

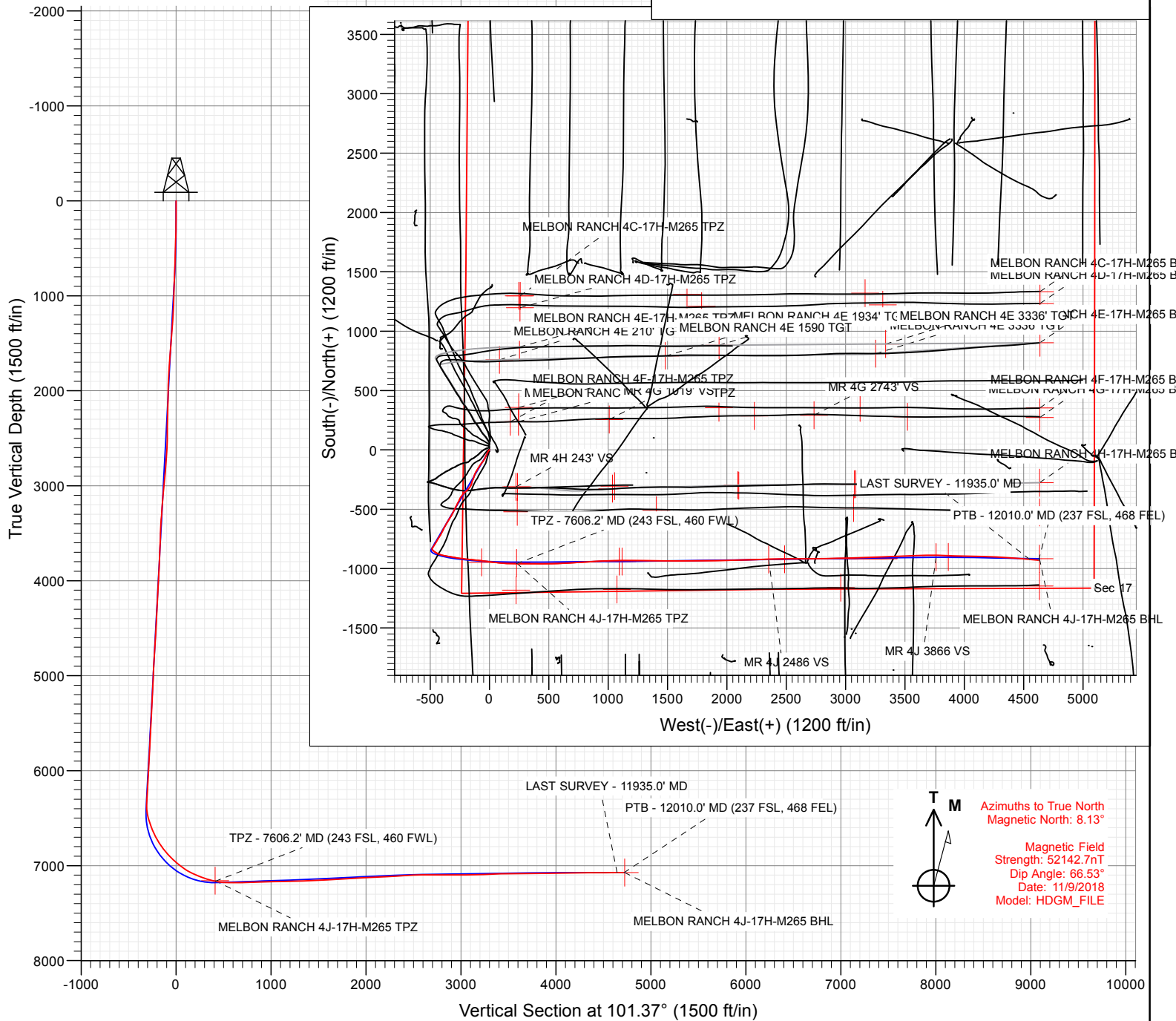


Project: Sec 17 T2N-R65W
 Site: Melbon Ranch Pad
 Well: MELBON RANCH 4J-17H-M265
 Wellbore: NEW
 Design: FINAL

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	250.0	0.00	0.00	250.0	0.0	0.0	0.00	0.00	0.0	
3	715.4	9.31	210.36	713.3	-32.5	-19.1	2.00	210.36	-12.4	
4	6489.6	9.31	210.36	6411.5	-838.3	-491.1	0.00	0.00	-319.0	
5	7697.8	91.94	89.64	7178.4	-945.5	247.3	8.00	-120.12	426.2	
6	8567.8	91.94	89.64	7149.0	-940.1	1116.8	0.00	0.00	1278.0	MR 4J 1278 VS
7	8608.5	92.63	89.21	7147.4	-939.7	1157.4	2.00	-31.76	1317.9	
8	9713.0	92.63	89.21	7096.7	-924.5	2260.7	0.00	0.00	2397.2	
9	9803.8	90.81	89.22	7094.0	-923.2	2351.5	2.00	179.80	2486.0	MR 4J 2486 VS
10	11214.7	90.81	89.22	7074.0	-903.9	3762.1	0.00	0.00	3866.0	MR 4J 3866 VS
11	11308.8	90.09	90.96	7073.3	-904.1	3856.2	2.00	112.48	3958.3	
12	12086.3	90.09	90.96	7072.0	-917.0	4633.5	0.00	0.00	4723.4	MELBON RANCH 4J-17H-M265 BHL

Name									
Type TD									
Target No Target (Freehand)									
Azimuth 101.37									
Origin Type Slot									
N/S 0.0									
E/W 0.0									
From TVD 0.0									
+N/-S									
+E/-W									
Latitude									
Longitude									
TVD									
MELBON RANCH 4J-17H-M265 BHL									
MELBON RANCH 4J-17H-M265 TPZ									
7072.0									
7157.0									
-917.0									
-952.2									
4633.5									
227.5									
40.132141									
-104.696637									



WELL DETAILS: MELBON RANCH 4J-17H-M265

4956.0			
+N/-S	+E/-W	Northing	Easting
0.0	0.0	1292920.34	3224623.87
		Latitude	Longitude
		40.134660	-104.696637

CATHEDRAL





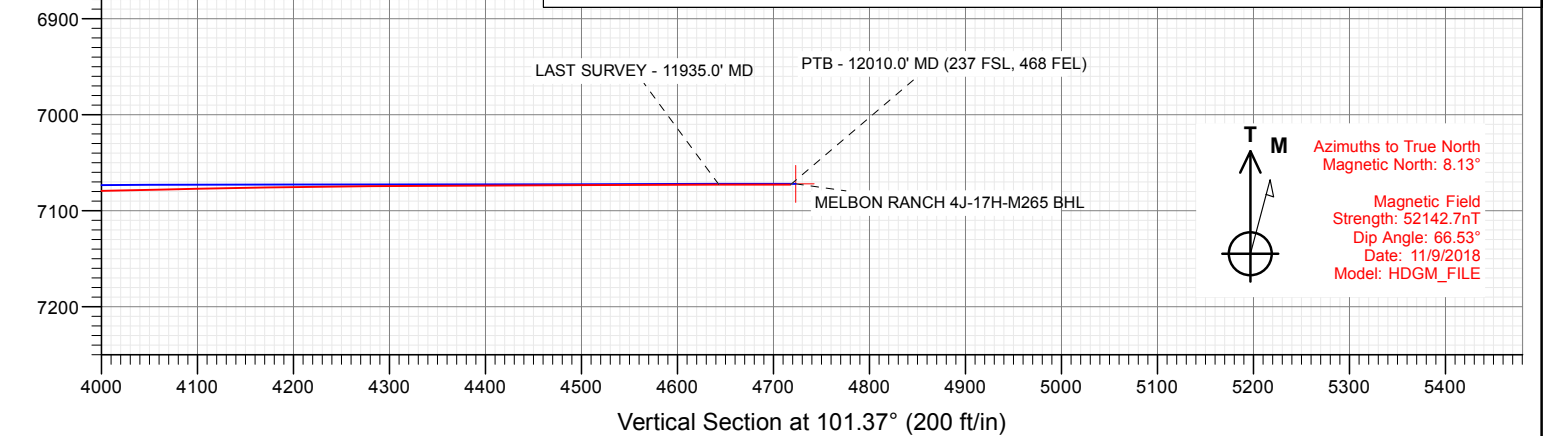
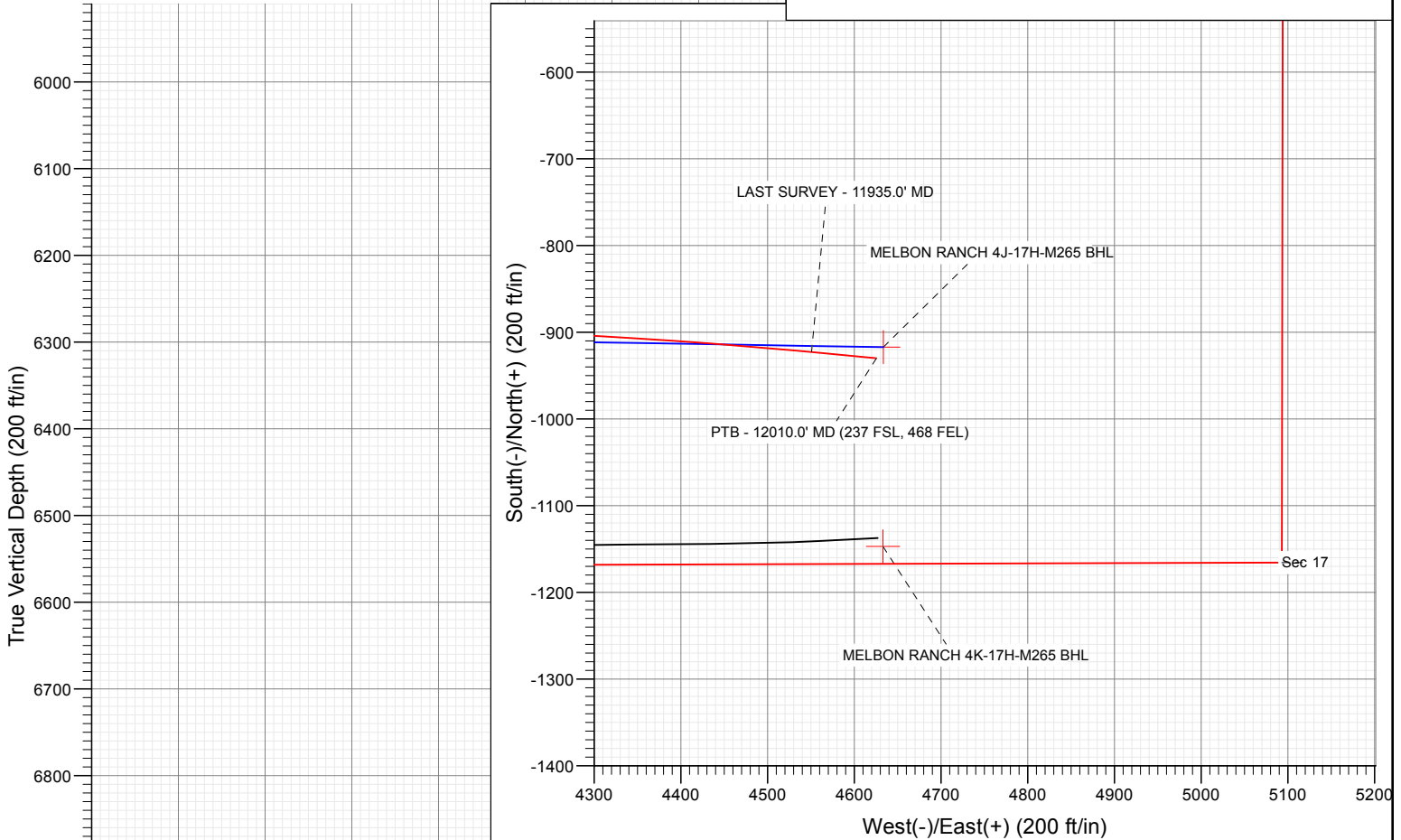
Project: Sec 17 T2N-R65W
 Site: Melbon Ranch Pad
 Well: MELBON RANCH 4J-17H-M265
 Wellbore: NEW SURVEYS
 Design: FINAL

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VFace	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	250.0	0.00	0.00	250.0	0.0	0.0	0.00	0.00	0.0	
3	715.4	9.31	210.36	713.3	-32.5	-19.1	2.00	210.36	-12.4	
4	6489.6	9.31	210.36	6411.5	-838.3	-491.1	0.00	0.00	-319.0	
5	7697.8	91.94	89.64	7178.4	-945.5	247.3	8.00	-120.12	426.2	
6	8567.8	91.94	89.64	7149.0	-940.1	1116.8	0.00	0.00	1278.0	MR 4J 1278 VS
7	8608.5	92.63	89.21	7147.4	-939.7	1157.4	2.00	-31.76	1317.9	
8	9713.0	92.63	89.21	7096.7	-924.5	2260.7	0.00	0.00	2397.2	
9	9803.8	90.81	89.22	7094.0	-923.2	2351.5	2.00	179.80	2486.0	MR 4J 2486 VS
10	11214.7	90.81	89.22	7074.0	-903.9	3762.1	0.00	0.00	3866.0	MR 4J 3866 VS
11	11308.8	90.09	90.96	7073.3	-904.1	3856.2	2.00	112.48	3958.3	
12	12086.3	90.09	90.96	7072.0	-917.0	4633.5	0.00	0.00	4723.4	MELBON RANCH 4J-17H-M265 BHL

FINAL
 MELBON RANCH 4J-17H-M265
 WELL @ 4979.06 (Original Well Elev)
 Ground Level @ 4956.0
 North American Datum 1983
 Well MELBON RANCH 4J-17H-M265, True North

Name	Type	TD	Target	No Target (Freehand)	TD	Origin	Type	Slot	N/S	E/W	From	Latitude	Longitude
MELBON RANCH 4J-17H-M265 BHL		7072.0			7072.0				+N/-S	+E/-W		40.132141	-104.680066
MELBON RANCH 4J-17H-M265 TPZ		7157.0			7157.0				-917.0	4633.5		40.132046	-104.695924
									-952.2	227.5			



Azimuths to True North
 Magnetic North: 8.13°
 Magnetic Field
 Strength: 52142.7nT
 Dip Angle: 66.53°
 Date: 11/9/2018
 Model: HDGM_FILE

WELL DETAILS: MELBON RANCH 4J-17H-M265

+N/-S	+E/-W	Northing	Easting	4956.0	Latitude	Longitude
0.0	0.0	1292920.34	3224623.87		40.134660	-104.696637

CATHEDRAL



Survey Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well MELBON RANCH 4J-17H-M265
Project:	Sec 17 T2N-R65W	TVD Reference:	WELL @ 4979.0ft (Original Well Elev)
Site:	Melbon Ranch Pad	MD Reference:	WELL @ 4979.0ft (Original Well Elev)
Well:	MELBON RANCH 4J-17H-M265	North Reference:	True
Wellbore:	NEW	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Project	Sec 17 T2N-R65W, Weld County, CO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		Melbon Ranch Pad			
Site Position:		Northing:	1,292,990.36 ft	Latitude:	40.134852
From:	Map	Easting:	3,224,623.87 ft	Longitude:	-104.696635
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.52 °

Well	MELBON RANCH 4J-17H-M265					
Well Position	+N/-S	0.0 ft	Northing:	1,292,920.34 ft	Latitude:	40.134660
	+E/-W	0.0 ft	Easting:	3,224,623.87 ft	Longitude:	-104.696637
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,956.0 ft

Wellbore	NEW				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM_FILE	11/9/2018	8.13	66.53	52,142.70000000

Design	FINAL				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(ft)	(ft)	(ft)	(°)	
	0.0	0.0	0.0	101.37	

Survey Program	Date	11/13/2018			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
181.0	2,335.0	Survey #1 (NEW)	GYRO-MWD	OWSG Gyro MWD	
2,451.0	10,816.0	Survey #3 (NEW)	MWD+HDGM	OWSG MWD + HDGM	
10,875.0	12,010.0	Survey #2 (NEW)	MWD+HDGM	OWSG MWD + HDGM	

Survey									
Measured			Vertical			Vertical	Dogleg	Build	Formations / Comments
Depth (ft)	Inclination (°)	Azimuth (°)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Section (ft)	Rate (°/100ft)	Rate (°/100ft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
181.0	0.53	241.17	181.0	-0.4	-0.7	-0.6	0.29	0.29	
275.0	1.41	224.56	275.0	-1.4	-1.9	-1.6	0.97	0.94	
370.0	2.82	228.43	369.9	-3.8	-4.5	-3.7	1.49	1.48	
465.0	3.96	213.84	464.8	-8.1	-8.1	-6.3	1.50	1.20	
559.0	5.72	206.10	558.4	-15.0	-11.9	-8.7	1.99	1.87	
633.0	7.47	208.65	631.9	-22.5	-15.9	-11.1	2.40	2.36	
728.0	7.91	206.22	726.1	-33.8	-21.7	-14.6	0.58	0.46	
822.0	9.40	203.82	819.0	-46.6	-27.7	-17.9	1.63	1.59	
917.0	7.68	207.52	912.9	-59.4	-33.7	-21.4	1.90	-1.81	
1,011.0	6.64	202.96	1,006.2	-69.9	-38.8	-24.2	1.26	-1.11	

Survey Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well MELBON RANCH 4J-17H-M265
Project:	Sec 17 T2N-R65W	TVD Reference:	WELL @ 4979.0ft (Original Well Elev)
Site:	Melbon Ranch Pad	MD Reference:	WELL @ 4979.0ft (Original Well Elev)
Well:	MELBON RANCH 4J-17H-M265	North Reference:	True
Wellbore:	NEW	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Formations / Comments
1,105.0	6.82	208.42	1,099.6	-79.9	-43.5	-26.9	0.71	0.19	
1,200.0	7.79	215.34	1,193.8	-90.1	-49.9	-31.2	1.38	1.02	
1,294.0	9.55	216.83	1,286.7	-101.5	-58.3	-37.2	1.89	1.87	
1,389.0	10.92	218.56	1,380.2	-114.9	-68.6	-44.7	1.48	1.44	
1,483.0	10.55	213.65	1,472.6	-129.0	-79.0	-52.0	1.05	-0.39	
1,578.0	12.05	211.65	1,565.7	-144.7	-89.0	-58.7	1.63	1.58	
1,673.0	13.05	210.22	1,658.4	-162.4	-99.6	-65.6	1.10	1.05	
1,767.0	11.54	212.73	1,750.3	-179.5	-110.0	-72.5	1.70	-1.61	
1,861.0	10.87	207.36	1,842.5	-195.2	-119.2	-78.4	1.32	-0.71	
1,956.0	10.15	200.93	1,935.9	-211.0	-126.3	-82.2	1.45	-0.76	
2,051.0	9.82	195.90	2,029.5	-226.6	-131.5	-84.2	0.98	-0.35	
2,145.0	9.50	199.71	2,122.1	-241.6	-136.3	-86.0	0.76	-0.34	
2,240.0	9.01	204.30	2,215.9	-255.8	-142.0	-88.8	0.93	-0.52	
2,335.0	7.89	199.19	2,309.9	-268.7	-147.2	-91.4	1.42	-1.18	
2,451.0	6.42	191.56	2,425.0	-282.6	-151.1	-92.5	1.51	-1.27	
2,545.0	8.09	201.58	2,518.2	-293.9	-154.6	-93.7	2.22	1.78	
2,639.0	7.73	210.63	2,611.3	-305.5	-160.3	-96.9	1.38	-0.38	
2,734.0	8.04	219.16	2,705.4	-316.1	-167.7	-102.1	1.27	0.33	
2,828.0	8.97	223.11	2,798.4	-326.6	-176.9	-109.0	1.17	0.99	
2,922.0	10.20	224.69	2,891.1	-337.9	-187.7	-117.5	1.34	1.31	
3,017.0	9.84	225.75	2,984.6	-349.5	-199.5	-126.7	0.43	-0.38	
3,112.0	8.83	225.48	3,078.4	-360.3	-210.5	-135.3	1.06	-1.06	
3,206.0	10.11	218.80	3,171.1	-371.8	-220.8	-143.2	1.79	1.36	
3,301.0	8.97	218.10	3,264.8	-384.1	-230.6	-150.4	1.21	-1.20	
3,395.0	10.20	216.34	3,357.5	-396.6	-240.0	-157.2	1.34	1.31	
3,489.0	9.62	205.80	3,450.1	-410.3	-248.4	-162.7	2.02	-0.62	
3,584.0	7.38	203.42	3,544.0	-423.1	-254.3	-165.9	2.39	-2.36	
3,679.0	8.13	206.76	3,638.1	-434.7	-259.7	-169.0	0.92	0.79	
3,797.0	8.92	208.70	3,754.8	-450.2	-267.9	-173.9	0.71	0.67	
3,892.0	10.37	207.64	3,848.5	-464.2	-275.4	-178.5	1.54	1.53	
3,986.0	11.34	206.85	3,940.8	-479.9	-283.5	-183.3	1.04	1.03	
4,081.0	9.67	206.32	4,034.2	-495.4	-291.2	-187.9	1.76	-1.76	
4,175.0	11.12	206.24	4,126.7	-510.6	-298.7	-192.2	1.54	1.54	
4,269.0	10.77	207.29	4,219.0	-526.6	-306.8	-197.0	0.43	-0.37	
4,364.0	9.05	206.06	4,312.5	-541.2	-314.1	-201.3	1.82	-1.81	
4,458.0	10.11	210.89	4,405.2	-554.9	-321.6	-205.9	1.41	1.13	
4,553.0	8.70	209.75	4,499.0	-568.3	-329.5	-211.0	1.50	-1.48	
4,647.0	11.25	214.41	4,591.5	-582.0	-338.2	-216.8	2.84	2.71	
4,741.0	10.24	212.21	4,683.9	-596.7	-347.8	-223.4	1.16	-1.07	
4,835.0	9.14	211.42	4,776.5	-610.1	-356.2	-228.9	1.18	-1.17	
4,930.0	8.44	211.42	4,870.4	-622.5	-363.7	-233.9	0.74	-0.74	
5,025.0	8.09	209.58	4,964.4	-634.3	-370.7	-238.4	0.46	-0.37	
5,119.0	9.54	211.07	5,057.3	-646.7	-377.9	-243.1	1.56	1.54	
5,214.0	11.47	203.07	5,150.7	-662.1	-385.7	-247.7	2.54	2.03	
5,308.0	10.55	203.07	5,243.0	-678.6	-392.7	-251.3	0.98	-0.98	
5,402.0	10.55	210.98	5,335.4	-693.9	-400.5	-255.9	1.54	0.00	
5,496.0	8.48	203.34	5,428.1	-707.7	-407.7	-260.3	2.58	-2.20	
5,591.0	9.01	215.38	5,522.0	-720.2	-414.8	-264.7	2.00	0.56	
5,685.0	7.56	218.01	5,615.0	-731.0	-422.9	-270.5	1.59	-1.54	
5,780.0	8.66	209.31	5,709.1	-742.2	-430.2	-275.5	1.73	1.16	
5,874.0	8.79	205.80	5,802.0	-754.8	-436.8	-279.5	0.58	0.14	
5,968.0	10.24	211.77	5,894.7	-768.4	-444.3	-284.2	1.86	1.54	
6,063.0	8.22	211.42	5,988.5	-781.4	-452.3	-289.5	2.13	-2.13	

Survey Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well MELBON RANCH 4J-17H-M265
Project:	Sec 17 T2N-R65W	TVD Reference:	WELL @ 4979.0ft (Original Well Elev)
Site:	Melbon Ranch Pad	MD Reference:	WELL @ 4979.0ft (Original Well Elev)
Well:	MELBON RANCH 4J-17H-M265	North Reference:	True
Wellbore:	NEW	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Formations / Comments
6,158.0	8.61	212.65	6,082.5	-793.2	-459.7	-294.4	0.45	0.41	
6,252.0	9.54	211.42	6,175.3	-805.7	-467.6	-299.6	1.01	0.99	
6,347.0	9.45	214.59	6,269.0	-818.9	-476.1	-305.4	0.56	-0.09	
6,441.0	7.30	207.99	6,362.0	-830.5	-483.3	-310.1	2.50	-2.29	
6,488.0	8.97	162.64	6,408.5	-836.7	-483.6	-309.2	13.71	3.55	
6,536.0	12.92	137.33	6,455.7	-844.2	-478.8	-303.1	12.78	8.23	
6,583.0	17.53	129.33	6,501.0	-852.5	-469.8	-292.6	10.76	9.81	
6,630.0	21.01	122.92	6,545.4	-861.6	-457.2	-278.5	8.65	7.40	
6,677.0	21.53	120.37	6,589.2	-870.5	-442.7	-262.5	2.26	1.11	
6,724.0	23.91	112.37	6,632.6	-878.5	-426.5	-245.0	8.29	5.06	
6,771.0	26.32	106.74	6,675.1	-885.2	-407.7	-225.2	7.22	5.13	
6,819.0	28.52	101.65	6,717.7	-890.5	-386.3	-203.2	6.69	4.58	
6,866.0	31.64	100.24	6,758.4	-895.0	-363.1	-179.6	6.81	6.64	
6,913.0	34.94	98.75	6,797.7	-899.2	-337.7	-153.8	7.23	7.02	
6,960.0	38.45	100.50	6,835.4	-903.9	-310.0	-125.8	7.79	7.47	
7,008.0	41.84	99.80	6,872.0	-909.4	-279.5	-94.8	7.12	7.06	
7,055.0	45.48	98.75	6,906.0	-914.6	-247.5	-62.4	7.90	7.74	
7,102.0	48.03	96.81	6,938.2	-919.2	-213.6	-28.3	6.20	5.43	
7,149.0	48.25	96.28	6,969.6	-923.2	-178.8	6.6	0.96	0.47	
7,197.0	51.02	93.82	7,000.7	-926.4	-142.4	43.0	6.97	5.77	
7,244.0	55.72	95.41	7,028.7	-929.5	-104.8	80.4	10.36	10.00	
7,291.0	60.29	96.90	7,053.6	-933.8	-65.2	120.1	10.09	9.72	
7,338.0	63.33	97.25	7,075.8	-938.9	-24.1	161.4	6.50	6.47	
7,385.0	66.58	96.28	7,095.7	-943.9	18.2	203.8	7.16	6.91	
7,432.0	68.82	96.46	7,113.6	-948.7	61.4	247.2	4.78	4.77	
7,480.0	71.81	95.32	7,129.7	-953.3	106.3	292.1	6.62	6.23	
7,527.0	72.91	92.68	7,144.0	-956.5	151.0	336.6	5.84	2.34	
7,575.0	75.28	90.84	7,157.1	-957.9	197.1	382.1	6.16	4.94	
7,606.2	78.43	90.84	7,164.2	-958.3	227.5	411.9	10.09	10.09	TPZ - 7606.2' MD (243 FSL, 460 FWL)
7,622.0	80.02	90.84	7,167.2	-958.5	243.0	427.2	10.09	10.09	
7,670.0	84.46	90.13	7,173.6	-958.9	290.6	473.9	9.37	9.25	
7,764.0	89.74	90.04	7,178.4	-959.1	384.4	565.9	5.62	5.62	
7,858.0	90.88	90.04	7,177.9	-959.1	478.4	658.1	1.21	1.21	
7,953.0	91.19	87.23	7,176.2	-956.9	573.4	750.7	2.98	0.33	
8,079.0	91.41	86.79	7,173.3	-950.3	699.2	872.8	0.39	0.17	
8,142.0	91.45	85.83	7,171.7	-946.3	762.0	933.6	1.52	0.06	
8,236.0	92.46	88.02	7,168.5	-941.2	855.8	1,024.5	2.56	1.07	
8,331.0	90.53	86.70	7,166.1	-936.8	950.7	1,116.7	2.46	-2.03	
8,426.0	91.58	89.52	7,164.3	-933.7	1,045.6	1,209.1	3.17	1.11	
8,520.0	91.36	89.34	7,161.9	-932.8	1,139.6	1,301.1	0.30	-0.23	
8,615.0	91.63	90.31	7,159.4	-932.5	1,234.5	1,394.1	1.06	0.28	
8,709.0	93.38	90.92	7,155.3	-933.5	1,328.4	1,486.4	1.97	1.86	
8,803.0	93.60	90.57	7,149.6	-934.7	1,422.3	1,578.6	0.44	0.23	
8,897.0	93.34	90.22	7,143.9	-935.4	1,516.1	1,670.7	0.46	-0.28	
8,992.0	93.56	89.87	7,138.2	-935.4	1,610.9	1,763.7	0.43	0.23	
9,087.0	92.59	89.34	7,133.1	-934.8	1,705.8	1,856.5	1.16	-1.02	
9,181.0	92.94	89.52	7,128.6	-933.8	1,799.7	1,948.4	0.42	0.37	
9,276.0	92.15	88.81	7,124.3	-932.5	1,894.6	2,041.2	1.12	-0.83	
9,371.0	92.46	88.90	7,120.5	-930.6	1,989.5	2,133.8	0.34	0.33	
9,465.0	93.21	88.55	7,115.9	-928.5	2,083.3	2,225.4	0.88	0.80	
9,559.0	93.91	88.29	7,110.0	-925.9	2,177.1	2,316.9	0.79	0.74	
9,654.0	93.56	88.46	7,103.8	-923.2	2,271.9	2,409.2	0.41	-0.37	
9,748.0	92.64	88.55	7,098.8	-920.8	2,365.7	2,500.8	0.98	-0.98	

Survey Report

Company:	Crestone Peak Resources	Local Co-ordinate Reference:	Well MELBON RANCH 4J-17H-M265
Project:	Sec 17 T2N-R65W	TVD Reference:	WELL @ 4979.0ft (Original Well Elev)
Site:	Melbon Ranch Pad	MD Reference:	WELL @ 4979.0ft (Original Well Elev)
Well:	MELBON RANCH 4J-17H-M265	North Reference:	True
Wellbore:	NEW	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Formations / Comments
9,843.0	90.97	88.73	7,095.8	-918.5	2,460.6	2,593.4	1.77	-1.76	
9,937.0	89.69	90.04	7,095.2	-917.5	2,554.6	2,685.3	1.95	-1.36	
10,031.0	89.25	89.87	7,096.1	-917.4	2,648.6	2,777.5	0.50	-0.47	
10,126.0	88.86	89.43	7,097.7	-916.8	2,743.6	2,870.5	0.62	-0.41	
10,220.0	90.13	88.81	7,098.5	-915.4	2,837.6	2,962.3	1.50	1.35	
10,314.0	90.62	88.99	7,097.9	-913.6	2,931.5	3,054.1	0.56	0.52	
10,438.0	92.29	88.29	7,094.7	-910.6	3,055.5	3,175.0	1.46	1.35	
10,468.0	92.24	87.94	7,093.5	-909.7	3,085.4	3,204.2	1.18	-0.17	
10,503.0	92.29	87.50	7,092.2	-908.3	3,120.4	3,238.2	1.26	0.14	
10,598.0	92.29	87.94	7,088.4	-904.5	3,215.2	3,330.4	0.46	0.00	
10,627.0	92.11	88.55	7,087.2	-903.6	3,244.2	3,358.6	2.19	-0.62	
10,692.0	90.79	88.37	7,085.6	-901.9	3,309.1	3,422.0	2.05	-2.03	
10,816.0	90.84	86.70	7,083.8	-896.5	3,433.0	3,542.4	1.35	0.04	
10,875.0	90.92	87.50	7,082.9	-893.5	3,491.9	3,599.5	1.36	0.14	
10,907.0	90.70	87.58	7,082.5	-892.2	3,523.9	3,630.6	0.73	-0.69	
10,970.0	90.62	88.64	7,081.8	-890.1	3,586.9	3,691.9	1.69	-0.13	
11,064.0	90.26	88.64	7,081.0	-887.9	3,680.8	3,783.6	0.38	-0.38	
11,158.0	90.31	91.54	7,080.6	-888.0	3,774.8	3,875.8	3.09	0.05	
11,253.0	90.75	91.71	7,079.7	-890.7	3,869.8	3,969.4	0.50	0.46	
11,348.0	91.14	91.71	7,078.1	-893.5	3,964.7	4,063.1	0.41	0.41	
11,442.0	91.23	91.89	7,076.2	-896.5	4,058.6	4,155.7	0.21	0.10	
11,537.0	90.40	90.31	7,074.8	-898.3	4,153.6	4,249.2	1.88	-0.87	
11,631.0	90.53	93.12	7,074.1	-901.1	4,247.6	4,341.9	2.99	0.14	
11,725.0	90.13	93.38	7,073.5	-906.5	4,341.4	4,434.9	0.51	-0.43	
11,819.0	90.18	94.44	7,073.3	-912.9	4,435.2	4,528.1	1.13	0.05	
11,913.0	90.22	95.05	7,072.9	-920.6	4,528.9	4,621.5	0.65	0.04	
11,935.0	90.00	95.49	7,072.9	-922.7	4,550.8	4,643.3	2.24	-1.00	LAST SURVEY - 11935.0' MD
12,010.0	90.00	95.49	7,072.9	-929.8	4,625.4	4,717.9	0.00	0.00	PTB - 12010.0' MD (237 FSL, 468 FEL)

Targets

Target Name	- hit/miss target	- Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
MELBON RANCH 4J-17			0.00	0.52	7,157.0	-952.2	227.5	1,291,970.24	3,224,859.98	40.132046	-104.695824
- actual wellpath misses target center by 9.3ft at 7604.5ft MD (7163.9 TVD, -958.3 N, 225.8 E)											
- Point											
MELBON RANCH 4J-17			0.00	0.53	7,072.0	-917.0	4,633.5	1,292,045.31	3,229,265.53	40.132141	-104.680066
- actual wellpath misses target center by 15.2ft at 12010.0ft MD (7072.9 TVD, -929.8 N, 4625.4 E)											
- Point											

Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates	Comment
7,606.2	7,164.2	-958.3	227.5 TPZ - 7606.2' MD (243 FSL, 460 FWL)
11,935.0	7,072.9	-922.7	4,550.8 LAST SURVEY - 11935.0' MD
12,010.0	7,072.9	-929.8	4,625.4 PTB - 12010.0' MD (237 FSL, 468 FEL)

Checked By: _____ Approved By: _____ Date: _____