Table of Chemical Analyses for Thermal and Mineral Spring and Well Waters Collected in 1980 and 1981

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Olympia, WA 98504

Open File Report 82-3

June, 1982

Prepared Under U.S. Department of Energy Contract

No. DE-AC07-79ET27014

SPRING IDENTIFICATION CODES

Spring Code	Name	Date Collected	Location T.	Location R.	Location S.
AHA-1	Ahtanum Soda Springs	8-3-81	12N	15E	8
BHW-1	Blockhouse Mineral Well	8-19-81	4N	15E	9C
BRA-1	Bumping River Soda Springs	7-20-81	17N	13E	34BB
BVA-3	Bonneville Hot Springs	7-11-81	2N	7E	16C
BVDH-1	Bonneville Drill Hole #2	5-21-81	2N	7E	39DC
BVDH-2	Bonneville Drill Hole #2	9-11-81	2N	7E	39DC
EPW-1	Ephrata Municipal Well	3-12-81	21N	26E	8CB
FGA-1	Bubbling Geyser Spring	9-15-81	21N	6E	27DD
FGW-1	Flaming Geyser Mineral Well	9-15-81	21N	6E	27DD
GMA-1	Goldmeyer Hot Springs	8-2-80	23N	11E	14B
GMC-1	Goldmeyer Hot Springs	8-2-80	23N	11E	14B
GMD-1	Goldmeyer Hot Springs	8-2-80	23N	11E	14B
GVA-1	Government Mineral Springs	3-17-81	5N	7E	31
KLA-1	Klickitat Mineral Springs	8-20-81	4N	13E	24
KLB-1	Klickitat Mineral Springs	8-21-81	4N	13E	24
KLC-1	Klickitat Mineral Springs	8-21-81	4N	13E	24
KLDH-1	Klickitat Drill Hole	8-18-81	4N	13E	23
LTA-1	Little Soda Springs	3-17-81	4N	7E	5D
MPW-1	Miocene Petroleum Well	8-4-81	12N	19E	17BA
RCA-1	Rock Creek Hot Springs	8-25-81	3N	7E	27AB
RCA-2	Rock Creek Hot Springs	9-11-81	3N	7E	27AB

Spring Code	Name	Date Collected	Location
SEA-GT	Scenic Hot Springs	8-1-80	26N 13E 28D
SEA-1	Scenic Hot Springs	6-24-81	26N 13E 28D
SEA-2	Scenic Hot Springs	9-25-81	26N 13E 28D
SEB-1	Scenic Hot Springs	6-24-81	26N 13E 28D
SEC-1	Scenic Hot Springs	6-24-81	26N 13E 28D
SED-1	Scenic Hot Springs	6-24-81	26N 13E 28D
SED-2	Scenic Hot Springs	9-25-81	26N 13E 28D
SMA-2	St. Martin Hot Springs	6-10-81	3N 8E 21DD
SPA-1	Shipherds Hot Springs	3-17-81	3N 8E 21DB
TWDH-1	Tieton Willows Drill Hole	7-30-81	14N 14E 25BC
YKW-1	Yakima Creamery Well	3-13-81	13N 18E 24
BKA-1	Baker Hot Springs	8/78	38N 9E 20C
BKB-1	Baker Hot Springs	8/78	38N 9E 20C
KNB-1	Kennedy Hot Springs	8-25-78	30N 12E 1A
KND-1	Kennedy Hot Springs	8-25-78	30N 12E 1A

Explanation

The table of chemical analyses is divided into two parts. The first part contains the abbreviated codes used for the water samples, collection date, and location of the spring or well. The second part contains chemical analyses, including conductivity (Cond), pH, temperature (Temp), chloride (Cl), sulfate (SO_4^{-2}), alkalinity (Alk), silica (SiO_2), sodium (Na), potassium (K), calcium (Ca), magnesium (Mg), lithium (Li), flouride (F), bromide (Br), and iron (Fe). All analyses were conducted in the Division of Geology and Earth Resources' geochemistry laboratory.

- Temperature is ^{o}C.
- Conductivity is measured in umhos/cm.
- All other analyses are listed as parts per million (ppm), approximately equivalent to milligrams per liter (mg/l).
- "LD" means less than detection limit. The detection limits for the various chemical species are listed in the last row of the table.
- Dashes indicate that analyses were not performed.
- For alkalinity, the Phenolphthalein (P), Brom Cresol Green -- Methyl Red (B), and total alkalinity (T) are listed separately and are represented as ppm HCO_3^-
- Baker and Kennedy Hot Springs samples were collected in 1978. The results are included here because this is the first analyses of these waters by the Division.
- Chemical analyses for other thermal and mineral springs in Washington are presented in:

Korosec, M. A., Schuster, J. E., with Blackwell, D. D.; Danes, Z. F.; Clayton, G. A.; Rigby, F. A.; and McEuen, R. B., 1981, The 1979-1980 geothermal resource assessment program in Washington: Washington Division of Geology and Earth Resources Open-File Report 81-3, 270 p.

TABLE OF CHEMICAL ANALYSES FOR THERMAL AND MINERAL SPRING AND WELL WATERS COLLECTED IN 1980 AND 1981

Spring Identification Code	Cond	pH	T	Cl	SO_4	P	Alk B	Alk Total	SiO_2	Na	K	Ca	Mg	Li	F	Br	Fe
AHA-1	1,100	5.6	12.6	5.6	7	0	650	650	107	83	10.6	73	60	LD	0.2	0.2	47
BHW-1	710	6.4	12.4	4.7	3	0	360	360	100	45	6.0	40	52	0.1	0.6	0.15	4
BRA-1	2,750	6.0	9.7	210	10	0	1570	1570	104	290	5.0	386	63	0.6	1.0	2.5	16
BYA-3	790	9.9	36.3	187	72	-	-	-	50	134	1.0	30	LD	LD	0.6	2.2	LD
BYDH-1	2,800	11.6	27.7	238	92	257	8	265	26	162	2.6	197	LD	LD	0.4	3.2	LD
BYDH-2	1,150	10.9	28.2	238	91	-	-	-	38	155	1.2	62	LD	LD	0.6	2.7	LD
EPW-1	265	-	-	5.8	17	-	-	-	64	27	4.7	19	12	LD	0.5	0.08	LD
FGA-1	180	8.5	10.1	3.1	LD	0	93	93	35	16	1.4	18	11	LD	0.1	0.07	LD
FGW-1	29,000	7.0	12.1	5460	LD	0	1850	1850	12	4150	34	34	27	0.5	2.4	44	LD
GMA-1	600	8.8	47.5	140	46	-	-	-	61	122	3.0	6.2	LD	0.2	0.8	1.8	LD
GMC-1	630	8.8	49.6	137	41	-	-	-	62	119	2.8	6.3	LD	0.2	0.9	1.8	LD
GMD-1	580	8.8	45.3	132	42	-	-	-	59	117	2.7	6.9	LD	0.2	0.8	1.7	LD
GVA-1	3,900	6.0	6.7	640	120	0	1000	1000	68	420	9.0	268	91	0.9	0.05	7.0	15
KLA-1	540	6.3	22.3	4.1	5	0	340	340	110	40	4.6	40	48	0.1	0.9	0.09	5.4
KLB-1	1,500	6.2	26.2	4.6	9	0	860	860	150	68	10.4	118	115	0.1	0.4	0.11	13
KLC-1	1,200	6.2	29.1	4.7	9	-	-	-	147	62	9.5	99	100	0.2	0.3	0.12	12
KLDH-1	1,200	5.8	13.5	2.5	11	-	-	-	114	41	5.7	94	101	0.1	0.5	0.08	22
LTA-1	4,000	6.0	7.7	48	57	0	1350	1350	47	310	3.5	218	200	LD	0.06	6.0	1.6
MPW-1	555	9.3	31.7	88	2	19	101	120	120	123	17.5	2.8	LD	LD	21	0.11	LD
RCA-1	400	9.7	33.5	85	40	4	31	35	41	80	0.1	11.5	LD	LD	0.7	1.2	LD
RCA-2	400	9.3	33.4	85	40	4	35	39	-	-	0.1	11.5	LD	LD	0.7	1.1	LD
SEA-GT	220	9.6	47	24	14	-	-	-	48	50	0.4	2.2	LD	LD	0.9	0.57	LD
SEA-1	180	9.3	39.2	18	14	9	43	52	41	40	0.5	2.3	LD	LD	0.7	0.29	LD
SEA-2	-	-	46.5	23	18	-	-	-	49	51	0.7	2.1	LD	LD	0.8	0.37	LD
SEB-1	200	9.4	42.4	21	16	11	43	54	46	46	0.5	1.9	LD	LD	0.8	0.34	LD
SEC-1	140	9.3	28.2	14	13	6	44	50	37	32	0.5	2.1	LD	LD	0.6	0.26	LD
SED-1	170	9.3	31.0	16	13	7	44	51	38	35	0.5	3.5	0.1	LD	0.6	0.32	LD
SED-2	-	-	32.7	18	15	-	-	-	40	40	1.0	3.5	0.1	LD	0.6	0.31	LD
SMA-2	2,200	8.5	50.0	680	16	0	22	22	51	325	5.2	68	0.4	0.4	0.6	7.3	LD
SPA-1	220	8.5	40.8	38	12	13	30	43	47	43	LD	4.2	0.1	LD	0.4	0.6	LD
TWDH-1	-	-	18	-	6	-	-	-	53	50	1.2	10	5	LD	-	-	4
YKW-1	215	-	28.3	4.5	2	-	-	-	23	52	0.5	1.8	LD	LD	1.2	0.2	LD
BKA-1	820	7.9	42	-	90	-	-	-	-	174	11	5.7	0.1	0.5	-	-	LD
BKB-1	780	8.0	40	-	78	-	-	-	-	154	9	5.8	0.2	0.4	-	-	LD
KNB-1	-	8.2	-	-	LD	-	-	-	-	670	70	185	67	3.9	-	-	7.
KND-1	3,200	8.2	-	-	LD	-	-	-	-	700	73	197	74	4.1	-	-	7.
Detection Limit				1	2	1	1	1	1	1	0.1	0.02	0.1	0.1	0.02	0.05	0