

Chisholm Salt Draw 10 State Com WCA 3H MWD 0' to 14061' Survey

Geodetic Report

(Def Survey)



Report Date: May 20, 2019 - 12:42 PM
 Client: Chisholm Energy
 Field: NM Eddy County (NAD 83)
 Structure / Slot: Chisholm Salt Draw 10 State Com WCA 3H / Chisholm Salt Draw 10
 Well: State Com WCA 3H
 Borehole: Chisholm Salt Draw 10 State Com WCA 3H
 UWI / API#: Unknown / Unknown
 Survey Name: Chisholm Salt Draw 10 State Com WCA 3H MWD 0' to 14061'
 Survey Date: April 22, 2019
 Tort / AHD / DOI / ERD Ratio: 254.855' / 5629.977' / 8.321' / 0.585
 Coordinate Reference System: NAD83 New Mexico State Plane, Eastern Zone, US Feet
 Location Lat / Long: N 32° 9' 4.09139", W 104° 4' 14.62832"
 Location Grid N/E Y/X: N 418817.930 RUS, E 622607.682 RUS
 CRS Grid Convergence Angle: 0.1397°
 Grid Scale Factor: 0.99991666
 Version / Patch: 2.10.760.0

Survey / DLS Computation: Minimum Curvature / Lubinski
 Vertical Section Azimuth: 178.830° (Grid North)
 Vertical Section Origin: 0.000 ft, 0.000 ft
 TVD Reference Datum: RKB = 32ft (JDC 12)
 TVD Reference Elevation: 3009.700 ft above MSL
 Seabed / Ground Elevation: 2977.700 ft above MSL
 Magnetic Declination: 7.071°
 Total Gravity Field Strength: 998.4559mgn (8.80655 Based)
 Gravity Model: GARM
 Total Magnetic Field Strength: 47885.868 nT
 Magnetic Dip Angle: 59.864°
 Declination Date: April 22, 2019
 Magnetic Declination Model: HDGM 2019
 North Reference: Grid North
 Grid Convergence Used: 0.1397°
 Total Corr Mag North->Grid: 6.9312°
 North: Well Head
 Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northing (RUS)	Easting (RUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")	Closure (ft)	Closure Azimuth (°)
SHL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	418817.93	622607.68	N 32° 9' 4.09 W 104° 4' 14.63		0.00	0.00
Begin SLB	117.00	0.56	239.34	117.00	0.29	-0.29	-0.49	0.48	418817.84	622607.19	N 32° 9' 4.09 W 104° 4' 14.63		0.57	239.34
MWD Survey	127.00	0.88	238.97	176.89	0.82	-0.62	-1.05	0.20	418817.31	622606.83	N 32° 9' 4.09 W 104° 4' 14.64		1.22	239.23
	237.00	1.24	233.48	236.98	1.18	-1.19	-1.88	0.94	418816.74	622605.81	N 32° 9' 4.08 W 104° 4' 14.65		2.22	237.51
	297.00	1.52	236.81	296.97	1.73	-1.75	-2.95	0.89	418816.18	622604.73	N 32° 9' 4.07 W 104° 4' 14.68		3.43	239.29
	375.00	1.81	249.59	374.95	2.32	-2.35	-4.69	0.66	418815.58	622602.99	N 32° 9' 4.07 W 104° 4' 14.68		5.25	243.34
	480.00	1.82	267.32	479.81	2.90	-2.85	-7.74	0.54	418814.98	622599.94	N 32° 9' 4.06 W 104° 4' 14.72		8.28	249.15
	533.00	2.31	276.35	532.87	2.81	-2.87	-8.84	1.11	418815.06	622598.04	N 32° 9' 4.06 W 104° 4' 14.74		10.06	253.43
	643.00	2.60	273.31	642.75	2.36	-2.46	-14.72	0.64	418815.47	622592.97	N 32° 9' 4.07 W 104° 4' 14.80		14.92	260.52
	676.00	2.69	273.72	676.70	2.23	-2.34	-18.59	0.07	418815.59	622591.08	N 32° 9' 4.07 W 104° 4' 14.82		16.76	261.97
	741.00	3.04	268.62	740.62	2.15	-2.28	-19.55	0.44	418815.85	622587.83	N 32° 9' 4.07 W 104° 4' 14.86		19.98	263.46
	836.00	3.74	262.78	835.45	2.58	-2.73	-25.44	0.82	418815.20	622582.24	N 32° 9' 4.07 W 104° 4' 14.92		25.59	263.88
	932.00	4.73	261.09	931.19	3.53	-3.73	-32.46	1.04	418814.20	622575.22	N 32° 9' 4.06 W 104° 4' 15.01		32.67	263.44
	1027.00	5.24	260.51	1025.83	4.79	-5.06	-40.61	0.54	418812.87	622567.08	N 32° 9' 4.04 W 104° 4' 15.10		40.92	262.90
	1122.00	5.47	260.48	1120.41	6.20	-6.52	-40.35	0.24	418811.41	622556.33	N 32° 9' 4.03 W 104° 4' 15.20		49.78	262.47
	1216.00	5.76	261.08	1213.96	7.82	-7.89	-58.43	0.31	418809.84	622549.28	N 32° 9' 4.01 W 104° 4' 15.31		58.58	262.21
	1311.00	6.44	262.81	1308.42	8.96	-9.40	-68.43	0.74	418808.53	622539.26	N 32° 9' 4.00 W 104° 4' 15.42		69.07	262.18
	1406.00	6.88	262.55	1402.80	10.27	-10.79	-79.19	0.25	418807.15	622528.50	N 32° 9' 3.99 W 104° 4' 15.55		79.92	262.24
	1501.00	6.88	264.84	1487.14	11.43	-12.01	-88.32	0.34	418805.92	622517.37	N 32° 9' 3.97 W 104° 4' 15.68		91.12	262.42
	1695.00	6.68	278.65	1683.84	10.43	-11.15	-112.28	0.94	418806.78	622495.41	N 32° 9' 3.98 W 104° 4' 15.93		112.83	264.33
	1784.00	6.64	282.48	1778.20	8.22	-9.02	-123.08	0.32	418808.81	622484.61	N 32° 9' 4.01 W 104° 4' 16.06		123.41	265.81
	1878.00	5.13	282.78	1871.70	6.06	-6.92	-132.48	0.61	418811.02	622475.20	N 32° 9' 4.03 W 104° 4' 16.17		132.67	267.01
	1970.00	3.84	280.08	1963.42	4.57	-5.47	-139.53	1.42	418812.46	622468.16	N 32° 9' 4.04 W 104° 4' 16.25		139.64	267.76
	2065.00	3.07	275.02	2058.25	3.75	-4.69	-145.20	0.87	418813.24	622462.49	N 32° 9' 4.05 W 104° 4' 16.32		145.28	268.15
	2158.00	1.79	258.84	2151.16	3.79	-4.75	-149.11	1.55	418813.18	622458.59	N 32° 9' 4.05 W 104° 4' 16.38		149.18	268.18
	2253.00	1.24	261.75	2246.13	4.21	-5.16	-151.58	0.58	418812.75	622456.12	N 32° 9' 4.04 W 104° 4' 16.39		151.87	268.04
	2348.00	0.28	218.54	2341.12	4.52	-5.51	-152.74	1.10	418812.42	622454.95	N 32° 9' 4.04 W 104° 4' 16.41		152.84	267.93
	2444.00	0.60	254.79	2437.12	4.83	-5.82	-153.38	0.42	418812.11	622454.32	N 32° 9' 4.04 W 104° 4' 16.41		153.49	267.83
	2537.00	1.83	276.60	2530.10	4.78	-5.78	-155.32	1.39	418812.15	622452.37	N 32° 9' 4.04 W 104° 4' 16.44		155.43	267.87
	2633.00	2.02	281.88	2626.04	3.95	-4.87	-158.42	0.57	418812.96	622449.28	N 32° 9' 4.05 W 104° 4' 16.47		158.49	268.20
	2727.00	2.39	280.17	2719.97	2.63	-3.68	-161.79	0.40	418814.25	622445.90	N 32° 9' 4.06 W 104° 4' 16.51		161.83	268.70
	2822.00	2.60	282.54	2814.88	2.10	-2.17	-165.64	0.25	418815.78	622442.05	N 32° 9' 4.07 W 104° 4' 16.56		165.66	269.25
	2917.00	2.99	288.69	2908.77	-0.55	-0.55	-169.08	0.48	418817.38	622437.72	N 32° 9' 4.09 W 104° 4' 16.61		169.98	269.82
	3011.00	3.50	287.87	3003.82	-2.25	1.12	-175.03	0.54	418819.05	622432.67	N 32° 9' 4.11 W 104° 4' 16.66		175.04	270.37
	3106.00	3.98	287.57	3088.42	-4.17	3.00	-180.93	0.51	418820.83	622426.78	N 32° 9' 4.13 W 104° 4' 16.73		180.96	270.95
	3200.00	4.51	289.13	3182.16	-6.41	5.20	-187.54	0.58	418822.13	622420.18	N 32° 9' 4.15 W 104° 4' 16.81		187.61	271.59
	3295.00	5.11	292.31	3286.82	-9.29	8.03	-194.98	0.89	418823.86	622412.72	N 32° 9' 4.18 W 104° 4' 16.90		194.98	272.36
	3390.00	5.79	293.84	3381.39	-12.98	11.68	-203.24	1.09	418825.89	622404.48	N 32° 9' 4.21 W 104° 4' 16.99		203.57	273.28
	3485.00	6.45	287.58	3475.85	-16.68	15.30	-212.68	1.09	418833.23	622395.04	N 32° 9' 4.25 W 104° 4' 17.10		213.21	274.12
	3580.00	6.99	279.21	3570.20	-19.28	17.84	-223.48	1.18	418835.77	622384.24	N 32° 9' 4.27 W 104° 4' 17.23		224.17	274.56
	3675.00	7.20	273.72	3664.47	-20.87	19.15	-235.10	0.75	418837.08	622372.60	N 32° 9' 4.28 W 104° 4' 17.38		235.89	274.66
	3770.00	6.84	269.32	3758.76	-21.06	19.47	-245.70	0.88	418837.40	622361.00	N 32° 9' 4.29 W 104° 4' 17.50		247.47	274.18
	3865.00	7.31	285.03	3853.04	-20.55	18.88	-256.38	0.75	418836.81	622349.32	N 32° 9' 4.28 W 104° 4' 17.63		256.07	273.71
	3960.00	8.28	268.39	3947.16	-19.68	17.82	-271.23	1.04	418835.85	622338.48	N 32° 9' 4.28 W 104° 4' 17.78		271.82	273.78
	4055.00	9.13	268.41	4041.07	-19.13	17.29	-285.59	0.95	418835.21	622322.12	N 32° 9' 4.27 W 104° 4' 17.95		286.11	273.46
	4149.00	8.20	266.34	4133.99	-18.59	16.65	-299.73	1.04	418834.58	622307.97	N 32° 9' 4.28 W 104° 4' 18.11		300.20	273.18
	4240.00	7.60	262.03	4224.13	-17.42	15.40	-312.17	0.93	418833.33	622295.54	N 32° 9' 4.29 W 104° 4' 18.26		312.55	272.82
	4336.00	6.60	261.24	4321.15	-15.49	13.38	-325.83	1.03	418831.32	622281.48	N 32° 9' 4.23 W 104° 4' 18.42		325.11	272.35
	4431.00	9.81	260.87	4414.83	-13.24	11.03	-340.84	1.27	418828.96	622268.87	N 32° 9' 4.21 W 104° 4' 18.59		341.02	271.85
	4528.00	10.95	261.68	4508.35	-10.74	8.43	-357.94	1.19	418828.38	622249.77	N 32° 9' 4.18 W 104° 4' 18.79		358.04	271.35
	4624.00	10.25	258.65	4602.73	-8.03	5.61	-375.19	0.84	418823.54	622232.53	N 32° 9' 4.16 W 104° 4' 18.99		375.23	270.88
	4719.00	7.71	254.80	4698.56	-4.93	2.42	-389.05	0.79	418820.35	622218.08	N 32° 9' 4.12 W 104° 4' 19.18		389.66	270.38
	4814.00	7.24	251.01	4790.75	-1.39	-1.20	-401.46	2.72	418816.73	622206.25	N 32° 9' 4.08 W 104° 4' 19.30		401.46	269.83
	4908.00	7.09	248.04	4884.02	-4.63	-4.19	-412.69	1.77	418813.40	622195.02	N 32° 9' 4.06 W 104° 4' 19.43		415.72	269.37
	5002.00	6.86	257.84	4977.32	4.38	-7.10	-423.81	0.35	418810.83	622183.90	N 32° 9' 4.03 W 104° 4' 19.56		423.87	268.94
	5097.00	7.07	259.00	5071.62	6.59	-9.40	-435.10	0.28	418808.53	622172.62	N 32° 9' 4.01 W 104° 4' 19.69		435.20	268.76
	5191.00	7.39	260.31	5164.88	8.64	-11.52	-446.74	0.38	418808.41	622160.98	N 32° 9' 3.99 W 104° 4' 19.82		446.69	268.52
	5286.00	8.43	260.81	5256.67	10.89	-13.96	-459.64	1.10	418804.27	622148.09	N 32° 9' 3.97 W 104° 4' 19.97		459.84	268.30
	5380.00	9.52	258.92	5351.82	13.20	-16.26	-474.07	1.20	418801.67	622133.66	N 32° 9' 3.94 W 104° 4' 20.14		474.34	268.04
	5475.00	9.66	257.35	5445.48	16.35	-16.51	-489.55	0.31	418798.42	622118.17	N 32° 9' 3.91 W 104° 4' 20.32		489.94	267.72
	5528.00	8.87	256.62	5497.80	18.22	-21.43	-497.87	1.51	418790.50	622109.86	N 32° 9' 3.89 W 104° 4' 20.42		498.33	267.54
	5571.00	8.83	255.53	5540.28	19.78	-23.03	-504.32	0.42	418794.90	622103.40	N 32° 9' 3.88 W 104° 4' 20.49		504.85	267.38
	5665.00	8.95	255.44	5633.14	23.35	-26.69	-518.47	0.03	418791.24	622089.28	N 32° 9' 3.84 W 104° 4' 20.68		519.15	267.05
	5759.00	9.56	254.47	5717.18	25.62	-29.18	-533.96	0.67	41871					

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' '')	Longitude (E/W ° ' '')	Closure (ft)	Closure Azimuth (°)
	8553.00	4.15	265.70	8460.42	31.80	-37.65	-906.02	0.24	418760.28	621701.74	N 32 0 3.74 W 104	4 25.17	906.80	267.62
	8648.00	4.44	263.09	8585.16	32.46	-38.35	-913.10	0.37	418770.58	621694.86	N 32 0 3.73 W 104	4 25.25	913.91	267.59
	8677.00	4.65	262.55	8614.07	32.73	-38.64	-915.38	0.74	418779.29	621692.38	N 32 0 3.73 W 104	4 25.28	916.20	267.58
	8747.00	4.95	259.72	8683.82	33.60	-39.55	-921.17	0.55	418778.39	621686.80	N 32 0 3.72 W 104	4 25.34	922.01	267.54
	8841.00	4.65	254.74	8777.49	35.27	-41.27	-928.83	0.55	418776.66	621678.03	N 32 0 3.71 W 104	4 25.43	929.75	267.46
	8936.00	4.59	254.84	8872.18	37.23	-43.28	-936.22	0.08	418774.85	621671.55	N 32 0 3.69 W 104	4 25.52	937.22	267.35
	9029.00	5.89	245.35	8964.76	40.15	-46.25	-944.14	1.60	418771.89	621663.02	N 32 0 3.66 W 104	4 25.61	945.28	267.20
	9061.00	7.75	240.74	9066.57	41.86	-47.88	-947.52	6.05	418769.95	621660.24	N 32 0 3.64 W 104	4 25.65	948.73	267.10
	9123.00	10.99	238.99	9057.73	46.90	-53.07	-956.23	5.25	418764.86	621651.53	N 32 0 3.59 W 104	4 25.75	957.71	266.82
	9155.00	13.92	229.70	9088.98	50.92	-57.14	-961.79	11.08	418760.80	621645.98	N 32 0 3.55 W 104	4 25.82	963.48	266.60
	9186.00	16.46	220.12	9118.90	56.66	-62.91	-967.48	11.49	418755.03	621640.30	N 32 0 3.49 W 104	4 25.86	969.50	266.28
	9217.00	19.26	211.56	9148.41	64.34	-70.63	-972.97	12.38	418747.31	621634.80	N 32 0 3.42 W 104	4 25.95	975.53	265.85
	9240.00	20.90	208.35	9170.01	71.16	-77.47	-976.80	8.58	418740.47	621630.88	N 32 0 3.35 W 104	4 25.99	979.97	265.47
	9264.00	22.66	205.48	9192.29	79.07	-85.41	-980.92	8.58	418732.53	621628.84	N 32 0 3.27 W 104	4 26.04	984.64	265.02
	9312.00	24.44	193.92	9236.32	97.03	-103.41	-987.30	10.29	418714.53	621620.47	N 32 0 3.09 W 104	4 26.11	992.70	264.02
	9359.00	26.29	184.98	9278.44	117.56	-123.98	-990.80	11.75	418693.89	621617.16	N 32 0 2.89 W 104	4 26.15	998.33	262.87
	9406.00	32.81	180.94	9318.95	141.32	-147.73	-991.78	10.17	418670.22	621615.99	N 32 0 2.65 W 104	4 26.17	1002.72	261.53
	9452.00	34.99	175.43	9357.18	166.87	-173.28	-990.93	8.43	418644.67	621616.84	N 32 0 2.40 W 104	4 26.16	1005.97	260.08
	9500.00	39.97	174.06	9395.52	195.83	-202.02	-988.27	8.47	418615.83	621619.50	N 32 0 2.12 W 104	4 26.13	1008.71	258.45
	9554.00	44.23	174.94	9433.99	231.33	-237.70	-984.85	9.80	418580.25	621622.92	N 32 0 1.76 W 104	4 26.09	1013.13	256.43
	9595.00	48.07	177.37	9464.29	260.84	-267.19	-982.89	10.29	418550.76	621624.88	N 32 0 1.47 W 104	4 26.07	1018.56	254.79
	9642.00	51.16	178.64	9494.74	296.62	-302.96	-981.65	6.89	418514.99	621628.11	N 32 0 1.12 W 104	4 26.05	1027.34	252.85
	9689.00	54.09	178.05	9523.27	333.93	-340.26	-979.91	7.82	418477.70	621627.88	N 32 0 0.75 W 104	4 26.04	1037.30	250.85
	9736.00	60.22	173.85	9548.78	373.26	-379.57	-976.41	13.92	418436.39	621631.36	N 32 0 0.36 W 104	4 26.00	1047.59	248.76
	9784.00	65.31	173.32	9570.71	415.68	-421.97	-971.63	10.65	418396.00	621638.13	N 32 0 59.94 W 104	4 25.94	1058.31	246.53
	9831.00	66.68	174.28	9588.70	458.87	-465.12	-966.95	9.45	418352.85	621640.81	N 32 0 59.51 W 104	4 25.89	1073.60	244.31
	9878.00	73.04	176.07	9603.73	503.25	-509.49	-963.21	8.05	418308.49	621644.55	N 32 0 59.07 W 104	4 25.85	1088.68	242.12
	9973.00	82.03	176.31	9624.21	555.75	-601.95	-957.05	9.47	418216.03	621650.70	N 32 0 58.16 W 104	4 25.78	1130.62	237.93
	10068.00	90.45	174.08	9630.44	600.17	-656.32	-949.12	9.17	418121.87	621658.64	N 32 0 57.22 W 104	4 25.69	1177.15	233.73
	10162.00	91.31	178.15	9626.00	783.86	-788.96	-941.11	2.38	418026.04	621666.65	N 32 0 56.30 W 104	4 25.60	1228.71	229.89
	10258.00	88.97	181.17	9628.76	876.81	-885.89	-938.87	5.77	417932.11	621668.89	N 32 0 55.35 W 104	4 25.57	1290.85	226.68
	10350.00	90.72	179.96	9629.01	971.80	-977.88	-939.78	2.31	417840.13	621667.98	N 32 0 54.44 W 104	4 25.59	1356.26	223.88
	10445.00	91.78	179.34	9628.95	1066.77	-1072.68	-939.20	1.27	417745.16	621668.58	N 32 0 53.50 W 104	4 25.58	1425.87	221.20
	10541.00	91.48	178.54	9624.24	1162.73	-1168.80	-937.42	0.88	417649.23	621670.34	N 32 0 52.55 W 104	4 25.56	1498.29	218.73
	10636.00	91.41	177.76	9621.02	1267.64	-1263.70	-934.36	1.28	417554.34	621673.40	N 32 0 51.61 W 104	4 25.53	1571.61	216.48
	10731.00	94.61	183.55	9615.19	1352.40	-1358.47	-935.44	6.51	417459.58	621672.33	N 32 0 50.67 W 104	4 25.55	1649.38	214.55
	10827.00	91.86	185.90	9609.78	1447.85	-1453.97	-934.33	3.77	417384.08	621664.43	N 32 0 49.73 W 104	4 25.64	1733.18	212.98
	10923.00	90.45	186.59	9607.84	1543.19	-1549.38	-933.77	1.64	417288.68	621653.99	N 32 0 48.78 W 104	4 25.77	1819.41	211.02
	11018.00	82.75	188.85	9605.18	1637.19	-1643.47	-938.53	3.39	417174.60	621641.24	N 32 0 47.85 W 104	4 25.82	1906.91	210.48
	11091.00	86.69	187.69	9601.13	1709.25	-1715.60	-937.01	1.88	417102.48	621630.75	N 32 0 47.14 W 104	4 26.04	1974.29	209.66
	11186.00	92.28	181.73	9596.23	1803.71	-1810.11	-934.79	6.42	417007.98	621622.97	N 32 0 46.20 W 104	4 26.13	2060.66	208.55
	11282.00	91.08	176.91	9593.40	1899.63	-1896.03	-933.65	5.17	416912.07	621624.11	N 32 0 45.25 W 104	4 26.12	2144.88	207.30
	11377.00	90.57	174.40	9592.02	1994.39	-2000.74	-936.46	2.70	416817.38	621631.31	N 32 0 44.32 W 104	4 26.04	2226.30	206.01
	11471.00	89.91	177.50	9591.63	2088.18	-2094.49	-936.82	3.37	416723.62	621637.94	N 32 0 43.39 W 104	4 25.97	2308.12	204.85
	11565.00	90.03	179.85	9591.88	2182.18	-2188.48	-937.65	2.50	416629.96	621640.12	N 32 0 42.46 W 104	4 25.94	2392.84	203.85
	11658.00	88.83	179.27	9592.77	2275.10	-2281.38	-934.68	1.32	416536.75	621643.26	N 32 0 41.54 W 104	4 25.91	2478.86	202.92
	11753.00	89.57	178.51	9594.26	2370.01	-2376.26	-930.17	2.56	416441.87	621647.59	N 32 0 40.60 W 104	4 25.86	2562.92	202.00
	11848.00	89.51	178.10	9595.02	2464.98	-2471.22	-927.36	0.44	416346.92	621650.40	N 32 0 39.66 W 104	4 25.83	2650.18	201.18
	11942.00	89.48	178.73	9595.85	2558.96	-2565.18	-924.76	0.67	416252.97	621653.00	N 32 0 38.73 W 104	4 25.81	2737.10	200.42
	12037.00	89.25	177.38	9596.90	2653.91	-2660.11	-921.54	1.44	416158.04	621656.22	N 32 0 37.79 W 104	4 25.77	2825.18	199.68
	12131.00	86.45	178.75	9598.79	2747.86	-2754.04	-918.37	1.69	416064.13	621659.40	N 32 0 36.86 W 104	4 25.74	2912.75	199.00
	12227.00	87.28	179.23	9602.37	2843.78	-2849.96	-914.68	1.32	415968.22	621661.95	N 32 0 35.91 W 104	4 25.72	3003.97	198.38
	12321.00	87.39	179.10	9606.74	2937.68	-2943.94	-911.34	0.18	415874.34	621662.45	N 32 0 34.98 W 104	4 25.71	3091.80	197.80
	12416.00	87.88	179.98	9610.82	3032.59	-3038.75	-904.28	0.68	415779.44	621663.48	N 32 0 34.04 W 104	4 25.70	3182.09	197.26
	12510.00	87.25	179.75	9614.98	3128.50	-3132.60	-903.80	0.47	415685.54	621663.97	N 32 0 33.12 W 104	4 25.69	3271.74	196.77
	12605.00	86.60	180.12	9617.59	3221.45	-3227.61	-903.69	2.50	415590.59	621664.07	N 32 0 32.18 W 104	4 25.70	3362.74	196.30
	12699.00	86.80	179.22	9618.25	3315.45	-3321.61	-903.15	0.98	415496.80	621664.61	N 32 0 31.25 W 104	4 25.69	3452.91	195.85
	12793.00	86.89	178.77	9618.68	3409.44	-3415.59	-901.50	0.57	415402.63	621666.26	N 32 0 30.32 W 104	4 25.67	3542.98	195.41
	12888.00	86.91	179.23	9618.83	3504.44	-3510.58	-899.84	0.48	415307.85	621667.82	N 32 0 29.38 W 104	4 25.68	3634.21	194.99
	12984.00	86.93	179.59	9619.22	3600.43	-3606.57	-898.85	0.48	415211.67	621668.81	N 32 0 28.43 W 104	4 25.65	3726.77	194.59
	13078.00	89.94	179.78	9619.56	3692.43	-3698.57	-898.35	0.40	415119.88	621669.41	N 32 0 27.52 W 104	4 25.65	3815.75	194.24
	13170.00	86.83	180.28	9619.75	3786.43	-3792.57	-898.40	0.54	415025.68	621669.37	N 32 0 26.59 W 104	4 25.65	3906.94	193.90
	13264.00	86.83	179.39	9620.03	3880.43	-3886.57	-898.13	0.95	414931.69	621669.94	N 32 0 25.66 W 104	4 25.65	3998.19	193.57
	13359.00	86.54	179.86	9620.55	3975.39	-3981.51	-895.02	2.68	414836.76	621672.74	N 32 0 24.72 W 104	4 25.62	4088.82	193.22
	13454.00	86.57	176.41	9621.29	4070.25	-4076.34	-892.44	0.47	414741.94	621678.32	N 32 0 23.78 W 104	4 25.55	4180.96	192.84
	13550.00	86.60	176.26	9621.98	4166.09	-4172.14	-892.31	0.16	414648.14	621684.48	N 32 0 22.83 W 104	4 25.48	4273.09	192.48
	13645.00	90.11	178.07	9622.22	4260.92	-4266.93	-891.85	0.57	414551.37	621690.81	N 32 0 21.89 W 104	4 25.41	4364.34	192.13
	13738.00	86.68	177.08											