

Open-File Report 80-619

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COMPLETE BOUGUER GRAVITY ANOMALY MAP OF THE VIDAL AREA,
CALIFORNIA AND ARIZONA

By

D. L. Healey and F. E. Currey

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COMPLETE BOUGUER GRAVITY ANOMALY MAP OF THE VIDAL AREA,
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ABSTRACT

A gravity survey of the Vidal area, California and Arizona, was conducted as a supplementary study to a concurrent geologic investigation of recent faulting by W. J. Carr of the U.S. Geological Survey. During the survey, 414 gravity stations were established by the U.S. Geological Survey. Data from these stations and data from about 500 other stations that were obtained from S. H. Biehler (University of California, Riverside), were used to compile the complete Bouguer gravity anomaly map that accompanies this report. Prominent positive and negative anomalies are shown by the contoured data. The positive anomalies generally coincide with the mountain ranges and the negative anomalies with the valleys. Northeast of Mesquite Mountain the steep gravity gradient probably indicates the presence of a fault that extends northwest through the Whipple Mountains and into eastern Chemehuevi Valley.

INTRODUCTION

The accompanying complete Bouguer gravity anomaly map of the Vidal area, California and Arizona (fig. 1) presents the results of a compilation of about 900 gravity stations. The map encompasses the area between lat 33°45' and 34°30' and long 114° to 115°. This area includes parts of the Needles and Salton Sea 1°X2° quadrangles. The gravity data shown include about 500 stations obtained from S. H. Biehler (Univ. of Calif., Riverside, written commun., 1975). Part of these data have since been published on the Needles quadrangle (Chapman and Rietman, 1976). In addition, the map shows 414 stations established by the U.S. Geological Survey (USGS). These new USGS stations provide additional detail and somewhat alter the contours shown by Chapman and Rietman (1976).

The gravity survey of the Vidal area was done concurrently with a geologic investigation by W. J. Carr of the USGS. The geologic study was to determine the presence, or absence, of recent faulting in the area and the gravity data were used to supplement this study. The work was funded by the Nuclear Regulatory Commission (NRC) and was part of a much larger effort to evaluate the Vidal area as to its suitability as a site for a proposed nuclear power plant.

Previous Work

Due to the high interest in the Vidal area as a proposed site for a nuclear power station, much geologic and geophysical work was done as part of the evaluation process. The purpose of the USGS gravity survey was to supplement earlier work and provide greater detail of the gravity anomalies in the area. Previously published contour maps of this area include Biehler (1975, fig. 2.5-41), West and Sumner (1973) and Chapman and Rietman (1976).

REDUCTION OF DATA

The USGS gravity data were reduced to the complete Bouguer values by standard reduction methods and procedures (Nettleton, 1976). The principal reduction density was 2.67 Mg/m^3 . Corrections for latitude, elevation, Earth tides, and instrument drift were applied. Terrain corrections through zone H (Hammer, 1939) were either computed or estimated from adjacent stations. The total terrain correction to a radial distance of 166.7 km was determined by the Plouff (1966) computer program. This program utilizes two sets of maps (card decks) on which the topography is digitized in 1X1 and 3X3 minutes of latitude and longitude. The gravity data obtained from S. H. Biehler (written commun., 1975) had already been reduced using the same reduction density but a slightly different terrain-correction system was employed. The complete Bouguer values determined by the two systems are in close agreement.

The principal gravity base station used for the USGS survey was VIDAL (Chapman, 1966, p. 28), which has an observed gravity value of 979,588.00 mGals. During the course of the gravity survey, a second base was established near Parker at station 161 (on BM 424). Figure 2 is a sketch map showing the locations of these two gravity base stations. A detailed description of each base is given in the appendix. The gravity data herein reported have not been converted to the 1971 International Gravity Standardization Network (IGSN) datum.

The accuracy of all gravity stations in this report, based on estimates of possible error in the observed gravity, latitude, elevation, and terrain correction, is thought to be ± 0.2 mGals. Most of this error may result from the terrain correction, which is subject to the greatest uncertainty.

GRAVITY ANOMALIES

Chapman and Rietman (1976, p. 4) give brief discussions of the gravity anomalies in the Needles $1^\circ \times 2^\circ$ quadrangle and also discuss the regional gradient. We will discuss some of these same anomalies and also those that occur in the northern part of the Salton Sea $1^\circ \times 2^\circ$ quadrangle.

In general, positive gravity anomalies in this area are associated with the mountainous areas and conversely, negative anomalies with the basins. A prominent positive anomaly occurs over the Whipple Mountains in the northeastern part of the map. This high continues through a series of saddles, southwestward through the Riverside Mountains and the Big Maria Mountains. These anomalies form an arc west of the Colorado River (Chapman and Rietman, 1976, p. 4). Other prominent positive anomalies occur over the Plomosa Mountains in Arizona, and the Little Maria, West Riverside, and Turtle Mountains in California. The highest positive anomaly (-20 mGals) shown on figure 1 occurs over the topographically low Mesquite Mountain (east of Poston, Ariz.). This anomaly is connected via a low saddle to the positive anomaly over the Riverside Mountains on the west side of the Colorado River. W. J. Carr (written commun., 1980) suggests that the rocks composing the lower plate of the Whipple Mountains detachment fault in the Riverside Mountains extend across to Mesquite Mountain. He further suggests that high-density Paleozoic carbonate rocks are present at

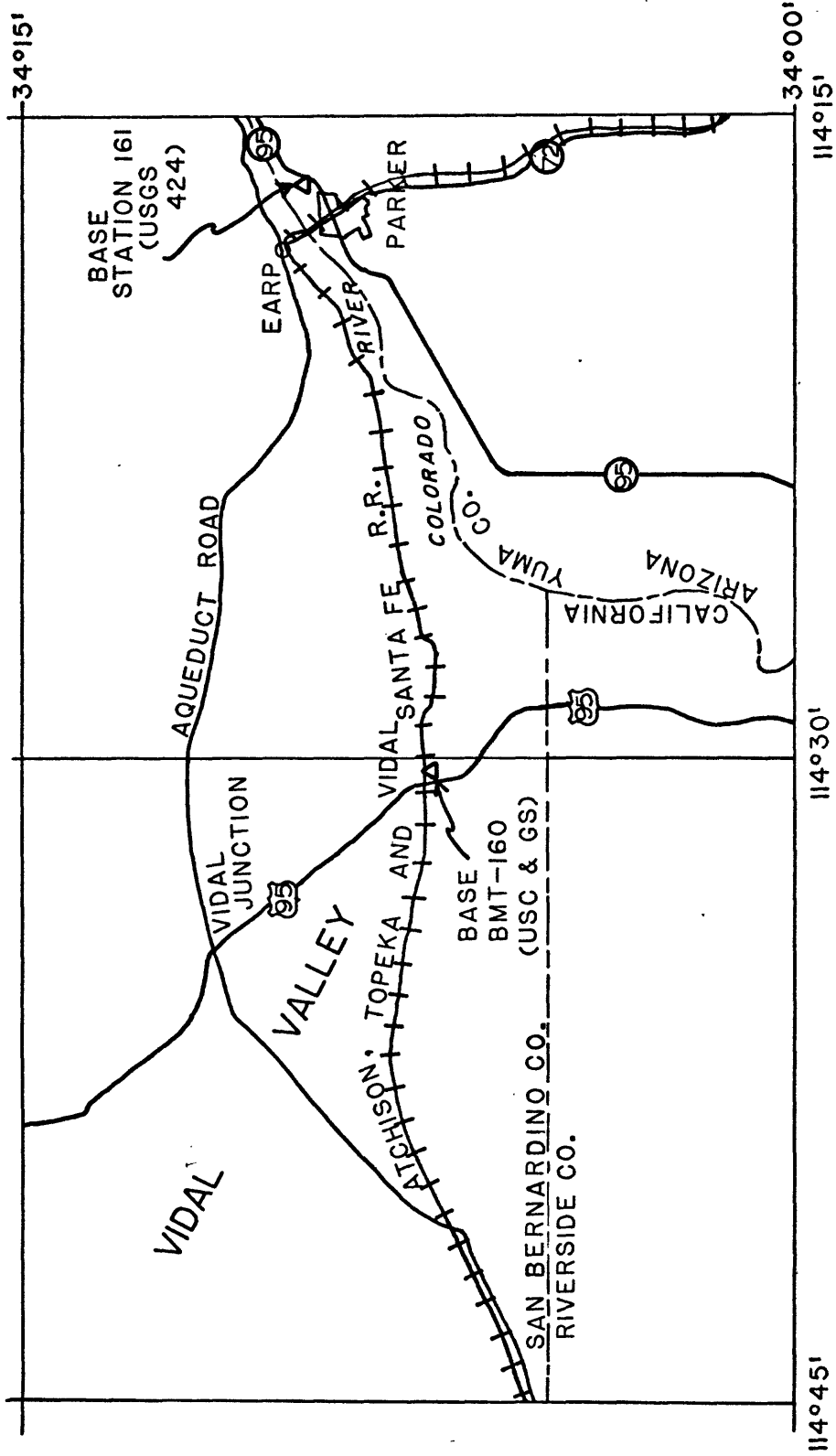


FIGURE 2.--SKETCH MAP OF PART OF THE NEEDLES 1° X 2° QUADRANGLE
 SHOWING GRAVITY BASE STATIONS FOR THE VIDAL GRAVITY
 SURVEY. MAP SCALE IS 1:250 000.

depth beneath Mesquite Mountain. Such a structural situation could account for this large positive anomaly.

Prominent negative anomalies are associated with Parker valley and La Posa plain in Arizona, and Rice, Ward, Vidal, and Chemeheuvi Valleys in California. These lows are indicative of the thickness of the low-density materials that fill these valleys.

The steepest gravity gradient shown on figure 1 occurs along the northeast side of Mesquite Mountain. This steep gradient (down to the northeast) probably indicates a fault trend, and indeed, this lineation coincides with a northwesterly trending fault mapped near the west side of the Whipple Mountains (W. J. Carr, written commun., 1980). As mapped by Carr, this fault passes between the closed -55 mGal high centered near lat 34°15' and long 114°30' and the -55 mGal contour to the east, and extends northwestward into Chemeheuvi Valley. Biehler (1975) and Chapman and Rietman (1976) show several northwest-trending faults in the Whipple Mountains that parallel the single fault shown by Carr. Other anomaly trends and gradients probably represent faulting but none are as well defined as the Mesquite Mountain gradient.

PRINCIPAL FACTS

The principal data acquired during the Vidal gravity survey from the 414 USGS gravity stations are listed in table 1. The complete Bouguer gravity anomaly map of the Vidal area was contoured from these data, plus those data obtained from S. H. Biehler (written commun., 1975). As mentioned above, Dr. Biehler's data have subsequently been published elsewhere. The Biehler stations are shown as open squares and the USGS stations as open circles on figure 1.

Table 1.--Principal facts for gravity stations in the Vidal area, California and Arizona.

STATION	LATITUDE	LONGITUDE	ELEV	GRV	F. A.	S. B. 1	S. B. 2	CC	TC	TER (NEAR)	TOT	C. B. 1	C. B. 2	ACC	STA
1	34	6.10	114 30.25	581.0	979592.27	-22.98	-42.80	-39.31	0.25	0.03	-0.06	-43.08	-39.54		1
2	34	5.07	114 32.44	814.0	979575.89	-16.01	-43.77	-38.89	0.34	0.03	0.00	-44.13	-39.18		2
3	34	4.14	114 33.20	922.0	979571.37	-9.07	-40.52	-34.99	0.38	0.03	0.00	-40.89	-35.29		3
4	34	2.92	114 34.64	1078.0	979563.55	-0.52	-37.29	-30.82	0.44	0.03	0.00	-37.68	-31.14		4
5	34	1.23	114 36.23	1184.0	979557.39	5.64	-34.74	-27.63	0.48	0.12	0.00	-35.00	-27.84		5
6	34	1.71	114 35.71	1192.0	979557.10	5.44	-35.22	-28.06	0.49	0.06	0.11	-35.54	-28.32		6
7	34	2.58	114 35.95	1150.0	979554.42	1.92	-34.87	-31.69	0.49	0.05	0.10	-39.21	-31.97		7
8	34	2.16	114 36.71	1275.0	979552.79	7.81	-35.68	-28.02	0.52	0.05	0.16	-35.98	-28.27		8
9	34	0.27	114 39.06	1138.0	979550.78	-3.96	-42.77	-35.94	0.47	0.05	0.00	-43.12	-36.23		9
10	34	1.80	114 40.22	1154.0	979546.93	-8.43	-47.79	-40.86	0.47	0.05	0.00	-48.13	-41.14		10
11	34	6.51	114 39.63	988.0	979556.20	-21.34	-55.04	-49.11	0.41	0.03	0.00	-55.42	-49.42		11
12	34	5.90	114 39.28	1082.0	979555.20	-12.65	-49.55	-43.06	0.44	0.04	0.00	-49.92	-43.36		12
13	34	5.56	114 38.34	1126.0	979554.99	-8.25	-46.65	-39.89	0.46	0.04	0.00	-47.01	-40.18		13
14	34	5.37	114 37.68	1135.0	979555.59	-6.54	-45.25	-38.43	0.46	0.04	0.00	-45.60	-38.72		14
15	34	4.90	114 35.99	1056.0	979561.86	-7.04	-43.06	-36.72	0.43	0.03	0.00	-43.44	-37.03		15
16	34	3.93	114 36.35	1148.0	979556.47	1.05	-39.36	-32.25	0.48	0.06	0.10	-39.69	-32.51		16
17	34	3.62	114 36.26	1196.0	979555.49	1.54	-39.25	-32.07	0.49	0.05	0.10	-39.58	-32.34		17
18	34	4.55	114 33.21	886.0	979571.32	-13.08	-43.30	-37.98	0.37	0.03	0.00	-43.67	-38.29		18
19	34	4.74	114 31.10	712.0	979589.77	-11.26	-35.55	-31.27	0.30	0.05	0.00	-35.83	-31.50		19
20	34	6.66	114 32.73	689.0	979531.82	-24.05	-47.55	-43.42	0.29	0.03	0.00	-47.89	-43.69		20
21	34	6.85	114 33.13	693.0	979580.52	-25.24	-48.88	-44.72	0.29	0.03	0.00	-49.21	-44.99		21
22	34	7.39	114 36.68	830.0	979565.00	-28.63	-56.94	-51.96	0.35	0.03	0.00	-57.30	-52.26		22
23	34	7.00	114 37.02	879.0	979562.27	-26.21	-56.19	-50.91	0.37	0.03	0.00	-56.56	-51.22		23
24	34	6.50	114 37.15	943.0	979560.59	-21.17	-53.33	-47.67	0.39	0.03	0.00	-53.71	-47.98		24
25	34	6.55	114 41.17	944.0	979556.15	-25.59	-57.78	-52.11	0.39	0.03	0.00	-58.14	-52.41		25
26	34	7.38	114 40.51	945.0	979555.72	-27.08	-59.31	-53.64	0.39	0.03	0.00	-59.68	-53.94		26
27	34	7.18	114 40.94	953.0	979554.32	-27.45	-59.95	-54.23	0.40	0.03	0.00	-60.31	-54.53		27
28	34	7.00	114 43.03	1068.0	979548.55	-24.15	-60.58	-54.17	0.44	0.03	0.00	-60.97	-54.49		28
29	34	10.70	114 39.29	1087.0	979546.78	-27.30	-64.37	-57.85	0.45	0.03	0.00	-64.77	-58.18		29
30	34	2.16	114 55.61	1321.0	979534.58	-5.58	-50.63	-42.70	0.53	0.20	0.16	-50.80	-42.84		30
31	34	1.27	114 54.56	1114.0	979549.02	-9.37	-47.36	-40.67	0.46	0.10	0.05	-47.67	-40.93		31
32	34	1.93	114 52.23	821.0	979554.82	-32.11	-60.12	-55.19	0.34	0.03	0.00	-60.45	-55.46		32
33	34	5.62	114 57.10	961.0	979551.39	-27.45	-60.23	-54.46	0.40	0.03	0.00	-60.61	-54.77		33
34	34	6.90	114 56.00	855.0	979557.75	-32.85	-62.01	-56.87	0.36	0.03	0.00	-62.32	-57.13		34
35	34	7.51	114 56.72	826.0	979558.52	-35.25	-63.43	-58.47	0.35	0.03	0.00	-63.71	-58.70		35
36	34	8.75	114 57.90	769.0	979561.35	-39.92	-66.14	-61.53	0.32	0.03	0.00	-66.38	-61.72		36
37	34	6.72	114 54.01	957.0	979553.86	-26.89	-59.53	-53.78	0.40	0.03	0.00	-59.85	-54.05		37
38	34	7.43	114 55.59	908.0	979553.24	-33.11	-64.08	-58.63	0.38	0.03	0.00	-64.39	-58.88		38
39	34	7.42	114 53.50	1031.0	979551.66	-23.11	-58.27	-52.08	0.43	0.03	0.00	-58.56	-52.32		39
40	34	7.42	114 52.44	1103.0	979551.83	-16.16	-53.78	-47.16	0.45	0.05	0.00	-54.03	-47.36		40
41	34	7.42	114 51.38	1171.0	979552.81	-8.79	-48.73	-41.70	0.48	0.08	0.00	-48.89	-41.83		41
42	34	5.63	114 49.30	1047.0	979556.32	-14.44	-50.15	-43.87	0.43	0.05	0.12	-50.41	-44.08		42
43	34	5.88	114 53.08	935.0	979556.37	-25.28	-57.17	-51.55	0.39	0.03	0.00	-57.49	-51.82		43
44	34	5.51	114 51.91	937.0	979555.20	-25.74	-57.70	-52.08	0.39	0.03	0.00	-58.02	-52.33		44
45	34	5.05	114 50.66	935.0	979555.63	-24.86	-56.75	-51.14	0.39	0.03	0.00	-57.06	-51.39		45
46	34	4.75	114 48.79	929.0	979557.66	-22.98	-54.66	-49.08	0.39	0.03	0.00	-54.97	-49.34		46
47	34	4.80	114 47.78	931.0	979559.41	-21.11	-52.86	-47.27	0.39	0.03	0.00	-53.17	-47.53		47
48	34	4.67	114 44.24	885.0	979554.31	-30.35	-60.54	-55.23	0.37	0.03	0.00	-60.89	-55.51		48
49	34	4.76	114 43.02	902.0	979553.82	-29.37	-60.13	-54.72	0.38	0.03	0.00	-60.48	-55.01		49
50	34	5.63	114 43.02	942.0	979551.53	-29.11	-61.24	-55.58	0.39	0.03	0.00	-61.60	-55.88		50

Table 1.--Principal facts for gravity stations in the Vidal area, California and Arizona--Continued

STATION	LATITUDE	LONGITUDE	OBS GRAV	F.A.	S.B.1	S.B.2	CC	TC	TER (NEAR)	TOT	C.B.1	C.B.2	ACC	STA
51	34 13.23	114 18.69	967.0	-24.47	-57.45	-51.64	0.40	0.14	0.27	0.41	-57.44	-51.64		51
52	34 13.58	114 18.43	998.0	-22.05	-56.09	-50.10	0.41	0.20	0.30	0.50	-56.01	-50.03		52
53	34 12.93	114 19.61	995.0	-21.90	-55.84	-49.87	0.41	0.15	0.26	0.41	-55.84	-49.86		53
54	34 12.68	114 20.36	936.0	-24.01	-55.43	-50.31	0.39	0.20	0.25	0.45	-55.87	-50.26		54
55	34 12.72	114 20.63	969.7	-23.38	-56.46	-50.63	0.40	0.20	0.26	0.46	-56.40	-50.59		55
56	34 12.73	114 20.95	960.0	-23.69	-57.11	-51.23	0.41	0.20	0.26	0.46	-57.06	-51.18		56
57	34 12.61	114 22.11	1000.0	-23.55	-57.65	-51.65	0.41	0.12	0.24	0.36	-57.71	-51.69		57
58	34 12.38	114 23.46	1009.0	-18.26	-52.67	-46.62	0.42	0.12	0.18	0.30	-52.79	-46.71		58
59	34 12.45	114 24.52	997.4	-18.32	-52.34	-45.35	0.41	0.12	0.16	0.28	-52.47	-46.46		59
60	34 11.93	114 27.08	980.3	-21.77	-55.21	-49.32	0.41	0.10	0.06	0.16	-55.45	-49.52		60
61	34 11.98	114 27.85	976.2	-23.47	-56.76	-50.90	0.40	0.08	0.04	0.12	-57.04	-51.13		61
62	34 12.09	114 29.01	973.4	-26.07	-59.27	-53.43	0.40	0.05	0.03	0.08	-59.60	-53.70		62
63	34 12.11	114 30.58	997.6	-27.88	-61.91	-55.92	0.41	0.04	0.01	0.05	-62.27	-56.22		63
64	34 12.12	114 31.78	997.4	-27.67	-61.69	-55.70	0.41	0.04	-0.01	0.03	-62.07	-56.01		64
65	34 12.04	114 33.01	966.0	-28.00	-60.95	-55.15	0.40	0.04	0.02	0.02	-61.33	-55.46		65
66	34 12.24	114 34.02	984.7	-30.76	-64.34	-58.43	0.41	0.04	-0.02	0.02	-64.73	-58.75		66
67	34 12.12	114 35.17	991.9	-32.82	-66.65	-60.69	0.41	0.04	-0.03	0.01	-67.05	-61.02		67
68	34 11.41	114 35.93	983.6	-33.60	-67.15	-61.25	0.41	0.04	-0.03	0.01	-67.55	-61.58		68
69	33 58.78	114 39.28	982.0	-11.95	-45.45	-39.55	0.41	0.04	-0.01	0.03	-45.82	-39.86		69
70	33 59.64	114 40.39	988.0	-16.02	-49.71	-43.78	0.41	0.03	-0.02	0.01	-50.11	-44.11		70
71	33 57.27	114 37.89	869.0	-11.95	-41.59	-36.37	0.36	0.03	0.04	0.07	-41.88	-36.61		71
72	33 57.00	114 37.35	908.0	-10.91	-41.87	-36.42	0.38	0.03	0.06	0.09	-42.16	-36.66		72
73	33 57.87	114 37.56	854.0	-10.91	-40.03	-34.91	0.36	0.04	0.01	0.05	-40.34	-35.16		73
74	33 58.27	114 37.60	882.0	-9.75	-39.83	-34.54	0.37	0.05	0.00	0.05	-40.15	-34.80		74
75	33 58.83	114 37.76	933.0	-9.89	-41.71	-36.11	0.39	0.05	0.01	0.06	-42.04	-36.38		75
76	33 59.55	114 38.58	1034.0	-6.10	-41.36	-35.15	0.43	0.06	0.02	0.08	-41.71	-35.44		76
77	33 55.68	114 40.65	933.0	-15.34	-47.16	-41.56	0.39	0.04	0.14	0.18	-47.37	-41.73		77
78	33 54.87	114 41.11	1045.0	-4.47	-40.11	-33.83	0.43	0.04	0.30	0.34	-40.20	-33.91		78
79	33 54.27	114 41.38	1083.0	-1.93	-38.87	-32.36	0.44	0.04	0.35	0.39	-38.92	-32.41		79
80	33 55.14	114 39.83	1097.0	1.88	-35.54	-28.95	0.45	0.04	0.32	0.36	-35.63	-29.03		80
81	33 55.06	114 40.21	1071.0	0.72	-35.80	-29.37	0.44	0.04	0.31	0.35	-35.89	-29.45		81
82	33 53.93	114 41.76	1070.0	-4.01	-40.50	-34.08	0.44	0.05	0.40	0.45	-40.50	-34.07		82
83	33 54.65	114 42.71	1029.0	-6.07	-41.16	-34.98	0.42	0.04	0.21	0.25	-41.34	-35.13		83
84	33 53.89	114 41.53	1108.0	-1.84	-39.63	-32.98	0.45	0.10	0.38	0.48	-39.60	-32.95		84
85	33 52.88	114 41.58	1264.0	1.77	-41.34	-33.75	0.51	0.05	0.46	0.51	-41.34	-33.75		85
86	33 50.33	114 42.29	983.0	-9.44	-42.96	-37.06	0.41	0.10	0.41	0.51	-42.86	-36.98		86
87	33 50.15	114 40.96	1152.0	-2.00	-41.29	-34.38	0.47	0.20	0.54	0.74	-41.02	-34.15		87
88	33 49.28	114 40.96	1020.0	-4.94	-39.73	-33.60	0.42	0.03	0.47	0.50	-39.64	-33.54		88
89	34 5.66	114 27.51	469.0	-18.91	-34.90	-32.09	0.20	0.03	-0.08	0.00	-35.15	-32.29		89
90	34 5.66	114 27.15	456.0	-23.69	-39.24	-36.50	0.20	0.03	-0.09	-0.06	-39.50	-36.72		90
91	34 7.31	114 25.66	460.0	-31.93	-47.62	-44.86	0.20	0.03	-0.09	-0.06	-47.87	-45.07		91
92	34 6.53	114 26.21	442.0	-29.69	-44.76	-42.11	0.19	0.03	-0.10	-0.07	-45.02	-42.32		92
93	34 5.78	114 26.46	431.0	-27.75	-42.45	-39.86	0.19	0.03	-0.11	-0.08	-42.71	-40.08		93
94	34 4.80	114 27.54	448.0	-21.37	-36.65	-33.96	0.19	0.03	-0.08	-0.05	-36.90	-34.16		94
95	34 4.80	114 28.32	480.0	-14.95	-31.32	-28.44	0.21	0.03	-0.06	-0.03	-31.56	-28.63		95
96	34 4.06	114 27.88	431.0	-20.50	-35.20	-32.61	0.19	0.03	-0.05	-0.02	-35.40	-32.78		96
97	34 3.42	114 28.40	413.0	-19.63	-33.71	-31.23	0.18	0.05	0.04	0.09	-33.80	-31.31		97
98	34 2.60	114 26.49	343.0	-18.36	-30.06	-28.00	0.15	0.03	-0.09	-0.06	-30.27	-28.17		98
99	34 2.17	114 26.42	341.0	-17.70	-29.33	-27.28	0.15	0.03	-0.09	-0.06	-29.54	-27.46		99
100	34 2.15	114 27.27	336.0	-19.03	-30.49	-28.48	0.15	0.03	-0.03	0.00	-30.64	-28.60		100

Table 1.--Principal facts for gravity stations in the Vidal area, California and Arizona--Continued

STATION	LATITUDE	LONGITUDE	ELEV	OBS GRAV	F.A.	S.B.1	S.B.2	CC	TC	TER (NEAR)	TOT	C.B.1	C.B.2	ACC	STA
101	34 1.57	114 29.16	421.0	979612.05	-11.94	-26.30	-23.77	0.18	0.05	0.21	0.00	-26.22	-23.71		101
102	34 1.11	114 28.28	335.0	979614.20	-17.24	-28.66	-26.65	0.15	0.03	0.12	0.00	-28.66	-26.65		102
103	34 0.21	114 29.00	326.0	979616.66	-14.37	-25.49	-23.53	0.14	0.05	0.17	0.00	-25.41	-23.47		103
104	33 59.34	114 35.57	896.0	979571.46	-4.71	-35.27	-29.89	0.37	0.05	0.03	0.00	-35.57	-30.14		104
105	33 55.65	114 32.33	363.0	979599.36	-21.84	-34.22	-32.04	0.16	0.04	0.05	0.00	-34.29	-32.10		105
106	33 53.74	114 31.65	340.0	979589.03	-31.68	-43.28	-41.23	0.15	0.05	0.02	0.00	-43.36	-41.30		106
107	33 52.95	114 31.48	360.0	979585.03	-32.70	-44.98	-42.82	0.16	0.08	-0.11	0.00	-45.06	-42.89		107
108	33 52.72	114 34.35	682.0	979568.67	-18.45	-41.71	-37.62	0.29	0.08	0.17	0.00	-41.75	-37.65		108
109	33 52.65	114 35.00	784.0	979564.66	-13.05	-39.79	-35.08	0.33	0.08	0.23	0.00	-39.80	-35.09		109
110	33 52.63	114 32.14	449.0	979580.17	-28.74	-44.06	-41.36	0.19	0.05	0.01	0.00	-44.19	-41.47		110
111	34 15.19	114 39.90	1259.0	979532.45	-31.72	-74.66	-67.10	0.51	0.03	0.16	0.00	-74.98	-67.37		111
112	34 15.69	114 40.58	1335.0	979529.58	-28.14	-73.68	-65.66	0.54	0.03	0.23	0.00	-73.95	-65.89		112
113	34 17.57	114 38.00	1268.0	979544.28	-22.37	-65.62	-58.01	0.51	0.03	0.04	0.00	-66.06	-58.37		113
114	34 19.25	114 38.81	1337.0	979540.67	-21.84	-67.44	-59.42	0.54	0.03	0.04	0.00	-67.91	-59.80		114
115	34 18.20	114 38.43	1307.0	979539.36	-24.51	-69.08	-61.24	0.53	0.03	0.04	0.00	-69.54	-61.61		115
116	34 19.92	114 37.40	1362.0	979539.29	-21.81	-68.26	-60.09	0.55	0.06	0.00	0.00	-68.75	-60.48		116
117	34 20.20	114 38.18	1318.0	979541.28	-24.35	-69.30	-61.39	0.53	0.05	0.00	0.00	-69.78	-61.78		117
118	34 20.05	114 39.15	1318.0	979540.04	-25.38	-70.33	-62.42	0.53	0.03	0.04	0.00	-70.80	-62.80		118
119	34 22.30	114 39.25	1250.0	979542.78	-32.18	-74.82	-67.31	0.51	0.03	0.00	0.00	-75.29	-67.70		119
120	34 22.38	114 41.31	1353.0	979532.49	-32.90	-79.04	-70.92	0.54	0.03	0.09	0.00	-79.47	-71.27		120
121	34 26.05	114 39.04	1140.0	979552.85	-37.71	-76.59	-69.75	0.47	0.03	-0.03	0.00	-77.06	-70.14		121
122	34 26.04	114 41.25	1211.0	979549.63	-34.24	-75.54	-68.27	0.49	0.03	-0.00	0.00	-76.01	-68.65		122
123	34 26.45	114 44.08	1361.0	979538.71	-31.63	-78.05	-69.88	0.55	0.03	0.08	0.00	-78.48	-70.23		123
124	34 26.97	114 49.86	1708.0	979528.73	-9.70	-67.95	-57.70	0.67	0.10	0.26	0.00	-68.26	-57.95		124
125	34 28.19	114 49.27	1573.0	979528.20	-24.64	-78.29	-68.84	0.62	0.10	0.11	0.00	-78.70	-69.19		125
126	34 27.00	114 54.33	1620.0	979523.86	-22.89	-78.14	-68.42	0.64	0.10	0.18	0.00	-78.50	-68.71		126
127	34 26.03	114 34.18	1034.0	979573.72	-26.79	-62.05	-55.84	0.43	0.03	-0.03	0.00	-62.48	-56.20		127
128	34 25.96	114 32.76	974.0	979578.18	-27.87	-61.09	-55.24	0.40	0.03	-0.01	0.00	-61.47	-55.56		128
129	34 25.59	114 32.56	956.0	979579.44	-27.78	-60.39	-54.65	0.40	0.03	-0.00	0.00	-60.76	-54.96		129
130	34 25.00	114 32.48	1031.0	979571.92	-27.42	-62.59	-56.40	0.43	0.05	-0.03	0.00	-63.00	-56.73		130
131	34 22.63	114 31.97	1250.0	979557.59	-18.12	-60.75	-53.25	0.51	0.05	0.02	0.00	-61.19	-53.61		131
132	34 21.42	114 32.53	1402.0	979539.26	-20.18	-67.99	-59.58	0.56	0.05	0.07	0.00	-68.43	-59.94		132
133	34 21.25	114 33.61	1359.0	979541.94	-21.30	-67.65	-59.49	0.55	0.05	0.03	0.00	-68.12	-59.88		133
134	34 21.61	114 35.46	1293.0	979549.33	-20.62	-54.72	-56.96	0.52	0.04	-0.02	0.00	-65.23	-57.37		134
135	34 22.12	114 36.75	1262.0	979549.01	-24.57	-57.62	-60.04	0.51	0.04	-0.03	0.00	-68.12	-60.45		135
136	34 20.81	114 37.25	1469.0	979538.22	-19.71	-67.76	-59.30	0.56	0.04	0.01	0.00	-68.27	-59.72		136
137	34 20.40	114 36.75	1390.0	979539.72	-19.42	-66.83	-58.48	0.56	0.05	0.00	0.00	-67.33	-58.90		137
138	34 18.70	114 35.90	1493.0	979532.76	-14.31	-65.23	-56.27	0.59	0.03	0.08	0.00	-65.72	-56.67		138
139	34 20.27	114 34.02	1460.0	979538.90	-13.47	-63.27	-54.50	0.58	0.03	0.07	0.00	-63.75	-54.90		139
140	34 18.76	114 32.00	1743.0	979526.92	3.28	-56.17	-45.71	0.68	0.05	0.33	0.00	-56.47	-45.96		140
141	34 17.86	114 31.50	1995.0	979508.82	10.14	-57.91	-45.93	0.76	0.35	0.72	0.00	-57.60	-45.68		141
142	34 12.87	114 35.10	1047.0	979549.82	-31.05	-66.76	-60.47	0.43	0.05	-0.02	0.00	-67.16	-60.80		142
143	34 13.45	114 32.54	1119.0	979551.17	-23.74	-61.90	-55.19	0.46	0.08	0.03	0.00	-62.26	-55.48		143
144	34 14.32	114 32.54	1182.0	979549.86	-20.34	-60.65	-53.56	0.48	0.10	0.07	0.00	-60.96	-53.81		144
145	34 15.25	114 32.53	1315.0	979546.95	-12.04	-56.89	-48.99	0.53	0.12	0.14	0.00	-57.16	-49.22		145
146	34 14.58	114 30.42	1034.0	979555.28	-29.20	-64.47	-58.26	0.43	0.08	0.22	0.00	-64.59	-58.36		146
147	34 11.66	114 29.32	940.0	979502.62	-26.62	-58.68	-53.04	0.39	0.03	0.01	0.00	-59.04	-53.33		147
148	34 11.40	114 27.79	915.0	979569.92	-22.31	-53.52	-48.03	0.38	0.03	0.02	0.00	-53.85	-48.30		148
149	34 11.17	114 25.95	832.0	979575.31	-23.41	-51.79	-46.79	0.35	0.03	0.04	0.00	-52.06	-47.02		149
150	34 11.53	114 26.18	878.0	979573.96	-20.93	-50.88	-45.61	0.37	0.04	0.06	0.00	-51.15	-45.83		150

Table 1.--Principal facts for gravity stations in the Vidal area, California and Arizona--Continued

STATION	LATITUDE	LONGITUDE	ELEV	ORS GRAV	F.A.	S.R.1	S.B.2	CC	TC	TER (NEAR)	TOT	C.H.1	C.B.2	ACC	STA
151	34 11.74	114 25.09	895.0	979572.91	-20.68	-51.20	-45.83	0.37	0.04	0.10	0.00	0.14	-46.02	151	
152	34 11.11	114 24.96	816.0	979575.80	-24.34	-52.17	-47.27	0.34	0.03	0.06	0.00	0.09	-47.48	152	
153	34 10.62	114 23.43	745.0	979573.26	-27.87	-53.28	-48.81	0.31	0.03	0.04	0.00	0.07	-49.01	153	
154	34 9.01	114 24.19	605.0	979583.19	-33.86	-54.50	-50.87	0.26	0.04	-0.04	0.00	0.00	-51.08	154	
155	34 8.78	114 24.59	558.0	979586.22	-34.94	-53.97	-50.62	0.24	0.03	-0.04	0.00	0.01	-51.82	155	
156	34 7.99	114 24.37	483.0	979593.61	-33.50	-49.97	-47.07	0.21	0.03	-0.07	0.00	-0.04	-47.27	156	
157	34 8.42	114 24.01	497.0	979592.77	-33.62	-50.57	-47.59	0.21	0.03	-0.05	0.00	-0.02	-47.78	157	
158	34 7.98	114 26.29	555.0	979588.56	-31.76	-50.69	-47.36	0.24	0.04	-0.08	0.00	-0.04	-47.58	158	
159	34 6.54	114 29.35	564.0	979593.80	-23.67	-42.90	-39.52	0.24	0.03	-0.07	0.00	-0.04	-39.75	159	
160	34 6.54	114 28.31	525.0	979590.51	-22.62	-40.53	-37.38	0.23	0.03	-0.08	0.00	-0.05	-37.60	160	
161	34 9.52	114 16.84	425.0	979599.20	-35.50	-49.99	-47.44	0.18	0.03	-0.02	0.00	0.01	-47.59	161	
162	33 45.44	114 10.82	931.0	979527.79	-25.80	-57.55	-51.96	0.39	0.03	-0.03	0.00	0.00	-52.28	162	
163	33 46.06	114 9.75	998.0	979526.81	-21.34	-55.37	-49.38	0.41	0.03	-0.02	0.00	0.01	-49.71	163	
164	33 45.93	114 8.55	1072.0	979524.56	-16.45	-53.01	-46.57	0.44	0.03	0.01	0.00	0.04	-46.90	164	
165	33 45.40	114 9.36	1068.0	979525.97	-20.32	-54.70	-48.65	0.42	0.03	-0.00	0.00	0.03	-48.97	165	
166	33 46.64	114 5.83	1241.0	979525.30	-0.80	-43.12	-35.67	0.50	0.05	0.07	0.00	0.13	-35.98	166	
167	33 45.48	114 6.28	1230.0	979516.70	-6.82	-48.77	-41.39	0.50	0.05	0.09	0.00	0.14	-41.68	167	
168	33 45.20	114 5.58	1284.0	979516.55	-3.50	-47.29	-39.59	0.52	0.06	0.13	0.00	0.19	-39.85	168	
169	33 46.92	114 4.52	1324.0	979524.72	6.04	-39.11	-31.17	0.53	0.10	0.05	0.00	0.15	-31.49	169	
170	33 47.43	114 5.38	1292.0	979524.11	5.72	-36.35	-30.59	0.52	0.15	0.05	0.00	0.20	-30.86	170	
171	33 47.15	114 3.00	1448.0	979517.20	9.87	-39.52	-30.83	0.58	0.15	0.07	0.00	0.22	-31.12	171	
172	33 46.96	114 2.52	1482.0	979512.80	8.93	-41.62	-32.72	0.59	0.15	0.08	0.00	0.23	-33.02	172	
173	33 47.98	114 0.96	1294.0	979527.24	4.27	-39.86	-32.10	0.52	0.05	-0.01	0.00	0.04	-32.49	173	
174	33 48.70	114 0.53	1219.0	979527.23	-3.79	-45.37	-38.05	0.50	0.05	-0.04	0.00	0.01	-38.45	174	
175	33 48.56	114 4.89	1536.0	979518.30	17.28	-35.10	-25.88	0.61	0.24	0.18	0.00	0.42	-26.04	175	
176	33 48.90	114 3.91	1414.0	979525.24	12.32	-35.91	-27.42	0.57	0.15	0.05	0.00	0.20	-27.72	176	
177	33 49.90	114 3.21	1296.0	979530.16	4.71	-39.49	-31.71	0.52	0.08	-0.01	0.00	0.07	-32.08	177	
178	33 51.30	114 2.52	1198.0	979530.64	-6.91	-47.43	-40.30	0.44	0.05	-0.06	0.00	-0.01	-40.70	178	
179	33 49.57	114 4.52	1370.0	979531.09	13.06	-33.67	-25.44	0.55	0.15	0.04	0.00	0.19	-25.74	179	
180	33 50.35	114 4.52	1308.0	979535.99	11.04	-33.57	-25.71	0.53	0.08	0.01	0.00	0.09	-26.08	180	
181	33 51.30	114 4.52	1246.0	979530.55	8.45	-34.04	-26.56	0.51	0.06	-0.02	0.00	0.04	-26.95	181	
182	33 51.22	114 6.52	1222.0	979549.03	14.79	-26.89	-19.56	0.50	0.15	-0.00	0.00	0.15	-19.84	182	
183	33 52.17	114 3.65	1174.0	979542.22	2.14	-37.90	-30.85	0.48	0.08	-0.05	0.00	0.03	-31.22	183	
184	33 52.62	114 2.63	1131.0	979535.86	-8.89	-47.46	-40.67	0.46	0.04	-0.07	0.00	-0.03	-41.08	184	
185	33 52.75	114 1.70	1095.0	979533.96	-14.36	-51.70	-45.13	0.45	0.03	-0.09	0.00	-0.06	-45.55	185	
186	33 53.50	114 1.89	1067.0	979540.04	-11.95	-48.34	-41.94	0.44	0.03	-0.10	0.00	-0.07	-42.36	186	
187	33 53.56	114 2.62	1110.0	979540.67	-7.36	-45.22	-38.56	0.45	0.04	-0.08	0.00	-0.04	-38.96	187	
188	33 53.05	114 3.66	1181.0	979544.25	3.61	-36.67	-29.58	0.48	0.05	-0.05	0.00	-0.00	-29.98	188	
189	33 56.04	114 0.14	947.0	979552.12	-14.69	-46.99	-41.31	0.39	0.03	-0.11	0.00	-0.08	-41.70	189	
190	33 56.70	114 0.41	947.0	979554.75	-12.98	-45.28	-39.59	0.39	0.03	-0.11	0.00	-0.08	-39.99	190	
191	33 55.86	114 1.08	947.0	979552.12	-14.44	-46.74	-41.06	0.39	0.03	-0.11	0.00	-0.08	-41.45	191	
192	33 56.14	114 3.19	1035.0	979554.57	-4.10	-39.40	-33.19	0.43	0.05	-0.09	0.00	-0.04	-33.58	192	
193	33 57.22	114 1.94	897.0	979560.35	-12.91	-43.40	-38.02	0.37	0.03	-0.10	0.00	-0.07	-38.39	193	
194	33 57.58	114 2.30	886.0	979550.54	-14.15	-44.37	-39.05	0.37	0.03	-0.11	0.00	-0.08	-39.42	194	
195	33 56.55	114 3.68	1032.0	979557.44	-2.09	-37.28	-31.09	0.43	0.10	-0.09	0.00	0.01	-31.43	195	
196	33 56.55	114 3.72	1104.0	979554.60	1.84	-35.81	-29.18	0.45	0.08	-0.08	0.00	0.00	-29.55	196	
197	33 57.04	114 4.96	996.0	979559.89	-3.70	-37.68	-31.70	0.41	0.10	-0.09	0.00	0.01	-32.02	197	
198	33 58.18	114 4.51	902.0	979564.42	-9.60	-40.37	-34.95	0.38	0.08	-0.11	0.00	-0.03	-35.29	198	
199	33 58.60	114 4.10	837.0	979566.33	-14.67	-43.22	-36.19	0.35	0.03	-0.11	0.00	-0.08	-38.55	199	
200	33 58.99	114 4.67	631.0	979566.38	-15.45	-43.79	-38.80	0.35	0.03	-0.11	0.00	-0.08	-39.16	200	

Table 1.--Principal facts for gravity stations in the Vidal area, California and Arizona--Continued

STATION	LATITUDE	LONGITUDE	ELEV	ORS	GRAV	F.A.	S.B.1	S.B.2	CC	TC	TER	(NEAR)	TOT	C.B.1	C.B.2	ACC	STA
201	33 59.22	114 7.25	757.0	979563.51	-25.60	-51.42	-46.87	0.32	0.03	0.03	-0.11	0.00	-0.08	-51.82	-47.20		201
202	33 59.15	114 5.74	805.0	979562.28	-22.22	-49.67	-44.84	0.34	0.03	0.03	-0.12	0.00	-0.09	-50.10	-45.19		202
203	33 58.47	114 3.40	848.0	979564.50	-15.01	-43.93	-38.84	0.35	0.03	0.03	-0.11	0.00	-0.08	-44.36	-39.19		203
204	33 57.42	114 3.67	941.0	979562.00	-7.30	-39.39	-33.74	0.39	0.08	0.08	-0.10	0.00	-0.02	-39.81	-34.08		204
205	33 50.90	114 17.25	850.0	979551.13	-17.66	-46.65	-41.55	0.36	0.03	0.03	-0.10	0.00	-0.07	-47.07	-41.90		205
206	33 51.29	114 17.76	864.0	979554.38	-13.63	-43.10	-37.91	0.36	0.03	0.03	-0.09	0.00	-0.06	-43.53	-38.26		206
207	33 51.74	114 18.34	863.0	979558.79	-9.94	-39.38	-34.20	0.36	0.05	0.05	-0.09	0.00	-0.04	-39.78	-34.53		207
208	33 51.07	114 18.42	888.0	979556.27	-9.18	-39.47	-34.14	0.37	0.03	0.03	-0.08	0.00	-0.05	-39.89	-34.49		208
209	33 51.27	114 19.09	903.0	979555.40	-6.92	-39.72	-34.29	0.38	0.03	0.03	-0.06	0.00	-0.03	-40.12	-34.63		209
210	33 51.18	114 16.81	849.0	979551.55	-17.72	-46.68	-41.56	0.36	0.03	0.03	-0.10	0.00	-0.07	-47.10	-41.93		210
211	33 48.62	114 16.60	742.0	979545.03	-30.75	-56.06	-51.60	0.31	0.03	0.03	-0.10	0.00	-0.07	-56.44	-51.92		211
212	33 49.32	114 16.37	774.0	979546.40	-27.34	-53.74	-49.09	0.33	0.03	0.03	-0.11	0.00	-0.08	-54.14	-49.42		212
213	33 50.90	114 15.42	827.0	979551.15	-19.80	-48.01	-43.04	0.35	0.03	0.03	-0.11	0.00	-0.08	-48.44	-43.40		213
214	33 50.74	114 14.68	830.0	979552.08	-18.37	-46.88	-41.69	0.35	0.03	0.03	-0.11	0.00	-0.08	-47.10	-42.05		214
215	33 56.37	114 14.75	903.0	979564.23	-7.18	-37.98	-32.56	0.38	0.03	0.03	-0.11	0.00	-0.08	-38.43	-32.93		215
216	33 56.40	114 15.77	911.0	979564.28	-6.42	-37.49	-32.02	0.38	0.03	0.03	-0.09	0.00	-0.06	-37.93	-32.38		216
217	33 56.44	114 17.04	906.0	979564.01	-7.22	-39.12	-32.68	0.38	0.03	0.03	-0.07	0.00	-0.04	-38.53	-33.02		217
218	33 56.46	114 13.63	886.0	979563.86	-9.27	-38.49	-34.17	0.37	0.03	0.03	-0.12	0.00	-0.09	-39.95	-34.55		218
219	34 5.16	114 17.60	347.0	979604.03	-31.92	-43.76	-41.67	0.15	0.03	0.03	-0.11	0.00	-0.08	-43.98	-41.86		219
220	34 6.45	114 18.14	354.0	979603.06	-34.03	-46.11	-43.98	0.15	0.03	0.03	-0.10	0.00	-0.07	-46.33	-44.17		220
221	34 6.45	114 17.60	354.0	979603.53	-33.56	-45.64	-43.51	0.15	0.03	0.03	-0.09	0.00	-0.06	-45.85	-43.69		221
222	34 6.45	114 18.66	353.0	979605.11	-32.08	-44.12	-42.00	0.15	0.03	0.03	-0.10	0.00	-0.07	-44.34	-42.18		222
223	34 6.45	114 19.43	361.0	979614.01	-22.43	-34.74	-32.57	0.16	0.03	0.03	-0.11	0.00	-0.08	-34.98	-32.77		223
224	34 6.89	114 19.18	356.0	979606.64	-28.88	-41.02	-38.88	0.15	0.03	0.03	-0.10	0.00	-0.07	-41.25	-39.07		224
225	34 7.32	114 18.55	354.0	979604.41	-33.90	-45.97	-43.65	0.15	0.03	0.03	-0.08	0.00	-0.05	-46.17	-44.01		225
226	34 7.32	114 18.12	356.0	979603.38	-34.74	-46.88	-44.74	0.15	0.03	0.03	-0.08	0.00	-0.05	-47.08	-44.91		226
227	34 7.78	114 17.05	412.0	979601.95	-31.54	-45.59	-43.12	0.18	0.03	0.03	-0.09	0.00	-0.06	-45.83	-43.32		227
228	34 7.09	114 17.05	417.0	979602.13	-29.93	-44.15	-43.17	0.18	0.03	0.03	-0.11	0.00	-0.08	-44.41	-41.86		228
229	33 45.14	114 28.07	288.0	979573.71	-39.94	-49.77	-49.04	0.13	0.03	0.03	-0.05	0.00	-0.02	-49.91	-48.15		229
230	33 47.83	114 27.04	297.0	979575.22	-41.32	-51.45	-49.67	0.13	0.03	0.03	-0.06	0.00	-0.03	-51.62	-49.80		230
231	33 48.63	114 27.04	294.0	979577.11	-40.82	-50.85	-49.09	0.13	0.03	0.03	-0.07	0.00	-0.04	-51.02	-49.23		231
232	33 49.50	114 27.04	301.0	979580.81	-37.68	-47.94	-46.13	0.13	0.03	0.03	-0.08	0.00	-0.05	-48.13	-46.29		232
233	33 51.25	114 27.04	306.0	979582.81	-37.64	-48.07	-46.24	0.13	0.03	0.03	-0.10	0.00	-0.07	-48.28	-46.40		233
234	33 52.34	114 27.04	311.0	979585.71	-35.78	-46.39	-44.52	0.14	0.03	0.03	-0.11	0.00	-0.08	-46.61	-44.70		234
235	33 53.41	114 25.46	318.0	979592.97	-29.35	-40.20	-38.29	0.14	0.03	0.03	-0.12	0.00	-0.09	-40.42	-38.47		235
236	33 53.85	114 25.46	312.0	979593.66	-29.84	-46.48	-38.60	0.14	0.03	0.03	-0.12	0.00	-0.09	-40.70	-38.79		236
237	33 54.29	114 25.46	313.0	979593.33	-30.68	-41.36	-39.48	0.14	0.03	0.03	-0.12	0.00	-0.09	-41.59	-39.67		237
238	33 54.28	114 24.94	313.0	979594.62	-29.38	-40.06	-38.18	0.14	0.03	0.03	-0.11	0.00	-0.08	-40.28	-38.36		238
239	33 54.28	114 23.89	317.0	979594.72	-28.90	-39.72	-37.81	0.14	0.03	0.03	-0.09	0.00	-0.06	-39.91	-37.97		239
240	33 55.59	114 24.42	316.0	979598.23	-27.31	-38.09	-36.19	0.14	0.03	0.03	-0.13	0.00	-0.10	-38.32	-36.38		240
241	33 56.46	114 24.42	319.0	979597.19	-29.28	-40.16	-38.24	0.14	0.03	0.03	-0.13	0.00	-0.10	-40.40	-38.44		241
242	33 56.90	114 24.58	322.0	979596.22	-30.58	-41.56	-39.63	0.14	0.03	0.03	-0.14	0.00	-0.11	-41.81	-39.83		242
243	34 1.66	114 22.85	337.0	979614.28	-17.74	-29.23	-27.21	0.15	0.03	0.03	-0.15	0.00	-0.12	-29.49	-27.42		243
244	34 1.66	114 21.80	338.0	979615.44	-16.48	-28.01	-25.98	0.15	0.03	0.03	-0.15	0.00	-0.12	-28.27	-26.20		244
245	34 4.29	114 20.75	347.0	979616.45	-18.29	-30.12	-28.04	0.15	0.03	0.03	-0.15	0.00	-0.12	-30.39	-28.26		245
246	34 4.29	114 21.81	350.0	979612.15	-22.31	-34.24	-32.14	0.15	0.03	0.03	-0.15	0.00	-0.12	-34.51	-32.36		246
247	34 3.42	114 23.90	339.0	979619.43	-14.85	-26.41	-24.38	0.15	0.03	0.03	-0.15	0.00	-0.12	-26.68	-24.60		247
248	34 4.29	114 24.95	341.0	979614.32	-20.98	-32.61	-30.57	0.15	0.03	0.03	-0.12	0.00	-0.09	-32.86	-30.77		248
249	34 5.15	114 23.85	346.0	979611.17	-24.86	-36.66	-34.59	0.15	0.03	0.03	-0.13	0.00	-0.10	-36.91	-34.79		249
250	34 5.18	114 21.76	348.0	979611.89	-24.00	-35.87	-33.78	0.15	0.03	0.03	-0.14	0.00	-0.11	-36.13	-33.99		250

Table 1.--Principal facts for gravity stations in the Vidal area, California and Arizona--Continued

STATION	LATITUDE	LONGITUDE	ELEV	OBS GRAV	F.A.	S.B.1	S.B.2	CC	TC	TER (NEAR)	TOT	C.B.1	C.B.2	ACC	STA
251	34	5.60	114 21.76	349.0	979610.53	-25.85	-37.75	0.15	0.03	0.13	0.00	-0.10	-38.00	-35.86	251
252	34	6.02	114 20.72	355.0	979613.57	-22.83	-34.94	0.15	0.03	0.13	0.00	-0.10	-35.19	-33.01	252
253	34	6.73	114 21.22	353.0	979604.59	-32.99	-45.03	0.15	0.03	0.10	0.00	-0.07	-45.26	-43.10	253
254	34	7.18	114 20.32	359.0	979604.46	-33.18	-45.43	0.16	0.03	0.09	0.00	-0.06	-45.64	-43.45	254
255	34	8.18	114 55.93	859.0	979551.86	-40.14	-69.44	0.36	0.03	0.09	0.00	0.12	-69.68	-64.48	255
256	34	8.76	114 55.68	962.0	979550.06	-33.07	-65.88	0.40	0.03	0.10	0.00	0.13	-66.14	-60.32	256
257	34	14.60	114 57.87	1203.0	979549.28	-19.33	-60.36	0.49	0.08	0.34	0.00	0.42	-60.43	-53.20	257
258	34	17.71	114 55.55	2280.0	979491.71	20.98	-53.13	0.85	0.82	1.45	0.00	2.27	-55.70	-42.21	258
259	34	10.08	114 39.45	1073.0	979456.13	-28.40	-64.99	0.44	0.03	0.01	0.00	0.04	-65.39	-59.88	259
260	34	9.30	114 41.40	1093.0	979547.87	-23.69	-60.97	0.45	0.04	0.01	0.00	0.08	-61.33	-54.71	260
261	34	9.42	114 43.59	1238.0	979545.76	-12.33	-54.55	0.50	0.05	0.15	0.00	0.20	-54.85	-47.37	261
262	34	10.73	114 41.56	1223.0	979539.87	-21.46	-63.17	0.50	0.05	0.11	0.00	0.16	-63.51	-56.11	262
263	34	10.85	114 17.40	592.0	979587.31	-33.54	-53.73	0.25	0.30	0.03	0.00	0.33	-53.65	-50.11	263
264	34	11.25	114 17.87	648.0	979583.88	-32.26	-54.36	0.28	0.28	0.05	0.00	0.33	-54.30	-50.42	264
265	34	11.90	114 17.92	742.0	979580.92	-27.28	-52.59	0.31	0.25	0.10	0.00	0.35	-52.56	-48.11	265
266	34	12.90	114 18.45	912.0	979566.42	-27.19	-58.30	0.38	0.20	0.22	0.00	0.42	-58.26	-52.79	266
267	34	14.87	114 17.18	1000.0	979563.60	-24.49	-58.59	0.41	0.40	0.40	0.00	0.80	-58.21	-52.27	267
268	34	12.58	114 15.70	613.0	979588.48	-32.81	-53.71	0.26	0.25	0.11	0.00	0.36	-53.61	-49.95	268
269	34	12.73	114 16.75	804.0	979577.93	-25.60	-53.02	0.34	0.30	0.12	0.00	0.42	-52.94	-48.13	269
270	34	11.56	114 16.99	668.0	979585.67	-29.02	-51.80	0.28	0.28	0.05	0.00	0.33	-51.75	-47.75	270
271	34	10.05	114 17.70	372.0	979601.91	-38.51	-51.20	0.16	0.15	0.08	0.00	0.23	-51.14	-48.91	271
272	34	9.43	114 20.39	492.0	979596.52	-31.75	-46.53	0.21	0.10	-0.00	0.00	0.10	-48.45	-45.67	272
273	34	9.10	114 22.00	538.0	979595.67	-27.81	-46.16	0.23	0.06	-0.03	0.00	0.03	-48.36	-43.09	273
274	34	10.85	114 21.05	711.0	979581.09	-28.56	-52.81	0.30	0.10	0.07	0.00	0.17	-52.95	-48.65	274
275	34	8.37	114 16.19	450.0	979598.37	-32.37	-47.72	0.19	0.05	-0.08	0.00	-0.03	-47.95	-45.20	275
276	34	9.37	114 15.57	454.0	979597.10	-34.66	-50.15	0.20	0.05	-0.05	0.00	-0.00	-50.34	-47.58	276
277	34	8.67	114 15.92	505.0	979594.85	-31.14	-48.36	0.22	0.05	-0.08	0.00	-0.03	-48.61	-45.54	277
278	34	7.55	114 16.24	503.0	979598.01	-26.60	-43.76	0.22	0.10	-0.11	0.00	-0.01	-43.98	-40.92	278
279	34	13.46	114 28.33	1147.0	979550.98	-21.31	-60.43	0.47	0.05	0.12	0.00	0.17	-60.72	-53.79	279
280	34	14.34	114 28.33	1243.0	979546.37	-18.12	-60.51	0.50	0.08	0.20	0.00	0.28	-60.74	-53.23	280
281	34	15.40	114 27.88	1403.0	979540.82	-10.10	-57.95	0.56	0.10	0.38	0.00	0.48	-58.04	-49.60	281
282	34	15.98	114 27.65	1529.0	979535.71	-4.17	-56.32	0.61	0.15	0.52	0.00	0.67	-56.26	-47.09	282
283	34	15.83	114 26.23	1450.0	979542.18	-4.92	-54.38	0.58	0.15	0.41	0.00	0.56	-54.39	-45.69	283
284	34	15.22	114 29.38	1316.0	979546.63	-9.40	-55.31	0.54	0.10	0.25	0.00	0.35	-55.31	-47.39	284
285	34	14.34	114 29.38	1238.0	979550.05	-14.91	-57.13	0.50	0.10	0.16	0.00	0.26	-57.38	-49.90	285
286	34	13.48	114 29.38	1132.0	979551.48	-22.25	-60.86	0.46	0.06	0.10	0.00	0.16	-61.16	-54.31	286
287	34	12.60	114 29.38	1034.0	979556.90	-24.82	-60.08	0.43	0.05	0.04	0.00	0.09	-60.41	-54.15	287
288	34	13.45	114 34.62	1075.0	979550.10	-28.95	-65.61	0.44	0.05	-0.01	0.00	0.04	-66.01	-59.49	288
289	34	13.89	114 35.66	1098.0	979550.91	-26.59	-64.04	0.45	0.05	-0.00	0.00	0.05	-64.44	-57.78	289
290	34	14.32	114 35.66	1150.0	979547.06	-26.15	-65.37	0.47	0.05	0.01	0.00	0.06	-65.78	-58.80	290
291	34	14.32	114 36.75	1111.0	979547.00	-29.88	-67.77	0.46	0.05	0.01	0.00	0.06	-68.16	-61.42	291
292	34	14.58	114 37.73	1155.0	979541.66	-31.44	-70.83	0.47	0.04	0.03	0.00	0.07	-71.23	-64.23	292
293	34	16.45	114 41.18	1442.0	979524.52	-24.20	-73.38	0.58	0.13	0.30	0.00	0.43	-73.53	-64.84	293
294	34	16.05	114 40.94	1386.0	979526.16	-27.27	-74.54	0.56	0.08	0.27	0.00	0.35	-74.74	-66.39	294
295	34	20.06	114 43.29	1603.0	979515.06	-23.57	-78.24	0.63	0.08	0.38	0.00	0.46	-78.41	-68.76	295
296	34	22.22	114 44.45	1658.0	979513.02	-23.46	-80.01	0.65	0.10	0.51	0.00	0.61	-80.05	-70.09	296
297	34	26.49	114 35.69	1122.0	979563.02	-29.85	-68.12	0.46	0.03	-0.05	0.00	-0.02	-68.60	-61.78	297
298	34	27.36	114 35.70	1218.0	979561.91	-23.18	-64.72	0.49	0.03	0.04	0.00	-0.01	-65.22	-57.82	298
299	34	28.23	114 35.70	1313.0	979559.60	-17.75	-62.53	0.53	0.03	-0.00	0.00	0.03	-63.03	-55.06	299
300	34	28.23	114 36.72	1317.0	979557.34	-19.63	-64.55	0.53	0.03	-0.02	0.00	0.01	-65.07	-57.07	300

Table 1.--Principal facts for gravity stations in the Vidal area, California and Arizona--Continued

STATION	LATITUDE	LONGITUDE	ELEV	OBS GRAV	F.A.	S.R.1	S.B.2	CC	TC	TER (NEAR)	TUT	C.B.1	C.B.2	ACC	STA
301	34 28.23	114 37.80	1308.0	979555.01	-22.81	-67.42	-59.57	0.53	0.03	-0.03	0.00	-67.94	-60.00		301
302	34 23.00	114 38.84	1227.0	979544.57	-33.54	-75.39	-68.02	0.50	0.03	-0.02	0.00	-75.87	-68.42		302
303	34 23.00	114 37.78	1201.0	979548.85	-31.70	-72.67	-65.46	0.49	0.03	-0.03	0.00	-73.16	-65.86		303
304	34 23.00	114 36.72	1220.0	979549.27	-29.50	-71.11	-63.78	0.50	0.03	-0.04	0.00	-71.61	-64.20		304
305	34 23.00	114 35.72	1197.0	979548.92	-32.01	-72.84	-65.65	0.49	0.03	-0.04	0.00	-73.33	-66.06		305
306	34 5.99	114 56.46	863.0	979557.83	-30.74	-60.18	-55.00	0.36	0.03	-0.01	0.00	-60.52	-55.28		306
307	34 4.82	114 58.68	945.0	979554.16	-25.07	-57.30	-51.63	0.39	0.03	-0.01	0.00	-57.67	-51.93		307
308	34 28.25	114 33.59	1255.0	979563.48	-19.35	-62.15	-54.62	0.51	0.04	0.03	0.00	-62.59	-54.98		308
309	34 27.38	114 33.59	1157.0	979567.26	-23.57	-63.03	-56.08	0.47	0.04	-0.01	0.00	-63.47	-56.45		309
310	34 29.64	114 34.55	1481.0	979557.28	-6.24	-56.75	-47.86	0.59	0.05	0.14	0.00	-57.15	-48.19		310
311	34 29.21	114 33.69	1367.0	979561.28	-12.36	-58.98	-50.78	0.55	0.04	0.10	0.00	-59.39	-51.11		311
312	34 28.92	114 32.08	1227.0	979557.32	-19.08	-60.93	-53.56	0.50	0.05	0.09	0.00	-61.29	-53.86		312
313	34 28.35	114 31.16	1109.0	979570.93	-25.77	-63.60	-56.94	0.45	0.05	0.05	0.00	-63.95	-57.23		313
314	34 27.91	114 30.20	977.0	979578.57	-29.93	-63.25	-57.39	0.40	0.04	0.03	0.00	-63.59	-57.67		314
315	34 27.38	114 29.29	864.0	979589.53	-28.86	-58.32	-53.14	0.36	0.04	0.03	0.00	-58.62	-53.38		315
316	34 26.68	114 28.68	785.0	979539.20	-27.52	-53.61	-49.02	0.32	0.05	0.08	0.00	-53.80	-49.17		316
317	34 25.74	114 28.95	876.0	979588.39	-26.63	-56.50	-51.24	0.37	0.04	0.03	0.00	-56.80	-51.49		317
318	34 14.46	114 26.90	1250.0	979547.47	-16.53	-59.16	-51.66	0.51	0.10	0.30	0.00	-59.26	-51.74		318
319	34 14.65	114 27.50	1304.0	979542.64	-16.55	-61.02	-53.19	0.53	0.14	0.29	0.00	-61.12	-53.27		319
320	34 16.85	114 29.02	1586.0	979534.60	-1.14	-55.23	-45.71	0.63	0.15	0.42	0.00	-55.29	-45.76		320
321	34 22.71	114 30.87	1233.0	979559.46	-17.68	-59.73	-52.33	0.50	0.05	0.06	0.00	-60.12	-52.65		321
322	34 23.00	114 30.46	1175.0	979563.69	-19.31	-59.38	-52.33	0.48	0.05	0.05	0.00	-59.76	-52.64		322
323	34 24.08	114 29.88	1056.0	979571.65	-24.05	-60.07	-53.73	0.43	0.04	0.03	0.00	-60.44	-54.03		323
324	34 27.95	114 31.25	1049.0	979572.31	-29.48	-65.25	-58.96	0.43	0.03	0.03	0.00	-65.63	-59.26		324
325	34 26.63	114 27.96	802.0	979599.07	-24.10	-51.45	-46.63	0.34	0.04	0.04	0.00	-51.70	-46.84		325
326	34 25.80	114 26.77	822.0	979593.44	-26.68	-54.72	-49.78	0.34	0.04	0.08	0.00	-54.94	-49.97		326
327	34 25.15	114 24.60	817.0	979592.15	-27.53	-55.40	-50.49	0.34	0.04	0.17	0.00	-55.53	-50.61		327
328	34 24.51	114 23.19	914.0	979587.33	-22.33	-53.51	-48.02	0.38	0.06	0.24	0.00	-53.59	-48.09		328
329	34 23.93	114 24.14	969.0	979584.10	-19.58	-52.63	-46.81	0.40	0.06	0.28	0.00	-52.69	-46.86		329
330	34 23.15	114 23.26	1144.0	979573.78	-12.34	-51.36	-44.49	0.47	0.10	0.44	0.00	-51.29	-44.43		330
331	34 24.34	114 26.20	1002.0	979581.52	-19.63	-53.80	-47.79	0.41	0.05	0.14	0.00	-54.03	-47.97		331
332	34 23.01	114 27.30	1238.0	979566.44	-10.65	-52.87	-45.44	0.50	0.08	0.19	0.00	-53.10	-45.63		332
333	34 22.33	114 27.68	1366.0	979559.88	-4.22	-50.81	-42.61	0.55	0.08	0.25	0.00	-51.03	-42.79		333
334	34 21.69	114 27.68	1410.0	979559.21	-0.13	-48.22	-39.76	0.56	0.08	0.28	0.00	-48.42	-39.92		334
335	34 25.29	114 27.49	927.0	979585.25	-23.68	-55.30	-49.73	0.39	0.04	0.05	0.00	-55.59	-49.98		335
336	34 25.89	114 28.44	856.0	979592.23	-24.82	-54.02	-48.88	0.36	0.04	0.04	0.00	-54.30	-49.11		336
337	34 26.38	114 28.84	810.0	979595.88	-26.18	-53.81	-48.95	0.34	0.04	0.05	0.00	-54.06	-49.15		337
338	33 55.59	114 23.37	320.0	979601.54	-23.62	-34.54	-32.62	0.14	0.03	-0.09	0.00	-34.74	-32.78		338
339	33 54.81	114 21.26	663.0	979572.65	-19.16	-41.78	-37.80	0.28	0.04	-0.09	0.00	-42.11	-38.07		339
340	33 56.46	114 22.10	319.0	979603.64	-22.83	-33.71	-31.79	0.14	0.03	-0.04	0.00	-33.86	-31.92		340
341	33 57.11	114 22.00	322.0	979605.56	-21.53	-32.51	-30.58	0.14	0.03	-0.05	0.00	-32.67	-30.71		341
342	33 57.55	114 21.83	328.0	979612.33	-14.81	-26.00	-24.03	0.14	0.04	-0.05	0.00	-26.15	-24.15		342
343	33 58.43	114 21.83	350.0	979616.28	-10.01	-21.95	-19.85	0.15	0.04	-0.08	0.00	-22.14	-20.01		343
344	33 59.08	114 21.83	321.0	979615.49	-14.44	-25.38	-23.46	0.14	0.03	-0.07	0.00	-25.57	-23.61		344
345	33 59.51	114 21.83	325.0	979614.64	-15.51	-26.59	-24.64	0.14	0.03	-0.09	0.00	-26.79	-24.81		345
346	33 55.68	114 17.34	891.0	979561.18	-10.40	-40.79	-35.44	0.37	0.03	-0.08	0.00	-41.20	-35.78		346
347	33 54.81	114 17.69	864.0	979561.28	-11.63	-41.10	-35.91	0.36	0.03	-0.09	0.00	-41.51	-36.25		347
348	33 53.94	114 18.04	857.0	979560.59	-11.77	-41.00	-35.85	0.36	0.03	-0.09	0.00	-41.42	-36.20		348
349	33 52.38	114 18.42	863.0	979559.64	-10.82	-40.25	-35.07	0.36	0.03	-0.09	0.00	-40.67	-35.41		349
350	33 52.10	114 18.77	836.0	979559.74	-12.03	-40.55	-35.53	0.35	0.03	-0.10	0.00	-40.96	-35.87		350

Table 1.--Principal facts for gravity stations in the Vidal area, California and Arizona--Continued

STATION	LATITUDE	LONGITUDE	08S GRAV	F.A.	S.B.1	S.B.2	CC	TC	TER (NEAR)	TOT	C.B.1	C.B.2	ACC	STA
351	33 47.75	114 19.74	668.0	28.96	-51.74	-47.73	0.28	0.04	-0.07	0.00	-52.06	-47.99		351
352	33 46.89	114 19.95	542.0	32.14	-50.63	-47.37	0.23	0.06	-0.02	0.00	-50.81	-47.53		352
353	33 46.49	114 19.47	559.0	31.69	-50.75	-47.40	0.24	0.06	-0.02	0.00	-50.95	-47.56		353
354	33 45.61	114 18.09	647.0	30.54	-52.60	-48.72	0.27	0.05	-0.02	0.00	-52.65	-48.92		354
355	33 45.44	114 17.69	663.0	30.77	-53.38	-49.40	0.28	0.05	-0.02	0.00	-53.63	-49.61		355
356	33 47.05	114 21.16	512.0	29.87	-47.34	-44.26	0.22	0.06	-0.02	0.00	-47.51	-44.41		356
357	33 48.45	114 20.97	711.0	19.56	-43.81	-39.54	0.30	0.10	-0.08	0.00	-44.09	-39.77		357
358	33 46.45	114 22.57	775.0	21.28	-47.71	-43.06	0.33	0.08	-0.02	0.00	-47.98	-43.28		358
359	33 48.38	114 23.15	719.0	20.61	-45.13	-40.82	0.30	0.10	-0.04	0.00	-45.37	-41.01		359
360	34 10.50	114 3.24	1165.3	18.41	-58.16	-51.16	0.48	0.08	0.00	0.00	-58.54	-51.48		360
361	34 10.11	114 3.32	1141.9	15.76	-54.71	-47.85	0.47	0.08	0.01	0.00	-55.08	-48.16		361
362	34 9.70	114 3.35	1137.9	14.24	-53.05	-46.22	0.47	0.08	0.01	0.00	-53.43	-46.53		362
363	34 9.22	114 3.48	1095.6	13.07	-50.44	-43.86	0.45	0.08	0.00	0.00	-50.81	-44.16		363
364	34 8.90	114 3.51	1082.8	12.29	-49.22	-47.72	0.44	0.08	-0.00	0.00	-49.59	-43.02		364
365	34 8.46	114 3.62	1058.0	13.77	-49.85	-43.50	0.44	0.08	-0.01	0.00	-50.22	-43.80		365
366	34 8.02	114 3.66	1040.5	12.85	-48.34	-42.09	0.43	0.06	-0.02	0.00	-48.73	-42.41		366
367	34 7.72	114 4.08	1009.3	13.86	-48.28	-42.22	0.42	0.06	-0.03	0.00	-48.67	-42.54		367
368	34 7.38	114 4.45	993.5	14.17	-48.05	-42.09	0.41	0.06	-0.04	0.00	-48.45	-42.41		368
369	34 7.16	114 4.82	971.1	15.98	-49.10	-43.27	0.40	0.05	-0.04	0.00	-49.50	-43.60		369
370	34 6.96	114 5.26	946.2	16.77	-49.04	-43.36	0.39	0.05	-0.04	0.00	-49.43	-43.68		370
371	34 6.83	114 5.78	921.0	13.97	-45.38	-39.85	0.38	0.06	-0.04	0.00	-45.75	-40.16		371
372	34 6.82	114 6.32	896.7	13.46	-44.05	-38.66	0.37	0.06	-0.04	0.00	-44.40	-38.96		372
373	34 6.85	114 6.83	877.2	16.06	-45.98	-40.71	0.37	0.06	-0.04	0.00	-46.33	-41.00		373
374	34 6.85	114 7.38	856.4	19.37	-48.58	-43.44	0.36	0.06	-0.05	0.00	-48.93	-43.73		374
375	34 7.00	114 7.86	832.8	21.41	-49.82	-44.82	0.35	0.06	-0.05	0.00	-50.16	-45.10		375
376	34 7.18	114 8.39	812.0	23.24	-50.94	-46.06	0.34	0.05	-0.05	0.00	-51.28	-46.34		376
377	34 7.24	114 8.81	789.6	23.78	-50.71	-45.97	0.33	0.05	-0.06	0.00	-51.05	-46.25		377
378	34 7.50	114 9.22	770.4	23.24	-49.52	-44.89	0.32	0.05	-0.06	0.00	-49.84	-45.16		378
379	34 7.64	114 9.70	749.1	22.00	-47.55	-43.05	0.32	0.05	-0.06	0.00	-47.87	-43.32		379
380	34 7.79	114 10.18	725.7	20.90	-45.65	-41.29	0.31	0.06	-0.07	0.00	-45.97	-41.55		380
381	34 7.94	114 10.68	699.4	20.68	-44.54	-40.34	0.30	0.08	-0.07	0.00	-44.82	-40.57		381
382	34 8.35	114 10.03	633.2	23.30	-44.90	-41.10	0.27	0.10	-0.03	0.00	-45.10	-41.26		382
383	34 8.81	114 2.45	1242.0	7.92	-50.28	-42.82	0.50	0.15	0.02	0.00	-50.61	-43.10		383
384	34 8.69	114 11.07	621.0	24.20	-45.38	-41.66	0.26	0.10	-0.02	0.00	-45.57	-41.81		384
385	34 8.75	114 11.62	603.6	25.37	-45.96	-42.34	0.26	0.10	-0.03	0.00	-46.15	-42.49		385
386	34 8.75	114 12.00	628.8	26.90	-48.35	-44.57	0.27	0.06	-0.05	0.00	-48.61	-44.79		386
387	34 8.72	114 12.48	619.6	28.04	-49.17	-45.45	0.26	0.05	-0.07	0.00	-49.45	-45.68		387
388	34 8.66	114 13.03	597.3	28.17	-48.54	-44.96	0.25	0.04	-0.07	0.00	-48.83	-45.19		388
389	34 8.22	114 13.25	602.9	25.53	-46.09	-42.47	0.26	0.04	-0.07	0.00	-46.40	-42.73		389
390	34 7.95	114 13.56	591.2	25.58	-45.75	-42.20	0.25	0.04	-0.10	0.00	-46.06	-42.46		390
391	34 7.82	114 13.94	563.4	27.27	-46.48	-43.10	0.24	0.04	-0.09	0.00	-46.78	-43.34		391
392	34 7.78	114 14.53	535.2	29.98	-48.23	-45.02	0.23	0.03	-0.09	0.00	-48.52	-45.26		392
393	34 7.75	114 15.35	523.8	31.03	-48.89	-45.75	0.22	0.03	-0.10	0.00	-49.19	-45.99		393
394	34 7.77	114 15.95	518.6	29.17	-46.86	-43.75	0.22	0.03	-0.10	0.00	-47.16	-43.99		394
395	34 11.31	114 13.45	371.0	39.65	-52.30	-50.07	0.16	0.11	0.15	0.00	-52.20	-49.99		395
396	34 13.14	114 11.83	376.0	42.85	-55.28	-53.02	0.16	0.12	0.31	0.00	-55.01	-52.80		396
397	34 14.00	114 10.90	379.0	43.31	-56.24	-53.96	0.16	0.11	0.39	0.00	-55.91	-53.69		397
398	34 12.00	114 10.01	720.0	29.58	-54.14	-49.82	0.30	0.10	0.09	0.00	-53.76	-49.50		398
399	34 11.92	114 8.75	1000.0	23.16	-57.27	-51.27	0.41	1.20	0.03	0.00	-56.45	-50.59		399
400	34 10.62	114 14.45	374.0	37.08	-49.84	-47.59	0.16	0.08	0.08	0.00	-49.84	-47.59		400

Table 1.--Principal facts for gravity stations in the Vidal area, California and Arizona--Continued

STATION	LATITUDE	LONGITUDE	ELEV	ORS GRAY	F. A.	S. B. 1	S. B. 2	CC	TC	TER (NEAR)	TOT	C. B. 1	C. B. 2	ACC	STA		
401	34	10.17	114	15.96	366.0	979603.74	-37.42	-49.90	-47.70	0.16	0.05	0.06	0.00	0.11	-49.95	-47.75	401
402	34	7.08	114	18.18	416.0	979597.82	-34.32	-48.51	-46.01	0.18	0.05	-0.11	0.00	-0.06	-48.75	-46.21	402
403	34	10.83	114	45.10	1447.0	979540.89	0.49	-48.86	-40.18	0.58	0.05	0.39	0.00	0.44	-49.00	-40.29	403
404	34	12.58	114	45.10	1646.0	979523.93	-0.20	-56.34	-46.45	0.65	0.05	0.54	0.00	0.59	-56.39	-46.50	404
405	34	9.25	114	46.32	1457.0	979538.55	1.30	-48.40	-39.65	0.58	0.05	0.39	0.00	0.43	-48.55	-39.78	405
406	34	10.84	114	44.66	1393.0	979540.26	-5.23	-52.74	-44.38	0.56	0.04	0.27	0.00	0.31	-52.99	-44.58	406
407	34	11.37	114	43.47	1410.0	979536.38	-8.25	-56.34	-47.88	0.56	0.04	0.26	0.00	0.30	-56.60	-48.09	407
408	34	11.99	114	42.33	1410.0	979531.25	-14.25	-62.34	-53.87	0.56	0.04	0.22	0.00	0.26	-62.64	-54.12	408
409	34	12.57	114	43.00	1525.0	979525.36	-10.13	-62.15	-52.99	0.60	0.04	0.32	0.00	0.36	-62.39	-53.19	409
410	34	1.63	114	46.52	709.0	979559.51	-37.47	-61.65	-57.40	0.30	0.03	-0.06	0.00	-0.03	-61.99	-57.67	410
411	34	1.70	114	47.19	700.0	979559.91	-38.02	-61.89	-57.69	0.30	0.03	-0.06	0.00	-0.03	-62.21	-57.95	411
412	34	3.03	114	47.20	737.0	979557.94	-38.36	-63.49	-59.07	0.31	0.03	-0.03	0.00	0.00	-63.80	-59.32	412
413	34	3.91	114	48.30	814.0	979559.21	-31.07	-58.84	-53.95	0.34	0.03	-0.00	0.00	0.03	-59.15	-54.21	413
414	34	9.80	114	2.90	1234.0	979545.69	-13.30	-55.39	-47.98	0.50	0.10	0.01	0.00	0.11	-55.78	-48.30	414

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Appendix

Descriptive material for gravity base stations used during the Vidal area gravity survey.

GRAVITY BASE STATION	
NAME VIDAL*	STATE California
LATITUDE 37°04.20'	LONGITUDE 114°30.55'
ELEVATION 191.26 m (627.5 ft)	QUADRANGLE VIDAL
OBSERVED GRAVITY 979,588.00	SBA ---
LOCATION DESCRIPTION:	
<p>Base station is at VIDAL, at the northeast corner of the intersection of Vidal Avenue and Fitz Street, 27.43 m (90 ft) east of the center line of Vidal Avenue, 15.24 m (50 ft) north of the centerline of Fitz Street and 29.87 m (98 ft) south of the A.T. & S.F. Railway tracks. A standard marker set on top of a concrete post and stamped T-160 1933 USC&GS. The gravity observation was taken on top of the bench mark.</p> <p>*Chapman, R. H., 1966, Gravity base station network: California Division Mines and Geology, Special Report 90, p. 28.</p>	

GRAVITY BASE STATION	
NAME Parker (Station 161)	STATE Arizona
LATITUDE 34°09.52'	LONGITUDE 114°16.84'
ELEVATION 129.84 m (426 ft)	QUADRANGLE Parker
OBSERVED GRAVITY 979,599.20	SBA ---
LOCATION DESCRIPTION:	
<p>Base station is located about 1.45 km (0.9 mi) northeast of the junction of Arizona Highway 72 leading through Parker along Arizona Highway 95 leading to Parker Dam. Thence, about 0.48 km (0.3 mi) west on a gravel road, 6.1 m (20 ft) north of centerline of road. A standard marker on top of an iron pipe and stamped USGS 424 feet. The gravity observation was taken on the ground 0.3 m (1 ft) north of the bench mark.</p>	