



Precision

Survey Report

Client	Carrizo Oil & Gas	MWD Operator	J. Bedard / P. Brown
Well Name	Bringelson Ranch	Rig Name	Xtreme 19
Location	Weld County, Colorado	End Date	
Start Date		Proposed Direction	180.0

SUR NUM	MD ft	INC °	AZM °	TVD ft	N-S ft	E-W ft	SECT ft	DLS °/100'
TIE IN	1430	0.00	0.00	1430.00	0.00	0.00	0.00	0.0
1	1455	0.6	113.0	1455.00	-0.05	0.12	0.05	2.4
2	1486	0.5	99.2	1486.00	-0.14	0.40	0.15	0.5
3	1517	1.1	60.0	1517.00	-0.01	0.79	0.03	2.5
4	1602	4.7	35.3	1601.87	3.24	3.51	-3.15	4.4
5	1687	4.7	28.8	1686.59	9.14	7.20	-8.94	0.6
6	1771	4.5	22.3	1770.32	15.20	10.11	-14.92	0.7
7	1857	4.7	16.5	1856.04	21.70	12.39	-21.36	0.6
8	1941	5.5	24.1	1939.71	28.67	15.01	-28.26	1.2
9	2024	6.0	26.6	2022.29	36.18	18.58	-35.67	0.7
10	2111	6.0	22.9	2108.82	44.44	22.39	-43.82	0.4
11	2195	5.5	23.2	2192.39	52.18	25.68	-51.47	0.6
12	2281	5.5	15.3	2278.00	59.95	28.39	-59.16	0.9
13	2366	5.6	13.0	2362.60	67.92	30.40	-67.08	0.3
14	2451	5.3	12.3	2447.22	75.79	32.17	-74.90	0.4
15	2536	5.1	10.7	2531.87	83.34	33.71	-82.41	0.3
16	2621	4.5	8.1	2616.57	90.35	34.88	-89.38	0.8
17	2706	4.1	3.2	2701.33	96.69	35.52	-95.70	0.6
18	2792	3.8	47.1	2787.14	101.70	37.78	-100.65	3.4
19	2877	5.1	59.8	2871.89	105.52	43.11	-104.32	1.9
20	2962	4.9	60.0	2956.56	109.23	49.52	-107.86	0.2
21	3047	5.1	57.7	3041.24	113.07	55.85	-111.53	0.3
22	3132	5.5	56.8	3125.88	117.32	62.45	-115.60	0.5
23	3218	5.5	54.3	3211.48	121.98	69.25	-120.07	0.3
24	3303	5.6	53.5	3296.08	126.82	75.89	-124.74	0.1
25	3388	6.0	56.4	3380.65	131.75	82.93	-129.47	0.6



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26	3473	6.3	54.2	3465.16	136.93	90.41	-134.46	0.4
27	3558	6.6	54.7	3549.62	142.49	98.18	-139.80	0.4
28	3644	6.5	54.0	3635.06	148.20	106.15	-145.30	0.1
29	3729	6.2	57.5	3719.54	153.50	113.91	-150.38	0.6
30	3813	5.9	58.5	3803.07	158.19	121.42	-154.87	0.4
31	3898	5.2	65.4	3887.67	162.08	128.65	-158.56	1.1
32	3984	5.0	62.4	3973.33	165.43	135.51	-161.73	0.4
33	4069	4.7	57.0	4058.03	169.05	141.72	-165.18	0.6
34	4154	4.4	53.5	4142.76	172.88	147.26	-168.86	0.5
35	4239	4.0	52.9	4227.53	176.61	152.24	-172.46	0.5
36	4324	4.7	48.4	4312.29	180.71	157.21	-176.42	0.9
37	4410	5.1	57.3	4397.97	185.12	163.06	-180.67	1.0
38	4495	4.3	53.3	4482.69	189.06	168.80	-184.46	1.0
39	4580	4.6	60.8	4567.43	192.63	174.33	-187.87	0.8
40	4665	6.1	73.3	4652.06	195.59	181.63	-190.64	2.2
41	4751	5.6	70.3	4737.61	198.32	189.96	-193.14	0.7
42	4836	4.9	69.8	4822.26	200.97	197.27	-195.59	0.8
43	4921	6.0	72.4	4906.87	203.57	204.91	-197.99	1.3
44	4961	6.1	79.5	4946.65	204.59	208.99	-204.59	1.9
45	5003	8.2	110.6	4988.33	203.94	213.99	-203.94	10.3
46	5046	12.0	132.4	5030.68	199.84	220.17	-199.84	12.4
47	5089	16.2	146.4	5072.38	191.83	226.79	-191.83	12.5
48	5131	19.6	164.4	5112.37	180.15	231.94	-180.15	15.4
49	5174	21.5	175.4	5152.65	165.34	234.51	-165.34	10.0
50	5216	20.1	178.4	5168.54	159.31	234.84	-159.31	10.3
51	5259	22.2	179.8	5231.96	134.79	235.21	-134.79	3.2



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52	5302	25.3	186.2	5271.32	117.52	234.25	-117.52	9.4
53	5344	27.4	189.3	5311.64	97.74	231.53	-97.74	5.6
54	5387	30.4	193.4	5346.64	78.78	227.69	-78.78	9.2
55	5430	34.3	193.7	5382.94	56.38	222.29	-56.38	8.8
56	5471	36.4	197.6	5416.39	33.56	215.88	-33.56	7.5
57	5514	39.5	194.8	5450.29	8.17	208.52	-8.17	8.2
58	5557	41.9	193.4	5482.89	-19.03	201.70	19.03	6.0
59	5599	47.2	193.5	5512.81	-47.67	194.85	47.67	12.6
60	5642	52.5	196.0	5540.53	-79.44	186.46	79.44	13.1
61	5671	57.2	197.1	5557.22	-102.16	179.70	102.16	16.5
62	5735	64.8	198.3	5586.77	-152.94	163.47	152.94	12.6
63	5765	66.0	193.4	5600.52	-181.79	155.29	181.79	14.0
64	5798	67.6	189.7	5612.73	-209.70	149.59	209.70	12.1
65	5829	70.8	186.0	5624.10	-239.33	145.51	239.33	14.7
66	5860	74.1	181.9	5633.75	-269.75	143.42	269.75	16.0
67	5890	78.4	180.0	5640.88	-298.88	142.94	298.88	15.6
68	5920	83.4	177.6	5645.99	-328.17	143.60	328.17	18.4
69	5952	87.3	175.3	5648.58	-359.99	145.57	359.99	14.1
70	5982	90.8	172.1	5649.08	-389.80	148.87	389.80	15.8
71	6013	91.9	168.9	5648.35	-420.36	153.98	420.36	10.9
72	6044	91.6	168.4	5647.40	-450.74	160.08	450.74	1.9
73	6071	89.6	167.5	5647.12	-477.14	165.71	477.14	8.1
74	6105	88.8	167.2	5647.60	-510.31	173.16	510.31	2.5
75	6136	88.4	167.0	5648.35	-540.52	180.08	540.52	1.4
76	6164	88.9	167.5	5649.01	-567.82	186.26	567.82	2.5
77	6197	89.3	167.9	5649.53	-600.06	193.28	600.06	1.7



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78	6228	89.9	170.7	5649.75	-630.52	199.04	630.52	9.2
79	6258	90.1	171.6	5649.75	-660.16	203.65	660.16	3.1
80	6289	90.1	171.2	5649.69	-690.81	208.29	690.81	1.3
81	6320	89.9	171.0	5649.69	-721.44	213.09	721.44	0.9
82	6350	90.7	171.6	5649.54	-751.09	217.62	751.09	3.3
83	6381	90.7	171.2	5649.16	-781.74	222.26	781.74	1.3
84	6412	88.6	171.2	5649.35	-812.38	227.00	812.38	6.8
85	6442	88.5	171.8	5650.11	-842.04	231.43	842.04	2.0
86	6473	88.4	171.9	5650.95	-872.71	235.83	872.71	0.5
87	6504	88.5	171.9	5651.78	-903.39	240.19	903.39	0.3
88	6534	89.1	173.3	5652.41	-933.13	244.06	933.13	5.1
89	6565	90.0	174.9	5652.66	-963.97	247.24	963.97	5.9
90	6595	90.7	175.8	5652.47	-993.87	249.67	993.87	3.8
91	6626	89.7	174.2	5652.36	-1024.75	252.38	1024.75	6.1
92	6655	89.4	172.5	5652.59	-1053.55	255.73	1053.55	6.0
93	6685	88.3	170.0	5653.19	-1083.19	260.30	1083.19	9.1
94	6710	88.6	170.5	5653.87	-1107.82	264.53	1107.82	2.3
95	6753	86.7	169.8	5655.63	-1150.15	271.88	1150.15	4.7
96	6768	84.9	169.5	5656.73	-1164.87	274.57	1164.87	12.2
97	6783	83.8	169.3	5658.21	-1179.54	277.31	1179.54	7.5
98	6798	82.6	169.1	5659.99	-1194.17	280.10	1194.17	8.1
99	6813	82.0	169.1	5661.99	-1208.77	282.91	1208.77	4.0
100	6828	81.7	169.1	5664.12	-1223.35	285.72	1223.35	2.0
101	6843	81.6	168.8	5666.30	-1237.91	288.57	1237.91	2.1
102	6881	81.0	168.6	5672.05	-1274.75	295.93	1274.75	1.7
103	6924	82.4	169.6	5678.25	-1316.53	303.97	1316.53	4.0



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104	6939	82.1	169.6	5680.28	-1331.15	306.65	1331.15	2.0
105	6954	81.9	169.6	5682.37	-1345.76	309.34	1345.76	1.3
106	6967	81.9	169.6	5684.20	-1358.42	311.66	1358.42	0.0
107	6982	82.1	170.0	5686.28	-1373.03	314.29	1373.03	3.0
108	6997	82.4	170.3	5688.31	-1387.68	316.83	1387.68	2.8
109	7012	83.1	170.5	5690.20	-1402.35	319.31	1402.35	4.9
110	7027	83.6	171.0	5691.94	-1417.06	321.71	1417.06	4.7
111	7052	84.9	170.9	5694.44	-1441.62	325.62	1441.62	5.2
112	7067	85.8	171.0	5695.66	-1456.38	327.97	1456.38	6.0
113	7082	86.0	170.9	5696.73	-1471.16	330.33	1471.16	1.5
114	7097	85.9	170.7	5697.79	-1485.93	332.72	1485.93	1.5
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