UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

Gravity survey data of White Sulphur Springs 1^{o} x 2^{o} quadrangle, Montana

by

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Open-File Report 85-275

1985

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Introduction

This report presents part of the work undertaken by the U.S. Geological Survey to evaluate the mineral-resource potential of the White Sulphur Springs 1^{o} x 2^{o} quadrangle. During the summer field seasons of 1977-1983, 1108 new gravity stations were established in the White Sulphur Springs area, Montana. The White Sulphur Springs quadrangle encompasses ten counties, two national forests, five mountain ranges, and two wilderness areas (table 1) and covers approximately 7000 sq. mi (fig. 1). This report presents the principal facts for these data.

Data Collection

Gravity observations were made using LaCoste-Romberg gravity meters G-550 and G-235 and Worden meter E-134. The gravity stations were referenced to the U.S. Department of Defense (DOD) bases at White Sulphur Springs, Harlowton, and Helena, which are part of the International Gravity Standardization Net (IGSN-71). Additional bases were set by the USGS and tied to these primary bases, and their descriptions constitute a separate open-file (Bankey, 1984). Gravity loops were started and closed daily by making repeat observations at the bases. Access was by helicopter and ground traverses into the roadless areas and by vehicle along highways and secondary roads outside of these areas.

Elevation Control

The survey area is bound by lat. 46^{o}-47^{o}N and long. 110^{o}-112^{o}W. The station elevations were obtained from benchmarks, spot elevations, and section corners on 1:24,000-scale and 1:62,500-scale USGS topographic maps. The uncertainty of elevations based on benchmarks is assumed to be 0.5 ft. For spot elevations and section corners with elevations in black, on 1:24,000-scale maps with a 40-ft contour interval, the uncertainty is assumed to be three ft . At a density of 2.67 g/cm^{3}, this elevation uncertainty translates to a maximum uncertainty in the Bouguer anomaly value of 0.18 mgals.

However, errors in the estimation of terrain corrections give rise to the greatest uncertainty in Bouguer values. Computer-generated terrain corrections in mountainous areas are generally accurate to within 1 mgal.

Data Reduction

Computer programs existing on the USGS DEC VAX 11-750 computer system were used to obtain principal facts and terrain-corrected gravity values. A program written by M. Webring and R. Wahl (USGS, unpub. program, 1979) was used to reduce gravity meter-readings to observed gravity values by calculating and correcting for earth-tide and linear meter-drift. The theoretical gravity value was calculated using the 1967 formula of the Geodetic Reference System (International Association of Geodesy, 1967). Mathematical equations are given in Cordell (1982).

Complete terrain corrections were computed using a program by R. H. Godson (USGS, unpub. program, 1978), correcting for the gravity effects of terrain from each station to a radius 166.7 km away using the method of Plouff (1977). Godson's program also calculates earth curvature corrections and

complete (terrain-corrected) Bouguer anomaly values. These computed terrain corrections use mean-elevation data digitized on a 15-second grid for corrections from 0 to 5 km, 1-minute terrain data for corrections from 5 to 21 km, and 3-minute terrain data for corrections from 21 to 166.7 km. A density of 2.67 g/cm^3 was used to calculate terrain corrections, giving the corrections and anomaly values listed in Appendix A.

References

Bankey, Viki, and Kleinkopf, M. D., 1984, Gravity base stations in the White Sulphur Springs 1^o x 2^o quadrangle, Montana: U. S. Geological Survey Open-File Report 84-108, 27 pgs.

Cordell, Lindrith, Keller, G. R., and Hildenbrand, T. G., 1982, Bouguer gravity map of the Rio Grande Rift, Colorado, New Mexico, and Texas: U.S. Geological Survey Geophysical Investigations Series, Map GP-949, scale 1:1,000,000.

Defense Mapping Agency Aerospace Center, 1974, World Relative Gravity Reference Network, North America, Part 2: DMAAC Reference Publication 25, with supplement updating gravity values to the International Gravity Standardization Net 1971, 1635 p.

International Association of Geodesy, 1967, Geodetic Reference System, 1967: International Association of Geodesy Special Publication 3, 74 p.

Plouff, Donald, 1977, Preliminary documentation for a FORTRAN program to compute gravity terrain corrections based on topography digitized on a geographic grid: U.S. Geological Survey Open-File Report 77-535.

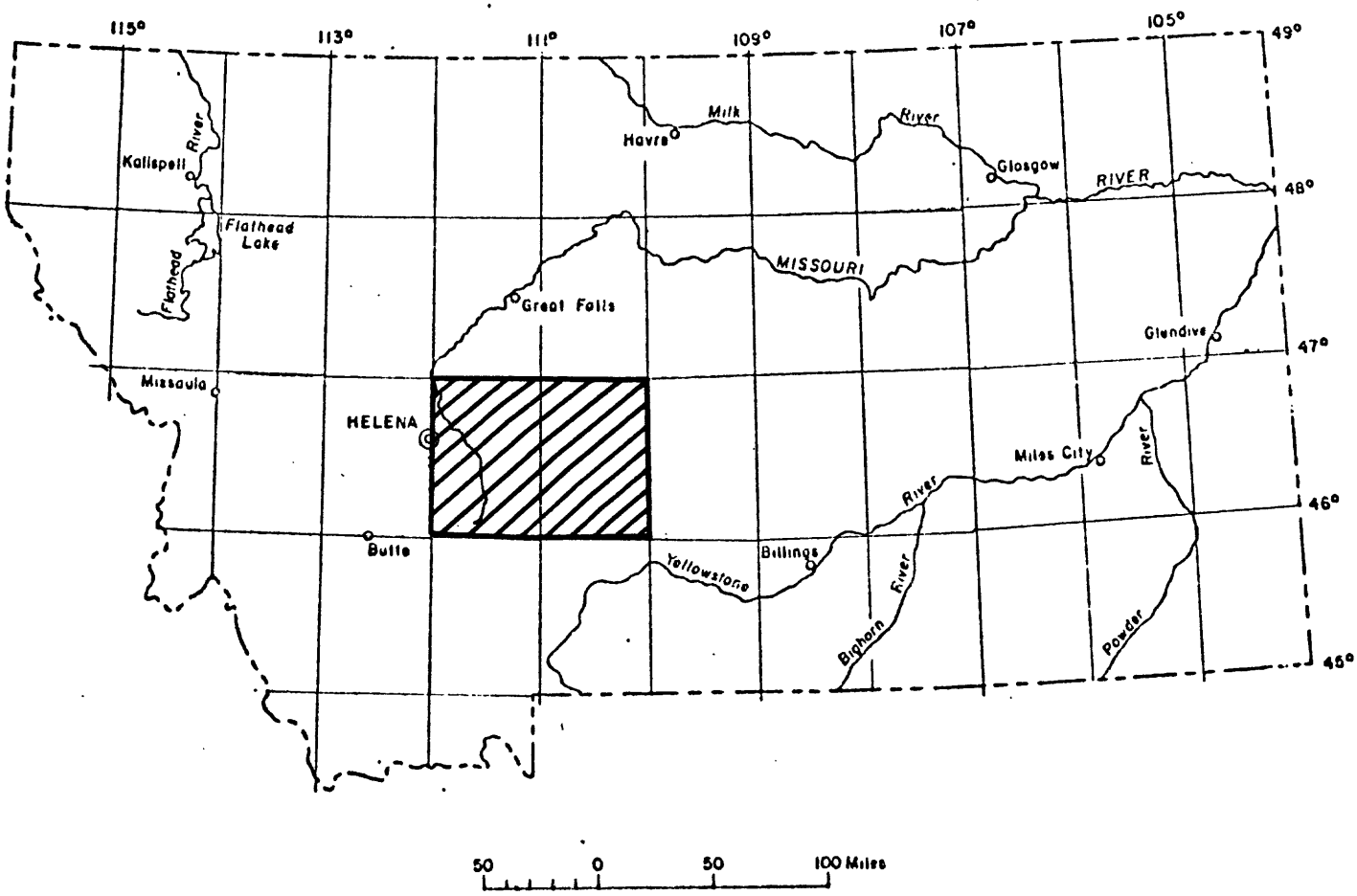

Figure 1--Map showing the location of the White Sulphur Springs gravity study area.

Table 1--Counties, National Forests, Mountain Ranges, and Wildernesses in the White Sulphur Springs area.

COUNTIES	Broadwater	Cascade	Gallatin	Jefferson
	Judith Basin	Lewis and Clark	Meagher	Park
	Sweet Grass	Wheatland		
NATIONAL FORESTS	Deerlodge	Gallatin	Helena	Lewis and Clark
MOUNTAINS	Big Belt Mtns	Bridger Range	Crazy Mtns	Castle Mtns
	Elkhorn Mtns	Little Belt Mtns		
WILDER-NESSES	Gates of the Mountains		Middle Judith (proposed)	

Appendix A: Principal Facts of Gravity Data

Explanation of headings

Identification

proj	Project name.
sta id	Gravity station identification number.

Location

latitude	North latitude in degrees, decimal minutes.
longitude	West longitude in degrees, decimal minutes.
ele	Station elevation in feet.
st	State where station is located.

Gravity

observed	Observed gravity in milligals.
theoretical	Theoretical gravity in milligals.

Corrections

Terrain	Terrain correction, 166.7 km radius, in milligals.
Bouguer	Simple Bouguer slab correction in milligals.
curv	Curvature correction in milligals.
special	Not used.

Anomalies

free-air	Free-air anomaly in milligals.
complete-Bouguer	Complete Bouguer anomaly in milligals for designated densities d1 and d2.
spec fields	Not used.

White Sulphur Springs Gravity Data
Bankey and others 1977-84
Meter used: var.

STATION IDENTIFICATION sta-id	LOCATIONS LATITUDE deg	min	LONGITUDE deg	min	ELE (in ft)	GRAVITY ST	OBSERVED	THEORETICAL	CORRECTIONS TERRAIN (d1=2.67)	BOUGUER	CURV	ANOMALIES SPECIAL	FREE AIR	COMPLETE-BOUGUER d1=2.67
ws2	46	50.52	-111	39.79	6223.00	mt	980267.31	980785.68	2.71	-212.25	-1.51	0.00	66.60	-144.45
ws3	46	51.56	-111	39.44	5811.00	mt	980293.61	980787.24	2.78	-198.20	-1.48	0.00	52.62	-144.28
ws4	46	51.87	-111	41.61	5403.00	mt	980314.06	980787.71	4.58	-184.28	-1.45	0.00	34.26	-146.89
ws5	46	51.16	-111	42.98	4645.00	mt	980353.37	980786.64	13.22	-158.43	-1.36	0.00	3.41	-143.16
ws6	46	50.52	-111	44.87	4412.00	mt	980362.99	980785.68	19.34	-150.48	-1.33	0.00	-7.90	-140.37
ws7	46	50.31	-111	45.47	4489.00	mt	980363.66	980785.36	14.13	-153.11	-1.34	0.00	0.32	-139.99
ws8	46	49.48	-111	47.00	4168.00	mt	980384.60	980784.12	8.51	-142.16	-1.29	0.00	-7.66	-142.60
ws9	46	48.73	-111	39.71	5982.00	mt	980275.28	980782.98	5.18	-204.03	-1.49	0.00	54.62	-145.73
ws11	46	47.39	-111	37.70	4836.00	mt	980320.31	980780.96	24.12	-164.94	-1.39	0.00	-6.02	-148.23
ws12	46	46.52	-111	38.40	4588.00	mt	980335.17	980779.65	18.72	-156.48	-1.36	0.00	-13.16	-152.28
ws13	46	46.07	-111	38.73	4459.00	mt	980345.67	980778.97	12.64	-152.08	-1.34	0.00	-14.10	-154.88
ws14	46	45.77	-111	40.23	4328.00	mt	980351.41	980778.52	13.11	-147.62	-1.32	0.00	-20.22	-156.04
ws15	46	44.36	-111	41.60	4215.00	mt	980351.67	980776.40	16.19	-143.76	-1.30	0.00	-28.46	-157.33
ws16	46	44.13	-111	42.65	4130.00	mt	980357.27	980776.05	12.33	-140.86	-1.28	0.00	-30.50	-160.32
ws17	46	43.37	-111	43.97	4042.00	mt	980364.57	980774.91	5.05	-137.86	-1.27	0.00	-30.33	-164.41
ws18	46	43.27	-111	45.27	3976.00	mt	980365.54	980774.76	4.66	-135.61	-1.26	0.00	-35.41	-167.62
ws19	46	51.09	-111	38.14	6187.00	mt	980270.20	980786.54	2.02	-211.02	-1.50	0.00	65.25	-145.26
ws20	46	51.68	-111	38.33	6260.00	mt	980267.27	980787.42	2.31	-213.51	-1.51	0.00	68.29	-144.42
ws21	46	51.35	-111	37.24	6165.00	mt	980272.01	980786.92	2.41	-210.27	-1.50	0.00	64.59	-144.77
ws22	46	51.33	-111	35.48	6251.00	mt	980268.51	980786.90	2.56	-213.20	-1.51	0.00	69.20	-142.95
ws23	46	50.46	-111	37.35	6113.00	mt	980272.94	980785.59	2.01	-208.50	-1.50	0.00	61.98	-146.01
ws24	46	47.89	-111	51.13	3961.00	mt	980392.86	980781.72	3.57	-135.10	-1.25	0.00	-16.46	-149.24
ws25	46	47.47	-111	52.39	3732.00	mt	980401.48	980781.09	4.16	-127.29	-1.21	0.00	-28.73	-153.06
ws26	46	47.25	-111	54.07	3590.00	mt	980408.16	980780.75	4.07	-122.44	-1.18	0.00	-35.06	-154.62
ws27	46	48.34	-111	53.65	3994.00	mt	980390.92	980782.40	1.60	-136.22	-1.26	0.00	-15.97	-151.86
ws28	46	49.19	-111	56.08	3629.00	mt	980408.29	980783.67	2.18	-123.77	-1.19	0.00	-34.19	-156.98
ws29	46	47.97	-111	47.72	4247.00	mt	980379.40	980781.84	3.25	-144.85	-1.30	0.00	-3.16	-146.07
ws30	46	47.48	-111	47.35	4450.00	mt	980365.85	980781.09	2.07	-151.78	-1.34	0.00	3.11	-147.93
ws31	46	46.44	-111	47.47	4430.00	mt	980356.82	980779.53	1.09	-151.09	-1.33	0.00	-6.24	-157.57
ws32	46	45.27	-111	46.70	4159.00	mt	980366.80	980777.77	3.40	-141.85	-1.29	0.00	-19.97	-159.71
ws33	46	44.47	-111	45.98	4725.00	mt	980331.32	980776.57	1.59	-161.16	-1.38	0.00	-1.05	-161.99
ws34	46	42.68	-111	46.46	3880.00	mt	980370.62	980773.87	7.39	-132.34	-1.24	0.00	-38.47	-164.65
ws35	46	42.62	-111	47.89	3682.00	mt	980380.24	980773.77	5.13	-125.58	-1.20	0.00	-47.37	-169.02
ws36	46	42.42	-111	48.92	3792.00	mt	980375.17	980773.48	1.63	-129.33	-1.22	0.00	-41.79	-170.72
ws37	46	42.28	-111	43.44	4505.00	mt	980339.21	980773.27	1.60	-153.65	-1.34	0.00	-10.53	-163.93
ws38	46	41.81	-111	42.75	4606.00	mt	980332.98	980772.55	1.86	-157.10	-1.36	0.00	-6.56	-163.15
ws39	46	41.23	-111	44.31	4238.00	mt	980351.17	980771.69	1.68	-144.55	-1.30	0.00	-22.08	-166.25
ws40	46	41.56	-111	45.45	4525.00	mt	980336.29	980772.19	1.16	-154.33	-1.35	0.00	-10.49	-165.01
ws41	46	39.98	-111	44.07	3800.00	mt	980371.19	980769.80	2.26	-129.61	-1.22	0.00	-41.35	-169.92
ws42	46	40.48	-111	45.64	4251.00	mt	980347.19	980770.56	1.26	-144.99	-1.30	0.00	-23.72	-168.75

White Sulphur Springs Gravity Data
Bankey and others 1977-84
Meter used: var.

STATION IDENTIFICATION sta-id	LOCATIONS LATITUDE deg	min	LONGITUDE deg	min	ELE (in ft)	ST	GRAVITY OBSERVED	THEORETICAL	CORRECTIONS TERRAIN	BOUGUER (d1=2.67)	CURV	SPECIAL	ANOMALIES FREE AIR	COMPLETE-BOUGUER d1=2.67
ws43	46	40.50	-111	47.95	3706.00	mt	980373.98	980770.59	1.09	-126.40	-1.20	0.00	-48.17	-174.69
ws44	46	39.46	-111	49.96	3679.00	mt	980378.07	980769.02	1.54	-125.48	-1.20	0.00	-45.06	-170.20
ws45	46	38.96	-111	43.54	3810.00	mt	980371.52	980768.27	1.92	-129.95	-1.22	0.00	-38.54	-167.79
ws46	46	49.20	-111	39.38	6618.00	mt	980239.85	980783.69	7.40	-225.72	-1.52	0.00	78.24	-141.60
ws01	46	49.72	-111	38.79	6788.00	mt	980232.31	980784.48	5.21	-231.52	-1.52	0.00	85.89	-141.94
ws47	46	49.77	-111	37.62	6572.00	mt	980246.01	980784.55	3.60	-224.15	-1.52	0.00	79.22	-142.85
ws48	46	49.77	-111	35.77	5976.00	mt	980279.32	980784.55	2.32	-203.82	-1.49	0.00	56.53	-146.47
ws49	46	49.33	-111	36.77	6400.00	mt	980251.01	980783.89	7.53	-218.29	-1.51	0.00	68.72	-143.55
ws51	46	48.46	-111	33.61	6557.00	mt	980246.47	980782.58	3.05	-223.64	-1.52	0.00	80.24	-141.87
ws52	46	48.13	-111	31.48	6358.00	mt	980256.88	980782.08	2.08	-216.85	-1.51	0.00	72.45	-143.83
ws53	46	45.92	-111	31.72	6580.00	mt	980239.01	980778.75	3.04	-224.42	-1.52	0.00	78.76	-144.14
ws54	46	44.33	-111	35.38	6262.00	mt	980248.83	980776.35	10.03	-213.58	-1.51	0.00	61.10	-143.95
ws55	46	41.76	-111	37.20	4536.00	mt	980333.48	980772.48	10.50	-154.71	-1.35	0.00	-12.56	-158.12
ws56	46	41.12	-111	38.56	4402.00	mt	980338.66	980771.52	9.95	-150.14	-1.33	0.00	-19.01	-160.53
ws57	46	39.27	-111	39.98	3929.00	mt	980352.24	980768.73	3.16	-134.01	-1.25	0.00	-47.10	-179.20
ws58	46	39.04	-111	41.30	4010.00	mt	980348.23	980768.39	1.33	-136.77	-1.26	0.00	-43.15	-179.85
ws59	46	47.95	-111	36.73	5234.00	mt	980311.76	980781.81	9.79	-178.52	-1.44	0.00	21.98	-148.18
ws60	46	47.56	-111	35.25	5477.00	mt	980298.79	980781.23	8.37	-186.80	-1.46	0.00	32.44	-147.46
ws61	46	47.42	-111	33.71	5592.00	mt	980294.99	980781.01	5.26	-190.73	-1.47	0.00	39.66	-147.28
ws63	46	49.62	-111	34.63	6926.00	mt	980222.92	980784.32	11.09	-236.23	-1.52	0.00	89.61	-137.04
ws64	46	38.64	-111	38.71	4154.00	mt	980335.53	980767.78	1.51	-141.68	-1.29	0.00	-41.72	-183.17
ws65	46	37.07	-111	37.30	3981.00	mt	980332.44	980765.41	1.22	-135.78	-1.26	0.00	-58.70	-194.52
ws66	46	35.76	-111	35.73	3931.00	mt	980330.31	980763.45	0.89	-134.08	-1.25	0.00	-63.55	-197.99
ws67	46	34.46	-111	34.54	3924.00	mt	980328.23	980761.48	0.87	-133.84	-1.25	0.00	-64.33	-198.54
ws68	46	33.58	-111	32.38	3994.00	mt	980324.42	980760.16	1.07	-136.22	-1.26	0.00	-60.24	-196.65
ws69	46	32.83	-111	30.76	4042.00	mt	980328.53	980759.03	1.44	-137.86	-1.27	0.00	-50.49	-188.18
ws70	46	31.98	-111	29.16	4145.00	mt	980331.28	980757.75	2.30	-141.37	-1.29	0.00	-36.78	-177.14
ws71	46	32.57	-111	28.70	4246.00	mt	980333.42	980758.63	2.82	-144.82	-1.30	0.00	-26.03	-169.34
ws72	46	32.87	-111	28.42	4251.00	mt	980333.23	980759.09	3.93	-144.99	-1.30	0.00	-26.20	-168.57
ws73	46	33.44	-111	28.24	4324.00	mt	980330.23	980759.95	5.65	-147.48	-1.32	0.00	-23.20	-166.34
ws74	46	34.33	-111	27.41	4464.00	mt	980325.00	980761.30	8.30	-152.25	-1.34	0.00	-16.62	-161.91
ws75	46	35.17	-111	26.27	4679.00	mt	980315.31	980762.56	8.66	-159.59	-1.37	0.00	-7.37	-159.66
ws76	46	35.98	-111	24.96	4964.00	mt	980303.96	980763.78	7.49	-169.31	-1.41	0.00	6.85	-156.38
ws77	46	36.84	-111	22.81	5217.00	mt	980293.27	980765.07	10.86	-177.94	-1.43	0.00	18.64	-149.87
ws78	46	38.29	-111	23.76	5893.00	mt	980266.32	980767.26	4.58	-200.99	-1.49	0.00	53.02	-144.88
ws79	46	39.68	-111	22.90	5452.00	mt	980294.17	980769.35	4.84	-185.95	-1.46	0.00	37.34	-145.23
ws80	46	40.75	-111	21.46	5173.00	mt	980311.60	980770.97	4.43	-176.44	-1.43	0.00	26.94	-146.50
ws81	46	41.38	-111	18.94	5035.00	mt	980319.89	980771.91	3.73	-171.73	-1.41	0.00	21.31	-148.10
ws82	46	41.42	-111	17.24	4899.00	mt	980327.34	980771.97	2.47	-167.09	-1.40	0.00	15.93	-150.09
ws84	46	52.19	-111	39.65	6311.00	mt	980263.72	980788.19	4.94	-215.25	-1.51	0.00	68.76	-143.06

White Sulphur Springs Gravity Data
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STATION IDENTIFICATION sta-id	LOCATIONS LATITUDE deg	min	LONGITUDE deg	min	ELE (in ft)		GRAVITY OBSERVED	THEORETICAL	CORRECTIONS TERRAIN (d1=2.67)	BOUGUER	CURV	ANOMALIES SPECIAL	FREE AIR	COMPLETE-BOUGUER d1=2.67
ws62	46	49.58	-111	42.58	7813.00	mt	980154.14	980784.26	21.27	-266.48	-1.48	0.00	104.22	-142.47
ws85	46	41.87	-111	21.97	5482.00	mt	980289.99	980772.65	1.61	-186.98	-1.46	0.00	32.68	-154.14
ws86	46	42.43	-111	22.27	5504.00	mt	980290.15	980773.50	1.08	-187.73	-1.46	0.00	34.06	-154.05
ws87	46	42.92	-111	22.27	5565.00	mt	980286.66	980774.23	1.02	-189.81	-1.47	0.00	35.57	-154.68
ws88	46	43.60	-111	21.29	5490.00	mt	980295.32	980775.26	1.34	-187.25	-1.46	0.00	36.15	-151.21
ws89	46	44.42	-111	21.54	5235.00	mt	980314.75	980776.48	1.43	-178.55	-1.44	0.00	30.39	-148.17
ws90	46	44.09	-111	19.75	5417.00	mt	980304.21	980775.99	1.02	-184.76	-1.45	0.00	37.45	-147.74
ws91	46	43.60	-111	17.94	5147.00	mt	980319.44	980775.26	0.92	-175.55	-1.43	0.00	28.04	-148.02
ws92	46	42.96	-111	15.98	4852.00	mt	980334.32	980774.29	0.86	-165.49	-1.39	0.00	16.16	-149.86
ws93	46	44.05	-111	15.95	5246.00	mt	980315.42	980775.94	1.40	-178.93	-1.44	0.00	32.65	-146.31
ws94	46	42.39	-111	15.30	4765.00	mt	980337.96	980773.43	0.75	-162.52	-1.38	0.00	12.49	-150.66
ws83	46	41.40	-111	15.24	4818.00	mt	980334.31	980771.95	0.74	-164.33	-1.39	0.00	15.31	-149.66
ws95	46	45.87	-111	22.81	5465.00	mt	980309.63	980778.67	0.99	-186.40	-1.46	0.00	44.70	-142.17
ws96	46	44.72	-111	27.24	6658.00	mt	980234.14	980776.94	3.65	-227.09	-1.52	0.00	83.03	-141.92
ws119	46	45.38	-111	29.11	7701.00	mt	980162.66	980777.93	12.47	-262.66	-1.49	0.00	108.55	-143.13
ws120	46	45.72	-111	29.33	7382.00	mt	980188.37	980778.45	6.94	-251.78	-1.51	0.00	103.77	-142.57
ws121	46	45.75	-111	30.06	7597.00	mt	980172.27	980778.49	11.07	-259.11	-1.50	0.00	107.83	-141.71
1-27	47	11.27	-112	10.27	1326.00	mt	980410.25	980816.91	0.67	-45.23	-0.53	0.00	2.57	-146.55
1-28	47	11.82	-112	11.79	1302.00	mt	980416.43	980817.73	0.49	-44.41	-0.53	0.00	0.41	-146.15
1-29	47	13.30	-112	14.35	1245.00	mt	980431.69	980819.97	0.64	-42.46	-0.50	0.00	-4.24	-144.20
1-30	47	13.67	-112	13.82	1297.00	mt	980422.22	980820.52	0.39	-44.24	-0.52	0.00	2.00	-144.14
1-28	47	11.82	-112	11.79	1302.00	mt	980416.45	980817.73	0.49	-44.41	-0.53	0.00	0.43	-146.12
1-56	47	9.90	-112	13.88	1300.00	mt	980414.51	980814.85	0.93	-44.34	-0.52	0.00	0.90	-145.04
1-57	47	7.60	-112	10.08	1361.00	mt	980395.15	980811.39	1.32	-46.42	-0.55	0.00	3.71	-148.67
1-58	47	5.57	-112	9.50	1276.00	mt	980408.82	980808.33	1.00	-43.52	-0.52	0.00	-5.79	-148.92
1-59	47	4.33	-112	8.40	1300.00	mt	980402.58	980806.47	1.21	-44.34	-0.52	0.00	-2.74	-148.37
1-60	47	1.81	-112	7.74	1154.00	mt	980425.73	980802.68	4.07	-39.36	-0.47	0.00	-20.91	-147.22
1-61	47	0.36	-112	4.28	1088.00	mt	980436.81	980800.49	4.93	-37.11	-0.45	0.00	-26.04	-146.04
1-62	46	58.64	-112	4.87	1111.00	mt	980427.84	980797.90	5.16	-37.89	-0.46	0.00	-27.37	-147.72
1-63	46	57.21	-112	6.30	1131.00	mt	980419.61	980795.75	8.49	-38.58	-0.46	0.00	-27.15	-146.47
1-64	46	55.38	-112	7.32	1163.00	mt	980411.86	980792.99	6.06	-39.67	-0.47	0.00	-22.27	-147.63
1-65	46	53.28	-112	6.58	1220.00	mt	980400.04	980789.84	1.68	-41.61	-0.50	0.00	-13.46	-149.57
1-66	46	52.13	-112	9.23	1217.00	mt	980391.65	980788.10	7.10	-41.51	-0.49	0.00	-20.86	-151.28
1-67	46	50.65	-112	11.42	1245.00	mt	980382.05	980785.68	7.02	-42.46	-0.50	0.00	-19.59	-153.24
1-68	46	48.14	-112	12.13	1281.00	mt	980357.87	980782.09	1.04	-43.69	-0.52	0.00	-28.99	-172.64
1-69	46	48.35	-112	14.89	1301.00	mt	980359.09	980782.41	1.17	-44.37	-0.52	0.00	-21.78	-167.59
1-103	46	45.18	-112	10.78	1329.00	mt	980341.21	980777.63	0.67	-45.33	-0.54	0.00	-26.24	-175.71
1-104	46	46.28	-112	13.17	1338.00	mt	980346.47	980779.29	1.20	-45.64	-0.54	0.00	-19.92	-169.84
1-105	46	47.33	-112	14.67	1333.00	mt	980350.04	980780.87	1.65	-45.46	-0.54	0.00	-19.53	-168.12
1-151	46	53.80	-112	14.31	1797.00	mt	980282.82	980790.62	8.20	-61.29	-0.70	0.00	46.54	-147.69

White Sulphur Springs Gravity Data
Bankey and others 1977-84
Meter used: var.

STATION IDENTIFICATION sta-id	LOCATIONS LATITUDE deg	min	LONGITUDE deg	min	ELE (in ft)		GRAVITY OBSERVED	THEORETICAL	CORRECTIONS TERRAIN (d1=2.67)	BOUGUER	CURV	ANOMALIES SPECIAL	FREE AIR	COMPLETE-BOUGUER d1=2.67
1-159	46	52.56	-112	13.04	1452.00	mt	980351.09	980788.75	1.60	-49.52	-0.58	0.00	10.40	-151.94
1-160	46	51.70	-112	12.53	1353.00	mt	980366.28	980787.45	2.77	-46.15	-0.54	0.00	-3.76	-153.76
1-161	46	51.23	-112	10.50	1234.00	mt	980384.71	980786.74	9.83	-42.09	-0.50	0.00	-21.36	-150.90
1-162	46	52.69	-112	8.43	1204.00	mt	980400.62	980788.95	3.43	-41.06	-0.49	0.00	-16.78	-149.39
1-163	46	53.52	-112	7.68	1188.00	mt	980407.02	980790.20	1.90	-40.52	-0.48	0.00	-16.51	-148.87
1-164	46	48.29	-112	13.29	1284.00	mt	980356.57	980782.31	1.04	-43.79	-0.52	0.00	-29.67	-173.62
1-165	46	50.05	-112	12.13	1257.00	mt	980378.32	980784.97	6.17	-42.87	-0.51	0.00	-18.93	-154.70
1-166	46	58.25	-112	12.18	1264.00	mt	980395.95	980797.31	8.96	-43.11	-0.51	0.00	-11.30	-145.13
1-167	46	58.83	-112	13.52	1311.00	mt	980388.44	980798.19	7.54	-44.71	-0.53	0.00	-5.12	-145.69
1-168	46	54.00	-112	8.83	1232.00	mt	980393.33	980790.91	2.16	-42.02	-0.50	0.00	-17.58	-154.55
1-169	46	53.02	-112	10.82	1292.00	mt	980382.93	980789.45	2.30	-44.07	-0.52	0.00	-7.89	-151.51
1-170	46	53.65	-112	12.67	1365.00	mt	980368.71	980790.39	4.28	-46.56	-0.55	0.00	-0.51	-150.37
1-171	46	55.04	-112	13.08	1617.00	mt	980325.14	980792.48	2.65	-55.15	-0.64	0.00	31.36	-148.37
1-172	46	56.57	-112	14.43	2143.00	mt	980212.02	980794.78	21.45	-73.09	-0.81	0.00	78.11	-141.76
1-173	46	55.32	-112	11.15	1460.00	mt	980355.01	980792.91	3.22	-49.80	-0.58	0.00	12.69	-148.95
1-174	46	54.92	-112	10.30	1534.00	mt	980340.04	980792.30	4.76	-52.32	-0.61	0.00	20.97	-147.38
1-188	46	50.53	-112	14.38	1694.00	mt	980292.73	980785.70	5.92	-57.78	-0.66	0.00	29.51	-155.60
1-189	46	49.29	-112	8.42	1848.00	mt	980257.61	980783.83	8.91	-63.03	-0.71	0.00	43.99	-155.49
1-190	46	50.73	-112	9.03	1767.00	mt	980278.70	980785.99	5.95	-60.27	-0.69	0.00	37.93	-155.43
1-191	46	50.06	-112	11.04	1650.00	mt	980299.02	980784.98	8.72	-56.28	-0.65	0.00	22.99	-154.40
1-192	46	50.08	-112	8.92	1767.00	mt	980281.15	980785.02	3.70	-60.27	-0.69	0.00	41.35	-154.26
1-193	46	48.80	-112	10.28	1554.00	mt	980315.73	980783.09	4.53	-53.00	-0.61	0.00	12.08	-158.76
1-194	47	1.53	-112	6.43	1133.00	mt	980431.48	980802.25	3.35	-38.64	-0.46	0.00	-21.03	-145.77
1-195	47	1.80	-112	8.79	1152.00	mt	980418.78	980802.66	7.08	-39.29	-0.47	0.00	-28.50	-151.56
1-196	47	0.97	-112	10.08	1353.00	mt	980385.30	980801.41	5.97	-46.15	-0.54	0.00	1.30	-145.50
1-197	47	2.16	-112	10.07	1176.00	mt	980415.56	980803.20	8.35	-40.11	-0.48	0.00	-24.74	-149.28
1-198	47	1.53	-112	11.46	1304.00	mt	980393.78	980802.25	9.35	-44.48	-0.53	0.00	-6.10	-144.03
1-199	47	2.52	-112	10.63	1230.00	mt	980411.51	980803.74	8.29	-41.95	-0.50	0.00	-12.61	-143.31
1-200	47	3.20	-112	12.36	1279.00	mt	980404.46	980804.77	7.44	-43.62	-0.52	0.00	-5.54	-142.61
1-201	47	3.89	-112	13.63	1321.00	mt	980398.31	980805.80	4.43	-45.06	-0.53	0.00	0.24	-144.57
1-202	47	2.64	-112	14.71	1426.00	mt	980379.80	980803.92	8.07	-48.64	-0.57	0.00	15.84	-137.08
1-205	47	12.43	-112	12.42	1273.00	mt	980424.20	980818.66	0.42	-43.42	-0.51	0.00	-1.57	-144.98
1-206	47	12.96	-112	12.96	1306.00	mt	980419.55	980819.45	0.37	-44.54	-0.53	0.00	3.03	-144.09
1-207	47	13.42	-112	13.42	1337.00	mt	980413.85	980820.15	0.43	-45.60	-0.54	0.00	6.22	-144.33
1-213	47	7.25	-112	10.06	1365.00	mt	980394.44	980810.86	0.71	-46.56	-0.55	0.00	4.84	-148.62
1-214	47	4.21	-112	9.43	1354.00	mt	980389.76	980806.29	1.80	-46.18	-0.54	0.00	1.26	-149.85
1-215	47	3.44	-112	7.39	1323.00	mt	980397.77	980805.13	0.79	-45.12	-0.53	0.00	0.76	-147.83
1-216	47	3.18	-112	2.95	1127.00	mt	980439.58	980804.73	1.27	-38.44	-0.46	0.00	-17.39	-143.48
1-217	47	2.70	-112	3.96	1127.00	mt	980435.94	980804.02	3.33	-38.44	-0.46	0.00	-20.41	-144.40
1-218	47	5.18	-112	3.75	1257.00	mt	980416.27	980807.74	0.70	-42.87	-0.51	0.00	-3.58	-144.89

White Sulphur Springs Gravity Data
Bankey and others 1977-84
Meter used: var.

STATION IDENTIFICATION sta-id	LOCATIONS LATITUDE deg	min	LONGITUDE deg	min	ELE (in ft)		GRAVITY OBSERVED	THEORETICAL	CORRECTIONS TERRAIN (d1=2.67)	BOUGUER	CURV	ANOMALIES SPECIAL	FREE AIR	COMPLETE-BOUGUER d1=2.67
1-219	47	6.66	-112	3.89	1254.00	mt	980418.05	980809.98	0.84	-42.77	-0.51	0.00	-4.97	-145.79
1-220	47	11.78	-112	11.77	1297.00	mt	980417.97	980817.67	0.41	-44.24	-0.52	0.00	0.41	-145.65
1-221	47	11.48	-112	11.47	1308.00	mt	980414.98	980817.23	0.50	-44.61	-0.53	0.00	1.35	-145.89
ck866	46	32.04	-110	54.30	5034.00	mt	980282.96	980757.84	0.65	-171.70	-1.41	0.00	-1.64	-174.10
ck867	46	30.72	-110	54.30	5032.00	mt	980280.75	980755.85	0.75	-171.63	-1.41	0.00	-2.05	-174.34
ck868	46	33.00	-110	52.33	5114.00	mt	980284.05	980759.29	0.77	-174.42	-1.42	0.00	5.52	-169.56
ck869	46	33.92	-110	51.35	5122.00	mt	980286.80	980760.67	0.87	-174.70	-1.42	0.00	7.63	-167.62
ck870	46	35.04	-110	50.57	5158.00	mt	980288.95	980762.36	1.00	-175.92	-1.43	0.00	11.49	-164.87
ck871	46	35.64	-110	50.47	5223.00	mt	980286.61	980763.27	0.95	-178.14	-1.44	0.00	14.34	-164.28
ck872	46	36.16	-110	50.40	5306.00	mt	980282.18	980764.05	1.01	-180.97	-1.44	0.00	16.93	-164.47
ck873	46	36.89	-110	50.61	5371.00	mt	980281.51	980765.15	0.89	-183.19	-1.45	0.00	21.27	-162.48
ck874	46	38.32	-110	51.46	5680.00	mt	980270.16	980767.30	0.97	-193.73	-1.48	0.00	36.80	-157.44
ck875	46	39.36	-110	52.30	5611.00	mt	980278.03	980768.87	1.32	-191.38	-1.47	0.00	36.62	-154.90
ck876	46	40.11	-110	52.81	5350.00	mt	980294.93	980770.00	1.52	-182.47	-1.45	0.00	27.86	-154.54
ck877	46	41.63	-110	52.09	5450.00	mt	980292.86	980772.29	2.92	-185.88	-1.46	0.00	32.90	-151.52
ck878	46	42.83	-110	51.50	5532.00	mt	980292.05	980774.09	1.72	-188.68	-1.46	0.00	37.99	-150.44
ck879	46	43.86	-110	51.06	5617.00	mt	980288.06	980775.65	1.41	-191.58	-1.47	0.00	40.44	-151.20
ck880	46	45.03	-110	51.83	5781.00	mt	980281.08	980777.41	1.11	-197.17	-1.48	0.00	47.10	-150.44
ck881	46	46.12	-110	51.92	5761.00	mt	980285.22	980779.05	1.25	-196.49	-1.48	0.00	47.73	-149.00
twodot	46	25.57	-110	4.32	4432.00	mt	980339.01	980748.09	0.54	-151.16	-1.33	0.00	7.58	-144.38
ck882	46	28.65	-110	18.57	4826.00	mt	980309.45	980752.73	0.50	-164.60	-1.39	0.00	10.41	-155.08
ck883	46	27.30	-110	19.11	4827.00	mt	980307.07	980750.70	0.62	-164.64	-1.39	0.00	10.16	-155.24
ck884	46	26.72	-110	18.66	4852.00	mt	980303.78	980749.82	0.71	-165.49	-1.39	0.00	10.09	-156.08
ck885	46	29.83	-110	18.89	4789.00	mt	980313.78	980754.52	0.54	-163.34	-1.38	0.00	9.49	-154.69
ck886	46	31.14	-110	18.89	4919.00	mt	980307.74	980756.48	0.56	-167.77	-1.40	0.00	13.69	-154.92
ck887	46	32.02	-110	18.89	5003.00	mt	980304.00	980757.81	0.59	-170.64	-1.41	0.00	16.51	-154.94
ck888	46	32.00	-110	18.89	5063.00	mt	980302.16	980757.78	0.74	-172.68	-1.42	0.00	20.34	-153.02
ck889	46	33.76	-110	18.89	5136.00	mt	980299.35	980760.44	0.79	-175.17	-1.43	0.00	21.75	-154.06
ck890	46	35.52	-110	20.17	5521.00	mt	980280.15	980763.09	1.74	-188.31	-1.46	0.00	36.07	-151.96
ck891	46	36.43	-110	20.40	5648.00	mt	980274.67	980764.46	1.55	-192.64	-1.47	0.00	41.16	-151.40
ck892	46	34.86	-110	19.07	5376.00	mt	980286.84	980762.09	1.30	-183.36	-1.45	0.00	30.14	-153.37
ck893	46	29.21	-110	18.31	4741.00	mt	980315.50	980753.57	0.66	-161.70	-1.38	0.00	7.63	-154.79
ck894	46	26.00	-110	4.27	4449.00	mt	980339.25	980748.73	0.40	-151.74	-1.34	0.00	8.77	-143.91
ck895	46	26.86	-110	4.27	4501.00	mt	980338.09	980750.04	0.34	-153.52	-1.34	0.00	11.21	-143.31
ck896	46	27.63	-110	4.27	4627.00	mt	980332.10	980751.20	0.51	-157.81	-1.36	0.00	15.90	-142.77
ck897	46	28.49	-110	4.30	4674.00	mt	980330.52	980752.49	0.34	-159.42	-1.37	0.00	17.44	-143.01
ck898	46	29.87	-110	4.94	4822.00	mt	980322.37	980754.57	0.39	-164.46	-1.39	0.00	21.11	-144.35
ck899	46	30.71	-110	4.94	4903.00	mt	980318.03	980755.84	0.43	-167.23	-1.40	0.00	23.12	-145.07
ck900	46	32.02	-110	4.94	5042.00	mt	980310.75	980757.81	0.51	-171.97	-1.42	0.00	26.93	-145.94
twodot	46	25.57	-110	4.32	4432.00	mt	980339.01	980748.09	0.54	-151.16	-1.33	0.00	7.58	-144.38

White Sulphur Springs Gravity Data
Bankey and others 1977-84
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STATION IDENTIFICATION sta-id	LOCATIONS LATITUDE deg	min	LONGITUDE deg	min	ELE (in ft)	GRAVITY ST	OBSERVED	THEORETICAL	CORRECTIONS TERRAIN	BOUGUER	CURV	ANOMALIES SPECIAL	FREE AIR	COMPLETE-BOUGUER d1=2.67
									(d1=2.67)					
harlowto	46	26.25	-109	50.25	4217.00	mt	980362.35	980749.12	0.17	-143.83	-1.30	0.00	9.69	-135.26
twodot	46	25.57	-110	4.32	4432.00	mt	980339.01	980748.09	0.54	-151.16	-1.33	0.00	7.58	-144.38
ck901	46	25.02	-110	4.33	4494.00	mt	980333.60	980[illegible].27	0.37	-153.28	-1.34	0.00	8.83	-145.42
ck902	46	24.41	-110	4.13	4530.00	mt	980329.66	980746.34	0.45	-154.51	-1.35	0.00	9.19	-146.21
ck903	46	23.71	-110	3.19	4592.00	mt	980324.62	980745.29	0.59	-156.62	-1.36	0.00	11.03	-146.36
ck904	46	23.01	-110	3.50	4647.00	mt	980320.69	980744.23	0.46	-158.50	-1.36	0.00	13.33	-146.08
ck905	46	22.17	-110	3.07	4733.00	mt	980315.24	980742.97	0.43	-161.43	-1.38	0.00	17.23	-145.15
ck906	46	21.52	-110	3.05	4807.00	mt	980310.22	980741.99	0.50	-163.95	-1.39	0.00	20.14	-144.70
ck907	46	20.65	-110	3.05	4862.00	mt	980305.93	980740.68	0.50	-165.83	-1.39	0.00	22.33	-144.39
ck908	46	19.78	-110	2.35	4843.00	mt	980305.92	980739.37	0.47	-165.18	-1.39	0.00	21.85	-144.25
ck909	46	18.65	-110	1.37	4932.00	mt	980298.20	980737.66	0.47	-168.22	-1.40	0.00	24.20	-144.95
ck910	46	17.75	-110	1.25	4957.00	mt	980294.53	980736.30	0.49	-169.07	-1.41	0.00	24.23	-145.75
ck911	46	16.64	-110	0.97	5199.00	mt	980277.35	980734.63	0.57	-177.32	-1.43	0.00	31.47	-146.72
ck912	46	15.47	-110	0.43	5135.00	mt	980278.68	980732.87	0.52	-175.14	-1.43	0.00	28.55	-147.50
ck913	46	14.50	-110	1.33	5255.00	mt	980265.39	980731.41	0.77	-179.23	-1.44	0.00	28.00	-151.91
ck914	46	13.20	-110	0.47	5451.00	mt	980249.84	980729.45	0.78	-185.92	-1.46	0.00	32.83	-153.77
ck915	46	13.20	-110	3.13	5547.00	mt	980243.12	980729.45	1.84	-189.19	-1.47	0.00	35.12	-153.69
ck916	46	12.83	-110	5.73	5751.00	mt	980228.34	980728.89	1.85	-196.15	-1.48	0.00	40.07	-155.71
ck917	46	11.47	-110	8.00	5763.00	mt	980224.82	980726.84	1.04	-196.56	-1.48	0.00	39.73	-157.27
ck918	46	10.34	-110	7.07	5692.00	mt	980226.07	980725.13	1.20	-194.14	-1.48	0.00	36.02	-158.40
ck919	46	8.88	-110	5.50	5515.00	mt	980233.61	980722.94	1.06	-188.10	-1.46	0.00	29.12	-159.39
ck920	46	7.58	-110	3.52	5341.00	mt	980241.15	980720.97	1.00	-182.17	-1.45	0.00	22.27	-160.35
ck921	46	8.00	-110	0.19	5200.00	mt	980251.59	980721.61	0.65	-177.36	-1.43	0.00	18.83	-159.31
ck922	46	9.30	-110	0.48	5216.00	mt	980253.96	980723.57	0.97	-177.90	-1.43	0.00	20.74	-157.63
harlowto	46	26.25	-109	50.25	4217.00	mt	980362.35	980749.12	0.17	-143.83	-1.30	0.00	9.69	-135.26
harlowto	46	26.25	-109	50.25	4217.00	mt	980362.35	980749.12	0.17	-143.83	-1.30	0.00	9.69	-135.26
ck893	46	29.20	-110	18.31	4741.00	mt	980315.43	980753.56	0.66	-161.70	-1.38	0.00	7.57	-154.85
ck923	46	37.89	-110	21.27	6409.00	mt	980231.51	980766.66	2.71	-218.59	-1.51	0.00	67.29	-150.10
ck924	46	39.23	-110	19.84	7308.00	mt	980175.72	980768.67	9.44	-249.25	-1.51	0.00	93.95	-147.37
ck925	46	40.41	-110	19.72	7782.00	mt	980148.72	980770.45	11.59	-265.42	-1.49	0.00	109.70	-145.62
ck926	46	39.05	-110	20.24	7013.00	mt	980196.63	980768.40	5.38	-239.19	-1.52	0.00	87.42	-147.91
ck893	46	29.20	-110	18.31	4741.00	mt	980315.41	980753.56	0.66	-161.70	-1.38	0.00	7.55	-154.87
harlowto	46	26.25	-109	50.25	4217.00	mt	980362.35	980749.12	0.17	-143.83	-1.30	0.00	9.69	-135.26
harlowto	46	26.25	-109	50.25	4217.00	mt	980362.35	980749.12	0.17	-143.83	-1.30	0.00	9.69	-135.26
ck893	46	29.20	-110	18.31	4741.00	mt	980315.59	980753.56	0.66	-161.70	-1.38	0.00	7.74	-154.68
ck932	46	26.02	-110	17.27	4782.00	mt	980307.25	980748.77	0.65	-163.10	-1.38	0.00	8.04	-155.80
ck933	46	25.48	-110	16.20	4823.00	mt	980303.88	980747.96	0.66	-164.50	-1.39	0.00	9.34	-155.89
ck934	46	24.85	-110	15.19	4867.00	mt	980300.80	980747.01	0.64	-166.00	-1.39	0.00	11.34	-155.42
ck935	46	24.12	-110	14.64	4943.00	mt	980295.58	980745.91	0.73	-168.59	-1.40	0.00	14.36	-154.90
ck936	46	23.80	-110	14.70	4905.00	mt	980297.96	980745.43	1.04	-167.30	-1.40	0.00	13.66	-154.00

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STATION IDENTIFICATION sta-id	LOCATIONS LATITUDE deg	min	LONGITUDE deg	min	ELE (in ft)		GRAVITY OBSERVED	THEORETICAL	CORRECTIONS TERRAIN (d1=2.67)	BOUGUER	CURV	ANOMALIES SPECIAL	FREE AIR	COMPLETE-BOUGUER d1=2.67
ck937	46	23.14	-110	14.50	5021.00	mt	980290.93	980744.43	0.86	-171.25	-1.41	0.00	18.52	-153.28
ck939	46	22.23	-110	14.92	5172.00	mt	980282.55	980743.05	0.93	-176.40	-1.43	0.00	25.70	-151.20
ck899	46	30.71	-110	4.94	4903.00	mt	980318.06	980755.84	0.43	-167.23	-1.40	0.00	23.16	-145.04
ck928	46	33.20	-110	4.92	5223.00	mt	980299.64	980759.59	0.65	-178.14	-1.44	0.00	31.06	-147.87
ck929	46	36.38	-110	4.92	5535.00	mt	980282.16	980764.38	1.03	-188.78	-1.46	0.00	38.09	-151.12
ck930	46	35.49	-110	4.92	5456.00	mt	980286.47	980763.04	0.88	-186.09	-1.46	0.00	36.33	-150.34
ck931	46	34.63	-110	4.92	5361.00	mt	980291.63	980761.75	0.76	-182.85	-1.45	0.00	33.86	-149.68
harlowto	46	26.25	-109	50.25	4217.00	mt	980362.35	980749.12	0.17	-143.83	-1.30	0.00	9.69	-135.26
jud1	46	56.50	-110	29.42	7099.00	mt	980212.46	980794.69	4.68	-242.13	-1.51	0.00	85.05	-153.91
jud2	46	55.22	-110	28.95	6234.00	mt	980258.78	980792.75	5.80	-212.62	-1.51	0.00	52.02	-156.31
jud3	46	55.12	-110	26.68	5878.00	mt	980278.23	980792.61	7.86	-200.48	-1.49	0.00	38.18	-155.93
jud4	46	54.94	-110	25.61	5771.00	mt	980284.35	980792.34	7.38	-196.83	-1.48	0.00	34.51	-156.42
jud5	46	54.47	-110	23.53	5588.00	mt	980292.99	980791.63	5.65	-190.59	-1.47	0.00	26.66	-159.75
jud6	46	53.07	-110	22.29	5427.00	mt	980304.47	980789.52	3.41	-185.10	-1.46	0.00	25.12	-158.02
jud7	46	51.25	-110	17.75	5210.00	mt	980325.44	980786.78	1.24	-177.70	-1.43	0.00	28.44	-149.45
jud8	46	51.05	-110	19.75	5202.00	mt	980323.87	980786.47	2.68	-177.43	-1.43	0.00	26.42	-149.76
jud9	46	51.33	-110	19.09	5260.00	mt	980320.98	980786.90	1.54	-179.40	-1.44	0.00	28.56	-150.74
jud10	46	49.43	-110	19.22	6132.00	mt	980263.62	980784.03	3.97	-209.14	-1.50	0.00	55.99	-150.68
jud11	46	47.91	-110	20.32	6485.00	mt	980243.79	980781.75	3.74	-221.18	-1.51	0.00	71.62	-147.33
jud12	46	47.63	-110	22.01	6646.00	mt	980234.39	980781.32	3.42	-226.68	-1.52	0.00	77.77	-147.00
jud13	46	47.62	-110	23.48	6976.00	mt	980211.17	980781.31	5.07	-237.93	-1.52	0.00	85.57	-148.80
jud15	46	46.54	-110	25.74	7331.00	mt	980186.56	980779.69	7.76	-250.04	-1.51	0.00	95.94	-147.85
jud16	46	44.92	-110	27.79	6979.00	mt	980211.83	980777.25	2.79	-238.03	-1.52	0.00	90.58	-146.18
jud17	46	43.89	-110	28.25	6642.00	mt	980232.41	980775.70	2.04	-226.54	-1.52	0.00	81.05	-144.96
jud18	46	43.82	-110	30.74	6787.00	mt	980220.06	980775.59	3.64	-231.49	-1.52	0.00	82.43	-146.93
jud19	46	43.64	-110	32.63	7363.00	mt	980186.02	980775.31	3.15	-251.13	-1.51	0.00	102.78	-146.71
jud20	46	45.14	-110	35.22	7409.00	mt	980182.86	980777.57	3.17	-252.70	-1.50	0.00	101.67	-149.36
jud21	46	46.29	-110	33.76	7972.00	mt	980147.45	980779.30	8.09	-271.90	-1.47	0.00	117.43	-147.86
jud22	46	46.30	-110	32.57	7977.00	mt	980144.62	980779.33	11.48	-272.07	-1.47	0.00	115.04	-147.02
jud23	46	50.69	-110	20.34	5095.00	mt	980324.40	980785.93	5.08	-173.78	-1.42	0.00	17.44	-152.68
jud24	46	50.50	-110	21.46	5154.00	mt	980317.27	980785.65	6.13	-175.79	-1.43	0.00	16.14	-154.94
jud25	46	50.22	-110	23.13	5237.00	mt	980312.39	980785.23	8.42	-178.62	-1.44	0.00	19.48	-152.16
jud26	46	50.19	-110	23.67	5263.00	mt	980309.43	980785.18	8.69	-179.51	-1.44	0.00	19.01	-153.25
jud27	46	50.21	-110	25.18	5345.00	mt	980304.35	980785.21	8.04	-182.30	-1.45	0.00	21.61	-154.10
jud28	46	50.35	-110	26.82	5439.00	mt	980299.10	980785.42	8.47	-185.51	-1.46	0.00	24.98	-153.52
jud29	46	50.45	-110	27.71	5552.00	mt	980294.50	980785.57	5.23	-189.36	-1.47	0.00	30.84	-154.76
jud30	46	50.65	-110	29.24	5729.00	mt	980284.71	980785.88	4.23	-195.40	-1.48	0.00	37.39	-155.26
jud31	46	50.46	-110	28.39	5588.00	mt	980291.99	980785.59	5.19	-190.59	-1.47	0.00	31.70	-155.17
jud32	46	50.28	-110	22.62	5232.00	mt	980313.89	980785.31	6.61	-178.45	-1.44	0.00	20.42	-152.86
jud33	46	55.19	-110	29.77	6350.00	mt	980252.76	980792.70	5.81	-216.58	-1.51	0.00	50.94	-155.34

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STATION IDENTIFICATION sta-id	LOCATIONS LATITUDE deg	min	LONGITUDE deg	min	GRAVITY ELE (in ft)	ST	OBSERVED	THEORETICAL	CORRECTIONS TERRAIN	BOUGUER (d1=2.67)	CURV	ANOMALIES SPECIAL	FREE AIR	COMPLETE-BOUGUER d1=2.67
jud34	46	51.77	-110	20.52	5714.00	mt	980293.28	980787.55	2.27	-194.89	-1.48	0.00	42.86	-151.24
jud35	46	51.51	-110	22.87	6200.00	mt	980259.74	980787.16	3.14	-211.46	-1.51	0.00	55.38	-154.45
jud36	46	51.95	-110	23.16	6120.00	mt	980258.81	980787.83	2.46	-208.74	-1.50	0.00	46.27	-161.51
jud37	46	51.82	-110	24.10	6502.00	mt	980241.99	980787.64	7.11	-221.76	-1.51	0.00	65.53	-150.63
jud38	46	55.35	-110	30.34	6515.00	mt	980243.00	980792.95	6.47	-222.21	-1.51	0.00	62.45	-154.80
jud39	46	55.12	-110	31.42	6915.00	mt	980218.39	980792.61	7.22	-235.85	-1.52	0.00	75.77	-154.38
jud40	46	52.87	-110	23.92	5635.00	mt	980289.24	980789.22	4.45	-192.19	-1.47	0.00	29.74	-159.48
jud41	46	52.72	-110	21.30	5341.00	mt	980311.12	980788.99	2.96	-182.17	-1.45	0.00	24.22	-156.44
jud42	46	48.19	-110	23.13	6668.00	mt	980231.44	980782.17	4.23	-227.43	-1.52	0.00	76.05	-148.67
jud43	46	48.79	-110	22.09	6666.00	mt	980232.27	980783.08	4.63	-227.36	-1.52	0.00	75.79	-148.46
jud44	46	49.08	-110	20.79	6482.00	mt	980244.78	980783.51	4.65	-221.08	-1.51	0.00	70.57	-147.38
jud45	46	46.22	-110	36.45	8052.00	mt	980142.61	980779.20	5.84	-274.63	-1.47	0.00	120.20	-150.06
jud46	46	47.22	-110	35.45	8081.00	mt	980140.48	980780.71	7.25	-275.62	-1.46	0.00	119.29	-150.54
jud47	46	48.28	-110	32.46	8211.00	mt	980131.07	980782.30	10.23	-280.05	-1.45	0.00	120.49	-150.78
jud48	46	48.38	-110	33.43	8014.00	mt	980142.01	980782.45	9.07	-273.33	-1.47	0.00	112.78	-152.96
jud49	46	46.23	-110	35.55	8082.00	mt	980138.93	980779.22	7.52	-275.65	-1.46	0.00	119.32	-150.27
jud50	46	48.73	-110	38.70	7988.00	mt	980148.57	980782.98	7.44	-272.45	-1.47	0.00	116.37	-150.11
jud51	46	50.88	-110	37.54	8031.00	mt	980142.89	980786.22	8.65	-273.91	-1.47	0.00	111.49	-155.24
jud52	46	51.02	-110	37.06	8165.00	mt	980138.21	980786.43	12.14	-278.48	-1.46	0.00	119.19	-148.61
jud53	46	50.21	-110	36.39	7527.00	mt	980177.26	980785.21	9.99	-256.72	-1.50	0.00	99.52	-148.71
jud54	46	46.08	-110	29.56	6068.00	mt	980265.76	980778.99	4.25	-206.96	-1.50	0.00	57.17	-147.04
jud55	46	46.27	-110	28.77	5926.00	mt	980273.79	980779.28	4.99	-202.12	-1.49	0.00	51.57	-147.05
jud56	46	46.65	-110	27.78	5896.00	mt	980274.96	980779.85	4.15	-201.10	-1.49	0.00	49.35	-149.08
jud57	46	47.14	-110	26.61	5942.00	mt	980274.78	980780.59	3.82	-202.66	-1.49	0.00	52.76	-147.58
jud58	46	47.53	-110	25.87	5770.00	mt	980282.28	980781.18	5.13	-196.80	-1.48	0.00	43.51	-149.64
jud59	46	48.05	-110	25.11	5510.00	mt	980297.08	980781.95	6.85	-187.93	-1.46	0.00	33.09	-149.45
jud60	46	48.58	-110	23.94	5410.00	mt	980302.60	980782.76	8.41	-184.52	-1.45	0.00	28.42	-149.15
jud61	46	49.24	-110	26.69	7066.00	mt	980201.16	980783.75	8.69	-241.00	-1.51	0.00	81.58	-152.24
jud62	46	48.33	-110	29.70	7866.00	mt	980153.86	980782.38	9.03	-268.29	-1.48	0.00	110.80	-149.94
jud63	46	49.37	-110	30.30	7230.00	mt	980194.51	980783.95	8.10	-246.59	-1.51	0.00	90.13	-149.87
jud64	46	49.49	-110	32.67	7550.00	mt	980170.85	980784.13	11.43	-257.51	-1.50	0.00	96.36	-151.22
jud65	46	51.99	-110	28.05	7178.00	mt	980196.31	980787.89	7.79	-244.82	-1.51	0.00	83.11	-155.43
jud66	46	52.53	-110	27.09	7160.00	mt	980200.86	980788.70	5.36	-244.21	-1.51	0.00	85.15	-155.21
jud67	46	53.45	-110	25.42	6925.00	mt	980213.92	980790.09	7.26	-236.19	-1.52	0.00	74.75	-155.70
jud68	46	54.14	-110	24.64	7200.00	mt	980195.27	980791.13	11.56	-245.57	-1.51	0.00	80.90	-154.62
jud69	46	54.29	-110	27.77	7770.00	mt	980159.05	980791.35	12.30	-265.01	-1.49	0.00	97.99	-156.20
jud70	46	53.52	-110	29.51	8153.00	mt	980136.57	980790.20	11.68	-278.08	-1.46	0.00	112.65	-155.20
jud71	46	54.39	-110	29.57	7555.00	mt	980176.94	980791.51	8.08	-257.68	-1.50	0.00	95.54	-155.56
jud72	46	52.27	-110	29.84	7896.00	mt	980149.50	980788.31	15.07	-269.31	-1.48	0.00	103.33	-152.39
jud73	46	53.44	-110	31.11	7886.00	mt	980150.10	980790.08	16.00	-268.97	-1.48	0.00	101.22	-153.22

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Bankey and others 1977-84
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STATION IDENTIFICATION sta-id	LOCATIONS LATITUDE deg	min	LONGITUDE deg	min	ELE (in ft)	ST	GRAVITY OBSERVED	THEORETICAL	CORRECTIONS TERRAIN (d1=2.67)	BOUGUER	CURV	ANOMALIES SPECIAL	FREE AIR	COMPLETE-BOUGUER d1=2.67
jud74	46	54.55	-110	32.44	8382.00	mt	980122.56	980791.75	15.31	-285.89	-1.43	0.00	118.60	-153.41
jud75	46	52.48	-110	31.81	7622.00	mt	980166.93	980788.63	13.16	-259.96	-1.49	0.00	94.70	-153.60
jud76	46	54.09	-110	33.80	7691.00	mt	980168.44	980791.05	9.58	-262.32	-1.49	0.00	100.27	-153.96
jud77	46	52.53	-110	35.34	7990.00	mt	980149.07	980788.70	7.57	-272.52	-1.47	0.00	111.33	-155.08
jud78	46	52.70	-110	36.95	8150.00	mt	980136.32	980788.95	9.70	-277.97	-1.46	0.00	113.36	-156.37
jud79	46	50.70	-110	35.59	7634.00	mt	980168.47	980785.95	7.68	-260.37	-1.49	0.00	100.05	-154.14
jud80	46	52.17	-110	33.90	7513.00	mt	980176.51	980788.16	8.37	-256.25	-1.50	0.00	94.50	-154.87
jud81	46	53.13	-110	32.78	7465.00	mt	980182.41	980789.61	7.64	-254.61	-1.50	0.00	94.46	-154.02
jud82	46	51.59	-110	32.48	5885.00	mt	980273.01	980787.28	7.09	-200.72	-1.49	0.00	38.92	-156.20
jud83	46	51.11	-110	31.18	5815.00	mt	980280.38	980786.56	4.37	-198.33	-1.49	0.00	40.44	-155.00
jud84	46	50.60	-110	31.88	5845.00	mt	980277.81	980785.80	5.11	-199.36	-1.49	0.00	41.46	-154.27
jud85	46	50.33	-110	33.10	5920.00	mt	980272.03	980785.39	6.32	-201.91	-1.49	0.00	43.14	-153.95
jud86	46	49.61	-110	34.50	6071.00	mt	980263.16	980784.30	6.56	-207.06	-1.50	0.00	49.54	-152.46
jud87	46	48.57	-110	36.36	7324.00	mt	980186.77	980782.74	5.14	-249.80	-1.51	0.00	92.44	-153.73
jud88	46	47.79	-110	34.49	7995.00	mt	980147.99	980781.56	7.11	-272.69	-1.47	0.00	117.87	-149.18
jud89	46	47.45	-110	30.85	7557.00	mt	980172.38	980781.05	8.82	-257.75	-1.50	0.00	101.62	-148.80
jud90	46	46.95	-110	32.67	6400.00	mt	980240.90	980780.30	8.80	-218.29	-1.51	0.00	62.19	-148.80
jud91	46	44.92	-110	32.10	6398.00	mt	980240.87	980777.25	8.22	-218.22	-1.51	0.00	65.03	-146.48
lc1	46	44.40	-110	25.81	6462.00	mt	980244.01	980776.46	2.80	-220.40	-1.51	0.00	74.97	-144.14
lc2	46	44.28	-110	23.17	6073.00	mt	980267.21	980776.28	2.41	-207.13	-1.50	0.00	61.80	-144.42
lc3	46	44.98	-110	20.51	5723.00	mt	980286.57	980777.34	3.61	-195.20	-1.48	0.00	47.22	-145.84
lc4	46	45.34	-110	19.01	5411.00	mt	980305.29	980777.88	4.24	-184.55	-1.45	0.00	36.08	-145.69
lc5	46	45.79	-110	18.68	5358.00	mt	980307.10	980778.55	4.81	-182.75	-1.45	0.00	32.23	-147.15
lc6	46	46.74	-110	18.04	5258.00	mt	980311.46	980779.98	7.44	-179.34	-1.44	0.00	25.77	-147.57
lc7	46	47.53	-110	18.03	5196.00	mt	980316.47	980781.18	7.57	-177.22	-1.43	0.00	23.76	-147.33
lc8	46	48.70	-110	17.32	5112.00	mt	980324.40	980782.94	5.99	-174.36	-1.42	0.00	22.03	-147.76
lc9	46	49.15	-110	16.89	5060.00	mt	980330.02	980783.62	4.14	-172.58	-1.42	0.00	22.09	-147.77
lc10	46	50.33	-110	16.40	4983.00	mt	980339.21	980785.39	1.83	-169.96	-1.41	0.00	22.27	-147.27
lc11	46	51.20	-110	16.47	4975.00	mt	980340.90	980786.70	1.57	-169.68	-1.41	0.00	21.89	-147.63
lc12	46	52.98	-110	15.24	4881.00	mt	980350.31	980789.38	1.42	-166.48	-1.40	0.00	19.79	-146.66
lc15	46	46.98	-110	41.73	6279.00	mt	980250.66	980780.34	5.40	-214.16	-1.51	0.00	60.54	-149.72
lc16	46	48.04	-110	42.21	6453.00	mt	980241.23	980781.95	5.20	-220.09	-1.51	0.00	65.86	-150.54
lc17	46	49.86	-110	41.04	7920.00	mt	980152.66	980784.68	6.28	-270.13	-1.48	0.00	112.37	-152.95
lc18	46	48.76	-110	41.46	7731.00	mt	980162.40	980783.03	8.18	-263.68	-1.49	0.00	106.01	-150.98
lc19	46	49.57	-110	39.65	7225.00	mt	980195.28	980784.25	3.63	-246.42	-1.51	0.00	90.14	-154.17
lc20	46	49.76	-110	37.17	6890.00	mt	980215.85	980784.53	4.80	-235.00	-1.52	0.00	78.95	-152.76
lc21	46	47.54	-110	40.44	6476.00	mt	980239.25	980781.19	5.06	-220.88	-1.51	0.00	66.79	-150.54
lc22	46	46.60	-110	38.69	7200.00	mt	980193.88	980779.77	4.58	-245.57	-1.51	0.00	90.87	-151.64
lc23	46	47.96	-110	38.39	7635.00	mt	980169.38	980781.82	4.42	-260.41	-1.49	0.00	105.18	-152.30
lc24	46	47.46	-110	19.33	5400.00	mt	980302.11	980781.07	7.95	-184.18	-1.45	0.00	28.67	-149.01

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Bankey and others 1977-84
Meter used: var.

STATION IDENTIFICATION sta-id	LOCATIONS LATITUDE deg	min	LONGITUDE deg	min	ELE (in ft)	ST	GRAVITY OBSERVED	THEORETICAL	CORRECTIONS TERRAIN (d1=2.67)	BOUGUER	CURV	ANOMALIES SPECIAL	FREE AIR	COMPLETE-BOUGUER d1=2.67
lc25	46	46.83	-110	20.42	5555.00	mt	980292.07	980780.12	6.76	-189.47	-1.47	0.00	34.15	-150.02
lc26	46	46.62	-110	21.67	5805.00	mt	980282.67	980779.80	4.76	-197.99	-1.48	0.00	48.56	-146.16
lc27	46	47.89	-110	15.25	5366.00	mt	980312.28	980781.72	3.85	-183.02	-1.45	0.00	35.00	-145.62
lc28	46	47.54	-110	15.85	5600.00	mt	980298.56	980781.19	3.12	-191.00	-1.47	0.00	43.80	-145.55
lc29	46	47.16	-110	17.07	5888.00	mt	980280.52	980780.62	2.65	-200.82	-1.49	0.00	53.39	-146.27
lc30	46	49.05	-110	14.66	5395.00	mt	980313.40	980783.46	1.48	-184.01	-1.45	0.00	37.10	-146.88
lc31	46	53.70	-110	16.89	5048.00	mt	980339.89	980790.47	1.47	-172.17	-1.42	0.00	23.98	-148.14
lc32	46	55.30	-110	17.60	5240.00	mt	980329.21	980792.88	2.51	-178.72	-1.44	0.00	28.93	-148.72
lc33	46	55.43	-110	19.45	5680.00	mt	980301.38	980793.07	3.13	-193.73	-1.48	0.00	42.25	-149.82
lc34	46	53.25	-110	18.76	5169.00	mt	980329.49	980789.79	1.70	-176.30	-1.43	0.00	25.63	-150.40
lc35	46	53.02	-110	17.48	5029.00	mt	980339.35	980789.45	1.49	-171.52	-1.41	0.00	22.68	-148.77
lc36	46	52.79	-110	16.29	4939.00	mt	980345.33	980789.09	1.45	-168.46	-1.40	0.00	20.54	-147.86
lc37	46	52.90	-110	19.86	5370.00	mt	980313.54	980789.27	1.67	-183.16	-1.45	0.00	29.09	-153.84
lc38	46	55.51	-110	24.38	5810.00	mt	980283.73	980793.20	7.39	-198.16	-1.48	0.00	36.70	-155.56
lc39	46	56.57	-110	28.87	6640.00	mt	980239.79	980794.78	6.65	-226.47	-1.52	0.00	69.14	-152.19
lc40	46	58.04	-110	32.08	6064.00	mt	980275.11	980796.99	6.95	-206.83	-1.50	0.00	48.13	-153.24
lc41	46	55.16	-110	27.80	6006.00	mt	980271.69	980792.66	6.96	-204.85	-1.50	0.00	43.60	-155.79
lc42	46	53.80	-110	23.02	5520.00	mt	980298.43	980790.62	5.39	-188.27	-1.46	0.00	26.72	-157.62
lc43	46	41.23	-110	28.26	6706.00	mt	980224.71	980771.69	1.87	-228.72	-1.52	0.00	83.37	-145.00
lc44	46	41.27	-110	24.59	6980.00	mt	980207.70	980771.74	2.80	-238.07	-1.52	0.00	92.04	-144.74
lc45	46	41.60	-110	22.85	6793.00	mt	980220.21	980772.24	2.69	-231.69	-1.52	0.00	86.49	-144.03
lc46	46	41.97	-110	21.98	6802.00	mt	980220.04	980772.80	2.26	-232.00	-1.52	0.00	86.60	-144.65
lc48	46	41.05	-110	36.79	6120.00	mt	980255.91	980771.41	1.71	-208.74	-1.50	0.00	59.79	-148.74
lc49	46	42.57	-110	36.06	6560.00	mt	980230.15	980773.70	2.44	-223.74	-1.52	0.00	73.07	-149.74
lc50	46	44.26	-110	35.35	7410.00	mt	980181.65	980776.25	4.02	-252.73	-1.50	0.00	101.88	-148.33
lc51	46	44.89	-110	33.73	7175.00	mt	980196.83	980777.20	2.79	-244.72	-1.51	0.00	94.04	-149.40
lc52	46	42.76	-110	28.10	6692.00	mt	980227.98	980773.99	1.98	-228.24	-1.52	0.00	83.02	-144.76
lc53	46	43.39	-110	33.50	6913.00	mt	980211.09	980774.95	4.51	-235.78	-1.52	0.00	85.95	-146.84
lc54	46	41.59	-110	33.88	6062.00	mt	980258.82	980772.23	5.34	-206.76	-1.50	0.00	56.43	-146.48
lc55	46	57.35	-110	23.61	6600.00	mt	980249.39	980795.96	3.00	-225.11	-1.52	0.00	73.81	-149.81
lc56	46	56.18	-110	25.01	6268.00	mt	980264.43	980794.20	3.07	-213.78	-1.51	0.00	59.42	-152.80
lc57	46	59.32	-110	23.36	5480.00	mt	980320.39	980798.93	5.96	-186.91	-1.46	0.00	36.61	-145.80
lc58	46	58.90	-110	25.75	5755.00	mt	980302.48	980798.30	7.42	-196.29	-1.48	0.00	45.18	-145.17
lc59	46	58.74	-110	26.61	5880.00	mt	980297.97	980798.05	8.69	-200.55	-1.49	0.00	52.65	-140.70
lc60	46	58.71	-110	28.30	6360.00	mt	980264.56	980798.01	7.85	-216.92	-1.51	0.00	64.39	-146.19
ss1	46	33.13	-110	56.83	4964.00	mt	980288.71	980759.48	0.51	-169.31	-1.41	0.00	-4.11	-174.32
ss2	46	34.18	-110	56.83	5034.00	mt	980290.77	980761.07	0.64	-171.70	-1.41	0.00	2.95	-169.52
ss3	46	34.66	-110	58.11	4997.00	mt	980289.78	980761.79	0.58	-170.43	-1.41	0.00	-2.25	-173.51
ss4	46	34.90	-111	0.65	4890.00	mt	980295.69	980762.16	0.46	-166.78	-1.40	0.00	-6.75	-174.47
ss5	46	34.65	-111	0.02	4903.00	mt	980295.41	980761.77	0.55	-167.23	-1.40	0.00	-5.44	-173.51

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Bankey and others 1977-84
Meter used: var.

STATION IDENTIFICATION sta-id	LOCATIONS LATITUDE deg	min	LONGITUDE deg	min	ELE (in ft)	ST	GRAVITY OBSERVED	THEORETICAL	CORRECTIONS TERRAIN (d1=2.67)	BOUGUER	CURV	ANOMALIES SPECIAL	FREE AIR	COMPLETE-BOUGUER d1=2.67
ss6	46	35.52	-111	0.67	4912.00	mt	980295.65	980763.09	0.47	-167.53	-1.40	0.00	-5.66	-174.13
ss7	46	35.52	-111	1.89	4891.00	mt	980300.15	980763.09	0.44	-166.82	-1.40	0.00	-3.14	-170.91
ss8	46	35.61	-111	3.17	4813.00	mt	980313.36	980763.22	0.53	-164.16	-1.39	0.00	2.61	-162.40
ss9	46	36.14	-111	4.29	4782.00	mt	980319.56	980764.02	0.60	-163.10	-1.38	0.00	5.10	-158.78
ss10	46	36.51	-111	6.19	4810.00	mt	980321.24	980764.58	0.81	-164.06	-1.39	0.00	8.85	-155.78
ss11	46	32.03	-110	56.81	4946.00	mt	980290.43	980757.82	0.51	-168.69	-1.40	0.00	-2.43	-172.02
ss12	46	32.04	-110	55.54	4975.00	mt	980285.27	980757.84	0.56	-169.68	-1.41	0.00	-4.87	-175.41
ss13	46	32.04	-110	54.29	5034.00	mt	980282.62	980757.84	0.66	-171.70	-1.41	0.00	-1.99	-174.44
ss14	46	32.90	-110	58.10	4927.00	mt	980291.47	980759.13	0.46	-168.05	-1.40	0.00	-4.49	-173.47
ss15	46	32.90	-110	59.35	4903.00	mt	980294.93	980759.13	0.47	-167.23	-1.40	0.00	-3.28	-171.44
ss16	46	32.91	-111	0.49	4876.00	mt	980304.43	980759.15	0.49	-166.31	-1.40	0.00	3.67	-163.54
ss17	46	32.89	-111	1.44	4911.00	mt	980304.01	980759.13	0.48	-167.50	-1.40	0.00	6.56	-161.86
ss18	46	32.88	-111	3.16	5078.00	mt	980290.70	980759.11	0.80	-173.20	-1.42	0.00	8.97	-164.85
ss19	46	32.80	-111	4.80	5081.00	mt	980291.68	980758.99	0.65	-173.30	-1.42	0.00	10.35	-163.72
ss20	46	33.74	-111	5.50	5196.00	mt	980290.75	980760.40	0.58	-177.22	-1.43	0.00	18.82	-159.26
ss21	46	33.74	-111	6.75	5253.00	mt	980283.49	980760.40	0.70	-179.16	-1.44	0.00	16.91	-162.99
ss22	46	32.85	-111	8.25	5471.00	mt	980269.20	980759.06	1.21	-186.60	-1.46	0.00	24.45	-162.40
ss23	46	32.43	-111	8.84	5560.00	mt	980260.37	980758.43	1.55	-189.64	-1.47	0.00	24.61	-164.95
ss24	46	31.54	-111	10.38	5934.00	mt	980243.77	980757.09	2.42	-202.39	-1.49	0.00	44.50	-156.96
ss25	46	31.29	-111	11.42	6119.00	mt	980228.77	980756.71	2.33	-208.70	-1.50	0.00	47.26	-160.62
ss26	46	30.79	-111	12.07	6375.00	mt	980210.92	980755.96	3.14	-217.43	-1.51	0.00	54.21	-161.59
ss27	46	30.43	-111	12.95	6678.00	mt	980191.15	980755.41	3.67	-227.77	-1.52	0.00	63.45	-162.16
ss28	46	30.21	-111	14.50	7212.00	mt	980156.06	980755.09	5.12	-245.98	-1.51	0.00	78.86	-163.51
ss29	46	30.54	-111	16.95	7036.00	mt	980164.05	980755.58	7.18	-239.98	-1.52	0.00	69.82	-164.49
ss26	46	30.79	-111	12.07	6375.00	mt	980210.95	980755.96	3.14	-217.43	-1.51	0.00	54.24	-161.56
ss27a	46	26.80	-110	54.21	5139.00	mt	980267.96	980749.95	0.81	-175.28	-1.43	0.00	1.12	-174.77
ss28a	46	26.80	-110	55.21	5069.00	mt	980272.10	980749.95	0.68	-172.89	-1.42	0.00	-1.31	-174.94
ss29a	46	26.86	-110	56.26	5082.00	mt	980269.59	980750.04	0.76	-173.33	-1.42	0.00	-2.69	-176.69
ss30	46	26.79	-110	57.05	5125.00	mt	980269.96	980749.93	0.65	-174.80	-1.42	0.00	1.82	-173.75
ss31	46	27.67	-110	57.06	5043.00	mt	980274.20	980751.26	0.64	-172.00	-1.42	0.00	-2.97	-175.75
ss32	46	28.53	-110	57.08	4999.00	mt	980280.54	980752.55	0.55	-170.50	-1.41	0.00	-2.06	-173.43
ss33	46	28.53	-110	58.34	5070.00	mt	980277.51	980752.55	0.64	-172.92	-1.42	0.00	1.58	-172.12
ss34	46	28.53	-110	59.59	5137.00	mt	980274.01	980752.55	0.69	-175.21	-1.43	0.00	4.37	-171.57
ss35	46	27.75	-111	0.71	5231.00	mt	980268.13	980751.38	0.73	-178.41	-1.44	0.00	8.51	-170.61
ss36	46	28.51	-111	1.20	5182.00	mt	980274.80	980752.52	0.72	-176.74	-1.43	0.00	9.42	-168.03
ss37	46	29.36	-111	1.00	5113.00	mt	980283.33	980753.80	0.67	-174.39	-1.42	0.00	10.19	-164.96
ss38	46	28.51	-111	2.10	5208.00	mt	980278.69	980752.52	0.86	-177.63	-1.43	0.00	15.76	-162.45
ss39	46	27.55	-111	3.07	5392.00	mt	980265.47	980751.08	1.29	-183.91	-1.45	0.00	21.27	-162.79
ss40	46	26.64	-111	3.98	5673.00	mt	980247.79	980749.70	2.16	-193.49	-1.48	0.00	31.37	-161.43
ss41	46	25.88	-111	5.36	6217.00	mt	980213.23	980748.55	3.04	-212.04	-1.51	0.00	49.07	-161.44

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Bankey and others 1977-84
Meter used: var.

STATION IDENTIFICATION sta-id	LOCATIONS LATITUDE deg	min	LONGITUDE deg	min	ELE (in ft)	ST	GRAVITY OBSERVED	THEORETICAL	CORRECTIONS TERRAIN	BOUGUER (d1=2.67)	CURV	ANOMALIES SPECIAL	FREE AIR	COMPLETE-BOUGUER d1=2.67
ss42	46	25.16	-111	6.04	6285.00	mt	980208.71	980747.47	3.56	-214.36	-1.51	0.00	52.03	-160.28
ss43	46	23.55	-111	6.20	6218.00	mt	980210.87	980745.05	2.30	-212.08	-1.51	0.00	50.32	-160.96
ss44	46	22.40	-111	6.11	6080.00	mt	980218.04	980743.31	1.54	-207.37	-1.50	0.00	46.26	-161.07
ss45	46	21.92	-111	5.99	6115.00	mt	980213.84	980742.59	2.35	-208.57	-1.50	0.00	46.07	-161.64
ss46	46	21.47	-111	5.75	5641.00	mt	980241.55	980741.91	2.54	-192.40	-1.47	0.00	29.92	-161.42
ss47	46	21.29	-111	7.89	5274.00	mt	980262.00	980741.64	3.57	-179.88	-1.44	0.00	16.16	-161.60
ss48	46	20.69	-111	8.90	5101.00	mt	980271.18	980740.73	4.80	-173.98	-1.42	0.00	9.98	-160.62
ss49	46	19.98	-111	10.47	4973.00	mt	980278.78	980739.66	3.61	-169.61	-1.41	0.00	6.63	-160.78
ss50	46	19.88	-111	12.50	4790.00	mt	980288.40	980739.52	4.64	-163.37	-1.38	0.00	-0.81	-160.92
ss51	46	20.41	-111	13.00	4819.00	mt	980287.36	980740.32	4.92	-164.36	-1.39	0.00	0.08	-160.75
ss52	46	21.22	-111	11.01	5238.00	mt	980263.78	980741.54	4.74	-178.65	-1.44	0.00	14.66	-160.69
ss53	46	21.80	-111	10.07	5478.00	mt	980250.58	980742.41	4.73	-186.84	-1.46	0.00	23.13	-160.44
ss54	46	22.60	-111	10.61	6013.00	mt	980221.24	980743.62	4.56	-205.09	-1.50	0.00	42.86	-159.16
ss55	46	22.91	-111	10.15	6262.00	mt	980206.72	980744.08	3.57	-213.58	-1.51	0.00	51.27	-160.25
ss56	46	23.43	-111	10.37	6644.00	mt	980183.72	980744.87	3.83	-226.61	-1.52	0.00	63.38	-160.92
ss57	46	23.95	-111	11.24	6766.00	mt	980175.38	980745.66	5.98	-230.77	-1.52	0.00	65.72	-160.58
ss58	46	23.31	-111	12.79	6172.00	mt	980210.73	980744.69	4.00	-210.51	-1.50	0.00	46.22	-161.80
ss59	46	23.29	-111	14.56	5924.00	mt	980223.76	980744.66	4.15	-202.05	-1.49	0.00	35.98	-163.42
ss60	46	22.53	-111	18.28	5101.00	mt	980267.94	980743.51	1.52	-173.98	-1.42	0.00	3.97	-169.91
ss61	46	22.54	-111	19.52	4978.00	mt	980272.39	980743.53	1.23	-169.79	-1.41	0.00	-3.15	-173.12
ss62	46	22.54	-111	20.75	4836.00	mt	980277.01	980743.53	1.06	-164.94	-1.39	0.00	-11.88	-177.15
ss63	46	21.24	-111	18.31	4901.00	mt	980279.26	980741.56	1.13	-167.16	-1.40	0.00	-1.56	-168.99
ss64	46	21.21	-111	17.38	4995.00	mt	980274.35	980741.52	1.19	-170.37	-1.41	0.00	2.41	-168.18
ss65	46	20.35	-111	17.40	4807.00	mt	980286.32	980740.23	1.05	-163.95	-1.39	0.00	-2.00	-166.29
ss66	46	19.49	-111	16.95	4512.00	mt	980303.56	980738.92	2.35	-153.89	-1.35	0.00	-11.18	-164.07
ss67	46	37.25	-111	4.18	4790.00	mt	980315.74	980765.69	0.50	-163.37	-1.38	0.00	0.36	-163.89
ss68	46	37.99	-111	4.75	4753.00	mt	980319.78	980766.80	0.58	-162.11	-1.38	0.00	-0.19	-163.10
ss69	46	39.03	-111	5.57	4674.00	mt	980326.17	980768.38	1.29	-159.42	-1.37	0.00	-2.80	-162.29
ss98	46	32.21	-111	5.29	5299.00	mt	980282.71	980758.09	1.04	-180.73	-1.44	0.00	22.76	-158.38
ss70	46	39.86	-111	6.51	4705.00	mt	980326.83	980769.62	1.02	-160.47	-1.37	0.00	-0.48	-161.30
ss99	46	31.48	-111	5.61	5408.00	mt	980274.20	980757.00	0.99	-184.45	-1.45	0.00	25.59	-159.33
ss71	46	40.49	-111	7.87	4671.00	mt	980338.73	980770.57	1.35	-159.31	-1.37	0.00	7.28	-152.05
ss72	46	40.55	-111	9.27	4608.00	mt	980343.39	980770.66	1.05	-157.17	-1.36	0.00	5.93	-151.54
ss100	46	31.60	-111	6.54	5344.00	mt	980277.24	980757.18	1.19	-182.27	-1.45	0.00	22.43	-160.09
ss101	46	31.99	-111	6.97	5350.00	mt	980278.28	980757.77	1.02	-182.47	-1.45	0.00	23.45	-159.45
ss73	46	40.71	-111	10.87	4658.00	mt	980337.74	980770.91	0.85	-158.87	-1.37	0.00	4.74	-154.65
ss102	46	32.19	-111	6.23	5345.00	mt	980279.80	980758.07	1.39	-182.30	-1.45	0.00	24.19	-158.17
ss74	46	40.66	-111	13.40	4826.00	mt	980331.20	980770.83	0.62	-164.60	-1.39	0.00	14.07	-151.30
ss103	46	31.12	-111	6.96	5390.00	mt	980270.98	980756.46	1.10	-183.84	-1.45	0.00	21.22	-162.97
ss75	46	40.28	-111	11.93	4750.00	mt	980336.49	980770.25	0.65	-162.01	-1.36	0.00	12.78	-149.95

White Sulphur Springs Gravity Data
Bankey and others 1977-84
Meter used: var.

STATION IDENTIFICATION sta-id	LOCATIONS LATITUDE deg	min	LONGITUDE deg	min	ELE (in ft)		GRAVITY OBSERVED	THEORETICAL	CORRECTIONS TERRAIN (d1=2.67)	BOUGUER	CURV	ANOMALIES SPECIAL	FREE AIR	COMPLETE-BOUGUER d1=2.67
ss104	46	31.10	-111	8.23	5595.00	mt	980255.88	980756.42	1.39	-190.83	-1.47	0.00	25.42	-165.49
ss76	46	39.66	-111	12.78	5045.00	mt	980320.26	980769.32	0.74	-172.07	-1.42	0.00	25.21	-147.54
ss77	46	39.79	-111	11.16	4720.00	mt	980333.19	980769.52	0.64	-160.99	-1.38	0.00	7.40	-154.32
ss78	46	38.88	-111	11.24	4797.00	mt	980327.09	980768.15	0.67	-163.61	-1.39	0.00	9.91	-154.42
ss79	46	38.06	-111	11.41	4884.00	mt	980322.69	980766.91	0.73	-166.58	-1.40	0.00	14.92	-152.33
ss80	46	38.23	-111	12.68	5158.00	mt	980312.20	980767.17	0.94	-175.92	-1.43	0.00	29.93	-146.48
ss105	46	30.59	-111	5.57	5298.00	mt	980275.82	980755.66	1.32	-180.70	-1.44	0.00	18.21	-162.61
ss81	46	37.74	-111	13.51	5343.00	mt	980301.35	980766.43	1.20	-182.23	-1.45	0.00	37.20	-145.28
ss106	46	29.97	-111	4.62	5181.00	mt	980282.66	980754.72	1.12	-176.71	-1.43	0.00	14.99	-162.03
ss82	46	36.45	-111	15.87	5955.00	mt	980259.20	980764.48	2.41	-203.11	-1.49	0.00	54.50	-147.69
ss83	46	36.71	-111	16.51	5788.00	mt	980269.11	980764.88	2.30	-197.41	-1.48	0.00	48.33	-148.27
ss107	46	28.18	-111	3.35	5298.00	mt	980272.95	980752.03	1.28	-180.70	-1.44	0.00	18.98	-161.88
ss108	46	29.42	-110	57.41	4994.00	mt	980283.86	980753.89	0.55	-170.33	-1.41	0.00	-0.55	-171.74
ss84	46	35.98	-111	15.52	5710.00	mt	980271.34	980763.78	2.47	-194.75	-1.48	0.00	44.33	-149.43
ss109	46	30.05	-110	57.44	4973.00	mt	980289.96	980754.84	0.54	-169.61	-1.41	0.00	2.63	-167.86
ss110	46	31.15	-110	58.08	4934.00	mt	980295.09	980756.50	0.52	-168.28	-1.40	0.00	2.44	-166.73
ss111	46	30.71	-110	59.33	4998.00	mt	980293.25	980755.84	0.57	-170.47	-1.41	0.00	7.27	-164.04
ss85	46	36.65	-111	13.64	5443.00	mt	980291.33	980764.78	1.31	-185.65	-1.46	0.00	38.21	-147.58
ss112	46	31.14	-111	0.62	5022.00	mt	980293.94	980756.48	0.52	-171.29	-1.41	0.00	9.57	-162.61
ss113	46	30.94	-111	2.15	4967.00	mt	980294.38	980756.19	0.68	-169.41	-1.41	0.00	5.14	-165.00
ss86	46	36.39	-111	12.74	5167.00	mt	980304.71	980764.40	1.29	-176.23	-1.43	0.00	26.05	-150.32
ss114	46	32.08	-111	0.99	5048.00	mt	980294.02	980757.91	0.56	-172.17	-1.42	0.00	10.68	-162.35
ss80	46	38.23	-111	12.68	5158.00	mt	980312.20	980767.17	0.94	-175.92	-1.43	0.00	29.93	-146.48
ss87	46	36.97	-111	11.47	5003.00	mt	980314.64	980765.27	0.85	-170.64	-1.41	0.00	19.70	-151.50
ss88	46	36.02	-111	11.60	5126.00	mt	980299.25	980763.84	0.98	-174.83	-1.43	0.00	17.30	-157.98
ss89	46	35.42	-111	11.68	5204.00	mt	980291.70	980762.93	1.07	-177.49	-1.43	0.00	17.99	-159.87
ss90	46	34.72	-111	12.55	5391.00	mt	980284.49	980761.88	1.50	-183.87	-1.45	0.00	29.40	-154.43
ss91	46	34.73	-111	14.48	5858.00	mt	980257.65	980761.89	2.53	-199.80	-1.49	0.00	46.43	-152.33
ss92	46	34.52	-111	15.76	6480.00	mt	980217.92	980761.58	4.56	-221.01	-1.51	0.00	65.46	-152.51
ss93	46	34.12	-111	13.94	6095.00	mt	980240.46	980760.98	3.19	-207.88	-1.50	0.00	52.42	-153.77
ss94	46	33.98	-111	12.68	5409.00	mt	980279.48	980760.76	2.11	-184.49	-1.45	0.00	27.19	-156.64
ss95	46	34.55	-111	11.93	5398.00	mt	980277.31	980761.62	1.46	-184.11	-1.45	0.00	23.13	-160.97
ss96	46	33.69	-111	11.93	5563.00	mt	980265.02	980760.33	1.76	-189.74	-1.47	0.00	27.65	-161.80
ss97	46	33.08	-111	12.02	5684.00	mt	980259.75	980759.41	1.90	-193.86	-1.48	0.00	34.66	-158.78
h2	46	34.18	-110	48.31	5455.00	mt	980269.31	980761.07	1.07	-186.05	-1.46	0.00	21.05	-165.39
h3	46	35.39	-110	47.24	5380.00	mt	980274.91	980762.88	1.03	-183.50	-1.45	0.00	17.78	-166.14
h4	46	36.51	-110	45.75	5349.00	mt	980284.47	980764.58	0.96	-182.44	-1.45	0.00	22.74	-160.19
h5	46	37.04	-110	44.87	5508.00	mt	980279.80	980765.37	0.91	-187.86	-1.46	0.00	32.21	-156.21
h6	46	37.28	-110	43.42	5554.00	mt	980278.90	980765.73	0.94	-189.43	-1.47	0.00	35.27	-154.69
h7	46	37.35	-110	42.16	5612.00	mt	980277.24	980765.84	0.81	-191.41	-1.47	0.00	38.96	-153.11

White Sulphur Springs Gravity Data
Bankey and others 1977-84
Meter used: var.

STATION IDENTIFICATION sta-id	LOCATIONS LATITUDE deg	min	LONGITUDE deg	min	ELE (in ft)	ST	GRAVITY OBSERVED	THEORETICAL	CORRECTIONS TERRAIN	BOUGUER (d1=2.67)	CURV	ANOMALIES SPECIAL	FREE AIR	COMPLETE-BOUGUER d1=2.67
h8	46	37.15	-110	40.82	5583.00	mt	980278.27	980765.54	0.89	-190.42	-1.47	0.00	37.56	-153.43
h9	46	36.86	-110	39.72	5675.00	mt	980269.53	980765.10	0.80	-193.56	-1.48	0.00	37.90	-156.33
h10	46	36.85	-110	38.57	5748.00	mt	980267.17	980765.09	0.87	-196.05	-1.48	0.00	42.42	-154.24
h11	46	36.17	-110	36.12	5606.00	mt	980276.66	980764.06	0.84	-191.20	-1.47	0.00	39.59	-152.24
h13	46	34.35	-110	33.04	5277.00	mt	980289.92	980761.32	1.29	-179.98	-1.44	0.00	24.68	-155.46
h14	46	33.93	-110	31.31	5175.00	mt	980299.57	980760.69	1.08	-176.50	-1.43	0.00	25.37	-151.48
h15	46	33.38	-110	30.09	5145.00	mt	980299.28	980759.86	1.44	-175.48	-1.43	0.00	23.10	-152.37
h16	46	32.96	-110	28.04	5068.00	mt	980305.17	980759.23	1.37	-172.85	-1.42	0.00	22.38	-150.52
h17	46	32.50	-110	26.78	5023.00	mt	980305.35	980758.54	1.24	-171.32	-1.41	0.00	19.02	-152.47
h18	46	31.97	-110	25.68	4998.00	mt	980304.49	980757.73	1.31	-170.47	-1.41	0.00	16.61	-153.95
h19	46	31.24	-110	24.31	4966.00	mt	980305.53	980756.64	0.88	-169.38	-1.41	0.00	15.75	-154.16
h20	46	30.37	-110	22.61	4919.00	mt	980306.41	980755.33	0.67	-167.77	-1.40	0.00	13.52	-154.98
h22	46	29.03	-110	16.44	4708.00	mt	980317.57	980753.30	0.51	-160.58	-1.37	0.00	6.87	-154.57
h23	46	28.72	-110	14.84	4669.00	mt	980319.56	980752.84	0.52	-159.25	-1.37	0.00	5.60	-154.43
h24	46	27.95	-110	13.06	4670.00	mt	980318.79	980751.67	0.43	-159.28	-1.37	0.00	6.15	-154.07
h25	46	27.64	-110	11.66	4665.00	mt	980319.32	980751.21	0.45	-159.11	-1.37	0.00	6.67	-153.35
h26	46	27.19	-110	10.52	4616.00	mt	980322.30	980750.54	0.41	-157.44	-1.36	0.00	5.72	-152.67
h27	46	26.50	-110	6.79	4491.00	mt	980333.08	980749.50	0.43	-153.18	-1.34	0.00	5.80	-148.29
h28	46	26.29	-110	5.53	4471.00	mt	980337.06	980749.18	0.40	-152.49	-1.34	0.00	8.22	-145.21
h29	46	25.99	-110	4.25	4448.00	mt	980339.12	980748.73	0.40	-151.71	-1.34	0.00	8.56	-144.08
h30	46	25.57	-110	4.29	4430.00	mt	980339.01	980748.09	0.52	-151.09	-1.33	0.00	7.39	-144.51
h31	46	27.49	-110	19.12	4827.00	mt	980307.13	980750.98	0.59	-164.64	-1.39	0.00	9.94	-155.50
h32	46	26.97	-110	21.38	4903.00	mt	980301.03	980750.20	0.96	-167.23	-1.40	0.00	11.76	-155.91
h33	46	26.56	-110	22.67	4964.00	mt	980296.41	980749.59	0.93	-169.31	-1.41	0.00	13.49	-156.29
h34	46	25.45	-110	24.96	5077.00	mt	980287.68	980747.91	0.94	-173.16	-1.42	0.00	17.05	-156.59
h35	46	25.42	-110	26.52	5063.00	mt	980287.26	980747.87	1.61	-172.68	-1.42	0.00	15.36	-157.13
h36	46	25.13	-110	28.15	5171.00	mt	980276.10	980747.43	0.75	-176.37	-1.43	0.00	14.79	-162.26
h37	46	24.79	-110	30.06	5190.00	mt	980275.55	980746.92	0.81	-177.02	-1.43	0.00	16.53	-161.10
h38	46	24.75	-110	32.57	5233.00	mt	980272.67	980746.86	1.23	-178.48	-1.44	0.00	17.76	-160.93
h39	46	24.34	-110	33.79	5351.00	mt	980266.97	980746.24	1.10	-182.51	-1.45	0.00	23.76	-159.09
h40	46	23.94	-110	35.26	5358.00	mt	980265.50	980745.63	1.36	-182.75	-1.45	0.00	23.56	-159.28
h41	46	22.93	-110	36.92	5497.00	mt	980253.67	980744.12	1.37	-187.49	-1.46	0.00	26.31	-161.27
h42	46	29.28	-110	54.26	5087.00	mt	980280.76	980753.68	0.85	-173.50	-1.42	0.00	5.30	-168.78
h43	46	27.82	-110	54.24	5070.00	mt	980277.75	980751.48	0.91	-172.92	-1.42	0.00	2.89	-170.54
h45	46	25.24	-110	54.22	5105.00	mt	980269.14	980747.59	0.77	-174.12	-1.42	0.00	1.46	-173.31
h46	46	24.42	-110	53.58	5126.00	mt	980267.19	980746.36	0.97	-174.83	-1.43	0.00	2.72	-172.57
h47	46	23.77	-110	52.98	5196.00	mt	980262.79	980745.38	0.72	-177.22	-1.43	0.00	5.88	-172.06
h48	46	23.18	-110	52.44	5227.00	mt	980261.34	980744.48	0.73	-178.28	-1.44	0.00	8.23	-170.75
h49	46	21.89	-110	49.66	5238.00	mt	980258.64	980742.54	2.04	-178.65	-1.44	0.00	8.51	-169.54
h50	46	21.03	-110	48.23	5281.00	mt	980253.70	980741.25	1.16	-180.12	-1.44	0.00	8.91	-171.49

White Sulphur Springs Gravity Data
Bankey and others 1977-84
Meter used: var.

STATION IDENTIFICATION sta-id	LOCATIONS LATITUDE deg min	LONGITUDE deg min	ELE (in ft)	ST	GRAVITY OBSERVED	GRAVITY THEORETICAL	CORRECTIONS TERRAIN	BOUGUER (d1=2.67)	CURV	ANOMALIES SPECIAL	FREE AIR	COMPLETE-BOUGUER d1=2.67
h51	46 20.30	-110 48.21	5349.00	mt	980249.50	980740.15	0.66	-182.44	-1.45	0.00	12.20	-171.03
h52	46 19.90	-110 46.28	5359.00	mt	980248.29	980739.55	0.57	-182.78	-1.45	0.00	12.53	-171.13
h53	46 20.31	-110 44.51	5457.00	mt	980238.59	980740.16	0.58	-186.12	-1.46	0.00	11.42	-175.58
h54	46 22.16	-110 42.36	5796.00	mt	980229.26	980742.95	0.84	-197.68	-1.48	0.00	31.15	-167.18
h56	46 25.95	-110 32.95	5436.00	mt	980264.00	980748.66	0.82	-185.41	-1.46	0.00	26.35	-159.69
h57	46 26.94	-110 33.42	5436.00	mt	980267.85	980750.16	1.13	-185.41	-1.46	0.00	28.71	-157.02
h58	46 27.70	-110 34.50	5603.00	mt	980258.54	980751.30	1.53	-191.10	-1.47	0.00	33.95	-157.09
h59	46 29.19	-110 36.07	6167.00	mt	980228.01	980753.55	1.71	-210.34	-1.50	0.00	54.17	-155.96
h60	46 29.60	-110 37.49	6694.00	mt	980197.21	980754.16	3.22	-228.31	-1.52	0.00	72.27	-154.34
h61	46 30.58	-110 38.61	7083.00	mt	980173.09	980755.64	5.31	-241.58	-1.51	0.00	83.22	-154.56
h62	46 29.41	-110 38.99	6830.00	mt	980187.05	980753.88	2.22	-232.95	-1.52	0.00	75.17	-157.08
h63	46 28.84	-110 38.97	6860.00	mt	980185.49	980753.02	2.58	-233.97	-1.52	0.00	77.29	-155.62
h64	46 28.42	-110 40.31	6894.00	mt	980175.86	980752.39	2.83	-235.13	-1.52	0.00	71.48	-162.34
h65	46 28.96	-110 41.02	7362.00	mt	980144.32	980753.20	6.57	-251.10	-1.51	0.00	83.10	-162.93
h66	46 28.89	-110 42.77	7663.00	mt	980122.01	980753.09	5.47	-261.36	-1.49	0.00	89.17	-168.22
h67	46 28.74	-110 41.79	7320.00	mt	980144.50	980752.87	4.75	-249.66	-1.51	0.00	79.67	-166.76
h68	46 28.07	-110 40.65	6860.00	mt	980174.38	980751.86	4.07	-233.97	-1.52	0.00	67.34	-164.08
h69	46 27.26	-110 40.81	6378.00	mt	980200.82	980750.63	2.77	-217.54	-1.51	0.00	49.71	-166.56
h70	46 26.42	-110 40.23	5972.00	mt	980226.93	980749.37	2.36	-203.69	-1.49	0.00	38.94	-163.88
h71	46 25.20	-110 38.32	5692.00	mt	980242.96	980747.53	1.34	-194.14	-1.48	0.00	30.50	-163.77
h72	46 25.45	-110 35.23	5369.00	mt	980265.93	980747.91	1.20	-183.12	-1.45	0.00	22.74	-160.63
h73	46 34.77	-110 47.38	5426.00	mt	980273.53	980761.95	1.29	-185.07	-1.46	0.00	21.65	-163.58
h74	46 34.43	-110 45.94	5537.00	mt	980268.58	980761.44	1.96	-188.85	-1.46	0.00	27.65	-160.71
h75	46 33.74	-110 44.76	5645.00	mt	980259.91	980760.40	1.92	-192.53	-1.47	0.00	30.17	-161.92
h76	46 33.67	-110 41.94	6312.00	mt	980217.43	980760.30	2.00	-215.28	-1.51	0.00	50.46	-164.33
h77	46 34.19	-110 42.35	6138.00	mt	980231.84	980761.08	1.69	-209.35	-1.50	0.00	47.74	-161.42
h78	46 32.94	-110 44.61	5746.00	mt	980251.50	980759.20	2.78	-195.98	-1.48	0.00	32.45	-162.23
h79	46 32.37	-110 43.38	5895.00	mt	980239.70	980758.34	3.35	-201.06	-1.49	0.00	35.52	-163.69
h80	46 31.90	-110 41.38	6410.00	mt	980210.09	980757.63	1.88	-218.63	-1.51	0.00	55.00	-163.26
h81	46 31.01	-110 39.78	6583.00	mt	980200.21	980756.29	3.43	-224.53	-1.52	0.00	62.72	-159.90
h82	46 32.46	-110 36.72	6557.00	mt	980211.13	980758.48	3.20	-223.64	-1.52	0.00	69.01	-152.95
h83	46 33.23	-110 34.95	5775.00	mt	980259.52	980759.63	1.43	-196.97	-1.48	0.00	42.76	-154.26
h84	46 24.57	-110 24.66	5157.00	mt	980280.12	980746.59	0.77	-175.89	-1.43	0.00	18.33	-158.22
h85	46 23.43	-110 24.30	5265.00	mt	980271.00	980744.87	0.86	-179.57	-1.44	0.00	21.08	-159.07
h86	46 23.03	-110 24.17	5295.00	mt	980267.78	980744.26	0.84	-180.60	-1.44	0.00	21.29	-159.91
h87	46 22.40	-110 23.95	5379.00	mt	980261.16	980743.31	0.83	-183.46	-1.45	0.00	23.51	-160.57
h88	46 21.90	-110 23.78	5427.00	mt	980257.20	980742.56	0.88	-185.10	-1.46	0.00	24.82	-160.86
h89	46 21.28	-110 23.85	5463.00	mt	980254.61	980741.63	1.03	-186.33	-1.46	0.00	26.54	-160.22
h90	46 18.60	-110 24.77	5769.00	mt	980237.74	980737.59	1.96	-196.76	-1.48	0.00	42.47	-153.92
h91	46 19.81	-110 23.15	5714.00	mt	980241.41	980739.41	1.46	-194.89	-1.48	0.00	39.15	-155.76

White Sulphur Springs Gravity Data
Bankey and others 1977-84
Meter used: var.

STATION IDENTIFICATION sta-id	LOCATIONS LATITUDE deg min	LONGITUDE deg min.	ELE (in ft)	GRAVITY ST OBSERVED	THEORETICAL	CORRECTIONS TERRAIN (d1=2.67)	BOUGUER	CURV	ANOMALIES SPECIAL	FREE AIR	COMPLETE-BOUGUER d1=2.67
h92	46 17.97	-110 26.76	6023.00 mt	980221.88	980736.64	4.30	-205.43	-1.50	0.00	51.42	-151.20
h93	46 15.96	-110 26.06	6171.00 mt	980208.80	980733.61	5.37	-210.48	-1.50	0.00	55.27	-151.33
h94	46 14.46	-110 25.95	6490.00 mt	980185.01	980731.34	4.35	-221.36	-1.51	0.00	63.72	-154.80
h95	46 13.47	-110 25.38	6700.00 mt	980172.24	980729.85	3.22	-228.52	-1.52	0.00	72.18	-154.64
h96	46 21.47	-110 25.14	5468.00 mt	980253.42	980741.91	1.26	-186.50	-1.46	0.00	25.54	-161.16
h97	46 21.63	-110 26.39	5455.00 mt	980254.15	980742.16	1.04	-186.05	-1.46	0.00	24.80	-161.67
h98	46 21.23	-110 29.80	5843.00 mt	980232.52	980741.55	1.73	-199.29	-1.49	0.00	40.24	-158.81
h99	46 23.29	-110 30.53	5497.00 mt	980252.67	980744.66	1.81	-187.49	-1.46	0.00	24.77	-162.37
h100	46 23.61	-110 31.38	5332.00 mt	980263.71	980745.14	1.27	-181.86	-1.45	0.00	19.82	-162.22
h101	46 24.63	-110 31.28	5213.00 mt	980273.24	980746.67	0.89	-177.80	-1.43	0.00	16.63	-161.71
h102	46 18.49	-110 48.22	5353.00 mt	980246.89	980737.42	0.84	-182.58	-1.45	0.00	12.69	-170.49
h103	46 16.85	-110 48.21	5313.00 mt	980247.11	980734.95	0.73	-181.21	-1.44	0.00	11.62	-170.30
h104	46 15.51	-110 46.96	5407.00 mt	980242.43	980732.93	0.35	-184.42	-1.45	0.00	17.80	-167.72
h105	46 14.61	-110 44.42	5556.00 mt	980229.21	980731.57	0.41	-189.50	-1.47	0.00	19.94	-170.62
h106	46 13.54	-110 44.22	5429.00 mt	980234.45	980729.96	1.16	-185.17	-1.46	0.00	14.86	-170.61
h107	46 11.56	-110 43.96	5396.00 mt	980233.59	980726.98	0.61	-184.04	-1.45	0.00	13.88	-171.00
h108	46 9.40	-110 43.86	5340.00 mt	980233.06	980723.72	0.84	-182.13	-1.45	0.00	11.34	-171.39
h109	46 8.50	-110 43.85	5332.00 mt	980232.29	980722.37	0.71	-181.86	-1.45	0.00	11.18	-171.42
h110	46 7.71	-110 43.71	5311.00 mt	980232.45	980721.17	0.61	-181.14	-1.44	0.00	10.56	-171.42
h111	46 10.26	-110 43.86	5351.00 mt	980233.92	980725.02	0.78	-182.51	-1.45	0.00	11.94	-171.23
h112	46 12.58	-110 44.10	5414.00 mt	980234.05	980728.52	1.11	-184.66	-1.45	0.00	14.49	-170.51
h113	46 17.26	-110 46.95	5343.00 mt	980247.54	980735.57	0.49	-182.23	-1.45	0.00	14.25	-168.94
h114	46 17.26	-110 45.74	5357.00 mt	980246.17	980735.57	0.44	-182.71	-1.45	0.00	14.20	-169.52
h115	46 17.16	-110 44.40	5375.00 mt	980241.54	980735.41	0.46	-183.33	-1.45	0.00	11.41	-172.91
h116	46 16.38	-110 43.26	5465.00 mt	980235.25	980734.24	0.53	-186.40	-1.46	0.00	14.75	-172.57
h117	46 15.50	-110 43.25	5527.00 mt	980231.12	980732.91	0.44	-188.51	-1.46	0.00	17.78	-171.76
h118	46 14.63	-110 43.24	5559.00 mt	980228.96	980731.60	0.45	-189.60	-1.47	0.00	19.94	-170.68
h119	46 14.29	-110 41.21	5527.00 mt	980233.09	980731.09	0.96	-188.51	-1.46	0.00	21.58	-167.44
h120	46 14.04	-110 38.89	5643.00 mt	980227.34	980730.71	2.51	-192.47	-1.47	0.00	27.10	-164.33
h122	46 14.22	-110 34.58	6104.00 mt	980200.09	980730.98	1.90	-208.19	-1.50	0.00	42.90	-164.89
h123	46 14.48	-110 33.35	6376.00 mt	980185.49	980731.38	1.89	-217.47	-1.51	0.00	53.46	-163.63
eh124	46 13.75	-110 31.57	6196.00 mt	980195.14	980730.28	2.22	-211.33	-1.50	0.00	47.30	-163.31
h125	46 12.83	-110 31.51	6065.00 mt	980198.82	980728.89	2.73	-206.86	-1.50	0.00	40.06	-165.57
h126	46 12.09	-110 31.43	5986.00 mt	980200.52	980727.77	2.68	-204.17	-1.50	0.00	35.45	-167.53
h127	46 11.09	-110 30.76	6050.00 mt	980193.49	980726.27	2.52	-206.35	-1.50	0.00	35.94	-169.38
h128	46 10.22	-110 30.75	5918.00 mt	980200.26	980724.95	1.81	-201.85	-1.49	0.00	31.62	-169.91
h129	46 10.04	-110 29.46	6000.00 mt	980198.66	980724.68	2.12	-204.64	-1.50	0.00	38.00	-166.02
h130	46 10.05	-110 28.24	6088.00 mt	980195.83	980724.70	2.73	-207.64	-1.50	0.00	43.42	-163.00
h131	46 9.75	-110 26.21	6358.00 mt	980183.27	980724.25	2.40	-216.85	-1.51	0.00	56.66	-159.28
h132	46 10.12	-110 25.06	6477.00 mt	980178.80	980724.80	2.52	-220.91	-1.51	0.00	62.83	-157.07

White Sulphur Springs Gravity Data
Bankey and others 1977-84
Meter used: var.

STATION IDENTIFICATION	LOCATIONS				GRAVITY			CORRECTIONS			ANOMALIES		
	LATITUDE		LONGITUDE		ELE	ST	OBSERVED	THEORETICAL	TERRAIN	BOUGUER	CURV	SPECIAL	FREE AIR	COMPLETE-BOUGUER
sta-id	deg	min	deg	min	(in ft)				(d1=2.67)					d1=2.67
h133	46	9.78	-110	24.08	6685.00	mt	980166.73	980724.29	3.16	-228.01	-1.52	0.00	70.82	-155.54
eh134	46	9.94	-110	22.46	6785.00	mt	980160.19	980724.54	4.07	-231.42	-1.52	0.00	73.43	-155.43
eh136	46	11.01	-110	24.38	6355.00	mt	980188.44	980726.15	2.89	-216.75	-1.51	0.00	59.67	-155.71
h137	46	10.23	-110	32.63	5779.00	mt	980212.59	980724.97	1.67	-197.11	-1.48	0.00	30.88	-166.04
h138	46	9.81	-110	33.67	5726.00	mt	980209.07	980724.34	1.35	-195.30	-1.48	0.00	23.01	-172.42
h139	46	8.95	-110	34.77	5634.00	mt	980212.30	980723.05	0.98	-192.16	-1.47	0.00	18.88	-173.77
h141	46	7.64	-110	36.22	5501.00	mt	980216.71	980721.06	0.91	-187.62	-1.46	0.00	12.78	-175.40
h142	46	6.29	-110	36.23	5424.00	mt	980218.18	980719.03	0.89	-185.00	-1.45	0.00	9.05	-176.52
h143	46	4.33	-110	37.28	5316.00	mt	980220.28	980716.08	0.93	-181.31	-1.44	0.00	3.95	-177.87
h144	46	2.75	-110	38.25	5169.00	mt	980226.36	980713.69	0.67	-176.30	-1.43	0.00	-1.40	-178.46
h145	46	1.92	-110	39.08	5183.00	mt	980223.59	980712.45	0.43	-176.78	-1.43	0.00	-1.60	-179.38
h146	46	1.04	-110	38.91	5134.00	mt	980226.36	980711.11	0.47	-175.11	-1.43	0.00	-2.11	-178.17
h148	46	2.58	-110	41.12	5111.00	mt	980228.99	980713.44	0.44	-174.32	-1.42	0.00	-3.96	-179.27
h149	46	4.56	-110	42.55	5288.00	mt	980225.33	980716.42	0.44	-180.36	-1.44	0.00	6.02	-175.34
h150	46	5.43	-110	43.17	5343.00	mt	980225.71	980717.73	0.46	-182.23	-1.45	0.00	10.26	-172.96
h151	46	6.30	-110	43.69	5370.00	mt	980225.83	980719.05	0.48	-183.16	-1.45	0.00	11.60	-172.52
h152	46	25.00	-110	5.53	4495.00	mt	980332.96	980747.23	0.42	-153.31	-1.34	0.00	8.32	-145.92
h153	46	25.01	-110	6.79	4520.00	mt	980330.44	980747.24	0.50	-154.16	-1.35	0.00	8.13	-146.88
h154	46	25.02	-110	8.06	4572.00	mt	980325.69	980747.27	0.56	-155.94	-1.35	0.00	8.25	-148.48
h155	46	24.50	-110	9.25	4643.00	mt	980319.06	980746.48	0.76	-158.36	-1.36	0.00	9.08	-149.88
h156	46	24.76	-110	11.84	4716.00	mt	980311.87	980746.88	0.85	-160.85	-1.37	0.00	8.35	-153.02
h157	46	23.65	-110	13.07	4855.00	mt	980301.96	980745.20	1.26	-165.59	-1.39	0.00	13.18	-152.54
h158	46	23.26	-110	14.24	4972.00	mt	980293.88	980744.62	0.91	-169.58	-1.41	0.00	16.69	-153.39
h159	46	22.25	-110	14.91	5172.00	mt	980282.56	980743.09	0.95	-176.40	-1.43	0.00	25.69	-151.19
h160	46	21.46	-110	15.64	5328.00	mt	980273.42	980741.90	1.07	-181.72	-1.45	0.00	32.39	-149.70
h161	46	37.47	-110	37.76	5760.00	mt	980267.09	980766.02	0.99	-196.46	-1.48	0.00	42.54	-154.41
h162	46	36.55	-110	34.57	5375.00	mt	980290.37	980764.64	1.06	-183.33	-1.45	0.00	31.02	-152.70
h163	46	37.14	-110	35.23	5548.00	mt	980281.97	980765.52	0.92	-189.23	-1.47	0.00	37.99	-151.79
h164	46	37.69	-110	35.74	5522.00	mt	980283.54	980766.36	1.01	-188.34	-1.46	0.00	36.29	-152.51
h165	46	38.31	-110	35.35	5636.00	mt	980281.55	980767.29	1.07	-192.23	-1.47	0.00	44.07	-148.56
h166	46	38.95	-110	35.18	5777.00	mt	980275.17	980768.26	1.16	-197.04	-1.48	0.00	49.98	-147.38
h167	46	39.31	-110	36.21	6032.00	mt	980259.36	980768.80	1.57	-205.73	-1.50	0.00	57.59	-148.08
h168	46	40.35	-110	37.15	6027.00	mt	980259.81	980770.36	1.26	-205.56	-1.50	0.00	56.00	-149.80
h169	46	39.42	-110	34.47	5678.00	mt	980281.55	980768.96	2.28	-193.66	-1.48	0.00	46.34	-146.51
h170	46	40.78	-110	34.48	5906.00	mt	980267.45	980771.01	3.65	-201.44	-1.49	0.00	51.63	-147.65
h171	46	39.54	-110	33.62	5798.00	mt	980274.28	980769.14	4.32	-197.75	-1.48	0.00	50.17	-144.74
h172	46	39.02	-110	32.05	6117.00	mt	980255.17	980768.35	3.39	-208.63	-1.50	0.00	61.82	-144.92
h173	46	38.73	-110	31.35	6020.00	mt	980261.01	980767.92	2.06	-205.32	-1.50	0.00	58.98	-145.78
h174	46	37.94	-110	29.44	6495.00	mt	980224.88	980766.73	5.48	-221.53	-1.51	0.00	68.68	-146.68
h175	46	38.83	-110	30.01	6291.00	mt	980243.65	980768.07	1.87	-214.57	-1.51	0.00	66.93	-147.27

White Sulphur Springs Gravity Data
Bankey and others 1977-84
Meter used: var.

STATION IDENTIFICATION sta-id	LOCATIONS LATITUDE deg	min	LONGITUDE deg	min	ELE (in ft)	GRAVITY ST	OBSERVED	THEORETICAL	CORRECTIONS TERRAIN	BOUGUER (d1=2.67)	CURV	ANOMALIES SPECIAL	FREE AIR	COMPLETE-BOUGUER d1=2.67
h176	46	39.74	-110	30.48	6233.00	mt	980248.62	980769.44	1.99	-212.59	-1.51	0.00	65.08	-147.02
h177	46	40.97	-110	30.11	6340.00	mt	980245.52	980771.29	2.66	-216.24	-1.51	0.00	70.19	-144.90
h178	46	35.87	-110	29.10	5352.00	mt	980292.01	980763.61	1.14	-182.54	-1.45	0.00	31.52	-151.33
h179	46	35.42	-110	28.33	5299.00	mt	980294.87	980762.93	1.43	-180.73	-1.44	0.00	30.08	-150.67
h181	46	33.35	-110	27.29	5224.00	mt	980297.33	980759.81	0.88	-178.18	-1.44	0.00	28.61	-150.12
h182	46	22.47	-110	48.77	5350.00	mt	980248.49	980743.42	0.93	-182.47	-1.45	0.00	8.01	-174.98
h183	46	23.01	-110	48.87	5377.00	mt	980249.37	980744.23	1.05	-183.39	-1.45	0.00	10.61	-173.18
h184	46	13.74	-110	48.34	5600.00	mt	980229.87	980730.26	0.40	-191.00	-1.47	0.00	26.04	-166.03
h185	46	13.75	-110	50.46	5571.00	mt	980228.43	980730.28	0.49	-190.01	-1.47	0.00	21.86	-169.13
h186	46	13.59	-110	51.40	5474.00	mt	980235.36	980730.04	0.53	-186.70	-1.46	0.00	19.92	-167.71
h187	46	13.75	-110	49.15	5457.00	mt	980237.12	980730.28	0.94	-186.12	-1.46	0.00	19.84	-166.80
h188	46	14.60	-110	48.20	5432.00	mt	980239.86	980731.55	0.51	-185.27	-1.46	0.00	18.95	-167.27
h189	46	15.51	-110	48.24	5409.00	mt	980240.65	980732.93	0.39	-184.49	-1.45	0.00	16.20	-169.35
h190	46	24.54	-110	55.78	5224.00	mt	980262.79	980746.54	0.54	-178.18	-1.44	0.00	7.35	-171.72
h191	46	23.79	-110	58.29	5398.00	mt	980253.52	980745.41	0.58	-184.11	-1.45	0.00	15.56	-169.42
h192	46	22.61	-110	59.49	5829.00	mt	980230.27	980743.63	0.84	-198.81	-1.49	0.00	34.59	-164.86
h193	46	21.54	-111	1.02	5732.00	mt	980230.24	980742.02	0.70	-195.50	-1.48	0.00	27.06	-169.22
h194	46	21.10	-111	3.97	5870.00	mt	980223.62	980741.36	1.07	-200.21	-1.49	0.00	34.07	-166.56
h195	46	20.14	-111	4.95	6144.00	mt	980207.32	980739.91	2.25	-209.55	-1.50	0.00	44.96	-163.85
h196	46	19.14	-111	5.50	6380.00	mt	980192.28	980738.40	3.46	-217.60	-1.51	0.00	53.60	-162.05
h197	46	18.56	-111	5.79	6452.00	mt	980187.01	980737.52	3.62	-220.06	-1.51	0.00	55.97	-161.98
h198	46	17.66	-111	6.40	6490.00	mt	980183.50	980736.16	3.68	-221.36	-1.51	0.00	57.39	-161.80
h199	46	16.13	-111	6.99	6382.00	mt	980187.94	980733.86	2.86	-217.67	-1.51	0.00	53.98	-162.34
h200	46	15.76	-111	8.56	6427.00	mt	980186.58	980733.31	1.68	-219.21	-1.51	0.00	57.41	-161.63
h201	46	15.60	-111	9.30	6492.00	mt	980182.34	980733.06	2.30	-221.42	-1.51	0.00	59.52	-161.11
h202	46	15.27	-111	10.77	6534.00	mt	980178.17	980732.57	2.85	-222.86	-1.51	0.00	59.80	-161.72
h203	46	15.26	-111	13.27	5933.00	mt	980215.06	980732.55	1.29	-202.36	-1.49	0.00	40.23	-162.33
h205	46	16.05	-111	20.75	4533.00	mt	980286.06	980733.74	0.81	-154.61	-1.35	0.00	-21.52	-176.67
h206	46	16.41	-111	21.94	4339.00	mt	980294.91	980734.29	0.77	-147.99	-1.32	0.00	-31.44	-179.98
h207	46	16.92	-111	22.01	4474.00	mt	980289.03	980735.05	0.50	-152.60	-1.34	0.00	-25.41	-178.84
h208	46	17.78	-111	22.02	4494.00	mt	980290.80	980736.35	0.51	-153.28	-1.34	0.00	-23.06	-177.17
h209	46	18.67	-111	21.99	4489.00	mt	980292.83	980737.70	0.57	-153.11	-1.34	0.00	-22.84	-176.72
h210	46	18.71	-111	11.46	5134.00	mt	980267.75	980737.75	4.05	-175.11	-1.43	0.00	12.64	-159.84
h211	46	17.86	-111	9.90	5444.00	mt	980248.62	980736.48	3.81	-185.68	-1.46	0.00	23.92	-159.41
h212	46	16.90	-111	9.68	6213.00	mt	980202.54	980735.03	1.73	-211.91	-1.51	0.00	51.55	-160.14
h213	46	16.59	-111	9.13	6389.00	mt	980188.27	980734.55	2.26	-217.91	-1.51	0.00	54.29	-162.88
h214	46	20.66	-111	2.79	5694.00	mt	980230.62	980740.69	0.91	-194.21	-1.48	0.00	25.19	-169.58
h215	46	20.68	-111	1.40	5683.00	mt	980228.26	980740.73	0.74	-193.83	-1.48	0.00	21.77	-172.80
h216	46	20.67	-111	0.15	5635.00	mt	980234.50	980740.71	0.53	-192.19	-1.47	0.00	23.51	-169.62
h217	46	20.70	-110	58.22	5598.00	mt	980240.53	980740.75	0.42	-190.93	-1.47	0.00	26.02	-165.96

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White Sulphur Springs Gravity Data
Bankey and others 1977-84
Meter used: var.

STATION IDENTIFICATION sta-id	LOCATIONS LATITUDE deg	min	LONGITUDE deg	min	GRAVITY ELE (in ft)	ST	OBSERVED	THEORETICAL	CORRECTIONS TERRAIN	BOUGUER (d1=2.67)	CURV	ANOMALIES SPECIAL	FREE AIR	COMPLETE-BOUGUER d1=2.67
h218	46	19.81	-110	58.25	5563.00	mt	980232.97	980739.41	0.43	-189.74	-1.47	0.00	16.51	-174.26
h219	46	18.09	-110	58.20	5431.00	mt	980240.56	980736.82	0.40	-185.24	-1.46	0.00	14.30	-172.00
h220	46	18.09	-110	55.73	5514.00	mt	980234.62	980736.82	0.44	-188.07	-1.46	0.00	16.15	-172.94
h221	46	17.25	-110	52.00	5373.00	mt	980240.98	980735.55	0.53	-183.26	-1.45	0.00	10.53	-173.65
h222	46	16.55	-110	51.99	5328.00	mt	980245.31	980734.49	0.71	-181.72	-1.45	0.00	11.69	-170.77
h223	46	16.38	-110	50.73	5261.00	mt	980249.46	980734.24	1.40	-179.44	-1.44	0.00	9.80	-169.68
h224	46	16.38	-110	49.48	5453.00	mt	980237.51	980734.24	0.45	-185.99	-1.46	0.00	15.88	-171.11
h225	46	19.44	-110	4.17	4977.00	mt	980296.59	980738.85	0.52	-169.75	-1.41	0.00	25.63	-145.01
h226	46	19.21	-110	5.36	5027.00	mt	980292.98	980738.51	0.61	-171.46	-1.41	0.00	27.06	-145.20
h227	46	18.77	-110	6.58	5132.00	mt	980284.22	980737.84	0.64	-175.04	-1.43	0.00	28.83	-147.00
h228	46	17.79	-110	8.36	5328.00	mt	980265.92	980736.37	0.79	-181.72	-1.45	0.00	30.43	-151.95
h229	46	16.69	-110	9.20	5507.00	mt	980251.58	980734.71	1.14	-187.83	-1.46	0.00	34.56	-153.59
h230	46	16.48	-110	10.60	5593.00	mt	980246.41	980734.40	1.28	-190.76	-1.47	0.00	37.80	-153.15
h231	46	16.12	-110	11.49	5679.00	mt	980241.20	980733.85	1.49	-193.69	-1.48	0.00	41.21	-152.47
h232	46	15.56	-110	12.45	5868.00	mt	980229.89	980733.00	1.78	-200.14	-1.49	0.00	48.50	-151.35
h233	46	15.51	-110	10.60	5733.00	mt	980236.79	980732.93	1.34	-195.54	-1.48	0.00	42.79	-152.89
h234	46	14.65	-110	10.59	5875.00	mt	980226.92	980731.63	1.51	-200.38	-1.49	0.00	47.56	-152.80
h235	46	14.10	-110	11.84	6045.00	mt	980217.12	980730.80	1.82	-206.18	-1.50	0.00	54.56	-151.30
h236	46	14.10	-110	13.09	6147.00	mt	980211.86	980730.80	2.16	-209.66	-1.50	0.00	58.89	-150.11
h237	46	13.96	-110	14.35	6332.00	mt	980201.28	980730.59	2.81	-215.97	-1.51	0.00	65.90	-148.76
h238	46	13.60	-110	10.59	5882.00	mt	980224.89	980730.05	1.37	-200.62	-1.49	0.00	47.77	-152.97
h239	46	12.82	-110	7.15	5812.00	mt	980225.19	980728.88	1.51	-198.23	-1.48	0.00	42.67	-155.54
h241	46	10.61	-110	8.00	5779.00	mt	980221.98	980725.54	1.33	-197.11	-1.48	0.00	39.70	-157.56
h242	46	6.85	-110	2.67	5348.00	mt	980238.55	980719.88	0.85	-182.40	-1.45	0.00	21.43	-161.58
h243	46	6.24	-110	2.58	5324.00	mt	980238.83	980718.95	0.81	-181.59	-1.45	0.00	20.37	-161.85
h244	46	5.55	-110	2.25	5362.00	mt	980235.00	980717.91	0.86	-182.88	-1.45	0.00	21.16	-162.32
h245	46	4.52	-110	2.37	5282.00	mt	980237.26	980716.36	0.86	-180.15	-1.44	0.00	17.45	-163.29
h246	46	3.64	-110	1.39	5250.00	mt	980237.56	980715.04	0.73	-179.06	-1.44	0.00	16.07	-163.70
h247	46	2.97	-110	0.75	5106.00	mt	980244.38	980714.02	0.80	-174.15	-1.42	0.00	10.37	-164.40
h248	46	2.47	-110	2.96	5268.00	mt	980233.15	980713.27	1.06	-179.68	-1.44	0.00	15.12	-164.94
h249	46	23.63	-110	47.80	5536.00	mt	980241.33	980745.16	1.90	-188.82	-1.46	0.00	16.58	-171.81
h250	46	24.00	-110	49.17	5511.00	mt	980242.29	980745.73	1.40	-187.96	-1.46	0.00	14.63	-173.40
h252	46	5.43	-110	42.46	5288.00	mt	980228.64	980717.73	0.44	-180.36	-1.44	0.00	8.02	-173.34
h253	46	3.68	-110	41.90	5153.00	mt	980230.06	980715.09	0.47	-175.75	-1.43	0.00	-0.60	-177.32
h254	46	1.20	-110	37.31	5126.00	mt	980227.38	980711.36	0.87	-174.83	-1.43	0.00	-2.08	-177.47
h255	46	1.61	-110	35.60	5280.00	mt	980218.88	980711.97	0.95	-180.09	-1.44	0.00	3.27	-177.30
h257	46	3.19	-110	30.81	5748.00	mt	980196.56	980714.36	2.12	-196.05	-1.46	0.00	22.55	-172.86
h258	46	2.27	-110	30.59	5955.00	mt	980184.46	980712.97	1.74	-203.11	-1.49	0.00	31.28	-171.58
h259	46	1.90	-110	30.33	5904.00	mt	980187.71	980712.41	1.89	-201.37	-1.49	0.00	30.30	-170.67
h260	46	1.05	-110	31.31	5633.00	mt	980200.07	980711.13	1.54	-192.13	-1.47	0.00	18.48	-173.58

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White Sulphur Springs Gravity Data
Bankey and others 1977-84
Meter used: var.

STATION IDENTIFICATION sta-id	LOCATIONS LATITUDE deg	min	LONGITUDE deg	min	ELE (in ft)	GRAVITY ST	OBSERVED	THEORETICAL	CORRECTIONS TERRAIN	BOUGUER (d1=2.67)	CURV	ANOMALIES SPECIAL	FREE AIR	COMPLETE-BOUGUER d1=2.67
h261	46	1.45	-110	29.63	5929.00	mt	980188.17	980711.73	2.24	-202.22	-1.49	0.00	33.79	-167.68
h262	46	2.40	-110	28.99	6284.00	mt	980169.75	980713.16	2.78	-214.33	-1.51	0.00	47.29	-165.77
h263	46	3.67	-110	29.51	6132.00	mt	980177.36	980715.09	2.79	-209.14	-1.50	0.00	38.70	-169.15
h256	46	2.80	-110	32.49	5650.00	mt	980199.22	980713.77	1.48	-192.71	-1.47	0.00	16.58	-176.11
h264	46	1.92	-110	33.72	5434.00	mt	980210.65	980712.45	1.03	-185.34	-1.46	0.00	9.04	-176.72
h265	46	1.89	-110	37.85	5123.00	mt	980228.34	980712.40	0.83	-174.73	-1.42	0.00	-2.44	-177.77
h266	46	2.81	-110	36.65	5208.00	mt	980224.77	980713.78	0.82	-177.63	-1.43	0.00	0.59	-177.66
h267	46	3.18	-110	35.91	5272.00	mt	980221.65	980714.34	0.88	-179.81	-1.44	0.00	2.92	-177.45
h268	46	4.47	-110	34.98	5317.00	mt	980222.41	980716.29	1.06	-181.35	-1.44	0.00	5.97	-175.76
h269	46	5.42	-110	33.72	5446.00	mt	980217.50	980717.72	1.15	-185.75	-1.46	0.00	11.74	-174.31
h270	46	5.41	-110	32.48	5597.00	mt	980209.91	980717.70	1.32	-190.90	-1.47	0.00	18.36	-172.68
h271	46	6.29	-110	33.73	5508.00	mt	980215.86	980719.03	1.10	-187.86	-1.46	0.00	14.62	-173.61
h272	46	7.16	-110	33.72	5526.00	mt	980215.73	980720.34	1.13	-188.48	-1.46	0.00	14.87	-173.94
h273	46	7.16	-110	32.48	5681.00	mt	980207.39	980720.34	1.17	-193.76	-1.48	0.00	21.09	-172.97
h274	46	7.16	-110	31.27	5822.00	mt	980200.77	980720.34	1.42	-198.57	-1.49	0.00	27.73	-170.91
h275	46	7.16	-110	30.02	5943.00	mt	980195.78	980720.34	1.98	-202.70	-1.49	0.00	34.11	-168.11
h276	46	7.15	-110	28.75	6210.00	mt	980183.33	980720.33	3.10	-211.81	-1.51	0.00	46.75	-163.46
h277	46	35.52	-110	59.38	4987.00	mt	980290.95	980763.09	0.53	-170.09	-1.41	0.00	-3.31	-174.28
h278	46	36.40	-110	59.38	5053.00	mt	980296.11	980764.41	0.64	-172.34	-1.42	0.00	6.72	-166.39
h279	46	37.18	-110	59.29	5035.00	mt	980296.92	980765.59	0.80	-171.73	-1.41	0.00	4.67	-167.67
h280	46	37.93	-110	57.49	5077.00	mt	980299.14	980766.72	2.28	-173.16	-1.42	0.00	9.71	-162.59
h281	46	39.46	-110	53.98	5314.00	mt	980293.76	980769.02	1.67	-181.25	-1.44	0.00	24.29	-156.73
h282	46	43.64	-110	52.07	5626.00	mt	980287.66	980775.31	1.39	-191.89	-1.47	0.00	41.22	-150.75
h283	46	43.01	-110	55.37	6129.00	mt	980257.31	980774.37	1.63	-209.04	-1.50	0.00	59.08	-149.84
h284	46	43.00	-110	56.42	6518.00	mt	980234.04	980774.35	2.47	-222.31	-1.51	0.00	72.37	-148.98
h285	46	43.77	-110	57.49	6366.00	mt	980246.01	980775.51	2.50	-217.13	-1.51	0.00	68.90	-147.24
h286	46	44.34	-110	58.58	6022.00	mt	980269.87	980776.37	1.96	-205.39	-1.50	0.00	59.58	-145.35
h287	46	44.75	-110	59.49	5692.00	mt	980291.35	980776.98	2.07	-194.14	-1.48	0.00	49.43	-144.11
h288	46	44.49	-111	0.68	5626.00	mt	980296.91	980776.59	1.16	-191.89	-1.47	0.00	49.19	-143.01
h289	46	44.47	-111	2.51	5142.00	mt	980325.03	980776.57	1.21	-175.38	-1.43	0.00	31.85	-143.74
h290	46	43.56	-111	3.80	4876.00	mt	980337.88	980775.20	1.70	-166.31	-1.40	0.00	21.08	-144.92
h291	46	43.42	-111	6.35	4687.00	mt	980345.96	980774.98	1.15	-159.86	-1.37	0.00	11.61	-148.47
h292	46	44.59	-111	7.10	5037.00	mt	980333.42	980776.75	0.79	-171.80	-1.41	0.00	30.20	-142.23
h298	46	47.19	-111	0.69	5237.00	mt	980322.25	980780.66	6.04	-178.62	-1.44	0.00	33.90	-140.11
h294	46	45.09	-111	4.55	5234.00	mt	980320.43	980777.50	0.71	-178.52	-1.44	0.00	34.96	-144.28
h295	46	45.96	-111	4.56	5151.00	mt	980326.65	980778.61	0.98	-175.69	-1.43	0.00	32.07	-144.06
h296	46	46.62	-111	4.58	5210.00	mt	980327.05	980779.80	0.88	-177.70	-1.43	0.00	37.02	-141.23
h297	46	47.07	-111	3.38	5299.00	mt	980323.45	980780.48	1.70	-180.73	-1.44	0.00	41.11	-139.36
eh299	46	46.60	-110	58.88	5570.00	mt	980300.92	980779.77	1.09	-189.98	-1.47	0.00	44.76	-145.60
eh300	46	46.00	-110	55.63	5945.00	mt	980277.33	980778.88	1.01	-202.77	-1.49	0.00	57.30	-145.95

White Sulphur Springs Gravity Data
Benkey and others 1977-84
Meter used: var.

STATION IDENTIFICATION sta-id	LOCATIONS LATITUDE deg	min	LONGITUDE deg	min	ELE (in ft)	ST	GRAVITY OBSERVED	THEORETICAL	CORRECTIONS TERRAIN	BOUGUER (d1=2.67)	CURV	ANOMALIES SPECIAL	FREE AIR	COMPLETE-BOUGUER d1=2.67
eh302	46	48.09	-110	54.42	5580.00	mt	980298.36	980782.02	2.29	-190.32	-1.47	0.00	40.89	-148.61
eh304	46	49.68	-110	56.12	5590.00	mt	980296.28	980784.41	2.13	-190.66	-1.47	0.00	37.35	-152.64
eh305	46	50.41	-110	58.37	5480.00	mt	980308.78	980785.52	2.05	-186.91	-1.46	0.00	38.42	-147.90
h306	46	50.34	-110	16.40	4983.00	mt	980339.13	980785.41	1.81	-169.96	-1.41	0.00	22.17	-147.38
h307	46	51.19	-110	16.48	4975.00	mt	980340.82	980786.69	1.58	-169.68	-1.41	0.00	21.83	-147.68
h308	46	54.24	-110	13.63	4802.00	mt	980359.05	980791.28	1.73	-163.78	-1.39	0.00	19.20	-144.24
h309	46	55.24	-110	10.97	4684.00	mt	980369.91	980792.79	2.31	-159.76	-1.37	0.00	17.47	-141.34
h310	46	55.92	-110	10.30	4649.00	mt	980373.44	980793.80	2.74	-158.56	-1.37	0.00	16.69	-140.50
h311	46	56.46	-110	8.62	4611.00	mt	980379.34	980794.62	1.01	-157.27	-1.36	0.00	18.21	-139.41
h312	46	56.89	-110	7.63	4573.00	mt	980383.30	980795.27	0.90	-155.97	-1.35	0.00	17.94	-138.48
h313	46	57.44	-110	6.57	4547.00	mt	980386.12	980796.09	0.82	-155.09	-1.35	0.00	17.49	-138.12
h314	46	58.26	-110	5.50	4470.00	mt	980391.75	980797.33	0.87	-152.46	-1.34	0.00	14.65	-138.27
h315	46	58.90	-110	3.18	4388.00	mt	980397.30	980798.30	0.66	-149.66	-1.33	0.00	11.53	-138.80
h316	46	59.40	-110	1.75	4376.00	mt	980398.70	980799.05	0.49	-149.25	-1.32	0.00	11.05	-139.03
h317	46	59.40	-110	0.50	4302.00	mt	980403.46	980799.05	0.38	-146.73	-1.31	0.00	8.86	-138.80
h318	46	59.84	-110	1.78	4437.00	mt	980395.13	980799.70	0.43	-151.33	-1.33	0.00	12.56	-139.68
h319	46	59.83	-110	3.05	4478.00	mt	980393.12	980799.70	0.42	-152.73	-1.34	0.00	14.41	-139.24
h320	46	59.83	-110	4.76	4553.00	mt	980388.45	980799.70	0.46	-155.29	-1.35	0.00	16.79	-139.39
h321	46	59.83	-110	6.22	4626.00	mt	980383.33	980799.70	0.52	-157.78	-1.36	0.00	18.53	-140.09
h322	46	59.81	-110	8.06	4703.00	mt	980377.86	980799.66	0.61	-160.41	-1.37	0.00	20.32	-140.84
h323	46	59.69	-110	10.59	4708.00	mt	980376.10	980799.48	1.15	-160.58	-1.37	0.00	19.22	-141.58
h324	46	58.93	-110	10.59	4817.00	mt	980368.00	980798.34	0.80	-164.29	-1.39	0.00	22.50	-142.38
h325	46	58.93	-110	11.86	4903.00	mt	980361.86	980798.34	0.98	-167.23	-1.40	0.00	24.44	-143.20
h326	46	58.93	-110	13.12	5070.00	mt	980350.60	980798.34	1.31	-172.92	-1.42	0.00	28.88	-144.15
h327	46	57.94	-110	15.52	5181.00	mt	980340.59	980796.85	2.39	-176.71	-1.43	0.00	30.80	-144.95
h328	46	57.64	-110	16.81	5355.00	mt	980328.70	980796.40	1.60	-182.64	-1.45	0.00	35.71	-146.79
h329	46	58.91	-110	17.26	5404.00	mt	980329.29	980798.30	2.04	-184.31	-1.45	0.00	38.99	-144.74
h330	46	59.50	-110	17.49	5303.00	mt	980336.20	980799.20	2.35	-180.87	-1.44	0.00	35.52	-144.44
h331	46	57.16	-110	5.54	4488.00	mt	980388.92	980795.68	0.87	-153.07	-1.34	0.00	15.17	-138.37
h332	46	55.98	-110	6.13	4737.00	mt	980371.52	980793.90	0.75	-161.57	-1.38	0.00	22.95	-139.24
h333	46	54.99	-110	6.07	4878.00	mt	980360.63	980792.41	0.91	-166.37	-1.40	0.00	26.80	-140.06
h334	46	54.11	-110	5.99	5182.00	mt	980339.19	980791.08	1.65	-176.74	-1.43	0.00	35.25	-141.27
h335	46	52.87	-110	5.52	5214.00	mt	980334.89	980789.22	0.92	-177.83	-1.43	0.00	35.83	-142.52
h336	46	52.00	-110	5.51	5206.00	mt	980334.39	980787.91	0.89	-177.56	-1.43	0.00	35.89	-142.22
h337	46	51.52	-110	7.24	5197.00	mt	980333.56	980787.19	1.00	-177.25	-1.43	0.00	34.94	-142.75
h338	46	50.80	-110	7.83	5355.00	mt	980321.46	980786.10	1.19	-182.64	-1.45	0.00	38.76	-144.14
h339	46	49.28	-110	8.25	5582.00	mt	980303.31	980783.80	1.64	-190.39	-1.47	0.00	44.24	-145.98
h340	46	48.12	-110	8.68	5780.00	mt	980291.41	980782.06	1.66	-197.14	-1.48	0.00	52.69	-144.27
h341	46	48.48	-110	7.74	5999.00	mt	980277.25	980782.60	2.20	-204.61	-1.50	0.00	58.56	-145.34
h342	46	49.27	-110	6.19	5560.00	mt	980306.29	980783.80	1.34	-189.64	-1.47	0.00	45.16	-144.60

White Sulphur Springs Gravity Data
Bankey and others 1977-84
Meter used: var.

STATION IDENTIFICATION sta-id	LOCATIONS LATITUDE deg	min	LONGITUDE deg	min	ELE (in ft)	GRAVITY ST	OBSERVED	THEORETICAL	CORRECTIONS TERRAIN	BOUGUER	CURV (d1=2.67)	SPECIAL	ANOMALIES FREE AIR	COMPLETE-BOUGUER d1=2.67
h343	46	49.44	-110	4.67	5281.00	mt	980324.79	980784.05	1.16	-180.12	-1.44	0.00	37.19	-143.21
h344	46	49.82	-110	2.80	5145.00	mt	980333.97	980784.62	1.05	-175.48	-1.43	0.00	33.02	-142.84
h345	46	50.27	-110	1.71	5039.00	mt	980341.10	980785.30	0.86	-171.87	-1.42	0.00	29.51	-142.91
h346	46	52.01	-110	1.72	4845.00	mt	980356.73	980787.91	0.71	-165.25	-1.39	0.00	24.29	-141.64
h347	46	53.90	-110	1.68	4655.00	mt	980372.46	980790.77	1.09	-158.77	-1.37	0.00	19.31	-139.73
h348	46	55.49	-110	1.73	4548.00	mt	980382.45	980793.16	0.58	-155.12	-1.35	0.00	16.86	-139.03
h349	46	55.48	-110	3.66	4601.00	mt	980378.55	980793.15	0.60	-156.93	-1.36	0.00	17.95	-139.74
h350	46	56.79	-110	3.67	4464.00	mt	980389.56	980795.12	0.62	-152.25	-1.34	0.00	14.12	-138.86
h351	46	41.81	-111	7.73	4764.00	mt	980331.05	980772.55	0.62	-162.49	-1.38	0.00	6.35	-156.89
h352	46	43.06	-111	8.67	4697.00	mt	980343.49	980774.45	0.71	-160.20	-1.37	0.00	10.62	-150.24
h353	46	43.28	-111	10.39	4721.00	mt	980347.90	980774.77	1.00	-161.02	-1.38	0.00	16.95	-144.45
h354	46	44.30	-111	8.87	4550.00	mt	980357.12	980776.30	0.89	-155.19	-1.35	0.00	8.56	-147.09
h355	46	44.81	-111	9.40	4507.00	mt	980361.23	980777.08	1.18	-153.72	-1.34	0.00	7.87	-146.02
h356	46	45.65	-111	9.64	4469.00	mt	980366.43	980778.34	1.78	-152.42	-1.34	0.00	8.23	-143.76
h357	46	46.45	-111	9.58	4453.00	mt	980372.59	980779.55	2.08	-151.88	-1.34	0.00	11.68	-139.45
h358	46	47.88	-111	9.47	4615.00	mt	980368.97	980781.70	0.88	-157.40	-1.36	0.00	21.13	-136.76
h359	46	48.99	-111	9.18	4611.00	mt	980375.40	980783.38	1.32	-157.27	-1.36	0.00	25.51	-131.80
h360	46	49.74	-111	9.81	4481.00	mt	980384.56	980784.50	2.01	-152.83	-1.34	0.00	21.33	-130.84
h361	46	49.57	-111	11.02	4497.00	mt	980382.76	980784.25	2.01	-153.38	-1.34	0.00	21.28	-131.43
h362	46	50.90	-111	9.47	4803.00	mt	980365.65	980786.24	1.17	-163.82	-1.39	0.00	30.93	-133.11
h363	46	51.14	-111	10.73	4782.00	mt	980366.56	980786.61	1.04	-163.10	-1.38	0.00	29.51	-133.94
h364	46	52.09	-111	12.38	4771.00	mt	980368.11	980788.05	1.75	-162.73	-1.38	0.00	28.59	-133.77
h365	46	52.46	-111	12.95	4900.00	mt	980360.49	980788.59	1.43	-167.12	-1.40	0.00	32.54	-134.55
h366	46	53.37	-111	12.35	5450.00	mt	980325.53	980789.97	2.12	-185.88	-1.46	0.00	47.89	-137.33
h367	46	53.85	-111	11.56	5677.00	mt	980311.38	980790.69	2.26	-193.63	-1.48	0.00	54.35	-138.49
h368	46	51.41	-111	8.36	4942.00	mt	980357.33	980787.02	1.83	-168.56	-1.40	0.00	34.90	-133.23
h369	46	51.43	-111	6.95	5231.00	mt	980339.50	980787.05	2.05	-178.41	-1.44	0.00	44.20	-133.60
h370	46	51.69	-111	5.32	5537.00	mt	980319.75	980787.44	1.97	-188.85	-1.46	0.00	52.82	-135.53
h371	46	52.46	-111	4.95	5583.00	mt	980315.56	980788.59	1.84	-190.42	-1.47	0.00	51.79	-138.26
h372	46	53.01	-111	4.42	5761.00	mt	980302.99	980789.43	1.42	-196.49	-1.48	0.00	55.12	-141.43
h373	46	53.76	-111	4.40	5948.00	mt	980289.43	980790.55	1.93	-202.87	-1.49	0.00	58.00	-144.43
h374	46	54.45	-111	4.36	6373.00	mt	980262.16	980791.59	3.67	-217.36	-1.51	0.00	69.63	-145.58
h375	46	54.90	-111	4.69	6592.00	mt	980248.56	980792.27	4.62	-224.83	-1.52	0.00	75.92	-145.81
h376	46	55.36	-111	5.39	5903.00	mt	980290.32	980792.97	4.51	-201.33	-1.49	0.00	52.25	-146.06
h377	46	55.33	-111	7.15	5294.00	mt	980328.27	980792.92	3.71	-180.56	-1.44	0.00	33.02	-145.27
h378	46	55.78	-111	7.83	5008.00	mt	980345.07	980793.60	4.16	-170.81	-1.41	0.00	22.27	-145.79
h379	46	56.40	-111	8.20	4858.00	mt	980353.87	980794.53	3.82	-165.69	-1.39	0.00	16.03	-147.23
h380	46	56.71	-111	8.90	4776.00	mt	980360.58	980795.00	3.15	-162.90	-1.38	0.00	14.57	-146.56
h381	46	54.70	-111	1.99	6236.00	mt	980268.96	980791.98	1.88	-212.69	-1.51	0.00	63.17	-149.14
eh382	46	54.40	-110	59.70	6480.00	mt	980253.68	980791.52	2.42	-221.01	-1.51	0.00	71.27	-148.84

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STATION IDENTIFICATION sta-id	LOCATIONS LATITUDE deg	min	LONGITUDE deg	min	GRAVITY ELE (in ft)	ST	OBSERVED	THEORETICAL	CORRECTIONS TERRAIN	BOUGUER (d1=2.67)	CURV	ANOMALIES SPECIAL	FREE AIR	COMPLETE-BOUGUER d1=2.67
eh383	46	54.06	-110	57.42	6970.00	mt	980222.02	980791.01	2.65	-237.73	-1.52	0.00	86.16	-150.43
eh384	46	54.29	-110	56.75	7090.00	mt	980215.50	980791.35	3.02	-241.82	-1.51	0.00	90.57	-149.75
eh385	46	53.78	-110	56.10	7210.00	mt	980205.52	980790.59	3.13	-245.91	-1.51	0.00	92.63	-151.66
h386	46	53.88	-110	54.54	7365.00	mt	980198.31	980790.73	3.63	-251.20	-1.51	0.00	99.83	-149.25
h388	46	53.99	-110	53.43	7499.00	mt	980187.97	980790.90	3.77	-255.77	-1.50	0.00	101.91	-151.59
h389	46	54.04	-110	47.40	7246.00	mt	980195.10	980790.98	2.92	-247.14	-1.51	0.00	85.20	-160.53
h390	46	53.22	-110	47.73	7101.00	mt	980203.43	980789.74	2.60	-242.19	-1.51	0.00	81.14	-159.97
h391	46	52.59	-110	47.20	6546.00	mt	980234.73	980788.80	3.95	-223.27	-1.51	0.00	61.25	-159.58
h392	46	51.81	-110	50.21	6156.00	mt	980260.06	980787.62	4.57	-209.96	-1.50	0.00	51.11	-155.79
h393	46	51.42	-110	51.00	6056.00	mt	980267.50	980787.03	4.72	-206.55	-1.50	0.00	49.74	-153.59
h394	46	31.79	-110	46.27	6392.00	mt	980204.04	980757.46	2.63	-218.01	-1.51	0.00	47.42	-169.47
h395	46	33.29	-110	50.06	5234.00	mt	980280.53	980759.72	1.07	-178.52	-1.44	0.00	12.84	-166.04
h396	46	32.08	-110	49.23	5490.00	mt	980262.94	980757.91	1.79	-187.25	-1.46	0.00	21.13	-165.79
h397	46	31.16	-110	49.23	5776.00	mt	980241.49	980756.52	2.41	-197.00	-1.48	0.00	27.94	-168.13
h398	46	31.17	-110	50.48	5696.00	mt	980243.91	980756.53	1.82	-194.27	-1.48	0.00	22.83	-171.10
eh399	46	32.06	-110	51.29	5370.00	mt	980268.19	980757.87	1.10	-183.16	-1.45	0.00	15.13	-168.37
h400	46	32.63	-110	51.68	5262.00	mt	980276.51	980758.73	1.04	-179.47	-1.44	0.00	12.45	-167.43
h401	46	32.46	-110	50.51	5336.00	mt	980273.75	980758.48	1.20	-182.00	-1.45	0.00	16.90	-165.35
h402	46	31.30	-110	54.29	5034.00	mt	980283.96	980756.73	0.71	-171.70	-1.41	0.00	0.48	-171.92
h403	46	30.92	-110	51.74	5258.00	mt	980270.59	980756.15	1.54	-179.34	-1.44	0.00	8.73	-170.50
h404	46	29.73	-110	51.43	5350.00	mt	980259.75	980754.36	2.27	-182.47	-1.45	0.00	8.33	-173.32
h405	46	30.31	-110	51.76	5350.00	mt	980262.74	980755.23	1.47	-182.47	-1.45	0.00	10.44	-172.01
h406	46	28.67	-110	53.65	5149.00	mt	980276.00	980752.76	1.01	-175.62	-1.43	0.00	7.29	-168.75
h407	46	28.79	-110	52.62	5265.00	mt	980265.70	980752.94	1.39	-179.57	-1.44	0.00	7.71	-171.92
h408	46	27.40	-110	53.30	5189.00	mt	980270.64	980750.85	1.23	-176.98	-1.43	0.00	7.60	-169.58
h409	46	26.41	-110	52.42	5312.00	mt	980259.97	980749.36	1.51	-181.18	-1.44	0.00	9.98	-171.13
h410	46	25.89	-110	51.79	5424.00	mt	980254.64	980748.57	1.86	-185.00	-1.45	0.00	15.96	-168.63
h411	46	25.51	-110	50.22	5646.00	mt	980239.02	980748.01	2.74	-192.57	-1.47	0.00	21.78	-169.53
h412	46	26.83	-110	49.48	6620.00	mt	980182.49	980749.99	3.96	-225.79	-1.52	0.00	54.77	-168.57
h413	46	38.16	-110	42.33	5618.00	mt	980276.17	980767.06	0.77	-191.61	-1.47	0.00	37.23	-155.08
h414	46	38.33	-110	40.84	5633.00	mt	980275.90	980767.31	0.78	-192.13	-1.47	0.00	38.11	-154.71
h415	46	39.05	-110	40.42	5628.00	mt	980274.41	980768.40	1.15	-191.95	-1.47	0.00	35.07	-157.21
h416	46	39.80	-110	41.66	5671.00	mt	980278.43	980769.53	1.69	-193.42	-1.48	0.00	42.00	-151.21
h417	46	39.56	-110	42.93	5596.00	mt	980279.26	980769.16	1.00	-190.86	-1.47	0.00	36.14	-155.19
h418	46	40.54	-110	42.92	5699.00	mt	980277.65	980770.65	1.19	-194.38	-1.48	0.00	42.73	-151.93
h419	46	41.67	-110	43.32	5836.00	mt	980272.57	980772.35	1.43	-199.05	-1.49	0.00	48.82	-150.28
h420	46	42.33	-110	45.22	6277.00	mt	980246.95	980773.34	2.85	-214.09	-1.51	0.00	63.65	-149.10
h421	46	42.15	-110	46.78	6550.00	mt	980230.64	980773.07	2.32	-223.40	-1.51	0.00	73.26	-149.34
h422	46	46.02	-110	48.75	5849.00	mt	980277.33	980778.90	2.88	-199.49	-1.49	0.00	48.25	-149.85
h423	46	46.76	-110	48.11	6002.00	mt	980269.45	980780.01	2.45	-204.71	-1.50	0.00	53.64	-150.12

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Meter used: var.

STATION IDENTIFICATION sta-id	LOCATIONS LATITUDE deg	min	LONGITUDE deg	min	GRAVITY ELE (in ft)	ST	OBSERVED	THEORETICAL	CORRECTIONS TERRAIN	BOUGUER (d1=2.67)	CURV	ANOMALIES SPECIAL	FREE AIR	COMPLETE-BOUGUER d1=2.67
h424	46	47.79	-110	48.18	6350.00	mt	980251.13	980781.56	1.83	-216.58	-1.51	0.00	66.46	-149.80
h425	46	48.78	-110	48.71	6768.00	mt	980225.15	980783.05	3.16	-230.84	-1.52	0.00	78.26	-150.93
h426	46	50.11	-110	48.02	7746.00	mt	980164.93	980785.06	5.31	-264.19	-1.49	0.00	107.92	-152.45
h427	46	49.91	-110	49.94	7424.00	mt	980185.73	980784.76	5.03	-253.21	-1.50	0.00	98.78	-150.91
h428	46	47.40	-110	47.21	6384.00	mt	980248.83	980780.98	1.77	-217.74	-1.51	0.00	67.94	-149.54
h429	46	49.05	-110	46.57	6636.00	mt	980232.71	980783.46	3.33	-226.33	-1.52	0.00	73.01	-151.51
h430	46	49.39	-110	45.87	6825.00	mt	980221.56	980783.98	3.04	-232.78	-1.52	0.00	79.11	-152.15
h431	46	49.63	-110	44.90	7275.00	mt	980193.65	980784.34	3.02	-248.13	-1.51	0.00	93.11	-153.51
h432	46	48.16	-110	46.15	6562.00	mt	980237.09	980782.13	2.45	-223.81	-1.52	0.00	71.79	-151.09
h433	46	45.95	-110	46.88	5933.00	mt	980272.15	980778.79	2.69	-202.36	-1.49	0.00	51.07	-150.09
h434	46	1.07	-110	41.24	5133.00	mt	980225.08	980711.16	0.41	-175.07	-1.43	0.00	-3.53	-179.62
h435	46	1.09	-110	42.44	5163.00	mt	980222.96	980711.20	0.39	-176.10	-1.43	0.00	-2.86	-179.99
h436	46	1.33	-110	43.69	5222.00	mt	980220.35	980711.55	0.40	-178.11	-1.44	0.00	-0.29	-179.43
h437	46	0.21	-110	46.24	5308.00	mt	980214.64	980709.87	0.61	-181.04	-1.44	0.00	3.77	-178.10
h438	46	1.10	-110	46.25	5347.00	mt	980214.61	980711.20	0.52	-182.37	-1.45	0.00	6.07	-177.23
h439	46	1.96	-110	46.23	5373.00	mt	980215.43	980712.51	0.48	-183.26	-1.45	0.00	8.03	-176.20
h440	46	1.96	-110	47.43	5458.00	mt	980212.74	980712.51	0.60	-186.16	-1.46	0.00	13.33	-173.66
h441	46	2.01	-110	48.54	5551.00	mt	980209.57	980712.58	0.65	-189.33	-1.47	0.00	18.82	-171.32
h442	46	0.20	-110	49.93	5469.00	mt	980210.75	980709.84	0.69	-186.53	-1.46	0.00	15.03	-172.27
h443	46	1.08	-110	49.92	5634.00	mt	980204.30	980711.17	0.60	-192.16	-1.47	0.00	22.75	-170.28
h444	46	0.21	-110	51.16	5610.00	mt	980203.56	980709.87	0.63	-191.34	-1.47	0.00	21.08	-171.11
h445	46	0.21	-110	52.36	5742.00	mt	980196.91	980709.87	0.89	-195.84	-1.48	0.00	26.83	-169.60
h446	46	2.82	-110	42.45	5176.00	mt	980226.35	980713.80	0.41	-176.54	-1.43	0.00	-0.86	-178.42
h447	46	2.81	-110	43.66	5241.00	mt	980223.77	980713.78	0.50	-178.76	-1.44	0.00	2.69	-177.00
h448	46	2.82	-110	44.95	5334.00	mt	980218.80	980713.80	0.46	-181.93	-1.45	0.00	6.44	-176.48
h449	46	3.69	-110	45.80	5417.00	mt	980218.50	980715.11	0.69	-184.76	-1.45	0.00	12.63	-172.89
h450	46	12.27	-110	52.00	5642.00	mt	980222.94	980728.05	0.92	-192.43	-1.47	0.00	25.27	-167.71
h451	46	10.26	-110	52.07	5983.00	mt	980200.43	980725.02	1.99	-204.06	-1.50	0.00	37.84	-165.73
h452	46	9.39	-110	52.58	6028.00	mt	980197.45	980723.70	1.05	-205.60	-1.50	0.00	40.40	-165.65
h453	46	7.97	-110	53.01	5658.00	mt	980216.36	980721.56	2.64	-192.98	-1.47	0.00	26.68	-165.13
h454	46	7.15	-110	54.77	5429.00	mt	980229.28	980720.33	3.22	-185.17	-1.46	0.00	19.32	-164.08
h455	46	6.68	-110	55.54	5351.00	mt	980232.99	980719.62	2.39	-182.51	-1.45	0.00	16.41	-165.16
h456	46	5.44	-110	55.49	5611.00	mt	980217.21	980717.75	2.33	-191.38	-1.47	0.00	26.93	-163.59
h457	46	4.72	-110	56.41	5830.00	mt	980203.38	980716.66	2.14	-198.84	-1.49	0.00	34.77	-163.42
eh135	46	10.50	-110	21.56	6780.00	mt	980170.76	980725.38	3.13	-231.25	-1.52	0.00	82.69	-146.94
h140	46	8.62	-110	35.76	5565.00	mt	980215.53	980722.55	0.89	-189.81	-1.47	0.00	16.13	-174.25
harlowto	46	26.25	-109	50.25	4214.00	mt	980362.35	980749.12	0.17	-143.73	-1.30	0.00	9.41	-135.44
ht1	46	36.64	-110	0.79	5064.00	mt	980315.10	980764.77	1.60	-172.72	-1.42	0.00	26.39	-146.15
ht2	46	37.86	-110	0.75	5410.00	mt	980294.39	980766.61	0.97	-184.52	-1.45	0.00	36.35	-148.65
ht3	46	38.55	-110	1.76	5530.00	mt	980287.24	980767.65	1.23	-188.61	-1.46	0.00	39.44	-149.40

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Meter used: var.

STATION IDENTIFICATION sta-id	LOCATIONS LATITUDE deg	min	LONGITUDE deg	min	ELE (in ft)	ST	GRAVITY OBSERVED	THEORETICAL	CORRECTIONS TERRAIN	BOUGUER (d1=2.67)	CURV	ANOMALIES SPECIAL	FREE AIR	COMPLETE-BOUGUER d1=2.67
ht4	46	39.87	-110	2.70	5750.00	mt	980280.16	980769.64	1.52	-196.12	-1.48	0.00	51.04	-145.04
ht5	46	40.40	-110	3.63	5863.00	mt	980274.64	980770.43	2.14	-199.97	-1.49	0.00	55.34	-143.98
ht6	46	41.18	-110	1.96	5772.00	mt	980283.58	980771.61	2.12	-196.87	-1.48	0.00	54.56	-141.67
ht7	46	41.63	-110	2.33	6122.00	mt	980262.84	980772.29	2.25	-208.80	-1.50	0.00	66.03	-142.03
ht8	46	42.81	-110	2.72	6646.00	mt	980230.21	980774.06	4.04	-226.68	-1.52	0.00	80.86	-143.30
ht9	46	41.13	-110	3.68	6255.00	mt	980252.03	980771.54	3.00	-213.34	-1.51	0.00	68.46	-143.38
ht10	46	41.83	-110	4.08	6615.00	mt	980231.79	980772.59	3.26	-225.62	-1.52	0.00	81.00	-142.88
ht11	46	42.31	-110	4.35	6767.00	mt	980221.83	980773.31	3.66	-230.80	-1.52	0.00	84.59	-144.07
ht12	46	42.75	-110	4.48	6931.00	mt	980212.23	980773.98	4.46	-236.40	-1.52	0.00	89.73	-143.72
ht13	46	43.51	-110	5.48	7190.00	mt	980197.80	980775.13	5.45	-245.23	-1.51	0.00	98.50	-142.80
ht14	46	44.22	-110	5.97	7413.00	mt	980183.87	980776.19	6.48	-252.84	-1.50	0.00	104.45	-143.42
ht15	46	44.17	-110	7.03	7587.00	mt	980172.30	980776.12	7.14	-258.77	-1.50	0.00	109.29	-143.84
ht16	46	43.10	-110	7.73	7525.00	mt	980172.01	980774.50	7.12	-256.66	-1.50	0.00	104.80	-146.24
ht17	46	43.15	-110	8.76	7510.00	mt	980174.67	980774.58	6.78	-256.14	-1.50	0.00	105.97	-144.89
ht18	46	42.84	-110	9.38	7671.00	mt	980164.02	980774.11	6.85	-261.64	-1.49	0.00	110.92	-145.36
ht19	46	43.13	-110	10.00	7725.00	mt	980161.17	980774.55	7.63	-263.48	-1.49	0.00	112.70	-144.64
ht20	46	43.34	-110	11.52	7640.00	mt	980167.08	980774.86	6.09	-260.58	-1.49	0.00	110.30	-145.68
ht21	46	42.58	-110	16.52	8240.00	mt	980121.87	980773.72	13.63	-281.04	-1.45	0.00	122.60	-146.26
ht22	46	42.55	-110	14.79	8015.00	mt	980138.30	980773.68	8.28	-273.37	-1.47	0.00	117.94	-148.61
ht23	46	43.08	-110	6.88	7394.00	mt	980182.84	980774.47	5.47	-252.19	-1.51	0.00	103.36	-144.87
ht24	46	42.30	-110	7.28	7441.00	mt	980176.80	980773.30	7.30	-253.79	-1.50	0.00	102.90	-145.10
ht25	46	40.74	-110	6.02	6720.00	mt	980222.80	980770.95	3.50	-229.20	-1.52	0.00	83.51	-143.70
ht26	46	40.39	-110	5.17	6154.00	mt	980254.66	980770.42	3.01	-209.90	-1.50	0.00	62.72	-145.67
harlowto	46	26.25	-109	50.25	4214.00	mt	980362.35	980749.12	0.17	-143.73	-1.30	0.00	9.41	-135.44
harlowto	46	26.25	-109	50.25	4214.00	mt	980362.35	980749.12	0.17	-143.73	-1.30	0.00	9.41	-135.44
ht27	45	59.29	-109	58.72	4714.00	mt	980261.40	980708.48	0.53	-160.78	-1.37	0.00	-3.90	-165.53
ht28	45	58.86	-109	59.98	4783.00	mt	980255.35	980707.83	0.74	-163.13	-1.38	0.00	-2.82	-166.60
ht29	45	58.92	-110	0.73	4886.00	mt	980248.28	980707.92	1.15	-166.65	-1.40	0.00	-0.30	-167.20
ht30	45	59.92	-110	2.62	5353.00	mt	980222.28	980709.43	1.11	-182.58	-1.45	0.00	16.08	-166.84
ht31	46	0.72	-110	4.42	5358.00	mt	980223.91	980710.63	1.06	-182.75	-1.45	0.00	16.97	-166.17
ht32	46	0.83	-110	6.52	5466.00	mt	980218.43	980710.80	1.58	-186.43	-1.46	0.00	21.48	-164.83
ht33	46	0.46	-110	7.07	5465.00	mt	980217.71	980710.24	1.96	-186.40	-1.46	0.00	21.22	-164.68
ht34	46	1.76	-110	10.01	5732.00	mt	980206.03	980712.20	5.50	-195.50	-1.48	0.00	32.67	-158.82
eht35	46	2.33	-110	13.32	6260.00	mt	980179.58	980713.05	12.15	-213.51	-1.51	0.00	54.97	-147.90
eht36	46	2.49	-110	14.40	6450.00	mt	980169.03	980713.30	18.53	-219.99	-1.51	0.00	62.03	-140.94
eht37	46	2.32	-110	12.04	6010.00	mt	980193.31	980713.05	10.46	-204.98	-1.50	0.00	45.23	-150.79
eht38	46	2.14	-110	10.76	5880.00	mt	980199.45	980712.77	7.83	-200.55	-1.49	0.00	39.42	-154.78
ht39	46	1.35	-110	6.04	5396.00	mt	980224.20	980711.59	1.50	-184.04	-1.45	0.00	19.88	-164.11
ht40	46	2.59	-110	7.37	5831.00	mt	980202.52	980713.45	1.87	-198.88	-1.49	0.00	37.21	-161.28
ht41	46	2.60	-110	7.77	5942.00	mt	980196.17	980713.46	2.13	-202.66	-1.49	0.00	41.27	-160.75

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STATION IDENTIFICATION sta-id	LOCATIONS LATITUDE deg	min	LONGITUDE deg	min	ELE (in ft)	ST	GRAVITY OBSERVED	THEORETICAL	CORRECTIONS TERRAIN	BOUGUER (d1=2.67)	CURV	SPECIAL	ANOMALIES FREE AIR	COMPLETE-BOUGUER d1=2.67
ht42	46	2.20	-110	9.32	6072.00	mt	980189.15	980712.87	2.94	-207.10	-1.50	0.00	47.07	-158.59
ht43	46	2.81	-110	9.85	6293.00	mt	980178.78	980713.78	3.54	-214.64	-1.51	0.00	56.55	-156.05
ht44	46	4.31	-110	8.61	6278.00	mt	980181.47	980716.04	2.71	-214.12	-1.51	0.00	55.56	-157.36
ht45	46	3.75	-110	7.38	6033.00	mt	980192.81	980715.20	1.98	-205.77	-1.50	0.00	44.73	-160.56
ht46	46	4.35	-110	7.01	5964.00	mt	980198.46	980716.11	1.73	-203.41	-1.49	0.00	42.99	-160.19
ht47	46	5.13	-110	6.11	5830.00	mt	980207.22	980717.28	1.54	-198.84	-1.49	0.00	37.98	-160.81
ht48	46	5.07	-110	4.87	5626.00	mt	980218.46	980717.19	1.21	-191.89	-1.47	0.00	30.15	-162.00
ht49	46	6.55	-110	3.82	5470.00	mt	980231.26	980719.42	0.96	-186.57	-1.46	0.00	26.05	-161.01
ht50	46	6.48	-110	4.84	5612.00	mt	980222.81	980719.32	1.26	-191.41	-1.47	0.00	31.05	-160.57
ht51	46	6.26	-110	6.08	5818.00	mt	980210.51	980718.98	1.44	-198.44	-1.49	0.00	38.44	-160.04
ht52	46	6.28	-110	8.50	6426.00	mt	980176.95	980719.02	2.59	-219.17	-1.51	0.00	61.98	-156.11
harlowto	46	26.25	-109	50.25	4214.00	mt	980362.35	980749.12	0.17	-143.73	-1.30	0.00	9.41	-135.44
harlowto	46	26.25	-109	50.25	4214.00	mt	980362.35	980749.12	0.17	-143.73	-1.30	0.00	9.41	-135.44
ht53	46	30.27	-110	16.35	4830.00	mt	980312.58	980755.17	0.52	-164.74	-1.39	0.00	11.48	-154.13
ht54	46	31.15	-110	16.35	4945.00	mt	980306.62	980756.50	0.62	-168.66	-1.40	0.00	14.99	-154.45
ht55	46	31.16	-110	17.50	4899.00	mt	980308.51	980756.52	0.58	-167.09	-1.40	0.00	12.55	-155.36
ht56	46	34.73	-110	17.61	5219.00	mt	980295.52	980761.89	0.97	-178.01	-1.43	0.00	24.26	-154.21
ht57	46	35.77	-110	17.28	5378.00	mt	980286.50	980763.46	1.24	-183.43	-1.45	0.00	28.61	-155.03
ht58	46	28.50	-110	11.79	4717.00	mt	980317.89	980752.51	0.40	-160.88	-1.37	0.00	8.83	-153.03
ht59	46	29.24	-110	11.59	4718.00	mt	980319.15	980753.62	0.46	-160.92	-1.37	0.00	9.07	-152.76
ht60	46	31.49	-110	11.76	5070.00	mt	980301.29	980757.01	0.71	-172.92	-1.42	0.00	20.90	-152.74
ht61	46	33.95	-110	12.12	5383.00	mt	980285.28	980760.72	0.88	-183.60	-1.45	0.00	30.60	-153.57
ht62	46	33.87	-110	11.60	5405.00	mt	980282.66	980760.60	0.89	-184.35	-1.45	0.00	30.16	-154.75
ht63	46	34.86	-110	12.54	5555.00	mt	980274.16	980762.09	1.12	-189.47	-1.47	0.00	34.27	-155.54
ht64	46	35.75	-110	13.64	5714.00	mt	980266.01	980763.43	1.46	-194.89	-1.48	0.00	39.72	-155.19
ht65	46	36.39	-110	13.50	5805.00	mt	980261.61	980764.40	1.58	-197.99	-1.48	0.00	42.90	-155.00
ht66	46	37.25	-110	13.75	5975.00	mt	980254.49	980765.69	1.94	-203.79	-1.49	0.00	50.47	-152.88
ht67	46	35.52	-110	12.76	5655.00	mt	980268.79	980763.09	1.26	-192.88	-1.47	0.00	37.30	-155.79
ht68	46	35.52	-110	10.63	5432.00	mt	980284.39	980763.09	1.07	-185.27	-1.46	0.00	31.95	-153.71
ht69	46	37.25	-110	9.96	5785.00	mt	980267.00	980765.69	1.98	-197.31	-1.48	0.00	45.12	-151.69
ht70	46	38.39	-110	10.93	6210.00	mt	980245.00	980767.41	3.05	-211.81	-1.51	0.00	61.34	-148.92
ht71	46	38.36	-110	9.14	6380.00	mt	980234.13	980767.36	3.64	-217.60	-1.51	0.00	66.49	-148.98
ht72	46	36.61	-110	7.00	5375.00	mt	980291.68	980764.73	3.04	-183.33	-1.45	0.00	32.24	-149.50
ht73	46	36.38	-110	6.18	5585.00	mt	980277.53	980764.38	1.04	-190.49	-1.47	0.00	38.17	-152.75
ht74	46	36.37	-110	3.66	5452.00	mt	980288.50	980764.37	0.99	-185.95	-1.46	0.00	36.65	-149.77
ht75	46	36.35	-110	2.30	5305.00	mt	980298.61	980764.33	0.94	-180.94	-1.44	0.00	32.98	-148.46
ht76	46	40.34	-110	0.47	5548.00	mt	980295.64	980770.34	1.40	-189.23	-1.47	0.00	46.84	-142.46
ht77	46	40.02	-110	0.16	5604.00	mt	980289.07	980769.86	1.71	-191.14	-1.47	0.00	46.01	-144.88
ht78	46	34.21	-110	0.47	5086.00	mt	980312.95	980761.12	0.79	-173.47	-1.42	0.00	29.97	-144.13
ht79	46	34.63	-110	2.41	5234.00	mt	980302.32	980761.75	0.67	-178.52	-1.44	0.00	32.61	-146.67

White Sulphur Springs Gravity Data
Bankey and others 1977-84
Meter used: var.

STATION IDENTIFICATION sta-id	LOCATIONS LATITUDE deg	min	LONGITUDE deg	min	ELE (in ft)		GRAVITY OBSERVED	THEORETICAL	CORRECTIONS TERRAIN	BOUGUER (d1=2.67)	CURV	ANOMALIES SPECIAL	FREE AIR	COMPLETE-BOUGUER d1=2.67
ht80	46	33.77	-110	2.38	5165.00	mt	980305.96	980760.45	0.63	-176.16	-1.43	0.00	31.07	-145.90
ht81	46	32.90	-110	2.41	5082.00	mt	980311.21	980759.13	0.55	-173.33	-1.42	0.00	29.82	-144.38
ht82	46	31.92	-110	3.11	5037.00	mt	980313.18	980757.66	0.57	-171.80	-1.41	0.00	29.05	-143.60
ht83	46	32.89	-110	3.65	5146.00	mt	980306.15	980759.13	0.60	-175.52	-1.43	0.00	30.79	-145.55
ht84	46	32.02	-110	6.15	5027.00	mt	980309.81	980757.81	0.51	-171.46	-1.41	0.00	24.58	-147.78
ht85	46	32.02	-110	7.46	4966.00	mt	980312.19	980757.81	0.55	-169.38	-1.41	0.00	21.22	-149.01
ht86	46	32.89	-110	7.46	5004.00	mt	980310.40	980759.13	0.60	-170.67	-1.41	0.00	21.69	-149.79
ht87	46	33.76	-110	8.43	5123.00	mt	980303.52	980760.44	0.71	-174.73	-1.42	0.00	24.70	-150.75
ht88	46	34.42	-110	9.89	5262.00	mt	980293.55	980761.43	0.97	-179.47	-1.44	0.00	26.78	-153.16
ht89	46	26.80	-110	1.49	4395.00	mt	980345.20	980749.95	0.34	-149.90	-1.33	0.00	8.45	-142.44
ht90	46	26.96	-110	0.52	4382.00	mt	980345.84	980750.18	0.32	-149.46	-1.33	0.00	7.62	-142.84
harlowto	46	26.25	-109	50.25	4214.00	mt	980362.35	980749.12	0.17	-143.73	-1.30	0.00	9.41	-135.44
ht91	46	49.20	-111	59.87	3981.00	mt	980395.15	980783.69	1.01	-135.78	-1.26	0.00	-14.26	-150.29
ht92	46	49.23	-111	58.19	3648.00	mt	980410.85	980783.73	1.25	-124.42	-1.19	0.00	-29.91	-154.27
ht93	46	49.51	-111	57.69	3604.00	mt	980413.66	980784.16	1.45	-122.92	-1.18	0.00	-31.66	-154.31
ht94	46	50.92	-111	59.98	3967.00	mt	980397.80	980786.28	1.16	-135.30	-1.25	0.00	-15.53	-150.92
ht95	46	50.20	-111	58.88	3840.00	mt	980404.13	980785.20	1.05	-130.97	-1.23	0.00	-20.04	-151.19
ht96	47	0.34	-112	2.46	3542.00	mt	980442.19	980800.46	2.22	-120.81	-1.17	0.00	-25.26	-145.02
ht97	46	58.15	-111	57.48	3593.00	mt	980434.55	980797.16	2.84	-122.55	-1.18	0.00	-24.81	-145.70
ht98	46	57.72	-111	56.54	3589.00	mt	980433.23	980796.52	3.58	-122.41	-1.18	0.00	-25.86	-145.87
ht99	46	56.32	-111	54.63	3825.00	mt	980416.89	980794.41	3.63	-130.46	-1.23	0.00	-17.90	-145.96
ht100	46	49.17	-111	57.19	3564.00	mt	980415.86	980783.64	1.57	-121.56	-1.17	0.00	-32.70	-153.86
ht101	46	48.60	-111	56.07	3564.00	mt	980415.24	980782.79	1.93	-121.56	-1.17	0.00	-32.47	-153.27
ht102	46	48.12	-111	55.36	3564.00	mt	980413.29	980782.06	2.94	-121.56	-1.17	0.00	-33.69	-153.48
ht103	46	47.58	-111	55.02	3565.00	mt	980409.42	980781.25	4.33	-121.59	-1.17	0.00	-36.65	-155.09
ht104	46	47.21	-111	54.08	3564.00	mt	980410.27	980780.69	3.84	-121.56	-1.17	0.00	-35.34	-154.23
ht105	46	46.28	-111	53.72	3566.00	mt	980403.83	980779.29	6.14	-121.63	-1.17	0.00	-40.19	-156.85
ht106	46	46.04	-111	53.44	3566.00	mt	980404.97	980778.93	4.97	-121.63	-1.17	0.00	-38.69	-156.52
ht107	46	49.54	-111	56.12	3564.00	mt	980416.33	980784.20	2.80	-121.56	-1.17	0.00	-32.80	-152.73
ht108	46	50.00	-111	55.75	3564.00	mt	980415.25	980784.89	5.44	-121.56	-1.17	0.00	-34.56	-151.85
ht109	46	50.89	-111	55.00	3564.00	mt	980418.87	980786.23	7.16	-121.56	-1.17	0.00	-32.29	-147.86
ht110	46	51.59	-111	54.42	3567.00	mt	980419.44	980787.28	7.31	-121.66	-1.17	0.00	-32.49	-148.01
ht111	46	52.22	-111	54.10	3564.00	mt	980419.75	980788.23	7.60	-121.56	-1.17	0.00	-33.40	-148.54
ht112	46	52.77	-111	54.98	3564.00	mt	980423.26	980789.06	5.84	-121.56	-1.17	0.00	-30.73	-147.62
ht113	46	53.54	-111	55.44	3564.00	mt	980426.65	980790.22	3.84	-121.56	-1.17	0.00	-28.50	-147.39
ht114	46	53.15	-111	56.82	3564.00	mt	980424.21	980789.63	5.93	-121.56	-1.17	0.00	-30.35	-147.15
ht115	46	53.95	-111	56.58	3564.00	mt	980426.80	980790.84	3.91	-121.56	-1.17	0.00	-28.97	-147.79
ht116	46	54.67	-111	55.92	3564.00	mt	980426.83	980791.93	4.02	-121.56	-1.17	0.00	-30.01	-148.73
ht117	46	55.28	-111	56.89	3564.00	mt	980429.04	980792.84	3.39	-121.56	-1.17	0.00	-28.73	-148.07
ht118	46	56.17	-111	56.87	3564.00	mt	980431.24	980794.19	2.46	-121.56	-1.17	0.00	-27.87	-148.14