

Minimum Radius of Curvature

API: 42-479-56063 **Well: Juan Salinas Ranch 1H** **Wellhead Location** **Lat: 27.958990**
Operator: Silverbow Resources **Area: Eagleford** **Long: -99.336697**
Rig: Cactus 161 **Type: U Lateral** **Magnetic Declination: 4.49**
TD: 19,819' **Plane of Proposal: 292.80**

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			
200	0.42	146.38	200	200.0	-0.61	-0.61	0.41	0.73	146.38	0.21	0.21	73.19
326	0.27	176.61	126	326.0	-1.13	-1.29	0.68	1.46	152.26	0.18	-0.12	23.99
514	0.20	227.33	188	514.0	-1.19	-1.96	0.46	2.01	166.65	0.11	-0.04	26.98
703	0.09	79.67	189	703.0	-1.17	-2.15	0.37	2.18	170.31	0.15	-0.06	-78.13
892	0.20	20.87	189	892.0	-1.29	-1.82	0.63	1.92	160.86	0.09	0.06	-31.11
1080	0.30	8.51	188	1080.0	-1.15	-1.02	0.82	1.31	141.30	0.06	0.05	-6.57
1269	0.69	319.07	189	1269.0	-0.01	0.32	0.15	0.36	24.59	0.29	0.21	164.32
1458	0.76	356.61	189	1458.0	1.56	2.44	-0.67	2.53	344.59	0.25	0.04	19.86
1646	1.07	341.17	188	1645.9	3.28	5.34	-1.31	5.50	346.21	0.21	0.16	-8.21
1835	1.35	330.52	189	1834.9	6.21	8.95	-2.98	9.43	341.60	0.19	0.15	-5.63
2024	1.16	333.12	189	2023.9	9.43	12.59	-4.94	13.53	338.59	0.10	-0.10	1.38
2211	1.87	333.46	187	2210.8	13.19	17.01	-7.16	18.46	337.19	0.38	0.38	0.18
2399	1.97	332.35	188	2398.7	18.01	22.62	-10.03	24.74	336.09	0.06	0.05	-0.59
2588	1.75	315.58	189	2587.6	23.17	27.56	-13.55	30.71	333.81	0.31	-0.12	-8.87
2778	1.74	294.18	190	2777.5	28.73	30.81	-18.22	35.79	329.41	0.34	-0.01	-11.26
2967	2.29	266.79	189	2966.4	35.00	31.78	-24.60	40.19	322.25	0.58	0.29	-14.49
3062	2.84	249.76	95	3061.3	38.42	30.85	-28.71	42.14	317.06	0.98	0.58	-17.93
3156	3.57	249.61	94	3155.1	42.26	29.03	-33.64	44.43	310.80	0.78	0.78	-0.16
3346	5.48	249.74	190	3344.5	53.20	23.83	-47.69	53.31	296.55	1.01	1.01	0.07
3534	5.20	253.88	188	3531.7	66.39	18.35	-64.30	66.87	285.93	0.25	-0.15	2.20
3572	5.25	253.66	38	3569.6	69.07	17.39	-67.62	69.82	284.42	0.14	0.13	-0.58
3718	4.85	252.01	146	3715.0	78.93	13.60	-79.90	81.05	279.66	0.29	-0.27	-1.13
3907	6.74	191.24	189	3903.2	82.76	0.24	-89.67	89.67	270.15	3.22	1.00	-32.15
4097	7.76	153.86	190	4091.8	70.85	-22.22	-86.19	89.01	255.54	2.49	0.54	-19.67
4286	6.71	151.71	189	4279.3	52.63	-43.40	-75.34	86.94	240.05	0.57	-0.56	-1.14
4474	5.92	147.12	188	4466.1	36.08	-61.21	-64.87	89.19	226.66	0.50	-0.42	-2.44
4664	5.32	149.26	190	4655.2	20.90	-77.01	-55.05	94.66	215.56	0.33	-0.32	1.13
4853	5.80	143.60	189	4843.3	5.65	-92.23	-44.90	102.58	205.96	0.39	0.25	-2.99
5041	5.71	143.11	188	5030.4	-10.58	-107.36	-33.65	112.51	197.40	0.05	-0.05	-0.26
5230	7.08	144.13	189	5218.2	-28.65	-124.32	-21.18	126.11	189.67	0.73	0.72	0.54
5420	6.34	143.44	190	5406.9	-47.68	-142.23	-8.07	142.46	183.25	0.39	-0.39	-0.36
5609	6.23	143.44	189	5594.8	-65.48	-158.85	4.25	158.91	178.47	0.06	-0.06	0.00
5798	6.56	148.61	189	5782.6	-83.06	-176.30	15.99	177.03	174.82	0.35	0.17	2.74
5988	5.14	143.25	190	5971.6	-99.20	-192.39	26.73	194.24	172.09	0.80	-0.75	-2.82
6177	2.11	144.06	189	6160.2	-109.47	-201.99	33.84	204.81	170.49	1.60	-1.60	0.43
6367	1.78	138.87	190	6350.1	-115.11	-207.05	37.84	210.48	169.64	0.20	-0.17	-2.73
6556	1.49	125.25	189	6539.0	-120.15	-210.68	41.77	214.78	168.78	0.26	-0.15	-7.21
6744	1.21	136.96	188	6726.9	-124.35	-213.54	45.12	218.25	168.07	0.21	-0.15	6.23
6933	0.72	161.29	189	6915.9	-126.96	-216.12	46.87	221.14	167.76	0.33	-0.26	12.87
7122	0.64	180.89	189	7104.9	-128.14	-218.30	47.23	223.35	167.79	0.13	-0.04	10.37
7312	0.54	221.35	190	7294.9	-128.25	-220.03	46.62	224.92	168.04	0.22	-0.05	21.29
7500	0.23	225.73	188	7482.9	-127.82	-220.96	45.77	225.65	168.30	0.17	-0.16	2.33
7689	0.28	293.74	189	7671.9	-127.21	-221.04	45.07	225.59	168.47	0.15	0.03	35.98
7878	0.17	281.06	189	7860.9	-126.47	-220.80	44.38	225.22	168.64	0.06	-0.06	-6.71
8067	0.24	313.26	189	8049.9	-125.83	-220.48	43.81	224.79	168.76	0.07	0.04	17.04
8257	0.54	320.87	190	8239.9	-124.66	-219.51	42.96	223.67	168.93	0.16	0.16	4.01
8447	0.48	320.91	190	8429.9	-123.17	-218.20	41.89	222.18	169.13	0.03	-0.03	0.02
8636	0.48	306.66	189	8618.9	-121.71	-217.11	40.76	220.90	169.37	0.06	0.00	-7.54
8826	0.52	294.10	190	8808.9	-120.07	-216.28	39.33	219.83	169.69	0.06	0.02	-6.61
9016	0.39	298.40	190	8998.9	-118.57	-215.62	37.98	218.94	170.01	0.07	-0.07	2.26
9205	0.51	272.48	189	9187.9	-117.14	-215.28	36.57	218.36	170.36	0.12	0.06	-13.71
9234	0.26	268.47	29	9216.9	-116.96	-215.28	36.37	218.33	170.41	0.87	-0.86	-13.83
9346	0.30	279.85	112	9328.9	-116.44	-215.23	35.83	218.20	170.55	0.06	0.04	10.16
9535	0.25	290.61	189	9517.9	-115.54	-215.00	34.96	217.83	170.76	0.04	-0.03	5.69
9724	0.53	253.93	189	9706.8	-114.45	-215.10	33.73	217.73	171.09	0.19	0.15	-19.41
9913	0.94	236.89	189	9895.8	-112.90	-216.19	31.59	218.49	171.69	0.24	0.22	-9.02
10102	0.95	243.94	189	10084.8	-111.00	-217.72	28.89	219.63	172.44	0.06	0.01	3.73

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						N-S Ft	E-W Ft	Distance FT	Direction Deg			
10291	0.62	249.47	189	10273.8	-109.23	-218.77	26.52	220.37	173.09	0.18	-0.17	2.93
10480	0.60	218.84	189	10462.8	-108.21	-219.90	24.94	221.31	173.53	0.17	-0.01	-16.21
10669	0.38	191.64	189	10651.8	-108.06	-221.29	24.20	222.60	173.76	0.17	-0.12	-14.39
10859	0.67	99.91	190	10841.8	-109.26	-222.09	25.16	223.52	173.54	0.41	0.15	-48.28
11048	0.45	72.16	189	11030.8	-110.90	-222.06	26.96	223.69	173.08	0.18	-0.12	-14.68
11237	0.20	130.64	189	11219.8	-111.78	-222.04	27.92	223.79	172.83	0.20	-0.13	30.94
11332	10.74	304.16	95	11314.2	-103.23	-217.17	20.70	218.15	174.56	11.51	11.09	182.65
11426	23.39	304.66	94	11403.9	-76.28	-201.57	-1.99	201.58	180.57	13.46	13.46	0.53
11521	29.31	292.80	95	11489.0	-34.50	-181.81	-39.00	185.94	192.11	8.31	6.23	-12.48
11615	35.43	294.16	94	11568.4	15.79	-161.72	-85.11	182.75	207.76	6.56	6.51	1.45
11710	39.76	296.12	95	11643.7	73.68	-137.06	-137.54	194.17	225.10	4.73	4.56	2.06
11805	46.27	296.80	95	11713.1	138.32	-108.18	-195.52	223.45	241.04	6.87	6.85	0.72
11899	52.64	296.04	94	11774.1	209.57	-76.44	-259.46	270.49	253.59	6.80	6.78	-0.81
11994	60.57	295.45	95	11826.4	288.72	-42.03	-330.85	333.51	262.76	8.36	8.35	-0.62
12089	66.07	295.48	95	11869.0	373.48	-5.55	-407.46	407.50	269.22	5.79	5.79	0.03
12184	72.02	296.19	95	11903.0	462.03	33.11	-487.27	488.40	273.89	6.30	6.26	0.75
12279	78.44	295.68	95	11927.2	553.70	73.26	-569.84	574.53	277.33	6.78	6.76	-0.54
12374	83.63	294.47	95	11942.0	647.44	113.01	-654.81	664.49	279.79	5.61	5.46	-1.27
12468	91.57	294.85	94	11945.9	741.23	152.16	-740.09	755.57	281.62	8.46	8.45	0.40
12563	92.13	294.60	95	11942.9	836.12	191.87	-826.34	848.32	283.07	0.65	0.59	-0.26
12658	91.88	294.39	95	11939.5	931.02	231.24	-912.73	941.57	284.22	0.34	-0.26	-0.22
12752	92.77	296.46	94	11935.7	1024.84	271.56	-997.55	1033.86	285.23	2.40	0.95	2.20
12847	94.09	298.61	95	11930.0	1119.34	315.39	-1081.64	1126.68	286.26	2.65	1.39	2.26
12942	92.91	296.69	95	11924.2	1213.82	359.39	-1165.63	1219.77	287.14	2.37	-1.24	-2.02
13036	92.55	298.13	94	11919.8	1307.41	402.62	-1248.98	1312.27	287.87	1.58	-0.38	1.53
13130	92.27	296.63	94	11915.8	1401.02	445.81	-1332.37	1404.97	288.50	1.62	-0.30	-1.60
13225	93.05	293.32	95	11911.4	1495.83	485.87	-1418.38	1499.29	288.91	3.58	0.82	-3.48
13319	90.78	290.92	94	11908.3	1589.76	521.24	-1505.40	1593.09	289.10	3.51	-2.41	-2.55
13414	90.84	291.09	95	11906.9	1684.71	555.29	-1594.08	1688.03	289.21	0.19	0.06	0.18
13509	91.06	290.18	95	11905.3	1779.62	588.76	-1682.97	1782.99	289.28	0.99	0.23	-0.96
13604	91.15	289.96	95	11903.5	1874.50	621.36	-1772.19	1877.96	289.32	0.25	0.09	-0.23
13698	91.09	289.07	94	11901.7	1968.33	652.75	-1860.77	1971.94	289.33	0.95	-0.06	-0.95
13793	91.06	289.36	95	11899.9	2063.12	684.01	-1950.46	2066.92	289.33	0.31	-0.03	0.31
13887	90.03	287.22	94	11899.0	2156.82	713.51	-2039.70	2160.90	289.28	2.53	-1.10	-2.28
13982	91.48	288.33	95	11897.7	2251.44	742.51	-2130.15	2255.85	289.22	1.92	1.53	1.17
14077	92.66	289.52	95	11894.3	2346.16	773.30	-2219.96	2350.79	289.21	1.76	1.24	1.25
14172	93.33	292.02	95	11889.4	2440.96	806.94	-2308.65	2445.61	289.27	2.72	0.71	2.63
14266	92.77	296.51	94	11884.3	2534.78	845.50	-2394.21	2539.11	289.45	4.81	-0.60	4.78
14361	93.89	297.40	95	11878.8	2629.36	888.49	-2478.74	2633.17	289.72	1.50	1.18	0.94
14455	88.77	307.71	94	11876.6	2721.82	938.98	-2557.81	2724.72	290.16	12.24	-5.45	10.97
14550	91.51	308.92	95	11876.4	2813.35	997.87	-2632.34	2815.13	290.76	3.15	2.88	1.27
14645	94.06	311.60	95	11871.8	2903.85	1059.18	-2704.74	2904.74	291.39	3.89	2.68	2.82
14740	95.24	316.93	95	11864.1	2991.94	1125.24	-2772.52	2992.17	292.09	5.73	1.24	5.61
14835	91.85	325.66	95	11858.2	3075.17	1199.16	-2831.74	3075.18	292.95	9.84	-3.57	9.19
14930	91.20	334.59	95	11855.7	3150.61	1281.43	-2878.99	3151.29	293.99	9.42	-0.68	9.40
15025	88.52	344.64	95	11855.9	3215.54	1370.35	-2912.04	3218.36	295.20	10.95	-2.82	10.58
15120	88.71	353.79	95	11858.2	3268.02	1463.55	-2929.79	3275.01	296.54	9.63	0.20	9.63
15215	93.03	3.04	95	11856.8	3307.19	1558.38	-2932.42	3320.79	297.99	10.74	4.55	-369.21
15309	91.85	13.08	94	11852.7	3331.05	1651.24	-2919.27	3353.91	299.49	10.74	-1.26	10.68
15404	90.76	21.69	95	11850.6	3340.00	1741.79	-2890.91	3375.09	301.07	9.13	-1.15	9.06
15498	90.11	32.03	94	11849.9	3333.35	1825.53	-2848.50	3383.27	302.65	11.02	-0.69	11.00
15593	90.00	42.92	95	11849.8	3309.32	1900.81	-2790.79	3376.63	304.26	11.46	-0.12	11.46
15688	90.87	52.12	95	11849.0	3269.64	1964.90	-2720.80	3356.13	305.84	9.73	0.92	9.68
15783	89.72	61.97	95	11848.6	3216.25	2016.51	-2641.19	3322.98	307.36	10.44	-1.21	10.37
15878	89.55	69.31	95	11849.2	3151.70	2055.67	-2554.71	3279.07	308.82	7.73	-0.18	7.73
15973	87.76	80.77	95	11851.4	3076.74	2080.15	-2463.11	3223.96	310.18	12.21	-1.88	12.06
16067	85.35	92.60	94	11857.1	2992.65	2085.58	-2369.61	3156.69	311.35	12.82	-2.56	12.59
16162	86.13	100.89	95	11864.1	2901.69	2074.46	-2275.62	3079.25	312.35	8.74	0.82	8.73

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16256	86.27	100.01	94	11870.4	2810.07	2057.44	-2183.38	3000.04	313.30	0.95	0.15	-0.94
16351	86.69	99.71	95	11876.2	2717.66	2041.21	-2089.96	2921.38	314.32	0.54	0.44	-0.32
16445	87.23	99.91	94	11881.2	2626.19	2025.21	-1997.46	2844.53	315.40	0.61	0.57	0.21
16539	87.68	99.58	94	11885.4	2534.71	2009.32	-1904.91	2768.76	316.53	0.59	0.48	-0.35
16634	88.29	98.41	95	11888.7	2442.51	1994.47	-1811.14	2694.10	317.76	1.39	0.64	-1.23
16729	88.82	98.29	95	11891.1	2350.55	1980.68	-1717.18	2621.41	319.08	0.57	0.56	-0.13
16823	89.33	98.87	94	11892.6	2259.44	1966.66	-1624.24	2550.67	320.45	0.82	0.54	0.62
16918	89.69	99.24	95	11893.4	2167.17	1951.71	-1530.43	2480.20	321.90	0.54	0.38	0.39
17013	87.84	101.46	95	11895.5	2074.43	1934.65	-1437.01	2409.95	323.40	3.04	-1.95	2.34
17107	87.00	102.07	94	11899.7	1982.26	1915.50	-1345.08	2340.59	324.92	1.10	-0.89	0.65
17202	87.25	102.73	95	11904.5	1888.94	1895.13	-1252.41	2271.57	326.54	0.74	0.26	0.69
17296	87.37	102.76	94	11908.9	1796.49	1874.41	-1160.83	2204.76	328.23	0.13	0.13	0.03
17391	87.93	104.19	95	11912.8	1702.83	1852.30	-1068.52	2138.40	330.02	1.62	0.59	1.51
17485	87.76	102.30	94	11916.3	1610.20	1830.78	-977.09	2075.20	331.91	2.02	-0.18	-2.01
17579	86.89	99.98	94	11920.7	1518.25	1812.63	-884.97	2017.13	333.98	2.63	-0.93	-2.47
17674	87.23	100.03	95	11925.6	1425.73	1796.15	-791.54	1962.83	336.22	0.36	0.36	0.05
17768	86.39	99.60	94	11930.8	1334.27	1780.15	-699.06	1912.49	338.56	1.00	-0.89	-0.46
17863	86.33	99.69	95	11936.8	1241.95	1764.27	-605.59	1865.31	341.06	0.11	-0.06	0.09
17958	86.38	99.93	95	11942.9	1149.57	1748.11	-512.17	1821.60	343.67	0.26	0.05	0.25
18053	86.27	99.21	95	11949.0	1057.28	1732.35	-418.69	1782.23	346.41	0.77	-0.12	-0.76
18147	86.24	99.37	94	11955.1	966.08	1717.21	-326.12	1747.90	349.25	0.17	-0.03	0.17
18241	86.30	99.50	94	11961.2	874.82	1701.83	-233.59	1717.79	352.18	0.15	0.06	0.14
18336	86.61	99.38	95	11967.1	782.57	1686.28	-140.05	1692.09	355.25	0.35	0.33	-0.13
18431	86.86	99.10	95	11972.5	690.37	1671.05	-46.44	1671.70	358.41	0.39	0.26	-0.29
18525	87.37	99.23	94	11977.2	599.13	1656.10	46.25	1656.75	1.60	0.56	0.54	0.14
18620	87.51	99.50	95	11981.5	506.82	1640.66	139.89	1646.61	4.87	0.32	0.15	0.28
18714	87.65	100.39	94	11985.4	415.26	1624.44	232.39	1640.98	8.14	0.96	0.15	0.95
18809	87.56	99.51	95	11989.4	322.72	1608.04	325.88	1640.73	11.46	0.93	-0.09	-0.93
18903	87.42	98.83	94	11993.5	231.46	1593.07	418.59	1647.15	14.72	0.74	-0.15	-0.72
18998	87.34	98.40	95	11997.9	139.45	1578.86	512.42	1659.93	17.98	0.46	-0.08	-0.45
19092	87.87	96.79	94	12001.8	48.83	1566.44	605.51	1679.40	21.13	1.80	0.56	-1.71
19186	87.81	94.96	94	12005.3	-41.04	1556.83	698.94	1706.53	24.18	1.95	-0.06	-1.95
19280	86.92	97.66	94	12009.7	-131.06	1546.51	792.27	1737.64	27.13	3.02	-0.95	2.87
19374	87.87	95.78	94	12013.9	-221.29	1535.52	885.52	1772.56	29.97	2.24	1.01	-2.00
19469	87.28	98.13	95	12018.0	-312.59	1524.03	979.73	1811.78	32.74	2.55	-0.62	2.47
19564	89.50	101.01	95	12020.6	-405.02	1508.24	1073.35	1851.19	35.44	3.83	2.34	3.03
19658	89.75	100.17	94	12021.2	-496.89	1490.97	1165.75	1892.61	38.02	0.93	0.27	-0.89
19749	90.20	100.52	91	12021.3	-585.75	1474.63	1255.27	1936.55	40.41	0.63	0.49	0.38
19819	90.20	100.52	70	12021.0	-654.14	1461.85	1324.09	1972.36	42.17	0.00	0.00	0.00