

FC
USGS
OFR
75-668

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Principal Facts for Gravity Stations in
Gerlach and San Emidio Known Geothermal
Resource Areas (KGRA), Nevada *Washoe Co.*

BY

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U.S. Geological Survey

Open-file Report 75-668
1975

This report is preliminary and has not been
edited or reviewed for conformity with U.S.
Geological Survey standards and nomenclature.

**UNIVERSITY OF UTAH
RESEARCH INSTITUTE
EARTH SCIENCE LAB.**

PRINCIPAL FACTS FOR GRAVITY STATIONS
IN GERLACH AND SAN EMIDIO KNOWN
GEOHERMAL RESOURCE AREAS (KGRA), NEVADA

BY DONALD L. PETERSON AND DANNY A. DANSEREAU

HEADINGS OF THE ACCOMPANYING TABLES OF PRINCIPAL FACTS ARE EXPLAINED
IN THE FOLLOWING LIST:

STATION	STATION DESIGNATION
LATITUDE	NORTH LATITUDE IN DEGREES, MINUTES, AND HUNDREDTHS OF MINUTES
LONGITUDE	WEST LONGITUDE IN DEGREES, MINUTES, AND HUNDREDTHS OF MINUTES.
ELEV.	ELEVATION IN FEET ¹
OBSERVED GRAVITY	OBSERVED GRAVITY IN MILLIGALS
BOUGUER ANOMALY	SIMPLE BOUGUER ANOMALY IN MILLIGALS FOR AN ASSUMED DENSITY OF 2.67 G PER CC

THESE DATA ARE REFERENCED TO THE GRAVITY BASE STATION IN GERLACH,
NEVADA, WITH AN OBSERVED GRAVITY VALUE OF 979829.16 MILLIGALS
(ACIC REFERENCE NO. 2350-1). (See fig. 1.)

¹To convert feet to metres, multiply by 0.3048.

GRAVITY BASE STATION			
LATITUDE	40° 39.1' N	(1)	STATION DESIGNATION GERLACH
LONGITUDE	119° 21.2' W	(1)	
ELEVATION	3934 ft	(1)	COUNTRY/STATE USA/Nevada
REFERENCE CODE NUMBERS		ADOPTED GRAVITY VALUE	
ACIC 2350-1		g = 979 829.16 mgals	
IGB 15609J			
		ESTIMATED ACCURACY	DATE
		± 0.1 mgals	MONTH/YEAR Jan/1969

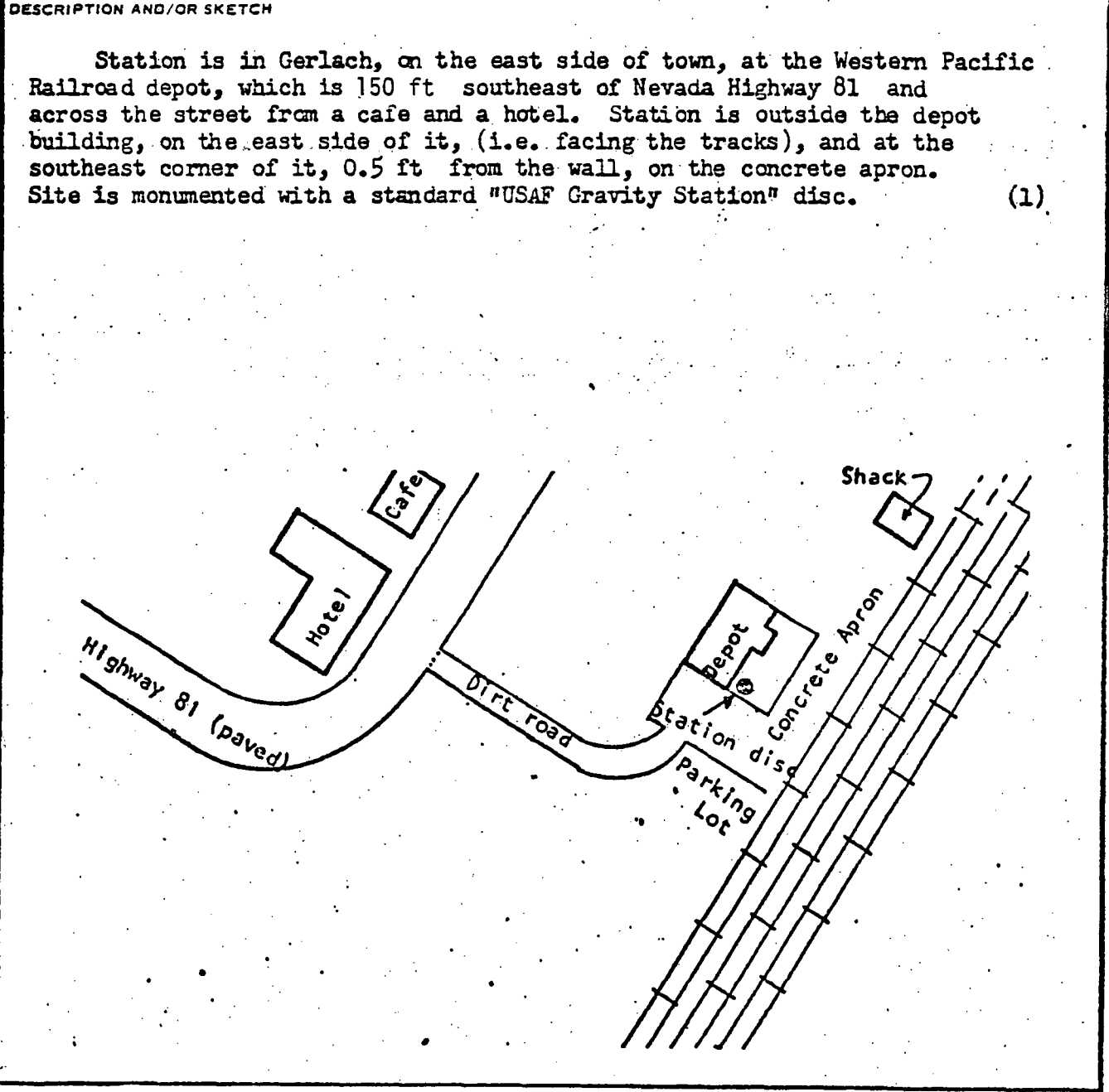


Figure 1. Location of gravity base station for Gerlach and San Emidio, Nevada, gravity surveys.

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 U.S.G.S. GRAVITY SURVEY
 DENSITY: 2.67

BOUGHER GRAVITY DATA

Gerlach KGRA, Nevada

STATION	LATITUDE	LOCATION LONGITUDE	ELEV.	OBSERVED GRAVITY	BOUGHER ANOMALY
BASF	40 39.10	-119 21.20	3933.9	979829.16	-163.48
GL01	40 41.37	-119 24.63	3945.4	979834.36	-160.97
GE02	40 41.16	-119 21.45	3943.6	979835.58	-159.54
GE03	40 41.00	-119 24.32	3947.0	979836.46	-158.22
GE04	40 40.88	-119 24.19	3954.1	979837.69	-156.39
GE05	40 40.68	-119 24.04	3962.2	979838.92	-154.39
GE06	40 40.51	-119 23.89	3978.2	979840.48	-151.61
GE08	40 40.10	-119 23.55	4020.5	979840.93	-148.02
GE09	40 39.94	-119 23.43	4038.9	979839.50	-148.11
GE10	40 39.73	-119 23.31	4067.2	979839.93	-145.69
GE11	40 39.54	-119 23.13	4083.3	979839.69	-144.68
GE12	40 39.15	-119 22.83	4033.6	979841.01	-146.19
GE13	40 39.28	-119 22.54	3991.9	979840.63	-148.81
GE14	40 39.38	-119 22.23	3971.2	979839.98	-150.50
GE15	40 39.34	-119 21.94	3978.2	979835.58	-154.77
GE16	40 39.30	-119 21.70	3959.9	979831.99	-159.39
GE17	40 39.13	-119 21.42	3953.2	979829.01	-162.51
BASF	40 39.10	-119 21.20	3933.9	979829.16	-163.48
GE18	40 39.25	-119 20.75	3918.0	979829.98	-163.83
GE19	40 39.05	-119 20.61	3917.1	979830.07	-163.51
GE20	40 39.07	-119 20.61	3916.3	979830.56	-163.09
GE21	40 38.62	-119 20.46	3913.7	979830.66	-162.46
GE22	40 39.41	-119 20.40	3908.0	979831.34	-161.81
GE23	40 39.20	-119 20.32	3910.2	979831.44	-161.27
GE24	40 37.97	-119 20.27	3930.0	979831.88	-159.31
GE25	40 37.81	-119 20.21	3930.9	979832.68	-158.22
GE26	40 37.55	-119 20.16	3931.6	979833.70	-156.76
GE27	40 37.37	-119 20.08	3945.5	979833.41	-155.95
GE28	40 37.18	-119 20.04	3967.2	979832.58	-155.21
GE29	40 37.18	-119 19.77	4001.5	979835.47	-150.27
GE30	40 37.20	-119 19.77	4052.0	979835.14	-147.61
GE31	40 37.01	-119 19.32	4115.1	979836.26	-142.44
GE32	40 37.04	-119 19.03	4211.6	979833.82	-139.15
GE33	40 37.12	-119 18.72	4383.1	979824.80	-136.06
GE34	40 41.49	-119 20.97	3906.0	979836.53	-161.33
GE35	40 38.89	-119 24.40	4092.0	979834.67	-148.21
GE36	40 39.13	-119 24.79	3899.0	979841.00	-153.77
GE37	40 38.49	-119 25.53	3882.0	979836.88	-158.55
GE38	40 37.77	-119 25.18	3956.0	979834.73	-154.61

BOUGUER GRAVITY DATA

Gerlach KGRA, Nevada

STATION	LATITUDE	LOCATION LONGITUDE	ELEV.	OBSERVED GRAVITY	BOUGUER ANOMALY
GE39	40 34.06	-119 24.39	3920.0	979832.27	
GE40	40 39.21	-119 24.25	3922.8	979833.41	-159.56
GE41	40 34.36	-119 24.01	3916.5	979834.48	-158.56
GE42	40 34.48	-119 23.75	3919.6	979833.89	-158.09
GE43	40 34.58	-119 23.44	3935.9	979832.97	-158.67
					-158.78
GE44	40 38.75	-119 23.18	3933.3	979835.81	
GE45	40 38.91	-119 23.01	3930.9	979839.64	-156.34
GE46	40 39.06	-119 22.83	3939.6	979838.84	-152.90
BASE	40 39.10	-119 21.20	3933.9	979829.16	-153.40
					-163.48

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BOUGUER GRAVITY DATA
 SAN EMIDIO KGRA, NEVADA

STATION	LATITUDE	LOCATION LONGITUDE	ELEV.	OBSERVED GRAVITY	BOUGUER ANOMALY
SE020	40 22.15	-119 25.73	4032.3	979813.26	-148.26
BASE1	40 39.10	-119 21.20	3933.9	979829.16	-163.48
SE001	40 22.11	-119 22.62	4514.1	979805.66	-126.79
BASE2	40 22.05	-119 22.72	4430.7	979812.12	-125.45
SE003	40 22.09	-119 22.99	4237.0	979818.31	-130.69
SE004	40 22.06	-119 23.25	4159.5	979817.92	-135.87
SE005	40 22.06	-119 23.68	4100.1	979815.91	-141.43
SE006	40 22.10	-119 23.88	4071.7	979817.89	-141.21
SE007	40 22.13	-119 24.21	4047.5	979818.56	-142.02
SE008	40 22.13	-119 24.46	4043.6	979817.01	-143.60
SE009	40 22.14	-119 24.81	4039.7	979816.22	-144.65
SE010	40 22.11	-119 25.05	4035.8	979815.25	-146.00
SE011	40 21.28	-119 25.01	4042.0	979816.88	-142.77
SE012	40 20.95	-119 24.13	4165.0	979816.83	-134.99
SE013	40 20.52	-119 24.67	4195.0	979813.40	-135.98
SE014	40 20.77	-119 29.32	4223.0	979810.46	-137.62
SE015	40 20.40	-119 28.42	4111.0	979813.46	-140.76
SE016	40 20.75	-119 28.22	4088.0	979812.49	-143.63
SE017	40 21.19	-119 28.13	4086.0	979812.45	-144.44
SE018	40 21.61	-119 28.19	4087.0	979812.69	-144.56
SE019	40 22.03	-119 28.20	4060.0	979815.58	-144.11
SE020	40 22.48	-119 28.20	4048.0	979816.03	-145.04
SE021	40 22.81	-119 28.47	4066.0	979815.75	-144.73
SE022	40 23.71	-119 26.71	4208.0	979815.76	-137.59
SE023	40 24.46	-119 28.72	4149.0	979812.08	-145.91
SE024	40 25.12	-119 28.91	4281.0	979806.60	-144.49
BASE1	40 39.10	-119 21.20	3933.9	979829.16	-163.48
BASE1	40 39.10	-119 21.20	3933.9	979829.16	-163.48
BASE2	40 22.05	-119 22.72	4430.7	979812.12	-125.45
SE025	40 22.17	-119 25.41	4033.0	979814.15	-147.36
SE027	40 22.14	-119 25.93	4031.3	979813.22	-148.35
SE028	40 22.13	-119 26.28	4025.8	979813.71	-148.17
SE029	40 22.10	-119 26.59	4026.8	979813.28	-148.50
SE030	40 22.09	-119 26.87	4024.8	979812.95	-148.69
SE031	40 22.05	-119 27.16	4030.7	979813.13	-148.33
SE032	40 22.07	-119 27.45	4030.1	979813.92	-147.61
SE033	40 22.04	-119 27.82	4042.3	979815.34	-145.42
SE034	40 22.06	-119 28.61	4122.9	979813.18	-142.80
SE035	40 22.05	-119 28.97	4162.0	979813.08	-140.54
SE036	40 22.04	-119 29.21	4200.5	979813.21	-138.10

BOUGHER GRAVITY DATA

SAN EMIDIO MOUNTAINS, NEVADA

STATION	LATITUDE	LONGITUDE	ELEV.	OBSERVED GRAVITY	BOUGHER ANOMALY
SE037	40 22.06	-119 29.35	4394.8	979803.21	-136.53
BASE2	40 22.05	-119 22.72	4430.7	979812.12	-125.45
SE038	40 24.20	-119 27.64	4051.5	979814.52	-148.90
SE039	40 24.19	-119 27.32	4020.3	979815.16	-150.11
SE040	40 24.20	-119 27.06	4011.3	979815.00	-150.63
SE041	40 24.20	-119 26.71	4007.3	979814.28	-151.78
SE042	40 24.25	-119 26.37	4013.1	979813.84	-151.96
SE043	40 24.21	-119 28.21	4112.0	979811.77	-148.06
SE044	40 24.09	-119 29.14	4391.4	979802.16	-140.80
SE045	40 23.96	-119 26.41	4015.0	979813.64	-151.60
SE046	40 23.71	-119 26.47	4015.0	979813.39	-151.48
SE047	40 23.41	-119 26.50	4015.0	979813.49	-150.94
SE048	40 23.16	-119 26.51	4015.0	979813.49	-150.56
SE049	40 22.91	-119 26.57	4015.0	979812.77	-150.91
SE050	40 24.20	-119 26.05	4018.5	979812.78	-152.61
SE051	40 24.29	-119 25.75	4014.0	979812.44	-153.36
BASE1	40 39.10	-119 21.20	3933.9	979829.16	-163.48
BASE1	40 39.10	-119 21.20	3933.9	979829.16	-163.48
SE052	40 24.23	-119 25.45	4023.4	979811.71	-153.64
SE053	40 24.22	-119 25.04	4039.0	979811.18	-153.02
SE054	40 24.23	-119 24.73	4042.7	979811.06	-152.94
SE055	40 24.29	-119 24.54	4044.9	979811.64	-152.32
SE056	40 24.36	-119 24.23	4046.6	979811.60	-150.36
SE057	40 24.38	-119 23.75	4165.6	979815.49	-141.39
SE058	40 24.67	-119 24.34	4063.0	979815.58	-146.16
SE059	40 23.50	-119 23.59	4237.2	979807.79	-143.50
SE060	40 26.48	-119 24.54	4073.0	979820.34	-145.20
SE061	40 25.93	-119 26.86	4022.0	979817.92	-149.84
SE062	40 26.23	-119 25.77	4010.0	979816.68	-152.24
BASE1	40 39.10	-119 21.20	3933.9	979829.16	-163.48