

HEADER INFORMATION

Company: SOUTHERN DIVISION

Field: WOLFCAMP CENTRAL

Site Name: UNIVERSIT' Mag Dec.Ci 7.44 TO GRID

Well Name UNIVERSITY CENTRAL 0810AH

Wellpath N UNIVERSIT' AFE / OCS:

Survey Nar UC0810AH, Survey Date 1/1/1990 Survey Typ H 0 - 18672 UC0810AH_ACTUAL :

Depth Unit usft

SURFACE LOCATION

Site Northi 559937.3

Site Easting 1595493

BOTTOM HOLE LOCATION

BHL MD 18672

BHL TVD 7882.56

WELL INFORMATION

Well North 559937.3

Well Eastin 1595493

Rig K.B: 2862

Vsec Angle 181.17

Vsec North 0

Vsec East: 0

SURVEY LIST

MD	INC	AZI	TVD	NS	EW	VSEC	DLS	S/STVD
0	0	0	0	0	0	0	0	-2862
27	0	0	27	0	0	0	0	-2835
100	0.05	26.84	100	0.03	0.01	-0.03	0.07	-2762
127	0.07	26.84	127	0.05	0.03	-0.05	0.07	-2735
152	0.16	118.16	152	0.05	0.06	-0.05	0.7	-2710
177	0.31	141.03	177	-0.02	0.14	0.02	0.7	-2685
202	0.27	123.7	202	-0.1	0.23	0.1	0.38	-2660
227	0.24	116.03	227	-0.16	0.33	0.15	0.18	-2635
252	0.17	108.2	252	-0.19	0.41	0.19	0.3	-2610
277	0.15	95.06	277	-0.21	0.48	0.2	0.17	-2585
302	0.15	90.18	302	-0.21	0.54	0.2	0.05	-2560
327	0.08	84.46	327	-0.21	0.59	0.2	0.28	-2535
352	0.13	104.88	352	-0.22	0.64	0.2	0.25	-2510
377	0.1	94.38	377	-0.22	0.69	0.21	0.15	-2485
402	0.1	99.11	402	-0.23	0.73	0.21	0.03	-2460
427	0.11	88.11	427	-0.23	0.77	0.22	0.09	-2435
452	0.15	99.3	452	-0.24	0.83	0.22	0.19	-2410
477	0.13	105.76	477	-0.25	0.89	0.23	0.1	-2385
502	0.18	127.21	502	-0.28	0.95	0.26	0.3	-2360

527	0.15	153.18	527	-0.33	0.99	0.31	0.32	-2335
552	0.15	160.17	552	-0.39	1.02	0.37	0.07	-2310
577	0.12	254.28	577	-0.43	1.01	0.41	0.79	-2285
602	0.08	307.71	602	-0.43	0.97	0.41	0.39	-2260
627	0.09	59.98	627	-0.41	0.97	0.39	0.57	-2235
652	0.12	68.17	652	-0.39	1.01	0.37	0.13	-2210
677	0.19	92.27	677	-0.38	1.08	0.36	0.38	-2185
702	0.2	113.04	702	-0.4	1.16	0.37	0.28	-2160
727	0.09	138.65	727	-0.43	1.21	0.41	0.5	-2135
752	0.09	134.3	752	-0.46	1.24	0.43	0.03	-2110
777	0.02	275.86	777	-0.47	1.25	0.45	0.43	-2085
802	0.1	4.7	802	-0.45	1.25	0.42	0.41	-2060
827	0.08	35.37	827	-0.41	1.26	0.39	0.21	-2035
852	0.17	77.7	852	-0.39	1.3	0.37	0.49	-2010
877	0.08	105.82	877	-0.39	1.36	0.36	0.43	-1985
902	0.16	268.68	902	-0.39	1.34	0.37	0.95	-1960
927	0.14	317.2	927	-0.37	1.28	0.35	0.5	-1935
952	0.13	37.68	952	-0.33	1.28	0.3	0.7	-1910
977	0.22	172.52	977	-0.35	1.3	0.33	1.3	-1885
1002	0.09	184.46	1002	-0.42	1.31	0.39	0.53	-1860
1027	0.1	277.67	1027	-0.44	1.29	0.41	0.55	-1835
1052	0.09	23.94	1052	-0.42	1.27	0.39	0.61	-1810
1077	0.1	36.96	1077	-0.38	1.29	0.35	0.09	-1785
1088	0.22	358.88	1088	-0.35	1.3	0.33	1.4	-1774
1100	0.17	355.59	1100	-0.31	1.3	0.28	0.43	-1762
1200	0.25	200.99	1200	-0.37	1.21	0.34	0.41	-1662
1216	0.31	198.8	1216	-0.44	1.18	0.42	0.38	-1646
1300	0.33	140.51	1300	-0.84	1.26	0.82	0.37	-1562
1406	0.63	108.62	1405.99	-1.26	2.01	1.22	0.37	-1456.01
1500	0.69	104.91	1499.99	-1.57	3.04	1.51	0.08	-1362.01
1595	0.75	101.77	1594.98	-1.85	4.21	1.76	0.08	-1267.02
1600	0.76	102.45	1599.98	-1.86	4.27	1.77	0.27	-1262.02
1700	0.88	114.15	1699.97	-2.32	5.62	2.2	0.21	-1162.03
1785	1	121.63	1784.96	-2.98	6.85	2.84	0.2	-1077.04
1800	0.93	125.25	1799.95	-3.11	7.06	2.97	0.62	-1062.05
1900	0.65	165.79	1899.95	-4.13	7.86	3.97	0.61	-962.05
1974	0.75	202.49	1973.94	-4.99	7.78	4.83	0.61	-888.06
2000	0.76	199.38	1999.94	-5.31	7.65	5.15	0.16	-862.06
2100	0.83	188.47	2099.93	-6.65	7.33	6.5	0.17	-762.07
2164	0.88	182.45	2163.92	-7.6	7.24	7.45	0.16	-698.08
2200	0.88	186.18	2199.92	-8.15	7.2	8	0.16	-662.08
2300	0.91	196.19	2299.9	-9.68	6.89	9.53	0.16	-562.1
2354	0.94	201.26	2353.9	-10.5	6.61	10.36	0.16	-508.1
2400	1	194.77	2399.89	-11.24	6.37	11.11	0.27	-462.11
2500	1.17	183.36	2499.87	-13.1	6.09	12.98	0.27	-362.13
2543	1.25	179.46	2542.86	-14.01	6.07	13.88	0.27	-319.14
2600	0.37	326.78	2599.86	-14.48	5.97	14.35	2.76	-262.14

2700	3.09	349.31	2699.81	-11.56	5.3	11.45	2.75	-162.19
2733	4	349.97	2732.74	-9.55	4.93	9.45	2.76	-129.26
2800	4.59	346.35	2799.55	-4.65	3.89	4.56	0.97	-62.45
2900	5.49	342.41	2899.17	3.8	1.5	-3.83	0.96	37.17
2922	5.69	341.71	2921.06	5.84	0.84	-5.86	0.96	59.06
3000	5.79	333.62	2998.67	13.04	-2.12	-12.99	1.04	136.67
3100	6.09	323.91	3098.14	21.84	-7.49	-21.69	1.05	236.14
3111	6.13	322.9	3109.07	22.78	-8.18	-22.61	1.04	247.07
3200	5.77	324.21	3197.59	30.2	-13.67	-29.92	0.43	335.59
3300	5.38	325.89	3297.12	38.16	-19.24	-37.76	0.42	435.12
3400	5.84	324.89	3396.64	46.21	-24.79	-45.69	0.47	534.64
3489	6.25	324.13	3485.15	53.84	-30.23	-53.21	0.47	623.15
3500	6.24	324.34	3496.08	54.81	-30.93	-54.16	0.23	634.08
3600	6.18	326.27	3595.5	63.7	-37.09	-62.93	0.22	733.5
3679	6.13	327.82	3674.04	70.8	-41.7	-69.94	0.22	812.04
3700	6.18	327.41	3694.92	72.71	-42.9	-71.82	0.32	832.92
3800	6.4	325.52	3794.32	81.84	-48.96	-80.82	0.3	932.32
3868	6.56	324.31	3861.88	88.11	-53.37	-87.01	0.31	999.88
3900	7.04	322.73	3893.66	91.16	-55.62	-90	1.61	1031.66
4000	8.55	318.93	3992.73	101.64	-64.22	-100.31	1.59	1130.73
4058	9.44	317.28	4050.02	108.39	-70.28	-106.93	1.6	1188.02
4100	9.01	316.47	4091.47	113.3	-74.88	-111.75	1.07	1229.47
4200	7.99	314.19	4190.37	123.82	-85.26	-122.06	1.07	1328.37
4248	7.5	312.88	4237.94	128.28	-89.94	-126.42	1.09	1375.94
4300	7.72	313.24	4289.48	132.98	-94.98	-131.02	0.43	1427.48
4400	8.15	313.89	4388.52	142.5	-104.98	-140.32	0.44	1526.52
4437	8.31	314.11	4425.14	146.18	-108.79	-143.93	0.44	1563.14
4500	9.06	316.83	4487.42	152.96	-115.45	-150.57	1.36	1625.42
4600	10.29	320.33	4585.99	165.58	-126.54	-162.96	1.36	1723.99
4627	10.63	321.14	4612.55	169.38	-129.64	-166.69	1.37	1750.55
4700	10.67	324.3	4684.29	180.11	-137.81	-177.26	0.8	1822.29
4800	10.79	328.56	4782.54	195.61	-148.09	-192.55	0.8	1920.54
4816	10.81	329.23	4798.26	198.18	-149.64	-195.08	0.79	1936.26
4900	10.89	325.19	4880.76	211.46	-158.2	-208.19	0.91	2018.76
5005	11.06	320.26	4983.84	227.35	-170.3	-223.83	0.91	2121.84
5100	9.96	320.1	5077.24	240.66	-181.4	-236.91	1.16	2215.24
5194	8.88	319.91	5169.98	252.45	-191.29	-248.49	1.15	2307.98
5200	8.93	319.63	5175.9	253.16	-191.89	-249.19	1.1	2313.9
5300	9.76	315.39	5274.58	265.1	-202.87	-260.91	1.08	2412.58
5384	10.5	312.35	5357.27	275.33	-213.52	-270.91	1.09	2495.27
5400	10.58	313.06	5373	277.31	-215.67	-272.85	0.95	2511
5500	11.09	317.26	5471.22	290.65	-228.91	-285.91	0.94	2609.22
5573	11.5	320.09	5542.8	301.39	-238.34	-296.46	0.94	2680.8
5600	11.55	318.53	5569.26	305.48	-241.86	-300.47	1.17	2707.26
5700	11.79	312.9	5667.19	319.93	-255.97	-314.64	1.16	2805.19
5762	12	309.54	5727.86	328.35	-265.58	-322.85	1.17	2865.86
5800	11.87	312.8	5765.04	333.52	-271.5	-327.9	1.81	2903.04

5900	11.72	321.62	5862.94	348.47	-285.35	-342.57	1.81	3000.94
5952	11.75	326.24	5913.85	357.01	-291.57	-350.98	1.81	3051.85
6000	11.02	326.35	5960.91	364.89	-296.83	-358.75	1.52	3098.91
6100	9.5	326.63	6059.31	379.74	-306.67	-373.4	1.52	3197.31
6141	8.88	326.77	6099.78	385.21	-310.26	-378.8	1.51	3237.78
6200	8.95	325.21	6158.07	392.79	-315.37	-386.27	0.43	3296.07
6300	9.09	322.61	6256.83	405.46	-324.61	-398.74	0.43	3394.83
6330	9.13	321.85	6286.45	409.21	-327.52	-402.44	0.42	3424.45
6400	9.15	323.41	6355.56	418.05	-334.27	-411.13	0.36	3493.56
6500	9.18	325.62	6454.29	431.01	-343.51	-423.91	0.35	3592.29
6520	9.19	326.06	6474.03	433.66	-345.3	-426.51	0.35	3612.03
6546	8.25	328	6499.73	436.96	-347.45	-429.77	3.79	3637.73
6550	7.77	328.48	6503.69	437.43	-347.75	-430.24	12.05	3641.69
6575	4.81	333.61	6528.54	439.81	-349.09	-432.59	12.05	3666.54
6600	2	353.9	6553.49	441.19	-349.61	-433.96	12.05	3691.49
6608	1.31	17.92	6561.49	441.41	-349.59	-434.18	12.05	3699.49
6702	1.06	187.9	6655.48	441.57	-349.38	-434.35	2.51	3793.48
6796	1.06	204.07	6749.47	439.92	-349.86	-432.68	0.32	3887.47
6800	1.02	202.02	6753.47	439.85	-349.89	-432.62	1.3	3891.47
6890	0.88	126.38	6843.46	438.7	-349.63	-431.47	1.3	3981.46
6900	0.84	130.93	6853.45	438.6	-349.51	-431.38	0.77	3991.45
6983	0.81	176.65	6936.45	437.62	-349.02	-430.4	0.77	4074.45
7000	0.81	183.9	6953.45	437.38	-349.02	-430.16	0.6	4091.45
7077	0.94	213.39	7030.44	436.31	-349.4	-429.08	0.6	4168.44
7100	0.93	212.94	7053.43	436	-349.61	-428.77	0.07	4191.43
7171	0.88	211.46	7124.43	435.05	-350.2	-427.81	0.07	4262.43
7200	0.66	216.28	7153.42	434.73	-350.42	-427.48	0.78	4291.42
7264	0.25	256.98	7217.42	434.4	-350.77	-427.14	0.78	4355.42
7300	0.42	253.65	7253.42	434.34	-350.98	-427.08	0.47	4391.42
7358	0.69	251.71	7311.42	434.17	-351.51	-426.9	0.47	4449.42
7400	0.76	231.87	7353.41	433.92	-351.97	-426.64	0.62	4491.41
7451	0.94	214.27	7404.41	433.37	-352.47	-426.08	0.62	4542.41
7500	1.06	194.43	7453.4	432.6	-352.81	-425.3	0.74	4591.4
7545	1.25	180.87	7498.39	431.7	-352.92	-424.41	0.74	4636.39
7600	4.14	180.41	7553.33	429.12	-352.95	-421.82	5.26	4691.33
7639	6.19	180.34	7592.16	425.61	-352.97	-418.31	5.26	4730.16
7650	7.5	181.57	7603.09	424.3	-352.99	-417	12	4741.09
7675	10.49	183.23	7627.78	420.39	-353.16	-413.09	12	4765.78
7700	13.48	184.16	7652.23	415.21	-353.5	-407.91	12	4790.23
7725	16.48	184.76	7676.38	408.77	-354.01	-401.45	12	4814.38
7733	17.44	184.91	7684.03	406.44	-354.21	-399.13	12	4822.03
7750	18.72	185.08	7700.19	401.19	-354.67	-393.86	7.52	4838.19
7800	22.47	185.46	7746.98	383.68	-356.29	-376.32	7.52	4884.98
7827	24.5	185.62	7771.75	372.97	-357.33	-365.59	7.52	4909.75
7850	27.44	184.61	7792.42	362.94	-358.22	-355.55	12.94	4930.42
7875	30.65	183.72	7814.27	350.83	-359.1	-343.43	12.94	4952.27
7900	33.86	182.98	7835.41	337.52	-359.87	-330.1	12.94	4973.41

7921	36.56	182.45	7852.57	325.42	-360.44	-317.99	12.94	4990.57
7950	38.47	181.97	7875.57	307.78	-361.12	-300.34	6.65	5013.57
8000	41.76	181.24	7913.8	275.58	-362.02	-268.13	6.65	5051.8
8015	42.75	181.04	7924.91	265.49	-362.22	-258.04	6.65	5062.91
8050	46.27	183.44	7949.86	240.99	-363.19	-233.52	11.14	5087.86
8100	51.37	186.41	7982.78	203.52	-366.46	-195.99	11.14	5120.78
8108	52.19	186.85	7987.73	197.27	-367.19	-189.74	11.14	5125.73
8125	54.59	187.42	7997.87	183.73	-368.88	-176.16	14.39	5135.87
8150	58.13	188.2	8011.71	163.12	-371.72	-155.49	14.39	5149.71
8175	61.67	188.93	8024.25	141.73	-374.94	-134.05	14.39	5162.25
8202	65.5	189.66	8036.26	117.88	-378.85	-110.12	14.39	5174.26
8225	68.2	188.48	8045.3	97	-382.18	-89.17	12.63	5183.3
8250	71.13	187.25	8053.99	73.78	-385.39	-65.89	12.63	5191.99
8275	74.08	186.06	8061.46	50.08	-388.15	-42.15	12.63	5199.46
8296	76.56	185.09	8066.78	29.87	-390.12	-21.89	12.63	5204.78
8300	77.2	184.95	8067.69	25.99	-390.46	-18.01	16.23	5205.69
8322	80.69	184.21	8071.91	4.47	-392.19	3.54	16.23	5209.91
8350	83.74	184.37	8075.7	-23.19	-394.26	31.24	10.92	5213.7
8400	89.2	184.65	8078.78	-72.93	-398.18	81.04	10.92	5216.78
8416	90.94	184.74	8078.76	-88.87	-399.49	97.01	10.92	5216.76
8510	90.44	184.03	8077.63	-182.59	-406.68	190.85	0.92	5215.63
8604	92.63	181.22	8075.11	-276.44	-410.98	284.78	3.79	5213.11
8698	91.88	177.88	8071.41	-370.35	-410.25	378.65	3.64	5209.41
8700	91.94	178.02	8071.34	-372.35	-410.17	380.65	7.6	5209.34
8750	93.55	181.47	8068.95	-422.28	-409.95	430.56	7.6	5206.95
8792	94.88	184.38	8065.86	-464.11	-412.09	472.43	7.6	5203.86
8800	94.93	184.38	8065.18	-472.06	-412.7	480.38	0.6	5203.18
8885	95.44	184.38	8057.5	-556.46	-419.16	564.9	0.6	5195.5
8900	94.97	184.38	8056.14	-571.36	-420.3	579.82	3.13	5194.14
8979	92.5	184.38	8050.99	-649.95	-426.32	658.52	3.13	5188.99
9000	92.75	184.34	8050.03	-670.87	-427.92	679.47	1.22	5188.03
9073	93.63	184.21	8045.97	-743.55	-433.35	752.24	1.22	5183.97
9100	93.32	183.91	8044.33	-770.43	-435.26	779.16	1.6	5182.33
9167	92.56	183.15	8040.89	-837.22	-439.37	846.01	1.6	5178.89
9200	92.34	183.15	8039.48	-870.14	-441.19	878.97	0.67	5177.48
9260	91.94	183.15	8037.24	-930.01	-444.48	938.89	0.67	5175.24
9300	92.52	183.9	8035.68	-969.9	-446.94	978.82	2.37	5173.68
9354	93.31	184.91	8032.93	-1023.67	-451.08	1032.67	2.37	5170.93
9400	92.58	183.53	8030.57	-1069.48	-454.46	1078.54	3.39	5168.57
9448	91.81	182.1	8028.74	-1117.39	-456.82	1126.48	3.39	5166.74
9500	92.19	181.91	8026.92	-1169.32	-458.63	1178.44	0.82	5164.92
9542	92.5	181.75	8025.2	-1211.27	-459.97	1220.41	0.82	5163.2
9600	91.69	179.58	8023.08	-1269.22	-460.64	1278.36	3.99	5161.08
9636	91.19	178.23	8022.17	-1305.2	-459.96	1314.32	3.99	5160.17
9700	91.4	179.55	8020.73	-1369.17	-458.72	1378.25	2.09	5158.73
9730	91.5	180.17	8019.97	-1399.16	-458.64	1408.24	2.09	5157.97
9800	92.58	183.21	8017.47	-1469.08	-460.71	1478.18	4.61	5155.47

9823	92.94	184.21	8016.36	-1492	-462.19	1501.13	4.61	5154.36
9900	92.94	182.92	8012.41	-1568.75	-466.97	1577.96	1.68	5150.41
9917	92.94	182.63	8011.54	-1585.71	-467.79	1594.93	1.68	5149.54
10000	91.34	181.54	8008.44	-1668.59	-470.81	1677.86	2.33	5146.44
10011	91.13	181.4	8008.2	-1679.59	-471.09	1688.85	2.33	5146.2
10104	89.94	179.46	8007.34	-1772.57	-471.79	1781.84	2.45	5145.34
10198	92.63	183.33	8005.23	-1866.49	-474.08	1875.79	5.01	5143.23
10200	92.61	183.29	8005.14	-1868.49	-474.19	1877.78	2.38	5143.14
10292	91.5	181.4	8001.84	-1960.35	-477.95	1969.7	2.38	5139.84
10300	91.44	181.28	8001.63	-1968.34	-478.14	1977.7	1.72	5139.63
10385	90.75	179.99	8000.01	-2053.32	-479.08	2062.67	1.72	5138.01
10400	90.85	180.38	7999.8	-2068.32	-479.13	2077.67	2.7	5137.8
10479	91.38	182.45	7998.27	-2147.27	-481.08	2156.65	2.7	5136.27
10500	91.34	182.77	7997.77	-2168.25	-482.04	2177.64	1.53	5135.77
10572	91.19	183.86	7996.18	-2240.11	-486.2	2249.57	1.53	5134.18
10600	91.19	183.96	7995.6	-2268.04	-488.11	2277.53	0.37	5133.6
10666	91.19	184.21	7994.23	-2333.85	-492.81	2343.43	0.37	5132.23
10700	91.23	184.4	7993.51	-2367.75	-495.36	2377.37	0.58	5131.51
10760	91.31	184.74	7992.18	-2427.55	-500.14	2437.25	0.58	5130.18
10800	91.39	185.26	7991.23	-2467.38	-503.63	2477.15	1.32	5129.23
10854	91.5	185.97	7989.87	-2521.11	-508.91	2530.97	1.32	5127.87
10900	91.44	186.14	7988.69	-2566.83	-513.77	2576.79	0.39	5126.69
10948	91.38	186.32	7987.51	-2614.54	-518.97	2624.59	0.39	5125.51
11000	90.16	184.84	7986.81	-2666.28	-524.03	2676.43	3.69	5124.81
11041	89.19	183.68	7987.05	-2707.17	-527.08	2717.36	3.69	5125.05
11100	89.78	183.68	7987.58	-2766.04	-530.86	2776.31	1	5125.58
11135	90.13	183.68	7987.61	-2800.97	-533.11	2811.27	1	5125.61
11200	90.08	183.8	7987.49	-2865.83	-537.35	2876.21	0.21	5125.49
11229	90.06	183.86	7987.45	-2894.77	-539.29	2905.17	0.21	5125.45
11300	90.01	183.6	7987.4	-2965.62	-543.91	2976.1	0.38	5125.4
11323	90	183.51	7987.4	-2988.57	-545.33	2999.08	0.38	5125.4
11400	90.87	182.79	7986.82	-3065.45	-549.56	3076.03	1.47	5124.82
11417	91.06	182.63	7986.53	-3082.43	-550.37	3093.03	1.47	5124.53
11500	91.17	181.69	7984.91	-3165.35	-553.5	3176	1.14	5122.91
11511	91.19	181.57	7984.68	-3176.35	-553.81	3186.99	1.14	5122.68
11605	92.13	180.17	7981.96	-3270.29	-555.24	3280.95	1.79	5119.96
11699	92.5	179.81	7978.16	-3364.22	-555.22	3374.85	0.55	5116.16
11700	92.51	179.81	7978.12	-3365.22	-555.22	3375.85	1.02	5116.12
11793	93.44	179.64	7973.29	-3458.09	-554.77	3468.7	1.02	5111.29
11800	93.26	179.61	7972.89	-3465.08	-554.72	3475.68	2.59	5110.89
11886	91.06	179.29	7969.64	-3551.01	-553.9	3561.58	2.59	5107.64
11900	91.12	179.26	7969.38	-3565	-553.73	3575.57	0.45	5107.38
11980	91.44	179.11	7967.59	-3644.97	-552.59	3655.5	0.45	5105.59
12000	91.25	178.81	7967.12	-3664.97	-552.23	3675.48	1.78	5105.12
12073	90.56	177.71	7965.97	-3737.92	-550.01	3748.37	1.78	5103.97
12100	90.65	178.21	7965.68	-3764.9	-549.05	3775.33	1.89	5103.68
12167	90.88	179.46	7964.79	-3831.88	-547.69	3842.27	1.89	5102.79

12200	91.34	179.52	7964.15	-3864.87	-547.4	3875.25	1.41	5102.15
12261	92.19	179.64	7962.27	-3925.84	-546.95	3936.19	1.41	5100.27
12300	91.75	179.42	7960.93	-3964.82	-546.63	3975.15	1.26	5098.93
12355	91.13	179.11	7959.55	-4019.8	-545.93	4030.11	1.26	5097.55
12400	91.07	179.28	7958.68	-4064.78	-545.29	4075.07	0.4	5096.68
12449	91	179.46	7957.8	-4113.77	-544.75	4124.04	0.4	5095.8
12500	90.42	178.41	7957.17	-4164.76	-543.81	4174.99	2.34	5095.17
12543	89.94	177.53	7957.03	-4207.73	-542.28	4217.93	2.34	5095.03
12600	90.9	179.68	7956.61	-4264.71	-540.9	4274.86	4.13	5094.61
12636	91.5	181.04	7955.86	-4300.7	-541.12	4310.85	4.13	5093.86
12700	92.05	181.16	7953.88	-4364.66	-542.35	4374.82	0.88	5091.88
12730	92.31	181.22	7952.74	-4394.63	-542.98	4404.8	0.88	5090.74
12800	92.22	180.44	7949.97	-4464.57	-543.99	4474.74	1.12	5087.97
12824	92.19	180.17	7949.05	-4488.55	-544.12	4498.72	1.12	5087.05
12900	90.62	178.46	7947.18	-4564.51	-543.21	4574.65	3.05	5085.18
12918	90.25	178.06	7947.04	-4582.5	-542.66	4592.63	3.05	5085.04
13000	90.15	180.35	7946.76	-4664.49	-541.53	4674.58	2.8	5084.76
13012	90.13	180.69	7946.73	-4676.49	-541.64	4686.58	2.8	5084.73
13106	90.69	180.87	7946.06	-4770.48	-542.92	4780.57	0.63	5084.06
13200	91.13	181.57	7944.57	-4864.45	-544.92	4874.56	0.88	5082.57
13294	91.44	181.04	7942.46	-4958.4	-547.06	4968.53	0.65	5080.46
13300	91.43	180.97	7942.31	-4964.39	-547.16	4974.53	1.15	5080.31
13387	91.25	179.99	7940.28	-5051.37	-547.9	5061.5	1.15	5078.28
13400	91.56	180.4	7939.96	-5064.36	-547.94	5074.49	3.98	5077.96
13481	93.5	182.98	7936.38	-5145.24	-550.33	5155.4	3.98	5074.38
13500	93.26	182.91	7935.26	-5164.18	-551.3	5174.36	1.32	5073.26
13575	92.31	182.63	7931.62	-5239	-554.92	5249.24	1.32	5069.62
13600	92.09	182.4	7930.65	-5263.96	-556.02	5274.22	1.27	5068.65
13669	91.5	181.75	7928.49	-5332.88	-558.51	5343.17	1.27	5066.49
13700	91.34	181.52	7927.72	-5363.86	-559.39	5374.16	0.92	5065.72
13763	91	181.04	7926.44	-5426.83	-560.8	5437.15	0.92	5064.44
13800	90.2	180.97	7926.05	-5463.82	-561.45	5474.15	2.16	5064.05
13856	89	180.87	7926.44	-5519.81	-562.35	5530.14	2.16	5064.44
13900	89.56	181.2	7926.99	-5563.8	-563.14	5574.14	1.47	5064.99
13950	90.19	181.57	7927.1	-5613.78	-564.35	5624.14	1.47	5065.1
14000	90.46	181.38	7926.82	-5663.77	-565.64	5674.14	0.65	5064.82
14044	90.69	181.22	7926.38	-5707.75	-566.64	5718.13	0.65	5064.38
14100	90.39	180.8	7925.85	-5763.74	-567.63	5774.13	0.92	5063.85
14138	90.19	180.52	7925.66	-5801.74	-568.07	5812.13	0.92	5063.66
14200	90.82	180.4	7925.12	-5863.73	-568.56	5874.12	1.03	5063.12
14231	91.13	180.34	7924.59	-5894.73	-568.76	5905.11	1.03	5062.59
14300	88.01	179.95	7925.11	-5963.72	-568.94	5974.09	4.56	5063.11
14325	86.88	179.81	7926.22	-5988.69	-568.89	5999.06	4.56	5064.22
14400	87.97	180.51	7929.59	-6063.62	-569.1	6073.97	1.73	5067.59
14419	88.25	180.69	7930.21	-6082.6	-569.3	6092.96	1.73	5068.21
14500	88.41	180.09	7932.57	-6163.57	-569.85	6173.92	0.77	5070.57
14513	88.44	179.99	7932.93	-6176.56	-569.85	6186.91	0.77	5070.93

14607	89.06	180.69	7934.98	-6270.54	-570.41	6280.88	0.99	5072.98
14701	91.69	183.51	7934.37	-6364.45	-573.86	6374.85	4.1	5072.37
14795	91.69	182.63	7931.59	-6458.28	-578.89	6468.75	0.94	5069.59
14800	91.7	182.63	7931.44	-6463.27	-579.12	6473.75	0.27	5069.44
14888	91.94	182.63	7928.65	-6551.13	-583.15	6561.68	0.27	5066.65
14900	91.55	182.54	7928.28	-6563.12	-583.69	6573.67	3.34	5066.28
14982	88.88	181.92	7927.97	-6645.05	-586.88	6655.64	3.34	5065.97
15000	88.82	181.72	7928.34	-6663.03	-587.45	6673.64	1.17	5066.34
15076	88.56	180.87	7930.07	-6738.99	-589.17	6749.62	1.17	5068.07
15100	89.46	181.1	7930.49	-6762.99	-589.58	6773.61	3.88	5068.49
15169	92.06	181.75	7929.57	-6831.95	-591.3	6842.6	3.88	5067.57
15200	92.17	181.34	7928.43	-6862.92	-592.13	6873.58	1.35	5066.43
15263	92.38	180.52	7925.93	-6925.86	-593.16	6936.53	1.35	5063.93
15300	92.31	180.24	7924.42	-6962.83	-593.4	6973.49	0.78	5062.42
15357	92.19	179.81	7922.18	-7019.78	-593.43	7030.44	0.78	5060.18
15400	92.28	179.49	7920.51	-7062.75	-593.17	7073.39	0.77	5058.51
15451	92.38	179.11	7918.43	-7113.71	-592.54	7124.32	0.77	5056.43
15500	93.13	179.39	7916.08	-7162.64	-591.9	7173.24	1.62	5054.08
15545	93.81	179.64	7913.36	-7207.56	-591.52	7218.14	1.62	5051.36
15600	93.01	179.84	7910.09	-7262.46	-591.27	7273.02	1.5	5048.09
15639	92.44	179.99	7908.24	-7301.42	-591.22	7311.97	1.5	5046.24
15700	91.67	180.11	7906.05	-7362.38	-591.27	7372.92	1.28	5044.05
15733	91.25	180.17	7905.21	-7395.37	-591.35	7405.9	1.28	5043.21
15800	91.25	180.54	7903.75	-7462.35	-591.76	7472.88	0.56	5041.75
15826	91.25	180.69	7903.18	-7488.34	-592.04	7498.87	0.56	5041.18
15900	90.37	180.28	7902.13	-7562.33	-592.67	7572.86	1.31	5040.13
15920	90.13	180.17	7902.05	-7582.33	-592.75	7592.85	1.31	5040.05
16000	90.56	182.71	7901.57	-7662.3	-594.76	7672.84	3.21	5039.57
16014	90.63	183.15	7901.42	-7676.28	-595.47	7686.84	3.21	5039.42
16108	87.94	183.51	7902.6	-7770.1	-600.93	7780.75	2.89	5040.6
16202	87.25	182.98	7906.54	-7863.87	-606.25	7874.61	0.93	5044.54
16295	88.13	183.33	7910.29	-7956.65	-611.36	7967.48	1.02	5048.29
16300	88.19	183.36	7910.45	-7961.64	-611.65	7972.47	1.26	5048.45
16389	89.19	183.86	7912.49	-8050.44	-617.25	8061.36	1.26	5050.49
16400	89.17	183.72	7912.65	-8061.41	-617.98	8072.35	1.32	5050.65
16483	89	182.63	7913.97	-8144.27	-622.57	8155.29	1.32	5051.97
16500	89.45	182.69	7914.2	-8161.25	-623.36	8172.28	2.65	5052.2
16576	91.44	182.98	7913.62	-8237.16	-627.13	8248.24	2.65	5051.62
16600	91.85	183.34	7912.93	-8261.11	-628.45	8272.22	2.28	5050.93
16670	93.06	184.38	7909.93	-8330.88	-633.15	8342.08	2.28	5047.93
16700	92.38	184.1	7908.5	-8360.77	-635.37	8372	2.46	5046.5
16763	90.94	183.51	7906.68	-8423.6	-639.55	8434.9	2.46	5044.68
16800	90.79	183.23	7906.12	-8460.53	-641.72	8471.87	0.86	5044.12
16857	90.56	182.8	7905.45	-8517.45	-644.72	8528.84	0.86	5043.45
16900	91.22	182.96	7904.78	-8560.39	-646.88	8571.81	1.58	5042.78
16951	92	183.15	7903.35	-8611.3	-649.6	8622.77	1.58	5041.35
17000	91.84	183.15	7901.71	-8660.2	-652.29	8671.71	0.33	5039.71

17044	91.69	183.15	7900.36	-8704.11	-654.7	8715.66	0.33	5038.36
17100	91.73	183.57	7898.69	-8759.99	-657.99	8771.6	0.76	5036.69
17138	91.75	183.86	7897.53	-8797.89	-660.45	8809.54	0.76	5035.53
17200	90.93	180.73	7896.09	-8859.81	-662.93	8871.5	5.22	5034.09
17232	90.5	179.11	7895.69	-8891.81	-662.88	8903.49	5.22	5033.69
17300	91.45	178.73	7894.53	-8959.79	-661.6	8971.43	1.5	5032.53
17326	91.81	178.58	7893.79	-8985.77	-660.99	8997.39	1.5	5031.79
17400	92.41	178.44	7891.07	-9059.69	-659.07	9071.26	0.83	5029.07
17419	92.56	178.41	7890.25	-9078.67	-658.55	9090.22	0.83	5028.25
17500	92.62	177.5	7886.59	-9159.53	-655.66	9171.01	1.13	5024.59
17513	92.63	177.35	7885.99	-9172.51	-655.07	9183.97	1.13	5023.99
17607	92.06	179.99	7882.14	-9266.4	-652.89	9277.79	2.87	5020.14
17700	92.06	179.64	7878.8	-9359.33	-652.59	9370.71	0.38	5016.8
17794	91.25	180.87	7876.09	-9453.29	-653.01	9464.65	1.57	5014.09
17800	91.17	181.02	7875.96	-9459.29	-653.11	9470.65	2.8	5013.96
17888	89.94	183.15	7875.11	-9547.22	-656.31	9558.63	2.8	5013.11
17900	89.92	183.24	7875.12	-9559.2	-656.98	9570.62	0.77	5013.12
17982	89.81	183.86	7875.32	-9641.04	-662.06	9652.55	0.77	5013.32
18000	89.99	183.89	7875.35	-9659	-663.27	9670.53	1.03	5013.35
18075	90.75	184.03	7874.86	-9733.82	-668.45	9745.44	1.03	5012.86
18100	90.7	184.17	7874.54	-9758.76	-670.24	9770.41	0.6	5012.54
18169	90.56	184.56	7873.79	-9827.55	-675.49	9839.29	0.6	5011.79
18200	90.29	183.92	7873.56	-9858.46	-677.79	9870.25	2.23	5011.56
18263	89.75	182.63	7873.53	-9921.36	-681.39	9933.21	2.23	5011.53
18300	89.9	182.63	7873.65	-9958.32	-683.09	9970.19	0.4	5011.65
18357	90.13	182.63	7873.63	-10015.3	-685.7	10027.17	0.4	5011.63
18400	89.4	181.98	7873.81	-10058.2	-687.43	10070.17	2.27	5011.81
18450	88.56	181.22	7874.69	-10108.2	-688.82	10120.15	2.27	5012.69
18500	88.16	180.47	7876.12	-10158.2	-689.56	10170.13	1.7	5014.12
18544	87.81	179.81	7877.67	-10202.1	-689.67	10214.1	1.7	5015.67
18600	87.81	179.81	7879.81	-10258.1	-689.48	10270.04	0	5017.81
18672	87.81	179.81	7882.56	-10330.1	-689.25	10341.97	0	5020.56

LeaseN/S	LeaseE/W	Northing	Easting	Latitude	Longitude
0	0	559937.3	1595493	31° 11' 5	101° 37' 37.80 W
0	0	559937.3	1595493	31° 11' 5	101° 37' 37.80 W
0.03	0.01	559937.3	1595493	31° 11' 5	101° 37' 37.79 W
0.05	0.03	559937.3	1595493	31° 11' 5	101° 37' 37.79 W
0.05	0.06	559937.3	1595493	31° 11' 5	101° 37' 37.79 W
-0.02	0.14	559937.2	1595493	31° 11' 5	101° 37' 37.79 W
-0.1	0.23	559937.2	1595493	31° 11' 5	101° 37' 37.79 W
-0.16	0.33	559937.1	1595493	31° 11' 5	101° 37' 37.79 W
-0.19	0.41	559937.1	1595493	31° 11' 5	101° 37' 37.79 W
-0.21	0.48	559937.1	1595493	31° 11' 5	101° 37' 37.79 W
-0.21	0.54	559937.1	1595493	31° 11' 5	101° 37' 37.79 W
-0.21	0.59	559937.1	1595494	31° 11' 5	101° 37' 37.79 W
-0.22	0.64	559937	1595494	31° 11' 5	101° 37' 37.79 W
-0.22	0.69	559937	1595494	31° 11' 5	101° 37' 37.79 W
-0.23	0.73	559937	1595494	31° 11' 5	101° 37' 37.79 W
-0.23	0.77	559937	1595494	31° 11' 5	101° 37' 37.79 W
-0.24	0.83	559937	1595494	31° 11' 5	101° 37' 37.79 W
-0.25	0.89	559937	1595494	31° 11' 5	101° 37' 37.78 W
-0.28	0.95	559937	1595494	31° 11' 5	101° 37' 37.78 W

-0.33	0.99	559936.9	1595494	31° 11' E	101° 37' 37.78 W
-0.39	1.02	559936.9	1595494	31° 11' E	101° 37' 37.78 W
-0.43	1.01	559936.8	1595494	31° 11' E	101° 37' 37.78 W
-0.43	0.97	559936.8	1595494	31° 11' E	101° 37' 37.78 W
-0.41	0.97	559936.9	1595494	31° 11' E	101° 37' 37.78 W
-0.39	1.01	559936.9	1595494	31° 11' E	101° 37' 37.78 W
-0.38	1.08	559936.9	1595494	31° 11' E	101° 37' 37.78 W
-0.4	1.16	559936.9	1595494	31° 11' E	101° 37' 37.78 W
-0.43	1.21	559936.8	1595494	31° 11' E	101° 37' 37.78 W
-0.46	1.24	559936.8	1595494	31° 11' E	101° 37' 37.78 W
-0.47	1.25	559936.8	1595494	31° 11' E	101° 37' 37.78 W
-0.45	1.25	559936.8	1595494	31° 11' E	101° 37' 37.78 W
-0.41	1.26	559936.9	1595494	31° 11' E	101° 37' 37.78 W
-0.39	1.3	559936.9	1595494	31° 11' E	101° 37' 37.78 W
-0.39	1.36	559936.9	1595494	31° 11' E	101° 37' 37.78 W
-0.39	1.34	559936.9	1595494	31° 11' E	101° 37' 37.78 W
-0.37	1.28	559936.9	1595494	31° 11' E	101° 37' 37.78 W
-0.33	1.28	559936.9	1595494	31° 11' E	101° 37' 37.78 W
-0.35	1.3	559936.9	1595494	31° 11' E	101° 37' 37.78 W
-0.42	1.31	559936.8	1595494	31° 11' E	101° 37' 37.78 W
-0.44	1.29	559936.8	1595494	31° 11' E	101° 37' 37.78 W
-0.42	1.27	559936.8	1595494	31° 11' E	101° 37' 37.78 W
-0.38	1.29	559936.9	1595494	31° 11' E	101° 37' 37.78 W
-0.35	1.3	559936.9	1595494	31° 11' E	101° 37' 37.78 W
-0.31	1.3	559937	1595494	31° 11' E	101° 37' 37.78 W
-0.37	1.21	559936.9	1595494	31° 11' E	101° 37' 37.78 W
-0.44	1.18	559936.8	1595494	31° 11' E	101° 37' 37.78 W
-0.84	1.26	559936.4	1595494	31° 11' E	101° 37' 37.78 W
-1.26	2.01	559936	1595495	31° 11' E	101° 37' 37.77 W
-1.57	3.04	559935.7	1595496	31° 11' E	101° 37' 37.76 W
-1.85	4.21	559935.4	1595497	31° 11' E	101° 37' 37.75 W
-1.86	4.27	559935.4	1595497	31° 11' E	101° 37' 37.75 W
-2.32	5.62	559934.9	1595499	31° 11' E	101° 37' 37.73 W
-2.98	6.85	559934.3	1595500	31° 11' E	101° 37' 37.72 W
-3.11	7.06	559934.2	1595500	31° 11' E	101° 37' 37.71 W
-4.13	7.86	559933.1	1595501	31° 11' E	101° 37' 37.70 W
-4.99	7.78	559932.3	1595501	31° 11' E	101° 37' 37.70 W
-5.31	7.65	559932	1595501	31° 11' E	101° 37' 37.71 W
-6.65	7.33	559930.6	1595500	31° 11' E	101° 37' 37.71 W
-7.6	7.24	559929.7	1595500	31° 11' E	101° 37' 37.71 W
-8.15	7.2	559929.1	1595500	31° 11' E	101° 37' 37.71 W
-9.68	6.89	559927.6	1595500	31° 11' E	101° 37' 37.71 W
-10.5	6.61	559926.8	1595500	31° 11' E	101° 37' 37.72 W
-11.24	6.37	559926	1595499	31° 11' E	101° 37' 37.72 W
-13.1	6.09	559924.2	1595499	31° 11' E	101° 37' 37.72 W
-14.01	6.07	559923.3	1595499	31° 11' E	101° 37' 37.72 W
-14.48	5.97	559922.8	1595499	31° 11' E	101° 37' 37.72 W

-11.56	5.3	559925.7	1595498	31° 11' 5	101° 37' 37.73 W
-9.55	4.93	559927.7	1595498	31° 11' 5	101° 37' 37.74 W
-4.65	3.89	559932.6	1595497	31° 11' 5	101° 37' 37.75 W
3.8	1.5	559941.1	1595494	31° 11' 5	101° 37' 37.78 W
5.84	0.84	559943.1	1595494	31° 11' 5	101° 37' 37.79 W
13.04	-2.12	559950.3	1595491	31° 11' 5	101° 37' 37.82 W
21.84	-7.49	559959.1	1595485	31° 11' 5	101° 37' 37.88 W
22.78	-8.18	559960	1595485	31° 11' 5	101° 37' 37.89 W
30.2	-13.67	559967.5	1595479	31° 11' 5	101° 37' 37.96 W
38.16	-19.24	559975.4	1595474	31° 11' 5	101° 37' 38.02 W
46.21	-24.79	559983.5	1595468	31° 11' 5	101° 37' 38.09 W
53.84	-30.23	559991.1	1595463	31° 11' 5	101° 37' 38.15 W
54.81	-30.93	559992.1	1595462	31° 11' 5	101° 37' 38.16 W
63.7	-37.09	560001	1595456	31° 11' 5	101° 37' 38.23 W
70.8	-41.7	560008.1	1595451	31° 12' 0	101° 37' 38.28 W
72.71	-42.9	560010	1595450	31° 12' 0	101° 37' 38.30 W
81.84	-48.96	560019.1	1595444	31° 12' 0	101° 37' 38.37 W
88.11	-53.37	560025.4	1595440	31° 12' 0	101° 37' 38.42 W
91.16	-55.62	560028.4	1595437	31° 12' 0	101° 37' 38.45 W
101.64	-64.22	560038.9	1595429	31° 12' 0	101° 37' 38.55 W
108.39	-70.28	560045.7	1595423	31° 12' 0	101° 37' 38.62 W
113.3	-74.88	560050.6	1595418	31° 12' 0	101° 37' 38.67 W
123.82	-85.26	560061.1	1595408	31° 12' 0	101° 37' 38.79 W
128.28	-89.94	560065.5	1595403	31° 12' 0	101° 37' 38.85 W
132.98	-94.98	560070.2	1595398	31° 12' 0	101° 37' 38.91 W
142.5	-104.98	560079.8	1595388	31° 12' 0	101° 37' 39.02 W
146.18	-108.79	560083.4	1595384	31° 12' 0	101° 37' 39.07 W
152.96	-115.45	560090.2	1595377	31° 12' 0	101° 37' 39.14 W
165.58	-126.54	560102.8	1595366	31° 12' 0	101° 37' 39.27 W
169.38	-129.64	560106.6	1595363	31° 12' 0	101° 37' 39.31 W
180.11	-137.81	560117.4	1595355	31° 12' 0	101° 37' 39.41 W
195.61	-148.09	560132.9	1595345	31° 12' 0	101° 37' 39.53 W
198.18	-149.64	560135.4	1595343	31° 12' 0	101° 37' 39.54 W
211.46	-158.2	560148.7	1595335	31° 12' 0	101° 37' 39.64 W
227.35	-170.3	560164.6	1595323	31° 12' 0	101° 37' 39.79 W
240.66	-181.4	560177.9	1595312	31° 12' 0	101° 37' 39.92 W
252.45	-191.29	560189.7	1595302	31° 12' 0	101° 37' 40.03 W
253.16	-191.89	560190.4	1595301	31° 12' 0	101° 37' 40.04 W
265.1	-202.87	560202.4	1595290	31° 12' 0	101° 37' 40.17 W
275.33	-213.52	560212.6	1595279	31° 12' 0	101° 37' 40.29 W
277.31	-215.67	560214.6	1595277	31° 12' 0	101° 37' 40.32 W
290.65	-228.91	560227.9	1595264	31° 12' 0	101° 37' 40.47 W
301.39	-238.34	560238.7	1595255	31° 12' 0	101° 37' 40.58 W
305.48	-241.86	560242.7	1595251	31° 12' 0	101° 37' 40.62 W
319.93	-255.97	560257.2	1595237	31° 12' 0	101° 37' 40.79 W
328.35	-265.58	560265.6	1595227	31° 12' 0	101° 37' 40.90 W
333.52	-271.5	560270.8	1595221	31° 12' 0	101° 37' 40.97 W

348.47	-285.35	560285.7	1595208	31° 12'	101° 37' 41.13 W
357.01	-291.57	560294.3	1595201	31° 12'	101° 37' 41.20 W
364.89	-296.83	560302.2	1595196	31° 12'	101° 37' 41.26 W
379.74	-306.67	560317	1595186	31° 12'	101° 37' 41.38 W
385.21	-310.26	560322.5	1595183	31° 12'	101° 37' 41.42 W
392.79	-315.37	560330.1	1595178	31° 12'	101° 37' 41.48 W
405.46	-324.61	560342.7	1595168	31° 12'	101° 37' 41.59 W
409.21	-327.52	560346.5	1595165	31° 12'	101° 37' 41.62 W
418.05	-334.27	560355.3	1595159	31° 12'	101° 37' 41.70 W
431.01	-343.51	560368.3	1595149	31° 12'	101° 37' 41.81 W
433.66	-345.3	560370.9	1595148	31° 12'	101° 37' 41.83 W
436.96	-347.45	560374.2	1595145	31° 12'	101° 37' 41.85 W
437.43	-347.75	560374.7	1595145	31° 12'	101° 37' 41.86 W
439.81	-349.09	560377.1	1595144	31° 12'	101° 37' 41.87 W
441.19	-349.61	560378.5	1595143	31° 12'	101° 37' 41.88 W
441.41	-349.59	560378.7	1595143	31° 12'	101° 37' 41.88 W
441.57	-349.38	560378.8	1595144	31° 12'	101° 37' 41.88 W
439.92	-349.86	560377.2	1595143	31° 12'	101° 37' 41.88 W
439.85	-349.89	560377.1	1595143	31° 12'	101° 37' 41.88 W
438.7	-349.63	560376	1595143	31° 12'	101° 37' 41.88 W
438.6	-349.51	560375.9	1595143	31° 12'	101° 37' 41.88 W
437.62	-349.02	560374.9	1595144	31° 12'	101° 37' 41.87 W
437.38	-349.02	560374.6	1595144	31° 12'	101° 37' 41.87 W
436.31	-349.4	560373.6	1595144	31° 12'	101° 37' 41.88 W
436	-349.61	560373.3	1595143	31° 12'	101° 37' 41.88 W
435.05	-350.2	560372.3	1595143	31° 12'	101° 37' 41.89 W
434.73	-350.42	560372	1595143	31° 12'	101° 37' 41.89 W
434.4	-350.77	560371.7	1595142	31° 12'	101° 37' 41.89 W
434.34	-350.98	560371.6	1595142	31° 12'	101° 37' 41.89 W
434.17	-351.51	560371.4	1595141	31° 12'	101° 37' 41.90 W
433.92	-351.97	560371.2	1595141	31° 12'	101° 37' 41.91 W
433.37	-352.47	560370.6	1595140	31° 12'	101° 37' 41.91 W
432.6	-352.81	560369.9	1595140	31° 12'	101° 37' 41.92 W
431.7	-352.92	560369	1595140	31° 12'	101° 37' 41.92 W
429.12	-352.95	560366.4	1595140	31° 12'	101° 37' 41.92 W
425.61	-352.97	560362.9	1595140	31° 12'	101° 37' 41.92 W
424.3	-352.99	560361.6	1595140	31° 12'	101° 37' 41.92 W
420.39	-353.16	560357.7	1595140	31° 12'	101° 37' 41.92 W
415.21	-353.5	560352.5	1595139	31° 12'	101° 37' 41.92 W
408.77	-354.01	560346	1595139	31° 12'	101° 37' 41.93 W
406.44	-354.21	560343.7	1595139	31° 12'	101° 37' 41.93 W
401.19	-354.67	560338.5	1595138	31° 12'	101° 37' 41.93 W
383.68	-356.29	560320.9	1595137	31° 12'	101° 37' 41.95 W
372.97	-357.33	560310.2	1595136	31° 12'	101° 37' 41.96 W
362.94	-358.22	560300.2	1595135	31° 12'	101° 37' 41.97 W
350.83	-359.1	560288.1	1595134	31° 12'	101° 37' 41.98 W
337.52	-359.87	560274.8	1595133	31° 12'	101° 37' 41.98 W

325.42	-360.44	560262.7	1595132	31° 12' 0"	101° 37' 41.99 W
307.78	-361.12	560245	1595132	31° 12' 0"	101° 37' 41.99 W
275.58	-362.02	560212.8	1595131	31° 12' 0"	101° 37' 42.00 W
265.49	-362.22	560202.8	1595131	31° 12' 0"	101° 37' 42.00 W
240.99	-363.19	560178.3	1595130	31° 12' 0"	101° 37' 42.01 W
203.52	-366.46	560140.8	1595126	31° 12' 0"	101° 37' 42.04 W
197.27	-367.19	560134.5	1595126	31° 12' 0"	101° 37' 42.05 W
183.73	-368.88	560121	1595124	31° 12' 0"	101° 37' 42.07 W
163.12	-371.72	560100.4	1595121	31° 12' 0"	101° 37' 42.10 W
141.73	-374.94	560079	1595118	31° 12' 0"	101° 37' 42.13 W
117.88	-378.85	560055.1	1595114	31° 12' 0"	101° 37' 42.17 W
97	-382.18	560034.3	1595111	31° 12' 0"	101° 37' 42.21 W
73.78	-385.39	560011	1595108	31° 12' 0"	101° 37' 42.24 W
50.08	-388.15	559987.3	1595105	31° 11' 5"	101° 37' 42.27 W
29.87	-390.12	559967.1	1595103	31° 11' 5"	101° 37' 42.29 W
25.99	-390.46	559963.3	1595102	31° 11' 5"	101° 37' 42.29 W
4.47	-392.19	559941.7	1595101	31° 11' 5"	101° 37' 42.31 W
-23.19	-394.26	559914.1	1595099	31° 11' 5"	101° 37' 42.33 W
-72.93	-398.18	559864.3	1595095	31° 11' 5"	101° 37' 42.37 W
-88.87	-399.49	559848.4	1595093	31° 11' 5"	101° 37' 42.38 W
-182.59	-406.68	559754.7	1595086	31° 11' 5"	101° 37' 42.45 W
-276.44	-410.98	559660.8	1595082	31° 11' 5"	101° 37' 42.49 W
-370.35	-410.25	559566.9	1595083	31° 11' 5"	101° 37' 42.47 W
-372.35	-410.17	559564.9	1595083	31° 11' 5"	101° 37' 42.47 W
-422.28	-409.95	559515	1595083	31° 11' 5"	101° 37' 42.46 W
-464.11	-412.09	559473.2	1595081	31° 11' 5"	101° 37' 42.48 W
-472.06	-412.7	559465.2	1595080	31° 11' 5"	101° 37' 42.48 W
-556.46	-419.16	559380.8	1595074	31° 11' 5"	101° 37' 42.55 W
-571.36	-420.3	559365.9	1595073	31° 11' 5"	101° 37' 42.56 W
-649.95	-426.32	559287.3	1595067	31° 11' 5"	101° 37' 42.62 W
-670.87	-427.92	559266.4	1595065	31° 11' 5"	101° 37' 42.63 W
-743.55	-433.35	559193.7	1595060	31° 11' 5"	101° 37' 42.68 W
-770.43	-435.26	559166.8	1595058	31° 11' 5"	101° 37' 42.70 W
-837.22	-439.37	559100	1595054	31° 11' 5"	101° 37' 42.74 W
-870.14	-441.19	559067.1	1595052	31° 11' 5"	101° 37' 42.76 W
-930.01	-444.48	559007.3	1595048	31° 11' 5"	101° 37' 42.79 W
-969.9	-446.94	558967.4	1595046	31° 11' 4"	101° 37' 42.81 W
-1023.67	-451.08	558913.6	1595042	31° 11' 4"	101° 37' 42.85 W
-1069.48	-454.46	558867.8	1595038	31° 11' 4"	101° 37' 42.88 W
-1117.39	-456.82	558819.9	1595036	31° 11' 4"	101° 37' 42.90 W
-1169.32	-458.63	558767.9	1595034	31° 11' 4"	101° 37' 42.92 W
-1211.27	-459.97	558726	1595033	31° 11' 4"	101° 37' 42.93 W
-1269.22	-460.64	558668	1595032	31° 11' 4"	101° 37' 42.93 W
-1305.2	-459.96	558632.1	1595033	31° 11' 4"	101° 37' 42.92 W
-1369.17	-458.72	558568.1	1595034	31° 11' 4"	101° 37' 42.89 W
-1399.16	-458.64	558538.1	1595034	31° 11' 4"	101° 37' 42.89 W
-1469.08	-460.71	558468.2	1595032	31° 11' 4"	101° 37' 42.90 W

-1492	-462.19	558445.3	1595031	31° 11' 4	101° 37' 42.92 W
-1568.75	-466.97	558368.5	1595026	31° 11' 4	101° 37' 42.96 W
-1585.71	-467.79	558351.6	1595025	31° 11' 4	101° 37' 42.97 W
-1668.59	-470.81	558268.7	1595022	31° 11' 4	101° 37' 42.99 W
-1679.59	-471.09	558257.7	1595022	31° 11' 4	101° 37' 42.99 W
-1772.57	-471.79	558164.7	1595021	31° 11' 4	101° 37' 42.99 W
-1866.49	-474.08	558070.8	1595019	31° 11' 4	101° 37' 43.00 W
-1868.49	-474.19	558068.8	1595019	31° 11' 4	101° 37' 43.00 W
-1960.35	-477.95	557976.9	1595015	31° 11' 3	101° 37' 43.04 W
-1968.34	-478.14	557968.9	1595015	31° 11' 3	101° 37' 43.04 W
-2053.32	-479.08	557883.9	1595014	31° 11' 3	101° 37' 43.04 W
-2068.32	-479.13	557868.9	1595014	31° 11' 3	101° 37' 43.03 W
-2147.27	-481.08	557790	1595012	31° 11' 3	101° 37' 43.05 W
-2168.25	-482.04	557769	1595011	31° 11' 3	101° 37' 43.05 W
-2240.11	-486.2	557697.2	1595007	31° 11' 3	101° 37' 43.09 W
-2268.04	-488.11	557669.2	1595005	31° 11' 3	101° 37' 43.11 W
-2333.85	-492.81	557603.4	1595000	31° 11' 3	101° 37' 43.16 W
-2367.75	-495.36	557569.5	1594998	31° 11' 3	101° 37' 43.18 W
-2427.55	-500.14	557509.7	1594993	31° 11' 3	101° 37' 43.23 W
-2467.38	-503.63	557469.9	1594989	31° 11' 3	101° 37' 43.26 W
-2521.11	-508.91	557416.2	1594984	31° 11' 3	101° 37' 43.32 W
-2566.83	-513.77	557370.4	1594979	31° 11' 3	101° 37' 43.37 W
-2614.54	-518.97	557322.7	1594974	31° 11' 3	101° 37' 43.42 W
-2666.28	-524.03	557271	1594969	31° 11' 3	101° 37' 43.47 W
-2707.17	-527.08	557230.1	1594966	31° 11' 3	101° 37' 43.50 W
-2766.04	-530.86	557171.2	1594962	31° 11' 3	101° 37' 43.54 W
-2800.97	-533.11	557136.3	1594960	31° 11' 3	101° 37' 43.56 W
-2865.83	-537.35	557071.4	1594956	31° 11' 3	101° 37' 43.60 W
-2894.77	-539.29	557042.5	1594954	31° 11' 3	101° 37' 43.62 W
-2965.62	-543.91	556971.6	1594949	31° 11' 2	101° 37' 43.66 W
-2988.57	-545.33	556948.7	1594948	31° 11' 2	101° 37' 43.67 W
-3065.45	-549.56	556871.8	1594943	31° 11' 2	101° 37' 43.71 W
-3082.43	-550.37	556854.8	1594943	31° 11' 2	101° 37' 43.72 W
-3165.35	-553.5	556771.9	1594939	31° 11' 2	101° 37' 43.74 W
-3176.35	-553.81	556760.9	1594939	31° 11' 2	101° 37' 43.75 W
-3270.29	-555.24	556667	1594938	31° 11' 2	101° 37' 43.75 W
-3364.22	-555.22	556573	1594938	31° 11' 2	101° 37' 43.74 W
-3365.22	-555.22	556572	1594938	31° 11' 2	101° 37' 43.74 W
-3458.09	-554.77	556479.2	1594938	31° 11' 2	101° 37' 43.72 W
-3465.08	-554.72	556472.2	1594938	31° 11' 2	101° 37' 43.72 W
-3551.01	-553.9	556386.3	1594939	31° 11' 2	101° 37' 43.70 W
-3565	-553.73	556372.3	1594939	31° 11' 2	101° 37' 43.69 W
-3644.97	-552.59	556292.3	1594940	31° 11' 2	101° 37' 43.67 W
-3664.97	-552.23	556272.3	1594941	31° 11' 2	101° 37' 43.66 W
-3737.92	-550.01	556199.3	1594943	31° 11' 2	101° 37' 43.63 W
-3764.9	-549.05	556172.4	1594944	31° 11' 2	101° 37' 43.61 W
-3831.88	-547.69	556105.4	1594945	31° 11' 2	101° 37' 43.59 W

-3864.87	-547.4	556072.4	1594946	31° 11' 2	101° 37' 43.58 W
-3925.84	-546.95	556011.4	1594946	31° 11' 2	101° 37' 43.57 W
-3964.82	-546.63	555972.4	1594946	31° 11' 2	101° 37' 43.56 W
-4019.8	-545.93	555917.5	1594947	31° 11' 1	101° 37' 43.54 W
-4064.78	-545.29	555872.5	1594948	31° 11' 1	101° 37' 43.53 W
-4113.77	-544.75	555823.5	1594948	31° 11' 1	101° 37' 43.52 W
-4164.76	-543.81	555772.5	1594949	31° 11' 1	101° 37' 43.50 W
-4207.73	-542.28	555729.5	1594951	31° 11' 1	101° 37' 43.47 W
-4264.71	-540.9	555672.6	1594952	31° 11' 1	101° 37' 43.45 W
-4300.7	-541.12	555636.6	1594952	31° 11' 1	101° 37' 43.45 W
-4364.66	-542.35	555572.6	1594951	31° 11' 1	101° 37' 43.45 W
-4394.63	-542.98	555542.6	1594950	31° 11' 1	101° 37' 43.46 W
-4464.57	-543.99	555472.7	1594949	31° 11' 1	101° 37' 43.46 W
-4488.55	-544.12	555448.7	1594949	31° 11' 1	101° 37' 43.46 W
-4564.51	-543.21	555372.8	1594950	31° 11' 1	101° 37' 43.44 W
-4582.5	-542.66	555354.8	1594950	31° 11' 1	101° 37' 43.43 W
-4664.49	-541.53	555272.8	1594951	31° 11' 1	101° 37' 43.40 W
-4676.49	-541.64	555260.8	1594951	31° 11' 1	101° 37' 43.40 W
-4770.48	-542.92	555166.8	1594950	31° 11' 1	101° 37' 43.41 W
-4864.45	-544.92	555072.8	1594948	31° 11' 1	101° 37' 43.42 W
-4958.4	-547.06	554978.9	1594946	31° 11' 1	101° 37' 43.43 W
-4964.39	-547.16	554972.9	1594946	31° 11' 1	101° 37' 43.43 W
-5051.37	-547.9	554885.9	1594945	31° 11' 1	101° 37' 43.43 W
-5064.36	-547.94	554872.9	1594945	31° 11' 1	101° 37' 43.42 W
-5145.24	-550.33	554792	1594943	31° 11' 1	101° 37' 43.44 W
-5164.18	-551.3	554773.1	1594942	31° 11' 1	101° 37' 43.45 W
-5239	-554.92	554698.3	1594938	31° 11' 1	101° 37' 43.48 W
-5263.96	-556.02	554673.3	1594937	31° 11' 1	101° 37' 43.49 W
-5332.88	-558.51	554604.4	1594934	31° 11' 1	101° 37' 43.51 W
-5363.86	-559.39	554573.4	1594934	31° 11' 1	101° 37' 43.52 W
-5426.83	-560.8	554510.4	1594932	31° 11' 1	101° 37' 43.52 W
-5463.82	-561.45	554473.4	1594931	31° 11' 1	101° 37' 43.53 W
-5519.81	-562.35	554417.5	1594931	31° 11' 1	101° 37' 43.53 W
-5563.8	-563.14	554373.5	1594930	31° 11' 1	101° 37' 43.53 W
-5613.78	-564.35	554323.5	1594929	31° 11' 1	101° 37' 43.54 W
-5663.77	-565.64	554273.5	1594927	31° 11' 1	101° 37' 43.55 W
-5707.75	-566.64	554229.5	1594926	31° 11' 1	101° 37' 43.55 W
-5763.74	-567.63	554173.5	1594925	31° 11' 1	101° 37' 43.56 W
-5801.74	-568.07	554135.5	1594925	31° 11' 1	101° 37' 43.56 W
-5863.73	-568.56	554073.5	1594924	31° 11' 1	101° 37' 43.56 W
-5894.73	-568.76	554042.5	1594924	31° 11' 1	101° 37' 43.55 W
-5963.72	-568.94	553973.5	1594924	31° 11' 1	101° 37' 43.55 W
-5988.69	-568.89	553948.6	1594924	31° 11' 1	101° 37' 43.54 W
-6063.62	-569.1	553873.6	1594924	31° 10' 5	101° 37' 43.53 W
-6082.6	-569.3	553854.7	1594924	31° 10' 5	101° 37' 43.53 W
-6163.57	-569.85	553773.7	1594923	31° 10' 5	101° 37' 43.53 W
-6176.56	-569.85	553760.7	1594923	31° 10' 5	101° 37' 43.53 W

-6270.54	-570.41	553666.7	1594923	31° 10' 5	101° 37' 43.52 W
-6364.45	-573.86	553572.8	1594919	31° 10' 5	101° 37' 43.55 W
-6458.28	-578.89	553479	1594914	31° 10' 5	101° 37' 43.59 W
-6463.27	-579.12	553474	1594914	31° 10' 5	101° 37' 43.60 W
-6551.13	-583.15	553386.1	1594910	31° 10' 5	101° 37' 43.63 W
-6563.12	-583.69	553374.1	1594909	31° 10' 5	101° 37' 43.64 W
-6645.05	-586.88	553292.2	1594906	31° 10' 5	101° 37' 43.66 W
-6663.03	-587.45	553274.2	1594905	31° 10' 5	101° 37' 43.67 W
-6738.99	-589.17	553198.3	1594904	31° 10' 5	101° 37' 43.67 W
-6762.99	-589.58	553174.3	1594903	31° 10' 5	101° 37' 43.68 W
-6831.95	-591.3	553105.3	1594902	31° 10' 5	101° 37' 43.69 W
-6862.92	-592.13	553074.3	1594901	31° 10' 5	101° 37' 43.69 W
-6925.86	-593.16	553011.4	1594900	31° 10' 5	101° 37' 43.70 W
-6962.83	-593.4	552974.4	1594900	31° 10' 5	101° 37' 43.69 W
-7019.78	-593.43	552917.5	1594899	31° 10' 4	101° 37' 43.69 W
-7062.75	-593.17	552874.5	1594900	31° 10' 4	101° 37' 43.68 W
-7113.71	-592.54	552823.6	1594900	31° 10' 4	101° 37' 43.66 W
-7162.64	-591.9	552774.6	1594901	31° 10' 4	101° 37' 43.65 W
-7207.56	-591.52	552729.7	1594901	31° 10' 4	101° 37' 43.64 W
-7262.46	-591.27	552674.8	1594902	31° 10' 4	101° 37' 43.63 W
-7301.42	-591.22	552635.8	1594902	31° 10' 4	101° 37' 43.62 W
-7362.38	-591.27	552574.9	1594902	31° 10' 4	101° 37' 43.62 W
-7395.37	-591.35	552541.9	1594902	31° 10' 4	101° 37' 43.61 W
-7462.35	-591.76	552474.9	1594901	31° 10' 4	101° 37' 43.61 W
-7488.34	-592.04	552448.9	1594901	31° 10' 4	101° 37' 43.61 W
-7562.33	-592.67	552374.9	1594900	31° 10' 4	101° 37' 43.60 W
-7582.33	-592.75	552354.9	1594900	31° 10' 4	101° 37' 43.60 W
-7662.3	-594.76	552275	1594898	31° 10' 4	101° 37' 43.62 W
-7676.28	-595.47	552261	1594897	31° 10' 4	101° 37' 43.62 W
-7770.1	-600.93	552167.2	1594892	31° 10' 4	101° 37' 43.67 W
-7863.87	-606.25	552073.4	1594887	31° 10' 4	101° 37' 43.72 W
-7956.65	-611.36	551980.6	1594882	31° 10' 4	101° 37' 43.77 W
-7961.64	-611.65	551975.6	1594881	31° 10' 4	101° 37' 43.77 W
-8050.44	-617.25	551886.8	1594876	31° 10' 3	101° 37' 43.82 W
-8061.41	-617.98	551875.9	1594875	31° 10' 3	101° 37' 43.83 W
-8144.27	-622.57	551793	1594870	31° 10' 3	101° 37' 43.87 W
-8161.25	-623.36	551776	1594870	31° 10' 3	101° 37' 43.88 W
-8237.16	-627.13	551700.1	1594866	31° 10' 3	101° 37' 43.91 W
-8261.11	-628.45	551676.2	1594864	31° 10' 3	101° 37' 43.92 W
-8330.88	-633.15	551606.4	1594860	31° 10' 3	101° 37' 43.97 W
-8360.77	-635.37	551576.5	1594858	31° 10' 3	101° 37' 43.99 W
-8423.6	-639.55	551513.7	1594853	31° 10' 3	101° 37' 44.03 W
-8460.53	-641.72	551476.7	1594851	31° 10' 3	101° 37' 44.05 W
-8517.45	-644.72	551419.8	1594848	31° 10' 3	101° 37' 44.08 W
-8560.39	-646.88	551376.9	1594846	31° 10' 3	101° 37' 44.10 W
-8611.3	-649.6	551326	1594843	31° 10' 3	101° 37' 44.12 W
-8660.2	-652.29	551277.1	1594841	31° 10' 3	101° 37' 44.14 W

-8704.11	-654.7	551233.2	1594838	31° 10' 3	101° 37' 44.17 W
-8759.99	-657.99	551177.3	1594835	31° 10' 3	101° 37' 44.20 W
-8797.89	-660.45	551139.4	1594832	31° 10' 3	101° 37' 44.22 W
-8859.81	-662.93	551077.5	1594830	31° 10' 3	101° 37' 44.24 W
-8891.81	-662.88	551045.5	1594830	31° 10' 3	101° 37' 44.23 W
-8959.79	-661.6	550977.5	1594831	31° 10' 3	101° 37' 44.21 W
-8985.77	-660.99	550951.5	1594832	31° 10' 3	101° 37' 44.20 W
-9059.69	-659.07	550877.6	1594834	31° 10' 2	101° 37' 44.17 W
-9078.67	-658.55	550858.6	1594834	31° 10' 2	101° 37' 44.16 W
-9159.53	-655.66	550777.7	1594837	31° 10' 2	101° 37' 44.12 W
-9172.51	-655.07	550764.8	1594838	31° 10' 2	101° 37' 44.11 W
-9266.4	-652.89	550670.9	1594840	31° 10' 2	101° 37' 44.07 W
-9359.33	-652.59	550577.9	1594840	31° 10' 2	101° 37' 44.05 W
-9453.29	-653.01	550484	1594840	31° 10' 2	101° 37' 44.05 W
-9459.29	-653.11	550478	1594840	31° 10' 2	101° 37' 44.05 W
-9547.22	-656.31	550390	1594837	31° 10' 2	101° 37' 44.07 W
-9559.2	-656.98	550378.1	1594836	31° 10' 2	101° 37' 44.08 W
-9641.04	-662.06	550296.2	1594831	31° 10' 2	101° 37' 44.12 W
-9659	-663.27	550278.3	1594830	31° 10' 2	101° 37' 44.14 W
-9733.82	-668.45	550203.4	1594824	31° 10' 2	101° 37' 44.19 W
-9758.76	-670.24	550178.5	1594823	31° 10' 2	101° 37' 44.20 W
-9827.55	-675.49	550109.7	1594817	31° 10' 2	101° 37' 44.25 W
-9858.46	-677.79	550078.8	1594815	31° 10' 2	101° 37' 44.28 W
-9921.36	-681.39	550015.9	1594812	31° 10' 2	101° 37' 44.31 W
-9958.32	-683.09	549978.9	1594810	31° 10' 2	101° 37' 44.32 W
-10015.3	-685.7	549922	1594807	31° 10' 2	101° 37' 44.35 W
-10058.2	-687.43	549879	1594805	31° 10' 1	101° 37' 44.36 W
-10108.2	-688.82	549829.1	1594804	31° 10' 1	101° 37' 44.37 W
-10158.2	-689.56	549779.1	1594803	31° 10' 1	101° 37' 44.37 W
-10202.1	-689.67	549735.1	1594803	31° 10' 1	101° 37' 44.37 W
-10258.1	-689.48	549679.2	1594803	31° 10' 1	101° 37' 44.36 W
-10330.1	-689.25	549607.2	1594804	31° 10' 1	101° 37' 44.35 W