

Principal Facts for Gravity Stations in Paradise and Stagecoach Valleys, Humboldt and Lyon Counties, Nevada

By Donald H. Schaefer, Brian G. Duffrin,
and Russell W. Plume

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CONVERSION FACTORS AND ABBREVIATIONS

"Inch-pound" units of measure used in this report may be converted to International System (metric) units by using the following factors:

<i>Multiply</i>	<i>By</i>	<i>To obtain</i>
Feet (ft)	0.3048	Meters (m)
Miles (mi)	1.609	Kilometers (km)

PRINCIPAL FACTS FOR GRAVITY STATIONS IN
PARADISE AND STAGECOACH VALLEYS,
HUMBOLDT AND LYON COUNTIES, NEVADA

By Donald H. Schaefer, Brian G. Duffrin, and Russell W. Plume

ABSTRACT

Principal facts for 178 gravity stations in Paradise Valley and 117 stations in Stagecoach Valley are tabulated; they consist of latitude, longitude, altitude, observed gravity, free-air anomaly, terrain correction, and Bouguer gravity-anomaly values at a bedrock density of 2.67 grams per cubic centimeter.

INTRODUCTION

During the period from January 1982 through March 1983, gravity measurements were made at 295 stations in and near Paradise and Stagecoach Valleys (figure 1). Of these measurements, 178 were in Paradise Valley, about 40 miles north of Winnemucca, and 117 were in Stagecoach Valley, about 20 miles east of Carson City. The measurements were made as part of the Great Basin Regional Aquifer-System Analysis (Harrill and others, 1983).

Horizontal control for most stations in the study area was obtained using the Loran navigation system. Bench marks, section corners, road intersections, and other prominent landmarks were used to locate the stations.

Most altitudes were determined using topographic maps.

The gravity observations were made with a Worden¹ temperature-controlled gravimeter with a scale factor of 0.1907 milliGal per scale division.

One base station was established in the Stagecoach study area. This station, in turn, was related to a network gravity base station in Carson City which is described by Chapman (1966, page 49). This station has a standard observed gravity value of 979,633.7 milliGals. For measurements in Paradise Valley, the base station there was related to a U.S. Department of Defense gravity station in Winnemucca, which has a standard observed gravity value of 979,810.48 milliGals (U.S. Air Force, written communication, 1981). Remeasurements were made at base stations in the study areas at the beginning, middle, and end of each working day, to correct for any gravimeter drift.

¹ The use of a brand name in this report is for identification purposes only and does not constitute endorsement by the U.S. Geological Survey.

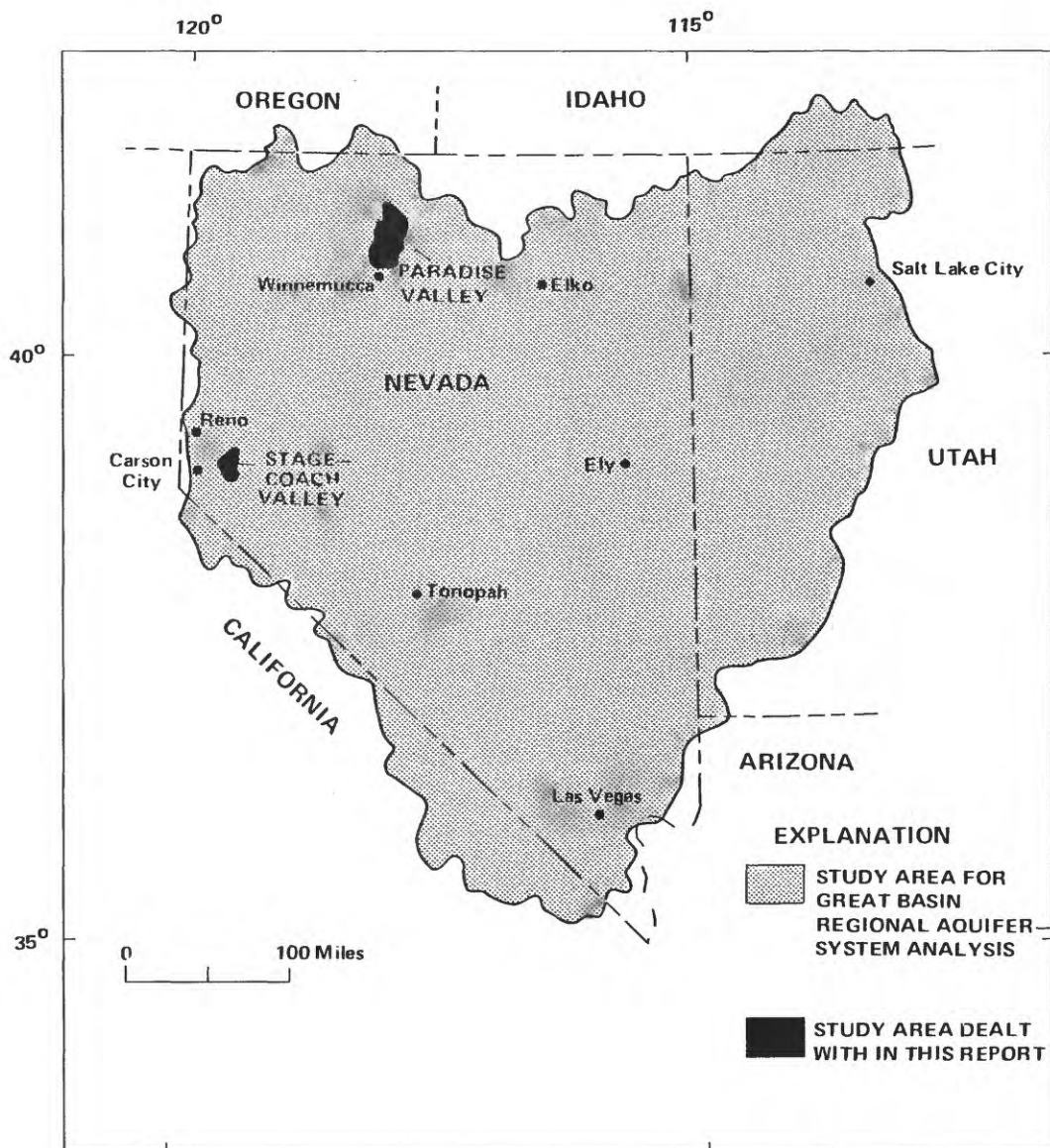


FIGURE 1.--Location of study areas.

Bouguer gravity-anomaly values were computed using the 1967 gravity formula (International Association of Geodesy, 1967) and a reduction density of 2.67 grams per cubic centimeter. Terrain corrections for each station were made by computer (Plouff, 1977) for the region extending radially outward from 1.4 to 104 miles. The corrections within the 1.4-mile radius were done manually using a template (Hayford and Bowie, 1912).

Principal facts for each of the 295 stations are listed in the following table. Figure 2 shows the location of the stations in Paradise Valley, and figure 3 shows the stations in Stagecoach Valley.

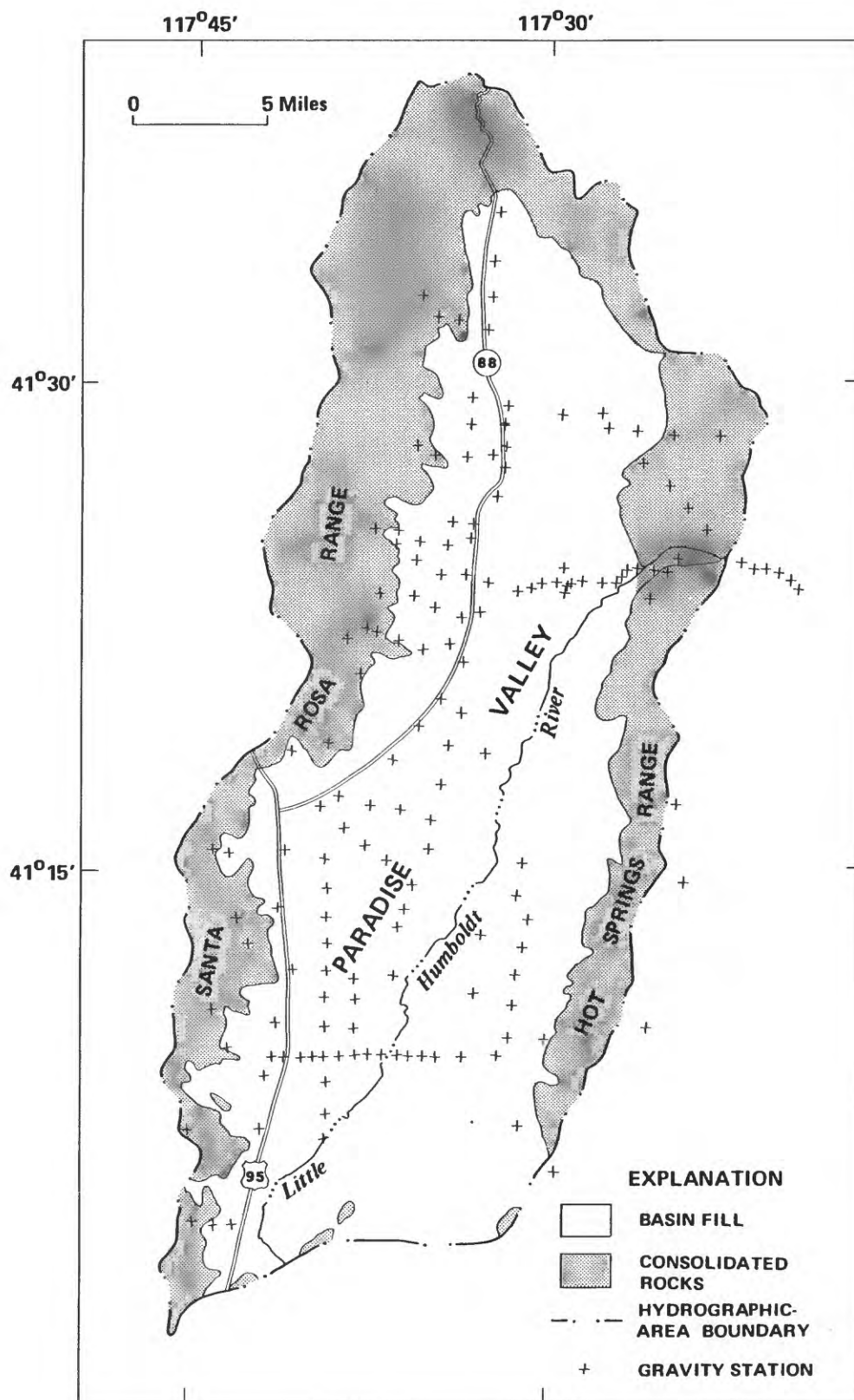


FIGURE 2.--Location of gravity stations in and adjacent to Paradise Valley.

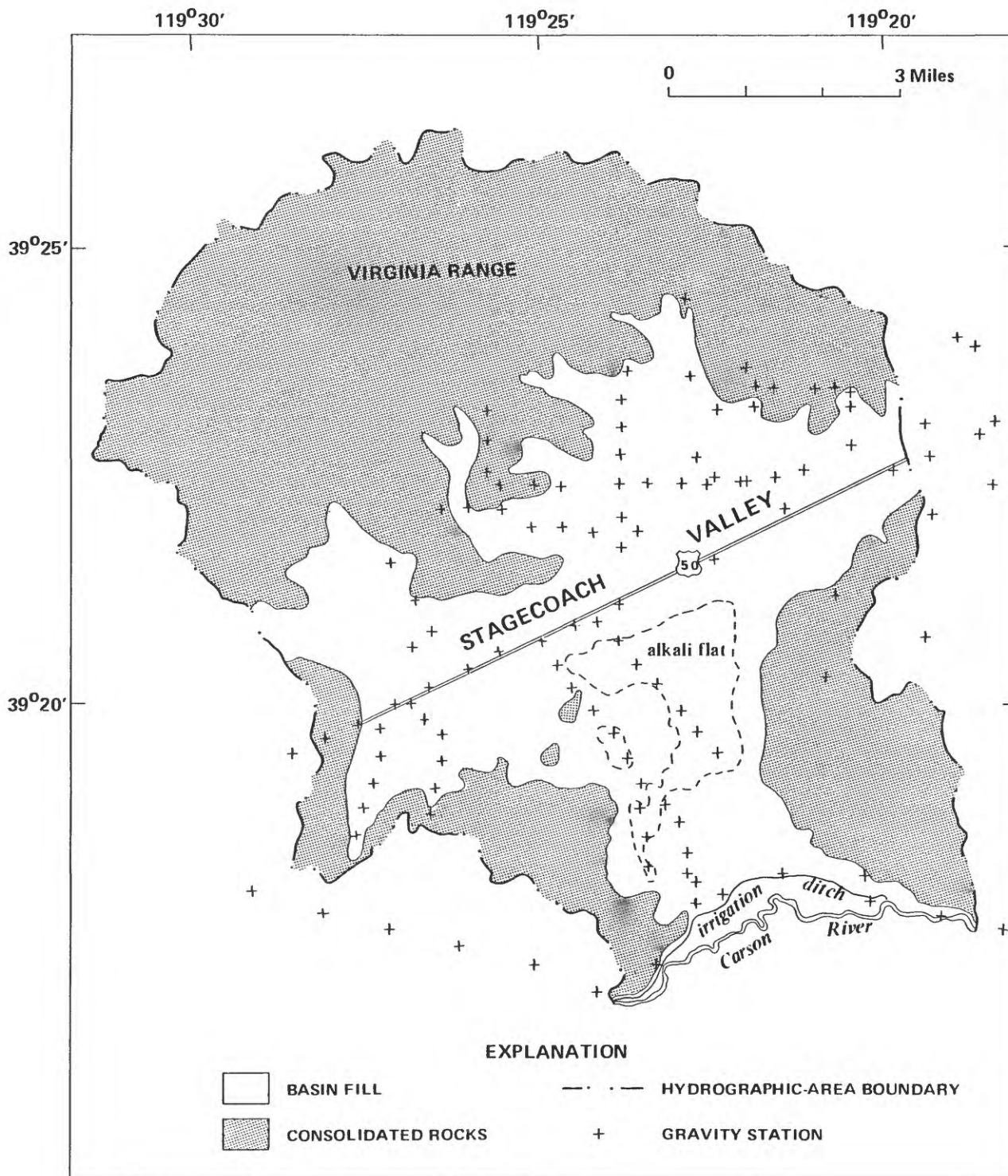


FIGURE 3.--Location of gravity stations in and adjacent to Stagecoach Valley.

PRINCIPAL FACTS FOR
GRAVITY STATIONS

Site: Data are listed by valley, in order of decreasing latitude (that is, from north to south).

Terrain corrections: "Hand" indicates manual correction within a radius of 1.42 miles, at a bedrock density of 2.67 g/cm³ (grams per cubic centimeter).

"Comp" indicates computer correction between radii of 1.42 and of 103.6 miles, at a bedrock density of 2.67 g/cm³. (See Schaefer, 1983, page 8.)

Bouguer anomaly: Complete Bouguer anomaly at a bedrock density of 2.67 g/cm³.

Site	Latitude		Longitude		Altitude (feet above sea level)	Observed gravity (mGal)	Free-air anomaly (mGal)	Terrain corrections		Bouguer anomaly (mGal)
	(deg	min)	(deg	min)				Hand (mGal)	Comp (mGal)	
STAGECOACH VALLEY										
SC 01	39	20.52	119	24.60	4266	979697.83	-11.41	0.01	0.76	-157.53
SC 02	39	20.62	119	25.38	4281	979698.06	-9.92	0.01	0.85	-156.47
SC 03	39	20.98	119	24.35	4280	979698.73	-9.88	0.02	0.77	-156.48
SC 04	39	20.78	119	24.82	4264	979698.34	-11.47	0.02	0.82	-157.47
SC 05	39	20.23	119	24.38	4260	979693.44	-15.94	0.02	0.73	-161.89
SC 06	39	20.00	119	24.07	4270	979690.33	-17.77	0.04	0.69	-164.10
SC 07	39	19.73	119	23.75	4280	979687.97	-18.79	0.03	0.66	-165.49
SC 08	39	19.47	119	23.52	4280	979684.03	-22.35	0.02	0.66	-169.06
SC 09	39	19.17	119	23.35	4270	979681.41	-25.47	0.03	0.68	-171.81
SC 10	39	18.95	119	23.02	4275	979682.67	-23.41	0.03	0.68	-169.93
SC 11	39	18.75	119	22.78	4288	979682.61	-21.95	0.02	0.66	-168.94
SC 12	39	18.42	119	22.67	4290	979681.91	-21.98	0.02	0.67	-169.01
SC 13	39	18.10	119	22.53	4295	979682.08	-20.86	0.04	0.69	-168.05
SC 14	39	17.83	119	22.53	4280	979682.77	-21.19	0.05	0.75	-167.81
SC 15	39	19.48	119	28.42	4434	979688.94	-2.98	0.01	0.94	-154.69
SC 16	39	20.42	119	25.90	4292	979696.61	-10.05	0.02	0.89	-156.94
SC 17	39	20.88	119	26.40	4347	979696.39	-5.78	0.03	0.98	-154.47
SC 18	39	21.25	119	26.65	4431	979693.44	-1.38	0.03	1.02	-152.91
SC 19	39	21.65	119	27.00	4560	979690.56	7.28	0.06	1.08	-148.62
SC 20	39	20.22	119	26.43	4310	979695.93	-8.73	0.02	0.91	-156.21
SC 21	39	20.05	119	26.92	4317	979695.35	-8.40	0.02	0.96	-156.08
SC 22	39	19.85	119	27.42	4320	979697.90	-5.28	0.05	1.01	-153.01
SC 23	39	19.65	119	27.92	4400	979693.79	-1.57	0.02	0.94	-152.11
SC 24	39	22.68	119	19.74	4510	979691.30	1.80	0.02	0.43	-153.02
SC 25	39	22.96	119	20.35	4520	979693.16	4.18	0.04	0.46	-150.96
SC 26	39	23.40	119	20.34	4610	979690.74	9.58	0.03	0.45	-148.66
SC 27	39	23.60	119	20.35	4730	979685.72	15.54	0.03	0.44	-146.83
SC 28	39	23.62	119	20.62	4680	979685.18	10.27	0.03	0.46	-150.36
SC 29	39	23.61	119	20.89	4630	979685.95	6.36	0.03	0.50	-152.52
SC 30	39	23.63	119	21.45	4650	979686.39	8.64	0.03	0.56	-150.86

Site	Latitude		Longitude		Altitude (feet above sea level)	Observed gravity (mGal)	Free-air anomaly (mGal)	Terrain corrections		Bouguer anomaly (mGal)
	(deg	min)	(deg	min)				Hand (mGal)	Comp (mGal)	
STAGECOACH VALLEY--Continued										
SC 31	39	23.61	119	21.75	4620	979685.58	5.04	0.05	0.61	-153.38
SC 32	39	23.41	119	21.75	4520	979689.94	0.30	0.06	0.67	-154.64
SC 33	39	23.40	119	22.30	4525	979689.42	0.26	0.06	0.75	-154.75
SC 34	39	22.58	119	22.32	4350	979692.61	-11.78	0.03	0.77	-160.79
SC 35	39	21.71	119	22.32	4290	979692.93	-15.82	0.02	0.71	-162.82
SC 36	39	21.99	119	23.43	4300	979699.01	-9.21	0.03	0.82	-156.44
SC 37	39	22.00	119	24.08	4325	979698.11	-7.78	0.03	0.88	-155.81
SC 38	39	22.04	119	24.52	4350	979696.07	-7.53	0.03	0.92	-156.37
SC 39	39	22.06	119	24.98	4400	979691.01	-7.91	0.04	0.94	-158.45
SC 40	39	22.27	119	25.42	4485	979682.20	-9.05	0.04	0.99	-162.46
SC 41	39	22.27	119	25.84	4560	979676.17	-8.03	0.05	1.00	-164.00
SC 42	39	22.25	119	26.27	4590	979681.38	0.03	0.05	1.07	-156.91
SC 43	39	22.52	119	23.72	4350	979697.38	-6.93	0.03	0.95	-155.74
SC 44	39	22.52	119	23.28	4350	979695.91	-8.40	0.02	0.87	-157.29
SC 45	39	22.53	119	22.83	4350	979693.01	-11.31	0.02	0.81	-160.27
SC 46	39	22.52	119	22.44	4345	979692.13	-12.65	0.03	0.77	-161.47
SC 47	39	22.59	119	21.87	4400	979697.35	-2.36	0.02	0.65	-153.18
SC 48	39	22.60	119	21.45	4430	979691.17	-5.73	0.02	0.58	-157.66
SC 49	39	22.69	119	21.03	4450	979691.10	-4.06	0.02	0.55	-156.71
SC 50	39	22.50	119	24.53	4350	979699.37	-4.91	0.04	1.11	-153.57
SC 51	39	22.50	119	24.94	4370	979692.10	-10.30	0.05	1.18	-159.58
SC 52	39	22.50	119	25.44	4500	979675.79	-14.39	0.04	1.08	-168.22
SC 53	39	22.66	119	25.64	4720	979676.27	6.53	0.04	0.95	-154.98
SC 54	39	23.01	119	25.64	4800	979675.06	12.33	0.13	1.03	-151.84
SC 55	39	23.33	119	25.63	4800	979675.69	12.49	0.12	1.18	-151.55
SC 56	39	23.78	119	23.61	4920	979684.53	31.94	0.12	0.86	-136.52
SC 57	39	23.49	119	23.69	4520	979692.73	2.97	0.16	1.12	-151.51
SC 56A	39	23.18	119	23.69	4440	979696.16	-0.66	0.11	1.09	-152.42
SC 57A	39	22.83	119	23.69	4380	979698.47	-3.48	0.10	1.03	-153.25
SC 58	39	22.14	119	23.67	4310	979698.29	-9.21	0.03	0.89	-156.72
SC 59	39	21.83	119	23.67	4300	979699.13	-8.85	0.02	0.82	-156.09
SC 60	39	21.19	119	23.71	4280	979696.36	-12.56	0.01	0.74	-159.18
SC 61	39	21.00	119	24.01	4270	979698.82	-10.76	0.01	0.75	-157.03
SC 62	39	20.77	119	23.71	4265	979696.97	-12.74	0.01	0.71	-158.88
SC 63	39	20.52	119	23.42	4265	979694.67	-14.67	0.02	0.68	-160.84

Site	Latitude		Longitude		Altitude (feet above sea level)	Observed gravity (mGal)	Free-air anomaly (mGal)	Terrain corrections		Bouguer anomaly (mGal)
	(deg	min)	(deg	min)				Hand (mGal)	Comp (mGal)	
STAGECOACH VALLEY--Continued										
SC 64	39	20.27	119	23.14	4265	979692.45	-16.52	0.02	0.66	-162.71
SC 65	39	20.02	119	22.78	4265	979690.17	-18.44	0.02	0.67	-164.62
SC 66	39	19.78	119	22.55	4265	979689.59	-18.65	0.08	0.68	-164.83
SC 67	39	19.54	119	22.26	4265	979688.60	-19.29	0.09	0.69	-165.45
SC 68	39	20.86	119	19.25	5020	979656.93	18.05	0.08	0.58	-154.12
SC 69	39	20.37	119	17.51	5980	979594.09	46.17	0.75	4.05	-155.42
SC 70	39	17.76	119	15.98	4330	979695.10	-4.05	0.04	0.38	-152.75
SC 71	39	17.50	119	17.05	4230	979693.73	-14.44	0.12	0.61	-159.48
SC 72	39	17.53	119	18.07	4227	979690.97	-17.53	0.14	0.71	-162.36
SC 73	39	17.69	119	19.00	4260	979691.06	-14.57	0.11	0.73	-160.52
SC 74	39	17.88	119	20.03	4240	979687.76	-20.03	0.18	0.79	-165.23
SC 75	39	18.15	119	20.07	4240	979686.10	-22.08	0.26	0.82	-167.26
SC 76	39	17.95	119	22.13	4240	979685.74	-22.15	0.05	0.78	-167.36
SC 77	39	18.81	119	26.42	4440	979674.94	-15.42	0.01	0.69	-167.59
SC 78	39	19.10	119	26.35	4320	979685.22	-16.85	0.03	0.82	-164.77
SC 79	39	19.41	119	26.25	4280	979689.28	-17.01	0.04	0.88	-163.49
SC 80	39	19.70	119	26.24	4280	979691.95	-14.77	0.05	0.89	-161.24
SC 81	39	19.89	119	26.50	4290	979693.74	-12.32	0.05	0.92	-159.10
SC 82	39	18.56	119	27.47	4360	979686.99	-10.53	0.02	0.90	-159.74
SC 83	39	18.88	119	27.38	4280	979688.70	-16.81	0.05	1.01	-163.16
SC 84	39	19.16	119	27.25	4280	979690.13	-15.79	0.06	1.00	-162.16
SC 85	39	19.47	119	27.14	4280	979693.66	-12.72	0.06	1.00	-159.08
SC 86	39	19.79	119	27.14	4290	979696.21	-9.70	0.06	1.01	-156.39
SC 87	39	20.70	119	26.69	4360	979694.80	-5.88	0.03	0.97	-155.01
SC 88	39	20.38	119	20.70	4340	979695.79	-6.30	0.14	0.69	-155.03
SC 89	39	20.05	119	26.70	4300	979695.33	-10.03	0.04	0.95	-157.13
SC 90	39	17.16	119	23.10	4260	979690.14	-14.71	0.09	1.02	-160.36
SC 91	39	16.83	119	23.97	4270	979691.59	-11.83	0.23	1.33	-157.52
SC 92	39	17.15	119	24.87	4260	979690.82	-14.01	0.27	1.37	-159.32
SC 93	39	17.35	119	25.98	4280	979684.79	-18.45	0.13	1.34	-164.48
SC 94	39	17.51	119	26.98	4280	979684.91	-18.57	0.16	1.33	-164.61
SC 95	39	17.68	119	27.97	4280	979688.78	-14.95	0.12	1.28	-161.04
SC 96	39	17.94	119	28.99	4280	979694.92	-9.20	0.05	1.20	-155.37
SC 97	39	18.71	119	29.35	4340	979691.16	-8.46	0.01	1.12	-156.76
SC 98	39	18.17	119	21.27	4242	979685.81	-22.22	0.09	0.77	-167.51

Site	Latitude		Longitude		Altitude (feet above sea level)	Observed gravity (mGal)	Free-air anomaly (mGal)	Terrain corrections		Bouguer anomaly (mGal)
	(deg	min)	(deg	min)				Hand (mGal)	Comp (mGal)	
STAGECOACH VALLEY--Continued										
SC 99	39	18.20	119	22.67	4298	979683.77	-19.04	0.03	0.68	-166.34
SC100	39	18.25	119	23.23	4288	979686.39	-17.44	0.02	0.72	-164.35
SC101	39	18.58	119	23.25	4278	979686.35	-18.91	0.03	0.70	-165.50
SC102	39	18.95	119	23.38	4286	979682.70	-22.35	0.02	0.67	-169.25
SC103	39	22.58	119	21.93	4384	979690.42	-10.78	0.02	0.68	-161.03
SC104	39	22.85	119	22.58	4409	979690.69	-8.56	0.07	0.79	-159.57
SC105	39	23.77	119	22.70	4650	979686.20	8.25	0.08	0.81	-151.01
SC106	39	24.62	119	22.75	4857	979678.53	18.77	0.15	0.91	-147.47
SC107	39	23.85	119	21.87	4719	979681.59	10.01	0.06	0.61	-151.81
SC108	39	24.10	119	18.55	4490	979687.69	-5.80	0.04	0.51	-159.86
SC109	39	24.22	119	18.82	4530	979687.15	-2.75	0.04	0.52	-158.18
SC110	39	23.25	119	18.25	4406	979695.59	-4.54	0.02	0.48	-155.75
SC111	39	22.53	119	18.28	4555	979687.38	2.33	0.05	0.38	-154.09
SC112	39	22.20	119	19.18	4575	979687.65	4.97	0.09	0.40	-152.12
SC113	39	23.23	119	19.27	4498	979691.23	-0.21	0.03	0.45	-154.61
SC114	39	22.23	119	21.27	4370	979695.68	-6.32	0.04	0.62	-156.16
SC115	39	21.29	119	20.53	4465	979694.67	2.99	0.11	0.50	-150.22
SC116	39	23.10	119	18.46	4440	979693.56	-3.14	0.06	0.45	-155.55
SC117	39	22.85	119	19.18	4513	979689.61	0.14	0.02	0.42	-154.80
PARADISE VALLEY										
PVG001	41	29.58	117	32.08	4525	979864.27	-12.67	0.01	1.00	-167.45
PVG002	41	29.43	117	32.13	4520	979864.10	-13.09	0.01	1.00	-167.70
PVG003	41	28.80	117	32.07	4500	979863.74	-14.39	0.01	0.92	-168.39
PVG004	41	28.13	117	32.03	4489	979862.76	-15.40	0.01	0.83	-169.10
PVG005	41	27.37	117	32.40	4490	979861.68	-15.25	0.01	0.82	-169.01
PVG006	41	26.28	117	33.05	4509	979861.20	-12.31	0.01	0.81	-166.73
PVG007	41	25.03	117	32.97	4471	979863.18	-12.03	0.01	0.68	-165.27
PVG008	41	23.67	117	33.27	4468	979863.85	-9.61	0.00	0.59	-162.83
PVG009	41	22.20	117	33.90	4440	979860.93	-12.96	0.01	0.57	-165.25
PVG010	41	21.10	117	34.85	4420	979859.52	-14.61	0.01	0.61	-166.17
PVG011	41	20.18	117	35.97	4410	979858.78	-14.91	0.03	0.69	-166.05

Site	Latitude		Longitude		Altitude (feet above sea level)	Observed gravity (mGal)	Free-air anomaly (mGal)	Terrain corrections		Bouguer anomaly (mGal)
	(deg	min)	(deg	min)				Hand (mGal)	Comp (mGal)	
PARADISE VALLEY--Continued										
PVG012	41	19.00	117	36.63	4444	979862.02	-6.71	0.01	0.48	-159.22
PVG013	41	3.95	117	42.85	4359	979845.52	-8.70	0.03	0.19	-158.59
PVG014	41	4.60	117	42.55	4350	979845.31	-10.73	0.04	0.17	-160.33
PVG015	41	4.58	117	43.38	4450	979842.45	-4.16	0.05	0.19	-157.17
PVG016	41	4.55	117	44.27	4580	979839.08	4.73	0.06	0.20	-152.74
PVG017	41	4.60	117	45.08	4668	979832.94	6.78	0.05	0.19	-153.70
PVG018	41	4.58	117	45.70	4918	979818.90	16.28	0.04	0.35	-152.63
PVG019	41	29.47	117	33.48	4610	979864.10	-4.69	0.05	1.40	-161.98
PVG020	41	30.20	117	33.50	4628	979865.60	-2.59	0.07	1.51	-160.38
PVG021	41	29.97	117	31.98	4540	979864.73	-11.39	0.01	1.01	-166.67
PVG022	41	31.05	117	32.60	4603	979866.35	-5.46	0.02	1.31	-162.60
PVG023	41	32.10	117	32.60	4666	979865.62	-1.84	0.02	1.46	-160.99
PVG024	41	33.40	117	32.62	4808	979857.44	1.38	0.08	1.70	-162.40
PVG025	41	34.53	117	32.57	4975	979846.17	4.11	0.11	1.98	-165.11
PVG026	41	36.03	117	32.33	5240	979826.70	7.30	0.24	2.63	-170.36
PVG027	41	16.20	117	41.35	4498	979864.80	5.33	0.02	0.65	-148.86
PVG028	41	16.02	117	43.42	4860	979849.93	24.75	0.46	1.08	-141.44
PVG029	41	16.17	117	44.05	5120	979822.86	21.90	0.32	1.07	-153.21
PVG030	41	19.22	117	40.88	4690	979851.60	5.66	0.17	0.97	-154.80
PVG031	41	19.32	117	42.35	5080	979840.22	30.79	0.07	0.84	-143.18
PVG032	41	14.37	117	41.35	4512	979855.11	-0.31	0.03	0.75	-154.89
PVG033	41	14.12	117	43.15	4920	979833.05	16.35	0.34	1.34	-151.63
PVG034	41	13.30	117	42.73	4920	979840.22	24.75	0.48	1.26	-143.31
PVG035	41	9.23	117	41.97	4582	979849.83	8.67	0.04	0.45	-148.61
PVG036	41	11.13	117	44.15	5300	979810.03	33.52	0.56	1.56	-147.27
PVG037	41	10.00	117	43.56	5020	979829.29	28.15	0.37	1.09	-143.51
PVG038	41	2.58	117	44.83	4720	979832.88	14.63	0.15	0.33	-147.51
PVG039	41	7.45	117	45.33	5050	979822.25	27.75	0.04	0.63	-145.41
PVG040	41	7.57	117	42.25	4559	979850.40	9.56	0.03	0.28	-147.10
PVG041	41	19.45	117	39.27	4860	979841.57	11.27	0.14	0.93	-155.07
PVG042	41	24.21	117	37.27	5160	979831.50	22.28	0.12	1.84	-153.44
PVG043	41	23.07	117	37.80	5140	979832.78	23.38	0.35	1.94	-151.55
PVG044	41	21.68	117	38.00	5190	979825.50	22.87	0.33	1.59	-154.12
PVG045	41	10.40	117	30.33	4720	979843.25	13.32	0.22	0.60	-148.54
PVG046	41	6.33	117	29.98	4525	979849.26	7.08	0.05	0.26	-148.43

Site	Latitude		Longitude		Altitude (feet above sea level)	Observed gravity (mGal)	Free-air anomaly (mGal)	Terrain corrections		Bouguer anomaly (mGal)
	(deg	min)	(deg	min)				Hand (mGal)	Comp (mGal)	
PARADISE VALLEY--Continued										
PVG047	41	7.67	117	31.38	4466	979852.63	2.90	0.08	0.30	-150.54
PVG047A	41	24.00	117	18.75	4500	979869.66	-1.28	0.02	0.19	-156.01
PVG048	41	23.98	117	19.31	4550	979870.41	4.19	0.01	0.17	-152.28
PVG049	41	24.30	117	19.64	4560	979868.38	2.63	0.01	0.18	-154.16
PVG050	41	24.64	117	20.00	4500	979873.72	1.82	0.02	0.27	-152.83
PVG051	41	24.86	117	20.48	4520	979872.58	2.23	0.04	0.27	-153.10
PVG052	41	25.00	117	21.00	4560	979868.52	1.71	0.02	0.25	-155.01
PVG053	41	24.95	117	21.56	4500	979873.46	1.09	0.05	0.31	-153.51
PVG054	41	25.15	117	22.06	4500	979878.76	6.09	0.04	0.33	-148.49
PVG055	41	25.47	117	22.71	4460	979878.40	1.49	0.03	0.40	-151.65
PVG056	41	25.44	117	23.17	4460	979876.37	-0.49	0.03	0.39	-153.64
PVG057	41	25.51	117	23.70	4460	979874.28	-2.69	0.03	0.38	-155.85
PVG058	41	25.50	117	24.29	4460	979872.06	-4.89	0.03	0.37	-158.06
PVG059	41	25.29	117	24.72	4460	979868.52	-8.12	0.02	0.36	-161.30
PVG060	41	25.04	117	25.24	4450	979870.02	-7.18	0.06	0.38	-160.00
PVG061	41	25.00	117	25.84	4440	979867.49	-10.59	0.05	0.37	-163.08
PVG062	41	24.95	117	26.39	4440	979863.12	-14.89	0.03	0.36	-167.38
PVG063	41	24.98	117	26.98	4435	979858.35	-20.17	0.02	0.35	-172.51
PVG064	41	24.74	117	27.21	4425	979857.11	-21.99	0.02	0.37	-173.96
PVG065	41	24.55	117	27.37	4421	979856.62	-22.58	0.03	0.38	-174.40
PVG066	41	24.54	117	28.01	4420	979854.02	-25.25	0.01	0.36	-177.06
PVG067	41	24.57	117	28.74	4414	979851.49	-28.39	0.00	0.35	-180.01
PVG068	41	24.57	117	29.34	4415	979851.26	-28.53	0.00	0.35	-180.18
PVG069	41	24.57	117	29.82	4415	979852.17	-27.61	0.00	0.36	-179.25
PVG070	41	24.57	117	30.43	4415	979853.17	-26.62	0.00	0.38	-178.24
PVG071	41	24.44	117	30.86	4410	979854.62	-25.45	0.00	0.40	-176.87
PVG072	41	24.37	117	31.56	4440	979855.66	-21.47	0.00	0.44	-173.90
PVG073	41	24.54	117	32.73	4470	979855.74	-18.83	0.01	0.58	-172.14
PVG074	41	22.63	117	34.29	4562	979856.62	-6.45	0.01	0.64	-162.86
PVG075	41	22.53	117	35.43	4760	979847.64	3.33	0.05	0.85	-159.66
PVG076	41	22.69	117	36.50	4970	979840.24	15.43	0.15	1.23	-154.38
PVG077	41	23.00	117	37.43	5330	979826.16	34.72	0.32	1.71	-146.94
PVG078	41	22.81	117	38.56	5620	979807.63	43.73	0.50	2.20	-147.38
PVG079	41	23.48	117	33.78	4590	979856.88	-4.82	0.01	0.60	-162.22
PVG080	41	23.76	117	34.95	4780	979848.30	4.03	0.03	0.87	-159.61

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	(deg	min)	(deg	min)				Hand (mGal)	Comp (mGal)	
PARADISE VALLEY--Continued										
PVG081	41	24.09	117	35.89	5050	979836.29	16.90	0.09	1.22	-155.66
PVG082	41	25.95	117	33.38	4600	979854.71	-9.75	0.01	0.77	-167.33
PVG083	41	25.69	117	34.44	4760	979850.25	1.21	0.03	0.99	-161.64
PVG084	41	25.74	117	35.55	5060	979837.66	16.75	0.09	1.32	-156.05
PVG085	41	26.14	117	36.49	5400	979823.13	33.57	0.17	1.84	-150.36
PVG086	41	26.27	117	37.48	5650	979807.07	40.82	0.29	2.46	-151.06
PVG087	41	25.71	117	36.63	5260	979828.53	26.46	0.12	1.78	-152.74
PVG088	41	25.22	117	35.75	4970	979840.31	11.72	0.07	1.33	-157.99
PVG089	41	24.83	117	34.72	4750	979851.64	2.95	0.03	0.95	-159.59
PVG090	41	24.78	117	33.58	4600	979857.72	-4.99	0.02	0.70	-162.64
PVG091	41	26.37	117	33.28	4620	979854.96	-8.25	0.01	0.80	-166.49
PVG092	41	26.49	117	34.26	4760	979851.77	1.54	0.03	1.04	-161.25
PVG093	41	28.53	117	32.46	4560	979857.91	-14.17	0.01	0.91	-170.23
PVG094	41	28.47	117	33.62	4760	979851.39	-1.80	0.05	1.12	-164.52
PVG095	41	28.51	117	34.98	5130	979832.36	13.88	0.11	1.62	-161.03
PVG096	41	28.75	117	35.71	5480	979821.43	35.49	0.19	2.11	-150.92
PVG097	41	32.34	117	32.87	4770	979853.17	-4.88	0.04	1.45	-167.61
PVG098	41	32.67	117	33.92	4880	979850.06	1.85	0.05	1.83	-164.26
PVG099	41	32.79	117	34.89	5217	979833.31	16.61	0.13	1.97	-160.93
PVG100	41	33.37	117	35.51	5280	979829.79	18.13	0.29	2.46	-161.08
PVG101	41	36.77	117	31.72	5520	979810.30	16.11	0.40	2.88	-170.90
PVG102	41	37.54	117	32.20	5760	979797.20	24.41	0.62	3.09	-170.61
PVG103	41	38.53	117	32.18	6280	979769.47	44.06	0.77	2.85	-168.97
PVG104	41	29.40	117	27.75	4525	979848.93	-27.74	0.00	0.56	-182.95
PVG105	41	29.32	117	26.53	4545	979850.84	-23.84	0.02	0.56	-179.74
PVG106	41	26.23	117	23.60	4545	979870.23	0.18	0.03	0.33	-155.94
PVG107	41	26.89	117	24.35	4625	979856.48	-7.04	0.01	0.30	-165.94
PVG108	41	27.55	117	25.10	4591	979853.09	-14.61	0.01	0.35	-172.30
PVG109	41	28.35	117	26.25	4545	979850.23	-22.99	0.01	0.43	-179.02
PVG110	41	29.79	117	28.00	4530	979848.76	-28.03	0.01	0.62	-183.35
PVG111	41	29.80	117	29.69	4530	979852.44	-24.36	0.00	0.67	-179.64
PVG112	41	19.49	117	34.29	4366	979843.36	-33.43	0.00	0.33	-183.41
PVG113	41	17.20	117	35.06	4338	979846.21	-29.80	0.00	0.19	-178.96
PVG114	41	15.18	117	35.83	4336	979845.27	-27.90	0.00	0.12	-177.06
PVG115	41	14.36	117	36.23	4340	979844.05	-27.52	0.00	0.11	-176.83

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	(deg	min)	(deg	min)				Hand (mGal)	Comp (mGal)	
PARADISE VALLEY--Continued										
PVG116	41	16.27	117	35.09	4335	979846.28	-28.61	0.00	0.15	-177.71
PVG117	41	18.31	117	34.64	4350	979844.01	-32.52	0.00	0.25	-182.04
PVG118	41	20.50	117	33.90	4385	979848.15	-28.37	0.00	0.40	-178.94
PVG119	41	17.81	117	38.93	4375	979863.94	-9.50	0.03	0.54	-159.59
PVG120	41	17.63	117	37.55	4360	979858.18	-16.40	0.00	0.36	-166.14
PVG121	41	17.41	117	36.30	4350	979851.39	-23.80	0.00	0.25	-173.31
PVG122	41	17.52	117	39.61	4388	979862.15	-9.63	0.01	0.54	-160.17
PVG123	41	16.96	117	38.69	4380	979857.11	-14.58	0.00	0.36	-165.02
PVG124	41	16.39	117	37.79	4360	979852.17	-20.55	0.00	0.25	-170.41
PVG125	41	15.84	117	36.87	4340	979849.49	-24.30	0.00	0.18	-173.54
PVG126	41	10.37	117	31.89	4358	979846.68	-17.23	0.03	0.42	-166.86
PVG127	41	11.34	117	31.66	4380	979851.89	-11.41	0.01	0.43	-161.77
PVG128	41	12.34	117	31.48	4365	979854.65	-11.55	0.04	0.44	-161.39
PVG129	41	13.20	117	31.24	4360	979857.49	-10.46	0.04	0.45	-160.12
PVG130	41	14.03	117	31.06	4355	979854.62	-15.05	0.02	0.43	-164.56
PVG131	41	14.74	117	31.52	4330	979847.56	-25.52	0.01	0.30	-174.29
PVG132	41	15.82	117	31.28	4340	979846.53	-27.22	0.01	0.27	-176.37
PVG133	41	19.20	117	32.80	4357	979840.55	-36.66	0.00	0.24	-186.42
PVG134	41	14.37	117	36.25	4338	979844.36	-27.41	0.00	0.11	-176.65
PVG135	41	13.81	117	36.50	4336	979843.99	-27.13	0.00	0.11	-176.31
PVG136	41	13.60	117	32.96	4324	979842.86	-29.07	0.00	0.20	-177.75
PVG137	41	11.75	117	33.30	4319	979842.04	-27.61	0.01	0.19	-176.12
PVG138	41	29.20	117	23.10	4850	979848.14	2.31	0.10	0.52	-164.09
PVG139	41	29.10	117	25.00	4675	979851.86	-10.27	0.04	0.49	-170.70
PVG140	41	24.10	117	25.89	4448	979877.39	1.41	0.15	0.50	-151.23
PVG141	41	10.75	117	25.97	5430	979808.60	44.88	0.10	0.85	-136.57
PVG142	41	17.70	117	24.83	5250	979832.09	41.06	0.04	0.54	-134.54
PVG143	41	15.23	117	24.50	5100	979834.19	32.76	0.17	0.57	-137.67
PVG144	41	25.00	117	29.58	4414	979861.35	-19.18	0.00	0.36	-170.78
PVG145	41	24.43	117	29.42	4414	979861.35	-18.32	0.00	0.34	-169.95
PVG146	41	24.23	117	29.52	4414	979861.71	-17.66	0.00	0.35	-169.28
WF01	41	9.83	117	40.93	4527	979851.26	4.12	0.01	0.33	-151.42
WF02	41	10.83	117	41.58	4598	979854.59	12.63	0.08	0.61	-145.06
WF03	41	9.82	117	41.77	4613	979849.49	10.39	0.03	0.49	-147.92
WF04	41	7.20	117	39.50	4337	979846.45	-14.70	0.00	0.08	-163.94

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PARADISE VALLEY--Continued										
WF05	41	12.38	117	40.93	4428	979867.74	7.47	0.07	0.70	-144.30
WF06	41	9.78	117	40.45	4489	979851.64	0.98	0.01	0.27	-153.32
WF07	41	9.78	117	40.00	4437	979849.77	-5.84	0.01	0.22	-158.37
WF08	41	9.77	117	39.50	4407	979846.58	-11.78	0.01	0.18	-163.35
WF09	41	9.77	117	38.82	4380	979845.85	-15.03	0.00	0.13	-165.73
WF10	41	9.77	117	38.28	4359	979843.23	-19.65	0.00	0.10	-169.64
WF11	41	9.75	117	37.65	4334	979842.01	-23.21	0.00	0.07	-172.36
WF12	41	9.75	117	37.08	4321	979840.59	-25.87	0.00	0.06	-174.58
WF13	41	9.75	117	36.67	4314	979839.77	-27.32	0.00	0.06	-175.81
WF14	41	9.77	117	36.02	4313	979839.36	-27.89	0.00	0.05	-176.33
WF15	41	9.77	117	35.40	4312	979839.93	-27.41	0.00	0.07	-175.81
WF16	41	9.77	117	34.87	4313	979841.66	-25.51	0.00	0.08	-173.96
WF17	41	9.77	117	33.75	4316	979846.15	-20.78	0.00	0.14	-169.25
WF18	41	9.82	117	32.30	4378	979854.75	-6.39	0.03	0.30	-156.85
WF19	41	12.40	117	39.35	4356	979861.26	-5.88	0.00	0.30	-155.55
WF20	41	12.24	117	38.27	4335	979854.04	-14.83	0.00	0.18	-163.90
WF21	41	12.24	117	36.57	4327	979847.67	-21.95	0.00	0.09	-170.84
WF22	41	10.67	117	39.47	4413	979850.34	-8.85	0.01	0.22	-160.56
WF23	41	13.30	117	39.37	4356	979863.31	-5.17	0.00	0.32	-154.82
WF24	41	11.57	117	39.43	4375	979855.65	-8.44	0.01	0.27	-158.80
WF25	41	14.18	117	39.40	4376	979862.09	-5.83	0.00	0.32	-156.16
WF26	41	15.03	117	39.33	4389	979860.86	-7.11	0.00	0.31	-157.90
WF27	41	15.87	117	39.43	4391	979861.76	-7.27	0.00	0.34	-158.10
WF28	41	8.93	117	39.47	4390	979846.60	-12.16	0.01	0.14	-163.16
WF29	41	8.03	117	39.48	4364	979845.84	-14.01	0.00	0.10	-164.16
WF30	41	10.68	117	38.30	4363	979845.38	-18.53	0.00	0.12	-168.62
WF31	41	11.55	117	38.22	4345	979849.64	-17.26	0.00	0.15	-166.71

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