

TABLE 4-1
RESULTS OF ISOTOPIC ANALYSIS OF WATER SAMPLES
COLLECTED IN FEBRUARY 2000
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Point Name	Zone	$\delta^{18}\text{O}$ (‰)	δD (‰)	$^{87}\text{Sr}/^{86}\text{Sr}$ (‰)	Total Strontium (mg/L)	^3H (TU)	^{36}Cl (pCi/L)	Corrected ^{14}C Age (ybp)	$\delta^{13}\text{C}$ (‰)	$\delta^{11}\text{B}$ (‰)	Total Boron ($\mu\text{g/L}$)	$\delta^{37}\text{Cl}$ (‰)	Chloride (mg/L)	$\delta^{34}\text{S}$ (‰)	Total Sulfur (mg/L)	^{222}Rn (pCi/L)
MW07-14	RA	-14.0	-106	0.708394	0.209	NS	<5	41,643	-5.6	-4.8	5,950	-0.6	235	13	1	750
26S/40E-35H02	RA	-13.7	-104	0.708429	3.94	<1.1	<5	33,789	-3	6.4	1,393	0.6	327	15.8	10	210
26S/40E-23D01	RA	-14.0	-105	0.70864	0.615	NS	<5	28,339	-10.5	1.5	16,400	0.4	479	20.2	151	460
26S/40E-23D01-DUP	RA	-13.9	-106	NS	0.598	NS	<5	29,242	-12.7	1.7	NS	0.6	455	22.5	157	<200
27/S40E-02J01	RA	-13.5	-105	0.708454	1.49	NS	NS	9,715	-5.2	-0.2	2,400	NS	388	11.8	15	<200
27S/40E-02J01-DUP	RA	-13.4	-103	0.70847	1.63	NS	NS	9,958	-5.2	0.2	NS	NS	525	11.4	15	<100
26S/40E-23B02	RA	-14.2	-108	0.708702	0.172	NS	<5	40,088	-2.1	-4.9	6,250	0.2	292	6.2	4	450
27S/40E-01K01	RA	-13.4	-106	0.708229	1.15	NS	<5	21,417	-4.2	6.4	2,350	-0.7	506	NS	16	220
26S/39E-23G-SEA05	RA	-13.1	-99	0.707707	0.307	1.3	<5	10,337	-7.7	9.1	500	-0.1	82	8.1	28	83
26S/40E-22P01	RA	-14.1	-107	NS	NS	1.3	NS	41,643	-3.9	-6.7	4,950	NS	147	8.1	13	920
26S/40E-31A01	RA	-12.8	-97	0.707815	0.649	NS	<5	23,200	-6.3	10.4	140	0.9	35.8	6.2	11	520
PEARSON 1	UNK	-12.0	-94	0.708996	0.814	2	NS	6,108	0.1	22.2	410	NS	83.6	4.1	54.6	NS
26S/39E-21Q01	RA	-13.0	-98	0.706861	0.421	1.5	<5	10,177	-8.6	7.8	150	NS	25	5.9	11	450
26S/40E-20L01	RA	-13.0	-99	0.708444	0.323	<1.6 (0.6)	<5	20,267	-8.5	7.3	220	0.9	22.5	5.8	9	280
26S/40E-06C01	RA	-8.1	-85	0.708767	0.147	<1.1	14	45,585	-4.3	NS	NS	NS	30,200	43.9	3911	200
25S/39E-30L01	RA	-10.7	-92	NS	NS	<0.7	<5	45,818	0.8	1.4	450	NS	12,500	37.9	577	220
26S/40E-29M06	RA	-12.8	-97	0.707957	0.57	<1.0	<5	22,900	-7.2	8.1	140	0	30.5	3.6	7	350
26S/40E-29M06-DUP	RA	-12.8	-97	0.70794	0.587	<1.4 (0.6)	<5	22,193	-6.5	8.9	140	0.1	29.9	3	7	390
26S/40E-22P03	RA	-14.2	-107	NS	NS	<1.0	NS	46,559	0.5	4.3	14,200	0.7	232	25.8	1	540
26S/40E-23D02	RA	-13.3	-103	0.708419	6.19	NS	<5	5,493	-10.8	NS	NS	0.2	978	4.6	752	350
MW07-15	RA	-14.0	-105	0.709012	0.06	NS	NS	40,088	3.3	-2.8	4,050	0.2	30.3	NC	1	470
26S/40E-06D01	RA	-10.6	-93	0.707817	0.109	NS	NS	27,526	-4.7	5.6	425,000	2.1	13,900	11.1	18	<200
26S/40E-22P04	RA	-12.8	-100	NS	NS	1.3	NS	4,903	1.4	19.3	410	NS	175	26.6	151	<200
MKFL-MW04	RA	-13.3	-102	0.708103	0.258	NS	NS	31,411	-1.7	-3.1	500	0.8	21.9	7	1	<300
MKFL-MW02	RA	-13.8	-105	0.708269	0.046	NS	NS	25,278	-3.3	-3.2	470	-0.3	15.3	NS	1	<200

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MKFL-MW02-DUP	RA	-13.8	-104	0.708291	0.046	NS	NS	25,477	-3.5	-2.9	NS	-1	15.5	NS	1	<200
MW02-03	RA	-12.9	-99	0.708527	0.097	NS	NS	18,025	-9	4.6	9,100	1.3	263	NS	1	440
JMM12-MW06	RA	-12.1	-99	0.708283	0.706	<1.4	<5	9,306	-7.3	15.2	170	0.4	31.1	0.3	16	230
MK22-MW12	RA	-14.3	-106	0.708509	0.97	<0.9	<5	41,363	-2.3	0.2	500	-0.9	12.1	NS	1	280
IWVWD #19-DUP	RA	-13.1	-101	0.708082	1.79	<1.3 (0.6)	NS	25,278	-5.2	6.2	NS	0.5	206	NS	34	420
IWVWD #19	RA	-13.1	-101	0.708079	1.84	<1	NS	23,837	-6.4	5.2	840	0.4	178	NS	1	570
26S/40E-19P01	RA	-14.0	-106	0.707903	0.097	<0.9	<5	23,200	-9.5	-7.7	350	NS	15	7.7	4	320
RLS07-MW02	SHZ	-12.4	-98	0.708569	9.11	NS	NS	3,491	-8.3	6.5	2,480	0.3	358	NS	927	920
26S/40E-22P02	SHZ	-12.7	-101	NS	NS	<1.4 (0.6)	NS	8,016	-9.8	3.9	1,220	NS	102	10.9	173	<200
JMM12-MW09	SHZ	-11.6	-97	0.708766	3.29	<1.4	<5	<50	-11.3	34.6	650	-0.7	217	3.7	84	220
JMM12-MW09-DUP	SHZ	-11.6	-97	0.707661	3.44	2.7	NS	<50	-11.2	33.4	NS	-0.4	224	3.7	86	360
25S/39E-12R02	SHZ	-12.1	-96	NS	NS	NS	NS	8,467	-2.9	8.3	2,900	NS	118	6.8	38	470
TTBK-MW10	SHZ	-12.1	-93	NS	NS	<0.7	NS	5,619	-3.2	6.7	1,910	NS	78	6.3	34	200
25S/39E-29M01	SHZ	-11.7	-94	NS	NS	1	NS	9,567	0.1	5.6	1,150	NS	43.7	12	16	<200
ITC02-MW21	SHZ	-12.8	-99	0.708182	0.994	1.3	NS	6,773	-11.5	16	5,600	0.6	431	NS	34	<200
MKFL-MW01	SHZ	-12.4	-103	0.70828	6.13	<1.0	NS	7,519	-11.5	10.9	660	0.8	31.9	NS	698	190
RLS22-MW06	SHZ	-12.4	-99	0.708448	1.73	2.2	<5	1,870	-9.4	10.3	1,360	0.4	177	2	100	170
MKFL-MW03	SHZ	-11.8	-93	0.708642	5.91	3.2	NS	4,737	-9.8	3.9	630	0.3	20.4	-10.2	465	250
26S/41E-11P01	SWV	-12.2	-101	0.708233	0.691	1.2	<5	11,080	-3.7	7.8	4,700	0.5	573	8.4	101	<300
USN08-MW01	SWV	-12.2	-103	0.707313	8.48	<0.6	<5	13,248	-3.5	3.3	11,300	0.4	2,990	NS	248	470
ALB08-MW06	SWV	-11.6	-97	0.707531	0.779	1.2	<5	3,534	-8.7	1.8	8,850	0.5	644	0.8	113	970
ALB08-MW06-DUP	SWV	-11.7	-97	0.707522	0.756	1.7	<5	3,634	-8.9	1.3	NS	0.8	639	0.5	111	1100
USN08-MW04	SWV	-11.5	-94	0.707552	0.499	2.7	NS	3,808	-4.8	6.1	45,600	-0.2	385	NS	146	<200
WELL 25	RWA	-13.5	-105	NS	NS	NS	<5	26,105	-8.6	2.1	770	NS	37.6	NS	12.6	330
SEASITE 1	RWA	-12.7	-103	NS	NS	NS	<5	48,275	-7	-0.6	1,930	NS	137	NS	34	310
IMPOUNDMENT 1	SW	-12.1	-94	NS	NS	NS	NS	215	-2.3	-2.5	960	NS	132	11.1	9	NS
IMPOUNDMENT 2	SW	-10.8	-90	NS	NS	NS	NS	340	-1.8	-2.1	1,020	NS	135	7.78	15	NS

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SEEP 1	SW	-9.8	-85	NS	NS	10.1	NS	<50	-3.5	-0.3	3,850	NS	341	1.3	133	180
IWVBCS1	spring	-12.3	-94	0.708142	0.838	1.8	NS	0	-7.9	21.8	160	NS	23.9	3.9	72	2100
LITTLE LAKE	SW	-6.6	-73	0.708059	0.362	1.3	NS	4,953	2.1	5.7	4,650	NS	175	7.7	57	NS
PRECIPITATION 2-16	Precip	-10.7	-87	NS	NS	1.6	NS	<50	-13.7	7.6	50	NS	0.8	6.7	34	NC
26S/39E-21Q01	UNK	-13.0	-98	0.706861	0.421	1.5	<5	10,177	-8.6	7.8	150	NS	25	5.9	11	450
68-6 (Brine)	COSO	-7.5	-103	0.707107	9.3	<1.6	NS	34,359	-3.5	1.2	67,200	NS	2,600	6.9	16	NS

Notes:

- $\mu\text{g/L}$ Micrograms per liter
- ‰ Per mil
- ^{14}C Carbon-14
- ^{222}Rn Radon-222
- ^{36}Cl Chlorine-36
- ^3H Tritium
- $^{87}\text{Sr}/^{86}\text{Sr}$ Strontium-87/strontium-86 ratio
- mg/L Milligrams per liter
- NS Not sampled
- pCi/L Picocuries per liter
- RA Regional aquifer
- RWA Randsburg Wash Area
- SHZ Shallow hydrogeologic zone
- SW Surface water
- SWV Salt Wells Valley
- TU Tritium units
- UNK Unknown
- ybp Years before present
- $\delta^{11}\text{B}$ Boron-11/boron-10 ratio
- $\delta^{13}\text{C}$ Carbon-13/carbon-12 ratio
- $\delta^{18}\text{O}$ Oxygen-18/oxygen-16 ratio
- $\delta^{34}\text{S}$ Sulfur-34/sulfur-32 ratio
- $\delta^{37}\text{Cl}$ Chlorine-37/chlorine-35 ratio
- δD Deuterium/protium ratio