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UNITED STATES DEPARTMENT OF THE INTERIOR
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Principal Facts for Gravity Stations in
the Elko Hot Springs Known Geothermal
Resource Area (KGRA), Nevada

Elko Co

By

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U.S. Geological Survey

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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 THE ELKO
HOT SPRINGS KNOWN GEOTHERMAL RESOURCE AREA, 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 ELKO,
NEVADA, WITH AN OBSERVED GRAVITY VALUE OF 979753.91 MILLIGALS
(ACIC REFERENCE NO. 3899-2).

¹To convert feet to metres, multiply by 0.3048.

BOUGUER GRAVITY DATA FOR THE ELKO HOT SPRINGS KNOWN GEOTHERMAL

RESOURCE AREA (KGRA), NEVADA

ELKO NEVADA, KGRA GRAVITY, BY PETERSON & DANSENEAU
 BASE STATION USED: ACIC 3899-2 1967 GBV, =979753.91
 DENSITY: 2.67

STATION	LATITUDE	LOCATION LONGITUDE	ELEV.	OBSERVED GRAVITY	BOUGUER ANOMALY
EK01	40 46.00	-115 46.17	5905.0	979715.58	-169.08
EK02	40 46.14	-115 45.97	5821.0	979720.26	-169.48
EK03	40 46.31	-115 46.08	5735.0	979727.35	-165.57
EK04	40 46.50	-115 45.98	5780.0	979724.20	-166.41
EK05	40 46.72	-115 45.60	5739.0	979726.88	-166.55
EK06	40 46.95	-115 45.62	5683.0	979731.24	-165.96
EK07	40 47.08	-115 45.63	5662.0	979733.34	-165.29
EK08	40 47.30	-115 45.64	5673.0	979735.10	-163.21
EK09	40 47.43	-115 45.65	5654.0	979733.31	-166.44
EK10	40 47.64	-115 45.66	5627.0	979734.44	-167.32
EK11	40 47.88	-115 45.64	5543.0	979739.50	-167.73
EK12	40 48.11	-115 45.65	5477.0	979742.59	-169.27
EK13	40 48.27	-115 45.69	5314.0	979751.68	-170.33
EK14	40 48.34	-115 45.79	5237.0	979756.88	-170.24
EK15	40 48.57	-115 45.98	5182.0	979759.74	-170.98
EK16	40 48.77	-115 46.21	5141.0	979758.53	-174.97
EK17	40 48.97	-115 46.24	5094.0	979759.57	-177.64
EK18	40 49.05	-115 46.41	5062.0	979762.62	-176.85
EK19	40 49.17	-115 46.49	5038.0	979761.06	-180.33
EK20	40 49.04	-115 46.62	5095.0	979758.99	-178.36
EK21	40 48.70	-115 46.55	5291.0	979751.56	-172.83
EK22	40 51.55	-115 45.20	5354.0	979741.31	-184.28
EK23	40 50.66	-115 44.86	5077.0	979758.89	-182.60
EK24	40 49.80	-115 45.78	5063.0	979759.47	-181.66
EK25	40 49.63	-115 45.27	5060.0	979761.66	-179.38
EK26	40 50.01	-115 44.34	5095.0	979761.06	-178.22

BOUGUER GRAVITY DATA FOR THE ELKO HOT SPRINGS KNOWN GEOTHERMAL
RESOURCE AREA (KGRA), NEVADA

STATION	LATITUDE	LOCATION LONGITUDE	ELEV.	OBSERVED GRAVITY	BOUGUER ANOMALY
EK27	40 50.23	-115 43.80	5199.0	979753.80	-179.56
EK28	40 49.99	-115 43.90	5136.0	979759.38	-177.43
EK29	40 49.66	-115 43.75	5203.0	979757.03	-175.13
EK30	40 49.61	-115 44.20	5251.0	979753.38	-175.86
EK31	40 48.97	-115 44.22	5472.0	979741.74	-172.78
EK32	40 48.79	-115 43.90	5521.0	979738.11	-173.20
EK33	40 47.84	-115 42.73	5769.0	979723.49	-172.30
EK34	40 47.31	-115 43.37	5892.0	979713.03	-173.61
EK35	40 46.50	-115 43.99	6051.0	979699.62	-177.26
EK36	40 46.93	-115 44.19	6406.0	979674.62	-178.97
EK37	40 47.65	-115 44.06	5947.0	979711.62	-171.78
EK38	40 47.68	-115 44.68	5887.0	979713.02	-174.25
EK39	40 46.56	-115 46.59	5580.0	979735.42	-168.48
EK40	40 46.97	-115 46.82	5420.0	979746.26	-168.18
EK41	40 47.27	-115 47.26	5279.0	979753.18	-170.62
EK42	40 48.08	-115 47.59	5170.0	979746.13	-185.22
EK43	40 48.61	-115 47.12	5059.0	979755.36	-183.44
EK44	40 48.12	-115 48.29	5048.0	979750.50	-188.31
EK45	40 47.73	-115 48.88	5041.0	979751.16	-187.99
EK46	40 48.48	-115 49.20	5032.0	979752.26	-188.72
EK47	40 48.73	-115 49.66	5165.0	979745.85	-187.21
EK48	40 47.73	-115 46.26	5565.0	979730.94	-174.35
EK49	40 47.80	-115 46.70	5722.0	979724.33	-171.74
EK50	40 50.06	-115 47.50	5148.0	979740.18	-196.20
EK51	40 50.36	-115 48.39	5235.0	979740.31	-191.30
EK52	40 51.06	-115 50.33	5519.0	979739.13	-174.88
EK53	40 50.30	-115 47.11	5277.0	979737.25	-191.51
EK54	40 51.09	-115 47.31	5296.0	979738.36	-190.70
EK55	40 50.74	-115 46.51	5165.0	979747.86	-188.51
EK56	40 49.36	-115 46.94	5044.0	979754.94	-186.62
EK57	40 49.27	-115 46.79	5043.0	979759.13	-182.37
EK58	40 48.97	-115 48.29	5041.0	979749.71	-191.40