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UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Principal facts for a gravity survey of
Pinto Hot Springs Known Geothermal Resource
Area, Nevada

Humboldt Co.

By

Donald L. Peterson and Jerry H. Hassemer

Open-File Report 77-67B
1977

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 A GRAVITY SURVEY OF PINTO HOT SPRINGS 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	State
Observed Gravity	Observed gravity in milligals.
ST. GRV.	Theoretical gravity computed using the "Geodetic Reference System 1967"
Free-Air	Free-air correction in milligals
Bouguer	Bouguer correction in milligals (includes elevation and curvature correction)
Bouguer Anomaly	Simple Bouguer Anomaly in milligals for an assumed density of 2.67 grams per cc

Station is in Denio, Nevada at the post office, 50 meters south of the Oregon-Nevada State line, on the west wall 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).

Reference:

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

BOUGUER GRAVITY DATA

PINTO HOT SPRINGS, NEVADA
 BY DONALD L. PETERSON 1976
 DENSITY: 2.67

G R A V I T Y S U R V E Y
 BASE VALUE=979898.21

STATION IDENTIFICATION	LATITUDE	LOCATION		ELEV. ST.	OBSERVED GRAVITY	STD. GRV.	CORRECTIONS			BOUGUER ANOMALI	SPEC. FIELD
		LONGITUDE					TERRAIN	FREE-AIR	BOUGUER		
PINTO . PS01	41 22,00	-118 51,90	4062,0		979898,21	-980291,17		381,94	-139,81	-150,83	
PINTO . PS02	41 21,98	-118 51,36	4040,0		979899,18	-980291,14		379,87	-139,06	-151,15	
PINTO . PS03	41 21,90	-118 50,87	4038,0		979898,19	-980291,02		379,68	-138,99	-152,14	
PINTO . PS04	41 21,81	-118 50,42	4035,0		979896,57	-980290,88		379,40	-138,89	-153,60	
PINTO . PS05	41 21,70	-118 49,90	4034,0		979894,76	-980290,72		379,31	-138,85	-155,50	
PINTO . PS06	41 21,62	-118 49,44	4034,0		979893,80	-980290,60		379,31	-138,85	-156,34	
PINTO . PS07	41 21,55	-118 49,00	4031,0		979894,83	-980290,49		379,03	-138,75	-155,38	
PINTO . PS08	41 21,51	-118 48,75	4036,0		979898,07	-980290,43		379,49	-138,92	-151,79	
PINTO . PS09	41 21,37	-118 48,39	4157,0		979896,38	-980290,23		390,87	-143,07	-146,05	
PINTO . PS01	41 22,00	-118 51,90	4062,0		979898,21	-980291,17		381,94	-139,81	-150,83	
PINTO . PS10	41 21,48	-118 48,06	4256,0		979893,69	-980290,39		400,18	-146,46	-142,98	
PINTO . PS11	41 21,65	-118 47,78	4186,0		979900,91	-980290,64		393,59	-144,06	-140,20	
PINTO . PS12	41 21,74	-118 47,38	4122,0		979905,82	-980290,78		387,58	-141,87	-139,25	
PINTO . PS13	41 21,69	-118 47,00	4042,0		979909,26	-980290,70		380,06	-139,13	-140,51	
PINTO . PS14	41 21,67	-118 46,52	4011,0		979908,04	-980290,67		377,14	-138,67	-143,56	
PINTO . PS15	41 21,58	-118 46,11	4021,0		979903,87	-980290,54		378,08	-138,41	-147,00	
PINTO . PS16	41 21,47	-118 48,63	4054,0		979898,93	-980290,37		381,19	-139,54	-149,79	
PINTO . PS01	41 22,00	-118 51,90	4062,0		979898,21	-980291,17		381,94	-139,81	-150,83	
PINTO . PS01	41 22,00	-118 51,90	4062,0		979898,21	-980291,17		381,94	-139,81	-150,83	
PINTO . PS17	41 20,83	-118 47,57	4523,0		979869,56	-980289,42		425,27	-155,61	-150,20	
PINTO . PS18	41 21,03	-118 46,73	4081,0		979903,05	-980289,72		383,73	-140,47	-143,41	
PINTO . PS19	41 20,66	-118 46,31	4432,0		979873,12	-980289,16		416,72	-152,50	-151,62	
PINTO . PS20	41 20,41	-118 47,32	5237,0		979811,45	-980288,79		492,38	-180,06	-165,02	
PINTO . PS21	41 20,03	-118 47,44	5189,0		979814,95	-980288,22		487,87	-178,41	-163,81	
PINTO . PS22	41 19,30	-118 47,63	5085,0		979819,35	-980287,13		478,10	-174,86	-164,54	
PINTO . PS23	41 20,03	-118 46,37	4511,0		979866,09	-980288,22		424,14	-155,20	-153,19	
PINTO . PS24	41 19,48	-118 45,38	4138,0		979889,59	-980287,40		389,08	-142,42	-151,15	
PINTO . PS25	41 19,83	-118 45,55	4071,0		979895,25	-980287,92		382,79	-140,12	-150,00	
PINTO . PS01	41 22,00	-118 51,90	4062,0		979898,21	-980291,17		381,94	-139,81	-150,83	
PINTO . PS26	41 20,92	-118 49,51	4031,0		979892,03	-980289,55		379,03	-138,75	-157,24	
PINTO . PS27	41 20,46	-118 48,63	4154,0		979886,37	-980288,86		390,59	-142,97	-154,87	
PINTO . PS28	41 20,01	-118 48,77	4132,0		979886,58	-980288,19		388,52	-142,21	-155,30	
PINTO . PS29	41 20,00	-118 49,51	4025,0		979892,31	-980288,18		378,46	-138,55	-155,96	
PINTO . PS01	41 22,00	-118 51,90	4062,0		979898,21	-980291,17		381,94	-139,81	-150,83	
PINTO . PS01	41 22,00	-118 51,90	4062,0		979898,21	-980291,17		381,94	-139,81	-150,83	
PINTO . PS30	41 21,10	-118 51,91	4048,0		979896,50	-980289,82		380,62	-139,33	-152,03	
PINTO . PS31	41 20,31	-118 51,92	4109,0		979890,78	-980288,64		386,36	-141,43	-152,93	
PINTO . PS32	41 19,82	-118 52,68	4321,0		979877,83	-980287,91		406,28	-148,69	-152,49	
PINTO . PS33	41 19,37	-118 53,49	4532,0		979866,47	-980287,23		426,12	-155,92	-150,56	
PINTO . PS34	41 18,80	-118 54,43	4518,0		979868,21	-980286,38		424,80	-155,44	-148,81	

BOUGUER GRAVITY DATA

PINTO HOT SPRINGS, NEVADA

GRAVITY SURVEY

STATION IDENTIFICATION	LATITUDE	LOCATION		ELEV.	ST.	OBSERVED GRAVITY	STD. GRV.	CORRECTIONS			BOUGUER ANOMALY	SPEC. FIELD
		LONGITUDE						TERRAIN	FREE-AIR	BOUGUER		
PINTO . PS35	41 20,73	-118 50,71		4112,0		979888,90	-980289,27	386,64	-141,53		-155,26	
PINTO . PS36	41 20,01	-118 50,90		4053,0		979891,80	-980268,19	381,09	-139,51		-154,81	
PINTO . PS37	41 19,80	-118 50,02		4031,0		979891,04	-980267,88	379,03	-138,75		-150,56	
PINTO . PS38	41 19,44	-118 49,13		4021,0		979893,21	-980287,34	378,09	-138,41		-154,45	
PINTO . PS39	41 18,94	-118 50,51		4067,0		979890,76	-980286,59	382,41	-139,99		-153,41	
PINTO . PS01	41 22,00	-118 51,90		4062,0		979898,21	-980291,17	381,94	-139,81		-150,83	
PINTO . PS40	41 22,47	-118 47,70		4174,0		979882,07	-980291,87	420,67	-153,94		-143,07	
PINTO . PS41	41 22,47	-118 46,18		4201,0		979891,33	-980291,87	395,00	-144,58		-150,12	
PINTO . PS42	41 21,77	-118 44,61		4013,0		979894,77	-980290,82	377,33	-138,13		-150,85	
PINTO . PS43	41 21,50	-118 43,98		4004,0		979893,15	-980290,42	376,49	-137,83		-156,81	
PINTO . PS44	41 22,08	-118 48,41		4034,0		979898,56	-980291,29	379,31	-138,85		-152,27	
PINTO . PS45	41 22,75	-118 49,52		4038,0		979898,52	-980292,29	379,68	-138,99		-153,08	
PINTO . PS46	41 23,68	-118 49,54		4044,0		979899,02	-980293,68	380,25	-139,20		-153,61	
PINTO . PS47	41 23,80	-118 48,66		4326,0		979885,77	-980293,86	400,75	-148,86		-150,20	
PINTO . PS48	41 24,21	-118 49,29		4069,0		979899,08	-980294,47	382,60	-140,05		-152,84	
PINTO . PS49	41 24,28	-118 50,18		4051,0		979897,21	-980294,58	380,90	-139,44		-155,91	
PINTO . PS50	41 24,31	-118 51,00		4057,0		979897,32	-980294,02	381,47	-139,64		-155,47	
PINTO . PS51	41 23,76	-118 52,01		4123,0		979896,54	-980293,80	387,67	-141,91		-151,50	
PINTO . PS52	41 22,99	-118 51,67		4077,0		979899,30	-980292,05	383,35	-140,33		-150,33	
PINTO . PS01	41 22,00	-118 51,90		4062,0		979898,21	-980291,17	381,94	-139,81		-150,83	