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stations in the Darrough Known
Geothermal Resource Area (KGRA),
Nevada

TM
cm
J. W. L. C.

By

Donald L. Peterson and Danny Dansereau

U.S. Geological Survey

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84

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PRINCIPAL FACTS FOR GRAVITY STATION IN
DARROUGH HOT SPRINGS KNOWN GEOTHERMAL
RESOURCE AREA (KGRA), NEVADA

by

DONALD L. PETERSON AND DANNY DANSEREAU

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

STATION IDENTIFICATION

LATITUDE

LONGITUDE

ELEV.

ST.

OBSERVED GRAVITY

STD. GRV.

TERRAIN CORRECTION

FREE-AIR

BOUGUER CORRECTION

BOUGUER ANOMALY

GRAVITY STATIONS

NORTH LATITUDE IN DEGREES,
MINUTES, AND HUNDREDTHS OF
MINUTES

WEST LONGITUDE IN DEGREES,
MINUTES, AND HUNDREDTHS OF
MINUTES

ELEVATION IN FEET¹

STATE POSTAL SERVICE TWO
LETTER ABBREVIATION

IN MILLIGALS

THEORETICAL GRAVITY

TERRAIN CORRECTION IN MILLIGALS
FOR AN ASSUMED DENSITY OF 2.67
G PER CC

FREE AIR CORRECTION IN MILLIGALS

ELEVATION AND CURVATURE CORRECTION
IN MILLIGALS

COMPLETE BOUGUER ANOMALY IN MILLIGALS
FOR ASSUMED DENSITY OF 2.67 G PER CC

THE DARROUGH HOT SPRINGS DATA ARE REFERENCED TO THE STATION LOCATED AT
THE NYE COUNTY AIRPORT, 8 MILES EAST OF TONOPAH (ACIC REFERENCE NO. 0455-1).

REFERENCE

HAMMER, SIGMUND, 1939, TERRAIN CORRECTION FOR GRAVIMETER STATIONS:
GEOPHYSICS, v. 4, p. 184-194.

¹To convert feet to metres, multiply by 0.3048.

BOUGUER GRAVITY DATA

KGRA PROJECT DARKOUGH, NEVADA, BY PETERSON & DANSEREAU
 BASE=ACIC 0455-1 GBV=979476915 (1967) & USGS BM5602 GBV=979543948 (1975)
 DENSITY: 2.67

STATION IDENTIFICATION	LATITUDE	LOCATION LONGITUDE	ELEV.	ST.	OBSERVED GRAVITY	STD. GRV.	TERRAIN	CORRECTIONS FREE-AIR	BOUGUER	SPECIAL	BOUGUER ANOMALY	SPEC. FIELD
GRAVITY.BASE5602			0.0	NE	979543.48							
GRAVITY. DA01	38 50.55	-117 11.61	5699.0	NE	979543.68	-980066.27	0.39	535.83	-195.85		-182.22	
GRAVITY. DA02	38 50.54	-117 11.80	5734.0	NE	979542.56	-980066.26	0.44	539.12	-197.05		-181.19	
GRAVITY. DA03	38 50.62	-117 12.03	5790.0	NE	979540.49	-980066.33	0.80	544.38	-198.96		-179.67	
GRAVITY. DA04	38 50.54	-117 12.26	5834.0	NE	979537.84	-980066.41	1.77	548.52	-200.47		-178.75	
GRAVITY. DA05	38 50.72	-117 12.61	5924.0	NE	979533.33	-980066.52	2.48	556.98	-203.54		-177.27	
GRAVITY. DA06	38 50.69	-117 12.86	6015.0	NE	979531.02	-980066.48	3.21	565.53	-206.65		-173.37	
GRAVITY. DA07	38 49.82	-117 11.32	5687.0	NE	979541.73	-980065.20	0.35	534.71	-195.44		-183.85	
GRAVITY. DA08	38 49.84	-117 11.21	5650.0	NE	979543.01	-980065.23	0.22	531.23	-194.18		-184.95	
GRAVITY. DA09	38 49.90	-117 11.00	5600.0	NE	979544.62	-980065.32	0.11	526.53	-192.47		-186.53	
GRAVITY. DA10	38 49.98	-117 10.92	5596.0	NE	979544.89	-980065.44	0.05	526.15	-192.33		-186.68	
GRAVITY. DA11	38 50.10	-117 10.84	5598.0	NE	979544.84	-980065.61	0.05	526.34	-192.40		-186.78	
GRAVITY. DA12	38 50.57	-117 10.51	5579.0	NE	979544.93	-980066.30	0.04	524.55	-191.75		-188.53	
GRAVITY. DA13	38 50.58	-117 10.02	5567.0	NE	979542.23	-980066.32	0.02	523.43	-191.34		-191.93	
GRAVITY. DA14	38 50.34	-117 10.02	5557.0	NE	979542.22	-980065.97	0.01	522.49	-191.00		-192.25	
GRAVITY. DA15	38 50.33	-117 9.73	5548.0	NE	979541.63	-980065.95	0.01	521.64	-190.69		-193.36	
GRAVITY. DA16	38 50.07	-117 9.31	5538.0	NE	979541.56	-980065.57	0.00	520.70	-190.35		-193.66	
GRAVITY. DA17	38 49.99	-117 9.09	5534.0	NE	979541.12	-980065.45	0.00	520.32	-190.21		-194.22	
GRAVITY. DA18	38 49.93	-117 8.75	5535.0	NE	979540.73	-980065.36	0.00	520.42	-190.25		-194.46	
GRAVITY. DA19	38 49.85	-117 8.37	5533.0	NE	979540.23	-980065.24	0.00	520.23	-190.18		-194.96	
GRAVITY. DA20	38 49.71	-117 7.62	5537.0	NE	979539.05	-980065.04		520.61	-190.32		-195.70	
GRAVITY. DA21	38 49.57	-117 6.81	5545.0	NE	979538.21	-980064.83		521.36	-190.59		-195.85	
GRAVITY. DA22	38 49.39	-117 6.18	5561.0	NE	979539.09	-980064.57		522.86	-191.14		-193.76	
GRAVITY.BASE5602			0.0	NE	979543.48							
GRAVITY.BASE0455			0.0	NE	979476.15							
GRAVITY.BASE5602			0.0	NE	979543.48							
GRAVITY. DA23	38 48.65	-117 11.25	5699.0	NE	979539.27	-980063.48	0.37	535.83	-195.85		-183.86	
GRAVITY. DA24	38 48.69	-117 11.50	5763.0	NE	979535.30	-980063.54	0.40	541.85	-198.04		-184.03	
GRAVITY. DA25	38 48.91	-117 11.28	5727.0	NE	979537.64	-980063.86	0.41	538.46	-196.81		-184.15	
GRAVITY. DA26	38 48.76	-117 11.77	5913.0	NE	979529.80	-980063.64	0.92	555.94	-203.17		-180.15	
GRAVITY. DA27	38 48.80	-117 11.99	5964.0	NE	979524.40	-980063.70	1.84	560.74	-204.91		-181.63	
GRAVITY. DA28	38 48.83	-117 12.29	6171.0	NE	979516.31	-980063.82	2.77	580.19	-211.98		-176.53	
GRAVITY. DA29	38 48.93	-117 12.55	6326.0	NE	979505.91	-980063.89	3.68	594.76	-217.27		-176.61	
GRAVITY. DA30	38 50.91	-117 11.64	5724.0	NE	979543.30	-980065.80	0.38	538.18	-196.71		-181.65	
GRAVITY. DA31	38 51.62	-117 12.03	5701.0	NE	979545.59	-980067.85	0.32	536.02	-195.92		-181.84	
GRAVITY. DA32	38 51.51	-117 11.44	5671.0	NE	979544.36	-980065.69	0.20	533.20	-194.90		-184.83	
GRAVITY. DA33	38 51.37	-117 10.22	5594.0	NE	979542.45	-980067.48	0.20	525.96	-192.26		-191.13	
GRAVITY. DA34	38 51.68	-117 9.88	5585.0	NE	979541.81	-980067.94	0.19	525.12	-191.96		-192.78	
GRAVITY.BASE5602			0.0	NE	979543.48							
GRAVITY. DA35	38 48.56	-117 11.11	5644.0	NE	979541.07	-980063.34	0.34	530.66	-193.97		-185.24	

KGRA PROJECT DARROUGH, NEVADA, BY PETERSON & DANSEREAU

STATION IDENTIFICATION		LATITUDE	LOCATION LONGITUDE	ELEV.	ST.	OBSERVED GRAVITY	STD. GRV.	CORRECTIONS			SPECIAL	BOUGUER ANOMALY	SPEC. FIELD
								TERRAIN	FREE-AIR	BOUGUER			
GRAVITY.	DA35	38 48.02	-117 11.20	5661.0	NE	979540.34	-980062.55	0.38	532.26	-194.55		-134.12	
GRAVITY.	DA37	38 47.07	-117 10.81	5660.0	NE	979539.55	-980061.15	0.36	532.17	-194.52		-133.59	
GRAVITY.	DA38	38 46.61	-117 10.91	5721.0	NE	979538.18	-980060.47	0.45	537.90	-196.61		-130.55	
GRAVITY.	DA39	38 46.05	-117 11.47	5871.0	NE	979532.89	-980059.65	1.07	552.00	-201.73		-175.42	
GRAVITY.	DA40	38 46.11	-117 10.81	5723.0	NE	979538.39	-980059.74	0.15	538.09	-196.67		-179.78	
GRAVITY.	DA41	38 46.21	-117 9.90	5611.0	NE	979537.65	-980059.89	0.31	527.56	-192.85		-187.22	
GRAVITY.	DA42	38 45.70	-117 8.76	5627.0	NE	979532.47	-980059.14	0.00	529.07	-193.39		-190.99	
GRAVITY.	DA43	38 46.03	-117 8.42	5634.0	NE	979532.75	-980059.62		529.72	-193.63		-190.78	
GRAVITY.	DA44	38 46.87	-117 8.39	5610.0	NE	979534.66	-980060.86		527.47	-192.81		-191.54	
GRAVITY.	DA45	38 47.48	-117 8.68	5577.0	NE	979536.24	-980061.76		524.37	-191.68		-192.83	
GRAVITY.	DA46	38 47.37	-117 9.28	5578.0	NE	979536.44	-980061.59		524.46	-191.72		-192.41	
GRAVITY.	DA47	38 47.48	-117 9.77	5575.0	NE	979538.06	-980061.76		524.18	-191.61		-191.13	
GRAVITY.	DA48	38 47.72	-117 9.76	5563.0	NE	979538.26	-980062.11		523.52	-191.38		-191.71	
GRAVITY.	DA49	38 48.37	-117 9.77	5555.0	NE	979539.39	-980063.06		522.30	-190.93		-192.30	
GRAVITY.	DA50	38 48.77	-117 9.33	5549.0	NE	979538.91	-980063.65		521.74	-190.73		-193.73	
GRAVITY.	DA51	38 49.10	-117 9.63	5544.0	NE	979540.33	-980064.14		521.26	-190.55		-193.10	
GRAVITY.	DA52	38 49.25	-117 9.75	5541.0	NE	979540.82	-980064.35		520.98	-190.45		-193.01	
GRAVITY.	DA53	38 49.24	-117 10.03	5543.0	NE	979541.32	-980064.35		521.17	-190.52		-192.38	
GRAVITY.	DA54	38 49.10	-117 10.34	5544.0	NE	979542.07	-980064.14	0.18	521.26	-190.55		-191.13	
GRAVITY.	DA55	38 49.30	-117 10.58	5550.0	NE	979543.15	-980064.43	0.19	521.83	-190.76		-190.02	
GRAVITY.	BASE5602			0.0	NE	979543.48							
GRAVITY.	BASE0455			0.0	NE	979476.15							
GRAVITY.	BASE0455			0.0	NE	979476.15							
GRAVITY.	BASE5602			0.0	NE	979543.48							
GRAVITY.	DA56	38 49.25	-117 5.42	5604.0	NE	979540.22	-980064.36		526.90	-192.61		-189.85	
GRAVITY.	DA57	38 49.26	-117 5.06	5627.0	NE	979540.22	-980064.37		529.07	-193.39		-188.47	
GRAVITY.	DA58	38 49.12	-117 4.53	5705.0	NE	979538.90	-980064.17	0.12	536.40	-196.06		-184.81	
GRAVITY.	DA59	38 48.61	-117 2.99	6234.0	NE	979508.06	-980063.42	0.37	586.11	-214.13		-183.01	
GRAVITY.	DA60	38 48.52	-117 1.64	6711.0	NE	979479.66	-980063.29	1.83	630.94	-230.41		-181.27	
GRAVITY.	DA61	38 48.94	-117 0.98	6628.0	NE	979469.10	-980063.90	2.09	641.93	-234.40		-185.18	
GRAVITY.	DA62	38 47.78	-117 2.93	6275.0	NE	979505.91	-980062.20	0.34	589.97	-215.53		-181.51	
GRAVITY.	DA63	38 46.96	-117 1.37	6933.0	NE	979465.37	-980060.99	3.95	651.80	-237.98		-177.55	
GRAVITY.	DA64	38 46.61	-117 0.85	7313.0	NE	979444.97	-980060.47	3.07	687.51	-250.93		-175.35	
GRAVITY.	DA65	38 47.00	-117 2.15	6656.0	NE	979482.50	-980061.05	0.41	626.71	-228.87		-180.30	
GRAVITY.	DA66	38 47.01	-117 3.32	6259.0	NE	979504.16	-980061.06	0.33	588.46	-214.98		-183.09	
GRAVITY.	DA67	38 46.93	-117 4.22	5975.0	NE	979519.31	-980060.95	0.25	561.77	-205.28		-184.90	
GRAVITY.	DA68	38 46.89	-117 5.34	5810.0	NE	979529.02	-980060.89	0.10	546.27	-199.65		-185.15	
GRAVITY.	DA69	38 46.81	-117 6.35	5703.0	NE	979534.20	-980060.77	0.01	536.21	-195.99		-186.34	
GRAVITY.	DA70	38 47.55	-117 6.27	5656.0	NE	979533.76	-980061.86	0.00	531.79	-194.38		-190.69	
GRAVITY.	DA71	38 48.35	-117 6.20	5608.0	NE	979536.65	-980063.04		527.28	-192.74		-191.85	
GRAVITY.	BASE5602			0.0	NE	979543.48							