



Crestone Peak Resources

Sec 19 T2N-R68W

Regnier Farms Pad

REGNIER FARMS 1G-19H-B268

Wellbore #1

Design #1 22Mar18 kjs

Anticollision Summary Report

06 April, 2018

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well REGNIER FARMS 1G-19H-B268
Project:	Sec 19 T2N-R68W	TVD Reference:	WELL @ 4988.00usft (Original Well Elev)
Reference Site:	Regnier Farms Pad	MD Reference:	WELL @ 4988.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	REGNIER FARMS 1G-19H-B268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Single User Db
Reference Design:	Design #1 22Mar18 kjs	Offset TVD Reference:	Offset Datum

Reference	Design #1 22Mar18 kjs		
Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	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	4/5/2018		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.00	22,755.39	Design #1 22Mar18 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 (Regnier Farms)						
A C N O 2 - KAUFFMAN - No Surveys	15,907.56	4,907.00	3,304.22	3,178.52	26.286	CC, ES
A C N O 2 - KAUFFMAN - No Surveys	16,400.00	4,907.00	3,340.72	3,210.56	25.666	SF
ANDERSON TRUST C UNIT 2 - CPR - Gyro	18,798.00	7,279.32	2,290.36	2,058.93	9.896	CC
ANDERSON TRUST C UNIT 2 - CPR - Gyro	18,900.00	7,278.50	2,292.63	2,058.78	9.804	ES
ANDERSON TRUST C UNIT 2 - CPR - Gyro	19,100.00	7,276.93	2,310.19	2,072.80	9.732	SF
ANSELM 1 - PETERSON - No Surveys	21,401.99	4,970.00	3,188.98	2,989.77	16.008	CC, ES
ANSELM 1 - PETERSON - No Surveys	21,600.00	4,970.00	3,195.12	2,994.63	15.936	SF
ARMSTEAD GAS UNIT 4-31 - EXTRACTION - Gyro	22,435.13	7,271.62	2,164.04	1,869.15	7.338	CC, ES
ARMSTEAD GAS UNIT 4-31 - EXTRACTION - Gyro	22,500.00	7,270.97	2,165.01	1,869.68	7.331	SF
ARMSTEAD GU 5-31 - NOBLE ENERGY - No Surveys	19,315.67	7,260.00	2,388.24	2,160.10	10.468	CC, ES
ARMSTEAD GU 5-31 - NOBLE ENERGY - No Surveys	19,400.00	7,260.00	2,389.73	2,160.92	10.444	SF
BALLANTINE 3-30 - KMG - Gyro	13,347.32	7,269.41	2,549.72	2,412.71	18.609	CC
BALLANTINE 3-30 - KMG - Gyro	13,400.00	7,269.66	2,550.27	2,412.51	18.512	ES
BALLANTINE 3-30 - KMG - Gyro	13,700.00	7,271.07	2,574.00	2,432.90	18.242	SF
BECKY 1 - KAUFFMAN - No Surveys	22,756.35	5,010.00	3,299.02	3,096.82	16.316	CC, ES, SF
BROWN C UNIT 2 - CPR - Gyro	22,756.35	7,418.35	2,409.84	2,159.61	9.631	CC, ES, SF
BRYANT 10-30 - KMG - MWD	15,917.31	7,541.98	1,050.04	865.97	5.705	CC, ES, SF
BRYANT 16-30 - KMG - MWD	17,190.76	7,349.66	242.35	37.47	1.183	Level 3, CC
BRYANT 16-30 - KMG - MWD	17,200.00	7,349.63	242.53	36.99	1.180	Level 3, ES, SF
BRYANT 20-30 - KMG - MWD	16,536.72	7,401.27	405.34	206.30	2.036	CC, ES, SF
BRYANT 23-30 - KMG - MWD	16,641.09	7,445.23	1,581.44	1,380.41	7.867	CC, ES
BRYANT 23-30 - KMG - MWD	16,700.00	7,443.22	1,582.53	1,381.21	7.861	SF
BRYANT 24-30 - KMG - MWD	15,168.56	7,375.12	220.76	46.54	1.267	Level 3, CC, ES, SF
BRYANT 33-29 - KMG - MWD	16,558.48	7,563.64	998.22	797.35	4.969	CC, ES
BRYANT 33-29 - KMG - MWD	16,600.00	7,563.49	999.08	797.81	4.964	SF
BRYANT 34-30 - KMG - No Surveys	17,519.29	4,906.00	2,608.80	2,493.65	22.656	CC, ES
BRYANT 34-30 - KMG - No Surveys	17,700.00	4,906.00	2,615.05	2,499.12	22.558	SF
BRYANT 36-30 - KMG - No Surveys	17,991.01	7,446.00	1,752.87	1,532.69	7.961	CC
BRYANT 36-30 - KMG - No Surveys	18,000.00	7,446.00	1,752.89	1,532.63	7.958	ES
BRYANT 36-30 - KMG - No Surveys	18,100.00	7,446.00	1,756.25	1,535.37	7.951	SF
BRYANT 8-30 - KMG - MWD	14,503.26	7,551.35	182.39	13.04	1.077	Level 3, CC, ES, SF
BRYANT FEDERAL 37-30 - KMG - MWD	17,875.90	7,276.93	302.97	87.02	1.403	Level 3, CC, ES, SF
BULTHAUP 1-6 - KMG - Gyro	22,756.35	7,323.11	1,326.40	1,187.10	9.522	CC, ES, SF
BULTHAUP 17-6 - KMG - MWD	22,756.35	7,398.86	1,769.25	1,679.85	19.790	CC, ES, SF
BULTHAUP 21-6 - KMG - MWD	22,756.35	7,381.53	2,277.91	2,067.93	10.848	CC, ES, SF
BULTHAUP 27-6 - KMG - MWD	22,756.35	7,424.48	553.12	404.73	3.727	CC, ES, SF
CARLA PETERSON 1 - KAUFFMAN - No Surveys	22,756.35	5,010.00	2,715.29	2,566.49	18.248	CC, ES, SF

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 REGNIER FARMS 1G-19H-B268
Project:	Sec 19 T2N-R68W	TVD Reference:	WELL @ 4988.00usft (Original Well Elev)
Reference Site:	Regnier Farms Pad	MD Reference:	WELL @ 4988.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	REGNIER FARMS 1G-19H-B268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Single User Db
Reference Design:	Design #1 22Mar18 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 (Regnier Farms)						
CHAMPLIN 86 'N' 1 - KMG - Gyro	17,048.18	7,300.00	1,704.10	1,503.12	8.479	CC
CHAMPLIN 86 'N' 1 - KMG - Gyro	17,100.00	7,300.00	1,704.89	1,502.52	8.425	ES
CHAMPLIN 86 'N' 1 - KMG - Gyro	17,300.00	7,293.36	1,722.59	1,516.38	8.353	SF
CINQUE 1 - FOUNDATION ENERGY - No oSurveys	19,986.27	4,907.00	2,523.49	2,391.49	19.118	CC
CINQUE 1 - FOUNDATION ENERGY - No oSurveys	20,000.00	4,907.00	2,523.53	2,391.46	19.107	ES
CINQUE 1 - FOUNDATION ENERGY - No oSurveys	20,100.00	4,907.00	2,526.05	2,393.56	19.065	SF
CINQUE 2 - FOUNDATION ENERGY - No Surveys	18,637.59	4,911.00	2,539.91	2,418.83	20.977	CC, ES
CINQUE 2 - FOUNDATION ENERGY - No Surveys	18,800.00	4,911.00	2,545.10	2,423.35	20.904	SF
CINQUE 3 - FOUNDATION ENERGY - No Surveys	20,077.79	4,905.00	3,281.13	3,099.40	18.055	CC
CINQUE 3 - FOUNDATION ENERGY - No Surveys	20,100.00	4,905.00	3,281.21	3,099.29	18.037	ES
CINQUE 3 - FOUNDATION ENERGY - No Surveys	20,300.00	4,905.00	3,288.65	3,105.43	17.949	SF
CINQUE 4 - FOUNDATION ENERGY - No Surveys	18,652.61	4,975.00	3,273.04	3,107.08	19.721	CC
CINQUE 4 - FOUNDATION ENERGY - No Surveys	18,700.00	4,975.00	3,273.39	3,107.03	19.677	ES
CINQUE 4 - FOUNDATION ENERGY - No Surveys	18,900.00	4,975.00	3,282.38	3,114.72	19.578	SF
CINQUE 6-31 - FOUNDATION ENERGY - No Surveys	21,297.60	4,973.00	2,499.91	2,351.29	16.821	CC
CINQUE 6-31 - FOUNDATION ENERGY - No Surveys	21,300.00	4,973.00	2,499.91	2,351.28	16.819	ES
CINQUE 6-31 - FOUNDATION ENERGY - No Surveys	21,400.00	4,973.00	2,502.00	2,352.95	16.785	SF
CINQUE 7-31 - EXTRACTION - No surveys	19,585.36	7,261.00	487.59	254.75	2.094	CC, ES, SF
CINQUE 8-31 - EXTRACTION - No Surveys	22,547.95	7,274.00	857.34	572.71	3.012	CC, ES, SF
CINQUE 9-31 - EXTRACTION - Gyro	21,515.58	7,268.84	227.91	-50.85	0.818	Level 2, CC, ES, SF
FILE FED 3I-32H-K268 - CPR - MWD	17,730.09	11,766.21	1,145.49	889.47	4.474	CC
FILE FED 3I-32H-K268 - CPR - MWD	17,800.00	11,719.72	1,146.26	889.12	4.458	ES
FILE FED 3I-32H-K268 - CPR - MWD	21,800.00	7,728.00	1,266.49	978.50	4.398	SF
FILE FED 3J-32H-K268 - CPR - MWD	16,800.00	12,482.01	1,184.74	922.15	4.512	SF
FILE FED 3J-32H-K268 - CPR - MWD	16,823.64	12,456.38	1,184.66	922.13	4.513	CC, ES
FILE FED 3K-32H-K268 - CPR - MWD	12,941.88	16,042.79	1,469.44	1,208.49	5.631	CC
FILE FED 3K-32H-K268 - CPR - MWD	13,000.00	16,004.74	1,469.83	1,208.30	5.620	ES, SF
FILE FED 3L-32H-K268 - CPR - MWD	16,823.97	12,104.43	1,857.99	1,596.75	7.112	CC, ES
FILE FED 3L-32H-K268 - CPR - MWD	16,938.91	12,040.40	1,861.85	1,599.25	7.090	SF
FILE FED 3M-32H-K268 - CPR - MWD	16,700.00	12,791.79	1,998.25	1,735.48	7.605	SF
FILE FED 3M-32H-K268 - CPR - MWD	17,020.05	12,360.02	1,993.67	1,733.74	7.670	CC
FILE FED 3M-32H-K268 - CPR - MWD	17,100.00	12,306.00	1,993.92	1,733.16	7.647	ES
FILE FED 3N-32H-K268 - CPR - MWD	16,200.00	13,163.27	2,042.90	1,777.86	7.708	SF
FILE FED 3N-32H-K268 - CPR - MWD	16,902.97	12,302.16	2,033.97	1,772.44	7.777	CC, ES
GLADYS-SAWDEY 1 - KMG - Gyro	13,922.88	7,285.25	3,039.28	2,892.07	20.646	CC
GLADYS-SAWDEY 1 - KMG - Gyro	14,000.00	7,282.04	3,040.26	2,891.95	20.500	ES
GLADYS-SAWDEY 1 - KMG - Gyro	14,400.00	7,265.32	3,076.45	2,923.68	20.138	SF
HANKINS 1 - KAUFFMAN - No Surveys	12,101.44	4,920.00	2,417.58	2,365.93	46.811	CC, ES
HANKINS 1 - KAUFFMAN - No Surveys	12,800.00	4,920.00	2,516.48	2,459.12	43.874	SF
HSR-BRYANT 9-30A - KMG - Gyro	16,026.35	7,254.64	316.22	132.29	1.719	CC, ES, SF
JACK HEIN UNIT 1 - HS RESOURCES - No Surveys	21,233.96	5,085.00	2,256.50	2,124.06	17.038	CC, ES
JACK HEIN UNIT 1 - HS RESOURCES - No Surveys	21,500.00	5,085.00	2,272.12	2,136.83	16.794	SF
JOHN LAMAR 1 - KAUFFMAN - No Surveys	13,235.92	4,930.00	2,354.97	2,295.56	39.640	CC, ES
JOHN LAMAR 1 - KAUFFMAN - No Surveys	13,800.00	4,930.00	2,421.59	2,357.76	37.941	SF
JOHNSON 32-30 - KAUFFMAN - No Surveys	14,752.10	4,895.00	2,540.24	2,459.90	31.619	CC, ES
JOHNSON 32-30 - KAUFFMAN - No Surveys	15,100.00	4,895.00	2,563.96	2,481.33	31.029	SF
JOHNSON 7-30A - KMG - Gyro	14,702.56	7,271.85	1,035.20	874.59	6.445	CC, ES, SF
KENYON 34-19 - CPR - MWD	12,023.95	7,458.63	922.13	805.87	7.932	CC, ES
KENYON 34-19 - CPR - MWD	12,100.00	7,457.53	925.26	808.22	7.906	SF
KENYON 4-8-19 - CPR - MWD	12,512.21	7,582.92	1,328.62	1,200.07	10.336	CC, ES
KENYON 4-8-19 - CPR - MWD	12,700.00	7,581.64	1,341.82	1,210.39	10.209	SF
KENYON 8-4-19 - CPR - MWD	10,046.06	7,705.12	985.42	891.06	10.442	CC, ES
KENYON 8-4-19 - CPR - MWD	10,100.00	7,705.84	986.90	891.99	10.398	SF

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

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Reference Well:	REGNIER FARMS 1G-19H-B268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Single User Db
Reference Design:	Design #1 22Mar18 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 (Regnier Farms)						
KENYON 8-6-19 - CPR - MWD	11,325.55	7,441.67	973.82	869.92	9.372	CC, ES
KENYON 8-6-19 - CPR - MWD	11,400.00	7,442.72	976.66	871.40	9.278	SF
KENYON 8-8-19 - CPR - MWD	12,545.78	7,515.04	952.71	823.95	7.399	CC
KENYON 8-8-19 - CPR - MWD	12,600.00	7,515.00	954.25	823.87	7.319	ES
KENYON 8-8-19 - CPR - MWD	12,700.00	7,514.94	965.11	832.57	7.282	SF
KOCH 41-6 - KAUFFMAN - No Surveys	22,756.35	5,037.00	2,596.97	2,470.75	20.576	CC, ES, SF
NELSON 1-A - TEXAS TEA - No Surveys	19,593.77	5,011.00	2,811.86	2,649.07	17.273	CC
NELSON 1-A - TEXAS TEA - No Surveys	19,600.00	5,011.00	2,811.87	2,648.96	17.261	ES
NELSON 1-A - TEXAS TEA - No Surveys	20,100.00	5,011.00	2,857.07	2,687.47	16.846	SF
NELSON 2 - TEXAS TEA - No Surveys	21,402.09	4,918.00	2,941.43	2,756.10	15.871	CC
NELSON 2 - TEXAS TEA - No Surveys	21,500.00	4,918.00	2,943.06	2,756.05	15.737	ES
NELSON 2 - TEXAS TEA - No Surveys	21,800.00	4,918.00	2,968.23	2,777.27	15.544	SF
NELSON 5 - TEXAS TEA - No Surveys	22,110.02	5,035.00	2,872.27	2,673.56	14.454	CC
NELSON 5 - TEXAS TEA - No Surveys	22,200.00	5,035.00	2,873.68	2,673.38	14.347	ES
NELSON 5 - TEXAS TEA - No Surveys	22,500.00	5,035.00	2,898.62	2,694.36	14.190	SF
NELSON-E UNIT 1 - CPR - Gyro	21,875.36	7,312.98	2,156.33	1,871.11	7.560	CC
NELSON-E UNIT 1 - CPR - Gyro	21,900.00	7,312.80	2,156.47	1,870.62	7.544	ES
NELSON-E UNIT 1 - CPR - Gyro	22,100.00	7,311.32	2,168.00	1,878.29	7.483	SF
NOAA FEDERAL 11-32 - CPR - Gyro	18,534.94	7,187.98	1,539.01	1,312.48	6.794	CC
NOAA FEDERAL 11-32 - CPR - Gyro	18,600.00	7,188.95	1,540.38	1,312.10	6.748	ES
NOAA FEDERAL 11-32 - CPR - Gyro	18,700.00	7,190.44	1,547.83	1,317.55	6.721	SF
RASMUSSEN 19-11 - CPR - Gyro	10,565.82	7,341.11	2,141.90	2,051.71	23.749	CC
RASMUSSEN 19-11 - CPR - Gyro	10,600.00	7,340.20	2,142.17	2,051.54	23.637	ES
RASMUSSEN 19-11 - CPR - Gyro	11,000.00	7,329.55	2,185.43	2,090.69	23.069	SF
RASMUSSEN 19-14 - CPR - Gyro	12,148.13	7,400.00	2,167.42	2,050.54	18.543	CC
RASMUSSEN 19-14 - CPR - Gyro	12,200.00	7,400.00	2,168.04	2,050.47	18.440	ES
RASMUSSEN 19-14 - CPR - Gyro	12,500.00	7,400.00	2,195.80	2,075.21	18.208	SF
RASMUSSEN 4-6-19 - CPR - MWD	11,149.51	7,565.33	1,763.00	1,660.08	17.131	CC
RASMUSSEN 4-6-19 - CPR - MWD	11,200.00	7,564.93	1,763.72	1,660.03	17.010	ES
RASMUSSEN 4-6-19 - CPR - MWD	11,500.00	7,562.63	1,797.50	1,690.15	16.745	SF
RASMUSSEN FEDERAL 35-29 - KMG - MWD	17,726.63	7,344.00	2,235.82	2,020.94	10.405	CC
RASMUSSEN FEDERAL 35-29 - KMG - MWD	17,800.00	7,344.00	2,237.02	2,020.47	10.330	ES
RASMUSSEN FEDERAL 35-29 - KMG - MWD	18,000.00	7,344.00	2,252.47	2,032.36	10.233	SF
RAY NELSON 0-4-32 - CPR - MWD	20,287.10	7,360.00	1,086.55	826.49	4.178	CC
RAY NELSON 0-4-32 - CPR - MWD	20,300.00	7,360.00	1,086.62	826.18	4.172	ES
RAY NELSON 0-4-32 - CPR - MWD	20,400.00	7,360.00	1,092.40	830.02	4.164	SF
RAY NELSON 12-32 - CPR - Gyro	19,687.21	7,218.63	1,602.34	1,355.65	6.495	CC
RAY NELSON 12-32 - CPR - Gyro	19,700.00	7,218.68	1,602.39	1,355.33	6.486	ES
RAY NELSON 12-32 - CPR - Gyro	19,800.00	7,219.08	1,606.30	1,356.86	6.440	SF
RAY NELSON 13-32 - CPR - MWD	20,995.94	7,460.84	1,560.23	1,283.43	5.637	CC
RAY NELSON 13-32 - CPR - MWD	21,000.00	7,460.80	1,560.23	1,283.30	5.634	ES
RAY NELSON 13-32 - CPR - MWD	21,100.00	7,459.92	1,563.69	1,284.01	5.591	SF
RAY NELSON 14-32 - CPR - MWD	22,603.91	7,353.07	1,638.22	1,338.26	5.461	CC, ES
RAY NELSON 14-32 - CPR - MWD	22,700.00	7,352.50	1,641.04	1,338.90	5.431	SF
RAY NELSON 24-32 - CPR - MWD	22,574.11	7,492.66	2,995.45	2,697.23	10.045	CC
RAY NELSON 24-32 - CPR - MWD	22,600.00	7,491.80	2,995.56	2,696.70	10.023	ES
RAY NELSON 24-32 - CPR - MWD	22,756.35	7,486.72	3,000.98	2,698.81	9.931	SF
RAY NELSON 2-4-32 - CPR - MWD	20,316.58	7,364.73	2,427.59	2,166.92	9.313	CC
RAY NELSON 2-4-32 - CPR - MWD	20,400.00	7,363.19	2,429.02	2,166.22	9.243	ES
RAY NELSON 2-4-32 - CPR - MWD	20,600.00	7,359.50	2,444.07	2,177.30	9.162	SF
REGNIER 4-4-19 - CPR - MWD	9,882.73	7,352.17	1,446.47	1,365.77	17.923	CC
REGNIER 4-4-19 - CPR - MWD	9,900.00	7,352.17	1,446.57	1,365.74	17.895	ES
REGNIER 4-4-19 - CPR - MWD	10,000.00	7,352.19	1,451.22	1,369.73	17.810	SF

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 REGNIER FARMS 1G-19H-B268
Project:	Sec 19 T2N-R68W	TVD Reference:	WELL @ 4988.00usft (Original Well Elev)
Reference Site:	Regnier Farms Pad	MD Reference:	WELL @ 4988.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	REGNIER FARMS 1G-19H-B268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Single User Db
Reference Design:	Design #1 22Mar18 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 (Regnier Farms)						
REGNIER FARMS 31-19 - CPR - Gyro	0.00	15.16	795.41			
REGNIER FARMS 31-19 - CPR - Gyro	8,200.00	7,300.00	1,209.00	1,152.82	21.517	SF
REGNIER FARMS 32-19 - CPR - Gyro	9,144.89	7,299.47	930.80	862.76	13.679	CC, ES
REGNIER FARMS 32-19 - CPR - Gyro	9,200.00	7,299.45	932.43	864.00	13.625	SF
REGNIER FARMS 33-19 - CPR - Gyro	10,460.67	7,313.51	1,061.36	973.07	12.021	CC, ES
REGNIER FARMS 33-19 - CPR - Gyro	10,500.00	7,313.45	1,062.09	973.44	11.981	SF
REGNIER FARMS 42-19 - CPR - Gyro	9,159.35	7,293.29	356.85	288.60	5.229	CC, ES
REGNIER FARMS 42-19 - CPR - Gyro	9,200.00	7,292.94	359.15	289.86	5.183	SF
REGNIER FARMS 43-19 - CPR - MWD	10,648.80	7,542.01	451.01	355.61	4.728	CC
REGNIER FARMS 43-19 - CPR - MWD	10,700.00	7,541.85	453.90	351.31	4.424	ES
REGNIER FARMS 43-19 - CPR - MWD	10,900.00	7,541.23	516.24	388.73	4.049	SF
REGNIER FARMS B 2 - CPR - Gyro	11,591.90	7,318.66	75.43	-31.66	0.704	Level 2, CC, ES, SF
REGNIER FARMS-B UNIT 1 - CPR - Gyro	8,217.98	7,291.93	62.49	5.78	1.102	Level 3, CC, ES, SF
ROSS 21-19 - CPR - Gyro	0.00	0.00	1,450.57			
ROSS 21-19 - CPR - Gyro	200.00	192.97	1,450.79	1,449.79	1,446.688	ES
ROSS 21-19 - CPR - Gyro	8,500.00	7,328.31	2,240.68	2,182.48	38.501	SF
ROSS 22-19 - CPR - Gyro	9,278.98	7,300.00	2,292.53	2,222.54	32.755	CC
ROSS 22-19 - CPR - Gyro	9,300.00	7,300.00	2,292.62	2,222.39	32.641	ES
ROSS 22-19 - CPR - Gyro	9,900.00	7,300.00	2,375.15	2,298.87	31.135	SF
ROSS 2-4-19 - CPR - MWD	9,876.50	7,496.34	2,723.58	2,641.46	33.166	CC
ROSS 2-4-19 - CPR - MWD	9,900.00	7,495.70	2,723.68	2,641.29	33.055	ES
ROSS 2-4-19 - CPR - MWD	10,600.00	7,475.27	2,817.95	2,728.71	31.578	SF
ROSS 4-2-19 - CPR - MWD	8,674.54	7,627.96	1,546.89	1,480.77	23.395	CC
ROSS 4-2-19 - CPR - MWD	8,700.00	7,627.46	1,547.10	1,480.59	23.262	ES
ROSS 4-2-19 - CPR - MWD	9,200.00	7,617.89	1,633.66	1,559.69	22.086	SF
SAWDEY 21-30 - KMG - MWD	13,963.15	7,469.73	1,574.21	1,424.54	10.517	CC
SAWDEY 21-30 - KMG - MWD	14,000.00	7,469.57	1,574.64	1,424.51	10.488	ES
SAWDEY 21-30 - KMG - MWD	14,100.00	7,469.14	1,580.15	1,429.04	10.457	SF
SAWDEY 22-30 - KMG - MWD	15,149.09	7,452.86	2,987.33	2,812.54	17.090	CC
SAWDEY 22-30 - KMG - MWD	15,200.00	7,451.38	2,987.77	2,812.19	17.017	ES
SAWDEY 22-30 - KMG - MWD	15,600.00	7,440.19	3,021.15	2,841.00	16.771	SF
SAWDEY 31-30 - KMG - MWD	13,888.41	7,518.49	4,149.67	4,000.70	27.856	CC
SAWDEY 31-30 - KMG - MWD	13,900.00	7,518.33	4,149.69	4,000.54	27.823	ES
SAWDEY 31-30 - KMG - MWD	14,900.00	7,504.81	4,271.17	4,110.05	26.510	SF
SAWDEY 32-30 - KMG - MWD	15,328.11	7,567.82	4,179.15	3,997.41	22.996	CC
SAWDEY 32-30 - KMG - MWD	15,400.00	7,569.06	4,179.77	3,996.68	22.829	ES
SAWDEY 32-30 - KMG - MWD	16,300.00	7,583.45	4,290.64	4,094.59	21.885	SF
SAWDEY 5-30 - KMG - MWD	14,709.68	7,427.82	3,743.89	3,579.30	22.747	CC
SAWDEY 5-30 - KMG - MWD	14,800.00	7,419.03	3,744.97	3,578.90	22.551	ES
SAWDEY 5-30 - KMG - MWD	15,500.00	7,342.42	3,826.01	3,651.20	21.887	SF
SAWDEY 6-30 - KMG - MWD	14,630.17	7,389.73	2,197.88	2,036.36	13.607	CC, ES
SAWDEY 6-30 - KMG - MWD	14,800.00	7,389.99	2,204.43	2,041.10	13.497	SF
SAWDEY UNIT 2 - KMG - Gyro	13,661.04	7,317.23	649.78	507.16	4.556	CC, ES, SF
SHAW 12-29A - KMG - Gyro	14,656.11	7,272.67	1,743.84	1,583.97	10.908	CC
SHAW 12-29A - KMG - Gyro	14,700.00	7,271.76	1,744.39	1,583.61	10.850	ES
SHAW 12-29A - KMG - Gyro	14,900.00	7,267.79	1,760.80	1,596.93	10.745	SF
TEGELER 11-30 - KMG - Gyro	15,871.55	7,295.77	2,298.93	2,117.63	12.681	CC
TEGELER 11-30 - KMG - Gyro	15,900.00	7,295.99	2,299.10	2,117.41	12.654	ES
TEGELER 11-30 - KMG - Gyro	16,100.00	7,297.51	2,310.25	2,126.42	12.567	SF
WILLIAMS 13-20 - KMG - MWD	11,986.73	7,589.81	1,693.25	1,568.24	13.544	CC
WILLIAMS 13-20 - KMG - MWD	12,000.00	7,589.69	1,693.31	1,567.90	13.503	ES
WILLIAMS 13-20 - KMG - MWD	12,400.00	7,586.20	1,742.95	1,608.73	12.985	SF
WILLIAMS 18-16 - CPR - Gyro	6,621.92	6,524.13	824.83	777.27	17.345	CC, ES

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

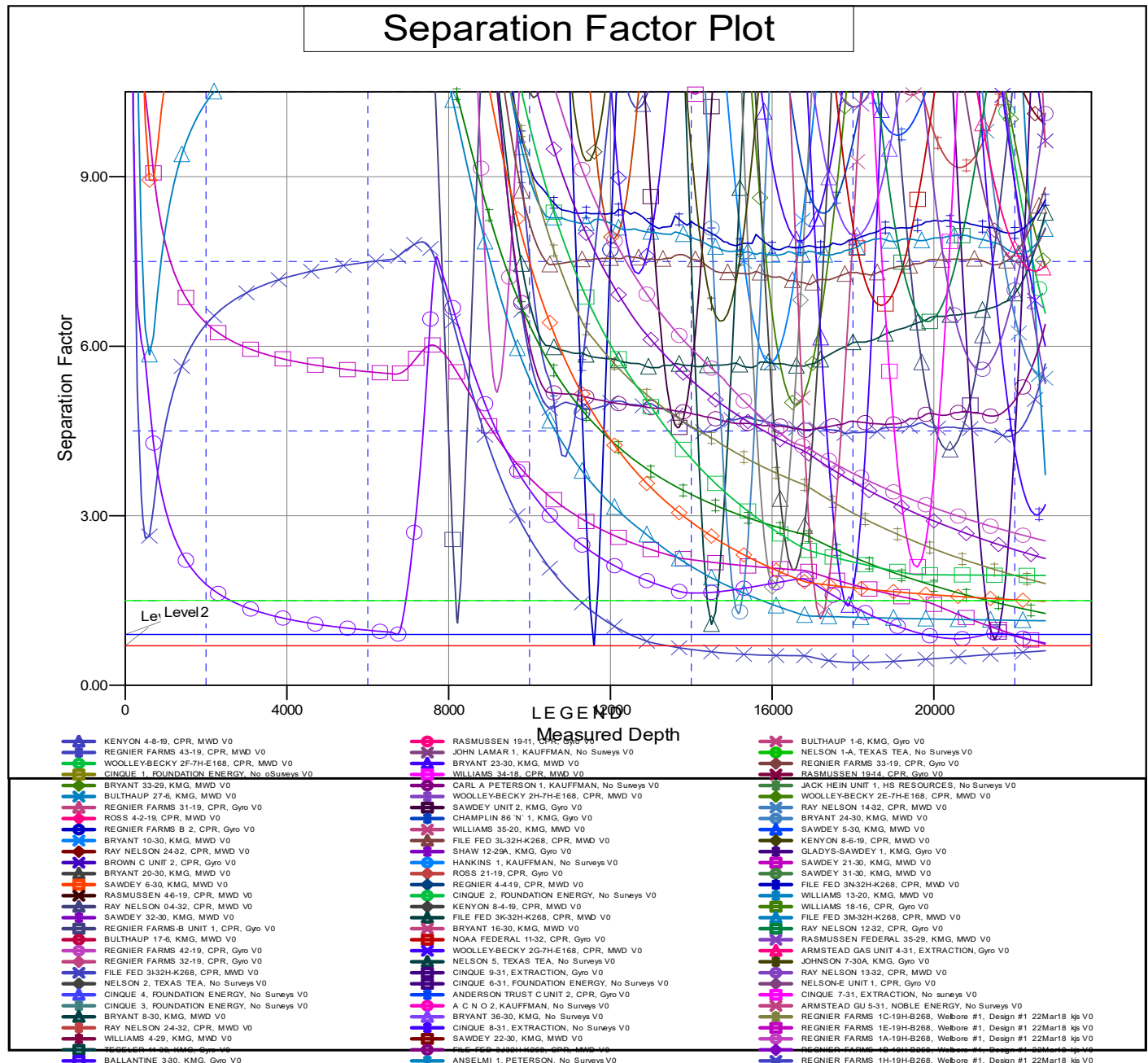
Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well REGNIER FARMS 1G-19H-B268
Project:	Sec 19 T2N-R68W	TVD Reference:	WELL @ 4988.00usft (Original Well Elev)
Reference Site:	Regnier Farms Pad	MD Reference:	WELL @ 4988.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	REGNIER FARMS 1G-19H-B268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Single User Db
Reference Design:	Design #1 22Mar18 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 (Regnier Farms)						
WILLIAMS 18-16 - CPR - Gyro	6,700.00	6,603.72	828.93	780.79	17.222	SF
WILLIAMS 24-18 - CPR - Gyro	0.00	0.00	1,630.61			
WILLIAMS 24-18 - CPR - Gyro	7,050.00	7,007.63	2,219.79	2,169.89	44.481	SF
WILLIAMS 34-18 - CPR - MWD	6,084.46	6,184.23	756.85	706.64	15.075	CC
WILLIAMS 34-18 - CPR - MWD	6,100.00	6,197.69	756.87	706.55	15.040	ES
WILLIAMS 34-18 - CPR - MWD	6,650.00	6,715.99	776.40	722.37	14.370	SF
WILLIAMS 35-20 - KMG - MWD	12,598.18	7,392.89	2,341.85	2,214.08	18.329	CC
WILLIAMS 35-20 - KMG - MWD	12,600.00	7,392.89	2,341.85	2,214.04	18.323	ES
WILLIAMS 35-20 - KMG - MWD	13,100.00	7,393.72	2,395.01	2,258.47	17.541	SF
WILLIAMS 4-29 - KMG - MWD	13,305.77	7,386.67	1,660.88	1,523.31	12.073	CC, ES
WILLIAMS 4-29 - KMG - MWD	13,600.00	7,385.14	1,686.74	1,544.05	11.821	SF
WOOLLEY-BECKY 2E-7H-E168 - CPR - MWD	22,756.35	14,800.00	2,800.24	2,421.37	7.391	CC, ES, SF
WOOLLEY-BECKY 2F-7H-E168 - CPR - MWD	22,756.35	14,555.00	2,420.21	2,052.62	6.584	CC, ES, SF
WOOLLEY-BECKY 2G-7H-E168 - CPR - MWD	22,756.35	15,260.00	2,166.61	1,805.84	6.005	CC, ES, SF
WOOLLEY-BECKY 2H-7H-E168 - CPR - MWD	22,756.35	15,075.00	1,820.84	1,479.71	5.338	CC, ES, SF
Regnier Farms Pad						
REGNIER FARMS 1A-19H-B268 - Wellbore #1 - Design	116.33	117.33	60.00	59.60	151.254	CC
REGNIER FARMS 1A-19H-B268 - Wellbore #1 - Design	200.00	200.98	60.00	59.00	60.213	ES
REGNIER FARMS 1A-19H-B268 - Wellbore #1 - Design	22,756.35	22,665.52	1,404.50	854.95	2.556	SF
REGNIER FARMS 1B-19H-B268 - Wellbore #1 - Design	200.00	201.00	50.00	49.00	50.174	CC, ES
REGNIER FARMS 1B-19H-B268 - Wellbore #1 - Design	22,756.35	22,908.51	1,219.46	675.78	2.243	SF
REGNIER FARMS 1C-19H-B268 - Wellbore #1 - Design	200.00	201.00	40.00	39.00	40.139	CC, ES
REGNIER FARMS 1C-19H-B268 - Wellbore #1 - Design	22,756.35	22,781.80	988.55	439.22	1.800	SF
REGNIER FARMS 1D-19H-B268 - Wellbore #1 - Design	200.00	201.00	30.00	29.00	30.104	CC, ES
REGNIER FARMS 1D-19H-B268 - Wellbore #1 - Design	22,756.35	22,698.78	699.95	149.06	1.271	Level 3, SF
REGNIER FARMS 1E-19H-B268 - Wellbore #1 - Design	200.00	201.00	20.00	19.00	20.070	CC
REGNIER FARMS 1E-19H-B268 - Wellbore #1 - Design	22,756.35	22,817.05	394.09	-147.83	0.727	Level 2, ES, SF
REGNIER FARMS 1F-19H-B268 - Wellbore #1 - Design	200.00	200.00	10.00	9.01	10.071	CC
REGNIER FARMS 1F-19H-B268 - Wellbore #1 - Design	22,756.35	22,984.72	240.46	-80.59	0.749	Level 2, ES, SF
REGNIER FARMS 1H-19H-B268 - Wellbore #1 - Design	443.26	442.72	7.95	5.22	2.915	CC
REGNIER FARMS 1H-19H-B268 - Wellbore #1 - Design	18,100.00	18,243.23	118.29	-175.48	0.403	Level 1, SF
REGNIER FARMS 1H-19H-B268 - Wellbore #1 - Design	20,500.00	20,640.23	219.40	-221.38	0.498	Level 1, ES
REGNIER FARMS 1I-19H-B268 - Wellbore #1 - Design #	388.96	387.90	19.24	16.91	8.250	CC
REGNIER FARMS 1I-19H-B268 - Wellbore #1 - Design #	480.54	478.89	19.52	16.54	6.536	ES
REGNIER FARMS 1I-19H-B268 - Wellbore #1 - Design #	22,755.86	22,843.98	630.08	78.37	1.142	Level 3, SF
REGNIER FARMS 1J-19H-B268 - Wellbore #1 - Design	287.93	287.15	29.87	28.25	18.482	CC
REGNIER FARMS 1J-19H-B268 - Wellbore #1 - Design	400.00	398.09	30.15	27.74	12.525	ES
REGNIER FARMS 1J-19H-B268 - Wellbore #1 - Design	22,755.86	23,097.91	791.04	258.64	1.486	Level 3, SF
REGNIER FARMS 1K-19H-B268 - Wellbore #1 - Design	200.00	200.00	40.00	39.01	40.283	CC
REGNIER FARMS 1K-19H-B268 - Wellbore #1 - Design	400.00	397.28	40.83	38.42	16.983	ES
REGNIER FARMS 1K-19H-B268 - Wellbore #1 - Design	22,700.00	22,972.26	1,064.78	517.09	1.944	SF

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well REGNIER FARMS 1G-19H-B268
Project:	Sec 19 T2N-R68W	TVD Reference:	WELL @ 4988.00usft (Original Well Elev)
Reference Site:	Regnier Farms Pad	MD Reference:	WELL @ 4988.00usft (Original Well Elev)
Site Error:	0.00 usft	North Reference:	True
Reference Well:	REGNIER FARMS 1G-19H-B268	Survey Calculation Method:	Minimum Curvature
Well Error:	0.00 usft	Output errors are at	2.00 sigma
Reference Wellbore	Wellbore #1	Database:	EDM 5000.14 Single User Db
Reference Design:	Design #1 22Mar18 kjs	Offset TVD Reference:	Offset Datum

Reference Depths are relative to WELL @ 4988.00usft (Original Well E
Offset Depths are relative to Offset Datum
Central Meridian is -105.5000000

Coordinates are relative to: REGNIER FARMS 1G-19H-B268
Coordinate System is US State Plane 1983, Colorado Northern Zone
Grid Convergence at Surface is: 0.30°



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