



Crestone Peak Resources

Sec 20 T1N-R67W

Herbers Pad

HERBERS 1G-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 1G-20H-B167
Project:	Sec 20 T1N-R67W	TVD Reference:	WELL @ 5129.31usft (Original Well Elev)
Reference Site:	Herbers Pad	MD Reference:	WELL @ 5129.31usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	HERBERS 1G-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	15,356.84	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	300.00	312.69	993.82	992.40	702.700	CC
BLANCHE C 4 - KAUFFMAN - No Survey	400.00	412.69	993.88	991.93	509.427	ES
BLANCHE C 4 - KAUFFMAN - No Survey	5,100.00	4,990.43	1,791.84	1,762.54	61.172	SF
BLANCHE C HOPKINS 2 - KAUFFMAN - No Survey	300.00	300.69	1,475.96	1,474.56	1,059.854	CC
BLANCHE C HOPKINS 2 - KAUFFMAN - No Survey	400.00	400.69	1,476.06	1,474.13	765.077	ES
BLANCHE C HOPKINS 2 - KAUFFMAN - No Survey	11,800.00	4,990.00	3,983.12	3,932.98	79.443	SF
GRIFFITHS 14N-20HZ - KMG - MWD	12,670.76	17,328.00	1,937.33	1,679.61	7.517	CC
GRIFFITHS 14N-20HZ - KMG - MWD	12,700.00	17,328.00	1,937.55	1,679.53	7.509	ES
GRIFFITHS 14N-20HZ - KMG - MWD	12,800.00	17,328.00	1,941.64	1,683.00	7.507	SF
GRIFFITHS 36C-20HZ - KMG - MWD	11,149.10	15,188.03	1,556.57	1,362.00	8.000	CC
GRIFFITHS 36C-20HZ - KMG - MWD	11,900.00	15,902.60	1,572.15	1,354.33	7.218	ES
GRIFFITHS 36C-20HZ - KMG - MWD	12,500.00	16,380.31	1,628.08	1,395.05	6.987	SF
HEINZE 1 - PETERSON - No Survey	11,331.29	5,092.00	2,673.98	2,629.71	60.400	CC, ES
HEINZE 1 - PETERSON - No Survey	12,500.00	5,092.00	2,914.90	2,858.52	51.702	SF
HEINZE 1A - PETERSON - No Survey	300.00	257.69	2,448.95	2,447.63	1,861.436	CC
HEINZE 1A - PETERSON - No Survey	400.00	357.69	2,449.01	2,447.16	1,322.184	ES
HEINZE 1A - PETERSON - No Survey	12,400.00	4,980.00	3,112.95	3,063.23	62.614	SF
HEINZE 2 - DENVER EAST - No Survey	12,543.99	5,090.00	2,725.97	2,675.28	53.770	CC, ES
HEINZE 2 - DENVER EAST - No Survey	13,400.00	5,090.00	2,857.21	2,799.44	49.451	SF
HEINZE HERBER 33-20 - PDC ENERGY - Gyro	11,184.79	7,717.56	996.33	911.41	11.733	CC, ES
HEINZE HERBER 33-20 - PDC ENERGY - Gyro	11,200.00	7,717.31	996.44	911.47	11.727	SF
HEINZE-HERBERS B 1 - PDC ENERGY - Gyro	12,122.24	7,714.65	96.85	-2.68	0.973	Level 3, CC, ES, SF
HERBERS 1 - CPR - Gyro	9,404.86	7,725.21	130.67	67.85	2.080	CC, ES, SF
HERBERS 2 - DENVER EAST - No Survey	300.00	273.69	1,234.04	1,232.70	917.620	CC
HERBERS 2 - DENVER EAST - No Survey	400.00	373.69	1,234.09	1,232.21	655.853	ES
HERBERS 2 - DENVER EAST - No Survey	5,300.00	5,090.00	1,991.35	1,960.31	64.151	SF
HERBERS 31-20 - KMG - Gyro	2,050.58	1,993.69	86.56	70.94	5.541	CC, ES
HERBERS 31-20 - KMG - Gyro	2,100.00	2,041.49	87.45	71.44	5.463	SF
HOWARD 10-29 - KMG - MWD	15,356.84	7,796.96	1,287.91	1,169.06	10.837	CC, ES, SF
HOWARD 10C-29HZ - KMG - MWD	15,356.84	12,351.00	1,403.12	1,228.49	8.035	CC, ES, SF
HOWARD 24-29 - KMG - MWD	15,356.84	7,910.20	514.08	414.67	5.171	CC, ES, SF
HOWARD 24N-29HZ - KMG - MWD	15,356.84	12,081.00	939.19	876.38	14.952	CC, ES, SF
HOWARD 28N-29HZ - KMG - MWD	13,380.56	15,002.07	1,548.53	1,320.90	6.803	CC
HOWARD 28N-29HZ - KMG - MWD	13,400.00	14,987.42	1,548.56	1,320.85	6.801	ES, SF
HOWARD 30C-28HZ - KMG - MWD	15,356.84	10,719.23	1,174.63	988.81	6.321	CC, ES, SF
HOWARD 30N-21HZX - KMG - MWD	12,543.32	7,972.58	1,295.26	1,187.70	12.043	CC
HOWARD 30N-21HZX - KMG - MWD	12,600.00	7,940.00	1,295.76	1,187.29	11.946	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 1G-20H-B167
Project:	Sec 20 T1N-R67W	TVD Reference:	WELL @ 5129.31usft (Original Well Elev)
Reference Site:	Herbers Pad	MD Reference:	WELL @ 5129.31usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	HERBERS 1G-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 30N-21HZX - KMG - MWD	13,000.00	7,700.45	1,327.95	1,214.30	11.684	SF
HOWARD 30N-21HZX - KMG Wellbore#2 - MWD	8,359.50	12,103.00	1,189.18	1,076.70	10.572	CC, ES
HOWARD 30N-21HZX - KMG Wellbore#2 - MWD	8,400.00	12,103.00	1,189.83	1,076.84	10.530	SF
HOWARD 3C-29HZ - KMG - MWD	13,156.96	15,438.00	1,990.03	1,760.16	8.657	CC, ES
HOWARD 3C-29HZ - KMG - MWD	13,200.00	15,412.84	1,990.33	1,760.23	8.650	SF
HOWARD 4C-21HZ - KMG - MWD	8,369.53	12,267.00	1,627.53	1,512.42	14.139	CC, ES
HOWARD 4C-21HZ - KMG - MWD	8,400.00	12,267.00	1,628.14	1,512.89	14.128	SF
HOWARD 4N-28HZ - KMG - MWD	15,356.84	10,485.45	1,659.85	1,474.09	8.935	CC, ES, SF
HOWARD 9-29 - KMG - MWD	15,356.84	7,784.00	1,139.19	1,070.46	16.576	CC, ES, SF
HOWARD 9C-29HZ - KMG - MWD	15,356.84	12,440.00	1,095.33	969.44	8.701	CC, ES, SF
HSR-UNDERHILL 15-17A - KMG - Gyro	6,908.24	6,736.48	752.86	694.80	12.968	CC
HSR-UNDERHILL 15-17A - KMG - Gyro	7,000.00	6,827.16	753.03	694.20	12.799	ES
HSR-UNDERHILL 15-17A - KMG - Gyro	7,200.00	7,024.05	757.94	697.49	12.537	SF
MARK 1 - VESSELS - No Survey	5,284.41	5,063.00	1,066.41	1,031.65	30.685	CC, ES
MARK 1 - VESSELS - No Survey	5,400.00	5,063.00	1,072.65	1,037.47	30.492	SF
MARK 1-A - CHAPARRAL - No Survey	2,335.05	2,266.70	103.98	89.60	7.229	CC, ES
MARK 1-A - CHAPARRAL - No Survey	2,400.00	2,329.79	105.12	90.31	7.097	SF
NGL C2B - NGL WATER - MWD	15,356.84	9,334.77	1,875.07	1,715.47	11.749	CC, ES, SF
PAUL HEINZE 1 - KPK - No Survey	300.00	273.69	2,481.40	2,480.06	1,845.292	CC
PAUL HEINZE 1 - KPK - No Survey	400.00	373.69	2,481.50	2,479.62	1,318.851	ES
PAUL HEINZE 1 - KPK - No Survey	12,500.00	5,000.00	3,744.18	3,686.00	64.358	SF
SCHEIDT STATE VV16-13 - KMG - Gyro	7,586.47	7,389.13	1,675.33	1,620.14	30.354	CC, ES
SCHEIDT STATE VV16-13 - KMG - Gyro	7,600.00	7,400.91	1,675.40	1,620.18	30.342	SF
UNDERHILL 1N-17HZ - KMG - MWD	7,592.10	7,499.04	645.28	584.38	10.596	CC, ES, SF
UNDERHILL 27C-17HZ - KMG - MWD	7,738.25	7,603.53	191.77	132.37	3.229	CC, ES, SF
UNDERHILL 27N-17HZ - KMG - MWD	6,258.86	6,174.34	58.39	1.29	1.023	Level 3, CC, ES, SF
UNDERHILL 28N-17HZ - KMG - MWD	5,037.52	5,002.55	645.27	598.80	13.884	CC, ES
UNDERHILL 28N-17HZ - KMG - MWD	5,300.00	5,239.62	655.36	606.74	13.478	SF
UNDERHILL 2C-17HZ - KMG - MWD	5,541.81	5,487.56	426.77	376.69	8.522	CC, ES
UNDERHILL 2C-17HZ - KMG - MWD	5,700.00	5,635.84	430.92	379.58	8.394	SF
UNDERHILL STATE 26C-17HZ - KMG - MWD	7,621.86	7,457.15	1,119.87	1,058.24	18.172	CC, ES, SF
UPRR 42 PAN AM AN 4 - KAUFFMAN - No Survey	11,147.22	4,961.00	3,304.32	3,251.11	62.093	CC
UPRR 42 PAN AM AN 4 - KAUFFMAN - No Survey	11,200.00	4,961.00	3,304.74	3,250.79	61.256	ES
UPRR 42 PAN AM AN 4 - KAUFFMAN - No Survey	12,800.00	4,961.00	3,678.20	3,605.93	50.895	SF
UPRR 42 PAN AM N 4 - KAUFFMAN - MWD	2,834.76	2,919.40	1,798.81	1,774.29	73.382	CC, ES
UPRR 42 PAN AM N 4 - KAUFFMAN - MWD	5,200.00	5,115.00	1,940.07	1,897.46	45.537	SF
UPRR 42 PAN AM-AN 1 - KAUFFMAN - No Survey	12,454.08	4,985.00	3,297.50	3,229.65	48.604	CC
UPRR 42 PAN AM-AN 1 - KAUFFMAN - No Survey	12,500.00	4,985.00	3,297.82	3,229.31	48.136	ES
UPRR 42 PAN AM-AN 1 - KAUFFMAN - No Survey	13,700.00	4,985.00	3,525.02	3,442.58	42.757	SF
UPRR 43 PAN AM GU K 1 - KMG - Gyro	14,766.65	7,686.27	104.16	-40.08	0.722	Level 2, CC, ES, SF
UPRR 43 PAN AM-G 12 - KAUFFMAN - No Survey	15,356.84	5,018.00	2,947.53	2,877.67	42.191	CC, ES, SF
UPRR 43 PAN AM-G 3 - KAUFFMAN - Gyro	14,832.02	7,689.11	2,233.91	2,087.34	15.241	CC, ES
UPRR 43 PAN AM-G 3 - KAUFFMAN - Gyro	15,000.00	7,683.97	2,244.94	2,096.31	15.104	SF
UPRR 43 PAN AM-G 6 - KAUFFMAN - No Survey	13,765.90	5,005.00	3,435.32	3,357.68	44.251	CC
UPRR 43 PAN AM-G 6 - KAUFFMAN - No Survey	13,800.00	5,005.00	3,435.49	3,357.48	44.043	ES
UPRR 43 PAN AM-G 6 - KAUFFMAN - No Survey	14,700.00	5,005.00	3,560.05	3,474.45	41.588	SF
UPRR 43 PAN AM-G 9 - KAUFFMAN - No Survey	15,356.84	4,975.00	3,553.00	3,458.12	37.448	CC, ES, SF
ZARLENGO 1 - UPRC - No Survey	15,247.20	4,960.00	2,757.40	2,682.58	36.855	CC
ZARLENGO 1 - UPRC - No Survey	15,300.00	4,960.00	2,757.90	2,682.53	36.590	ES
ZARLENGO 1 - UPRC - No Survey	15,356.84	4,960.00	2,759.58	2,683.63	36.334	SF
ZARLENGO 3 - ANADARKO - No Survey	15,097.25	4,990.00	2,827.03	2,753.64	38.519	CC
ZARLENGO 3 - ANADARKO - No Survey	15,100.00	4,990.00	2,827.03	2,753.61	38.503	ES
ZARLENGO 3 - ANADARKO - No Survey	15,356.84	4,990.00	2,838.92	2,762.84	37.313	SF

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

Anticollision Summary Report

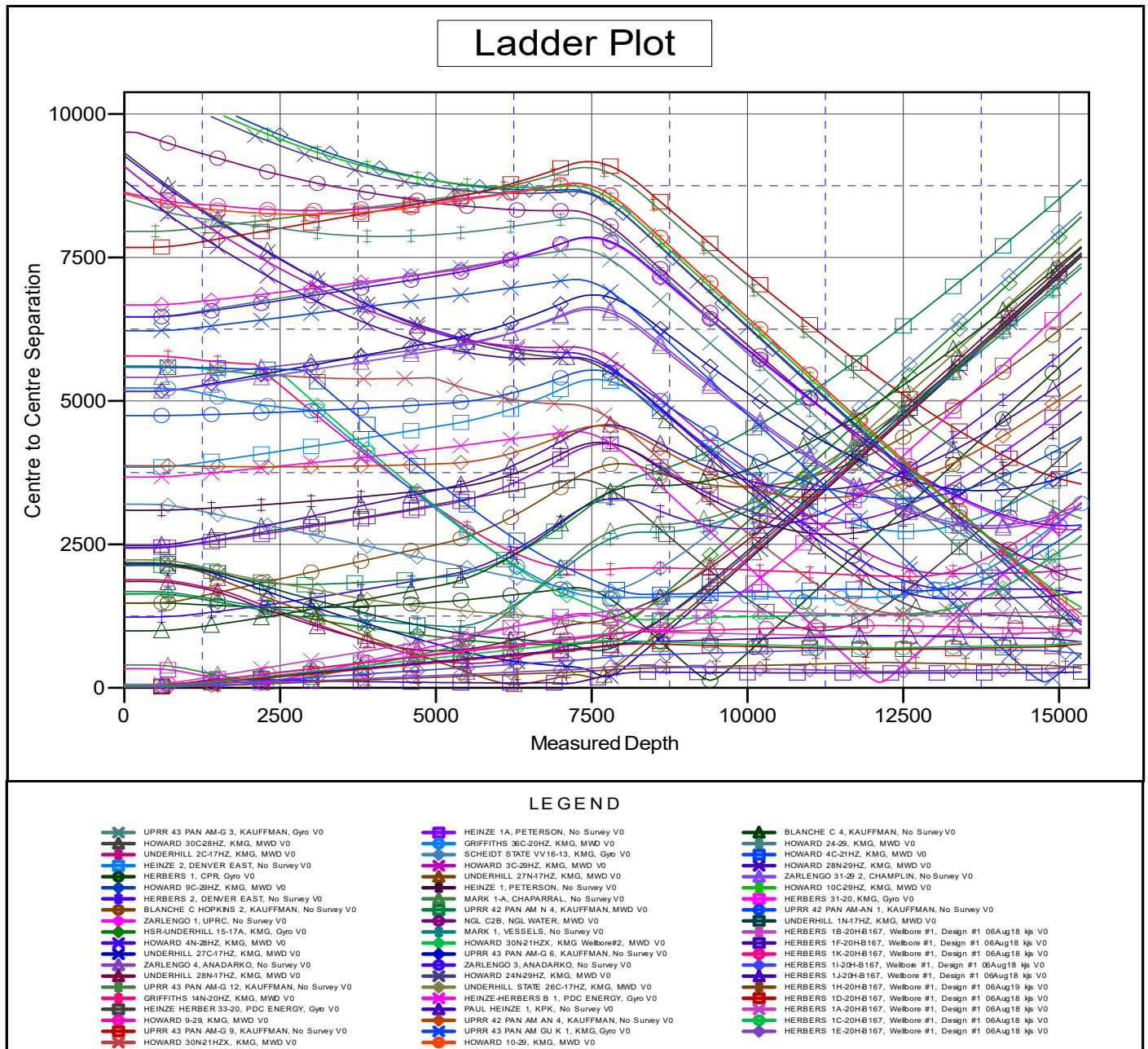
Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HERBERS 1G-20H-B167
Project:	Sec 20 T1N-R67W	TVD Reference:	WELL @ 5129.31usft (Original Well Elev)
Reference Site:	Herbers Pad	MD Reference:	WELL @ 5129.31usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	HERBERS 1G-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)						
ZARLENGO 31-29 2 - CHAMPLIN - No Survey	13,876.49	4,990.00	2,826.07	2,763.98	45.517	CC
ZARLENGO 31-29 2 - CHAMPLIN - No Survey	13,900.00	4,990.00	2,826.17	2,763.85	45.354	ES
ZARLENGO 31-29 2 - CHAMPLIN - No Survey	14,600.00	4,990.00	2,917.21	2,849.41	43.026	SF
ZARLENGO 4 - ANADARKO - No Survey	13,883.18	4,965.00	2,780.32	2,715.90	43.160	CC
ZARLENGO 4 - ANADARKO - No Survey	13,900.00	4,965.00	2,780.37	2,715.75	43.024	ES
ZARLENGO 4 - ANADARKO - No Survey	14,700.00	4,965.00	2,897.83	2,825.32	39.967	SF
Herbers Pad						
HERBERS 1A-20H-B167 - Wellbore #1 - Design #1 06Au	116.32	117.36	60.00	59.60	151.236	CC
HERBERS 1A-20H-B167 - Wellbore #1 - Design #1 06Au	300.00	300.82	60.17	58.46	35.134	ES
HERBERS 1A-20H-B167 - Wellbore #1 - Design #1 06Au	15,356.84	14,995.53	1,376.65	1,126.29	5.499	SF
HERBERS 1B-20H-B167 - Wellbore #1 - Design #1 06Au	410.72	412.17	49.31	46.80	19.658	CC, ES
HERBERS 1B-20H-B167 - Wellbore #1 - Design #1 06Au	15,356.84	15,107.53	1,022.95	771.51	4.068	SF
HERBERS 1C-20H-B167 - Wellbore #1 - Design #1 06Au	460.75	462.33	39.13	36.27	13.662	CC
HERBERS 1C-20H-B167 - Wellbore #1 - Design #1 06Au	500.00	501.74	39.23	36.09	12.476	ES
HERBERS 1C-20H-B167 - Wellbore #1 - Design #1 06Au	15,300.00	14,927.13	797.60	546.49	3.176	SF
HERBERS 1D-20H-B167 - Wellbore #1 - Design #1 06Au	442.49	443.51	28.62	25.89	10.468	CC
HERBERS 1D-20H-B167 - Wellbore #1 - Design #1 06Au	500.00	501.04	28.96	25.82	9.202	ES
HERBERS 1D-20H-B167 - Wellbore #1 - Design #1 06Au	15,356.84	15,011.37	767.39	526.68	3.188	SF
HERBERS 1E-20H-B167 - Wellbore #1 - Design #1 06Au	540.19	541.25	18.20	14.77	5.302	CC
HERBERS 1E-20H-B167 - Wellbore #1 - Design #1 06Au	600.00	601.15	18.38	14.51	4.753	ES
HERBERS 1E-20H-B167 - Wellbore #1 - Design #1 06Au	14,900.00	14,701.30	338.15	121.62	1.562	SF
HERBERS 1F-20H-B167 - Wellbore #1 - Design #1 06Au	300.00	300.21	10.00	8.29	5.846	CC
HERBERS 1F-20H-B167 - Wellbore #1 - Design #1 06Au	400.00	400.21	10.08	7.65	4.152	ES
HERBERS 1F-20H-B167 - Wellbore #1 - Design #1 06Au	7,100.00	7,127.53	75.34	12.76	1.204	Level 3, SF
HERBERS 1H-20H-B167 - Wellbore #1 - Design #1 06Au	300.00	299.87	10.00	8.29	5.850	CC
HERBERS 1H-20H-B167 - Wellbore #1 - Design #1 06Au	400.00	399.73	10.26	7.84	4.233	ES
HERBERS 1H-20H-B167 - Wellbore #1 - Design #1 06Au	15,356.84	15,254.60	342.45	102.05	1.425	Level 3, SF
HERBERS 1I-20H-B167 - Wellbore #1 - Design #1 06Au	300.00	299.80	20.00	18.29	11.701	CC, ES
HERBERS 1I-20H-B167 - Wellbore #1 - Design #1 06Au	15,356.84	15,185.80	597.30	356.24	2.478	SF
HERBERS 1J-20H-B167 - Wellbore #1 - Design #1 06Au	204.30	203.64	30.00	28.98	29.371	CC
HERBERS 1J-20H-B167 - Wellbore #1 - Design #1 06Au	300.00	298.88	30.38	28.67	17.822	ES
HERBERS 1J-20H-B167 - Wellbore #1 - Design #1 06Au	15,356.84	15,502.49	803.79	549.36	3.159	SF
HERBERS 1K-20H-B167 - Wellbore #1 - Design #1 06Au	200.00	199.27	40.00	39.01	40.390	CC, ES
HERBERS 1K-20H-B167 - Wellbore #1 - Design #1 06Au	15,356.84	15,398.71	979.19	724.89	3.851	SF

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well HERBERS 1G-20H-B167
Project:	Sec 20 T1N-R67W	TVD Reference:	WELL @ 5129.31usft (Original Well Elev)
Reference Site:	Herbers Pad	MD Reference:	WELL @ 5129.31usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	HERBERS 1G-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 @ 5129.31usft (Original Well E
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000

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



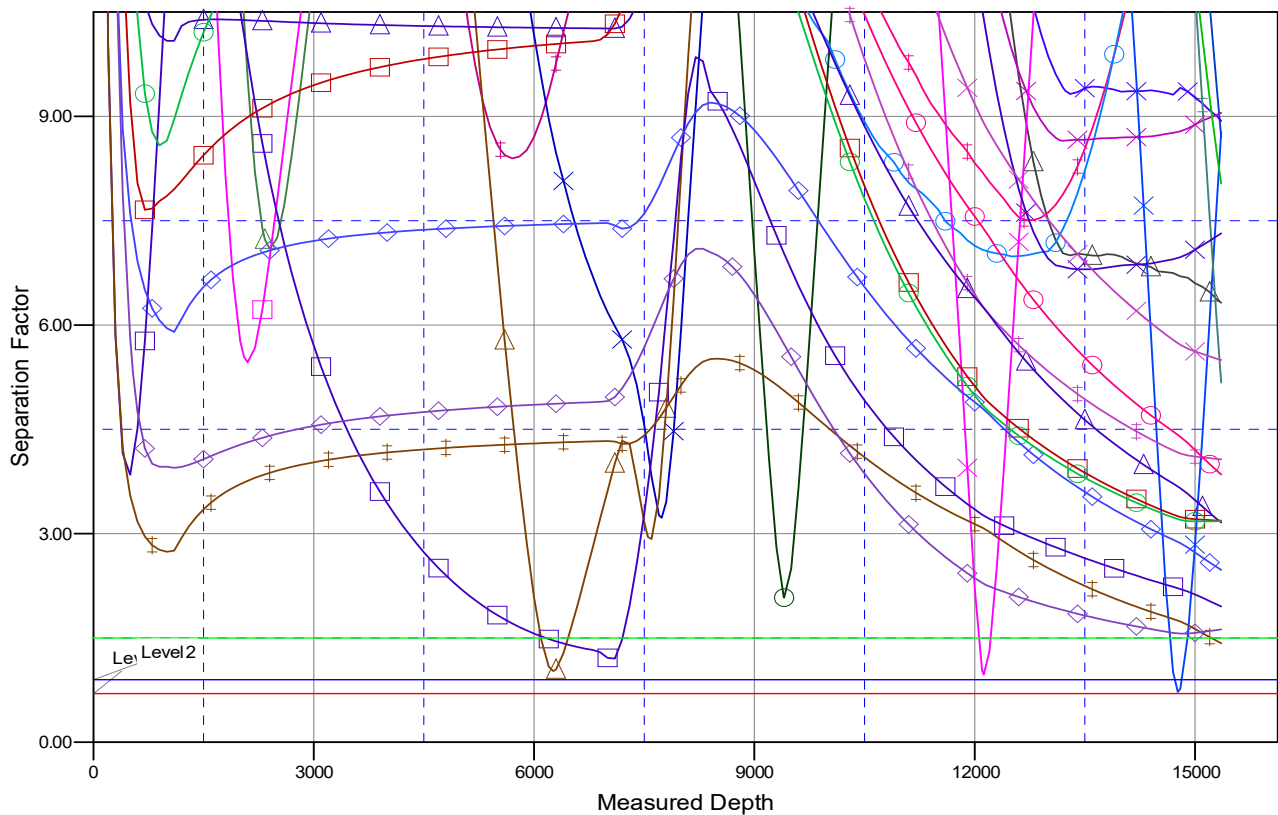
Company: Crestone Peak Resources
Project: Sec 20 T1N-R67W
Reference Site: Herbers Pad
Site Error: 0.00 usft
Reference Well: HERBERS 1G-20H-B167
Well Error: 0.00 usft
Reference Wellbore: Wellbore #1
Reference Design: Design #1 06Aug18 kjs

Local Co-ordinate Reference: Well HERBERS 1G-20H-B167
TVD Reference: WELL @ 5129.31usft (Original Well Elev)
MD Reference: WELL @ 5129.31usft (Original Well Elev)
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 WELL @ 5129.31usft (Original Well E
Offset Depths are relative to Offset Datum
Central Meridian is -105.500000

Coordinates are relative to: HERBERS 1G-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 30C28HZ, KMG, MWD V0 | GRIFFITHS 3C-20HZ, KMG, MWD V0 | HOWARD 24-28, KMG, MWD V0 |
| UNDERHILL 2C47HZ, KMG, MWD V0 | SCHIEDT STATE VV16-13, KMG, Gyro V0 | HOWARD 4C21HZ, KMG, MWD V0 |
| HEINZE 2, DENVER EAST, No Survey V0 | HOWARD 3C28HZ, KMG, MWD V0 | HOWARD 28N29HZ, KMG, MWD V0 |
| HERBERS 1, CPR, Gyro V0 | UNDERHILL 27N47HZ, KMG, MWD V0 | ZARLENGO 31-29 2, CHAMPLIN, No Survey V0 |
| HOWARD 9C28HZ, KMG, MWD V0 | HEINZE 1, PETERSON, No Survey V0 | HOWARD 10C29HZ, 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-AN 1, KAUFFMAN, No Survey V0 |
| ZARLENGO 1, UPRC, No Survey V0 | NCL C28, NGL WATER, MWD V0 | UNDERHILL 1N47HZ, KMG, MWD V0 |
| HSR-UNDERHILL 15-17A, KMG, Gyro V0 | MARK 1, VESSELS, No Survey V0 | HERBERS 18-20H167, Wellbore #1, Design #1 06Aug18 kjs V0 |
| HOWARD 4N28HZ, KMG, MWD V0 | HOWARD 30N21HZX, KMG Wellbore#2, MWD V0 | HERBERS 1F-20H167, Wellbore #1, Design #1 06Aug18 kjs V0 |
| UNDERHILL 27C47HZ, KMG, MWD V0 | UPRR 43 PAN AM-G 6, KAUFFMAN, No Survey V0 | HERBERS 1K-20H167, Wellbore #1, Design #1 06Aug18 kjs V0 |
| ZARLENGO 4, ANADARKO, No Survey V0 | ZARLENGO 3, ANADARKO, No Survey V0 | HERBERS 1J-20H167, Wellbore #1, Design #1 06Aug18 kjs V0 |
| UNDERHILL 28N47HZ, KMG, MWD V0 | HOWARD 24N29HZ, KMG, MWD V0 | HERBERS 1A-20H167, Wellbore #1, Design #1 06Aug18 kjs V0 |
| UPRR 43 PAN AM-G 12, KAUFFMAN, No Survey V0 | UNDERHILL STATE 28C-17HZ, KMG, MWD V0 | HERBERS 1D-20H167, Wellbore #1, Design #1 06Aug18 kjs V0 |
| GRIFFITHS 14N-20HZ, KMG, MWD V0 | HEINZE-HERBERS B 1, PDC ENERGY, Gyro V0 | HERBERS 1A-20H167, Wellbore #1, Design #1 06Aug18 kjs V0 |
| HEINZE HERBER 33-20, PDC ENERGY, Gyro V0 | PAUL HEINZE 1, KPC, No Survey V0 | HERBERS 1C-20H167, Wellbore #1, Design #1 06Aug18 kjs V0 |
| HOWARD 9-29, KMG, MWD V0 | UPRR 42 PAN AM AN 4, KAUFFMAN, No Survey V0 | HERBERS 1E-20H167, 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 | |
| HOWARD 30N21HZX, KMG, MWD V0 | HOWARD 10-29, KMG, MWD V0 | |