

MASTER

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

PRINCIPAL FACTS FOR A GRAVITY SURVEY OF
BALTAZOR KNOWN GEOTHERMAL RESOURCE
AREA, NEVADA

BY

Donald L. Peterson and Donald B. Hoover

Open-file Report 77-67C

1977

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

DISTRIBUTION OF THIS DOCUMENT IS UNLIMITED

80.75

Rec'd 8-3-78

EW-78-X-05-1684

peg

DISCLAIMER

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency Thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

DISCLAIMER

Portions of this document may be illegible in electronic image products. Images are produced from the best available original document.

PRINCIPAL FACTS FOR A GRAVITY SURVEY OF
BALTAZOR KNOWN GEOTHERMAL RESOURCE
AREA, NEVADA

Explanation of the headings of the columns of the accompanying table of principal facts:

STATION IDENTIFICATION	Gravity survey station number
LATITUDE	North latitude in degrees, minutes, and hundredths of minutes.
LONGITUDE	West longitude in degrees, minutes, and hundredths of minutes.
ELEV.	Elevation in feet (to convert to meters, multiply by 0.3048)
ST.	Non-applicable
OBSERVED	Observed gravity in milligals.
THEORETICAL	Theoretical gravity in milligals computed using the "Geodetic Reference System 1967".
TERRAIN	Terrain correction in milligals computed for "Hammer Zones" "E" through "H".
FREE AIR	Free-air correction in milligals.
BOUGUER	Bouguer correction in milligals (includes elevation and curvature correction).
SPECIAL	Non-applicable
BOUGUER ANOMALY	Bouguer anomaly in milligals for an assumed density of 2.67 grams per cubic centimeter.

SPEC. FIELD

Non-applicable

These data are referenced to a gravity base station in Denio, Nevada at the Post Office, 50 meters south of the Oregon-Nevada State line, 1.6 meters south of the door in the southeast corner of the concrete porch, near the mailbox. Site is monumented with a "USAF Gravity Station" disc (A.C.I.C. reference number 2352-1). Base value is 979945.94.

REFERENCES

Geodetic Reference System 1967, International Assn. of Geodesy, Special
Publication No. 3.

Hammer, Sigmund, 1939, Terrain corrections for gravimeter stations:
Geophysics, v. 4, no. 3, p. 184-193.

BOUGUER GRAVITY DATA

page

BALTAZOR KGRA NE. BASE STA DENIO NEV ACIC REF NO 2352 1

METER W177 MSV .4910

Density: 2.67 Meter ID: w-177 Date: 06/01/77

STATION IDENTIFICATION	LATITUDE	LOCATION		ELEV. ST.	GRAVITY		TERRAIN	CORRECTIONS			BOUGUER ANOMALY	SPEC. FIELD
		LONGITUDE			OBSERVED	THEORETICAL		FREE-AIR	BOUGUER	SPECIAL		
kgra . DE01	41 56.58	118 40.92		4214.0	979960.80	-980342.95	0.26	396.22	-145.03	0.00	-130.69	
kgra . DE02	41 55.62	118 42.49		4234.0	979952.50	-980341.51	0.69	398.10	-145.71	0.00	-135.93	
kgra . DE03	41 55.62	118 42.90		4375.0	979943.12	-980341.51	2.09	411.35	-150.54	0.00	-135.49	
kgra . DE04	41 54.58	118 44.02		4215.0	979944.79	-980339.95	1.91	396.32	-145.06	0.00	-141.99	
kgra . DE05	41 54.73	118 44.08		4327.0	979939.23	-980340.17	3.15	406.84	-148.90	0.00	-139.84	
kgra . DE06	41 53.84	118 44.82		4751.0	979906.54	-980338.84	3.20	446.69	-163.42	0.00	-145.82	
kgra . DE07	41 53.87	118 44.09		4214.0	979941.84	-980338.88	0.26	396.22	-145.03	0.00	-145.58	
kgra . DE08	41 53.03	118 44.69		4219.0	979942.09	-980337.63	0.28	396.69	-145.20	0.00	-143.76	
kgra . DE09	41 53.00	118 44.29		4215.0	979938.59	-980337.58	0.03	396.32	-145.06	0.00	-147.70	
kgra . DE10	41 55.82	118 40.69		4288.0	979957.02	-980341.80	1.07	403.18	-147.56	0.00	-128.10	
kgra . DE11	41 55.82	118 41.18		4208.0	979959.82	-980341.80	0.33	395.66	-144.82	0.00	-130.82	
kgra . DE12	41 55.82	118 41.71		4208.0	979956.87	-980341.80	0.17	395.66	-144.82	0.00	-133.93	
kgra . DE13	41 54.95	118 40.70		4418.0	979947.59	-980340.50	1.13	415.40	-152.02	0.00	-128.40	
kgra . DE14	41 54.95	118 41.72		4266.0	979953.09	-980340.50	0.26	401.11	-146.81	0.00	-132.85	
kgra . DE15	41 53.88	118 42.32		4245.0	979950.59	-980338.90	0.44	399.14	-146.09	0.00	-134.82	
kgra . DE16	41 52.64	118 42.28		4247.0	979949.95	-980337.04	0.55	399.33	-146.16	0.00	-133.38	
kgra . DE17	41 52.10	118 41.73		4378.0	979942.68	-980336.23	1.43	411.64	-150.64	0.00	-131.13	
kgra . DE18	41 52.10	118 42.90		4214.0	979947.00	-980336.23	0.00	396.22	-145.03	0.00	-138.03	
kgra . DE19	41 52.12	118 44.10		4219.0	979938.70	-980336.26	0.00	396.69	-145.20	0.00	-146.07	
kgra . DE20	41 55.53	118 42.70		4248.1	979951.54	-980341.37	1.17	399.43	-146.19	0.00	-135.43	
kgra . DE21	41 55.46	118 42.64		4225.4	979952.01	-980341.27	0.89	397.29	-145.42	0.00	-136.49	
kgra . DE22	41 55.31	118 42.56		4211.0	979951.32	-980341.04	0.44	395.94	-144.92	0.00	-138.26	
kgra . DE23	41 55.24	118 42.50		4211.7	979951.13	-980340.94	0.39	396.01	-144.95	0.00	-138.36	
kgra . DE24	41 55.13	118 42.59		4215.6	979950.83	-980340.77	0.39	396.37	-145.08	0.00	-138.26	
kgra . DE25	41 55.39	118 42.42		4211.8	979951.73	-980341.16	0.39	396.02	-144.95	0.00	-137.97	
kgra . DE26	41 54.99	118 42.68		4212.4	979949.77	-980340.56	0.31	396.07	-144.97	0.00	-139.39	
kgra . DE27	41 54.82	118 42.80		4214.6	979948.41	-980340.30	0.31	396.28	-145.05	0.00	-140.35	
kgra . DE28	41 54.68	118 43.00		4189.0	979947.00	-980340.09	0.25	393.87	-144.17	0.00	-143.14	
kgra . DE29	41 55.18	118 42.29		4214.2	979952.38	-980340.84	0.21	396.24	-145.03	0.00	-137.05	
kgra . DE30	41 55.08	118 42.15		4215.6	979953.77	-980340.70	0.17	396.37	-145.08	0.00	-135.46	
kgra . DE31	41 55.00	118 41.90		4239.6	979953.63	-980340.58	0.25	398.63	-145.90	0.00	-133.98	
kgra . DE32	41 56.68	118 41.72		4303.0	979953.09	-980343.09	0.51	404.59	-148.07	0.00	-132.99	
kgra . DE33	41 57.02	118 42.83		5004.0	979910.32	-980343.60	2.07	470.47	-172.08	0.00	-132.82	