



Survey

<p>Client: Esso Australia Ltd Field: BlackBack Gippsland Offshore Structure: BlackBack Sedco 702 A-1 Well: A-1 Borehole: A-1 ST API #: Date: April 21, 1999 Grid Convergence: -0.96788765° Scale Factor: 0.99982562</p> <p>Location: S 38 32 31.677, E 148 33 11.274 : N 5732873.400 m, E 635355.100 m Coordinate System: UTM Zone 55 S on Australian Datum 1984</p>	<p>Survey Computation Method: Minimum Curvature DLS Computation Method: Lubinski Vertical Section Azimuth: 355.700° Vertical Section Origin: N 0.000 m, E 0.000 m TVD Reference: Rotary Table 26.0 m above MSL Magnetic Declination: 13.384° Total Field Strength: 60296.736 nT Dip: -69.042° Declination Date: February 27, 1999 Magnetic Declination Model: BGS 1998 North Reference: Grid North Coordinate Reference To: Structure Reference Point</p>
--	---

Station ID	MD (m)	Incl (°)	Azim (°)	TVD (m)	VSec (m)	N/S (m)	E/W (m)	DLS (°/30m)	Grid Coordinates		Geographic Coordinates	
									Northing (m)	Easting (m)	Latitude	Longitude
Tie-In	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5732873.40	635355.10	S 38 32 31.677	E 148 33 11.274
	421.00	0.00	118.67	421.00	0.00	0.00	0.00	0.00	5732873.40	635355.10	S 38 32 31.677	E 148 33 11.274
	424.40	0.44	118.67	424.40	-0.01	-0.01	0.01	3.88	5732873.39	635355.11	S 38 32 31.677	E 148 33 11.275
	433.90	0.67	118.67	433.90	-0.06	-0.05	0.09	0.73	5732873.35	635355.19	S 38 32 31.678	E 148 33 11.278
	443.60	1.22	118.67	443.60	-0.14	-0.13	0.23	1.70	5732873.27	635355.33	S 38 32 31.681	E 148 33 11.284
30" Casing	453.30	1.40	118.67	453.30	-0.26	-0.23	0.43	0.56	5732873.17	635355.53	S 38 32 31.684	E 148 33 11.292
	463.00	1.35	118.67	462.99	-0.39	-0.35	0.63	0.15	5732873.05	635355.73	S 38 32 31.688	E 148 33 11.301
	472.60	1.94	118.67	472.59	-0.54	-0.48	0.87	1.84	5732872.92	635355.97	S 38 32 31.692	E 148 33 11.311
	482.30	1.67	118.67	482.28	-0.71	-0.62	1.14	0.84	5732872.78	635356.24	S 38 32 31.696	E 148 33 11.322
	487.00	1.35	118.67	486.98	-0.78	-0.68	1.25	2.04	5732872.72	635356.35	S 38 32 31.698	E 148 33 11.327
	491.10	1.06	118.67	491.08	-0.82	-0.72	1.33	2.12	5732872.68	635356.43	S 38 32 31.699	E 148 33 11.330
	519.90	0.83	118.67	519.88	-1.08	-0.95	1.74	0.24	5732872.45	635356.84	S 38 32 31.706	E 148 33 11.347
	548.90	0.85	112.10	548.87	-1.29	-1.13	2.13	0.10	5732872.27	635357.23	S 38 32 31.712	E 148 33 11.363
	578.00	0.76	117.52	577.97	-1.49	-1.30	2.50	0.12	5732872.10	635357.60	S 38 32 31.717	E 148 33 11.379

	607.00	0.44	120.87	606.97	-1.65	-1.45	2.76	0.33	5732871.95	635357.86	S 38 32 31.722	E 148 33 11.389
	636.10	0.66	122.56	636.07	-1.82	-1.60	3.00	0.23	5732871.80	635358.10	S 38 32 31.727	E 148 33 11.399
	650.00	0.56	118.40	649.97	-1.90	-1.67	3.13	0.24	5732871.73	635358.23	S 38 32 31.729	E 148 33 11.405
20 Casing	689.12	1.26	120.18	689.08	-2.25	-1.98	3.67	0.54	5732871.42	635358.77	S 38 32 31.739	E 148 33 11.427
	719.19	1.50	65.10	719.15	-2.30	-1.98	4.31	1.29	5732871.42	635359.41	S 38 32 31.738	E 148 33 11.454
	748.79	3.53	17.27	748.72	-1.32	-0.95	4.93	2.79	5732872.45	635360.03	S 38 32 31.705	E 148 33 11.479
	807.91	6.57	13.29	807.60	3.60	4.08	6.25	1.55	5732877.48	635361.35	S 38 32 31.541	E 148 33 11.530
	838.21	9.51	11.16	837.60	7.67	8.23	7.13	2.93	5732881.63	635362.23	S 38 32 31.406	E 148 33 11.563
	865.42	12.94	8.40	864.29	12.81	13.45	8.01	3.83	5732886.85	635363.11	S 38 32 31.236	E 148 33 11.596
	896.24	16.67	3.22	894.08	20.56	21.28	8.77	3.85	5732894.68	635363.87	S 38 32 30.982	E 148 33 11.622
	924.88	20.03	0.25	921.26	29.53	30.29	9.02	3.65	5732903.69	635364.12	S 38 32 30.690	E 148 33 11.626
	951.82	23.17	359.15	946.30	39.42	40.20	8.96	3.53	5732913.59	635364.06	S 38 32 30.368	E 148 33 11.616
	981.56	25.16	358.42	973.44	51.57	52.37	8.70	2.03	5732925.76	635363.80	S 38 32 29.974	E 148 33 11.597
	1009.78	28.29	359.43	998.64	64.24	65.06	8.47	3.36	5732938.45	635363.57	S 38 32 29.562	E 148 33 11.579
	1038.86	31.04	0.21	1023.91	78.59	79.45	8.43	2.86	5732952.84	635363.53	S 38 32 29.096	E 148 33 11.567
	1067.13	33.93	359.33	1047.75	93.74	94.63	8.36	3.11	5732968.01	635363.46	S 38 32 28.604	E 148 33 11.554
	1096.16	36.75	358.31	1071.43	110.50	111.42	8.01	2.98	5732984.80	635363.11	S 38 32 28.059	E 148 33 11.527
	1127.05	39.69	357.70	1095.69	129.60	130.51	7.34	2.88	5733003.89	635362.44	S 38 32 27.441	E 148 33 11.486
	1155.88	43.87	354.25	1117.19	148.79	149.66	5.97	4.96	5733023.03	635361.07	S 38 32 26.821	E 148 33 11.417
	1183.49	47.66	352.36	1136.45	168.55	169.30	3.65	4.37	5733042.67	635358.75	S 38 32 26.185	E 148 33 11.307
	1212.09	51.37	354.08	1155.02	190.28	190.90	1.10	4.13	5733064.27	635356.20	S 38 32 25.486	E 148 33 11.187
	1242.07	54.60	354.94	1173.06	214.21	214.73	-1.19	3.30	5733088.09	635353.91	S 38 32 24.715	E 148 33 11.076
	1271.80	57.80	355.55	1189.60	238.91	239.34	-3.24	3.27	5733112.70	635351.86	S 38 32 23.918	E 148 33 10.974
	1289.16	60.26	355.87	1198.53	253.80	254.19	-4.35	4.28	5733127.55	635350.75	S 38 32 23.437	E 148 33 10.918
13 3/8 Casing	1326.74	60.69	356.00	1217.05	286.50	286.80	-6.67	0.35	5733160.15	635348.43	S 38 32 22.381	E 148 33 10.799
	1354.99	61.51	355.93	1230.70	311.23	311.47	-8.41	0.87	5733184.82	635346.69	S 38 32 21.582	E 148 33 10.710
	1384.41	61.45	355.95	1244.75	337.08	337.26	-10.24	0.06	5733210.60	635344.86	S 38 32 20.746	E 148 33 10.616
	1414.28	61.36	353.52	1259.05	363.30	363.37	-12.64	2.14	5733236.71	635342.46	S 38 32 19.901	E 148 33 10.499
	1442.19	61.35	355.92	1272.43	387.78	387.76	-14.90	2.26	5733261.09	635340.20	S 38 32 19.111	E 148 33 10.389
	1471.63	60.53	355.63	1286.73	413.52	413.42	-16.79	0.87	5733286.75	635338.31	S 38 32 18.280	E 148 33 10.293
	1501.64	60.89	355.68	1301.41	439.69	439.52	-18.78	0.36	5733312.84	635336.32	S 38 32 17.435	E 148 33 10.193
	1530.17	60.53	355.09	1315.37	464.57	464.32	-20.78	0.66	5733337.64	635334.32	S 38 32 16.632	E 148 33 10.093
	1558.47	60.71	355.47	1329.25	489.23	488.90	-22.81	0.40	5733362.22	635332.29	S 38 32 15.836	E 148 33 9.992
	1586.27	60.25	355.14	1342.95	513.42	513.01	-24.79	0.59	5733386.32	635330.31	S 38 32 15.055	E 148 33 9.893
	1617.82	60.06	355.20	1358.65	540.79	540.28	-27.09	0.19	5733413.59	635328.02	S 38 32 14.172	E 148 33 9.779
	1643.74	60.17	355.19	1371.57	563.26	562.67	-28.97	0.13	5733435.97	635326.14	S 38 32 13.448	E 148 33 9.686

1674.41	60.53	355.08	1386.74	589.91	589.23	-31.23	0.36	5733462.53	635323.88	S 38 32 12.588	E 148 33 9.574
1705.36	60.32	355.33	1402.01	616.83	616.05	-33.48	0.29	5733489.34	635321.63	S 38 32 11.719	E 148 33 9.463
1732.48	59.91	355.30	1415.53	640.34	639.49	-35.40	0.45	5733512.78	635319.71	S 38 32 10.960	E 148 33 9.367
1762.81	60.02	355.13	1430.71	666.60	665.65	-37.59	0.18	5733538.93	635317.52	S 38 32 10.113	E 148 33 9.258
1791.92	60.22	355.56	1445.21	691.84	690.81	-39.64	0.44	5733564.09	635315.47	S 38 32 9.298	E 148 33 9.156
1819.51	60.09	355.85	1458.94	715.77	714.67	-41.44	0.31	5733587.95	635313.67	S 38 32 8.526	E 148 33 9.065
1849.39	59.87	355.87	1473.89	741.64	740.48	-43.30	0.22	5733613.75	635311.81	S 38 32 7.690	E 148 33 8.970
1880.00	59.87	355.87	1489.26	768.11	766.88	-45.21	0.00	5733640.15	635309.90	S 38 32 6.835	E 148 33 8.873
1907.89	59.81	355.96	1503.27	792.23	790.94	-46.93	0.11	5733664.20	635308.18	S 38 32 6.056	E 148 33 8.785
1932.35	59.85	356.20	1515.56	813.38	812.03	-48.37	0.26	5733685.29	635306.74	S 38 32 5.372	E 148 33 8.711
1961.76	59.98	356.09	1530.30	838.82	837.42	-50.08	0.16	5733710.67	635305.03	S 38 32 4.550	E 148 33 8.623
1991.39	60.13	356.14	1545.09	864.50	863.04	-51.82	0.16	5733736.29	635303.29	S 38 32 3.720	E 148 33 8.533
2021.50	60.36	356.29	1560.04	890.64	889.12	-53.55	0.26	5733762.37	635301.56	S 38 32 2.876	E 148 33 8.444
2053.78	60.54	356.51	1575.96	918.71	917.15	-55.31	0.24	5733790.39	635299.80	S 38 32 1.968	E 148 33 8.352
2082.87	60.56	355.75	1590.26	944.04	942.42	-57.02	0.68	5733815.66	635298.09	S 38 32 1.149	E 148 33 8.263
2108.93	60.70	356.10	1603.04	966.75	965.07	-58.64	0.39	5733838.30	635296.47	S 38 32 0.416	E 148 33 8.181
2129.97	60.90	356.17	1613.31	985.12	983.40	-59.87	0.30	5733856.63	635295.24	S 38 31 59.822	E 148 33 8.117
2137.25	60.88	356.23	1616.85	991.48	989.75	-60.30	0.23	5733862.98	635294.81	S 38 31 59.616	E 148 33 8.095
2167.68	61.06	355.73	1631.61	1018.09	1016.29	-62.16	0.47	5733889.51	635292.95	S 38 31 58.757	E 148 33 8.000
2195.96	61.31	355.75	1645.24	1042.87	1041.00	-64.00	0.27	5733914.22	635291.11	S 38 31 57.956	E 148 33 7.906
2221.57	61.52	354.86	1657.50	1065.35	1063.41	-65.84	0.95	5733936.63	635289.27	S 38 31 57.231	E 148 33 7.815
2251.46	61.59	354.77	1671.73	1091.63	1089.58	-68.22	0.11	5733962.79	635286.89	S 38 31 56.384	E 148 33 7.698
2280.40	61.22	354.95	1685.59	1117.04	1114.89	-70.49	0.42	5733988.10	635284.62	S 38 31 55.564	E 148 33 7.587
2310.84	61.40	354.79	1700.20	1143.74	1141.49	-72.88	0.22	5734014.69	635282.23	S 38 31 54.703	E 148 33 7.470
2341.94	60.86	354.75	1715.21	1170.97	1168.61	-75.36	0.52	5734041.81	635279.75	S 38 31 53.825	E 148 33 7.349
2367.51	59.72	355.02	1727.89	1193.18	1190.73	-77.34	1.37	5734063.92	635277.77	S 38 31 53.109	E 148 33 7.251
2398.31	58.68	354.68	1743.66	1219.63	1217.08	-79.72	1.05	5734090.27	635275.39	S 38 31 52.256	E 148 33 7.135
2426.78	58.62	354.84	1758.47	1243.94	1241.29	-81.94	0.16	5734114.47	635273.17	S 38 31 51.472	E 148 33 7.026
2455.75	59.57	355.47	1773.35	1268.79	1266.06	-84.04	1.13	5734139.24	635271.08	S 38 31 50.670	E 148 33 6.922
2481.11	59.91	355.22	1786.13	1290.70	1287.89	-85.82	0.48	5734161.07	635269.30	S 38 31 49.963	E 148 33 6.834
2511.84	59.71	355.38	1801.58	1317.26	1314.36	-87.99	0.24	5734187.53	635267.13	S 38 31 49.106	E 148 33 6.726
2540.56	59.56	355.64	1816.10	1342.04	1339.07	-89.93	0.28	5734212.24	635265.19	S 38 31 48.306	E 148 33 6.628
2569.31	59.42	355.58	1830.70	1366.81	1363.76	-91.83	0.16	5734236.92	635263.29	S 38 31 47.506	E 148 33 6.533
2597.51	58.88	355.83	1845.16	1391.02	1387.90	-93.64	0.62	5734261.06	635261.48	S 38 31 46.724	E 148 33 6.441
2629.14	58.39	355.75	1861.62	1418.03	1414.84	-95.62	0.47	5734287.99	635259.50	S 38 31 45.852	E 148 33 6.341

2658.37	58.13	356.10	1877.00	1442.88	1439.64	-97.39	0.41	5734312.79	635257.73	S 38 31 45.049	E 148 33 6.250
2687.52	58.15	356.31	1892.38	1467.64	1464.34	-99.03	0.18	5734337.49	635256.09	S 38 31 44.249	E 148 33 6.165
2718.09	58.14	355.76	1908.52	1493.61	1490.24	-100.82	0.46	5734363.38	635254.30	S 38 31 43.410	E 148 33 6.074
2743.91	58.00	356.38	1922.17	1515.52	1512.10	-102.33	0.63	5734385.24	635252.79	S 38 31 42.702	E 148 33 5.996
2773.53	58.44	354.90	1937.77	1540.70	1537.21	-104.24	1.35	5734410.34	635250.88	S 38 31 41.888	E 148 33 5.900
2802.50	59.04	354.59	1952.81	1565.46	1561.87	-106.51	0.68	5734435.00	635248.61	S 38 31 41.090	E 148 33 5.789
2833.23	58.77	354.86	1968.68	1591.77	1588.07	-108.93	0.35	5734461.19	635246.19	S 38 31 40.242	E 148 33 5.671
2858.12	59.17	354.91	1981.51	1613.10	1609.32	-110.83	0.48	5734482.44	635244.29	S 38 31 39.554	E 148 33 5.577
2887.62	59.34	354.83	1996.59	1638.45	1634.57	-113.10	0.19	5734507.69	635242.02	S 38 31 38.736	E 148 33 5.466
2917.72	59.57	354.62	2011.89	1664.37	1660.38	-115.48	0.29	5734533.49	635239.64	S 38 31 37.901	E 148 33 5.350
2946.84	59.68	354.74	2026.61	1689.48	1685.40	-117.81	0.16	5734558.51	635237.31	S 38 31 37.091	E 148 33 5.236
2975.99	59.88	354.77	2041.28	1714.67	1710.48	-120.11	0.21	5734583.58	635235.01	S 38 31 36.279	E 148 33 5.124
3006.75	59.95	355.16	2056.70	1741.28	1736.99	-122.45	0.34	5734610.09	635232.67	S 38 31 35.420	E 148 33 5.009
3035.02	59.77	354.92	2070.90	1765.73	1761.35	-124.56	0.29	5734634.44	635230.56	S 38 31 34.632	E 148 33 4.905
3063.76	59.98	355.23	2085.32	1790.59	1786.11	-126.70	0.36	5734659.20	635228.42	S 38 31 33.830	E 148 33 4.799
3092.62	59.70	355.52	2099.82	1815.54	1810.99	-128.71	0.39	5734684.07	635226.41	S 38 31 33.024	E 148 33 4.699
3121.60	59.72	355.38	2114.44	1840.56	1835.93	-130.69	0.13	5734709.01	635224.43	S 38 31 32.217	E 148 33 4.600
3151.49	59.46	355.62	2129.57	1866.34	1861.63	-132.72	0.33	5734734.71	635222.40	S 38 31 31.384	E 148 33 4.498
3179.29	59.46	355.20	2143.69	1890.28	1885.50	-134.63	0.39	5734758.57	635220.49	S 38 31 30.612	E 148 33 4.403
3207.72	59.93	353.69	2158.04	1914.82	1909.92	-137.01	1.46	5734782.99	635218.11	S 38 31 29.821	E 148 33 4.287
3235.57	59.64	353.88	2172.06	1938.87	1933.85	-139.61	0.36	5734806.91	635215.51	S 38 31 29.046	E 148 33 4.163
3266.39	59.34	354.09	2187.70	1965.41	1960.26	-142.40	0.34	5734833.32	635212.73	S 38 31 28.192	E 148 33 4.030
3296.82	59.00	354.34	2203.30	1991.54	1986.25	-145.03	0.40	5734859.30	635210.10	S 38 31 27.350	E 148 33 3.903
3325.72	59.05	354.56	2218.17	2016.31	2010.92	-147.43	0.20	5734883.97	635207.70	S 38 31 26.552	E 148 33 3.787
3354.64	58.78	354.17	2233.10	2041.07	2035.56	-149.86	0.45	5734908.61	635205.27	S 38 31 25.754	E 148 33 3.670
3380.91	58.66	354.44	2246.74	2063.51	2057.90	-152.09	0.30	5734930.94	635203.04	S 38 31 25.031	E 148 33 3.562
3413.02	57.98	354.59	2263.61	2090.83	2085.10	-154.70	0.65	5734958.14	635200.43	S 38 31 24.150	E 148 33 3.435
3423.01	57.87	354.76	2268.91	2099.30	2093.53	-155.48	0.54	5734966.57	635199.65	S 38 31 23.877	E 148 33 3.397
3440.37	58.13	354.77	2278.11	2114.02	2108.19	-156.83	0.45	5734981.22	635198.30	S 38 31 23.403	E 148 33 3.331
3469.22	58.53	354.43	2293.26	2138.57	2132.64	-159.14	0.51	5735005.67	635195.99	S 38 31 22.611	E 148 33 3.219
3498.05	58.98	353.92	2308.21	2163.21	2157.16	-161.64	0.65	5735030.18	635193.49	S 38 31 21.817	E 148 33 3.099
3526.68	59.44	353.82	2322.87	2187.79	2181.61	-164.27	0.49	5735054.63	635190.86	S 38 31 21.026	E 148 33 2.973
3557.62	59.86	353.40	2338.50	2214.47	2208.15	-167.24	0.54	5735081.17	635187.89	S 38 31 20.167	E 148 33 2.832
3586.46	60.43	353.31	2352.86	2239.46	2232.99	-170.13	0.60	5735106.00	635185.00	S 38 31 19.363	E 148 33 2.695
3614.50	60.59	353.98	2366.66	2263.85	2257.25	-172.83	0.65	5735130.26	635182.30	S 38 31 18.578	E 148 33 2.567
3643.60	59.87	353.97	2381.11	2289.10	2282.37	-175.49	0.74	5735155.37	635179.64	S 38 31 17.765	E 148 33 2.440

3649.14	60.13	353.79	2383.88	2293.90	2287.14	-176.00	1.64	5735160.14	635179.13	S 38 31 17.611	E 148 33 2.416
3672.54	60.63	353.44	2395.45	2314.22	2307.35	-178.26	0.75	5735180.35	635176.87	S 38 31 16.957	E 148 33 2.308
3692.54	60.57	354.11	2405.26	2331.64	2324.67	-180.15	0.88	5735197.67	635174.98	S 38 31 16.396	E 148 33 2.218
3700.54	60.62	354.07	2409.19	2338.60	2331.61	-180.87	0.23	5735204.60	635174.26	S 38 31 16.171	E 148 33 2.184
3719.65	61.09	354.05	2418.50	2355.29	2348.21	-182.59	0.74	5735221.20	635172.54	S 38 31 15.634	E 148 33 2.101
3728.96	60.81	354.10	2423.02	2363.42	2356.30	-183.43	0.91	5735229.29	635171.70	S 38 31 15.372	E 148 33 2.061
3756.08	59.63	354.26	2436.49	2386.95	2379.72	-185.82	1.31	5735252.71	635169.31	S 38 31 14.614	E 148 33 1.946
3765.73	59.60	354.22	2441.37	2395.28	2388.00	-186.66	0.14	5735260.98	635168.47	S 38 31 14.346	E 148 33 1.905
3768.39	59.56	354.22	2442.72	2397.57	2390.28	-186.89	0.45	5735263.26	635168.24	S 38 31 14.272	E 148 33 1.894
3775.11	59.08	353.63	2446.15	2403.35	2396.03	-187.50	3.12	5735269.01	635167.63	S 38 31 14.086	E 148 33 1.865
3786.27	58.44	353.53	2451.93	2412.88	2405.51	-188.57	1.74	5735278.49	635166.56	S 38 31 13.779	E 148 33 1.814
3799.87	57.94	352.08	2459.10	2424.42	2416.98	-190.01	2.93	5735289.96	635165.12	S 38 31 13.408	E 148 33 1.747
3810.10	57.74	350.23	2464.55	2433.06	2425.54	-191.34	4.63	5735298.52	635163.79	S 38 31 13.131	E 148 33 1.686
3866.55	57.81	347.93	2494.65	2480.49	2472.42	-200.39	1.03	5735345.39	635154.75	S 38 31 11.616	E 148 33 1.280
3903.92	58.44	347.96	2514.39	2511.93	2503.46	-207.02	0.51	5735376.42	635148.12	S 38 31 10.613	E 148 33 0.985
3934.85	58.21	349.26	2530.63	2538.05	2529.26	-212.22	1.10	5735402.22	635142.92	S 38 31 9.779	E 148 33 0.752
3963.27	57.60	351.79	2545.73	2562.03	2553.00	-216.18	2.35	5735425.96	635138.96	S 38 31 9.012	E 148 33 0.572
3990.63	57.99	352.27	2560.31	2585.13	2575.93	-219.39	0.62	5735448.88	635135.75	S 38 31 8.270	E 148 33 0.424
4020.51	58.37	352.98	2576.07	2610.48	2601.11	-222.65	0.72	5735474.06	635132.49	S 38 31 7.455	E 148 33 0.272
4049.81	58.49	352.90	2591.41	2635.42	2625.88	-225.72	0.14	5735498.82	635129.42	S 38 31 6.654	E 148 33 0.128
4078.87	58.58	353.21	2606.57	2660.18	2650.49	-228.72	0.29	5735523.43	635126.42	S 38 31 5.857	E 148 32 59.987
4108.46	58.46	353.62	2622.03	2685.39	2675.56	-231.61	0.37	5735548.49	635123.53	S 38 31 5.046	E 148 32 59.850
4134.49	58.73	353.45	2635.59	2707.59	2697.63	-234.11	0.35	5735570.56	635121.03	S 38 31 4.332	E 148 32 59.732
4162.49	59.07	353.72	2650.05	2731.55	2721.46	-236.79	0.44	5735594.39	635118.35	S 38 31 3.561	E 148 32 59.604
4191.66	59.77	354.86	2664.89	2756.66	2746.45	-239.29	1.24	5735619.37	635115.85	S 38 31 2.752	E 148 32 59.484
4220.96	59.87	354.67	2679.62	2781.98	2771.67	-241.60	0.20	5735644.59	635113.54	S 38 31 1.935	E 148 32 59.371
4250.49	59.96	354.62	2694.43	2807.53	2797.11	-243.98	0.10	5735670.02	635111.16	S 38 31 1.112	E 148 32 59.255
4280.76	60.10	354.45	2709.55	2833.75	2823.21	-246.48	0.20	5735696.12	635108.66	S 38 31 0.267	E 148 32 59.134
4310.18	60.63	355.88	2724.09	2859.32	2848.69	-248.63	1.38	5735721.59	635106.51	S 38 30 59.442	E 148 32 59.027
4339.21	60.72	355.65	2738.31	2884.62	2873.93	-250.50	0.23	5735746.83	635104.64	S 38 30 58.624	E 148 32 58.932
4368.56	60.96	355.49	2752.61	2910.26	2899.49	-252.48	0.28	5735772.38	635102.66	S 38 30 57.796	E 148 32 58.833
4378.54	61.02	355.77	2757.45	2918.98	2908.19	-253.15	0.76	5735781.08	635101.99	S 38 30 57.515	E 148 32 58.799
4407.69	60.87	355.82	2771.61	2944.46	2933.60	-255.02	0.16	5735806.49	635100.12	S 38 30 56.692	E 148 32 58.704
4436.98	60.55	355.85	2785.94	2970.01	2959.08	-256.87	0.33	5735831.96	635098.28	S 38 30 55.867	E 148 32 58.610
4467.11	60.10	356.04	2800.86	2996.19	2985.19	-258.72	0.48	5735858.07	635096.43	S 38 30 55.021	E 148 32 58.516
4495.88	59.62	356.20	2815.30	3021.07	3010.02	-260.41	0.52	5735882.90	635094.74	S 38 30 54.217	E 148 32 58.429

4523.91	59.15	356.39	2829.58	3045.19	3034.09	-261.97	0.53	5735906.96	635093.18	S 38 30 53.437	E 148 32 58.348
4553.13	58.55	356.63	2844.69	3070.19	3059.05	-263.49	0.65	5735931.92	635091.66	S 38 30 52.629	E 148 32 58.268
4583.31	58.09	356.50	2860.54	3095.87	3084.68	-265.03	0.47	5735957.54	635090.12	S 38 30 51.798	E 148 32 58.186
4611.60	57.67	356.79	2875.58	3119.83	3108.60	-266.43	0.52	5735981.46	635088.72	S 38 30 51.023	E 148 32 58.112
4641.09	57.14	356.87	2891.47	3144.67	3133.41	-267.80	0.54	5736006.26	635087.35	S 38 30 50.220	E 148 32 58.038
4670.25	56.46	356.84	2907.44	3169.07	3157.77	-269.14	0.70	5736030.62	635086.01	S 38 30 49.431	E 148 32 57.966
4678.23	56.34	356.97	2911.85	3175.71	3164.41	-269.50	0.61	5736037.26	635085.65	S 38 30 49.215	E 148 32 57.946
4695.00	56.10	357.00	2921.18	3189.65	3178.33	-270.23	0.43	5736051.18	635084.92	S 38 30 48.764	E 148 32 57.907