



CRESTONE PEAK
RESOURCES

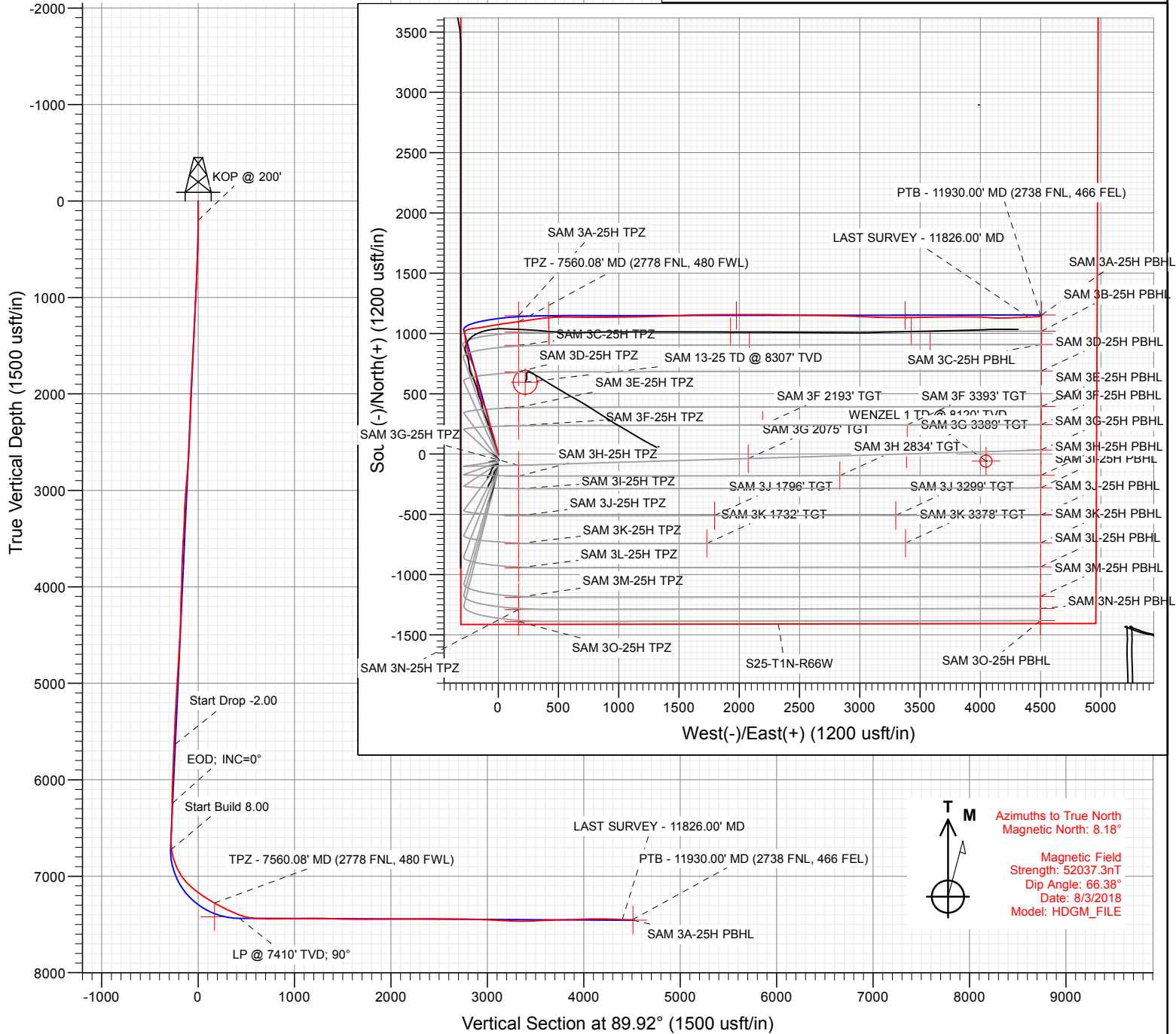
SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	
3	683.07	9.66	344.41	680.78	39.14	-10.92	2.00	344.41	-10.86	
4	6786.35	9.66	344.41	6697.50	1025.72	-286.26	0.00	0.00	-284.74	
5	7940.77	89.78	89.91	7436.03	1147.49	426.31	8.00	105.33	428.01	
6	9490.77	89.78	89.91	7442.00	1149.87	1976.30	0.00	0.00	1978.00	SAM 3A 1978' VS
7	9496.12	89.67	89.91	7442.03	1149.88	1981.65	2.00	179.52	1983.35	
8	10887.07	89.67	89.91	7449.98	1152.00	3372.57	0.00	0.00	3374.27	
9	10890.79	89.75	89.91	7450.00	1152.00	3376.30	2.00	0.00	3378.00	SAM 3A 3378' VS
10	12022.40	89.75	89.91	7455.00	1153.72	4507.89	0.00	0.00	4509.60	SAM 3A-25H PBHL

SAM 3A-25H-M166
379737 185134 407637 185240
23 KB @ 5109.00usf
Ground Level @ 5086.00
North American Datum 1983
Well SAM 3A-25H-M166, True North

Project: DJ BASIN
Site: S25-T1N-R66W (SAM)
Well: SAM 3A-25H-M166
Wellbore: OH
Design: FINAL

Name	Type	User	Target	No Target (Freehand)	Asimuth	Origin Type	TVD	+N/-S	+E/-W	Latitude	Longitude
SAM 3A-25H TPZ					7420.00	1147.12	169.16	40.022044	-104.733248		
SAM 3A-25H VS					7436.00	1147.48	418.30	40.022045	-104.732358		
SAM 3A 1978' VS					7442.00	1149.87	1976.30	40.022051	-104.728795		
SAM 3A 3378' VS					7450.00	1152.00	3376.30	40.022057	-104.721797		
SAM 3A-25H PBHL					7455.00	1153.72	4507.89	40.022061	-104.717796		



Asimuths to True North
Magnetic North: 8.18°

Magnetic Field
Strength: 52037.3nT
Dip Angle: 66.38°
Date: 8/3/2018
Model: HDGM_FILE



WELL DETAILS: SAM 3A-25H-M166

+N/-S	+E/-W	Northing	Ground Level:	5086.00	Latitude	Longitude
0.00	0.00	1250656.75	Easting	3214576.98	40.018895	-104.733852





CRESTONE PEAK
RESOURCES

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	
3	683.07	9.66	344.41	680.78	39.14	-10.92	2.00	344.41	-10.86	
4	6786.35	9.66	344.41	6697.50	1025.72	-286.26	0.00	0.00	-284.74	
5	7940.77	89.78	89.91	7436.03	1147.49	426.31	8.00	105.33	428.01	
6	9490.77	89.78	89.91	7442.00	1149.87	1976.30	0.00	0.00	1978.00	SAM 3A 1978' VS
7	9496.12	89.67	89.91	7442.03	1149.88	1981.65	2.00	179.52	1983.35	
8	10887.07	89.67	89.91	7449.98	1152.00	3372.57	0.00	0.00	3374.27	
9	10890.79	89.75	89.91	7450.00	1152.00	3376.30	2.00	0.00	3378.00	SAM 3A 3378' VS
10	12022.40	89.75	89.91	7455.00	1153.72	4507.89	0.00	0.00	4509.60	SAM 3A-25H PBHL

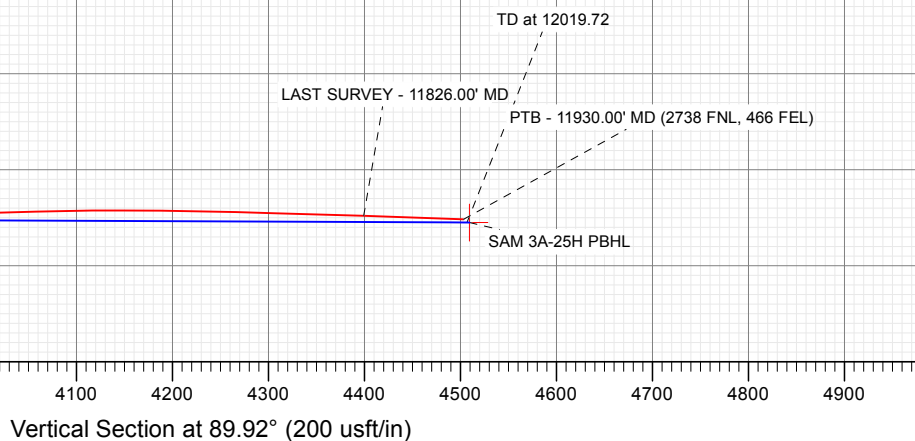
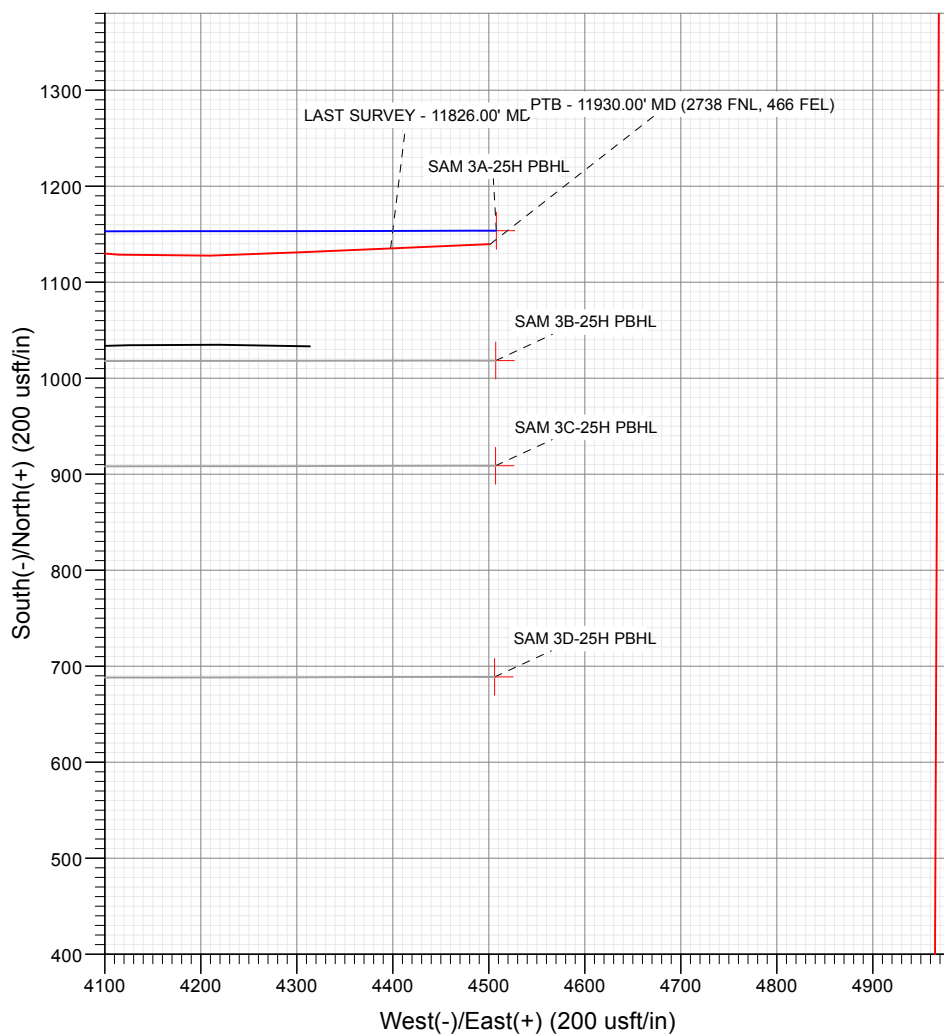
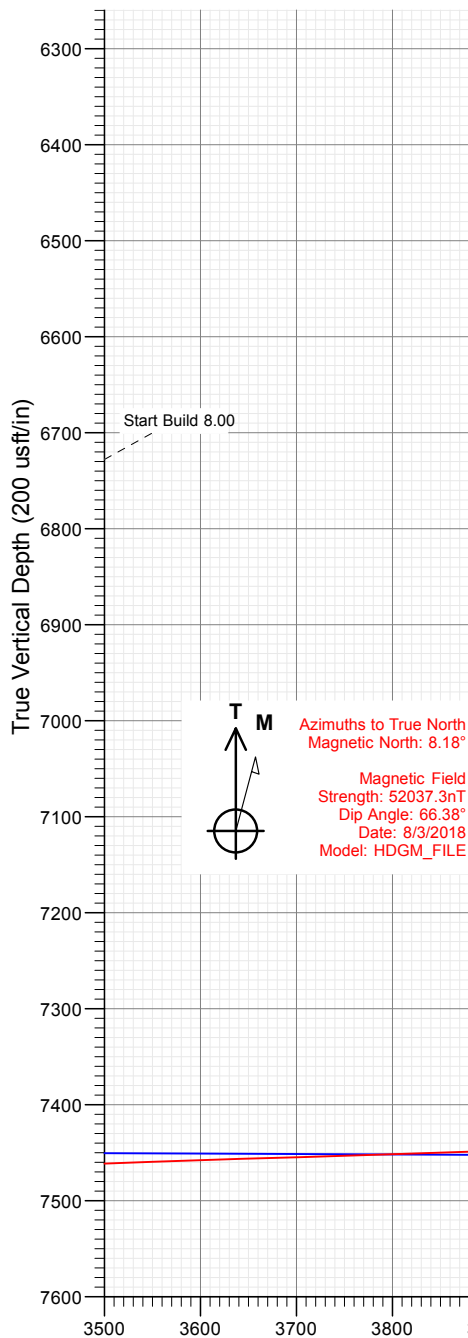
Project: DJ BASIN

Site: S25-T1N-R66W (SAM)

Well: SAM 3A-25H-M166

Wellbore: OH

Design: FINAL



WELL DETAILS: SAM 3A-25H-M166

+N/-S	+E/-W	Northing	Ground Level:	5086.00	Latitude	Longitude
0.00	0.00	1250656.75	Easting	3214576.98	40.018895	-104.733852

CATHEDRAL



Survey Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well SAM 3A-25H-M166
Project:	DJ BASIN	TVD Reference:	23' KB @ 5109.00usft
Site:	S25-T1N-R66W (SAM)	MD Reference:	23' KB @ 5109.00usft
Well:	SAM 3A-25H-M166	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Project	DJ BASIN		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		S25-T1N-R66W (SAM)			
Site Position:		Northing:	1,251,849.37 usft	Latitude:	40.022061
From:	Lat/Long	Easting:	3,219,074.73 usft	Longitude:	-104.717756
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16"	Grid Convergence:	0.51 °

Well	SAM 3A-25H-M166					
Well Position	+N/-S	0.00 usft	Northing:	1,250,656.75 usft	Latitude:	40.018895
	+E/-W	0.00 usft	Easting:	3,214,576.98 usft	Longitude:	-104.733852
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	5,086.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM_FILE	8/3/2018	8.18	66.38	52,037.30000000

Design	FINAL				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	89.92	

Survey Program	Date	8/15/2018			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
108.00	2,372.00	Survey #1 (OH)	VESSI_GYROFLEX	VESSI Gyroflex Gyro	
2,459.00	11,930.00	Survey #2 (OH)	MWD+HDGM	OWSG MWD + HDGM	

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100u)	Formations / Comments
10.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00	
108.00	0.05	43.70	108.00	0.03	0.03	0.03	0.05	0.05	
200.00	1.93	12.57	199.98	1.57	0.39	0.40	2.05	2.04	
291.00	2.53	350.59	290.91	5.05	0.40	0.41	1.14	0.66	
358.00	2.47	352.06	357.85	7.94	-0.04	-0.03	0.13	-0.09	
464.00	3.75	332.27	463.70	13.27	-1.97	-1.95	1.56	1.21	
547.00	5.53	339.65	546.42	19.42	-4.62	-4.60	2.26	2.14	
628.00	8.16	343.26	626.84	28.59	-7.64	-7.60	3.29	3.25	
711.00	8.20	343.39	708.99	39.90	-11.03	-10.97	0.05	0.05	
794.00	10.44	344.90	790.89	52.83	-14.68	-14.60	2.71	2.70	
876.00	10.59	346.73	871.51	67.34	-18.34	-18.24	0.45	0.18	
959.00	10.51	344.98	953.11	82.08	-22.06	-21.93	0.40	-0.10	

Survey Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well SAM 3A-25H-M166
Project:	DJ BASIN	TVD Reference:	23' KB @ 5109.00usft
Site:	S25-T1N-R66W (SAM)	MD Reference:	23' KB @ 5109.00usft
Well:	SAM 3A-25H-M166	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100u)	Formations / Comments
1,044.00	11.02	345.69	1,036.62	97.44	-26.07	-25.93	0.62	0.60	
1,127.00	11.51	345.03	1,118.02	113.12	-30.17	-30.00	0.61	0.59	
1,211.00	10.52	348.55	1,200.47	128.73	-33.86	-33.67	1.42	-1.18	
1,294.00	10.80	344.77	1,282.04	143.66	-37.41	-37.19	0.91	0.34	
1,377.00	8.87	342.74	1,363.81	157.28	-41.35	-41.11	2.36	-2.33	
1,461.00	8.12	336.32	1,446.89	168.90	-45.65	-45.40	1.44	-0.89	
1,544.00	8.08	334.41	1,529.07	179.53	-50.53	-50.26	0.33	-0.05	
1,627.00	9.75	339.31	1,611.06	191.36	-55.53	-55.25	2.21	2.01	
1,710.00	9.86	339.31	1,692.85	204.59	-60.52	-60.22	0.13	0.13	
1,792.00	10.45	346.12	1,773.57	218.37	-64.79	-64.46	1.63	0.72	
1,875.00	10.56	347.15	1,855.18	233.10	-68.28	-67.94	0.26	0.13	
1,961.00	11.09	345.51	1,939.65	248.79	-72.11	-71.74	0.71	0.62	
2,044.00	10.19	348.27	2,021.22	263.70	-75.60	-75.21	1.25	-1.08	
2,130.00	8.61	350.81	2,106.06	277.51	-78.17	-77.76	1.90	-1.84	
2,219.00	8.67	350.19	2,194.05	290.70	-80.38	-79.95	0.12	0.07	
2,309.00	8.92	348.85	2,282.99	304.23	-82.88	-82.43	0.36	0.28	
2,372.00	9.14	347.54	2,345.21	313.90	-84.91	-84.44	0.48	0.35	
2,459.00	9.36	347.01	2,431.08	327.54	-87.99	-87.50	0.27	0.25	
2,553.00	10.06	341.82	2,523.74	342.79	-92.27	-91.76	1.19	0.74	
2,647.00	9.10	340.50	2,616.42	357.60	-97.31	-96.78	1.05	-1.02	
2,742.00	12.26	338.57	2,709.77	374.08	-103.51	-102.95	3.35	3.33	
2,836.00	11.29	335.76	2,801.79	391.76	-110.93	-110.35	1.20	-1.03	
2,931.00	10.68	334.18	2,895.05	408.16	-118.58	-117.98	0.72	-0.64	
3,025.00	9.84	332.33	2,987.54	423.12	-126.11	-125.48	0.96	-0.89	
3,120.00	8.88	330.40	3,081.28	436.68	-133.50	-132.85	1.06	-1.01	
3,214.00	9.67	347.98	3,174.07	450.71	-138.73	-138.06	3.12	0.84	
3,309.00	8.83	346.04	3,267.83	465.59	-142.15	-141.46	0.94	-0.88	
3,404.00	8.44	345.87	3,361.75	479.43	-145.61	-144.90	0.41	-0.41	
3,499.00	11.51	340.33	3,455.31	495.12	-150.50	-149.77	3.38	3.23	
3,594.00	10.90	338.04	3,548.50	512.38	-157.05	-156.29	0.79	-0.64	
3,688.00	10.24	352.46	3,640.92	528.90	-161.47	-160.69	2.89	-0.70	
3,782.00	8.97	345.25	3,733.60	544.28	-164.43	-163.63	1.86	-1.35	
3,888.00	7.95	344.11	3,838.45	559.32	-168.55	-167.72	0.98	-0.96	
3,982.00	6.81	356.24	3,931.67	571.13	-170.69	-169.84	2.05	-1.21	
4,077.00	9.89	339.01	4,025.67	584.37	-173.98	-173.12	4.14	3.24	
4,171.00	11.91	354.04	4,117.99	601.56	-177.88	-176.99	3.69	2.15	
4,266.00	10.72	354.66	4,211.14	620.11	-179.72	-178.80	1.26	-1.25	
4,361.00	9.62	353.16	4,304.64	636.79	-181.49	-180.55	1.19	-1.16	
4,456.00	8.39	348.24	4,398.47	651.46	-183.85	-182.88	1.53	-1.29	
4,550.00	12.88	345.95	4,490.84	668.34	-187.79	-186.80	4.80	4.78	
4,644.00	12.66	344.55	4,582.51	688.44	-193.08	-192.06	0.40	-0.23	
4,739.00	11.07	342.44	4,675.48	707.17	-198.61	-197.56	1.73	-1.67	
4,833.00	9.80	340.15	4,767.92	723.30	-204.05	-202.97	1.42	-1.35	
4,927.00	9.58	338.31	4,860.58	738.09	-209.65	-208.56	0.40	-0.23	
5,022.00	9.05	338.57	4,954.33	752.39	-215.30	-214.19	0.56	-0.56	
5,116.00	8.39	335.67	5,047.24	765.52	-220.83	-219.70	0.84	-0.70	
5,211.00	7.78	336.73	5,141.30	777.74	-226.23	-225.07	0.66	-0.64	
5,306.00	9.62	340.50	5,235.20	791.13	-231.42	-230.24	2.03	1.94	
5,400.00	8.61	337.78	5,328.01	805.05	-236.70	-235.51	1.17	-1.07	
5,494.00	6.06	345.08	5,421.24	816.36	-240.64	-239.43	2.88	-2.71	
5,589.00	8.53	340.59	5,515.46	827.85	-244.27	-243.04	2.67	2.60	
5,684.00	10.85	344.90	5,609.10	843.13	-248.94	-247.69	2.56	2.44	
5,779.00	9.54	340.77	5,702.60	859.20	-253.87	-252.59	1.58	-1.38	

Survey Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well SAM 3A-25H-M166
Project:	DJ BASIN	TVD Reference:	23' KB @ 5109.00usft
Site:	S25-T1N-R66W (SAM)	MD Reference:	23' KB @ 5109.00usft
Well:	SAM 3A-25H-M166	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100u)	Formations / Comments
5,873.00	8.79	353.34	5,795.41	873.69	-257.27	-255.97	2.27	-0.80	
5,968.00	8.57	341.38	5,889.33	887.61	-260.37	-259.05	1.91	-0.23	
6,063.00	10.94	345.51	5,982.95	903.05	-264.88	-263.54	2.60	2.49	
6,157.00	10.68	351.67	6,075.29	920.30	-268.38	-267.01	1.26	-0.28	
6,252.00	9.27	348.33	6,168.85	936.51	-271.20	-269.81	1.60	-1.48	
6,346.00	9.71	7.66	6,261.58	951.78	-271.68	-270.26	3.41	0.47	
6,440.00	10.20	352.37	6,354.19	967.89	-271.72	-270.29	2.85	0.52	
6,535.00	8.66	345.60	6,447.90	983.16	-274.62	-273.16	2.00	-1.62	
6,629.00	7.47	345.87	6,540.97	995.94	-277.87	-276.39	1.27	-1.27	
6,724.00	6.24	344.02	6,635.29	1,006.89	-280.80	-279.31	1.32	-1.29	
6,818.00	10.85	38.86	6,728.36	1,018.71	-276.65	-275.14	9.42	4.90	
6,912.00	18.85	68.66	6,819.27	1,031.17	-256.89	-255.36	11.51	8.51	
7,008.00	24.43	81.93	6,908.52	1,039.61	-222.75	-221.20	7.70	5.81	
7,102.00	32.92	84.66	6,990.92	1,044.72	-177.98	-176.44	9.14	9.03	
7,197.00	42.41	79.47	7,066.05	1,053.00	-120.64	-119.08	10.52	9.99	
7,292.00	52.87	78.59	7,129.97	1,066.38	-51.83	-50.25	11.03	11.01	
7,386.00	54.71	82.63	7,185.52	1,078.72	22.97	24.57	3.98	1.96	
7,482.00	58.49	82.81	7,238.35	1,088.87	102.46	104.07	3.94	3.94	
7,560.08	60.43	82.66	7,278.03	1,097.38	169.16	170.79	2.48	2.48	TPZ - 7560.08' MD (2778 FNL, 480 FWL)
7,576.00	60.82	82.63	7,285.84	1,099.15	182.92	184.55	2.48	2.48	
7,671.00	63.77	80.26	7,330.01	1,111.69	266.07	267.72	3.81	3.11	
7,765.00	67.10	83.25	7,369.09	1,123.91	350.66	352.33	4.57	3.54	
7,859.00	68.91	85.71	7,404.29	1,132.29	437.40	439.08	3.10	1.93	
7,948.00	79.85	89.23	7,428.23	1,135.99	522.89	524.57	12.87	12.29	
8,042.00	86.66	91.07	7,439.26	1,135.74	616.18	617.86	7.50	7.24	
8,137.00	90.26	90.63	7,441.82	1,134.33	711.12	712.80	3.82	3.79	
8,231.00	90.75	90.19	7,440.99	1,133.66	805.11	806.79	0.70	0.52	
8,325.00	90.31	89.40	7,440.12	1,133.99	899.11	900.79	0.96	-0.47	
8,420.00	90.53	89.14	7,439.42	1,135.20	994.10	995.78	0.36	0.23	
8,514.00	90.92	88.70	7,438.23	1,136.97	1,088.07	1,089.76	0.63	0.41	
8,608.00	91.19	88.61	7,436.50	1,139.18	1,182.03	1,183.72	0.30	0.29	
8,703.00	87.98	89.23	7,437.19	1,140.97	1,277.00	1,278.69	3.44	-3.38	
8,797.00	88.37	88.61	7,440.18	1,142.74	1,370.93	1,372.63	0.78	0.41	
8,893.00	88.33	87.56	7,442.95	1,145.95	1,466.84	1,468.54	1.09	-0.04	
8,987.00	88.81	87.03	7,445.29	1,150.38	1,560.70	1,562.41	0.76	0.51	
9,082.00	90.04	89.40	7,446.25	1,153.34	1,655.64	1,657.35	2.81	1.29	
9,177.00	90.18	89.14	7,446.06	1,154.55	1,750.64	1,752.35	0.31	0.15	
9,271.00	90.44	89.75	7,445.56	1,155.46	1,844.63	1,846.34	0.71	0.28	
9,367.00	90.62	89.67	7,444.67	1,155.95	1,940.63	1,942.34	0.21	0.19	
9,461.00	90.79	90.02	7,443.51	1,156.20	2,034.62	2,036.33	0.41	0.18	
9,556.00	90.53	89.67	7,442.42	1,156.46	2,129.61	2,131.32	0.46	-0.27	
9,650.00	90.18	90.28	7,441.83	1,156.50	2,223.61	2,225.32	0.75	-0.37	
9,744.00	90.53	91.86	7,441.25	1,154.75	2,317.59	2,319.30	1.72	0.37	
9,838.00	90.04	90.72	7,440.78	1,152.63	2,411.56	2,413.27	1.32	-0.52	
9,933.00	89.65	90.46	7,441.04	1,151.65	2,506.55	2,508.26	0.49	-0.41	
10,028.00	89.17	90.54	7,442.02	1,150.82	2,601.55	2,603.25	0.51	-0.51	
10,122.00	88.99	91.25	7,443.53	1,149.35	2,695.52	2,697.22	0.78	-0.19	
10,217.00	89.08	91.25	7,445.13	1,147.28	2,790.49	2,792.18	0.09	0.09	
10,312.00	88.37	91.95	7,447.24	1,144.63	2,885.42	2,887.12	1.05	-0.75	
10,407.00	87.89	92.21	7,450.34	1,141.18	2,980.31	2,982.00	0.57	-0.51	
10,501.00	86.84	91.86	7,454.66	1,137.85	3,074.15	3,075.83	1.18	-1.12	
10,596.00	86.00	92.04	7,460.60	1,134.62	3,168.91	3,170.59	0.90	-0.88	
10,691.00	87.85	91.34	7,465.69	1,131.83	3,263.73	3,265.40	2.08	1.95	

Survey Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well SAM 3A-25H-M166
Project:	DJ BASIN	TVD Reference:	23' KB @ 5109.00usft
Site:	S25-T1N-R66W (SAM)	MD Reference:	23' KB @ 5109.00usft
Well:	SAM 3A-25H-M166	North Reference:	True
Wellbore:	OH	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usf)	Build Rate (°/100u)	Formations / Comments
10,786.00	91.67	88.70	7,466.09	1,131.79	3,358.70	3,360.37	4.89	4.02	
10,880.00	92.15	89.14	7,462.96	1,133.56	3,452.63	3,454.31	0.69	0.51	
10,975.00	92.11	89.23	7,459.43	1,134.91	3,547.55	3,549.23	0.10	-0.04	
11,069.00	91.63	89.40	7,456.36	1,136.04	3,641.50	3,643.18	0.54	-0.51	
11,164.00	91.85	89.23	7,453.47	1,137.17	3,736.45	3,738.13	0.29	0.23	
11,259.00	91.80	89.40	7,450.45	1,138.31	3,831.39	3,833.08	0.19	-0.05	
11,353.00	91.76	89.93	7,447.53	1,138.86	3,925.34	3,927.03	0.57	-0.04	
11,448.00	91.98	94.50	7,444.43	1,135.19	4,020.20	4,021.88	4.81	0.23	
11,543.00	90.31	93.36	7,442.53	1,128.68	4,114.95	4,116.62	2.13	-1.76	
11,638.00	88.90	87.82	7,443.18	1,127.70	4,209.90	4,211.57	6.02	-1.48	
11,732.00	88.59	87.73	7,445.24	1,131.35	4,303.81	4,305.48	0.34	-0.33	
11,826.00	88.02	87.56	7,448.02	1,135.21	4,397.69	4,399.37	0.63	-0.61	LAST SURVEY - 11826.00' MD
11,930.00	88.02	87.56	7,451.62	1,139.64	4,501.53	4,503.22	0.00	0.00	PTB - 11930.00' MD (2738 FNL, 466 FEL)

Targets										
Target Name										
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting			
- Shape	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)	Latitude	Longitude	
SAM 3A-25H TPZ	0.00	360.00	7,420.00	1,147.12	169.16	1,251,805.29	3,214,736.22	40.022044	-104.733248	
- actual wellpath misses target center by 131.06usft at 7632.67usft MD (7312.71 TVD, 1106.18 N, 232.32 E)										
- Point										
SAM 3A-25H PBHL	0.00	0.00	7,455.00	1,153.72	4,507.89	1,251,849.37	3,219,074.73	40.022061	-104.717756	
- actual wellpath misses target center by 15.82usft at 11930.00usft MD (7451.62 TVD, 1139.64 N, 4501.53 E)										
- Point										
SAM 3A 1978' VS	0.00	0.00	7,442.00	1,149.87	1,976.30	1,251,823.65	3,216,543.27	40.022051	-104.726795	
- actual wellpath misses target center by 6.64usft at 9402.69usft MD (7444.26 TVD, 1156.11 N, 1976.31 E)										
- Point										
SAM 3A 3378' VS	0.00	0.00	7,450.00	1,152.00	3,376.30	1,251,837.88	3,217,943.19	40.022057	-104.721797	
- actual wellpath misses target center by 25.19usft at 10804.50usft MD (7465.54 TVD, 1132.20 N, 3377.19 E)										
- Point										
SAM 3A 420' VS	0.00	0.00	7,436.00	1,147.48	418.30	1,251,807.79	3,214,985.35	40.022045	-104.732358	
- actual wellpath misses target center by 39.67usft at 7854.60usft MD (7402.71 TVD, 1131.97 N, 433.31 E)										
- Point										

Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
7,560.08	7,278.03	1,097.38	169.16	TPZ - 7560.08' MD (2778 FNL, 480 FWL)	
11,826.00	7,448.02	1,135.21	4,397.69	LAST SURVEY - 11826.00' MD	
11,930.00	7,451.62	1,139.64	4,501.53	PTB - 11930.00' MD (2738 FNL, 466 FEL)	

Checked By: _____ Approved By: _____ Date: _____