

APPENDIX 3

Chemistry data for well, spring and stream waters

- 3.1 General chemistry, major and minor ions
- 3.2 Trace element chemistry
- 3.3 Isotopic and groundwater age data

WATER CHEMISTRY:

Code	Meaning	Unit
3H	Tritium	Tritium Units (TU)
3H:3He Age	Tritium:Helium dissolved gas age	years
Ag	Silver	mg/L
Al	Aluminum	mg/L
ALK	Alkalinity, Total	mg/L
As	Arsenic	mg/L
B	Boron	mg/L
Ba	Barium	mg/L
Be	Beryllium	mg/L
Br	Bromide	mg/L
C13r	13C:12C ratio	ratio
C14	14C content	percent modern carbon
Ca	Calcium	mg/L
Cd	Cadmium	mg/L
CF	Conductivity, field	us/cm
CFC113	Chlorofluorocarbon-113 age	years
CFC113/12	Chlorofluorocarbon-113/12 ratio age	years
CFC12	Chlorofluorocarbon-12 age	years
Cl	Chloride	mg/L
Co	Cobalt	mg/L
CONDLAB	Conductivity, laboratory (μ S)	us/cm
Cr	Chromium	mg/L
Cu	Copper	mg/L
d34S	Sulfate 34 isotope ratio	per mil (o/oo)
DO	Dissolved Oxygen, field	mg/L
F	Fluoride	mg/L
Fe	Iron	mg/L
H2r	Deuterium:Hydrogen ratio	ratio
H2S	Hydrogen Sulfide	mg/L
HCO3	Bicarbonate	mg/L
HRD	Hardness (CaCO3)	mg/L
IONBAL	Ion Balance	%
K	Potassium	mg/L
Li	Lithium	mg/L
Mg	Magnesium	mg/L
Mn	Manganese	mg/L
Mo	Molybdenum	mg/L
Na	Sodium	mg/L
Ni	Nickel	mg/L
NO2	Nitrite (as NO2)	mg/L
NO3	Nitrate (as NO3)	mg/L
O18r	18O:16O ratio	per mil (o/oo)
ORP	Oxidation-Reduction Potential	mV
Pb	Lead	mg/L
pHf	pH, field	pH units
pHL	pH,laboratory	pH units
PO4	Phosphate	mg/L
Sb	Antimony	mg/L
Se	Selenium	mg/L
Si	Silicon	mg/L
SiO2	Silica	mg/L
Sn	Tin	mg/L
SO4	Sulfate	mg/L
Sr	Strontium	mg/L
Temp	Temperature, field	degrees celsius
TAn	Total Anions	epm
TCat	Total Cations	epm
TDS	Total Dissolved Solids	mg/L
Th	Thorium	mg/L
Ti	Titanium	mg/L
Tl	Thallium	mg/L
U	Uranium (total, by ICP-MS)	mg/L
V	Vanadium	mg/L
Zn	Zinc	mg/L

SITE INFORMATION					FIELD PARAMETERS AND GENERAL CHEMISTRY								MAJOR AND MINOR IONS (mg/L)															SAMPLE INFORMATION		
Sample ID	Site type	Water bearing formation	Easting	Northing	Well depth (ft bls)	SC (µS/cm)	Field pH*	Temperature (°C)	DO	ORP (mV)	TDS	Water type	Ca	Na	Ca:Na ratio	Mg	K	HCO3	CO3	SO4	Cl	Br	Cl:Br ratio	F	Fe	Mn	NO3	Ion balance (% difference)	Analyzing laboratory or data source	Sample date
TV-102A	GW	Ttc	442027	4021635	460	495	7.6	15.7	7.3	-320	322	Ca-Na-HCO3-SO4	65	27	2.8	10	2.3	206	0	62	21	0.22	95	0.9	<0.02	0.001	3.0	-0.78	NMBGMR	1/10/13
TV-103C	GW	Tto	439575	4020899	1000	320	8.2*	nr	nr	nr	240	Na-Ca-HCO3-SO4	22	41	0.6	2.3	1.2	117	1.2	42	12	nr	nr	0.8	<0.02	0.005	<0.1	-1.68	Hall Environmental	4/5/07
TV-104B	GW	Ttc	440789	4019142	1080	495	7.8*	na	na	na	345	Ca-Na-HCO3-SO4	47	31	1.7	11	7.3	170	0	80	10	0.12	83	1.0	0.34	0.003	0.7	0.18	NMBGMR for TSWCD	12/1/05
TV-106A	GW	Ttc	440432	4019553	972	245	8.1	18.4	9.2	98	206	Ca-Mg-Na-HCO3	28	13	2.5	7.4	3.5	125	0	24	3.2	0.04	74	0.8	0.08	0.001	0.4	-0.37	NMBGMR	7/27/11
TV-107C	GW	Ttc	440249	4019644	955	330	7.2*	nr	nr	nr	199	Ca-Na-HCO3-SO4	40	37	1.2	0.9	U	125	0	50	7.4	nr	nr	0.8	<0.1	<0.02	<0.22	4.31	Glorieta Geoscience(1989)	9/1/82
TV-108A	GW	QTlb	438929	4024831	185	575	7.7	13.4	5.6	125	370	Ca-Mg-HCO3-SO4	75	25	3.4	15	2.2	175	0	110	23	0.28	82	0.5	<0.02	<0.001	5.8	1.75	NMBGMR	8/15/11
TV-115A	GW	Tc	438728	4022238	600	455	7.5	17.0	4.8	145	392	Ca-Na-HCO3-SO4	59	27	2.5	8.3	2.0	190	0	52	17	0.14	121	0.9	<0.02	<0.001	1.5	1.09	NMBGMR	8/15/11
TV-116C	GW	QTI	443986	4024762	260	810	7.6*	nr	nr	nr	500	Ca-Na-HCO3-SO4	130	33	4.5	13	nr	330	0	nr	18	nr	nr	0.7	0.06	<0.002	7.5		Hall Environmental	5/30/08
TV-118A	GW	Tc	443951	4023035	175	570	7.3	13.2	6.2	58	369	Ca-Na-HCO3	63	55	1.3	8.8	2.4	310	0	55	4.2	0.02	233	1.1	0.02	0.001	1.3	-0.75	NMBGMR	8/16/11
TV-121C	GW	QTlb, Tsb	439043	4024718	215	540	7.2*	nr	nr	nr	346	Ca-Na-HCO3-SO4	76	29	3.0	14	2.6	175	0	106	24	nr	nr	0.6	<0.02	<0.005	6.2	2.71	Intermountain Laboratories	12/11/97
TV-135A	GW	QTI	445189	4026137	112	650	7.5	12.1	7.8	81	413	Ca-Na-HCO3-SO4	88	40	2.5	17	1.0	320	0	71	5.3	0.18	29	0.5	<0.02	<0.001	11	3.35	NMBGMR	8/16/11
TV-136A	GW	QTlb	441717	4026765	122	1100	7.2	11.2	2.1	56	790	Ca-Mg-SO4-HCO3	175	35	5.7	34	0.6	355	0	310	18	0.15	120	1.3	<0.02	<0.001	1.9	0.82	NMBGMR	8/17/11
TV-139A	GW	QTlb, Tsb	438605	4022824	400	491	7.3	13.5	8.0	U	336	Ca-HCO3-SO4	70	22	3.7	11	2.1	181	0	83	22	0.28	80	0.5	0.03	0.001	7.0	-0.47	NMBGMR	7/25/12
TV-140A	GW	QTI, Tc	437092	4021843	260	410	7.6	13.8	11	146	290	Ca-HCO3-SO4	59	20	3.4	9	2.4	150	0	69	20	0.28	71	0.3	<0.02	<0.001	5.8	0.72	NMBGMR	6/6/12
TV-142A	GW	QTI, Tc	445074	4024612	65	705	7.3	13.1	6.1	98	456	Ca-HCO3	115	24	5.5	17	0.8	400	0	54	10	0.04	257	0.7	<0.02	<0.001	14	-0.01	NMBGMR	8/16/11
TV-143C	GW	QTlb, Tsb	439606	4025237	300	nr	7.1*	nr	nr	nr	343	Ca-Mg-HCO3-SO4	76	28	3.1	18	2.8	160	0	120	22	nr	nr	<0.5	<0.02	0.01	6.2	-1.54	National Testing Laboratories	4/7/09
TV-153C	GW	QTI, Tc	443983	4024152	245	831	7.6*	13.0	nr	nr	494	Ca-Na-HCO3-SO4	92	76	1.4	12	<2	400	0	100	7	nr	nr	1.9	0.06	<0.01	5.3	-1.23	Pinnacle Labs, Inc.	3/20/01
TV-160C	GW	Ttc	445094	4022051	125	500	7.7*	nr	nr	nr	305	Ca-HCO3-SO4	80	19	4.8	12	3.0	254	0	64	<10	nr	nr	nr	nr	nr	nr	2.79	Garrabrant (1993)	6/15/89
TV-162A	GW	QTI	442680	4024140	160	703	7.6	11.7	8.7	-307	459	Na-Ca-HCO3	45	117	0.4	7.3	2.2	369	0	74	3.4	<0.1	nr	1.4	<0.02	<0.001	7.4	0.50	NMBGMR	1/10/13
TV-168A	GW	Tsb	443597	4027664	50	385	7.6	14.1	6.0	57	256	Ca-Na-HCO3-SO4	41	29	1.6	7.4	1.9	140	0	61	14	0.15	93	0.2	0.06	0.007	3.3	-1.04	NMBGMR	8/17/11
TV-179A	GW	QTI	442102	4025079	180	780	7.3	12.9	12	105	512	Ca-HCO3-SO4	130	28	5.3	13	1.3	380	0	115	9	0.11	79	0.5	<0.02	<0.001	6.2	-0.99	NMBGMR	8/17/11
TV-181A	GW	QTI	443750	4025324	150	750	7.4	12.1	5.5	56	475	Ca-HCO3-SO4	115	33	4.0	16	0.7	355	0	84	23	0.13	177	0.4	<0.02	<0.001	9.8	0.65	NMBGMR	8/18/11
TV-184A	GW	Ttc	444810	4022151	255	510	7.2	11.8	4.8	166	321	Ca-Na-HCO3	70	31	2.6	8.1	1.4	250	0	51	6.5	0.05	130	2.6	<0.02	<0.001	3.3	0.45	NMBGMR	5/22/12
TV-185A	GW	QTlb	443531	4027603	180	275	7.6	13.2	7.9	90	176	Ca-Na-HCO3	31	18	2.0	4	1.7	130	0	22	7.5	0.09	80	0.3	<0.02	<0.001	1.7	-1.92	NMBGMR	8/17/11
TV-186A	GW	QTI	440972	4023357	280	465	7.5	15.4	4.7	106	295	Ca-Na-HCO3-SO4	65	24	3.1	8.5	1.5	215	0	50	12	0.12	100	0.8	<0.02	<0.001	1.5	0.45	NMBGMR	5/22/12
TV-188A	GW	Tc	438841	4023087	395	315	7.9	16.5	0.5	117	205	Na-Ca-HCO3-SO4	24	41	0.7	3.3	1.9	135	0	34	9	0.07	126	1.4	<0.02	<0.001	0.8	0.00	NMBGMR	8/18/11
TV-191A	GW	Ttc	439911	4020631	1002	345	7.8	19.6	2.4	na	254	Ca-Na-HCO3-SO4	36	25	1.7	5.3	2.5	125	0	43	19	0.15	127	1.0	<0.02	0.009	0.4	-1.70	NMBGMR	4/20/11
TV-192AC	GW	QTlb, Tsb	440787	4023808	240	485	7.5	18.4	1.3	105	270	Ca-HCO3-SO4	78	20	4.4	nr	2.7	151	16	82	27	nr	nr	0.8	<0.5	nr	1.4	-1.86	Glorieta Geoscience (1989)	3/20/89
TV-194A	GW	QTI	442432	4026017	100	702	7.6	11.6	10	na	460	Ca-HCO3-SO4	113	30	4.3	13	1.1	308	0	111	13	0.20	67	0.6	0.02	<0.001	7.9	1.02	NMBGMR	1/10/13
TV-198A	GW	QTlb, Tsb	436937	4023381	480	275	8.2	16.8	1.0	61	176	Na-Ca-HCO3-SO4	20	36	0.6	2.1	2.1	115	0	29	6.9	0.06	115	1.2	<0.02	<0.001	1.1	-0.01	NMBGMR	8/15/11
TV-218A**	GW	Tc	442074	4023809	460	6536	12.3	16.8	na	na	1049	Ca-Na-Cl	630	110	6.6	<0.25	61.0	0	63	7	170	0.6	283	<0.1	<0.1	<0.01	0.33	26.87	NMBGMR	5/22/12
TV-229C	GW	Ttc	439009	4020576	1070	351	7.7*	nr	nr	nr	189	Na-Ca-HCO3-SO4	15	54	0.3	1.3	0.4	101	0	59	16	nr	nr	0.9	0.09	<0.005	7.1	-4.42	Assagai Analytical	5/3/96
TV-232A	GW	QTI	441479	4025438	120	880	7.4	12.2	9.4	88	592	Ca-HCO3-SO4	125	45	3.2	2.0	2.2	275	0	205	26	0.33	79	0.7	<0.02	<0.001	9.7	0.95	NMBGMR	8/18/11
TV-235A	GW	Ttc	445894	4021455	220	767	7.1	13.4	0.2	nr	505	Na-HCO3-SO4-Cl	28	143	0.2	4.1	2.3	173	0	120	67	0.45	148	1.5	1.6	2.18	0.4	-0.15	NMBGMR	7/23/12
TV-237B	GW	Tc	439727	4018783	1290	364	7.8*	na	na	na	260	Ca-Mg-HCO3	41	14	3.4	11	3.8	190	0	13	12	0.23	52	0.5	0.10	<0.001	1.8	-1.08	NMBGMR for TSWCD	9/18/02
TV-238B	GW	Tsb	441602	4026232	105	597	7.3*	na	na	na	390	Ca-Na-HCO3-SO4	80	32	2.9	10	13	280	0	75	13	0.13	100	0.9	0.25	0.004	5.2	-0.64	NMBGMR for TSWCD	9/18/02
TV-239B	GW	QTI	441899	4023741	300	641	7.4*	na	na	na	410	Ca-HCO3-SO4	95	21	5.2	11	2.2	191	0	120	31	0.41	76	0.3	0.25	<0.001	9.2	-0.34	NMBGMR for TSWCD	9/18/02
TV-240B	GW	QTlb, Tsb	443993	4027861	200	161	8.3*	na	na	na	110	Ca-Na-HCO3	17	18	1.1	0.5	1.3	83	0	8.7	3.0	<0.1	nr	0.2	0.02	<0.001	2.1	1.25	NMBGMR for TSWCD	9/18/02
TV-243B	GW	Tc	443811	4023222	138	714	7.4*	na	na	na	470	Na-Ca-HCO3	70	85	0.9	14	2.5	405	0	63	7.4	<0.1	nr	0.8	0.01	0.001	6.5	0.74	NMBGMR for TSWCD	9/18/02
TV-244B	GW	Tc	443611	4023520	320	890	8.0*	na	na	na	544	Ca-Na-HCO3-SO4	105	55	2.2	12	1.9	245	0	190	30	<0.5	nr	1.2	0.54	<0.001	8.7	-2.30	NMBGMR for TSWCD	12/12/05
TV-245B	GW	Ttc	444194	4022503	120	680	7.7*	na	na	na	409	Ca-Na-HCO3-SO4	79	43	2.1	8.2	2.5	230	0	104	25	0.31	81	1.0	0.22	0.002	6.2	-2.21	NMBGMR for TSWCD	12/12/05
TV-246B	GW	Ttc	442801	4021984	400	550	7.7*	na	na	na	326	Ca-Na-HCO3-SO4	63	27	2.7	10	3.3	215	0	55	26	0.20	130	0.7	0.31	0.004	1.8	-2.55	NMBGMR for TSWCD	12/13/05
TV-247B	GW	QTI	445170	4028179	60	560	7.4*	na	na	na	360	Ca-HCO3	85	25	3.9	13	1.5	309	0	50	7.6	<0.1	nr	0.3	0.64	0.001	4.2	0.62	NMBGMR for TSWCD	9/18/02
TV-248B	GW	QTlb	444152	4027510	180	340	8.0*	na	na	na	232	Ca-Na-HCO3	38	36	1.2	4	1.4	195	0	33	20	<0.1	nr	0.4	na	na	0.8	-2.17	NMBGMR for TSWCD	6/8/05
TV-249B	GW	QTI	445760	4029271	130	215	7.6*	na	na	na	160	Ca-Na-HCO3	30	12	2.9	6.1	1.1	115	0	22	3.6	<0.1	nr	0.2	0.35	0.003	1.6	1.30	NMBGMR for TSWCD	3/9/05

Sample ID	Site type	Water bearing formation	Easting	Northing	Well depth (ft bsl)	TRACE ELEMENTS (mg/L)																		
						Al	As	B	Ba	Be	Co	Cr	Cu	Li	Mo	Ni	Pb	Se	SiO2	Sr	Ti	U	V	Zn
TV-102A	GW	Ttc	442027	4021635	460	<0.0005	0.0006	0.051	0.075	<0.0005	0.0005	0.0006	0.0008	0.031	0.002	0.001	<0.0005	0.002	27.1	0.496	0.002	0.0056	0.0025	0.0067
TV-103C	GW	Tto	439575	4020899	1000	<0.02	0.002	na	<0.02	<0.002	na	<0.006	<0.006	na	na	<0.01	<0.005	0.001	na	na	na	0.0036	na	0.24
TV-104B	GW	Ttc	440789	4019142	1080	0.001	0.004	0.047	0.05	<0.001	<0.001	0.005	0.001	0.021	0.007	0.001	0.003	0.002	71	0.31	0.002	0.009	0.009	1.4
TV-106A	GW	Ttc	440432	4019553	972	0.0043	0.0017	0.022	0.099	<0.0005	<0.0005	0.0028	<0.0005	0.009	0.002	0.0005	<0.0005	<0.001	64	0.26	0.003	0.003	0.0067	0.038
TV-108A	GW	QTlb	438929	4024831	185	<0.0005	<0.0005	0.044	0.032	<0.0005	<0.0005	0.001	<0.0005	0.01	<0.001	0.0009	<0.0005	0.003	25	0.43	0.001	0.0032	0.0031	0.0012
TV-115A	GW	Tc	438728	4022238	600	0.0006	0.0005	0.06	0.055	<0.0005	<0.0005	0.0013	0.0008	0.036	0.002	0.0007	<0.0005	0.001	29	0.41	0.001	0.0052	0.0034	0.0011
TV-116C	GW	QTI	443986	4024762	260	<0.02	<0.001	na	0.082	<0.003	na	<0.006	<0.006	na	na	<0.01	0.0072	na	na	na	na	0.009	na	<0.02
TV-118A	GW	Tc	443951	4023035	175	<0.0005	0.0008	0.1	0.052	<0.0005	<0.0005	0.0009	0.0011	0.019	0.003	0.0008	<0.0005	<0.001	23	0.35	0.001	0.0057	0.0023	0.059
TV-121C	GW	QTlb, Tsb	439043	4024718	215	0.11	<0.005	na	0.04	<0.004	na	<0.01	<0.01	na	na	na	<0.005	<0.005	na	na	na	na	na	<0.02
TV-135A	GW	QTI	445189	4026137	112	<0.0005	<0.0005	0.13	0.043	<0.0005	<0.0005	<0.0005	<0.0005	0.011	<0.001	0.0011	<0.0005	<0.001	19	0.6	<0.001	0.0095	0.0006	0.0086
TV-136A	GW	QTlb	441717	4026765	122	<0.0005	<0.0005	0.12	0.019	<0.0005	<0.0005	<0.0005	0.0087	0.028	0.003	0.0025	<0.0005	0.001	35	1.1	0.002	0.018	0.002	0.027
TV-139A	GW	QTlb, Tsb	438605	4022824	400	0.001	0.0009	0.045	0.099	<0.0005	<0.0005	0.0014	0.0005	0.024	0.001	0.0011	<0.0005	0.003	27.3	0.477	0.001	0.003	0.0029	0.0092
TV-140A	GW	QTI, Tc	437092	4021843	260	0.0008	0.0012	0.034	0.087	<0.0005	<0.0005	0.0021	<0.0005	0.018	<0.001	0.0009	<0.0005	0.003	28	0.4	0.002	<0.0005	<0.0005	0.0008
TV-142A	GW	QTI, Tc	445074	4024612	65	0.002	<0.0005	0.11	0.086	<0.0005	<0.0005	<0.0005	0.0015	0.027	0.003	0.0015	<0.0005	<0.001	21	0.62	0.001	0.0056	0.0006	0.0046
TV-143C	GW	QTlb, Tsb	439606	4025327	300	<0.1	<0.005	na	<0.3	na	na	<0.01	0.008	na	na	<0.02	<0.002	<0.02	29	na	na	na	na	0.045
TV-153C	GW	QTI, Tc	443983	4024152	245	<0.1	<0.003	na	0.027	<0.0005	na	<0.02	<0.01	na	na	<0.02	<0.002	<0.003	na	na	na	na	na	<0.01
TV-162A	GW	QTI	442680	4024140	160	0.0013	0.001	0.297	0.036	<0.0005	<0.0005	0.0005	0.0011	0.021	0.005	0.0007	<0.0005	<0.001	16.7	0.256	0.001	0.0054	0.002	0.0037
TV-168A	GW	Tsb	443597	4027664	50	<0.0005	<0.0005	0.027	0.026	<0.0005	<0.0005	0.0018	0.0031	0.005	0.001	0.0007	<0.0005	0.001	28	0.27	0.001	0.004	0.0035	0.025
TV-179A	GW	QTI	442102	4025079	180	<0.0005	<0.0005	0.046	0.058	<0.0005	<0.0005	<0.0005	0.0012	0.021	0.002	0.0018	<0.0005	0.002	18	0.52	<0.001	0.0089	0.0006	0.0017
TV-181A	GW	QTI	443750	4025324	150	0.0019	<0.0005	0.087	0.091	<0.0005	<0.0005	<0.0005	0.0008	0.014	0.002	0.0016	<0.0005	0.001	16	0.53	<0.001	0.006	0.0006	0.0015
TV-184A	GW	Tc	444810	4022151	255	<0.0005	<0.0005	0.093	0.055	<0.0005	<0.0005	0.0009	0.0006	0.074	0.0058	0.0008	<0.0005	0.0009	20	0.38	0.0012	0.0025	0.0013	0.0034
TV-185A	GW	QTlb	443531	4027603	180	0.0014	0.0008	0.014	0.022	<0.0005	<0.0005	0.0033	<0.0005	0.006	<0.001	0.0005	<0.0005	<0.001	24	0.23	0.001	0.0021	0.0051	0.018
TV-186A	GW	QTI	440972	4023357	280	0.0008	<0.0005	0.054	0.08	<0.0005	<0.0005	0.0013	0.0018	0.037	0.0017	0.0008	<0.0005	0.0009	23	0.41	0.0013	0.0024	0.0018	0.017
TV-188A	GW	Tc	438841	4023087	395	0.0009	0.0008	0.084	0.04	<0.0005	<0.0005	0.0007	0.0006	0.018	0.005	<0.0005	<0.0005	<0.001	22	0.26	0.001	0.0019	0.0034	0.0006
TV-191A	GW	Tto	439911	4020631	1002	0.0012	0.0022	0.031	0.009	<0.0005	<0.0005	0.0019	<0.0005	0.028	0.005	0.0006	<0.0005	0.001	58	0.26	0.002	0.0067	0.0084	0.2
TV-192C	GW	QTlb, Tsb	440787	4023808	240	na	<0.001	na	na	na	na	<0.05	na	na	na	<0.01	<0.005	0.002	na	na	na	na	na	0.12
TV-194A	GW	QTI	442432	4026017	100	<0.0005	<0.0005	0.05	0.075	<0.0005	<0.0005	0.0007	0.001	0.013	0.003	0.0017	<0.0005	0.002	14.2	0.442	0.001	0.0066	0.0006	0.0273
TV-198A	GW	QTlb, Tsb	436937	4023381	480	0.0013	0.0009	0.056	0.022	<0.0005	<0.0005	0.0025	<0.0005	0.016	0.005	<0.0005	<0.0005	<0.001	20	0.26	<0.001	0.0016	0.0039	0.0012
TV-218A	GW	Tc	442074	4022809	460	0.19	<0.005	0.0098	1.5	<0.005	<0.005	<0.005	0.0075	0.12	<0.01	0.019	0.059	<0.01	1.1	3.6	<0.01	<0.005	<0.005	1.2
TV-229C	GW	Tto	439009	4020576	1070	<0.5	<0.06	na	<0.01	<0.001	<0.01	<0.02	0.1	na	na	<0.04	<0.001	<0.05	na	na	na	na	<0.003	0.1
TV-232A	GW	QTI	441479	4025438	120	0.0007	0.0005	0.053	0.026	<0.0005	<0.0005	<0.0005	0.0008	0.021	0.003	0.0017	<0.0005	0.003	20	0.53	0.001	0.011	0.001	0.0063
TV-235A	GW	Ttc	445894	4021455	220	0.0267	0.0044	0.465	0.028	0.0006	0.0012	0.0007	0.0005	0.188	0.022	0.0023	<0.0005	0.001	33.8	0.231	0.002	<0.0005	0.002	0.0282
TV-237B	GW	Ttc	439727	4018783	1290	na	0.002	na	0.155	na	<0.001	0.007	0.005	<0.01	0.002	<0.001	<0.001	0.002	64	0.39	na	0.003	0.011	1.03
TV-238B	GW	Tsb	441602	4026232	105	na	<0.001	na	0.036	na	<0.001	0.001	0.002	<0.01	0.003	<0.001	<0.001	0.001	20	0.427	na	0.004	<0.001	0.022
TV-239B	GW	QTI	441899	4023741	300	na	<0.001	na	0.066	na	<0.001	0.002	0.002	<0.01	<0.001	<0.001	<0.001	0.004	25	0.545	na	0.03	0.002	0.036
TV-240B	GW	QTlb, Tsb	443993	4027861	200	na	<0.001	na	0.021	na	<0.001	0.009	<0.001	<0.01	0.001	<0.001	<0.001	<0.001	19	0.116	na	0.001	0.008	0.01
TV-243B	GW	Tc	443811	4023222	138	na	<0.001	na	0.484	na	<0.001	0.002	0.032	0.03	0.002	<0.001	<0.001	<0.001	23	0.529	na	0.016	0.002	0.418
TV-244B	GW	Tc	443611	4023520	320	0.006	0.001	0.11	0.035	<0.001	<0.001	0.003	0.004	0.041	0.002	0.001	<0.001	0.004	17	0.54	0.001	0.005	0.002	0.006
TV-245B	GW	Ttc	444194	4022503	120	<0.001	0.001	0.1	0.16	<0.001	<0.001	0.002	0.004	0.024	0.004	<0.001	<0.001	0.002	24	0.36	0.001	0.007	0.003	0.033
TV-246B	GW	Ttc	442801	4021984	400	0.002	0.002	0.047	0.093	<0.001	<0.001	0.001	0.014	0.032	0.002	0.001	0.001	0.004	31	0.5	0.002	0.008	0.005	0.02
TV-247B	GW	QTI	445170	4028179	60	na	<0.001	na	0.08	na	<0.001	0.013	<0.001	<0.01	0.001	<0.001	<0.001	0.001	20	0.44	na	0.02	0.006	<0.001
TV-248B	GW	QTlb	444152	4027510	180	0.001	0.001	0.061	0.065	<0.001	<0.001	0.002	0.004	0.018	0.001	<0.001	<0.001	<0.001	18	0.37	<0.001	<0.004	0.005	0.002
TV-249B	GW	QTI	445760	4029271	130	0.001	<0.001	0.006	0.028	<0.001	<0.001	0.001	0.003	0.002	<0.001	<0.001	<0.001	0.001	26	0.18	0.001	0.002	0.002	0.002
TV-250B	GW	QTI	445214	4028188	60	0.001	<0.001	0.02	0.091	<0.001	<0.001	0.001	0.002	0.004	0.001	0.001	<0.001	0.001	19	0.43	<0.001	0.03	0.003	0.075
TV-251B	GW	Tsb	445612	4028725	280	0.001	<0.001	0.006	0.037	<0.001	<0.001	0.001	0.013	0.001	<0.001	<0.001	<0.001	0.001	20	0.22	<0.001	0.005	0.002	0.001
TV-252B	GW	Ttc	440890	4019767	1190	<0.001	0.003	0.039	0.073	<0.001	<0.001	0.002	0.001	0.017	0.006	<0.001	<0.001	0.001	71	0.49	0.002	0.011	0.002	1.9
TV-253B	GW	Tto	438917	4020148	1048	0.002	0.004	0.059	0.002	<0.001	<0.001	0.002	0.005	0.014	0.006	0.001	<0.001	0.001	51	0.038	0.001	0.004	0.014	0.25
TV-254B	GW	QTI	441847	4023497	210	0.002	0.001	0.041	0.073	<0.001	<0.001	0.001	0.002	0.032	0.001	0.001	<0							

Site ID	Site type	Easting	Northing	Well depth	$\delta^2\text{H}$ (‰)	$\delta^{18}\text{O}$ (‰)	^3H (TU)*	$\delta^{13}\text{C}$ (‰)	^{14}C activity (pmC)	^{14}C error (\pm pmC)	^{14}C apparent age (RCYBP)	CFC12	CFC11	CFC113	SF6	
TV-100	GW	439079	4017493	1000	-102.21	-14.2	0.03	-12.8	17.11	0.12	14,180	Ss	53	34	Ss	
TV-102	GW	442027	4021635	460	-94.26	-14.9	0.02	-13.9	49.12	0.18	5,710	na	na	na	na	
TV-106	GW	440432	4019553	972	-95.47	-13.3	0.05	-13.8	58.99	0.22	4,240	32	36	25	46	
TV-108	GW	438929	4024831	185	-94.34	-13.2	1.07	-10.1	74.92	0.27	2,320	Ss	Ss	Ss	13	
TV-115	GW	438728	4022238	600	-96.66	-13.5	0.01	-11.7	46.51	0.23	6,150	53	51	32	6	
TV-118	GW	443951	4023035	175	-94.24	-13.3	8.05	-14	98.15	0.36	150	Ss	Ss	Ss	Ss	
TV-125	GW	445310	4020203	280	-93.52	-13.0	0.02	-13.8	6.66	0.07	21,760	49	50	39	46	
TV-126	GW	445254	4020385	420	-93.53	-13.0	0.34	-10.7	8.5	0.08	19,800	48	50	37	27	
TV-127	GW	445193	4020308	400	-101.58	-13.6	0.07	-9.8	55.91	0.20	4,670	Ss	34	Ss	Ss	
TV-128	GW	445068	4020094	500	-100.63	-13.8	0.11	-11	31.3	0.15	9,330	na	na	na	na	
TV-135	GW	445189	4026137	112	-95.90	-13.4	8.78	-12.4	95.5	0.35	370	Ss	Ss	Ss	Ss	
TV-136	GW	441717	4026765	122	-93.21	-13.0	6.73	-13.1	101.63	0.37	na	na	na	na	na	
TV-139	GW	438605	4022824	400	-94.72	-14.6	0.61	-12.1	66.89	0.24	3,230	53	49	47	45	
TV-140	GW	437092	4021843	260	-93.77	-14.9	na	na	na		na	na	na	na	na	
TV-142	GW	445074	4024612	65	-94.17	-13.3	8.35	-13	107.1	0.26	na	Ss	Ss	Ss	Ss	
TV-152	GW	441426	4022701	1200	-95.52	-14.4	0.05	-13.7	8.47	0.07	19,830	na	na	na	na	
TV-162	GW	442680	4024140	160	-90.33	-14.6	6.91	-14.4	108.56	0.26	na	na	na	na	na	
TV-168	GW	443597	4027664	50	-94.63	-13.3	0.18	-13.3	68.66	0.25	3,020	Ss	Ss	Ss	Ss	
TV-170	GW	440310	4026257	2527	-107.93	-14.7	<0.8	-12.4	3.87	0.07	26,130	na	na	na	na	
TV-171	GW	440344	4026206	3180	-105.84	-14.5	na	-10.9	3.72	0.06	26,440	na	na	na	na	
TV-174	GW	440398	4026308	144	-99.80	-13.0	na	na	na		na	na	na	na	na	
TV-179	GW	442102	4025079	180	-93.98	-13.1	14.1	-11.5	92.34	0.34	640	Ss	Ss	Ss	26	
TV-181	GW	443750	4025324	150	-92.48	-13.0	7.49	-13	103.55	0.25	na	Ss	Ss	Ss	Ss	
TV-184	GW	444810	4022151	255	-93.86	-15.1	na	na	na		na	na	na	na	na	
TV-185	GW	443531	4027603	180	-94.64	-13.5	0.79	-15.2	68.41	0.25	3,050	Ss	Ss	Ss	Ss	
TV-186	GW	440972	4023357	280	-93.87	-15.0	na	na	na		na	na	na	na	na	
TV-188	GW	438841	4023087	395	-100.49	-14.2	0.03	-11.8	7.35	0.08	20,970	48	50	33	Ss	
TV-191	GW	439911	4020631	1002	-94.39	-13.1	0.03	-12.4	16.8	0.14	14,330	62	55	45	Ss	
TV-194	GW	442432	4026017	100	-91.01	-14.3	10	-12.3	93.03	0.34	580	na	na	na	na	
TV-198	GW	436937	4023381	480	-97.97	-13.9	0.07	-12.9	27.74	0.13	10,300	na	na	na	na	
TV-201	GW	445909	4020976	260	-102.44	-14.6	0	-21.2	26.99	0.13	10,520	na	na	na	na	
TV-209	GW	444721	4017534	295	-100.62	-13.9	1.2	-11	70.92	0.26	2,760	Ss	49	24	Ss	
TV-216	GW	444087	4013519	420	-100.20	-13.8	-0.04	-12.5	84.74	0.31	1,330	53	51	41	10	
TV-217A1	GW	442074	4022809	1575	-98.53	-15.8	na	na	na		na	na	na	na	na	
TV-217A2	GW	442074	4022809	1785	-99.02	-15.7	na	na	na		na	na	na	na	na	
TV-217A3	GW	442074	4022809	2003	-99.26	-15.7	na	na	na		na	na	na	na	na	
TV-217	GW	442074	4022809	2003	-115.83	-14.7	na	na	na		na	na	na	na	na	
TV-218	GW	442074	4022809	460	-93.96	-14.9	na	na	na		na	na	na	na	na	
TV-219	GW	442093	4022868	1400	-91.99	-14.8	na	na	na		na	na	na	na	na	
TV-230	GW	439362	4016255	1400	-91.38	-12.8	-0.01	-17.9	71.37	0.26	2,710	na	na	na	na	
TV-232	GW	441479	4025438	120	-95.03	-13.3	8.35	-10.1	85.91	0.31	1,220	Ss	Ss	Ss	Ss	
TV-235	GW	445894	4021455	220	-90.99	-13.6	2.09	-18.1	84.64	0.31	1,340	na	na	na	na	
TV-266	GW	446191	4027125	75	-91.51	-14.4	4.39	-11.7	78.35	0.28	1,960	na	na	na	na	
TV-267	GW	447149	4024143	182	-93.10	-14.7	8.21	-12.5	90.97	0.33	760	na	na	na	na	
TV-268	GW	446589	4022531	215	-90.75	-14.5	6.94	-13.3	106.16	0.26	na	na	na	na	na	
TV-301	GW	443954	4020825	1185	-105.3	-14.5	na	-11.1	16.7	0.10	14,390	na	na	na	na	
TS-054	spring	433924	4021264		-109.30	-15.1	na	-8.4	9.57	0.12	18,850	na	na	na	na	
TS-056	spring	433641	4021102		-102.90	-14.4	na	-11.4	38.47	0.24	7,670	na	na	na	na	
TV-501	spring	443761	4011531		-100.39	-13.8	na	na	na		na	na	na	na	na	
TV-502	spring	443457	4016260		-96.60	-13.1	na	na	na		na	na	na	na	na	
TV-503	spring	445589	4020038		-93.37	-13.1	-0.04	-11.7	18.33		13,630	na	na	na	na	
TV-504	spring	445363	4020171		-91.82	-12.7	0.99	-16.2	89.74	0.33	870	na	na	na	na	
TV-510	effluent	441066	4025662		-96.10	-14.5	na	na	na		na	na	na	na	na	
TV-512	stream	447515	4019855		-94.60	-13.4	8.37	na	na		na	na	na	na	na	
TV-513	stream	452454	4040459		-94.60	-13.0	6.61	na	na		na	na	na	na	na	
TV-514	stream	454864	4032809		-93.10	-13.2	8.02	na	na		na	na	na	na	na	
					SUMMARY STATISTICS FOR GROUNDWATER											
					MIN	-115.83	-15.78	-0.04	-21.2	3.7		150	32	34	24	6
					MAX	-90.33	-12.69	14.10	-8.4	109		26440	62	55	47	46
					MEDIAN	-94.68	-13.87	0.61	-12.5	68		4670.00	51	50	35.5	26.5

‰ – per mil (parts per thousand)

TU – tritium units

* Standard analytical error for ^3H in all samples is 0.09 TU. Results less than 0.1 TU are effectively below the method detection limit.

pmC – percent modern carbon

RCYBP – radiocarbon years before present (1950), Cambridge half-life 5,730 +/-40 yr

CFC–chlorofluorocarbon

SF6–sulfur hexafluoride

Ss —"Supersaturated" means there are additional non-atmospheric sources of the CFC or SF6 that overwhelm concentrations from natural sources.