - No Survey	14,400.00	4,990.00	2,682.64	2,617.46	41.156	SF
ZARLENGO 4 - ANADARKO - No Survey	13,622.58	4,965.00	2,970.15	2,894.47	39.247	CC
ZARLENGO 4 - ANADARKO - No Survey	13,700.00	4,965.00	2,971.16	2,894.46	38.739	ES
ZARLENGO 4 - ANADARKO - No Survey	14,500.00	4,965.00	3,097.04	3,012.31	36.555	SF
Herbers Pad						
HERBERS 1A-20H-B167 - Wellbore #1 - Design #1 06Au	116.64	116.71	10.00	9.60	25.278	CC
HERBERS 1A-20H-B167 - Wellbore #1 - Design #1 06Au	300.00	300.00	10.33	8.62	6.041	ES
HERBERS 1A-20H-B167 - Wellbore #1 - Design #1 06Au	15,108.64	14,995.53	357.29	112.09	1.457	Level 3, SF
HERBERS 1C-20H-B167 - Wellbore #1 - Design #1 06Au	332.84	332.59	9.86	7.91	5.070	CC
HERBERS 1C-20H-B167 - Wellbore #1 - Design #1 06Au	400.00	399.67	10.09	7.66	4.160	ES
HERBERS 1C-20H-B167 - Wellbore #1 - Design #1 06Au	15,108.64	14,977.45	256.52	41.18	1.191	Level 3, SF
HERBERS 1D-20H-B167 - Wellbore #1 - Design #1 06Au	271.09	270.58	19.93	18.43	13.283	CC
HERBERS 1D-20H-B167 - Wellbore #1 - Design #1 06Au	400.00	399.14	20.58	18.16	8.495	ES
HERBERS 1D-20H-B167 - Wellbore #1 - Design #1 06Au	15,108.64	15,009.65	309.93	66.39	1.273	Level 3, SF
HERBERS 1E-20H-B167 - Wellbore #1 - Design #1 06Au	328.92	328.14	29.85	27.93	15.596	CC
HERBERS 1E-20H-B167 - Wellbore #1 - Design #1 06Au	400.00	398.81	30.19	27.77	12.472	ES
HERBERS 1E-20H-B167 - Wellbore #1 - Design #1 06Au	15,108.64	15,149.49	659.83	405.18	2.591	SF
HERBERS 1F-20H-B167 - Wellbore #1 - Design #1 06Au	478.03	477.03	38.96	35.97	13.043	CC
HERBERS 1F-20H-B167 - Wellbore #1 - Design #1 06Au	500.00	498.92	39.00	35.85	12.399	ES
HERBERS 1F-20H-B167 - Wellbore #1 - Design #1 06Au	15,108.64	15,096.31	926.22	672.44	3.650	SF
HERBERS 1G-20H-B167 - Wellbore #1 - Design #1 06A	412.17	410.72	49.31	46.80	19.658	CC, ES
HERBERS 1G-20H-B167 - Wellbore #1 - Design #1 06A	15,108.64	15,240.53	1,016.32	766.63	4.070	SF
HERBERS 1H-20H-B167 - Wellbore #1 - Design #1 06Au	383.92	382.28	59.50	57.20	25.822	CC
HERBERS 1H-20H-B167 - Wellbore #1 - Design #1 06Au	400.00	398.10	59.53	57.11	24.618	ES
HERBERS 1H-20H-B167 - Wellbore #1 - Design #1 06Au	15,108.64	15,248.60	1,319.65	1,065.28	5.188	SF
HERBERS 1I-20H-B167 - Wellbore #1 - Design #1 06Au	320.42	318.87	69.86	68.01	37.761	CC, ES
HERBERS 1I-20H-B167 - Wellbore #1 - Design #1 06Au	15,108.64	15,176.09	1,553.37	1,298.91	6.105	SF
HERBERS 1J-20H-B167 - Wellbore #1 - Design #1 06Au	259.21	257.39	79.94	78.53	56.674	CC, ES
HERBERS 1J-20H-B167 - Wellbore #1 - Design #1 06Au	15,108.64	15,496.48	1,821.85	1,568.90	7.202	SF
HERBERS 1K-20H-B167 - Wellbore #1 - Design #1 06Au	200.00	198.30	90.00	89.01	91.197	CC, ES
HERBERS 1K-20H-B167 - Wellbore #1 - Design #1 06Au	15,108.64	15,392.71	1,979.48	1,725.20	7.784	SF

Anticollision Summary Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HERBERS 1B-20H-B167
Project:	Sec 20 T1N-R67W	TVD Reference:	WELL @ 5130.28usft (Original Well Elev)
Reference Site:	Herbers Pad	MD Reference:	WELL @ 5130.28usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	HERBERS 1B-20H-B167	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:	Design #1 06Aug18 kjs	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 5130.28usft (Original Well E
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000

Coordinates are relative to: HERBERS 1B-20H-B167
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.38°



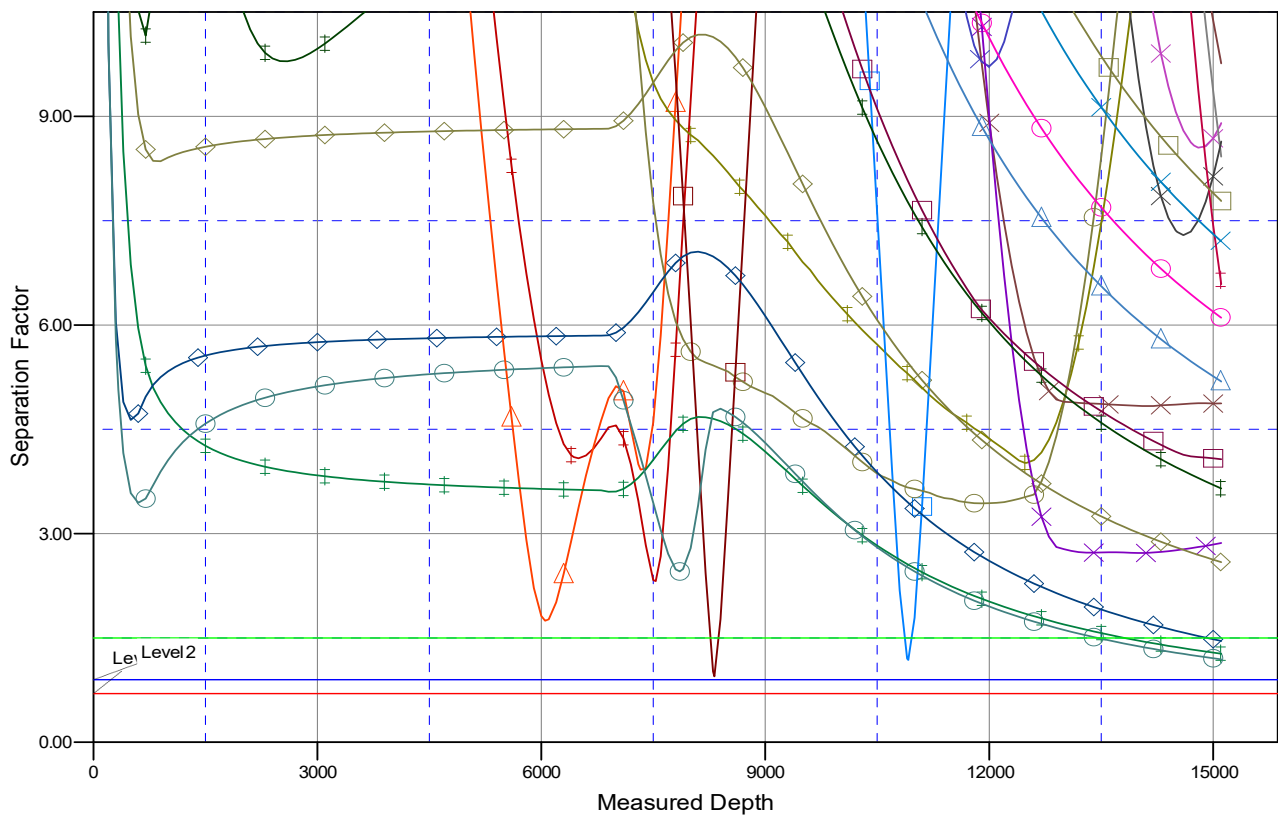
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HERBERS 1B-20H-B167
Project:	Sec 20 T1N-R67W	TVD Reference:	WELL @ 5130.28usft (Original Well Elev)
Reference Site:	Herbers Pad	MD Reference:	WELL @ 5130.28usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	HERBERS 1B-20H-B167	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:	Design #1 06Aug18 kjs	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 5130.28usft (Original Well E
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000

Coordinates are relative to: HERBERS 1B-20H-B167
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.38°

Separation Factor Plot



LEGEND

UPRR 43 PAN AM-G 3, KAUFFMAN, Gyro V0	HEINZE 1A, PETERSON, No Survey V0	BLANCHE C 4, KAUFFMAN, No Survey V0
HOWARD 30C-28HZ, KMG, MWD V0	GRIFFITHS 3C-20HZ, KMG, MWD V0	HOWARD 24-28, KMG, MWD V0
UNDERHILL 2C-17HZ, KMG, MWD V0	SCHIEDT STATE VV16-13, KMG, Gyro V0	HOWARD 4C-21HZ, KMG, MWD V0
HEINZE 2, DENVER EAST, No Survey V0	HOWARD 3C-28HZ, KMG, MWD V0	HOWARD 28N29HZ, KMG, MWD V0
HERBERS 1, CPR, Gyro V0	UNDERHILL 27N-17HZ, KMG, MWD V0	ZARLENGO 31-29 2, CHAMPLIN, No Survey V0
HOWARD 9C-20HZ, KMG, MWD V0	HEINZE 1, PETERSON, No Survey V0	HOWARD 10C-29HZ, KMG, MWD V0
HERBERS 2, DENVER EAST, No Survey V0	MARK 1-A, CHAPARRAL, No Survey V0	HERBERS 31-20, KMG, Gyro V0
BLANCHE C HOPKINS 2, KAUFFMAN, No Survey V0	UPRR 42 PAN AM N 4, KAUFFMAN, MWD V0	UPRR 42 PAN AM-N 1, KAUFFMAN, No Survey V0
ZARLENGO 1, UPRC, No Survey V0	NCL C28, NGL WATER, MWD V0	UNDERHILL 1N-17HZ, KMG, MWD V0
HSR-UNDERHILL 15-17A, KMG, Gyro V0	MARK 1, VESSELS, No Survey V0	HERBERS 1F-20H-B167, Wellbore #1, Design #1 06Aug18 kjs V0
HOWARD 4N-28HZ, KMG, MWD V0	HOWARD 30N-21HZX, KMG Wellbore#2, MWD V0	HERBERS 1K-20H-B167, Wellbore #1, Design #1 06Aug18 kjs V0
UNDERHILL 27C-17HZ, KMG, MWD V0	UPRR 43 PAN AM-G 6, KAUFFMAN, No Survey V0	HERBERS 1I-20H-B167, Wellbore #1, Design #1 06Aug18 kjs V0
ZARLENGO 4, ANADARKO, No Survey V0	ZARLENGO 3, ANADARKO, No Survey V0	HERBERS 1J-20H-B167, Wellbore #1, Design #1 06Aug18 kjs V0
UNDERHILL 28N-17HZ, KMG, MWD V0	HOWARD 24N-29HZ, KMG, MWD V0	HERBERS 1H-20H-B167, Wellbore #1, Design #1 06Aug19 kjs V0
UPRR 43 PAN AM-G 12, KAUFFMAN, No Survey V0	UNDERHILL STATE 28C-17HZ, KMG, MWD V0	HERBERS 10-20H-B167, Wellbore #1, Design #1 06Aug18 kjs V0
GRIFFITHS 14N-20HZ, KMG, MWD V0	HEINZE-HERBERS B 1, PDC ENERGY, Gyro V0	HERBERS 1A-20H-B167, Wellbore #1, Design #1 06Aug18 kjs V0
HEINZE HERBER 33-20, PDC ENERGY, Gyro V0	PAUL HEINZE 1, KPC, No Survey V0	HERBERS 1G-20H-B167, Wellbore #1, Design #1 06Aug18 kjs V0
HOWARD 9-29, KMG, MWD V0	UPRR 42 PAN AM AN 4, KAUFFMAN, No Survey V0	HERBERS 1C-20H-B167, Wellbore #1, Design #1 06Aug18 kjs V0
UPRR 43 PAN AM-G 9, KAUFFMAN, No Survey V0	UPRR 43 PAN AM GU K 1, KMG, Gyro V0	HERBERS 1E-20H-B167, Wellbore #1, Design #1 06Aug18 kjs V0
HOWARD 30N-21HZX, KMG, MWD V0	HOWARD 10-29, KMG, MWD V0	