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PRINCIPAL FACTS FOR NEW GRAVITY STATIONS IN THE PAHUTE MESA AND OASIS VALLEY AREAS, NYE COUNTY, NEVADA

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Open-File Report 98-498

Prepared in cooperation with the
U.S. DEPARTMENT OF ENERGY
NEVADA OPERATIONS OFFICE
(Interagency Agreement DE-AI08-96NV11967)

1998

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

Menlo Park, California 94025

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INTRODUCTION

Regional gravity and aeromagnetic maps of the Pahute Mesa and Oasis Valley region indicate the presence of several structures that may influence the flow of groundwater (McCafferty and Grauch, 1997). For example, several prominent linear features expressed by both gravity and aeromagnetic data could act either as barriers or conduits for groundwater (fig 1). The current gravity study was undertaken to better define the boundaries of the interpreted major regional structures in the area. Existing gravity data for this area are available and summarized by Ponce (1997). Gravity and aeromagnetic data, along with results from a concurrent magnetotelluric (MT) study (Schenkel, 1998) will be combined with existing geologic data to develop robust tectonic models of the subsurface. Results are intended to provide constraints in the development of hydrological models for groundwater flow in the area. The geophysical investigations are part of an interagency effort between the U.S. Geological Survey (USGS) and the U.S. Department of Energy (DOE) under Interagency Agreement DE-AI08-96NV11967.

The current investigation is concentrated in the area between lat. 36°52' and 37°22' N., and between long. 116°22' and 116°47' W. Locations of the new gravity stations are shown in figure 1.

ACKNOWLEDGMENTS

We thank Gary Dixon and Jerry Magner of the USGS for arranging the logistics on the Nevada Test Site and for facilitating our work there. Officials at the Nellis Air Force Range were very accommodating by allowing access necessary to complete our study. Thanks, also, to Glenn Coffer and David Spicer for access to their properties. Discussions with V. Langenheim, R. Morin, D. Ponce, and R. Sikora were very helpful. This paper was reviewed by D. Ponce.

PROCEDURES

Gravity data were obtained using a LaCoste and Romberg meter (USGS meter G17C) and observed gravity values were referenced to the International Gravity Standardization Net 1971 (ISGN 71) gravity datum (Morelli, 1974). Gravity observations were tied to two ISGN 71 base stations (see descriptions in Harris and others, 1989); one within the USGS's core library building at the Nevada Test Site (*MERCA*) and another at the original Beatty post office (*BPO*), now the Death Valley Visitor Center. Revised observed gravity values at *MERCA* and *BPO* and are 979,518.89 and 979,566.45 mGal, respectively (D.A. Ponce, written communication, 1997). A secondary gravity base was established on Pahute Mesa at lat. 37°14.47' N., long. 116°27.60' W., elev. 1932 m, and it has an observed gravity value of 979,320.94 mGal. This base was established by repeat occupations using two different gravity meters (USGS meters G17C and G614).

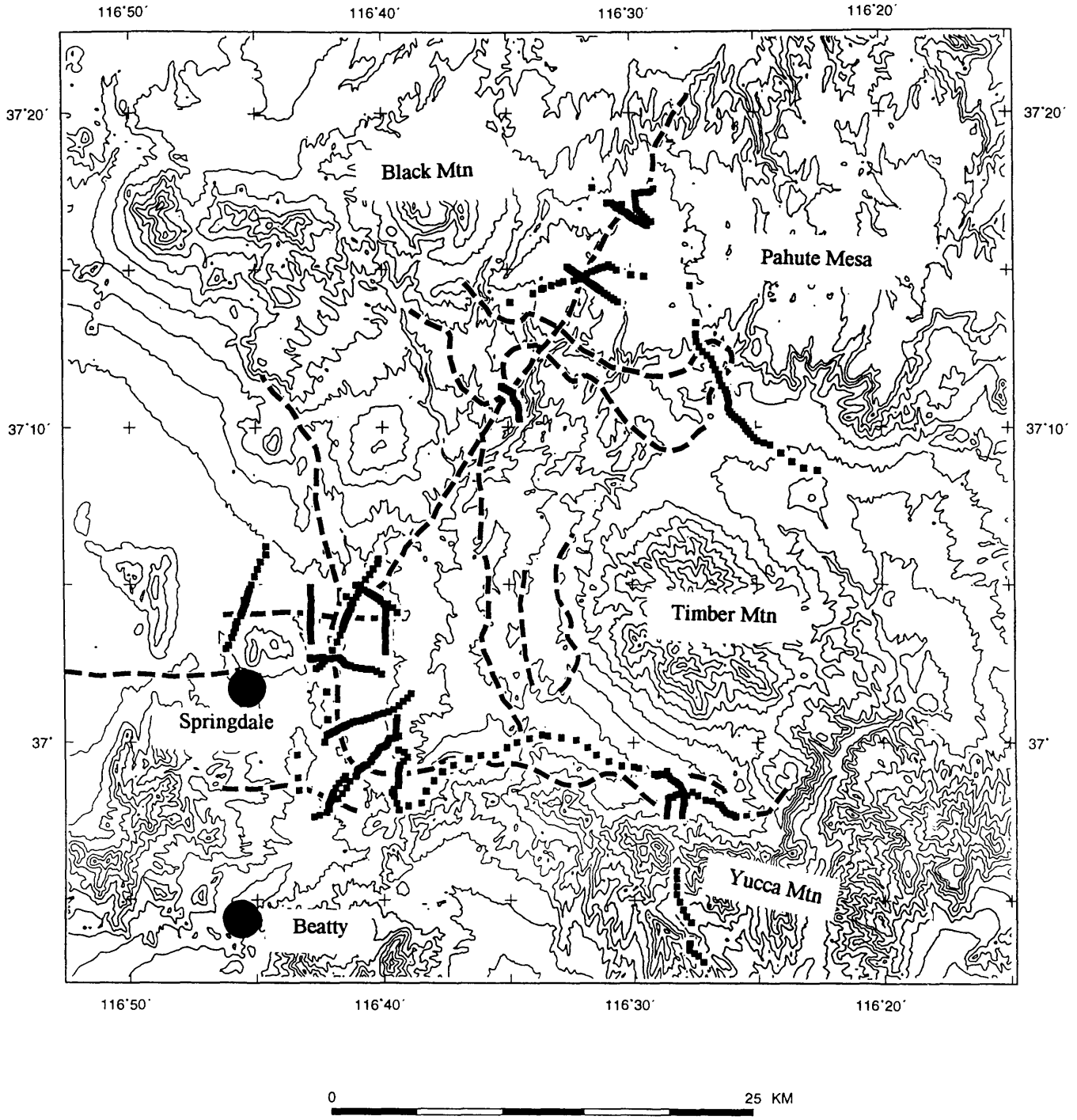

Figure 1. Index map of the Pahute Mesa - Oasis Valley area. The heavy dashed lines denote prominent gravity features seen on regional anomaly maps. Gravity stations established for this study are shown as black squares.

Observed gravity at each station was adjusted by assuming a time-dependent linear drift between readings of a base station at the start and finish of the daily survey. This adjustment compensates for drift in the instrument's spring. Observed gravity values are considered accurate to about 0.05 mGal based on repeat measurements over several mountain calibration loops (Barnes and others, 1969; Ponce and Oliver, 1981). All gravity data were reduced using standard gravity corrections (Harris and others, 1989) and a reduction density of 2670 kg/m^3. Terrain corrections, which are necessary to account for variations in topography near a gravity station, were obtained using the Hayford and Bowie (1912) system. The calculations used digitized topography in a digital elevation model (DEM) and a procedure by Plouff (1977). An isostatic correction was calculated for all data in order to remove long-wavelength variations in the gravity field that are inversely related to topography. The resulting isostatic residual gravity, therefore, is a reflection of density distributions within middle to upper crustal levels.

GRAVITY DATA

Four hundred and eighty seven gravity stations were established in the Pahute Mesa - Oasis Valley area during November 1997, March 1998, and June 1998. Most stations were along profiles designed to cross perpendicularly some of the prominent gravity and aeromagnetic features mentioned above. When nearing a suspected feature, the station spacing was reduced from about 500 m to approximately 100 m. The combination of a perpendicular profile and closely spaced gravity observations will provide important constraints on the depth and dip of modeled sources. A few stations were established where the regional coverage was poor.

Precise locations of gravity stations were determined using a differential global positioning system (GPS). Documented elevations on Pahute Mesa near our study area are scarce, and "spot" elevations on topographic maps were initially used for control. The survey network later was adjusted on the basis of GPS measurements made at accurately determined locations of exploratory wells within the area.. Benchmarks in the vicinity of Beatty and Springdale were used for network control in the Oasis Valley area, and this control was carried into part of the Beatty Wash area. Positions of most gravity stations are considered accurate to within about 0.3 m. Elevations for stations PM423 to PM443 in Beatty Wash, however, are accurate only to within 3 m because of an inadvertent loss of GPS data. Relative elevations within a particular profile are accurate to about 0.03 m. The largest sources of error in gravity surveys are uncertainties in elevation and in the terrain correction, particularly in areas of rugged topography. Typical regional gravity surveys, however, probably have anomaly values accurate to within 2 mGal (Simpson and Jachens, 1989). With our precise elevation control and the subdued topography near most of our gravity profiles, Bouguer anomaly values we determine generally are accurate to within 0.1 mGal.

All gravity data and their associated parameters are given in table 1. Terrain corrections for Hayford and Bowie (1912) zones A and B, with an outer radius of 68 m, were estimated in the field and are not given in table 1. The free-air anomaly listed accounts for the difference in elevation between the gravity station and geoid. This anomaly also includes corrections for Earth tides (tidal effects of both the moon and the sun), instrument drift, latitude, and the Earth's curvature. The free-air anomaly was calculated using the Geodetic Reference System 1967 formula for theoretical gravity on the ellipsoid (Swick, 1942; International Union of Geodesy and Geophysics, 1971). The column, "TERRAIN-HAND," lists the inner-zone terrain correction (Hayford and Bowie zones A, B, C and D) calculated using a density of 2670 kg/m^3. "D" in the table denotes that the correction was carried out to zone D with an outer radius of 0.59 km. These calculations were made using a program developed by Spielman and Ponce (1984). The total terrain correction ("TERRAIN-COMP") removes the effects of topography out to a radius of 166.7 km from the gravity station (Plouff, 1977). The complete Bouguer anomaly ("BOUGUER ANOM") accounts for the mass above the reference ellipsoid, which we approximate as the geoid or mean sea level. The isostatic residual gravity anomaly ("ISOST ANOM") was determined by subtracting an isostatic regional field from the complete Bouger anomaly. This regional isostatic field was calculated using an Airy-Heiskanen (Heiskanen and Vening Meinesz, 1958) model for local compensation of topographic loads (Simpson and others, 1983, 1986). This model assumes a crustal thickness of 25 km, a crustal density of 2670 kg/m^3, and a 400 kg/m^3 density contrast between the crust and mantle.

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TABLE 1.—*Principal facts of gravity data from Pahute Mesa/Oasis Valley*

STATION NAME	LATITUDE	LONGITUDE	ELEV (m)	OBS GRAV (mGal)	FREE AIR	TERRAIN HAND	TERRAIN COMP	BOUG ANOM	ISOST ANOM
97PM001	37 14.22	116 33.95	1741.8	979378.02	-10.1	0.1D	1.0	-205.4	-46.1
97PM002	37 14.47	116 27.60	1932.4	979320.94	-8.7	0.1D	1.5	-225.0	-64.6
97PM003	37 15.09	116 31.00	1886.1	979337.88	-7.0	0.1D	1.4	-218.1	-57.7
97PM004	37 15.15	116 30.86	1892.3	979336.01	-7.0	0.0D	1.4	-218.9	-58.3
97PM005	37 15.07	116 30.72	1896.8	979334.08	-7.4	0.0D	1.4	-219.8	-59.3
97PM006	37 14.97	116 30.55	1896.7	979333.37	-8.0	0.0D	1.4	-220.4	-60.0
97PM007	37 17.06	116 30.33	1901.0	979342.61	-0.5	0.4D	1.6	-213.1	-50.9
97PM008	37 16.72	116 30.03	1844.5	979350.43	-9.6	0.0D	1.1	-216.4	-54.4
97PM009	37 16.75	116 30.07	1841.2	979351.50	-9.6	0.1D	1.2	-216.0	-53.9
97PM010	37 16.78	116 30.11	1840.4	979352.06	-9.3	0.1D	1.2	-215.6	-53.5
97PM011	37 16.81	116 30.17	1838.8	979352.85	-9.1	0.2D	1.3	-215.0	-52.9
97PM012	37 16.83	116 30.23	1848.0	979351.63	-7.5	0.2D	1.3	-214.5	-52.4
97PM013	37 16.86	116 30.33	1871.0	979347.47	-4.6	0.2D	1.3	-214.2	-52.1
97PM014	37 16.69	116 30.00	1848.8	979349.09	-9.6	0.0D	1.1	-216.8	-54.8
97PM015	37 16.66	116 29.94	1853.0	979347.83	-9.5	0.0D	1.1	-217.2	-55.3
97PM016	37 16.63	116 29.89	1851.2	979347.93	-9.9	0.1D	1.2	-217.4	-55.4
97PM017	37 16.61	116 29.83	1847.7	979348.38	-10.5	0.0D	1.1	-217.6	-55.7
97PM018	37 16.58	116 29.78	1850.2	979347.59	-10.5	0.0D	1.1	-217.9	-56.0
97PM019	37 16.55	116 29.72	1855.9	979346.02	-10.3	0.0D	1.1	-218.3	-56.4
97PM020	37 16.53	116 29.66	1857.5	979345.39	-10.4	0.0D	1.1	-218.6	-56.7
97PM021	37 16.50	116 29.55	1856.0	979345.48	-10.7	0.0D	1.1	-218.8	-56.9
97PM022	37 16.47	116 29.49	1856.1	979345.11	-11.0	0.0D	1.1	-219.1	-57.2
97PM023	37 16.89	116 30.34	1885.6	979344.95	-2.7	0.3D	1.5	-213.7	-51.7
97PM024	37 16.92	116 30.39	1862.8	979350.53	-4.2	0.1D	1.2	-212.9	-50.8
97PM025	37 16.94	116 30.50	1870.4	979350.20	-2.2	0.1D	1.2	-211.8	-49.7
97PM026	37 16.98	116 30.56	1860.8	979353.06	-2.3	0.1D	1.2	-210.9	-48.8
97PM027	37 17.11	116 30.74	1892.4	979347.29	1.5	0.1D	1.3	-210.5	-48.3
97PM028	37 17.06	116 30.65	1877.9	979350.17	-0.1	0.1D	1.2	-210.4	-48.3
97PM029	37 17.02	116 30.58	1866.6	979352.22	-1.4	0.1D	1.2	-210.6	-48.5
97PM030	37 17.11	116 30.92	1903.2	979345.39	2.9	0.2D	1.5	-210.1	-48.0
97PM031	37 16.44	116 29.43	1858.1	979344.21	-11.2	0.0D	1.1	-219.6	-57.7
97PM032	37 16.42	116 29.37	1859.1	979343.72	-11.4	0.0D	1.1	-219.8	-58.0
97PM033	37 16.39	116 29.32	1860.5	979343.11	-11.5	0.0D	1.1	-220.1	-58.3
97PM034	37 15.06	116 31.10	1876.7	979340.54	-7.2	0.1D	1.4	-217.3	-56.9
97PM035	37 15.05	116 31.17	1867.7	979342.75	-7.7	0.1D	1.3	-216.9	-56.5
97PM036	37 15.01	116 31.28	1854.3	979346.03	-8.5	0.1D	1.2	-216.2	-55.9
97PM037	37 14.97	116 31.40	1845.1	979348.83	-8.5	0.1D	1.2	-215.3	-54.9
97PM038	37 14.92	116 31.54	1836.1	979351.28	-8.7	0.0D	1.1	-214.6	-54.3
97PM039	37 14.86	116 31.71	1826.1	979353.81	-9.2	0.0D	1.1	-213.9	-53.8
97PM040	37 14.79	116 31.91	1814.3	979356.60	-10.0	0.1D	1.1	-213.4	-53.3
97PM041	37 14.67	116 32.07	1813.7	979357.08	-9.5	0.0D	1.1	-212.8	-52.9
97PM042	37 14.63	116 32.26	1808.3	979359.42	-8.7	0.0D	1.1	-211.5	-51.6
97PM043	37 14.72	116 31.89	1806.7	979360.25	-8.6	0.2D	1.2	-211.0	-51.0
97PM044	37 14.60	116 32.70	1802.6	979361.70	-8.2	0.0D	1.1	-210.3	-50.5
97PM045	37 14.55	116 32.89	1796.8	979363.12	-8.5	0.0D	1.0	-210.0	-50.2
97PM046	37 14.47	116 33.20	1787.2	979366.60	-7.8	0.0D	1.0	-208.3	-48.6
97PM047	37 14.39	116 33.52	1782.9	979367.69	-8.0	0.1D	1.1	-207.9	-48.4
97PM048	37 14.35	116 33.61	1774.9	979369.74	-8.3	0.1D	1.0	-207.4	-47.9
97PM049	37 14.75	116 31.95	1816.8	979356.05	-9.7	0.0D	1.1	-213.4	-53.3
97PM050	37 14.71	116 31.94	1819.5	979354.97	-9.9	0.0D	1.1	-213.9	-53.9
97PM051	37 14.68	116 31.83	1823.6	979353.78	-9.7	0.0D	1.1	-214.2	-54.2
97PM052	37 14.65	116 31.77	1822.1	979353.89	-10.0	0.0D	1.1	-214.3	-54.3
97PM053	37 14.62	116 31.71	1822.1	979353.74	-10.1	0.0D	1.1	-214.4	-54.4
97PM054	37 14.58	116 31.65	1824.8	979352.77	-10.2	0.0D	1.1	-214.8	-54.8
97PM055	37 14.55	116 31.59	1826.3	979352.17	-10.3	0.0D	1.1	-215.0	-55.1
97PM056	37 14.52	116 31.53	1828.1	979351.47	-10.4	0.1D	1.2	-215.3	-55.4
97PM057	37 14.48	116 31.47	1830.1	979350.75	-10.5	0.1D	1.2	-215.5	-55.6
97PM058	37 14.45	116 31.41	1836.0	979349.00	-10.4	0.2D	1.4	-215.9	-56.0
97PM059	37 14.42	116 31.35	1847.4	979345.41	-10.4	0.3D	1.5	-217.1	-57.3
97PM060	37 14.38	116 31.30	1860.3	979341.80	-10.0	0.2D	1.5	-218.1	-58.3
97PM061	37 14.35	116 31.24	1873.4	979338.44	-9.2	0.2D	1.6	-218.8	-59.0
97PM062	37 14.32	116 31.18	1883.5	979335.83	-8.7	0.2D	1.7	-219.3	-59.5
97PM063	37 11.09	116 34.81	1613.4	979400.00	-23.1	0.1D	1.0	-204.1	-47.7
97PM064	37 11.01	116 34.81	1613.5	979399.50	-23.5	0.1D	1.0	-204.4	-48.1
97PM065	37 10.92	116 34.80	1614.0	979398.97	-23.7	0.1D	1.1	-204.7	-48.4
97PM066	37 10.84	116 34.74	1610.9	979399.04	-24.5	0.1D	1.1	-205.1	-48.9
97PM067	37 10.77	116 34.67	1605.6	979399.75	-25.3	0.1D	1.2	-205.2	-49.1
97PM068	37 10.70	116 34.62	1602.1	979400.07	-26.0	0.2D	1.3	-205.4	-49.3
97PM069	37 10.62	116 34.59	1596.5	979400.59	-27.1	0.3D	1.4	-205.7	-49.7
97PM070	37 10.53	116 34.56	1591.5	979401.00	-28.1	0.7D	1.7	-205.9	-49.9
97PM071	37 10.42	116 34.57	1587.8	979401.17	-28.9	1.0D	2.1	-205.9	-50.1
97PM072	37 10.32	116 34.58	1584.0	979401.18	-29.9	1.3D	2.3	-206.3	-50.6
97PM073	37 10.26	116 34.54	1581.2	979400.68	-31.2	2.5D	3.5	-206.0	-50.4
97PM074	37 11.13	116 34.90	1613.5	979400.22	-22.9	0.0D	1.0	-203.9	-47.5
97PM075	37 11.17	116 34.99	1614.0	979402.73	-20.3	0.1D	1.0	-201.4	-44.9
97PM076	37 11.21	116 35.08	1610.9	979405.26	-18.8	0.1D	1.0	-199.5	-43.0
97PM077	37 11.25	116 35.17	1605.6	979406.88	-18.9	0.2D	1.0	-198.9	-42.5
97PM078	37 11.29	116 35.26	1601.8	979407.80	-19.2	0.2D	1.0	-198.8	-42.3
97PM079	37 13.94	116 34.90	1734.0	979380.87	-9.2	0.0D	1.1	-203.7	-44.7
97PM080	37 13.95	116 30.52	1894.1	979330.86	-9.9	0.1D	1.5	-221.8	-62.2

TABLE 1.—*Principal facts of gravity data from Pahute Mesa/Oasis Valley*—Continued

STATION NAME	LATITUDE	LONGITUDE	ELEV (m)	OBS GRAV (mGal)	FREE AIR	TERRAIN HAND	TERRAIN COMP	BOUG ANOM	ISOST ANOM
97PM081	37 14.03	116 30.66	1887.9	979332.92	-9.8	0.1D	1.5	-221.1	-61.5
97PM082	37 14.10	116 30.79	1888.4	979333.60	-9.1	0.1D	1.5	-220.4	-60.8
97PM083	37 14.22	116 30.39	1897.2	979331.79	-8.4	0.1D	1.5	-220.7	-60.9
97PM084	37 14.30	116 30.53	1896.2	979332.53	-8.1	0.0D	1.4	-220.3	-60.5
97PM085	37 14.78	116 32.01	1814.2	979357.12	-9.4	0.0D	1.1	-212.9	-52.8
97PM086	37 14.82	116 32.06	1810.1	979358.72	-9.2	0.0D	1.0	-212.2	-52.1
97PM087	37 14.85	116 32.12	1808.8	979359.33	-9.0	0.0D	1.0	-211.8	-51.7
97PM088	37 14.88	116 32.18	1809.7	979359.56	-8.5	0.0D	1.0	-211.5	-51.3
97PM089	37 14.91	116 32.24	1809.7	979359.94	-8.2	0.0D	1.0	-211.2	-51.0
97PM090	37 14.95	116 32.30	1805.9	979361.08	-8.3	0.0D	1.0	-210.8	-50.6
97PM091	37 14.98	116 32.36	1806.4	979361.30	-7.9	0.0D	1.0	-210.5	-50.3
97PM092	37 15.01	116 32.42	1806.9	979361.67	-7.5	0.0D	1.0	-210.1	-49.9
97PM093	37 15.05	116 32.48	1804.9	979362.48	-7.3	0.1D	1.1	-209.7	-49.5
97PM094	37 15.08	116 32.54	1799.4	979364.00	-7.6	0.1D	1.1	-209.3	-49.0
97PM095	37 16.84	116 29.62	1849.3	979348.16	-10.6	0.0D	1.1	-217.9	-55.7
97PM096	37 16.89	116 29.72	1849.7	979348.54	-10.1	0.0D	1.1	-217.5	-55.3
97PM097	37 16.97	116 29.76	1852.0	979348.57	-9.5	0.1D	1.2	-217.1	-54.8
97PM098	37 17.06	116 29.77	1852.1	979348.82	-9.4	0.0D	1.1	-217.0	-54.7
97PM099	37 17.15	116 29.77	1857.2	979347.88	-8.9	0.0D	1.1	-217.1	-54.7
97PM100	37 17.24	116 29.78	1863.1	979346.81	-8.2	0.1D	1.1	-217.1	-54.7
97PM101	37 17.32	116 29.79	1868.9	979346.65	-6.8	0.1D	1.1	-216.2	-53.7
97PM102	37 17.41	116 29.80	1875.3	979346.81	-4.8	0.1D	1.2	-214.9	-52.3
97PM103	37 17.41	116 29.70	1871.0	979347.67	-5.2	0.1D	1.2	-214.9	-52.3
97PM104	37 17.42	116 29.59	1866.4	979348.55	-5.8	0.1D	1.2	-214.9	-52.3
97PM105	37 17.44	116 29.49	1865.7	979348.47	-6.1	0.1D	1.1	-215.2	-52.6
97PM106	37 17.44	116 29.38	1870.4	979347.01	-6.1	0.1D	1.1	-215.7	-53.1
97PM107	37 17.44	116 29.26	1875.9	979345.21	-6.2	0.0D	1.1	-216.5	-53.8
97PM108	37 17.47	116 29.16	1873.3	979345.50	-6.8	0.1D	1.2	-216.7	-54.0
97PM109	37 17.54	116 29.06	1869.5	979346.29	-7.2	0.1D	1.2	-216.7	-53.9
97PM110	37 16.51	116 29.16	1864.6	979342.06	-11.5	0.0D	1.1	-220.5	-58.6
97PM111	37 16.59	116 29.32	1861.1	979343.68	-11.0	0.0D	1.1	-219.7	-57.7
97PM112	37 16.66	116 29.43	1858.0	979345.01	-10.8	0.0D	1.1	-219.1	-57.0
97PM113	37 16.75	116 29.53	1852.1	979347.05	-10.7	0.0D	1.1	-218.3	-56.2
97PM114	37 17.60	116 31.50	1851.6	979359.49	0.4	0.1D	1.2	-207.2	-44.7
97PM115	37 14.78	116 29.46	1897.1	979330.65	-10.3	0.0D	1.3	-222.9	-62.4
97PM116	37 14.82	116 29.97	1896.4	979331.70	-9.6	0.0D	1.3	-222.0	-61.6
97PM117	37 13.29	116 27.37	1889.0	979331.08	-10.2	0.1D	1.5	-221.6	-62.1
97PM118	37 12.93	116 27.38	1853.5	979339.38	-12.4	0.9D	2.3	-219.0	-59.8
97PM119	37 12.71	116 27.35	1822.3	979347.62	-13.4	1.0D	2.4	-216.4	-57.4
97PM120	37 12.54	116 27.23	1831.0	979346.92	-11.2	0.5D	1.9	-215.7	-56.8
97PM121	37 12.39	116 27.09	1814.0	979351.65	-11.5	0.5D	1.9	-214.1	-55.3
97PM122	37 12.28	116 26.91	1789.5	979357.32	-13.2	0.4D	1.9	-213.1	-54.3
97PM123	37 12.16	116 26.75	1767.7	979361.75	-15.3	0.4D	2.0	-212.6	-53.9
97PM124	37 11.98	116 26.69	1762.1	979362.73	-15.8	0.5D	2.0	-212.5	-53.9
97PM125	37 11.83	116 26.59	1757.1	979363.30	-16.6	0.7D	2.2	-212.5	-54.0
97PM126	37 11.68	116 26.46	1748.1	979364.97	-17.5	0.3D	1.8	-212.8	-54.4
97PM127	37 11.50	116 26.42	1743.0	979367.44	-16.3	0.1D	1.5	-211.3	-53.1
97PM128	37 11.33	116 26.33	1736.1	979369.13	-16.5	0.0D	1.4	-210.9	-52.8
97PM129	37 11.20	116 26.19	1731.3	979370.55	-16.4	0.1D	1.4	-210.2	-52.2
97PM130	37 11.08	116 26.13	1728.1	979371.42	-16.3	0.1D	1.4	-209.8	-51.9
97PM131	37 10.94	116 26.10	1724.3	979372.85	-15.9	0.1D	1.3	-208.9	-51.2
97PM132	37 10.80	116 26.07	1721.1	979373.97	-15.5	0.1D	1.3	-208.3	-50.7
97PM133	37 10.63	116 26.09	1717.8	979375.30	-15.0	0.1D	1.3	-207.4	-49.9
97PM134	37 10.50	116 26.03	1712.9	979375.87	-15.7	0.1D	1.3	-207.6	-50.3
97PM135	37 10.41	116 25.94	1714.0	979376.10	-15.0	0.1D	1.2	-207.1	-49.9
97PM136	37 10.32	116 25.83	1710.2	979376.23	-15.9	0.1D	1.2	-207.5	-50.4
97PM137	37 10.24	116 25.71	1710.6	979375.42	-16.5	0.1D	1.2	-208.2	-51.1
97PM138	37 10.17	116 25.57	1714.0	979374.69	-16.1	0.1D	1.2	-208.1	-51.0
97PM139	37 10.07	116 25.48	1717.3	979373.39	-16.2	0.1D	1.2	-208.7	-51.7
97PM140	37 9.96	116 25.40	1714.5	979373.63	-16.7	0.0D	1.1	-208.9	-52.0
97PM141	37 9.87	116 25.31	1712.9	979373.08	-17.6	0.0D	1.1	-209.6	-52.8
97PM142	37 9.78	116 25.21	1714.6	979372.33	-17.7	0.1D	1.1	-209.9	-53.2
97PM143	37 9.67	116 25.08	1716.3	979371.06	-18.3	0.1D	1.1	-210.7	-54.0
97PM144	37 9.57	116 24.95	1712.9	979371.94	-18.3	0.0D	1.1	-210.3	-53.8
97PM145	37 9.50	116 24.69	1702.2	979375.20	-18.2	0.0D	1.1	-209.1	-52.5
97PM146	37 9.43	116 24.44	1694.7	979377.39	-18.3	0.0D	1.1	-208.2	-51.8
97PM147	37 9.16	116 24.00	1669.8	979382.62	-20.3	0.1D	1.2	-207.4	-51.2
97PM148	37 8.88	116 23.56	1660.7	979384.23	-21.1	0.0D	1.1	-207.2	-51.2
97PM149	37 8.68	116 23.08	1660.1	979386.38	-18.8	0.1D	1.2	-204.9	-48.9
97PM150	37 8.59	116 22.53	1641.3	979392.72	-18.2	0.1D	1.4	-201.9	-46.0
97PM151	37 0.24	116 42.26	1176.8	979513.04	-29.0	0.0D	0.6	-161.4	-18.1
97PM152	37 0.27	116 42.19	1177.4	979512.30	-29.6	0.0D	0.6	-162.0	-18.8
97PM153	37 0.29	116 42.13	1179.0	979511.24	-30.2	0.0D	0.6	-162.8	-19.5
97PM154	37 0.32	116 42.06	1182.9	979509.76	-30.5	0.0D	0.5	-163.6	-20.2
97PM155	37 0.34	116 42.00	1183.9	979508.94	-31.0	0.0D	0.5	-164.2	-20.9
97PM156	37 0.37	116 41.93	1187.4	979507.50	-31.5	0.0D	0.6	-165.0	-21.6
97PM157	37 0.39	116 41.87	1191.0	979506.11	-31.8	0.0D	0.5	-165.7	-22.3
97PM158	37 0.43	116 41.81	1194.0	979504.99	-32.0	0.0D	0.5	-166.4	-22.8
97PM159	37 0.45	116 41.74	1195.7	979503.99	-32.5	0.0D	0.5	-167.0	-23.5
97PM160	37 0.47	116 41.68	1197.7	979502.91	-33.0	0.0D	0.5	-167.8	-24.2

TABLE 1.—*Principal facts of gravity data from Pahute Mesa/Oasis Valley*—Continued

STATION NAME	LATITUDE	LONGITUDE	ELEV (m)	OBS GRAV (mGal)	FREE AIR	TERRAIN HAND	TERRAIN COMP	BOUG ANOM	ISOST ANOM
97PM161	37 0.50	116 41.61	1201.0	979501.51	-33.4	0.0D	0.5	-168.6	-24.9
97PM162	37 0.52	116 41.55	1203.0	979500.47	-33.9	0.0D	0.5	-169.2	-25.5
97PM163	37 0.54	116 41.48	1204.8	979499.54	-34.3	0.0D	0.5	-169.9	-26.1
97PM164	37 0.59	116 41.35	1211.0	979497.11	-34.9	0.0D	0.5	-171.1	-27.3
97PM165	37 0.64	116 41.22	1216.5	979494.98	-35.4	0.0D	0.5	-172.2	-28.3
97PM166	37 0.67	116 41.08	1223.3	979492.69	-35.7	0.0D	0.5	-173.2	-29.3
97PM167	37 0.68	116 40.93	1230.0	979490.50	-35.8	0.0D	0.6	-174.1	-30.2
97PM168	37 0.72	116 40.79	1236.8	979488.43	-35.8	0.0D	0.6	-174.9	-30.9
97PM169	37 0.76	116 40.66	1241.2	979487.02	-35.9	0.0D	0.6	-175.5	-31.4
97PM170	37 0.79	116 40.52	1248.6	979484.93	-35.8	0.0D	0.6	-176.2	-32.0
97PM171	37 0.85	116 40.36	1259.5	979481.84	-35.6	0.1D	0.6	-177.2	-33.0
97PM172	37 0.88	116 40.24	1263.2	979480.76	-35.6	0.0D	0.6	-177.6	-33.3
97PM173	37 0.92	116 40.03	1272.7	979478.03	-35.4	0.0D	0.6	-178.5	-34.1
97PM174	37 0.97	116 39.82	1286.3	979474.49	-34.8	0.1D	0.6	-179.4	-35.0
97PM175	37 1.04	116 39.61	1296.7	979471.47	-34.7	0.1D	0.6	-180.5	-35.9
97PM176	37 1.16	116 39.41	1307.7	979468.75	-34.2	0.1D	0.7	-181.2	-36.5
97PM177	37 1.30	116 39.24	1309.2	979468.22	-34.5	0.1D	0.7	-181.7	-36.7
97PM178	37 1.41	116 39.07	1311.9	979467.35	-34.7	0.1D	0.7	-182.1	-37.0
97PM179	37 1.55	116 38.92	1297.8	979470.41	-36.2	0.1D	0.8	-182.0	-36.7
97PM180	36 59.61	116 43.42	1104.9	979534.09	-29.2	0.0D	0.8	-153.2	-10.8
97PM181	37 0.02	116 42.34	1176.8	979514.76	-27.0	0.1D	0.6	-159.3	-16.3
97PM182	37 0.73	116 42.22	1183.8	979510.76	-29.8	0.1D	0.6	-162.9	-19.1
97PM183	37 1.60	116 42.27	1186.4	979508.93	-32.1	0.1D	0.6	-165.6	-20.6
97PM184	37 2.34	116 42.66	1171.1	979513.54	-33.3	0.0D	0.7	-164.9	-19.1
97PM185	37 2.41	116 42.53	1177.3	979511.55	-33.5	0.0D	0.6	-165.8	-19.9
97PM186	37 2.49	116 42.43	1177.2	979510.83	-34.3	0.0D	0.6	-166.7	-20.7
97PM187	37 2.58	116 42.34	1178.4	979509.89	-35.1	0.0D	0.6	-167.5	-21.4
97PM188	37 2.65	116 42.28	1179.8	979508.99	-35.6	0.0D	0.6	-168.2	-22.0
97PM189	37 2.65	116 42.21	1181.3	979508.22	-35.9	0.0D	0.6	-168.7	-22.5
97PM190	37 2.65	116 42.13	1184.4	979506.82	-36.4	0.0D	0.6	-169.5	-23.3
97PM191	37 2.67	116 42.07	1187.7	979505.64	-36.6	0.0D	0.6	-170.1	-23.9
97PM192	37 2.68	116 41.99	1186.1	979505.18	-37.5	0.0D	0.6	-170.9	-24.7
97PM193	37 2.69	116 41.92	1187.9	979504.32	-37.9	0.0D	0.6	-171.4	-25.2
97PM194	37 2.69	116 41.85	1189.4	979503.47	-38.2	0.0D	0.6	-172.0	-25.7
97PM195	37 2.68	116 41.77	1191.1	979502.59	-38.6	0.0D	0.6	-172.5	-26.3
97PM196	37 2.63	116 41.70	1192.6	979501.76	-38.9	0.0D	0.6	-173.0	-26.8
97PM197	37 2.59	116 41.63	1194.2	979500.91	-39.2	0.0D	0.6	-173.5	-27.3
97PM198	37 2.53	116 41.57	1196.3	979500.00	-39.3	0.0D	0.6	-173.9	-27.8
97PM199	37 2.48	116 41.52	1197.8	979499.28	-39.5	0.1D	0.6	-174.2	-28.1
97PM200	37 2.46	116 41.45	1200.1	979498.33	-39.8	0.0D	0.6	-174.7	-28.6
97PM201	37 2.43	116 41.31	1204.5	979496.59	-40.1	0.0D	0.6	-175.5	-29.5
97PM202	37 2.38	116 41.12	1208.8	979494.78	-40.5	0.1D	0.7	-176.3	-30.3
97PM203	37 2.35	116 40.89	1216.3	979492.47	-40.4	0.1D	0.6	-177.2	-31.1
97PM204	37 2.32	116 40.68	1223.1	979490.41	-40.4	0.1D	0.6	-177.9	-31.8
97PM205	37 2.32	116 40.48	1230.1	979488.32	-40.3	0.0D	0.6	-178.6	-32.5
97PM206	37 2.26	116 40.28	1236.6	979486.36	-40.2	0.1D	0.7	-179.1	-33.1
97PM207	37 2.16	116 40.08	1244.7	979483.97	-39.9	0.1D	0.7	-179.8	-33.9
97PM208	37 2.67	116 42.35	1178.8	979509.75	-35.2	0.0D	0.6	-167.7	-21.5
97PM209	37 2.70	116 42.41	1178.2	979510.34	-34.8	0.0D	0.6	-167.3	-21.0
97PM210	37 2.69	116 42.49	1177.0	979511.10	-34.4	0.0D	0.7	-166.7	-20.5
97PM211	37 2.68	116 42.56	1175.7	979511.84	-34.1	0.0D	0.7	-166.2	-20.0
97PM212	37 2.67	116 42.63	1174.4	979512.50	-33.8	0.0D	0.7	-165.8	-19.6
97PM213	37 2.66	116 42.71	1172.5	979513.21	-33.7	0.0D	0.7	-165.4	-19.2
97PM214	37 2.64	116 42.78	1171.0	979513.71	-33.6	0.0D	0.8	-165.1	-19.0
97PM215	37 2.63	116 42.85	1168.9	979514.38	-33.6	0.1D	0.9	-164.7	-18.6
97PM216	37 2.68	116 42.91	1170.4	979514.39	-33.2	0.2D	1.0	-164.4	-18.2
97PM217	37 0.79	116 39.47	1320.8	979466.12	-32.3	0.1D	0.7	-180.7	-36.4
97PM218	37 0.46	116 39.53	1316.5	979467.85	-31.4	0.1D	0.8	-179.3	-35.4
97PM219	36 59.77	116 39.43	1292.0	979474.85	-31.0	0.1D	0.8	-176.1	-33.0
97PM220	36 59.55	116 39.08	1339.7	979464.67	-26.1	0.4D	1.2	-176.2	-33.4
97PM221	36 59.19	116 39.41	1268.9	979482.61	-29.5	0.1D	0.8	-172.0	-29.7
97PM222	36 58.81	116 39.42	1237.3	979493.13	-28.2	0.1D	0.7	-167.2	-25.3
98PM223	37 4.61	116 41.45	1217.4	979495.55	-40.3	0.0D	0.7	-177.1	-28.5
98PM224	37 4.34	116 41.31	1207.0	979496.72	-42.0	0.0D	0.7	-177.5	-29.3
98PM225	37 4.50	116 41.21	1210.1	979496.35	-41.6	0.0D	0.8	-177.5	-29.0
98PM226	37 4.72	116 40.98	1213.1	979494.68	-42.7	0.0D	0.9	-178.8	-30.0
98PM227	37 4.99	116 40.88	1217.7	979492.93	-43.4	0.1D	1.0	-179.9	-30.8
98PM228	37 5.16	116 40.70	1223.8	979490.81	-43.9	0.1D	1.0	-181.1	-31.7
98PM229	37 4.13	116 41.36	1203.0	979497.99	-41.6	0.0D	0.7	-176.8	-28.7
98PM230	37 4.08	116 41.39	1201.8	979498.31	-41.6	0.0D	0.7	-176.6	-28.6
98PM231	37 4.03	116 41.42	1201.5	979498.71	-41.2	0.0D	0.7	-176.2	-28.3
98PM232	37 3.98	116 41.45	1200.3	979499.12	-41.1	0.0D	0.7	-176.0	-28.1
98PM233	37 3.93	116 41.48	1199.1	979499.70	-40.8	0.0D	0.7	-175.6	-27.7
98PM234	37 3.88	116 41.50	1197.9	979500.12	-40.7	0.0D	0.7	-175.3	-27.5
98PM235	37 3.82	116 41.53	1196.6	979500.45	-40.7	0.0D	0.7	-175.1	-27.5
98PM236	37 3.77	116 41.55	1195.4	979500.76	-40.7	0.0D	0.7	-175.0	-27.4
98PM237	37 3.72	116 41.57	1193.9	979501.06	-40.8	0.0D	0.7	-174.9	-27.4
98PM238	37 3.66	116 41.59	1192.7	979501.47	-40.6	0.0D	0.7	-174.6	-27.1
98PM239	37 3.58	116 41.63	1191.7	979501.99	-40.3	0.0D	0.7	-174.2	-26.8
98PM240	37 3.39	116 41.71	1190.7	979502.69	-39.6	0.0D	0.7	-173.4	-26.3

TABLE 1.—*Principal facts of gravity data from Pahute Mesa/Oasis Valley*—Continued

STATION NAME	LATITUDE	LONGITUDE	ELEV (m)	OBS GRAV (mGal)	FREE AIR	TERRAIN HAND	TERRAIN COMP	BOUG ANOM	ISOST ANOM
98PM241	37 3.18	116 41.84	1187.5	979504.17	-38.8	0.0D	0.7	-172.3	-25.5
98PM242	37 2.93	116 42.03	1184.3	979505.95	-37.7	0.0D	0.6	-170.8	-24.3
98PM243	36 57.64	116 42.76	1083.9	979532.89	-34.1	0.0D	0.7	-155.8	-15.8
98PM244	36 57.69	116 42.56	1093.9	979529.84	-34.1	0.1D	0.7	-156.9	-16.9
98PM245	36 57.78	116 42.28	1107.5	979525.91	-34.0	0.1D	0.7	-158.4	-18.2
98PM246	36 57.89	116 42.18	1115.4	979524.22	-33.4	0.1D	0.7	-158.7	-18.4
98PM247	36 57.97	116 42.22	1110.8	979524.50	-34.6	0.2D	0.9	-159.2	-18.8
98PM248	36 58.03	116 42.20	1114.0	979524.07	-34.1	0.3D	0.9	-159.1	-18.6
98PM249	36 58.08	116 42.17	1116.7	979523.57	-33.9	0.2D	0.9	-159.2	-18.6
98PM250	36 58.14	116 42.13	1120.4	979523.12	-33.3	0.2D	0.8	-159.0	-18.4
98PM251	36 58.19	116 42.10	1123.6	979522.63	-32.8	0.2D	0.8	-159.0	-18.3
98PM252	36 58.24	116 42.08	1126.4	979522.27	-32.4	0.2D	0.8	-158.9	-18.1
98PM253	36 58.30	116 42.06	1129.3	979521.83	-32.0	0.2D	0.8	-158.9	-18.0
98PM254	36 58.36	116 42.03	1131.7	979521.40	-31.8	0.2D	0.8	-158.9	-18.0
98PM255	36 58.41	116 42.00	1134.9	979520.72	-31.6	0.2D	0.7	-159.1	-18.1
98PM256	36 58.56	116 41.91	1142.8	979518.87	-31.2	0.1D	0.6	-159.7	-18.5
98PM257	36 58.71	116 41.79	1151.5	979516.82	-30.8	0.1D	0.6	-160.3	-18.9
98PM258	36 58.82	116 41.63	1159.9	979515.14	-30.1	0.1D	0.6	-160.5	-18.9
98PM259	36 58.93	116 41.53	1166.5	979513.73	-29.6	0.1D	0.6	-160.7	-19.0
98PM260	36 58.93	116 41.13	1180.7	979508.69	-30.2	0.1D	0.7	-162.9	-21.1
98PM261	36 58.98	116 41.09	1183.4	979507.84	-30.4	0.2D	0.7	-163.3	-21.5
98PM262	36 59.06	116 41.08	1195.2	979504.74	-29.9	0.1D	0.6	-164.3	-22.4
98PM263	36 59.12	116 41.05	1198.6	979503.62	-30.1	0.1D	0.6	-164.9	-22.8
98PM264	36 59.21	116 40.90	1206.1	979501.03	-30.5	0.0D	0.6	-166.1	-24.0
98PM265	36 59.31	116 40.70	1211.3	979498.35	-31.7	0.1D	0.6	-167.9	-25.5
98PM266	36 59.28	116 40.77	1207.3	979499.99	-31.3	0.1D	0.6	-167.0	-24.7
98PM267	36 59.26	116 40.83	1204.7	979500.81	-31.2	0.1D	0.6	-166.7	-24.4
98PM268	36 59.18	116 40.96	1203.1	979502.11	-30.3	0.0D	0.6	-165.6	-23.5
98PM269	36 59.15	116 41.01	1200.2	979502.97	-30.3	0.0D	0.6	-165.3	-23.2
98PM270	36 59.31	116 40.66	1217.0	979496.71	-31.6	0.1D	0.6	-168.4	-26.1
98PM271	36 59.40	116 40.55	1220.2	979495.27	-32.2	0.1D	0.6	-169.4	-26.9
98PM272	36 59.58	116 40.42	1228.7	979491.91	-33.2	0.1D	0.6	-171.3	-28.6
98PM273	36 59.47	116 40.49	1225.3	979493.62	-32.4	0.1D	0.6	-170.1	-27.5
98PM274	36 58.42	116 39.69	1215.1	979500.65	-27.0	0.0D	0.6	-163.5	-22.2
98PM275	36 58.64	116 39.46	1227.9	979496.72	-27.3	0.1D	0.7	-165.2	-23.6
98PM276	36 58.72	116 39.44	1229.8	979495.50	-28.0	0.1D	0.7	-166.2	-24.4
98PM277	36 57.87	116 39.43	1179.4	979510.63	-27.2	0.3D	1.1	-159.3	-18.6
98PM278	36 58.08	116 39.52	1188.9	979507.78	-27.4	0.3D	1.0	-160.7	-19.7
98PM279	36 58.31	116 39.61	1205.6	979503.23	-27.1	0.1D	0.8	-162.6	-21.3
98PM280	36 58.52	116 39.62	1219.1	979499.77	-26.7	0.1D	0.6	-163.8	-22.3
98PM281	36 58.86	116 39.42	1243.2	979491.08	-28.5	0.1D	0.7	-168.1	-26.2
98PM282	36 58.92	116 39.45	1247.8	979489.64	-28.6	0.1D	0.7	-168.8	-26.8
98PM283	36 58.98	116 39.46	1250.4	979488.65	-28.9	0.1D	0.8	-169.3	-27.2
98PM284	36 59.03	116 39.45	1255.1	979486.99	-29.1	0.1D	0.8	-170.1	-28.0
98PM285	36 59.10	116 39.45	1264.2	979484.44	-29.0	0.1D	0.8	-171.0	-28.8
98PM286	36 59.16	116 39.43	1265.0	979483.82	-29.5	0.1D	0.8	-171.5	-29.2
98PM287	36 59.29	116 39.38	1281.9	979479.28	-29.0	0.1D	0.8	-173.0	-30.5
98PM288	36 59.41	116 39.25	1297.7	979474.85	-28.7	0.1D	0.8	-174.4	-31.8
98PM289	36 59.70	116 39.20	1304.5	979472.23	-29.7	0.1D	0.8	-176.1	-33.1
98PM290	37 0.21	116 39.42	1303.5	979471.25	-31.7	0.1D	0.8	-178.1	-34.5
98PM291	36 58.77	116 41.35	1168.2	979512.51	-30.0	0.1D	0.6	-161.4	-19.8
98PM292	36 58.56	116 41.49	1155.9	979514.75	-31.3	0.1D	0.7	-161.2	-19.9
98PM293	36 58.38	116 41.66	1143.7	979517.48	-32.1	0.2D	0.7	-160.6	-19.5
98PM294	36 58.22	116 41.84	1132.1	979520.14	-32.8	0.2D	0.8	-159.9	-19.1
98PM295	37 4.27	116 41.27	1205.6	979496.99	-42.0	0.0D	0.7	-177.4	-29.2
98PM296	37 4.21	116 41.30	1204.2	979497.36	-42.0	0.0D	0.7	-177.2	-29.1
98PM297	36 58.88	116 43.40	1094.3	979533.75	-31.8	0.4D	1.2	-154.2	-12.7
98PM298	36 58.48	116 43.35	1089.9	979533.81	-32.5	0.2D	1.0	-154.6	-13.6
98PM299	37 4.49	116 45.49	1240.2	979504.81	-23.8	0.0D	0.4	-163.5	-15.7
98PM300	37 4.44	116 45.42	1239.3	979505.16	-23.7	0.0D	0.4	-163.2	-15.5
98PM301	37 4.37	116 45.45	1242.4	979504.50	-23.3	0.0D	0.4	-163.2	-15.6
98PM302	37 4.32	116 45.47	1242.0	979504.61	-23.2	0.0D	0.4	-163.1	-15.5
98PM303	37 4.27	116 45.50	1241.1	979504.88	-23.2	0.0D	0.4	-162.9	-15.4
98PM304	37 4.22	116 45.52	1240.4	979505.15	-23.1	0.0D	0.4	-162.7	-15.2
98PM305	37 4.16	116 45.55	1237.1	979506.13	-23.0	0.0D	0.4	-162.3	-14.9
98PM306	37 4.11	116 45.57	1231.8	979507.54	-23.2	0.0D	0.4	-161.8	-14.5
98PM307	37 4.07	116 45.60	1231.4	979507.84	-22.9	0.0D	0.4	-161.5	-14.2
98PM308	37 4.00	116 45.62	1230.0	979508.08	-23.0	0.0D	0.4	-161.5	-14.2
98PM309	37 4.54	116 45.38	1242.1	979504.41	-23.7	0.0D	0.4	-163.6	-15.8
98PM310	37 4.59	116 45.36	1243.7	979503.93	-23.8	0.0D	0.4	-163.8	-15.9
98PM311	37 5.32	116 40.53	1228.0	979488.76	-44.9	0.1D	1.1	-182.4	-32.8
98PM312	37 5.49	116 40.40	1231.9	979487.20	-45.5	0.2D	1.2	-183.4	-33.6
98PM313	37 5.65	116 40.23	1236.3	979486.42	-45.1	0.2D	1.3	-183.4	-33.5
98PM314	37 5.80	116 40.19	1238.5	979486.20	-44.9	0.2D	1.4	-183.3	-33.2
98PM315	37 4.42	116 41.20	1208.1	979496.41	-42.0	0.0D	0.8	-177.7	-29.3
98PM316	37 4.60	116 41.06	1211.8	979495.58	-42.0	0.0D	0.8	-178.0	-29.4
98PM317	37 4.35	116 42.87	1222.9	979502.29	-31.5	0.0D	0.5	-169.1	-21.0
98PM318	37 4.52	116 42.85	1234.8	979499.29	-31.1	0.1D	0.5	-170.0	-21.7
98PM319	37 4.73	116 42.87	1246.6	979497.07	-30.0	0.1D	0.5	-170.2	-21.7
98PM320	37 4.90	116 42.87	1252.1	979496.64	-28.9	0.1D	0.5	-169.8	-21.2

TABLE 1.—*Principal facts of gravity data from Pahute Mesa/Oasis Valley*—Continued

STATION NAME	LATITUDE	LONGITUDE	ELEV (m)	OBS GRAV (mGal)	FREE AIR	TERRAIN HAND	TERRAIN COMP	BOUG ANOM	ISOST ANOM
98PM321	37 4.81	116 40.93	1216.1	979494.06	-42.5	0.0D	0.9	-178.9	-30.0
98PM322	37 4.90	116 40.91	1217.8	979493.50	-42.7	0.1D	0.9	-179.3	-30.2
98PM323	37 4.83	116 40.75	1222.9	979491.67	-42.8	0.0D	0.9	-180.0	-31.1
98PM324	37 4.77	116 40.63	1224.3	979490.89	-43.1	0.0D	0.9	-180.5	-31.5
98PM325	37 4.74	116 40.56	1225.0	979490.46	-43.2	0.0D	0.9	-180.7	-31.8
98PM326	37 4.71	116 40.50	1226.0	979490.10	-43.3	0.1D	0.9	-180.8	-31.9
98PM327	37 4.69	116 40.44	1229.7	979489.22	-43.0	0.1D	0.9	-180.9	-32.1
98PM328	37 4.65	116 40.37	1230.7	979488.80	-43.0	0.1D	0.9	-181.1	-32.3
98PM329	37 4.61	116 40.29	1232.4	979488.07	-43.2	0.1D	0.9	-181.4	-32.6
98PM330	37 4.57	116 40.22	1233.6	979487.76	-43.1	0.1D	0.9	-181.4	-32.7
98PM331	37 4.53	116 40.14	1234.7	979486.98	-43.4	0.1D	0.9	-181.9	-33.2
98PM332	37 4.48	116 40.11	1235.8	979487.06	-42.9	0.1D	0.9	-181.6	-32.9
98PM333	37 4.98	116 41.07	1223.4	979493.34	-41.2	0.1D	0.9	-178.5	-29.4
98PM334	37 4.17	116 42.86	1213.3	979504.10	-32.4	0.0D	0.5	-168.9	-21.0
98PM335	37 4.11	116 42.87	1210.5	979505.82	-31.4	0.0D	0.6	-167.6	-19.8
98PM336	37 4.06	116 42.88	1208.3	979506.75	-31.1	0.0D	0.6	-167.0	-19.3
98PM337	37 4.00	116 42.88	1205.5	979507.75	-30.9	0.0D	0.6	-166.5	-18.9
98PM338	37 3.95	116 42.87	1203.0	979508.45	-30.9	0.0D	0.6	-166.2	-18.6
98PM339	37 3.90	116 42.87	1200.8	979509.21	-30.8	0.0D	0.6	-165.8	-18.3
98PM340	37 3.84	116 42.85	1198.5	979509.70	-30.9	0.0D	0.6	-165.6	-18.2
98PM341	37 3.79	116 42.87	1198.8	979509.57	-30.8	0.0D	0.6	-165.6	-18.2
98PM342	37 3.74	116 42.90	1204.3	979508.34	-30.3	0.1D	0.6	-165.7	-18.4
98PM343	37 3.63	116 42.88	1195.6	979510.11	-31.1	0.0D	0.6	-165.5	-18.2
98PM344	37 3.53	116 42.89	1193.0	979510.17	-31.6	0.0D	0.6	-165.8	-18.6
98PM345	37 3.42	116 42.86	1188.4	979511.01	-32.1	0.0D	0.7	-165.6	-18.6
98PM346	37 3.33	116 42.86	1183.9	979511.79	-32.5	0.0D	0.7	-165.6	-18.7
98PM347	37 3.22	116 42.86	1179.7	979512.52	-33.0	0.0D	0.7	-165.4	-18.7
98PM348	37 3.81	116 45.77	1233.0	979507.05	-22.8	0.0D	0.4	-161.6	-14.6
98PM349	37 3.71	116 45.82	1231.2	979507.32	-23.0	0.0D	0.4	-161.6	-14.7
98PM350	37 3.62	116 45.83	1220.6	979509.61	-23.8	0.0D	0.5	-161.2	-14.4
98PM351	37 3.47	116 45.90	1227.1	979508.92	-22.3	0.0D	0.5	-160.4	-13.8
98PM352	37 3.31	116 45.97	1213.7	979512.36	-22.8	0.0D	0.5	-159.3	-12.9
98PM353	37 3.07	116 46.11	1200.1	979514.75	-24.2	0.0D	0.6	-159.1	-13.0
98PM354	37 2.96	116 46.21	1195.2	979516.14	-24.2	0.0D	0.6	-158.5	-12.5
98PM355	37 4.65	116 45.34	1245.4	979503.51	-23.8	0.0D	0.4	-164.0	-16.0
98PM356	37 4.70	116 45.32	1249.2	979502.59	-23.6	0.0D	0.4	-164.3	-16.2
98PM357	37 4.77	116 45.30	1255.1	979501.16	-23.3	0.0D	0.4	-164.6	-16.5
98PM358	37 4.85	116 45.26	1251.2	979502.17	-23.6	0.0D	0.4	-164.5	-16.3
98PM359	37 4.99	116 45.19	1245.8	979503.34	-24.3	0.0D	0.4	-164.6	-16.2
98PM360	37 5.25	116 45.07	1261.0	979499.50	-23.8	0.0D	0.4	-165.8	-17.2
98PM361	37 5.47	116 44.96	1256.4	979501.03	-24.0	0.0D	0.4	-165.5	-16.6
98PM362	37 5.70	116 44.84	1260.5	979501.02	-23.1	0.0D	0.4	-165.0	-15.8
98PM363	37 5.94	116 44.61	1267.7	979499.12	-23.2	0.0D	0.5	-165.8	-16.3
98PM364	37 6.19	116 44.61	1275.2	979497.28	-23.0	0.0D	0.5	-166.5	-16.8
98PM365	37 4.39	116 39.99	1239.6	979486.07	-42.6	0.1D	0.9	-181.7	-33.1
98PM366	37 4.38	116 39.84	1243.5	979484.91	-42.6	0.1D	1.0	-182.0	-33.5
98PM367	37 4.27	116 39.64	1250.5	979483.84	-41.3	0.1D	0.9	-181.6	-33.1
98PM368	37 4.12	116 39.47	1258.6	979482.24	-40.2	0.1D	0.9	-181.4	-33.1
98PM369	37 4.24	116 39.92	1249.8	979484.30	-41.0	0.1D	0.8	-181.3	-33.0
98PM370	37 4.14	116 39.91	1254.9	979483.48	-40.1	0.0D	0.8	-181.1	-32.8
98PM371	37 4.07	116 39.90	1259.8	979482.55	-39.5	0.0D	0.7	-181.0	-32.8
98PM372	37 4.00	116 39.93	1266.2	979481.29	-38.6	0.1D	0.7	-180.9	-32.8
98PM373	37 3.95	116 39.92	1269.1	979480.55	-38.4	0.1D	0.7	-181.0	-33.0
98PM374	37 3.89	116 39.92	1268.2	979480.90	-38.2	0.0D	0.6	-180.8	-32.8
98PM375	37 3.83	116 39.91	1268.8	979480.85	-38.0	0.0D	0.6	-180.6	-32.8
98PM376	37 3.78	116 39.89	1273.0	979479.90	-37.6	0.1D	0.7	-180.7	-32.8
98PM377	37 3.73	116 39.93	1267.1	979481.33	-37.9	0.1D	0.7	-180.3	-32.6
98PM378	37 3.67	116 39.93	1266.0	979481.77	-37.7	0.0D	0.6	-180.0	-32.3
98PM379	37 3.60	116 39.92	1270.7	979480.41	-37.5	0.1D	0.7	-180.4	-32.7
98PM380	37 3.57	116 39.94	1268.7	979480.69	-37.8	0.1D	0.6	-180.4	-32.8
98PM381	37 3.51	116 39.92	1264.4	979481.81	-38.0	0.0D	0.6	-180.1	-32.5
98PM382	37 3.41	116 39.92	1269.1	979480.34	-37.8	0.1D	0.6	-180.5	-33.1
98PM383	37 3.33	116 39.93	1264.9	979481.13	-38.2	0.1D	0.6	-180.4	-33.1
98PM384	37 3.21	116 39.93	1271.5	979479.44	-37.7	0.1D	0.6	-180.6	-33.5
98PM385	37 3.02	116 39.94	1270.7	979479.38	-37.7	0.1D	0.6	-180.6	-33.6
98PM386	37 2.87	116 39.93	1265.9	979480.20	-38.2	0.1D	0.6	-180.5	-33.7
98PM387	36 53.03	116 27.21	1493.3	979425.44	-8.6	1.4D	4.0	-173.0	-36.6
98PM388	36 53.32	116 27.58	1551.8	979413.44	-2.9	0.6D	3.7	-174.3	-37.7
98PM389	36 53.43	116 27.77	1573.1	979409.27	-0.7	0.2D	3.4	-174.7	-38.0
98PM390	36 53.58	116 27.78	1574.6	979409.40	-0.3	0.3D	3.5	-174.4	-37.5
98PM391	36 53.62	116 27.75	1580.0	979408.13	0.0	0.5D	3.9	-174.3	-37.3
98PM392	36 53.23	116 27.41	1526.9	979418.14	-5.8	1.5D	4.4	-173.6	-37.0
98PM393	36 54.30	116 27.71	1384.1	979455.79	-13.7	0.1D	2.6	-167.3	-29.2
98PM394	36 54.49	116 27.89	1414.0	979450.38	-10.2	0.1D	2.3	-167.4	-29.1
98PM395	36 54.70	116 28.02	1437.0	979445.22	-8.6	0.1D	2.2	-168.5	-30.0
98PM396	36 54.95	116 28.16	1456.9	979439.81	-8.2	0.1D	2.4	-170.2	-31.4
98PM397	36 55.19	116 28.29	1491.7	979434.06	-3.6	0.1D	2.5	-169.4	-30.4
98PM398	36 55.44	116 28.29	1520.3	979428.01	-1.1	0.2D	2.8	-169.8	-30.5
98PM399	36 55.69	116 28.28	1549.9	979422.02	1.6	0.4D	3.4	-169.9	-30.1
98PM400	36 55.93	116 28.28	1583.1	979415.72	5.2	0.8D	4.2	-169.2	-29.2

TABLE 1.—*Principal facts of gravity data from Pahute Mesa/Oasis Valley*—Continued

STATION NAME	LATITUDE	LONGITUDE	ELEV (m)	OBS GRAV (mGal)	FREE AIR	TERRAIN HAND	TERRAIN COMP	BOUG ANOM	ISOST ANOM
98PM401	36 59.62	116 40.35	1232.3	979490.97	-33.1	0.0D	0.6	-171.6	-28.8
98PM402	36 59.68	116 40.28	1237.2	979489.30	-33.3	0.0D	0.6	-172.4	-29.6
98PM403	36 59.75	116 40.23	1242.3	979487.89	-33.2	0.0D	0.6	-172.9	-30.0
98PM404	36 59.83	116 40.18	1247.5	979486.38	-33.3	0.0D	0.6	-173.5	-30.5
98PM405	36 59.85	116 40.09	1252.0	979485.08	-33.2	0.0D	0.6	-174.0	-30.9
98PM406	36 59.88	116 40.01	1257.3	979483.92	-32.8	0.0D	0.6	-174.1	-31.0
98PM407	36 59.92	116 39.93	1261.9	979482.68	-32.7	0.0D	0.6	-174.5	-31.3
98PM408	36 59.98	116 39.87	1267.1	979481.30	-32.5	0.0D	0.7	-174.9	-31.7
98PM409	37 0.06	116 39.84	1272.7	979479.74	-32.5	0.0D	0.7	-175.5	-32.1
98PM410	37 0.13	116 39.78	1278.6	979478.05	-32.4	0.1D	0.7	-176.1	-32.7
98PM411	37 0.14	116 39.69	1287.1	979475.77	-32.1	0.1D	0.7	-176.7	-33.2
98PM412	37 0.16	116 39.56	1299.8	979472.64	-31.4	0.1D	0.7	-177.4	-33.9
98PM413	37 0.21	116 39.45	1301.9	979471.81	-31.6	0.1D	0.8	-177.9	-34.3
98PM414	37 0.32	116 39.54	1304.6	979471.19	-31.6	0.1D	0.7	-178.1	-34.4
98PM415	37 0.65	116 39.52	1311.2	979468.76	-32.4	0.1D	0.7	-179.8	-35.7
98PM416	36 58.00	116 39.06	1169.2	979513.93	-27.2	0.7D	1.8	-157.5	-16.6
98PM417	36 58.08	116 38.54	1183.3	979510.12	-26.8	0.6D	1.9	-158.6	-17.4
98PM418	36 58.46	116 38.34	1195.9	979506.06	-27.5	0.4D	1.5	-161.1	-19.4
98PM419	36 58.79	116 38.03	1209.7	979501.83	-28.0	0.1D	1.3	-163.3	-21.2
98PM420	36 59.08	116 37.69	1221.8	979496.25	-30.2	0.2D	1.5	-166.8	-24.2
98PM421	36 59.30	116 37.26	1233.5	979493.81	-29.4	0.2D	1.4	-167.3	-24.3
98PM422	36 59.49	116 36.64	1250.8	979487.08	-31.1	0.1D	1.3	-171.0	-27.7
98PM423	36 59.61	116 36.15	1265.5	979484.17	-29.6	0.1D	1.3	-171.2	-27.7
98PM424	36 59.62	116 35.56	1271.0	979481.76	-30.3	0.2D	1.6	-172.3	-28.7
98PM425	36 59.84	116 35.13	1290.8	979477.95	-28.4	0.2D	1.7	-172.4	-28.5
98PM426	37 0.01	116 34.73	1301.5	979474.29	-29.0	0.2D	1.8	-174.1	-29.9
98PM427	37 0.13	116 34.21	1313.7	979470.34	-29.3	0.3D	2.0	-175.6	-31.1
98PM428	37 0.24	116 33.69	1330.5	979467.04	-27.6	0.1D	1.7	-176.1	-31.4
98PM429	37 0.21	116 33.45	1335.9	979466.42	-26.5	0.1D	1.7	-175.6	-30.9
98PM430	37 0.16	116 32.90	1346.6	979463.58	-26.0	0.1D	1.7	-176.3	-31.5
98PM431	37 0.09	116 32.29	1367.9	979458.19	-24.7	0.0D	1.5	-177.6	-32.8
98PM432	36 59.85	116 31.82	1376.2	979454.58	-25.4	0.0D	1.6	-179.2	-34.6
98PM433	36 59.62	116 31.48	1385.3	979451.81	-25.0	0.1D	1.6	-179.8	-35.5
98PM434	36 59.41	116 30.98	1397.5	979448.61	-24.2	0.0D	1.6	-180.3	-36.2
98PM435	36 59.27	116 30.49	1407.3	979446.42	-23.1	0.1D	1.6	-180.4	-36.3
98PM436	36 59.23	116 30.00	1418.8	979444.06	-21.9	0.1D	1.6	-180.4	-36.3
98PM437	36 59.19	116 29.81	1421.9	979443.09	-21.9	0.1D	1.6	-180.7	-36.6
98PM438	36 59.00	116 29.18	1434.1	979439.77	-21.1	0.1D	1.7	-181.3	-37.3
98PM439	36 58.95	116 29.05	1438.7	979438.02	-21.4	0.1D	1.6	-182.1	-38.2
98PM440	36 59.00	116 28.90	1444.8	979438.13	-19.5	0.1D	1.6	-180.9	-36.9
98PM441	36 58.98	116 28.76	1447.8	979436.64	-20.0	0.0D	1.6	-181.8	-37.8
98PM442	36 59.06	116 28.68	1452.4	979434.60	-20.8	0.1D	1.6	-183.1	-39.0
98PM443	36 59.09	116 28.66	1461.5	979433.84	-18.7	0.0D	1.5	-182.2	-38.0
98PM444	36 58.94	116 28.58	1458.7	979435.57	-17.6	0.1D	1.5	-180.7	-36.7
98PM445	36 58.12	116 28.02	1529.9	979423.32	-6.8	0.2D	1.7	-177.6	-34.7
98PM446	36 58.25	116 27.95	1515.4	979426.20	-8.5	0.1D	1.6	-177.9	-34.8
98PM447	36 58.32	116 27.98	1505.9	979428.18	-9.6	0.1D	1.6	-177.9	-34.7
98PM448	36 58.40	116 27.97	1510.7	979426.77	-9.6	0.1D	1.5	-178.5	-35.2
98PM449	36 58.46	116 28.02	1505.1	979428.05	-10.2	0.1D	1.5	-178.5	-35.0
98PM450	36 58.52	116 28.07	1492.1	979430.64	-11.7	0.1D	1.5	-178.5	-35.0
98PM451	36 58.59	116 28.10	1489.5	979430.84	-12.4	0.2D	1.6	-178.9	-35.3
98PM452	36 58.65	116 28.14	1477.2	979432.89	-14.2	0.1D	1.6	-179.3	-35.7
98PM453	36 58.69	116 28.22	1469.1	979434.17	-15.5	0.1D	1.6	-179.7	-36.0
98PM454	36 58.74	116 28.28	1463.5	979434.94	-16.5	0.1D	1.6	-180.1	-36.3
98PM455	36 58.77	116 28.35	1458.5	979435.92	-17.1	0.0D	1.6	-180.1	-36.3
98PM456	36 58.81	116 28.43	1455.3	979436.65	-17.4	0.0D	1.6	-180.1	-36.2
98PM457	36 58.86	116 28.52	1453.3	979436.94	-17.8	0.0D	1.6	-180.3	-36.4
98PM458	36 57.67	116 28.69	1602.5	979410.93	3.9	0.3D	2.4	-174.5	-32.3
98PM459	36 57.76	116 28.67	1583.2	979415.14	2.0	0.3D	2.2	-174.4	-32.1
98PM460	36 57.85	116 28.67	1564.6	979418.11	-0.9	0.2D	2.0	-175.4	-33.0
98PM461	36 57.94	116 28.65	1552.2	979419.62	-3.3	0.2D	1.9	-176.5	-34.0
98PM462	36 58.04	116 28.63	1538.1	979421.80	-5.6	0.1D	1.8	-177.4	-34.7
98PM463	36 58.14	116 28.63	1524.9	979423.81	-7.8	0.1D	1.7	-178.2	-35.3
98PM464	36 58.22	116 28.62	1512.5	979425.77	-9.8	0.1D	1.6	-178.8	-35.9
98PM465	36 58.26	116 28.53	1513.3	979425.59	-9.8	0.1D	1.6	-178.9	-35.9
98PM466	36 58.27	116 28.43	1518.6	979424.18	-9.6	0.2D	1.7	-179.2	-36.2
98PM467	36 58.34	116 28.32	1498.2	979428.57	-11.6	0.1D	1.6	-179.1	-35.9
98PM468	36 58.36	116 28.21	1494.7	979429.84	-11.4	0.1D	1.6	-178.5	-35.3
98PM469	36 58.37	116 28.10	1509.8	979426.47	-10.2	0.2D	1.6	-178.9	-35.7
98PM470	36 58.33	116 27.85	1510.3	979427.29	-9.1	0.1D	1.5	-178.0	-34.7
98PM471	36 58.43	116 27.62	1506.7	979427.27	-10.4	0.2D	1.5	-178.9	-35.4
98PM472	36 58.32	116 27.40	1497.4	979429.34	-11.1	0.1D	1.6	-178.4	-35.0
98PM473	36 58.17	116 27.10	1548.8	979418.07	-6.2	0.3D	1.7	-179.3	-36.2
98PM474	36 58.14	116 26.82	1530.7	979422.15	-7.7	0.2D	1.6	-178.8	-35.6
98PM475	36 58.05	116 26.61	1522.0	979424.03	-8.4	0.1D	1.5	-178.5	-35.4
98PM476	36 58.03	116 26.50	1529.4	979422.02	-8.1	0.1D	1.5	-179.1	-36.0
98PM477	36 57.93	116 26.43	1530.1	979421.98	-7.8	0.0D	1.5	-178.9	-35.8
98PM478	36 57.86	116 26.36	1529.9	979421.92	-7.8	0.0D	1.6	-178.8	-35.9
98PM479	36 57.78	116 26.27	1533.5	979421.12	-7.3	0.1D	1.6	-178.7	-35.9
98PM480	36 57.74	116 26.14	1535.6	979420.27	-7.5	0.0D	1.6	-179.1	-36.3

TABLE 1.—*Principal facts of gravity data from Pahute Mesa/Oasis Valley*—Continued

STATION NAME	LATITUDE	LONGITUDE	ELEV (m)	OBS GRAV (mGal)	FREE AIR	TERRAIN HAND	TERRAIN COMP	BOUG ANOM	ISOST ANOM
98PM481	36 57.71	116 26.01	1536.4	979419.66	-7.8	0.1D	1.7	-179.5	-36.7
98PM482	36 57.65	116 25.91	1538.1	979419.61	-7.2	0.1D	1.8	-179.0	-36.3
98PM483	36 58.08	116 27.95	1556.9	979417.21	-4.5	0.4D	1.9	-178.2	-35.3
98PM484	36 57.99	116 28.01	1553.2	979418.92	-3.8	0.2D	1.7	-177.3	-34.5
98PM485	36 57.88	116 28.03	1574.1	979414.93	-1.2	0.2D	1.9	-176.8	-34.2
98PM486	36 57.77	116 28.06	1600.9	979409.99	2.3	0.4D	2.2	-176.0	-33.6
98PM487	36 57.69	116 28.06	1612.1	979408.54	4.4	0.4D	2.3	-175.1	-32.8

Note: Latitude and longitude of stations in degrees North and degrees West, respectively. Terrain corrections: HAND denotes inner zone correction; COMP is total terrain correction. BOUG ANOM is the complete Bouguer anomaly (reduction density of 2670 kg/m^3); ISOST ANOM is the isostatic residual gravity anomaly.