

Minimum Radius of Curvature

API: 42-479-56064 **Well: Juan Salinas Ranch 201H** **Wellhead Location** **Lat: 27.958990**
Operator: Silverbow Resources **Area: Eagleford** **Long: -99.336635**
Rig: Cactus 161 **Type: U Lateral** **Magnetic Declination: 4.49**
TD: 20,570' **Plane of Proposal: 300.75**

Measured Depth Ft	Drift Angle Deg	Azimuth Direction Deg	Course Length Ft	TVD Ft	Vertical Section Ft	COORDINATES		CLOSURE		Dog Leg Severity Deg/100'	Build / Drop Deg/100'	Left / Right Deg/100'
						N-S Ft	E-W Ft	Distance FT	Direction Deg			
0.00	0.00	0.00		0.0	0.00	0.00	0.00	0.00	0.00			
199	0.63	121.61	199	199.0	-1.09	-0.57	0.93	1.09	121.61	0.32	0.32	61.11
325	0.59	139.08	126	325.0	-2.40	-1.43	1.95	2.41	126.24	0.15	-0.03	13.87
514	0.46	86.33	189	514.0	-3.95	-2.11	3.34	3.95	122.32	0.25	-0.07	-27.91
608	0.12	240.47	94	608.0	-4.21	-2.14	3.63	4.21	120.48	0.61	-0.36	163.98
797	0.38	184.34	189	797.0	-4.40	-2.86	3.41	4.45	129.97	0.17	0.14	-29.70
986	0.54	256.41	189	986.0	-4.04	-3.69	2.50	4.46	145.92	0.29	0.08	38.13
1080	0.58	242.74	94	1080.0	-3.47	-4.02	1.65	4.34	157.72	0.15	0.04	-14.54
1268	0.25	123.41	188	1268.0	-3.37	-4.68	1.14	4.82	166.28	0.39	-0.18	-63.47
1458	1.41	114.96	190	1457.9	-6.11	-5.89	3.61	6.91	148.52	0.61	0.61	-4.45
1645	1.32	107.88	187	1644.9	-10.50	-7.53	7.74	10.80	134.18	0.10	-0.05	-3.79
1834	0.89	105.81	189	1833.9	-14.04	-8.59	11.23	14.14	127.43	0.23	-0.23	-1.10
2023	0.93	82.57	189	2022.8	-16.67	-8.79	14.16	16.67	121.84	0.20	0.02	-12.30
2211	0.84	81.08	188	2210.8	-18.93	-8.38	17.04	18.99	116.20	0.05	-0.05	-0.79
2399	1.05	105.38	188	2398.8	-21.65	-8.63	20.06	21.83	113.27	0.24	0.11	12.93
2588	1.08	124.16	189	2587.8	-25.10	-10.09	23.20	25.30	113.50	0.18	0.02	9.94
2777	2.75	150.86	189	2776.6	-30.80	-15.05	26.88	30.81	119.24	0.98	0.88	14.13
2967	3.83	167.26	190	2966.3	-39.11	-25.22	30.50	39.58	129.58	0.75	0.57	8.63
3156	5.05	170.83	189	3154.8	-48.79	-39.59	33.22	51.68	140.00	0.66	0.65	1.89
3345	5.09	157.53	189	3343.0	-60.84	-55.55	37.75	67.16	145.80	0.62	0.02	-7.04
3534	3.14	164.34	189	3531.5	-71.31	-68.28	42.35	80.35	148.19	1.06	-1.03	3.60
3565	2.90	167.36	31	3562.5	-72.46	-69.86	42.75	81.91	148.54	0.93	-0.77	9.74
3724	2.61	162.31	159	3721.3	-77.93	-77.24	44.73	89.26	149.92	0.24	-0.18	-3.18
3913	5.75	121.61	189	3909.8	-90.63	-86.30	54.11	101.86	147.91	2.19	1.66	-21.53
4103	6.58	118.46	190	4098.7	-111.02	-96.48	71.78	120.26	143.35	0.47	0.44	-1.66
4292	6.63	111.64	189	4286.5	-132.62	-105.66	91.45	139.74	139.13	0.42	0.03	-3.61
4480	6.62	104.66	188	4473.2	-153.74	-112.41	112.02	158.69	135.10	0.43	-0.01	-3.71
4670	6.66	102.89	190	4661.9	-174.75	-117.64	133.35	177.83	131.42	0.11	0.02	-0.93
4859	5.81	115.44	189	4849.8	-194.71	-124.19	152.68	196.81	129.13	0.85	-0.45	6.64
5047	6.53	129.39	188	5036.7	-214.76	-135.07	169.53	216.76	128.54	0.88	0.38	7.42
5236	7.98	135.72	189	5224.2	-238.06	-151.28	187.00	240.53	128.97	0.87	0.77	3.35
5426	6.48	136.13	190	5412.7	-261.14	-168.45	203.64	264.28	129.60	0.79	-0.79	0.22
5615	6.38	135.13	189	5600.5	-281.59	-183.58	218.44	285.34	130.04	0.08	-0.05	-0.53
5804	5.92	129.11	189	5788.4	-301.41	-197.17	233.41	305.54	130.19	0.42	-0.24	-3.19
5994	4.81	124.34	190	5977.6	-319.05	-207.85	247.59	323.27	130.01	0.63	-0.58	-2.51
6183	4.30	126.71	189	6166.0	-334.01	-216.55	259.81	338.23	129.81	0.29	-0.27	1.25
6373	3.83	128.37	190	6355.5	-347.38	-224.75	270.50	351.69	129.72	0.25	-0.25	0.87
6562	2.78	126.08	189	6544.2	-358.20	-231.37	279.15	362.57	129.65	0.56	-0.56	-1.21
6750	1.31	129.92	188	6732.1	-364.86	-235.43	284.49	369.27	129.61	0.78	-0.78	2.04
6940	1.01	135.19	190	6922.0	-368.63	-238.01	287.33	373.11	129.64	0.17	-0.16	2.77
7128	0.25	117.59	188	7110.0	-370.64	-239.38	288.86	375.16	129.65	0.41	-0.40	-9.36
7318	0.31	13.25	190	7300.0	-370.90	-239.07	289.35	375.34	129.56	0.23	0.03	-54.92
7506	0.54	17.70	188	7488.0	-370.55	-237.73	289.73	374.78	129.37	0.12	0.12	2.37
7695	0.70	1.45	189	7677.0	-369.78	-235.73	290.03	373.75	129.10	0.12	0.08	-8.60
7884	0.84	351.68	189	7866.0	-368.35	-233.20	289.86	372.03	128.82	0.10	0.07	185.31
8074	0.93	341.34	190	8056.0	-366.30	-230.37	289.17	369.71	128.54	0.10	0.05	-5.44
8263	1.19	330.05	189	8244.9	-363.42	-227.21	287.70	366.60	128.30	0.18	0.14	-5.97
8453	1.17	324.29	190	8434.9	-359.92	-223.93	285.58	362.90	128.10	0.06	-0.01	-3.03
8642	1.37	325.69	189	8623.9	-356.10	-220.49	283.18	358.90	127.91	0.11	0.11	0.74
8832	1.21	315.94	190	8813.8	-352.11	-217.18	280.51	354.75	127.75	0.14	-0.08	-5.13
9022	1.11	309.12	190	9003.8	-348.35	-214.57	277.68	350.93	127.69	0.09	-0.05	-3.59
9218	0.96	317.10	196	9199.7	-344.90	-212.17	275.09	347.41	127.64	0.11	-0.08	4.07
9346	0.99	262.20	128	9327.7	-343.00	-211.54	273.27	345.58	127.74	0.70	0.02	-42.89
9535	0.75	264.92	189	9516.7	-340.72	-211.87	270.42	343.53	128.08	0.13	-0.13	1.44
9724	0.99	238.87	189	9705.7	-338.95	-212.82	267.79	342.06	128.48	0.24	0.13	-13.78
9819	0.99	227.04	95	9800.7	-338.34	-213.81	266.48	341.65	128.74	0.21	0.00	-12.45
10008	1.20	228.23	189	9989.6	-337.28	-216.24	263.81	341.11	129.34	0.11	0.11	0.63
10197	1.22	235.28	189	10178.6	-335.85	-218.70	260.68	340.27	130.00	0.08	0.01	3.73

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						N-S Ft	E-W Ft	Distance FT	Direction Deg			
10386	0.90	248.07	189	10367.6	-334.12	-220.40	257.65	339.06	130.54	0.21	-0.17	6.77
10575	0.62	298.18	189	10556.5	-332.20	-220.47	255.37	337.38	130.81	0.37	-0.15	26.51
10764	0.18	225.24	189	10745.5	-331.10	-220.20	254.26	336.36	130.89	0.31	-0.23	-38.59
10954	0.36	24.69	190	10935.5	-330.96	-219.87	254.30	336.17	130.85	0.28	0.09	-105.55
11048	0.36	28.26	94	11029.5	-330.92	-219.34	254.56	336.02	130.75	0.02	0.00	3.80
11143	1.63	327.36	95	11124.5	-329.70	-217.94	253.97	334.66	130.63	1.57	1.34	314.84
11237	3.63	327.07	94	11218.4	-325.83	-214.31	251.64	330.53	130.42	2.13	2.13	-0.31
11332	5.11	312.13	95	11313.1	-318.99	-208.95	246.86	323.42	130.25	1.95	1.56	-15.73
11427	14.36	304.42	95	11406.7	-303.05	-199.43	233.98	307.44	130.44	9.81	9.74	-8.12
11521	29.37	296.85	94	11493.7	-268.22	-182.33	203.62	273.32	131.84	16.22	15.97	-8.05
11616	39.11	302.14	95	11572.1	-214.88	-155.80	157.34	221.43	134.72	10.71	10.25	5.57
11710	51.69	301.62	94	11638.0	-148.10	-120.55	100.60	157.01	140.15	13.39	13.38	-0.55
11805	65.86	302.00	95	11687.1	-67.08	-77.82	31.75	84.05	157.80	14.92	14.92	0.40
11900	77.07	302.51	95	11717.3	22.82	-29.82	-44.29	53.39	236.05	11.81	11.80	0.54
11995	84.17	300.58	95	11732.8	116.47	19.17	-124.12	125.60	278.78	7.74	7.47	-2.03
12089	90.45	298.59	94	11737.2	210.30	65.50	-205.74	215.91	287.66	7.01	6.68	-2.12
12184	92.18	299.03	95	11735.0	305.22	111.27	-288.95	309.63	291.06	1.88	1.82	0.46
12279	93.16	299.28	95	11730.6	400.08	157.50	-371.82	403.81	292.96	1.06	1.03	0.26
12374	93.61	299.29	95	11725.0	494.88	203.89	-454.54	498.17	294.16	0.47	0.47	0.01
12469	93.92	299.55	95	11718.7	589.65	250.45	-537.11	592.63	295.00	0.43	0.33	0.27
12564	94.12	299.30	95	11712.1	684.39	297.01	-619.65	687.15	295.61	0.34	0.21	-0.26
12658	93.67	300.97	94	11705.7	778.16	344.09	-700.75	780.67	296.15	1.84	-0.48	1.78
12752	93.47	301.28	94	11699.8	871.98	392.58	-781.07	874.18	296.69	0.39	-0.21	0.33
12847	94.17	301.45	95	11693.5	966.76	441.92	-862.00	968.68	297.14	0.76	0.74	0.18
12942	91.82	301.92	95	11688.5	1061.61	491.75	-942.73	1063.27	297.55	2.52	-2.47	0.49
13037	91.37	301.32	95	11685.9	1156.56	541.53	-1023.59	1158.01	297.88	0.79	-0.47	-0.63
13131	92.02	301.26	94	11683.1	1250.52	590.33	-1103.88	1251.82	298.14	0.69	0.69	-0.06
13225	92.49	301.11	94	11679.4	1344.44	638.97	-1184.24	1345.62	298.35	0.52	0.50	-0.16
13320	93.17	300.89	95	11674.7	1439.32	687.84	-1265.57	1440.41	298.52	0.75	0.72	-0.23
13414	94.09	301.29	94	11668.8	1533.13	736.28	-1345.90	1534.13	298.68	1.07	0.98	0.43
13509	95.02	301.34	95	11661.2	1627.83	785.50	-1426.81	1628.74	298.83	0.98	0.98	0.05
13604	94.91	301.23	95	11653.0	1722.47	834.65	-1507.69	1723.30	298.97	0.16	-0.12	-0.12
13699	93.92	301.01	95	11645.7	1817.18	883.60	-1588.77	1817.95	299.08	1.07	-1.04	-0.23
13794	93.61	301.34	95	11639.4	1911.97	932.67	-1669.88	1912.69	299.18	0.48	-0.33	0.35
13888	91.18	300.39	94	11635.5	2005.88	980.85	-1750.49	2006.56	299.26	2.78	-2.59	-1.01
13983	90.81	299.69	95	11633.9	2100.86	1028.40	-1832.72	2101.54	299.30	0.83	-0.39	-0.74
14077	91.46	300.59	94	11632.0	2194.84	1075.59	-1913.99	2195.51	299.33	1.18	0.69	0.96
14172	91.09	299.91	95	11629.9	2289.81	1123.43	-1996.03	2290.47	299.37	0.81	-0.39	-0.72
14267	90.67	299.56	95	11628.4	2384.78	1170.55	-2078.52	2385.46	299.39	0.58	-0.44	-0.37
14361	91.04	300.50	94	11627.0	2478.76	1217.58	-2159.89	2479.44	299.41	1.07	0.39	1.00
14456	90.73	300.00	95	11625.6	2573.75	1265.43	-2241.94	2574.42	299.44	0.62	-0.33	-0.53
14551	90.42	299.90	95	11624.6	2668.73	1312.86	-2324.25	2669.41	299.46	0.34	-0.33	-0.11
14645	90.87	300.53	94	11623.5	2762.72	1360.16	-2405.47	2763.39	299.49	0.82	0.48	0.67
14740	90.95	300.95	95	11622.0	2857.71	1408.71	-2487.12	2858.36	299.53	0.45	0.08	0.44
14835	90.95	303.77	95	11620.5	2952.65	1459.55	-2567.34	2953.23	299.62	2.97	0.00	2.97
14930	92.07	307.02	95	11618.0	3047.29	1514.55	-2644.75	3047.71	299.80	3.62	1.18	3.42
15025	92.04	309.24	95	11614.6	3141.44	1573.16	-2719.42	3141.67	300.05	2.34	-0.03	2.34
15120	91.32	320.70	95	11611.8	3233.33	1640.16	-2786.49	3233.37	300.48	12.08	-0.76	12.06
15215	91.68	332.00	95	11609.3	3318.84	1719.09	-2839.03	3318.94	301.20	11.90	0.38	11.89
15309	91.34	342.19	94	11606.8	3394.42	1805.53	-2875.55	3395.40	302.12	10.84	-0.36	10.84
15404	90.98	346.13	95	11604.9	3463.41	1896.89	-2901.47	3466.52	303.18	4.16	-0.38	4.15
15499	90.48	351.35	95	11603.6	3526.96	1990.02	-2920.01	3533.65	304.27	5.52	-0.53	5.49
15594	91.93	358.18	95	11601.6	3582.74	2084.54	-2928.68	3594.78	305.44	7.35	1.53	7.19
15689	91.82	4.81	95	11598.5	3629.11	2179.41	-2926.20	3648.62	306.68	6.98	-0.12	-371.97
15784	89.72	15.50	95	11597.3	3662.47	2272.77	-2909.47	3691.95	308.00	11.47	-2.21	11.25
15878	89.33	26.39	94	11598.0	3678.46	2360.42	-2875.92	3720.56	309.38	11.59	-0.41	11.59
15973	89.89	38.03	95	11598.7	3676.04	2440.66	-2825.38	3733.57	310.82	12.27	0.59	12.25
16068	88.26	49.94	95	11600.2	3654.33	2508.88	-2759.53	3729.55	312.28	12.65	-1.72	12.54

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16162	88.60	62.18	94	11602.8	3614.24	2561.25	-2681.72	3708.32	313.68	13.02	0.36	13.02
16257	88.52	73.85	95	11605.2	3556.83	2596.74	-2593.81	3670.27	315.03	12.28	-0.08	12.28
16351	89.24	84.15	94	11607.0	3486.81	2614.65	-2501.68	3618.67	316.26	10.98	0.77	10.96
16446	89.13	92.87	95	11608.4	3406.55	2617.11	-2406.82	3555.57	317.40	9.18	-0.12	9.18
16540	89.05	102.95	94	11609.9	3320.04	2604.20	-2313.84	3483.63	318.38	10.72	-0.09	10.72
16634	89.89	103.71	94	11610.8	3230.35	2582.52	-2222.38	3407.11	319.29	1.21	0.89	0.81
16729	90.76	103.99	95	11610.2	3139.46	2559.78	-2130.14	3330.17	320.23	0.96	0.92	0.29
16824	89.02	104.94	95	11610.4	3048.28	2536.06	-2038.16	3253.56	321.21	2.09	-1.83	1.00
16918	89.30	105.31	94	11611.8	2957.76	2511.53	-1947.43	3178.09	322.21	0.49	0.30	0.39
17013	89.13	105.56	95	11613.1	2866.14	2486.25	-1855.86	3102.53	323.26	0.32	-0.18	0.26
17107	88.85	105.89	94	11614.7	2775.37	2460.78	-1765.39	3028.54	324.34	0.46	-0.30	0.35
17202	89.33	106.41	95	11616.3	2683.45	2434.36	-1674.16	2954.47	325.48	0.74	0.51	0.55
17297	89.61	106.80	95	11617.1	2591.33	2407.21	-1583.12	2881.13	326.67	0.51	0.29	0.41
17391	89.80	107.30	94	11617.6	2500.01	2379.65	-1493.25	2809.37	327.89	0.57	0.20	0.53
17485	90.20	107.61	94	11617.6	2408.53	2351.45	-1403.58	2738.50	329.17	0.54	0.43	0.33
17580	91.48	107.26	95	11616.2	2316.10	2322.99	-1312.96	2668.36	330.52	1.40	1.35	-0.37
17674	91.71	106.09	94	11613.6	2224.95	2296.03	-1222.95	2601.42	331.96	1.27	0.24	-1.24
17769	89.89	105.89	95	11612.3	2133.10	2269.86	-1131.64	2536.31	333.50	1.93	-1.92	-0.21
17864	86.39	105.10	95	11615.4	2041.51	2244.50	-1040.15	2473.80	335.14	3.78	-3.68	-0.83
17958	86.22	105.24	94	11621.4	1951.16	2219.95	-949.62	2414.53	336.84	0.23	-0.18	0.15
18053	86.72	103.66	95	11627.3	1860.15	2196.30	-857.80	2357.87	338.67	1.74	0.53	-1.66
18147	85.20	102.90	94	11633.9	1770.71	2174.76	-766.55	2305.90	340.58	1.81	-1.62	-0.81
18242	85.28	102.97	95	11641.8	1680.58	2153.56	-674.28	2256.65	342.61	0.11	0.08	0.07
18337	85.51	103.45	95	11649.4	1590.29	2131.92	-582.09	2209.96	344.73	0.56	0.24	0.51
18431	85.68	103.40	94	11656.6	1500.82	2110.17	-490.93	2166.52	346.90	0.19	0.18	-0.05
18526	86.16	104.04	95	11663.4	1410.21	2087.69	-398.87	2125.45	349.18	0.84	0.51	0.67
18620	86.38	104.29	94	11669.5	1320.32	2064.74	-307.92	2087.57	351.52	0.35	0.23	0.27
18715	85.71	102.25	95	11676.1	1229.92	2042.98	-215.69	2054.34	353.97	2.26	-0.71	-2.15
18809	86.19	102.30	94	11682.7	1140.99	2023.05	-124.06	2026.85	356.49	0.51	0.51	0.05
18904	86.36	102.48	95	11688.9	1051.02	2002.71	-31.47	2002.95	359.10	0.26	0.18	0.19
18998	86.16	102.90	94	11695.0	961.84	1982.10	60.04	1983.01	1.73	0.49	-0.21	0.45
19092	86.27	103.30	94	11701.2	872.46	1960.84	151.39	1966.68	4.41	0.44	0.12	0.43
19186	86.16	103.90	94	11707.4	782.84	1938.79	242.55	1953.90	7.13	0.65	-0.12	0.64
19280	86.75	102.81	94	11713.2	693.31	1917.12	333.84	1945.97	9.88	1.32	0.63	-1.16
19375	87.06	102.45	95	11718.3	603.15	1896.38	426.40	1943.72	12.67	0.50	0.33	-0.38
19469	87.39	103.18	94	11722.9	513.83	1875.55	517.95	1945.76	15.44	0.85	0.35	0.78
19564	87.31	103.45	95	11727.3	423.29	1853.70	610.30	1951.58	18.22	0.30	-0.08	0.28
19659	87.73	104.39	95	11731.4	332.44	1830.86	702.42	1960.98	20.99	1.08	0.44	0.99
19752	88.94	104.45	93	11734.1	243.23	1807.71	792.45	1973.78	23.67	1.30	1.30	0.06