Minimum Radius of Curvature

API:	42-283-36918	**Well:**	Jea Unit L LAS L3H	**Wellhead Location**	**Lat:** 28.489172
Operator:	Chesapeake	**Area:**	Eagleford		**Long:** -99.125986
Rig:	Patterson 585	**Type:**	U-Lateral		**Magnetic Declination:** 4.23
TD:	19,974'				**Plane of Proposal:** 300.00

Measured Depth Ft	Drift Angle Deg	Azimuth Direction Deg	Course Length Ft	TVD Ft	Vertical Section Ft	COORDINATES N-S Ft	COORDINATES E-W Ft	CLOSURE Distance FT	CLOSURE Direction Deg	Dog Leg Severity Deg/100'	Build / Drop Deg/100'	Left / Right Deg/100'
0.00	0.00	0.00		0.0	0.00	0.00	0.00	0.00	0.00			
103	0.24	192.52	103	102.9	-100.15	-0.21	-0.05	0.22	192.52	0.23	0.23	187.09
201	0.41	196.25	98	201.3	-100.30	-0.75	-0.19	0.77	194.22	0.17	0.17	3.79
310	0.48	188.05	109	309.9	-100.56	-1.57	-0.36	1.61	192.97	0.09	0.06	-7.55
405	0.45	181.01	95	404.9	-100.89	-2.34	-0.42	2.38	190.29	0.07	-0.03	-7.41
513	0.45	179.88	109	513.4	-101.31	-3.19	-0.43	3.22	187.69	0.01	0.00	-1.04
608	0.44	179.11	94	607.6	-101.68	-3.92	-0.42	3.95	186.18	0.01	-0.01	-0.82
702	0.42	181.53	94	701.6	-102.03	-4.63	-0.43	4.65	185.29	0.03	-0.02	2.57
809	0.34	176.30	107	809.0	-102.40	-5.34	-0.42	5.36	184.48	0.08	-0.07	-4.87
904	0.35	180.65	95	904.0	-102.70	-5.91	-0.40	5.93	183.90	0.03	0.01	4.58
1013	0.31	181.29	109	1012.5	-103.00	-6.54	-0.41	6.55	183.62	0.04	-0.04	0.59
1108	0.28	183.93	95	1107.5	-103.23	-7.03	-0.44	7.04	183.55	0.03	-0.03	2.78
1203	0.24	176.58	95	1202.5	-103.44	-7.46	-0.44	7.47	183.37	0.05	-0.04	-7.74
1311	0.24	167.23	109	1311.4	-103.72	-7.91	-0.38	7.91	182.72	0.04	0.00	-8.59
1407	0.28	165.57	95	1406.8	-104.02	-8.33	-0.27	8.33	181.88	0.04	0.04	-1.74
1501	0.25	179.47	95	1501.4	-104.28	-8.76	-0.21	8.76	181.40	0.07	-0.03	14.70
1611	0.14	206.85	109	1610.7	-104.41	-9.11	-0.27	9.12	181.71	0.13	-0.10	25.05
1706	0.10	219.06	95	1705.7	-104.41	-9.28	-0.38	9.29	182.32	0.05	-0.04	12.85
1800	0.14	194.11	95	1800.3	-104.42	-9.46	-0.46	9.47	182.76	0.07	0.04	-26.38
1908	0.12	192.31	108	1908.3	-104.49	-9.70	-0.51	9.71	183.03	0.02	-0.02	-1.67
2003	0.12	221.20	95	2003.3	-104.51	-9.87	-0.60	9.89	183.48	0.06	0.00	30.41
2112	0.13	222.77	109	2111.8	-104.46	-10.04	-0.76	10.07	184.32	0.01	0.01	1.45
2207	0.16	227.25	95	2206.8	-104.39	-10.21	-0.93	10.26	185.20	0.03	0.03	4.72
2302	0.18	245.69	95	2301.8	-104.27	-10.37	-1.16	10.43	186.40	0.06	0.02	19.41
2411	0.21	274.19	109	2411.3	-103.99	-10.42	-1.52	10.53	188.29	0.09	0.03	26.04
2506	0.27	273.80	94	2505.5	-103.63	-10.39	-1.91	10.57	190.43	0.06	0.06	-0.41
2613	0.35	288.07	107	2613.0	-103.08	-10.28	-2.48	10.57	193.56	0.10	0.07	13.28
2708	0.45	289.51	95	2708.0	-102.43	-10.06	-3.10	10.53	197.15	0.11	0.11	1.52
2803	0.43	299.14	95	2803.0	-101.71	-9.76	-3.77	10.46	201.10	0.08	-0.02	10.14
2910	0.44	290.72	107	2910.4	-100.90	-9.42	-4.51	10.44	205.56	0.06	0.01	-7.84
3004	0.47	291.10	94	3004.4	-100.16	-9.15	-5.20	10.53	209.61	0.03	0.03	0.40
3112	0.46	297.45	108	3112.1	-99.29	-8.80	-6.00	10.65	214.30	0.05	-0.01	5.90
3207	0.46	298.03	95	3207.1	-98.53	-8.44	-6.67	10.76	218.33	0.00	0.00	0.61
3302	0.53	293.48	95	3302.1	-97.71	-8.09	-7.41	10.97	222.51	0.08	0.07	-4.79
3411	0.52	295.98	109	3410.7	-96.72	-7.67	-8.32	11.31	227.32	0.02	-0.01	2.30
3506	0.49	295.13	95	3505.6	-95.89	-7.31	-9.07	11.65	231.14	0.03	-0.03	-0.89
3600	0.50	292.54	95	3600.2	-95.08	-6.98	-9.82	12.05	234.60	0.03	0.01	-2.74
3707	0.95	279.86	107	3706.9	-93.78	-6.65	-11.12	12.96	239.13	0.45	0.42	-11.88
3806	0.28	320.07	99	3806.2	-92.78	-6.32	-12.09	13.64	242.39	0.76	-0.67	40.50
3901	0.32	292.76	95	3901.2	-92.30	-6.04	-12.48	13.87	244.17	0.15	0.04	-28.75
4004	0.31	260.11	103	4003.9	-91.80	-5.98	-13.02	14.33	245.34	0.17	-0.01	-31.79
4104	0.33	260.83	100	4103.5	-91.37	-6.07	-13.57	14.86	245.90	0.02	0.02	0.72
4208	0.42	287.91	105	4208.2	-90.77	-6.00	-14.23	15.44	247.14	0.19	0.09	25.87
4303	0.45	306.38	95	4303.2	-90.05	-5.67	-14.86	15.91	249.11	0.15	0.03	19.44
4412	0.52	209.37	109	4411.8	-89.64	-5.85	-15.45	16.52	249.26	0.67	0.06	-89.35
4507	0.54	294.83	95	4506.8	-89.20	-6.04	-16.07	17.16	249.41	0.76	0.02	89.96
4601	0.56	290.22	94	4601.0	-88.30	-5.69	-16.90	17.83	251.39	0.05	0.02	-4.89
4709	0.59	289.74	107	4708.5	-87.24	-5.32	-17.91	18.69	253.45	0.03	0.03	-0.45
4803	0.05	220.61	95	4803.3	-86.75	-5.19	-18.40	19.12	254.25	0.61	-0.57	-72.88
4911	1.00	130.71	108	4910.9	-87.66	-5.84	-17.72	18.66	251.77	0.93	0.88	-83.57
5006	1.28	90.42	95	5005.9	-89.40	-6.38	-16.03	17.26	248.28	0.87	0.29	-42.41
5100	1.75	78.03	94	5099.8	-91.38	-6.09	-13.58	14.88	245.82	0.61	0.50	-13.18
5209	1.75	76.80	109	5208.4	-93.82	-5.37	-10.34	11.65	242.55	0.03	0.00	-1.13
5304	1.50	84.02	95	5303.3	-95.88	-4.91	-7.69	9.13	237.44	0.34	-0.26	7.60
5412	1.24	93.31	108	5411.3	-98.07	-4.83	-5.12	7.04	226.65	0.32	-0.24	8.60
5505	1.18	94.23	94	5504.8	-99.85	-4.96	-3.15	5.88	212.39	0.07	-0.06	0.98
5600	1.14	92.04	95	5599.8	-101.56	-5.07	-1.23	5.21	193.62	0.06	-0.04	-2.31
5708	0.93	89.41	108	5707.9	-103.27	-5.10	0.73	5.15	171.90	0.20	-0.19	-2.43

Minimum Radius of Curvature

API:	42-283-36918	**Well:**	Jea Unit L LAS L3H	**Wellhead Location**	**Lat:** 28.489172
Operator:	Chesapeake	**Area:**	Eagleford		**Long:** -99.125986
Rig:	Patterson 585	**Type:**	U-Lateral	**Magnetic Declination:**	4.23
TD:	19,974'			**Plane of Proposal:**	300.00

Measured Depth Ft	Drift Angle Deg	Azimuth Direction Deg	Course Length Ft	TVD Ft	Vertical Section Ft	COORDINATES N-S Ft	COORDINATES E-W Ft	CLOSURE Distance FT	CLOSURE Direction Deg	Dog Leg Severity Deg/100'	Build / Drop Deg/100'	Left / Right Deg/100'
5803	0.80	91.64	94	5802.4	-104.51	-5.11	2.15	5.54	157.17	0.14	-0.14	2.36
5911	0.62	95.03	109	5910.9	-105.71	-5.18	3.49	6.25	146.01	0.17	-0.17	3.12
6006	0.43	101.35	95	6005.9	-106.51	-5.30	4.35	6.86	140.57	0.21	-0.20	6.65
6101	0.30	118.66	95	6100.9	-107.10	-5.49	4.92	7.37	138.10	0.18	-0.14	18.22
6210	0.12	146.72	109	6209.5	-107.48	-5.72	5.23	7.75	137.52	0.19	-0.17	25.85
6304	0.09	205.31	94	6303.8	-107.58	-5.87	5.26	7.88	138.14	0.11	-0.03	62.14
6412	0.43	229.18	108	6412.1	-107.45	-6.21	4.91	7.92	141.65	0.32	0.31	22.04
6507	0.57	47.83	95	6507.1	-107.48	-6.12	4.99	7.90	140.81	1.05	0.15	-190.89
6602	1.00	88.42	95	6602.1	-108.33	-5.78	6.17	8.46	133.14	0.71	0.45	42.73
6710	2.29	98.41	108	6709.6	-111.13	-6.07	9.24	11.05	123.32	1.22	1.20	9.29
6804	3.63	94.30	94	6803.4	-115.55	-6.57	14.06	15.52	115.05	1.44	1.43	-4.37
6913	4.74	91.11	109	6911.7	-122.58	-6.92	21.97	23.04	107.47	1.04	1.02	-2.94
7008	6.19	87.15	95	7006.3	-130.32	-6.74	31.01	31.74	102.25	1.58	1.53	-4.17
7102	5.93	88.37	95	7100.6	-138.79	-6.34	41.02	41.51	98.79	0.31	-0.27	1.29
7210	5.20	89.77	108	7207.8	-147.74	-6.17	51.46	51.83	96.83	0.69	-0.68	1.30
7305	4.77	91.07	95	7302.5	-154.92	-6.22	59.72	60.04	95.95	0.47	-0.45	1.37
7413	6.85	89.59	108	7410.1	-164.42	-6.26	70.66	70.94	95.06	1.93	1.92	-1.37
7508	6.39	87.13	94	7503.8	-173.69	-5.96	81.54	81.76	94.18	0.57	-0.49	-2.61
7603	5.77	82.91	95	7598.3	-181.94	-5.10	91.56	91.70	93.19	0.80	-0.65	-4.44
7711	5.30	77.34	109	7706.4	-189.98	-3.33	101.87	101.93	91.87	0.66	-0.43	-5.13
7806	5.99	81.49	95	7800.9	-197.08	-1.63	111.05	111.07	90.84	0.84	0.73	4.37
7901	5.49	79.66	95	7895.4	-204.43	-0.08	120.43	120.43	90.04	0.56	-0.53	-1.93
8010	5.16	79.80	109	8003.5	-212.11	1.71	130.34	130.35	89.25	0.30	-0.30	0.13
8105	5.05	92.55	95	8098.2	-219.09	2.28	138.72	138.74	89.06	1.20	-0.12	13.42
8213	3.00	95.19	109	8206.5	-225.91	1.81	146.33	146.34	89.29	1.90	-1.89	2.43
8308	3.84	312.98	95	8301.4	-225.06	3.76	146.48	146.52	88.53	6.82	0.88	229.25
8403	10.05	304.34	95	8395.7	-213.69	10.61	137.30	137.70	85.58	6.61	6.54	-9.09
8513	15.42	305.70	110	8502.5	-189.64	24.51	117.56	120.09	78.22	4.91	4.90	1.24
8608	20.48	303.46	95	8592.8	-160.47	41.06	93.42	102.04	66.27	5.37	5.33	-2.36
8703	27.02	302.96	95	8679.7	-122.28	61.98	61.41	87.26	44.74	6.89	6.88	-0.53
8811	34.70	304.69	108	8772.8	-66.84	93.00	15.30	94.25	9.34	7.13	7.08	1.60
8905	41.29	305.32	94	8846.8	-9.23	126.19	-32.06	130.20	345.75	7.02	7.01	0.67
9013	52.25	306.10	108	8920.5	68.73	171.97	-95.65	196.78	330.92	10.19	10.18	0.72
9108	65.45	304.72	95	8969.5	149.50	218.91	-161.81	272.22	323.53	13.95	13.89	-1.45
9203	73.79	304.32	95	9002.7	238.47	269.48	-235.35	357.78	318.87	8.76	8.75	-0.42
9312	86.22	300.37	109	9021.5	345.35	326.66	-325.76	461.33	315.08	11.96	11.42	-3.63
9407	90.64	299.12	94	9024.1	439.71	373.47	-407.69	552.89	312.49	4.86	4.68	-1.32
9502	89.20	299.83	95	9024.2	534.71	420.21	-490.39	645.80	310.59	1.69	-1.52	0.75
9610	88.63	298.92	109	9026.3	643.26	473.46	-584.99	752.58	308.99	0.99	-0.52	-0.84
9705	89.62	296.86	95	9027.7	738.18	517.89	-668.94	845.99	307.75	2.41	1.04	-2.17
9813	89.05	297.77	108	9029.0	845.90	567.38	-764.76	952.25	306.57	1.00	-0.53	0.84
9908	89.95	299.07	95	9029.8	940.58	612.46	-848.06	1046.09	305.84	1.67	0.95	1.37
10002	91.04	299.03	94	9029.0	1034.70	658.17	-930.35	1139.62	305.28	1.16	1.16	-0.04
10111	90.35	298.20	109	9027.7	1143.95	710.50	-1026.28	1248.23	304.70	0.99	-0.63	-0.76
10206	89.87	297.32	95	9027.5	1239.01	754.82	-1110.47	1342.72	304.20	1.05	-0.50	-0.92
10301	89.14	297.48	95	9028.3	1333.91	798.53	-1194.81	1437.09	303.76	0.79	-0.77	0.17
10410	89.26	298.61	109	9029.8	1442.41	849.57	-1290.62	1545.15	303.36	1.05	0.11	1.04
10505	90.10	300.29	95	9030.4	1537.40	896.28	-1373.34	1639.93	303.13	1.98	0.88	1.77
10600	91.46	300.46	95	9029.1	1632.38	944.31	-1455.29	1734.82	302.98	1.44	1.43	0.18
10708	91.46	301.17	108	9026.3	1739.91	999.40	-1547.64	1842.28	302.85	0.66	0.00	0.66
10803	93.29	300.45	95	9022.4	1834.95	1048.08	-1629.28	1937.28	302.75	2.07	1.92	-0.76
10912	92.41	300.59	109	9017.0	1944.24	1103.59	-1723.43	2046.49	302.63	0.81	-0.80	0.13
11007	91.63	300.08	95	9013.6	2039.18	1151.54	-1805.37	2141.36	302.53	0.98	-0.82	-0.54
11102	91.13	299.87	95	9011.3	2134.15	1198.99	-1887.64	2236.24	302.42	0.57	-0.53	-0.22
11211	94.04	300.28	109	9006.4	2242.60	1253.33	-1981.49	2344.60	302.31	2.71	2.68	0.38
11306	93.15	299.24	95	9000.5	2337.41	1300.39	-2063.80	2439.32	302.21	1.44	-0.94	-1.09
11401	92.44	298.75	95	8995.8	2432.28	1346.39	-2146.79	2534.06	302.09	0.91	-0.75	-0.52
11510	91.61	298.20	109	8992.0	2541.32	1398.39	-2242.67	2642.93	301.95	0.91	-0.76	-0.50

Minimum Radius of Curvature

API:	42-283-36918	**Well:**	Jea Unit L LAS L3H	**Wellhead Location**	**Lat:** 28.489172
Operator:	Chesapeake	**Area:**	Eagleford		**Long:** -99.125986
Rig:	Patterson 585	**Type:**	U-Lateral		**Magnetic Declination:** 4.23
TD:	19,974'				**Plane of Proposal:** 300.00

Measured Depth Ft	Drift Angle Deg	Azimuth Direction Deg	Course Length Ft	TVD Ft	Vertical Section Ft	COORDINATES N-S Ft	COORDINATES E-W Ft	CLOSURE Distance FT	CLOSURE Direction Deg	Dog Leg Severity Deg/100'	Build / Drop Deg/100'	Left / Right Deg/100'
11605	91.14	297.15	95	8989.7	2636.64	1442.70	-2327.16	2738.08	301.80	1.21	-0.49	-1.10
11713	90.66	298.42	108	8988.0	2744.40	1492.97	-2422.56	2845.66	301.64	1.26	-0.45	1.18
11806	91.75	301.70	93	8986.0	2837.65	1539.68	-2503.28	2938.88	301.59	3.70	1.17	3.52
11901	91.12	300.66	94	8983.7	2932.03	1588.56	-2584.04	3033.28	301.58	1.29	-0.67	-1.10
12010	90.29	299.89	109	8982.3	3041.45	1643.72	-2678.53	3142.67	301.54	1.03	-0.76	-0.70
12105	90.43	300.13	95	8981.7	3136.59	1691.30	-2760.92	3237.77	301.49	0.29	0.15	0.25
12200	92.67	300.39	95	8979.2	3231.55	1739.16	-2842.94	3332.71	301.46	2.37	2.36	0.27
12309	91.92	296.57	109	8974.8	3339.97	1790.88	-2938.28	3441.03	301.36	3.58	-0.69	-3.52
12404	91.67	295.62	95	8971.8	3434.70	1832.64	-3023.55	3535.59	301.22	1.03	-0.26	-1.00
12513	92.76	299.65	109	8967.6	3543.21	1883.01	-3119.77	3643.99	301.11	3.84	1.00	3.71
12609	91.81	296.30	96	8963.8	3638.92	1927.94	-3204.34	3739.62	301.03	3.63	-0.99	-3.49
12704	92.13	300.37	95	8960.5	3733.81	1972.99	-3287.89	3834.44	300.97	4.29	0.34	4.28
12812	91.77	303.60	109	8956.8	3842.23	2030.46	-3379.92	3942.92	301.00	2.99	-0.33	2.98
12907	91.03	301.87	95	8954.5	3937.09	2081.81	-3459.80	4037.84	301.04	1.98	-0.78	-1.82
13002	93.07	300.77	95	8951.1	4031.72	2131.02	-3540.66	4132.49	301.04	2.45	2.15	-1.16
13110	91.87	298.75	108	8946.5	4139.46	2184.49	-3634.19	4240.21	301.01	2.18	-1.11	-1.87
13205	90.59	296.04	95	8944.4	4234.33	2228.19	-3718.51	4334.99	300.93	3.15	-1.35	-2.85
13302	91.04	294.90	97	8943.1	4330.98	2269.88	-3806.04	4431.51	300.81	1.26	0.46	-1.18
13407	95.11	284.95	106	8937.4	4434.71	2305.80	-3905.08	4535.01	300.56	10.16	3.85	-9.42
13502	94.31	277.99	95	8929.6	4524.42	2324.61	-3997.81	4624.53	300.18	7.35	-0.84	-7.33
13608	92.29	268.79	106	8923.5	4618.63	2330.84	-4103.00	4718.83	299.60	8.90	-1.91	-8.71
13703	89.90	263.86	95	8921.7	4697.64	2324.75	-4197.75	4798.50	298.98	5.77	-2.52	-5.19
13809	89.19	254.90	106	8922.5	4778.27	2305.17	-4302.15	4880.81	298.18	8.45	-0.67	-8.43
13905	92.60	247.17	95	8921.0	4840.80	2274.22	-4392.22	4946.08	297.37	8.86	3.58	-8.11
14010	94.44	238.85	106	8914.5	4898.20	2226.41	-4486.11	5008.21	296.39	8.05	1.74	-7.87
14105	89.18	229.44	95	8911.5	4936.98	2170.87	-4562.95	5053.04	295.44	11.34	-5.54	-9.91
14201	89.15	220.95	95	8912.9	4961.94	2103.75	-4630.53	5086.02	294.43	8.90	-0.03	-8.90
14306	88.90	216.08	105	8914.7	4977.53	2021.37	-4696.09	5112.65	293.29	4.63	-0.24	-4.62
14401	88.22	207.36	95	8917.1	4980.38	1940.67	-4745.97	5127.42	292.24	9.20	-0.72	-9.18
14507	91.20	201.15	106	8917.6	4969.74	1843.78	-4789.63	5132.26	291.05	6.48	2.80	-5.84
14602	88.35	191.87	95	8918.0	4947.61	1752.81	-4816.59	5125.61	290.00	10.22	-3.00	-9.77
14702	86.90	182.85	100	8922.1	4909.32	1654.15	-4829.34	5104.78	288.91	9.16	-1.45	-9.05
14802	86.32	173.71	100	8928.0	4857.06	1554.81	-4826.36	5070.62	287.86	9.17	-0.58	-9.17
14907	86.86	164.43	105	8934.3	4788.25	1451.69	-4806.44	5020.88	286.81	8.81	0.51	-8.81
15002	88.04	156.98	95	8938.6	4716.36	1362.18	-4775.10	4965.59	285.92	7.93	1.24	-7.84
15108	88.71	146.63	106	8941.6	4626.15	1268.63	-4724.95	4892.30	285.03	9.75	0.63	-9.73
15203	88.74	139.02	95	8943.7	4538.68	1193.01	-4667.60	4817.65	284.34	8.01	0.03	-8.01
15308	88.64	133.99	104	8946.1	4438.70	1117.36	-4595.83	4729.71	283.66	4.82	-0.10	-4.82
15407	88.35	126.05	100	8948.7	4340.80	1053.43	-4519.70	4640.84	283.12	7.98	-0.29	-7.98
15513	88.51	122.16	106	8951.6	4235.47	994.22	-4432.26	4542.40	282.64	3.68	0.15	-3.68
15608	88.04	121.82	95	8954.5	4140.57	943.92	-4351.72	4452.91	282.24	0.61	-0.49	-0.36
15703	87.06	119.57	95	8958.5	4045.67	895.47	-4270.11	4362.99	281.84	2.58	-1.03	-2.37
15812	87.26	119.72	109	8963.9	3936.38	841.41	-4175.12	4259.06	281.39	0.23	0.18	0.14
15907	87.20	119.39	95	8968.5	3841.35	794.53	-4092.46	4168.87	280.99	0.35	-0.06	-0.35
16002	88.88	118.77	95	8971.8	3746.42	748.39	-4009.49	4078.73	280.57	1.88	1.77	-0.65
16111	88.86	118.14	109	8973.9	3637.91	696.67	-3914.05	3975.57	280.09	0.58	-0.02	-0.58
16206	88.99	118.15	95	8975.7	3542.98	651.87	-3830.30	3885.37	279.66	0.14	0.14	0.01
16301	88.84	117.46	95	8977.5	3448.07	607.56	-3746.28	3795.23	279.21	0.74	-0.16	-0.73
16409	89.18	117.89	108	8979.4	3339.74	557.21	-3650.27	3692.56	278.68	0.51	0.31	0.40
16504	88.84	117.46	94	8981.0	3245.69	513.49	-3566.92	3603.69	278.19	0.58	-0.36	-0.46
16612	85.99	118.03	109	8985.9	3137.33	463.00	-3470.94	3501.68	277.60	2.68	-2.63	0.53
16707	87.19	122.07	95	8991.6	3042.52	415.53	-3388.87	3414.25	276.99	4.43	1.26	4.25
16802	86.21	120.81	95	8997.0	2947.71	366.06	-3307.95	3328.15	276.31	1.68	-1.03	-1.33
16910	87.76	119.87	108	9002.7	2839.72	311.51	-3214.75	3229.81	275.53	1.68	1.43	-0.87
17005	86.71	118.89	94	9007.3	2745.41	265.24	-3132.57	3143.78	274.84	1.52	-1.11	-1.04
17113	88.57	119.31	109	9011.7	2636.95	212.48	-3037.78	3045.20	274.00	1.76	1.71	0.39
17208	89.74	118.82	95	9013.1	2541.97	166.33	-2954.76	2959.43	273.22	1.34	1.23	-0.52
17304	88.86	117.97	96	9014.3	2446.45	120.89	-2870.69	2873.24	272.41	1.28	-0.92	-0.89

Minimum Radius of Curvature

API: 42-283-36918 **Well:** Jea Unit L LAS L3H **Wellhead Location** **Lat:** 28.489172
Operator: Chesapeake **Area:** Eagleford **Long:** -99.125986
Rig: Patterson 585 **Type:** U-Lateral **Magnetic Declination:** 4.23
TD: 19,974' **Plane of Proposal:** 300.00

Measured Depth Ft	Drift Angle Deg	Azimuth Direction Deg	Course Length Ft	TVD Ft	Vertical Section Ft	COORDINATES N-S Ft	COORDINATES E-W Ft	CLOSURE Distance FT	CLOSURE Direction Deg	Dog Leg Severity Deg/100'	Build / Drop Deg/100'	Left / Right Deg/100'
17413	89.16	118.17	109	9016.2	2337.53	69.61	-2774.53	2775.40	271.44	0.33	0.28	0.18
17507	89.90	120.41	94	9017.0	2243.26	23.49	-2692.31	2692.41	270.50	2.50	0.78	2.38
17601	89.86	120.21	94	9017.2	2149.26	-23.95	-2611.16	2611.27	269.47	0.22	-0.04	-0.21
17709	88.70	120.90	108	9018.5	2040.99	-79.00	-2517.92	2519.15	268.20	1.25	-1.07	0.64
17804	88.70	120.31	95	9020.7	1946.02	-127.35	-2436.17	2439.50	267.01	0.62	0.00	-0.62
17913	89.21	119.77	109	9022.7	1837.47	-181.69	-2342.20	2349.24	265.56	0.68	0.47	-0.50
18007	88.19	118.95	94	9024.8	1743.50	-227.77	-2260.30	2271.74	264.25	1.39	-1.09	-0.87
18102	87.89	118.95	95	9028.0	1648.57	-273.72	-2177.22	2194.36	262.83	0.32	-0.32	0.00
18211	88.08	118.96	109	9031.9	1540.09	-326.25	-2082.28	2107.68	261.10	0.18	0.18	0.01
18306	89.40	119.98	95	9033.9	1445.12	-372.98	-1999.59	2034.08	259.43	1.76	1.39	1.07
18401	89.68	120.06	95	9034.7	1350.12	-420.50	-1917.34	1962.91	257.63	0.31	0.29	0.08
18509	89.67	119.76	109	9035.3	1241.55	-474.64	-1823.23	1884.00	255.41	0.28	-0.01	-0.28
18604	89.25	119.56	95	9036.2	1146.56	-521.65	-1740.68	1817.17	253.32	0.49	-0.44	-0.21
18713	87.98	118.50	109	9038.8	1038.04	-574.32	-1645.78	1743.11	250.76	1.52	-1.17	-0.98
18808	88.66	121.47	95	9041.6	943.09	-621.77	-1563.54	1682.64	248.31	3.21	0.72	3.13
18903	90.35	121.23	95	9042.5	848.13	-671.19	-1482.42	1627.29	245.64	1.80	1.78	-0.25
19011	90.20	120.73	108	9041.9	740.14	-726.78	-1389.83	1568.38	242.39	0.48	-0.14	-0.46
19105	89.53	119.81	94	9042.2	646.15	-774.17	-1308.64	1520.49	239.39	1.21	-0.71	-0.98
19212	87.98	118.03	107	9044.5	538.77	-826.10	-1214.64	1468.94	235.78	2.20	-1.44	-1.66
19308	87.77	118.17	95	9048.0	443.46	-871.02	-1130.52	1427.14	232.39	0.26	-0.22	0.15
19403	90.20	119.89	95	9049.7	348.21	-917.25	-1047.22	1392.13	228.79	3.12	2.55	1.81
19511	90.10	119.13	109	9049.4	239.64	-970.73	-952.74	1360.15	224.46	0.71	-0.09	-0.70
19606	89.89	118.83	94	9049.4	145.52	-1016.34	-870.38	1338.10	220.58	0.39	-0.22	-0.32
19700	89.25	117.59	95	9050.2	50.71	-1061.18	-786.80	1321.04	216.55	1.47	-0.67	-1.31
19810	89.79	119.74	110	9051.1	-58.82	-1113.73	-690.66	1310.50	211.80	2.02	0.49	1.96
19905	89.27	118.65	95	9051.8	-153.81	-1160.07	-607.74	1309.62	207.65	1.27	-0.55	-1.15
19974	89.15	118.49	69	9052.8	-222.78	-1193.06	-547.15	1312.54	204.64	0.29	-0.17	-0.23