Appendix A

Analytical Results for Alluvial Groundwater Samples, January 2000 through April 2010

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Alluvial Groundwater -- Upgradient -- 92-05[a,b]

Analyte	Unit	10/30/00	04/11/01	07/20/01	10/10/01
Field Measurements					
Alkalinity	mg/L	--	270	321	303
Conductivity[c]	µmhos/cm	1520	1250	1366	1350
DO[c]	mg/L	--	7.7	--	--
ORP[c]	mV	84	71	--	38
pH[c]	s.u.	7.05	7.66	6.42	6.99
Temperature[c]	C	9.4	7.7	9.7	10
Turbidity[c]	NTU	42.6	4.05	60.3	70.5
Common Ions					
Ca	mg/L	266	214	206	207
Chloride	mg/L	16.4	15.2	15.4	15.6
Fluoride	µg/L	126	160	122	182
Hardness	mg/L	831	678	645	648
K	mg/L	2.90	2.39	2.49	2.53
Mg	mg/L	40.5	35.0	31.7	31.9
Na	mg/L	41.5	36.6	40.8	40.1
NO_3+NO_2 as N	µg/L	1150J	1140	54.3	510
SO_4	mg/L	545	232	454	450
TDS[c]	mg/L	1160	1060	957	--
Metals					
As	µg/L	0.2U	0.5U	0.5U	0.6U
Fe	µg/L	11.7U	9.1	15.6	0.8U
Mn	µg/L	12.9	0.63	6.8	6.6
Mo	µg/L	1.9	0.4U	3U	1.9U
Se	µg/L	1.3	2.4	0.85	0.49
U	µg/L	5.9	4.9	4.4	4.8
V	µg/L	1.3U	0.4U	0.3U	0.38
Radiological					
Alpha[d]	pCi/L	8.6UJ	7.8U	5.0UJ	8.3UJ
Alpha-U[e]	pCi/L	8.6UJ	7.8U	5.0UJ	8.3UJ
Beta	pCi/L	7.5U	8.0U	4.7U	8.2U
U	µg/L	5.9	4.9	4.4	4.8
U-234	pCi/L	--	--	3.7J	--
U-238	pCi/L	--	--	1.8J	--

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Upgradient -- MW00-01[a,b]

Analyte	Unit	08/01/00	11/01/00	04/09/01	07/11/01	10/08/01	04/03/02	07/08/02	10/07/02	04/07/03	10/07/03	04/12/04	10/06/04	04/05/05
Field Measurements														
Alkalinity	mg/L	254	258	242	243	276	278	303	339	276	317	312	236	302
Conductivity[c]	µmhos/cm	2390	1461	1355	1660	1710	1574	2610	1436	1324	1499	1254	1755	1449
DO[c]	mg/L	3.94	4.8	4.4	--	--	--	--	--	--	--	--	4.11	--
ORP[c]	mV	215	170	23	13	13	-87	--	--	--	59.4	229.7	34	168
pH[c]	s.u.	6.81	6.82	7.33	6.63	6.86	6.94	6.61	6.67	6.76	6.82	6.86	6.80	6.70
Temperature[c]	C	12.5	9.2	7.2	10	10.6	12	14.1	12.01	7.74	10.8	9.48	10.0	8.67
Turbidity[c]	NTU	1.67	0.98	0.4	3.38	0.57	1.51	0.95	3.23	1.06	1.05	0.81	2.51	0.66
Common Ions														
Ca	mg/L	251	255	216	287	310	276	229	250	224	253	210	330	300
Chloride	mg/L	11.9	10.1	16.6	6.51	8.45	12.8	15.2	14.2	20.5	13.1	18.0	11.0	22.0
Fluoride	µg/L	150	148	138	181	26.2U	109J	181	172	17.2U	238	150.	200.U	200.U
Hardness	mg/L	807	812	690	934	999	894	741	799	715	808	664	1040	939
K	mg/L	2.41	2.42	1.99	2.41	2.34	2.33	2.19	2.43	2.27	2.53	3.60	4.10	3.80
Mg	mg/L	43.7	42.5	36.7	52.8	54.7	49.7	41.0	42.5	37.9	42.9	34.0	53.0	46.0
Na	mg/L	38.2	34.5	38.8	36.0	37.6	37.8	37.3	46.1	41.5	45.3	41.0	44.0	40.0
NO_3+NO_2 as N	µg/L	892	555	699	57.4	235	304	466	1140	1320J	439	970.	230.	2300.
SO_4	mg/L	598	575	508	730	790	632	499	531	434	533	390	750	590
TDS[c]	mg/L	1200	1150	1070	1380	--	--	--	--	--	--	--	--	--
Metals														
As	µg/L	0.3U	0.2U	0.5U	0.5U	0.6U	0.33	0.19	0.1U	0.200	0.320	0.23	0.27	0.23
Fe	µg/L	9.1U	11.7U	14.1	5.9	0.8U	1U	4U	0.8U	4.00	12.6	9.8U	7U	7.5U
Mn	µg/L	2.3	2U	0.78	0.1U	0.1U	0.1U	0.1U	0.1U	0.360	1.80	0.077U	0.066U	0.13U
Mo	µg/L	2.3	1.3	0.4U	3U	1.9U	1.8U	1.8U	1.7U	2.00U	1.70U	3.1	0.17U	1.9
Se	µg/L	1.8	1.1	1.7	0.3U	0.97	1.1	1.2	1.1	2.10	2.00	1.8	1.1	2
U	µg/L	4.6	4.2	7.9	5.5	5.4	5.7	4.1	5.5	5.20	6.20	11J	5.3J	15
V	µg/L	1.3U	1.3U	0.4U	0.53	0.3U	1.1	0.3U	0.3U	0.300U	0.320	0.25U	0.26J	0.3UR
Radiological														
Alpha[d]	pCi/L	12.2U	8.3UJ	8.0U	12.4UJ	12.2UJ	10.3UJ	9.9U	8.9U	10.7UJ	9.7	8.6	6.3J	12.7
Alpha-U[e]	pCi/L	12.2U	8.3UJ	8.0U	12.4UJ	12.2UJ	10.3UJ	9.9U	8.9U	10.7UJ	5.4	1.0	2.7J	2.4
Beta	pCi/L	10.5U	7.4U	8.0U	12.0U	11.6U	10.2	8.9U	9.0U	11.3U	8.6U	5.3J	3.9J	3.3U
U	µg/L	4.6	4.2	7.9	5.5	5.4	5.7	4.1	5.5	5.20	6.20	11J	5.3J	15

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Upgradient -- MW00-01[a,b]

Analyte	Unit	10/05/05	04/28/06	10/02/06	04/11/07	10/08/07	04/10/08[c]	10/08/08	04/06/09	10/06/09	04/20/10
Field Measurements											
Alkalinity	mg/L	256	273	329	258	308	329	304	251	318	118J
Conductivity[c]	µmhos/cm	1857	1904	2051	1785	1904	1481	1836	1651	1692	1451
DO[c]	mg/L	3.94	1.15	4.18	3.34	--	--	--	--	--	--
ORP[c]	mV	90	-23.9	136	46.0	54.1	35.6	146	163	--	114.7
pH[c]	s.u.	6.78	6.82	6.52	6.85	6.65	6.84	6.71	6.76	6.63	6.81
Temperature[c]	C	9.7	8.58	10.75	8.17	10.61	7.71	10.31	8.99	9.95	9.29
Turbidity[c]	NTU	1.23	0.60	0.42	0.64	2.06	0.86	2.90	0.55	1.79	3.43
Common Ions											
Ca	mg/L	430	440	400	400	360	260	400	380J	370J	230
Chloride	mg/L	8.90	8.30	10.0	8.70	7.00	15.0	6.40	7.10	7.10	23.0
Fluoride	µg/L	200.U	200.U	230.	200.U	280.	200.U	250.	310.	300.	160.
Hardness	mg/L	1330	1370	1330	1230	1180	818	1240	1180J	1150J	723
K	mg/L	4.00	3.80	4.40	3.20	4.30	3.00	3.80J	3.60J	3.00J	2.70J
Mg	mg/L	62.0	67.0	80.0	57.0	69.0	41.0	58.0	56.0	54.0	36.0
Na	mg/L	34.0	38.0	49.0	37.0	48.0	43.0	40.0	36.0J	42.0J	44.0J
NO_3+NO_2 as N	µg/L	140.	1100.	700.	170.	190.	980.	140.	310.	110.	2200.
SO_4	mg/L	900	1000	1100	910	1000	540	910	760	750	410
TDS[c]	mg/L	--	--	--	--	--	--	--	--	--	--
Metals											
As	µg/L	0.17	0.0075U	0.023U	0.012U	0.25	0.24	0.27	0.21U	0.28	0.31
Fe	µg/L	7.8U	14U	2.2U	7.4U	5.6U	1.4U	3.1U	17	1.6U	4.9U
Mn	µg/L	0.096U	0.23U	0.097U	0.17U	0.16U	0.49	0.2U	1.3	0.1U	0.11U
Mo	µg/L	0.068U	1.9J	0.13U	1.7	1.9	1.9	1.6	1.5	1.8	1.9
Se	µg/L	0.023U	0.47	0.5	1.3	0.64	1.3	0.81	1.2	1	3.5
U	µg/L	5.9	6.5	11	6	6.5J	9.4	5.8	4.3	5.2	10
V	µg/L	0.1U	0.7J	0.21U	0.36J	0.39J	0.29	0.19	0.34	0.26J	0.24
Radiological											
Alpha[d]	pCi/L	--	--	--	--	--	--	--	--	--	--
Alpha-U[e]	pCi/L	--	--	--	--	--	--	--	--	--	--
Beta	pCi/L	--	--	--	--	--	--	--	--	--	--
U	µg/L	5.9	6.5	11	6	6.5J	9.4	5.8	4.3	5.2	10

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Upgradient -- MW00-02[a,b]

Analyte	Unit	08/02/00	11/01/00	04/09/01	07/12/01	10/11/01	04/03/02	07/09/02	10/09/02	04/07/03
Field Measurements										
Alkalinity	mg/L	254	294	243	257	282	281	291	312	220
Conductivity[c]	µmhos/cm	3290	2200	1845	1856	2020	1830	3067	1649	1504
DO[c]	mg/L	2.58	4.3	5	--	--	--	--	--	--
ORP[c]	mV	163	150	52	--	107	-23	--	--	--
pH[c]	s.u.	6.83	6.55	6.77	6.76	6.84	6.95	6.56	6.78	6.8
Temperature[c]	C	11	9.2	7.8	9.4	8.5	9.1	10.35	11.3	8.85
Turbidity[c]	NTU	3.7	0.51	0.3	0.9	1.33	2.12	1.9	95.8	2.14
Common Ions										
Ca	mg/L	366	414	316	322	370	334	279	293	266
Chloride	mg/L	6.50	7.99	9.38	5.20	6.46	6.47	7.34	12.6	13.3
Fluoride	µg/L	166	130	140	139	164	151J	198	160	17.2U
Hardness	mg/L	1200	1360	1040	1070	1210	1100	922	962	865
K	mg/L	2.46	2.71	2.28	2.38	2.37	2.40	2.31	2.49	2.18
Mg	mg/L	69.8	78.7	60.6	63.4	70.5	65.6	54.7	55.9	48.7
Na	mg/L	41.3	43.8	41.4	40.5	39.7	38.3	37.0	40.1	39.4
NO_3+NO_2 as N	µg/L	404	703	1230	42	746	190	307	690	982J
SO_4	mg/L	1020	1070	848	875	1000	815	721	715	590J
TDS[c]	mg/L	1790	1940	1600	1620	--	--	--	--	--
Metals										
As	µg/L	0.3U	0.2U	0.5U	0.5U	0.6U	0.17	0.1U	1.2	0.100U
Fe	µg/L	9.1U	11.7U	18.4	9.1	0.8U	1U	66.3	1060	6.60
Mn	µg/L	72.7	8.6	2.3	1.2	0.1U	1.5	17.8	211	1.80
Mo	µg/L	2.5	2.1	3.1	3U	1.9U	1.8U	1.8U	2.6	2.00U
Se	µg/L	1.7	1.8	2	1.6	0.94	1	1.4	1.3	2.70
U	µg/L	5.5	10	6.4	5.1	6.5	6.6	5	7.3	5.90
V	µg/L	1.3U	1.3U	0.47	0.3U	0.3U	0.3U	0.3U	1.1	0.390
Radiological										
Alpha[d]	pCi/L	11.1U	13.9UJ	11.5U	7.1UJ	12.9UJ	11.1UJ	10.3U	9.4U	11.2UJ
Alpha-U[e]	pCi/L	11.1U	13.9UJ	11.5U	7.1UJ	12.9UJ	11.1UJ	10.3U	9.4U	11.2UJ
Beta	pCi/L	11.9U	13.1U	11.9U	6.6U	11.6U	9.5U	8.9U	9.0U	11.6U
U	µg/L	5.5	10	6.4	5.1	6.5	6.6	5	7.3	5.90

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- 82-20[a,b]

Analyte	Unit	11/01/00	10/11/01	10/09/02
Field Measurements				
Alkalinity	mg/L	210	279	326
Conductivity[c]	µmhos/cm	2470	2370	2167
ORP[c]	mV	203	105	--
pH[c]	s.u.	6.53	6.56	6.75
Temperature[c]	C	9.1	8.8	11.09
Turbidity[c]	NTU	>1000	24.3	3.16
Common Ions				
Ca	mg/L	451	417	379
Chloride	mg/L	18.4	10.9	23.3
Fluoride	µg/L	140	213	173
Hardness	mg/L	1510	1400	1280
K	mg/L	2.83	2.72	2.75
Mg	mg/L	92.5	86.9	81.6
Na	mg/L	72.1	71.6	64.7
NO_3+NO_2 as N	µg/L	1180	788	3170
SO_4	mg/L	1200	1300	1090
TDS[c]	mg/L	2260	--	--
Metals				
As	µg/L	0.2U	0.6U	0.1U
Fe	µg/L	23.1	24.8	0.8U
Mn	µg/L	310	155	23.3
Mo	µg/L	2.8	1.9U	1.7U
Se	µg/L	3.6	2.7	11.3
U	µg/L	7.7	7.6	7
V	µg/L	1.3U	0.32	0.3U
Radiological				
Alpha[d]	pCi/L	12.8J	14.6UJ	10.4U
Alpha-U[e]	pCi/L	7.5J	14.6UJ	10.4U
Beta	pCi/L	11.6U	11.7U	9.1U
U	µg/L	7.7	7.6	7

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- GB1126T[a,b]

Analyte	Unit	01/14/00	04/18/00
Common Ions			
Ca	mg/L	140	291
Hardness	mg/L	691	1210
K	mg/L	0.786	2.65
Mg	mg/L	82.8	118
Na	mg/L	225	788
Metals			
As	µg/L	1.4	5.6
Fe	µg/L	8.9U	152
Mn	µg/L	530	1270
Mo	µg/L	20	225
Se	µg/L	0.10U	10
U	µg/L	158	2670
V	µg/L	62.2	2560
Radiological			
U	µg/L	158	2670

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- GB3127T[a,b]

Analyte	Unit	04/18/00
Common Ions		
Ca	mg/L	695
Hardness	mg/L	2080
K	mg/L	5.48
Mg	mg/L	84.8
Na	mg/L	189
Metals		
As	µg/L	0.24
Fe	µg/L	140
Mn	µg/L	240
Mo	µg/L	4.6
Se	µg/L	41.8
U	µg/L	122
V	µg/L	2.7
Radiological		
U	µg/L	122

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- MW00-03[a,b]

Analyte	Unit	10/15/01	04/04/02	04/10/03	04/09/09[c]
Field Measurements					
Alkalinity	mg/L	449	--	--	392
Conductivity[c]	µmhos/cm	4760	5000	3431	3910
DO[c]	mg/L	--	--	--	4.2
ORP[c]	mV	-80	120	--	-21.1
pH[c]	s.u.	7.01	7.2	7.11	7.60
Temperature[c]	C	14.4	7.3	7.55	8.3
Turbidity[c]	NTU	5.71	15.6	1.69	--
Common Ions					
Ca	mg/L	513	472	322	--
Chloride	mg/L	199	--	--	127
Fluoride	µg/L	586	--	--	--
Hardness	mg/L	2120	2010	1320	--
K	mg/L	2.95	2.28	1.61	--
Mg	mg/L	204	201	126	--
Na	mg/L	545	608	401	--
NO_3 as N	µg/L	--	--	--	452
NO_3+NO_2 as N	µg/L	332	--	--	--
SO_4	mg/L	2720	--	--	2110
Metals					
As	µg/L	1.8	0.42	0.200	--
Fe	µg/L	527	1U	1.30U	--
Mn	µg/L	4570	3790	25.8	--
Mo	µg/L	50.9	8.9	9.00	--
Se	µg/L	2.6	0.53	12.9	--
U	µg/L	864	559	534	597.5
V	µg/L	0.56	0.3U	0.300U	--
Radiological					
Alpha[d]	pCi/L	548	--	--	--
Alpha-U[e]	pCi/L	0[f]	--	--	--
Beta	pCi/L	146	--	--	--
U	µg/L	864	559	534	597.5

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[b] Samples were filtered in the field unless otherwise noted.
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[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- MW00-04[a,b]

Analyte	Unit	08/02/00	11/02/00	01/30/01
Field Measurements				
Alkalinity	mg/L	--	289	--
Conductivity[c]	µmhos/cm	3655	4100	4790
DO[c]	mg/L	1.49	--	--
ORP[c]	mV	-35	197	130
pH[c]	s.u.	7.29	7.03	7.29
Temperature[c]	C	19.3	13.8	4.3
Turbidity[c]	NTU	13.3	79.2	--
Common Ions				
Ca	mg/L	301	356	360
Hardness	mg/L	1070	1290	1350J
K	mg/L	20.5	19.2	17.8
Mg	mg/L	78.4	98.3	109J
Na	mg/L	496	579	638
NO_3+NO_2 as N	µg/L	--	--	29500
Metals				
As	µg/L	0.89	0.2U	0.2U
Fe	µg/L	2120	11.7U	11U
Mn	µg/L	7530	8090	9020
Mo	µg/L	245	296	457
Se	µg/L	0.46	1.8	0.66
U	µg/L	119	1080	2170
V	µg/L	1.3U	1.3U	1.5U
Radiological				
U	µg/L	119	1080	2170
U-234	pCi/L	--	--	716
U-238	pCi/L	--	--	699

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- MW00-08[a,b]

Analyte	Unit	04/09/01[c]
Field Measurements		
Conductivity[c]	µmhos/cm	3870
ORP[c]	mV	192
pH[c]	s.u.	6.73
Temperature[c]	C	6.5
Turbidity[c]	NTU	29.6

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- T00-01[a,b]

Analyte	Unit	08/01/00	11/02/00	04/09/01	07/18/01	10/09/01	01/31/02	04/03/02	07/10/02	10/08/02	01/13/03	04/09/03	07/07/03	10/08/03
Field Measurements														
Alkalinity	mg/L	185	175	--	256	259	251	219	1274	272	236	176	339	290
Conductivity[c]	µmhos/cm	4980	2130	--	2420	1928	2260	1697	4238	2284	2288	1738	2019	1475
DO[c]	mg/L	0.66	3.1	2.1	--	--	--	--	--	--	--	--	--	--
ORP[c]	mV	162	131	--	99	122	--	144	--	--	--	--	-8	-26
pH[c]	s.u.	6.43	6.1	--	6.23	6.64	6.95	6.78	6.48	6.47	6.77	6.91	6.64	6.77
Temperature[c]	C	19.4	14.1	--	14.7	15.2	7.7	5.62	16.08	15.88	9.3	6.75	13.6	15.9
Turbidity[c]	NTU	4.96	44.5	--	1.27	1.57	2.08	2.72	1.13	0.93	1.84	2.05	1.04	0.6
Common Ions														
Ca	mg/L	180	127	137	157	157	173	181	194	173	216	200	234	170
Chloride	mg/L	134	87.5	96.1	91.3	94.7	74.0	51.0	69.3	80.1	79.0	98.5J	67.4	50.7
Fluoride	µg/L	691	610	525	652	749	335	25.1U	494	349	459	263J	269	374
Hardness	mg/L	677	473	506	577	569	640	658	697	639	774	711	820	601
K	mg/L	35.8	28.3	21.0	29.9	29.2	25.2	16.2	24.6	29.7	22.2	14.5	18.5	13.8
Mg	mg/L	55.2	37.8	39.9	45.0	43.0	50.4	50.0	51.7	50.2	57.0	51.5	57.2	42.8
Na	mg/L	430	317	255	336	306	242	125	251	273	253	129	183	108
NO_3+NO_2 as N	µg/L	55100	51100J	10800	9380	5940	5100	868	1200	3440	2590	275	1350	111
SO_4	mg/L	1060	694	422	887	946	853	679	886	924	941	654J	801	500
TDS[c]	mg/L	2400	1700	1590	1820	--	--	--	--	--	--	--	--	--
Metals														
As	µg/L	19.3	19.4	14.9	17.8	20.5	16.5	11.6	14.6	17.1	13.7	12.3	17.9	20.9
Fe	µg/L	9.1U	11.7U	1.0U	0.8U	0.8U	0.8U	1U	4U	0.8U	2.9U	1.30U	1U	0.800U
Mn	µg/L	4280	2440	933	1940	2290	2110	119	981	2740	1170	66.9	649	160
Mo	µg/L	163	150	86.4	144	167	103	53.1	116	142	96.4	54.5	101	82.2
Se	µg/L	10.9	12.1	9.5	13.5	39.2	18.4	22.2	24.5	14.3	73.1	15.4	16.7	16.4
U	µg/L	176	144	525	473	416	684	452	610J	372	718	486	713	565
V	µg/L	597	604	386	598	667	421	288	521	579	400	317	520	499
Radiological														
Alpha[d]	pCi/L	93.9	71.4J	497	330J	344J	472	294J	377	253	490	313	398	326
Alpha-U[e]	pCi/L	0[f]	0[f]	136	0[f]	58.2J	2.1	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]
Beta	pCi/L	80.1	58.5	149	72.1	98.4	141	146	108	101	166	140	118	99.3
U	µg/L	176	144	525	473	416	684	452	610J	372	718	486	713	565
U-234	pCi/L	--	--	--	155J	--	--	--	--	--	--	--	--	--
U-238	pCi/L	--	--	--	182J	--	--	--	--	--	--	--	--	--

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- T00-01[a,b]

Analyte	Unit	01/20/04	04/13/04	10/07/04	10/06/05	10/04/06	10/09/07	10/09/08	10/07/09
Field Measurements									
Alkalinity	mg/L	614	242	269	347	210	132	418	273
Conductivity[c]	µmhos/cm	2086	1491	1335	1056	1325	1056	1813	1422
DO[c]	mg/L	--	--	0.30	--	0.95	--	--	--
ORP[c]	mV	-103.1	--	-18	-41	41	-75	-33	--
pH[c]	s.u.	6.95	7.07	7.00	7.00	6.68	6.89	6.87	6.79
Temperature[c]	C	6.47	9.93	15.7	16.0	14.20	15.85	15.61	15.15
Turbidity[c]	NTU	1.35	1.06	1.33	1.83	0.99	1.70	3.17	1.80
Common Ions									
Ca	mg/L	300	190	190	140	230	130	250	200J
Chloride	mg/L	88.0	44.0	26.0	41.0	38.0	35.0	36.0	39.0
Fluoride	µg/L	430.	440.	430.	370.	250.	340.	730.	480.
Hardness	mg/L	1030	652	639	461	743	436	810	644J
K	mg/L	15.0	15.0	8.50	8.20	10.0	10.0	15.0J	10.0J
Mg	mg/L	68.0	43.0	40.0	27.0	41.0	27.0	45.0	35.0
Na	mg/L	140	92.0	65.0	58.0	77.0	73.0J	130	78.0J
NO_3+NO_2 as N	µg/L	240.	18	10.U	10.U	120.	80.	14	10.U
SO_4	mg/L	850	480	430	200	510	410	690	490
TDS[c]	mg/L	--	--	--	--	--	--	--	--
Metals									
As	µg/L	16J	16	13	8.8	8.7	8.1	8.9	8.5
Fe	µg/L	6.7U	9.8U	7U	7.8U	2.2U	5.6U	3.1U	1.6U
Mn	µg/L	250	81	1500	3200	1100	240	1700	260
Mo	µg/L	50J	51	41	45	19	18	33	24
Se	µg/L	10J	3.3	2.4	0.21	5.4	13	1.4	2.6
U	µg/L	690	350	180J	210	98	35	230	120
V	µg/L	380	340	280J	120	180	220J	110	180
Radiological									
Alpha[d]	pCi/L	435	221	120	--	--	--	--	--
Alpha-U[e]	pCi/L	0[f]	0[f]	0[f]	--	--	--	--	--
Beta	pCi/L	121	95.1	41.9	--	--	--	--	--
U	µg/L	690	350	180J	210	98	35	230	120
U-234	pCi/L	--	--	--	--	--	--	--	--
U-238	pCi/L	--	--	--	--	--	--	--	--

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- T00-03[a,b]

Analyte	Unit	04/09/09[c]
Field Measurements		
Alkalinity	mg/L	271
Conductivity[c]	µmhos/cm	1392
DO[c]	mg/L	7.1
ORP[c]	mV	21
pH[c]	s.u.	7.38
Temperature[c]	C	4.6
Common Ions		
Chloride	mg/L	28.0
NO_3 as N	µg/L	678
SO_4	mg/L	755
Metals		
U	µg/L	150.3
Radiological		
U	µg/L	150.3

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[c] Sample was unfiltered.
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[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- TOO-04[a,b]

Analyte	Unit	04/09/01	07/11/01	10/15/01	01/31/02	04/03/02	07/09/02	10/08/02	01/13/03	04/09/03	07/09/03	10/06/03	01/20/04	04/13/04
Field Measurements														
Alkalinity	mg/L	214	236	216	159	--	241	175	213	221	296	222	464	295
Conductivity[c]	µmhos/cm	2580	5370	2720	2210	1653	3301	1771	1722	1891	1765	1578	1706	1712
DO[c]	mg/L	1.6	--	--	--	--	--	--	--	--	--	--	--	--
ORP[c]	mV	107	--	136	--	91	--	--	--	--	101	64.1	-66.4	--
pH[c]	s.u.	6.77	6.46	6.64	7.04	7.02	6.54	6.71	7.05	6.84	6.82	7.17	7.17	7.19
Temperature[c]	C	6.7	14.7	16.3	7	7.6	16.18	15.61	8	6.95	18.7	16.23	6.57	10.29
Turbidity[c]	NTU	--	1.82	2.08	1.3	2.65	4.52	2.17	1.42	0.51	2.64	0.5	3.26	1.27
Common Ions														
Ca	mg/L	176	512	173	157	184	192	209	240	253	230	192	270	230
Chloride	mg/L	80.4	131	73.2	51.7	35.7	34.5	50.1	37.1	67.6J	59.1	48.0	60.0	45.0
Fluoride	µg/L	530	459	1020	385	290J	610	276	25.1U	160J	445	461	500.	380.
Hardness	mg/L	679	1930	667	618	707	727	760	846	885	804	666	913	780
K	mg/L	11.2	12.9	10.2	9.92	10.3	11.7	12.6	9.75	8.30	9.60	9.66	11.0	11.0
Mg	mg/L	58.1	158	57.0	54.8	60.1	60.1	57.8	59.9	61.5	55.7	45.2	58.0	50.0
Na	mg/L	295	856	380	252	122	136	124	96.0	119	113	102	97.0	94.0
NO_3 as N	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--
NO_3+NO_2 as N	µg/L	15000	64600	16700	7910	3010	2900	4010	2470	2660	1180	1010	1400.	730.
SO_4	mg/L	480	3080	1280	899	654	733	789	721	784J	679	579	730	560
TDS[c]	mg/L	1990	5640	--	--	--	--	--	--	--	--	--	--	--
Metals														
As	µg/L	4.7	5.3	5.9	4.9	4.4	5.1	5.2	5.7	5.10	6.20	8.70	7.6J	8.1
Fe	µg/L	1.0U	2.2	0.8U	0.8U	1U	4U	0.8U	2.9U	1.30U	1U	0.800U	6.7U	9.8U
Mn	µg/L	1000	2220	1210	1440	408	920	292	53.5	8.60	180	18.5	2.5	0.077U
Mo	µg/L	364	237	389	348	232	301	230	195	118	217	187	130J	110
Se	µg/L	7.3	35.7	16.9	21.5	33.5	33.8	112	46.6	19.1	47.9	39.5	31J	15
U	µg/L	1310	3690	1340	1110	1440	1280J	674	1390	831	1270	680	890	650
V	µg/L	120	128	165	125	111	154	163	138	118	171	193	150	160
Radiological														
Alpha[d]	pCi/L	691	2520J	966	769	871J	928	474	914	407	736	393	573	464
Alpha-U[e]	pCi/L	0[f]	0[f]	45.4	6.4	0[f]	48.6	11.0	0[f]	0[f]	0[f]	0[f]	0[f]	17.5
Beta	pCi/L	349	511	217	200	422	165	156	282	231	214	118	141	170
U	µg/L	1310	3690	1340	1110	1440	1280J	674	1390	831	1270	680	890	650

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[c] Sample was unfiltered.
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[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- TOO-04[a,b]

Analyte	Unit	10/07/04	10/06/05	10/04/06	10/09/07	10/09/08	04/09/09[c]
Field Measurements							
Alkalinity	mg/L	380	400	276	251	106	274
Conductivity[c]	µmhos/cm	1946	1556	2040	1851	1621	2474
DO[c]	mg/L	1.00	--	1.88	--	--	4.8
ORP[c]	mV	39	41	105	-22	81	-53
pH[c]	s.u.	7.03	6.93	6.70	6.87	6.97	7.51
Temperature[c]	C	15.8	15.2	14.66	15.49	15.59	6.9
Turbidity[c]	NTU	2.28	2.17	2.17	0.88	2.1	--
Common Ions							
Ca	mg/L	310	240	490	370	250	--
Chloride	mg/L	37.0	22.0	37.0	27.0	24.0	72.0
Fluoride	µg/L	500.	340.	440.	530.	780.	--
Hardness	mg/L	1030	805	1550	1200	822	--
K	mg/L	13.0	11.0	12.0	10.0	8.80J	--
Mg	mg/L	62.0	50.0	80.0	67.0	48.0	--
Na	mg/L	97.0	67.0	100	86.0	77.0	--
NO_3 as N	µg/L	--	--	--	--	--	1130
NO_3+NO_2 as N	µg/L	540.	58	310.	460.	420.	--
SO_4	mg/L	740	490	1000	990	620	1210
TDS[c]	mg/L	--	--	--	--	--	--
Metals							
As	µg/L	9.7	8.9	8.1	7.1	9.9	--
Fe	µg/L	7U	7.8U	2.2U	5.6U	3.1U	--
Mn	µg/L	1.4	9.9	2.6	55	17	--
Mo	µg/L	160	160	93	94	110	--
Se	µg/L	30	2.3	9	19	17	--
U	µg/L	790J	700	370	260	380	511.1
V	µg/L	250J	240	170	210J	210	--
Radiological							
Alpha[d]	pCi/L	527	--	--	--	--	--
Alpha-U[e]	pCi/L	0[f]	--	--	--	--	--
Beta	pCi/L	181	--	--	--	--	--
U	µg/L	790J	700	370	260	380	511.1

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- T00-05[a,b]

Analyte	Unit	04/09/09[c]
Field Measurements		
Alkalinity	mg/L	251
Conductivity[c]	µmhos/cm	4248
DO[c]	mg/L	6.5
ORP[c]	mV	-17.3
pH[c]	s.u.	7.57
Temperature[c]	C	9.7
Common Ions		
Chloride	mg/L	126
NO_3 as N	µg/L	29400
SO_4	mg/L	2440
Metals		
U	µg/L	2339.3
Radiological		
U	µg/L	2339.3

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- T00-07[a,b]

Analyte	Unit	04/09/09[c]
Field Measurements		
Alkalinity	mg/L	364
Conductivity[c]	µmhos/cm	3918
DO[c]	mg/L	2.8
ORP[c]	mV	-49.7
pH[c]	s.u.	7.30
Temperature[c]	C	8.5
Common Ions		
Chloride	mg/L	146
NO_3 as N	µg/L	12400
SO_4	mg/L	2090
Metals		
U	µg/L	699.8
Radiological		
U	µg/L	699.8

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- T00-17[a,b]

Analyte	Unit	08/24/00
Metals		
As	µg/L	0.44
Fe	µg/L	49.7
Mn	µg/L	80.9
Mo	µg/L	44.8
Se	µg/L	60.8
U	µg/L	638
V	µg/L	1.2U
Radiological		
U	µg/L	638

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- T00-18[a,b]

Analyte	Unit	08/24/00	10/30/00
Field Measurements			
Alkalinity	mg/L	--	457
Conductivity[c]	µmhos/cm	--	5160
ORP[c]	mV	--	207
pH[c]	s.u.	--	6.75
Temperature[c]	C	--	13.3
Turbidity[c]	NTU	--	396
Common Ions			
NO_3+NO_2 as N	µg/L	--	96900
Metals			
As	µg/L	0.62	0.46
Fe	µg/L	98.3	11.7U
Mn	µg/L	1760	593
Mo	µg/L	340	514
Se	µg/L	13.6	103
U	µg/L	1110	1430
V	µg/L	1.2U	1.3U
Radiological			
U	µg/L	1110	1430
U-234	pCi/L	384	--
U-235	pCi/L	19.6	--
U-238	pCi/L	379	--

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- TOO-19[a,b]

Analyte	Unit	08/24/00
Metals		
As	µg/L	0.3U
Fe	µg/L	44
Mn	µg/L	513
Mo	µg/L	452
Se	µg/L	47.4
U	µg/L	935
V	µg/L	1.2U
Radiological		
U	µg/L	935
U-234	pCi/L	306
U-235	pCi/L	13.4
U-238	pCi/L	308

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- T01-01[a,b]

Analyte	Unit	07/18/01	10/09/01	01/30/02	04/03/02	07/10/02	10/08/02	04/09/03	10/07/03	04/14/04	10/07/04	04/06/05	10/06/05	04/27/06
Field Measurements														
Alkalinity	mg/L	290	224	251	203	297	228	165	219	222	189	265	276	276
Conductivity[c]	µmhos/cm	2200	2060	1893	1688	3880	2007	1804	1367	1162	1142	1208	971	1463
DO[c]	mg/L	--	--	2.27	--	--	--	--	--	--	0.36	--	--	0.61
ORP[c]	mV	--	99	128.2	143	--	--	--	-36	--	-44	215	14	-25.8
pH[c]	s.u.	6.24	6.64	6.88	6.93	6.55	6.6	6.96	7.01	7.17	7.29	6.92	7.16	7.06
Temperature[c]	C	17.3	16.7	5.62	5.55	16.7	16.45	7.7	14.74	9.68	13.6	8.24	15.7	10.47
Turbidity[c]	NTU	3.26	3.36	142.3	3.5	3.25	3.88	0.92	0.83	1.11	1.86	1.26	0.77	1.92
Common Ions														
Ca	mg/L	131	143	170	200	140	115	216	162	260	150	160	130	210
Chloride	mg/L	87.4	77.2	76.4	50.4	81.5	82.5	99.8J	49.5	41.0	25.0	58.0	42.0	74.0
Fluoride	µg/L	694	673	333	192	545	382	119J	424	410.	300.	270.	280.	230.
Hardness	mg/L	467	502	606	712	492	424	754	564	859	510	544	419	701
K	mg/L	26.3	23.8	15.7	12.3	18.3	21.3	10.8	9.98	14.0	6.30	8.30	6.70	11.0
Mg	mg/L	34.0	35.2	44.0	51.7	34.7	33.3	52.2	38.7	51.0	33.0	35.0	23.0	43.0
Na	mg/L	355	259	221	111	286	272	129	95.1	82.0	53.0	75.0	55.0	97.0
NO_3+NO_2 as N	µg/L	2120	2600	1560	524	2160	2990	273	32.3	26	10.U	79	10.U	36
SO_4	mg/L	765	801	775	684	723	753	706J	449	470	370	350	200	580
TDS[c]	mg/L	1620	--	--	--	--	--	--	--	--	1600	870	670	1200
Metals														
As	µg/L	33.9	25.9	20.6	17.3	30.2	33.1	16.1	27.2	19	15	13	11	11
Fe	µg/L	0.8U	0.8U	0.8U	1U	4U	0.8U	1.30U	0.800U	9.8U	7U	7.5U	7.8U	14U
Mn	µg/L	586	553	127	16.7	155	198	9.30	83.1	450	1700	1800	2700	2700
Mo	µg/L	106	105	63.2	42.1	81.3	87	32.2	51.3	37	28	38	32	17
Se	µg/L	22.2	86.3	55.4	32.2	125	237	16.3	12.1	2.6	0.93	3.8	0.32	0.68
U	µg/L	326	321	651	331	326J	193	291	334	210	91J	170	120	160
V	µg/L	796	750	441	346	700	731	352	491	350	180J	190	110	170
Radiological														
Alpha[d]	pCi/L	182J	239J	381	230J	231	131	170	199	132	59.5	96.2	--	--
Alpha-U[e]	pCi/L	0[f]	18.5J	0[f]	2.6J	7.0	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	--	--
Beta	pCi/L	50.2	65.7	16.5U	111	59.5	57.8	84.0	68.4	53.8	24.1	38.7	--	--
U	µg/L	326	321	651	331	326J	193	291	334	210	91J	170	120	160
U-234	pCi/L	108J	--	--	--	--	--	--	--	--	--	--	--	--
U-238	pCi/L	136J	--	--	--	--	--	--	--	--	--	--	--	--

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- T01-01[a,b]

Analyte	Unit	10/04/06	04/11/07	10/09/07	04/09/08[c]	10/09/08	04/07/09	04/20/10
Field Measurements								
Alkalinity	mg/L	210	280	144	237	292	296	180
Conductivity[c]	µmhos/cm	1358	1899	1082	1271	1671	1420	1239
DO[c]	mg/L	0.98	1.71	--	1.23	--	--	--
ORP[c]	mV	85	-49.0	-21	2.0	-56	67	82.7
pH[c]	s.u.	6.74	6.92	6.97	7.21	6.88	7.14	7.22
Temperature[c]	C	12.52	6.26	15.37	4.17	16.98	6.05	5.19
Turbidity[c]	NTU	0.83	3.87	0.99	0.80	3.98	1.88	2.40
Common Ions								
Ca	mg/L	230	400	140	170	220	280J	140
Chloride	mg/L	42.0	80.0	37.0	41.0	43.0	47.0	42.0
Fluoride	µg/L	230.	200.U	290.	180.	580.	310.	270.
Hardness	mg/L	747	1260	469	560	718	917J	461
K	mg/L	10.0	12.0	9.90	7.60	15.0J	9.50J	8.50J
Mg	mg/L	42.0	63.0	29.0	33.0	41.0	53.0	27.0
Na	mg/L	78.0	120	71.0	61.0	120	110J	70.0
NO_3+NO_2 as N	µg/L	50.	16	79	43	10.U	36	110.
SO_4	mg/L	520	840	430	430	590	610	320
TDS[c]	mg/L	1000	1700	810	910	1200	1400	780
Metals								
As	µg/L	10	8.2	11	7.7	9.4	6.7	9
Fe	µg/L	2.2U	3.7U	5.6U	1.4U	6.8	9.3	4.9U
Mn	µg/L	2000	620	48	830	1200	1300	280
Mo	µg/L	16	12	18	14	24	8.8	18
Se	µg/L	4.9	2.5	10	6.8	7.2	0.83	6.1
U	µg/L	98	180	54	110	160	110	97
V	µg/L	140	210J	250J	98	180	78	120
Radiological								
Alpha[d]	pCi/L	--	--	--	--	--	--	--
Alpha-U[e]	pCi/L	--	--	--	--	--	--	--
Beta	pCi/L	--	--	--	--	--	--	--
U	µg/L	98	180	54	110	160	110	97
U-234	pCi/L	--	--	--	--	--	--	--
U-238	pCi/L	--	--	--	--	--	--	--

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[c] Sample was unfiltered.
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[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- T01-02[a,b]

Analyte	Unit	07/18/01	01/30/02	04/03/02	07/10/02	10/08/02	04/09/03	07/07/03	10/07/03	04/14/04	10/05/04	04/05/05	10/06/05	04/27/06
Field Measurements														
Alkalinity	mg/L	295	320	337	348	341	272	377	340	269	320	212	296	294
Conductivity[c]	µmhos/cm	228	1926	1886	3533	1784	1932	1776	1802	1352	1584	1297	1415	1603
DO[c]	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	2.41
ORP[c]	mV	--	124	149	--	--	--	97	61	--	50	127	31	-38.7
pH[c]	s.u.	6.33	6.8	6.83	6.7	6.73	6.94	6.82	6.75	7.11	7.05	6.78	7.00	7.20
Temperature[c]	C	18.6	6.78	10.83	19.9	16.18	8.96	16.2	15.09	9.74	15.2	5.80	17.2	10.44
Turbidity[c]	NTU	701	>1000	9.58	20.3	86.4	3.67	4.94	3.47	2.61	2.63	1.93	3.44	2.60
Common Ions														
Ca	mg/L	251	246	247	234	242	265	256	248	250	230	160	200	270
Chloride	mg/L	101	76.3	66.7	33.3	66.7	98.6J	68.2	73.1	72.0	38.0	74.0	59.0	81.0
Fluoride	µg/L	489	279	249	244	221	124J	102	309	440.	460.	330.	340.	360.
Hardness	mg/L	854	831	840	796	816	891	850	830	822	756	540	648	880
K	mg/L	16.6	12.2	9.38	9.84	9.64	9.14	8.92	10.1	13.0	11.0	11.0	11.0	10.0
Mg	mg/L	55.1	52.6	54.3	51.3	51.3	55.6	51.2	51.2	48.0	44.0	34.0	36.0	50.0
Na	mg/L	189	128	112	106	101	121	108	107	92.0	79.0	82.0	84.0	96.0
NO_3+NO_2 as N	µg/L	4450	2960	2820J	1770	1590	6390	2370	2300	1200.	680.	1000.	1100.	3400.
SO_4	mg/L	715	737	656	303	634	700J	611	626	550	520J	400	410	630
TDS[c]	mg/L	1640	--	--	--	--	--	--	--	--	--	--	--	--
Metals														
As	µg/L	15.6	17.6	22.3	18.6	18.8	17.8	23.0	28.2	24	29	19	24	20
Fe	µg/L	5.4	259	28.3	4U	0.8U	1.30U	10.00	0.800U	9.8U	7U	7.5U	7.8U	14U
Mn	µg/L	691	465	6.9	105	73.2	3.50	12.8	4.50	4.3	5.2	9.3	12	1.8
Mo	µg/L	44.4	26.9	31.3	22.5	23.7	28.9	25.9	26.8	20	31	15	25	23
Se	µg/L	125	137	133	131	118	144	86.8	98.2	32	46	12	36	43
U	µg/L	311	301	373	323J	278	391	305	278	240	210J	180	160	240
V	µg/L	472	405	507	532	609	449	581	623	450	620J	370	550	350
Radiological														
Alpha[d]	pCi/L	155J	--	210J	197	158	207	148	149	151	123	88.7	--	--
Alpha-U[e]	pCi/L	0[f]	--	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	--	--
Beta	pCi/L	46.0	--	116	52.3	59.6	107	50.3	53.8	63.5	57.0	35.7	--	--
U	µg/L	311	301	373	323J	278	391	305	278	240	210J	180	160	240
U-234	pCi/L	107J	--	--	--	--	--	--	--	--	--	--	--	--
U-238	pCi/L	138J	--	--	--	--	--	--	--	--	--	--	--	--

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- T01-02[a,b]

Analyte	Unit	10/04/06	04/11/07	10/09/07	04/09/08[c]	10/09/08	04/07/09	10/07/09	04/20/10
Field Measurements									
Alkalinity	mg/L	302	370	291	250	362	276	337	186
Conductivity[c]	µmhos/cm	1894	1947	1670	1605	1752	2295	1875	1521
DO[c]	mg/L	4.35	6.01	--	2.33	--	--	--	--
ORP[c]	mV	151	123.5	93	105.2	75	64	--	72.0
pH[c]	s.u.	6.86	7.06	6.99	7.22	6.97	7.21	6.95	7.20
Temperature[c]	C	14.36	8.90	15.52	5.99	15.06	10.38	14.81	7.28
Turbidity[c]	NTU	2.47	1.78	1.19	0.99	4.08	3.35	4.15	3.24
Common Ions									
Ca	mg/L	380	420	280	200	260	340J	310J	160
Chloride	mg/L	63.0	83.0	44.0	82.0	56.0	85.0	72.0	55.0
Fluoride	µg/L	460.	400.	560.	290.	620.	490.	510.	370.
Hardness	mg/L	1210	1320	917	668	851	1100J	1000J	535
K	mg/L	14.0	11.0	12.0	8.10	12.0J	11.0J	10.0J	8.70J
Mg	mg/L	64.0	67.0	53.0	41.0	49.0	62.0	55.0	33.0
Na	mg/L	110	120	100	92.0	110	130J	100J	91.0
NO_3+NO_2 as N	µg/L	2200.	2700.J	670.	3800.	1400.	2500.	1200.	3800.
SO_4	mg/L	820	750	720	560	640	740	690	410
TDS[c]	mg/L	--	--	--	--	--	--	--	--
Metals									
As	µg/L	24	19	20	18	24	18	22	21
Fe	µg/L	2.2U	3.7U	5.6U	1.4U	3.1U	1.3UJ	1.6U	4.9U
Mn	µg/L	0.097U	0.084U	0.16U	0.15U	10	0.39	0.1U	0.11U
Mo	µg/L	28	24	28	21	22	19	23	26
Se	µg/L	44	41	29	28	35	32	29	51
U	µg/L	230	270	160	200	180	220	180	160
V	µg/L	430	410J	540J	320	460	350	520	350
Radiological									
Alpha[d]	pCi/L	--	--	--	--	--	--	--	--
Alpha-U[e]	pCi/L	--	--	--	--	--	--	--	--
Beta	pCi/L	--	--	--	--	--	--	--	--
U	µg/L	230	270	160	200	180	220	180	160
U-234	pCi/L	--	--	--	--	--	--	--	--
U-238	pCi/L	--	--	--	--	--	--	--	--

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- T01-03[a,b]

Analyte	Unit	10/10/01
Field Measurements		
Conductivity[c]	µmhos/cm	2080
ORP[c]	mV	136
pH[c]	s.u.	6.79
Temperature[c]	C	14
Turbidity[c]	NTU	900
Common Ions		
Ca	mg/L	247
Chloride	mg/L	92.1
Fluoride	µg/L	349
Hardness	mg/L	830
K	mg/L	10.6
Mg	mg/L	51.9
Na	mg/L	138
NO_3+NO_2 as N	µg/L	3120
SO_4	mg/L	765
Metals		
As	µg/L	17.6
Fe	µg/L	0.8U
Mn	µg/L	302
Mo	µg/L	25.6
Se	µg/L	86.8
U	µg/L	224
V	µg/L	491
Radiological		
Alpha[d]	pCi/L	130J
Alpha-U[e]	pCi/L	0[f]
Beta	pCi/L	46.2
U	µg/L	224

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- T01-04[a,b]

Analyte	Unit	07/18/01	10/10/01	01/30/02	04/03/02	07/10/02	10/08/02	04/09/03	10/07/03	04/13/04	10/05/04	04/05/05	10/06/05	04/27/06
Field Measurements														
Alkalinity	mg/L	298	297	307	428	365	359	326	338	345	373	290	316	340
Conductivity[c]	µmhos/cm	2100	2010	1806	1936	3334	1763	2111	1959	1969	1763	2075	1669	1842
DO[c]	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	2.30
ORP[c]	mV	94	135	108	141	--	--	--	88	--	63	249	40	-32.4
pH[c]	s.u.	6.13	6.72	6.94	6.79	6.61	6.68	6.72	6.76	6.98	6.88	6.75	6.83	7.10
Temperature[c]	C	16.1	14.1	8.91	12.43	15.56	14.97	11.19	14.37	11.15	13.7	7.40	14.2	10.88
Turbidity[c]	NTU	753	974	800	8.67	3.16	51.9	4.96	1.95	0.98	3.88	1.12	2.53	1.59
Common Ions														
Ca	mg/L	251	261	260	271	241	248	311	282	370	290	300	240	320
Chloride	mg/L	98.7	81.1	79.0	75.6	60.2	71.5	138J	88.2	96.0	45.0	150	77.0	110
Fluoride	µg/L	350	388	268	226	338	267	85.2J	256	410.	370.	230.	280.	220.
Hardness	mg/L	860	881	878	921	815	834	1040	944	1200	942	980	780	1050
K	mg/L	9.75	7.88	7.71	6.53	6.32	7.56	6.67	7.00	10.0	8.40	12.0	9.60	9.10
Mg	mg/L	56.7	55.6	55.6	59.4	51.8	52.2	64.9	58.3	66.0	53.0	56.0	44.0	62.0
Na	mg/L	160	121	104	102	94.0	94.6	111	109	93.0	79.0	130	90.0	100
NO_3+NO_2 as N	µg/L	3560	2520	2160	2050J	1370	1700	5700	2670	3700.	990.	9800.	2700.	5800.
SO_4	mg/L	691	754	693	640	598	606	725J	683	610	600	770	570	700
TDS[c]	mg/L	1630	--	--	--	--	--	--	--	--	--	--	--	--
Metals														
As	µg/L	11.1	12.1	12.6	12.4	10.9	10.7	10.7	14.9	13	16	15	13	13
Fe	µg/L	9.1	23.1	0.8U	1U	4U	0.8U	1.30U	0.800U	240	7U	7.5U	7.8U	14U
Mn	µg/L	324	126	117	14.7	5.4	84.8	1.10	1.90	4.1	0.066U	0.13U	0.096U	0.23U
Mo	µg/L	17.9	13.4	14.8	14.9	13.7	15.2	10.00	8.00	12	13J	12	17	15
Se	µg/L	93.5	72.5	85.7	79	66.3	83.5	97.6	66.6	49	40	74	31	38
U	µg/L	221	192	251	282	226	213	233	185	190	150J	230	140	220
V	µg/L	358	360	317	329	314	369	303	382	330	370J	270	370	270
Radiological														
Alpha[d]	pCi/L	93.8J	95.6J	141	149	128	111	104	91.5	130	106	155	--	--
Alpha-U[e]	pCi/L	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	3.0	0[f]	--	--
Beta	pCi/L	37.3	37.9	9.9U	83.1	11.6U	49.0	64.0	38.7	53.3	39.9	56.0	--	--
U	µg/L	221	192	251	282	226	213	233	185	190	150J	230	140	220
U-234	pCi/L	73.9J	--	--	--	--	--	--	--	--	--	--	--	--
U-238	pCi/L	97.3J	--	--	--	--	--	--	--	--	--	--	--	--

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- T01-04[a,b]

Analyte	Unit	10/03/06	04/11/07	10/09/07	04/09/08[c]	10/09/08	04/07/09	10/07/09	04/20/10
Field Measurements									
Alkalinity	mg/L	324	397	330	314	364	325	360	245
Conductivity[c]	µmhos/cm	1967	1952	1833	2543	1885	2469	1975	2583
DO[c]	mg/L	3.64	6.27	--	1.75	--	--	--	--
ORP[c]	mV	135	111.6	85	107.5	136	66	--	63.2
pH[c]	s.u.	6.67	6.99	6.88	7.01	6.91	7.05	6.83	7.12
Temperature[c]	C	13.91	9.14	14.58	7.53	14.88	10.74	13.75	7.82
Turbidity[c]	NTU	1.71	1.24	2.63	0.27	2.42	2.89	117	--
Common Ions									
Ca	mg/L	430	420	340	350	280	360J	330J	340
Chloride	mg/L	75.0	93.0	56.0	170	69.0	110	85.0	160
Fluoride	µg/L	390.	320.	510.	280.	730.	440.	520.	400.
Hardness	mg/L	1370	1320	1110	1150	930	1180J	1080J	1120
K	mg/L	10.0	8.20	9.50	9.90	9.10J	8.60J	7.70J	10.0J
Mg	mg/L	71.0	67.0	63.0	67.0	56.0	68.0	62.0	67.0
Na	mg/L	110	110	99.0	150	110	130J	110J	160
NO_3+NO_2 as N	µg/L	3300.	4600.	2400.	14000.	2500.	5200.	2700.	11000.
SO_4	mg/L	820	680	800	900	700	760	700	850
TDS[c]	mg/L	--	--	--	--	--	--	--	--
Metals									
As	µg/L	15	13	14	14	16	15	15	17
Fe	µg/L	2.2U	3.7U	5.6U	1.4U	3.1U	1.3UJ	1.6U	4.9U
Mn	µg/L	0.097U	0.084U	0.16U	0.27	0.2U	0.28	9.4	0.11U
Mo	µg/L	15	17	14	19	13	13	13	18
Se	µg/L	31	35	30	81	26	31	23	100
U	µg/L	180	200	140	240	150	170	140	190
V	µg/L	310	310J	410J	310	350	310	360	330
Radiological									
Alpha[d]	pCi/L	--	--	--	--	--	--	--	--
Alpha-U[e]	pCi/L	--	--	--	--	--	--	--	--
Beta	pCi/L	--	--	--	--	--	--	--	--
U	µg/L	180	200	140	240	150	170	140	190
U-234	pCi/L	--	--	--	--	--	--	--	--
U-238	pCi/L	--	--	--	--	--	--	--	--

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- T01-05[a,b]

Analyte	Unit	10/09/01	01/30/02	04/03/02	07/09/02	10/08/02	04/09/03	07/08/03	10/07/03	04/13/04	10/05/04	04/05/05	10/06/05	04/27/06
Field Measurements														
Alkalinity	mg/L	324	--	335	342	363	346	383	260	324	377	318	154	332
Conductivity[c]	µmhos/cm	1957	1762	1940	3315	1758	2182	1644	1989	1988	1769	2409	1708	1865
DO[c]	mg/L	--	3.78	--	--	--	--	--	--	--	--	--	--	2.58
ORP[c]	mV	525	93	30	--	--	--	87	10.6	--	-13	173	-20	-32.7
pH[c]	s.u.	6.79	6.73	6.75	6.55	6.74	6.85	6.88	6.78	6.94	6.92	6.71	6.91	7.09
Temperature[c]	C	14.5	9.7	12.14	14.46	13.98	10.22	14	14.76	9.86	14.1	7.48	14.7	10.14
Turbidity[c]	NTU	129	6.1	8.09	2.73	1.77	2.39	1.76	0.79	0.55	4.38	0.61	1.90	0.49
Common Ions														
Ca	mg/L	267	264	263	238	253	331	263	285	350	300	390	250	320
Chloride	mg/L	79.4	79.4	79.3	59.7	75.6	148J	69.3	93.9	99.0	47.0	190	79.0	110
Fluoride	µg/L	371	233J	326	324	280	17.2UJ	17.2U	253	350.	380.	220.	250.	240.
Hardness	mg/L	901	892	890	806	850	1110	873	957	1130	980	1270	822	1050
K	mg/L	6.58	5.86	5.43	6.31	6.40	6.15	5.75	6.14	9.70	7.90	11.0	8.30	8.80
Mg	mg/L	56.8	56.6	56.7	51.3	52.9	68.3	52.6	59.5	62.0	56.0	72.0	48.0	62.0
Na	mg/L	114	98.1	97.0	94.7	91.2	118	101	110	96.0	79.0	170	98.0	100
NO_3+NO_2 as N	µg/L	2640	2030	2040J	1310	1750	5840	1960	2800	3800.	990.	15000.	3000.	6200.
SO_4	mg/L	732	679	645	585	599	749J	598	700	610	590	930	570	690
Metals														
As	µg/L	10.7	10	8.8	9.5	9.7	9.60	12.0	14.3	12	15	12	14	14
Fe	µg/L	0.8U	29.4	32.7	4U	0.8U	1.30U	8.60	0.800U	9.8U	7U	7.5U	7.8U	14U
Mn	µg/L	1.7	60.8	2.4	0.63	0.1U	0.100U	1.40	0.100U	0.077U	1.1	0.13U	0.096U	0.23U
Mo	µg/L	8.7	6.6	9.7	12	11.7	9.20	8.50	6.80	12	9.9J	8.1	6.7	12
Se	µg/L	68.9	66.5	58.5	55.9	72.1	90.4	42.9	59.6	42	35	77	28	37
U	µg/L	180	230	235	201J	188	194	168	174	160	130J	190	140	200
V	µg/L	289	229	226	280	314	270	331	346	310	340J	260	330	260
Radiological														
Alpha[d]	pCi/L	91.7J	130	140	118	96.3	94.0	92.6	71.6	112	83.2	118	--	--
Alpha-U[e]	pCi/L	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	2.1	0[f]	0[f]	--	--
Beta	pCi/L	26.4	9.8U	66.8	10.4U	39.7	52.0	31.6	33.2	47.3	34.3	45.3	--	--
U	µg/L	180	230	235	201J	188	194	168	174	160	130J	190	140	200

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- T01-05[a,b]

Analyte	Unit	10/03/06	04/11/07	10/09/07	04/09/08[c]	10/09/08	04/07/09	10/07/09	04/20/10
Field Measurements									
Alkalinity	mg/L	323	387	329	324	346	314	366	250
Conductivity[c]	µmhos/cm	1972	1962	1865	2652	1924	2487	1998	2846
DO[c]	mg/L	3.42	6.13	--	--	--	--	--	--
ORP[c]	mV	125	100.1	59	102.7	109	51	--	46.0
pH[c]	s.u.	6.69	6.98	6.88	6.98	6.91	7.03	6.80	6.96
Temperature[c]	C	14.15	8.25	14.41	8.04	15.62	9.54	13.85	9.32
Turbidity[c]	NTU	1.13	2.25	1.09	0.37	2.81	1.63	4.52	2.54
Common Ions									
Ca	mg/L	420	420	350	360	290	370J	320J	370
Chloride	mg/L	77.0	97.0	61.0	180	73.0	110	89.0	180
Fluoride	µg/L	400.	200.	470.	500.U	730.	450.	460.	350.
Hardness	mg/L	1340	1330	1140	1190	963	1210J	1050J	1240
K	mg/L	8.80	8.20	8.50	8.30J	8.40J	8.30J	6.50J	8.50J
Mg	mg/L	70.0	68.0	65.0	71.0	58.0	70.0	60.0	76.0
Na	mg/L	110	110	100	160	110	140J	110J	180
NO_3+NO_2 as N	µg/L	3300.	5100.	2800.	14000.	2900.	5400.	2800.	13000.
SO_4	mg/L	810	700	810	910	710	770	740	940
Metals									
As	µg/L	14	14	12	13	16	14	15	13
Fe	µg/L	2.2U	3.7U	5.6U	1.4U	3.1U	1.3UJ	1.6U	4.9U
Mn	µg/L	0.097U	0.084U	0.16U	0.54	0.2U	0.28	0.1U	0.11U
Mo	µg/L	8.3	14	11	12	10	11	10	10
Se	µg/L	27	33	25	66	23	29	21	82
U	µg/L	160	180	130	180	140	160	130	150
V	µg/L	270	290J	380J	270	310	290	330	250
Radiological									
Alpha[d]	pCi/L	--	--	--	--	--	--	--	--
Alpha-U[e]	pCi/L	--	--	--	--	--	--	--	--
Beta	pCi/L	--	--	--	--	--	--	--	--
U	µg/L	160	180	130	180	140	160	130	150

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- T01-06[a,b]

Analyte	Unit	04/10/03
Field Measurements		
Conductivity[c]	µmhos/cm	5011
pH[c]	s.u.	6.25
Temperature[c]	C	8.75
Turbidity[c]	NTU	21.8
Common Ions		
Ca	mg/L	509
Hardness	mg/L	2090
K	mg/L	2.82
Mg	mg/L	199
Na	mg/L	522
Metals		
As	µg/L	0.100U
Fe	µg/L	1.30U
Mn	µg/L	458
Mo	µg/L	2.00U
Se	µg/L	102
U	µg/L	1550
V	µg/L	0.300U
Radiological		
U	µg/L	1550

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- T01-07[a,b]

Analyte	Unit	07/11/01	10/09/01	01/31/02	04/03/02	07/09/02	10/08/02	04/09/03	10/07/03	04/13/04	10/06/04	04/05/05	10/05/05	04/27/06
Field Measurements														
Alkalinity	mg/L	374	329	386	461	387	415	369	390	382	433	334	352	379
Conductivity[c]	µmhos/cm	3290	2980	2840	2777	4660	2459	3093	2861	3077	2330	3292	2571	2878
DO[c]	mg/L	--	--	--	--	--	--	--	--	--	4.31	--	--	0.64
ORP[c]	mV	65	119	--	153	--	--	--	147	--	65	161	65	-17.9
pH[c]	s.u.	6.25	6.77	6.89	6.62	6.48	6.71	6.61	6.74	6.76	6.80	6.63	6.77	6.84
Temperature[c]	C	11	11.6	9.6	10.89	13.22	11.93	11.46	14.34	11.45	13.0	9.12	12.6	11.20
Turbidity[c]	NTU	4.87	1.47	4.92	3.85	1.74	1.69	0.59	0.35	0.77	1.68	1.23	0.81	0.37
Common Ions														
Ca	mg/L	349	335	309	316	284	296	385	351	410	310	440	340	450
Chloride	mg/L	205	189	157	157	131	144	223J	178	180	110	270	170	220
Fluoride	µg/L	468	649	371	50.2U	635	290	17.2UJ	391	500.U	410.	500.U	500.U	500.U
Hardness	mg/L	1390	1320	1210	1240	1100	1130	1460	1310	1480	1120	1630	1240	1620
K	mg/L	5.24	4.90	4.98	4.79	4.42	4.63	5.23	5.05	10.0	7.10	9.10	7.40	9.00
Mg	mg/L	125	118	107	110	95.1	94.1	120	106	110	83.0	130	94.0	120
Na	mg/L	305	238	208	188	187	176	245	213	200	130	260	170	210
NO_3+NO_2 as N	µg/L	7350	6760	4830	4560	3440	3470	9170	5910	8900.	2700.	15000.	6900.	15000.
SO_4	mg/L	1300	1240	936	1010	905	905	1200J	1080	1100	830	1400	990	1200
TDS[c]	mg/L	2790	--	--	--	--	--	--	--	--	--	--	--	--
Metals														
As	µg/L	2.4	3.9	3.7	3.2	3	3.1	3.20	4.20	3.6	4.1	3.8	4.1	3.9
Fe	µg/L	0.8U	0.8U	0.8U	1U	4U	18	1.30U	0.800U	9.8U	7U	15U	7.8U	14U
Mn	µg/L	54.9	26.2	18.8	17.9	12.5	13.8	4.30	3.90	0.077U	0.066U	170	0.096U	0.23U
Mo	µg/L	3.7	3.9	1.5U	2.8	4	3.1	2.00U	1.70U	6.5	6	8.1	7.5	6.4
Se	µg/L	54.4	46.4	38.4	40.7	39	40	73.4	51.3	43	26	61	29	43
U	µg/L	214	201	199	203	191	183	197	182	190	150J	270	170	210
V	µg/L	86.2	93.3	91.9	90.9	91.1	102	91.3	95.8	98	96J	85	100	79
Radiological														
Alpha[d]	pCi/L	82.7J	97.2	91.0	138J	98.3	112	70.0	90.4	149	105	105	--	--
Alpha-U[e]	pCi/L	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	18.5	2.0	0[f]	--	--
Beta	pCi/L	35.5	50.0	28.9	64.7	15.2U	38.0	55.0	35.7	53.0	39.4	65.0	--	--
U	µg/L	214	201	199	203	191	183	197	182	190	150J	270	170	210

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[c] Sample was unfiltered.
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[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- T01-07[a,b]

Analyte	Unit	10/03/06	04/11/07	10/09/07	04/09/08[c]	10/09/08	04/07/09	10/05/09	04/20/10
Field Measurements									
Alkalinity	mg/L	365	431	375	358	388	337	379	217
Conductivity[c]	µmhos/cm	2589	3001	2472	3650	2525	3460	2612	3922
DO[c]	mg/L	1.11	5.05	--	--	--	--	--	--
ORP[c]	mV	130	194.4	96	167.8	-39	127	--	133.4
pH[c]	s.u.	6.55	6.77	6.84	6.72	6.74	6.77	6.56	6.72
Temperature[c]	C	12.92	10.21	15.24	9.52	13.54	10.48	12.18	12.00
Turbidity[c]	NTU	1.50	3.67	2.22	1.32	0.69	2.54	3.93	1.47
Common Ions									
Ca	mg/L	450	480	390	440	310	470J	390J	410
Chloride	mg/L	160	210	140	270	140	200	150	250
Fluoride	µg/L	500.U	500.U	500.	500.U	570.	450.	710.	440.
Hardness	mg/L	1580	1690	1390	1630	1150	1670J	1390J	1560
K	mg/L	7.90	7.10	7.70	8.40	7.00J	8.50J	6.30J	11.0J
Mg	mg/L	110	120	100	130	92.0	120	100	130
Na	mg/L	210	220	180	250	190	240J	190J	290
NO_3+NO_2 as N	µg/L	9000.	16000.	17000.	22000.	8500.	13000.	7900.	26000.
SO_4	mg/L	990	1200	1000	1500	1000	1100	910	1400
TDS[c]	mg/L	--	--	--	--	--	--	--	--
Metals									
As	µg/L	4	4.7	3.5	3.6	4.5	4.5	4.5	3.2
Fe	µg/L	2.2U	7.4U	5.6U	1.4U	3.1U	1.3UJ	1.6U	31
Mn	µg/L	0.097U	0.17U	0.16U	4.3	0.2U	0.15	1.2	40
Mo	µg/L	6.2	7.4	5.6	9.2	5.8	5.8	5.4	8.8
Se	µg/L	30	45	29	53	27	38	25	44
U	µg/L	180	190	150	220	160	160	150	240
V	µg/L	80	94J	110J	84	94	90	110	67
Radiological									
Alpha[d]	pCi/L	--	--	--	--	--	--	--	--
Alpha-U[e]	pCi/L	--	--	--	--	--	--	--	--
Beta	pCi/L	--	--	--	--	--	--	--	--
U	µg/L	180	190	150	220	160	160	150	240

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- T01-08[a,b]

Analyte	Unit	07/11/01	10/11/01	01/31/02	04/03/02	07/10/02	10/09/02	04/09/03	10/07/03	04/14/04	04/09/09[c]
Field Measurements											
Alkalinity	mg/L	--	--	--	--	498	--	--	--	156	63
Conductivity[c]	µmhos/cm	5160	4290	3090	4080	8082	4092	4032	4560	4674	4497
DO[c]	mg/L	--	--	--	--	--	--	--	--	--	6.6
ORP[c]	mV	--	29	--	61	--	--	--	89.9	--	44
pH[c]	s.u.	6.73	6.77	7.07	6.93	6.54	6.64	6.75	6.69	6.11	6.10
Temperature[c]	C	23	16	3.6	8.4	20.14	17.22	6.78	18.32	13.46	8.3
Turbidity[c]	NTU	12.1	36.9	84.1	52.6	15.8	9.21	11.5	9.01	4.26	--
Common Ions											
Ca	mg/L	519	584	533	609	572	593	538	521	490	--
Chloride	mg/L	--	--	--	--	--	--	126J	--	110	122
Fluoride	µg/L	--	--	--	--	--	--	319J	--	3000.	--
Hardness	mg/L	1950	2130	2000	2120	2090	2250	2150	2160	2460	--
K	mg/L	10.2	7.06	6.17	3.23	5.58	6.89	5.09	8.66	14.0	--
Mg	mg/L	159	162	162	145	160	186	195	209	300	--
Na	mg/L	439	400	326	304	389	398	385	402	320	--
NO_3 as N	µg/L	--	--	--	--	--	--	--	--	--	35200
NO_3+NO_2 as N	µg/L	8390	16800	--	--	25300	--	51600	--	53000.	--
SO_4	mg/L	--	--	--	--	--	--	2580J	--	2400	2870
Metals											
As	µg/L	0.5U	0.69	0.6U	0.27	0.97	0.24	0.100U	0.310	0.24	--
Fe	µg/L	18.1	30.3	0.8U	23.2	23	0.8U	1.30U	0.800U	87	--
Mn	µg/L	7770	11400	11300	11600	12800	14200	8140	13100	9100	--
Mo	µg/L	45.3	38.7	16.5	16.5	35.2	30.8	6.30	15.1	16	--
Se	µg/L	2	0.84	1.4	1.2	1.1	1.2	2.80	0.100U	3.1	--
U	µg/L	397	430	46.5R	435	416J	354	220	143	210	1450.9
V	µg/L	3.7	3	2.4	1.3	4	4	2.80	4.70	8.3	--
Radiological											
U	µg/L	397	430	46.5R	435	416J	354	220	143	210	1450.9

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- T01-12[a,b]

Analyte	Unit	07/11/01	10/09/01	01/30/02	04/03/02	07/09/02	10/07/02	04/08/03	07/08/03	10/07/03	04/13/04	10/07/04	04/06/05	10/05/05
Field Measurements														
Alkalinity	mg/L	363	361	443	484	410	406	366	445	351	399	412	325	342
Conductivity[c]	µmhos/cm	2250	2270	2240	2180	3572	2151	3144	1894	2676	2584	2210	2764	2307
DO[c]	mg/L	--	--	--	--	--	--	--	--	--	--	3.19	--	6.81
ORP[c]	mV	10	105	--	154	--	--	--	215	110	--	74	231	34
pH[c]	s.u.	6.51	6.93	7.16	6.87	6.69	6.82	6.69	6.87	6.83	6.91	6.90	6.73	6.93
Temperature[c]	C	11.6	13	7.8	9.54	14.66	14.04	9.77	13.6	14.61	9.89	14.0	11.00	13.8
Turbidity[c]	NTU	1.56	1.47	4.95	2.2	0.5	3.47	0.58	4.45	0.86	0.42	1.03	0.91	1.29
Common Ions														
Ca	mg/L	294	316	290	299	259	294	428	293	334	350	330	400	330
Chloride	mg/L	123	128	112	115	91.0	141	233J	114	151	150	110	240	150
Fluoride	µg/L	349	440	266	25.1U	335	318	17.2UJ	259	283	290.	240.	500.U	500.U
Hardness	mg/L	1010	1070	986	1020	881	1000	1500	987	1170	1190	1100	1400	1110
K	mg/L	4.12	4.20	3.80	3.56	3.23	4.22	5.44	3.55	5.16	8.30	6.80	9.20	7.00
Mg	mg/L	67.8	69.0	63.6	66.9	57.0	65.0	104	62.0	82.3	77.0	66.0	97.0	70.0
Na	mg/L	147	131	125	124	102	153	243	123	216	150	120	200	140
NO_3+NO_2 as N	µg/L	4310	5000	3960	4040	1990	4130	11500	3540	6080	8000.	3200.	22000.	9000.
SO_4	mg/L	750	850	677	656	556	695	1170J	653	977	850	720	1100	800
TDS[c]	mg/L	1800	--	--	--	--	--	--	--	--	--	1600	2300	1800
Metals														
As	µg/L	1.2	1.5	2.2	2.1	2.2	2.5	1.70	2.30	2.40	2	2.4	1.3	2.2
Fe	µg/L	0.8U	0.8U	0.8U	1U	4U	0.8U	1.30U	1.00U	0.800U	9.8U	7U	7.5U	7.8U
Mn	µg/L	0.21	0.1U	0.1U	0.1U	0.1U	0.1U	0.100U	0.100U	0.100U	0.077U	0.066U	2.2	0.096U
Mo	µg/L	3U	1.9U	1.5U	1.8U	1.8U	1.7U	2.00U	1.70U	1.70U	5.1	3.5J	2.8J	5.9
Se	µg/L	37.5	35.3	27.6	30.6	22.7	44.4	109	25.8	51.8	40	26	69	27
U	µg/L	164	153	161	155	119	141	282	144	199	190J	130J	260	210
V	µg/L	15.6	21	27.6	28	33.5	53	27.6	37.4	30.1	32	43J	16	31
Radiological														
Alpha[d]	pCi/L	60.9J	80.2J	101	67.3J	70.3	81.8	113	67.1	96.3	118	94.7	145	--
Alpha-U[e]	pCi/L	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	5.4	0[f]	--
Beta	pCi/L	28.7	23.2	33.3	52.9	11.4U	27.2	75.0	25.7	40.5	50.0	36.8	59.5	--
U	µg/L	164	153	161	155	119	141	282	144	199	190J	130J	260	210

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- T01-12[a,b]

Analyte	Unit	04/28/06	10/03/06	04/11/07	10/09/07	04/10/08[c]	10/08/08	04/07/09	10/08/09
Field Measurements									
Alkalinity	mg/L	392	361	413	378	338	190	369	393
Conductivity[c]	µmhos/cm	2326	2232	2344	2308	2751	2173	2843	2332
DO[c]	mg/L	2.07	4.68	5.08	--	1.59	--	--	--
ORP[c]	mV	-30.1	125	159	48.0	99.7	151	143	--
pH[c]	s.u.	6.92	6.71	6.93	6.85	6.89	6.9	6.96	6.79
Temperature[c]	C	10.61	14.15	8.78	14.27	9.42	13.98	9.25	12.87
Turbidity[c]	NTU	1.47	0.46	0.39	0.65	0.86	3.85	4.19	2.27
Common Ions									
Ca	mg/L	330	420	460	370	330	310	370J	350J
Chloride	mg/L	160	140	160	140	210	120	170	150
Fluoride	µg/L	250.	500.U	280.	440.	500.U	730.	420.	460.
Hardness	mg/L	1120	1370	1500	1250	1160	1050	1270J	1180J
K	mg/L	6.80	7.20	6.60	7.60	7.60	6.30J	7.10J	5.70J
Mg	mg/L	72.0	79.0	86.0	80.0	81.0	68.0	83.0	74.0
Na	mg/L	140	160	160	160	190	140	180J	150J
NO_3+NO_2 as N	µg/L	12000.	12000.	13000.	16000.	17000.	7200.	9600.	8800.
SO_4	mg/L	770	770	820	900	990	750	840	800
TDS[c]	mg/L	1700	1800	2000	2000	2200	1700	2000	1800
Metals									
As	µg/L	1.8	2.5	2.4	2.2	1.5	3.4	2.7	3.1
Fe	µg/L	14U	2.2U	3.7U	5.6U	1.4U	3.1U	1.3UJ	1.6U
Mn	µg/L	0.64	0.097U	0.084U	0.16U	0.36	0.2U	0.097U	0.1U
Mo	µg/L	5.4	4.2J	4.5	3.8	3.4	6.3	4.6	4.4
Se	µg/L	34	28	40	32	54	25	34	26
U	µg/L	220	170	210	180	190	190	200	170
V	µg/L	25	32	36J	48J	19	45	31	45
Radiological									
Alpha[d]	pCi/L	--	--	--	--	--	--	--	--
Alpha-U[e]	pCi/L	--	--	--	--	--	--	--	--
Beta	pCi/L	--	--	--	--	--	--	--	--
U	µg/L	220	170	210	180	190	190	200	170

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- T01-13[a,b]

Analyte	Unit	07/20/01	01/31/02	04/03/02	07/10/02	04/09/03	10/07/04	10/06/05	10/03/06	10/09/07	10/09/08
Field Measurements											
Alkalinity	mg/L	--	--	--	--	--	--	542	642	546	400
Conductivity[c]	µmhos/cm	3650	3700	3500	6376	3269	3644	3894	3685	--	--
DO[c]	mg/L	--	--	--	--	--	0.69	--	1.87	--	--
ORP[c]	mV	--	--	63	--	--	-150	-13	-56	--	--
pH[c]	s.u.	6.48	7.16	7.23	6.82	6.9	6.96	6.88	6.64	--	--
Temperature[c]	C	16.5	6.8	8.8	14.65	9.33	15.4	13.2	14.41	--	--
Turbidity[c]	NTU	53.3	33.5	38.3	25.6	5.35	14.7	10.7	298	--	--
Common Ions											
Ca	mg/L	405	407	401	388	419	480	600	590	390	530
Chloride	mg/L	--	--	--	--	--	--	230	200	--	290
Fluoride	µg/L	--	--	--	--	--	--	500.U	500.U	--	1200.
Hardness	mg/L	1280	1280	1270	1230	1320	1470	1850	1800	1260	1660
K	mg/L	17.8	16.0	14.3	15.0	12.8	18.0	16.0	20.0	20.0	16.0J
Mg	mg/L	64.6	65.0	64.1	62.9	65.3	66.0	85.0	80.0	69.0	82.0
Na	mg/L	451	372	360	359	331	290	220	360	270	280
NO_3+NO_2 as N	µg/L	--	--	--	--	--	--	10.U	10.U	10.U	10.
SO_4	mg/L	--	--	--	--	--	--	1400	1400	--	1400
Metals											
As	µg/L	0.5U	1.6	1.3	1.3	1.60	5.5	8.5	17	7.3	10
Fe	µg/L	14.9	55.6	1U	4U	1.30U	210	2500	2700	2400	350
Mn	µg/L	924	1270	831	792	1130	3700	7500	6200	6000	6300
Mo	µg/L	74.3	45.7	41.1	41.8	27.6	43	18	60	13	37
Se	µg/L	0.45	0.3U	0.4	0.37	0.400	0.58	0.25	0.025U	0.13	1.4
U	µg/L	436	27.9R	391	349	328	310J	240	340	150	200
V	µg/L	28.7	215	104	186	233	190J	6.9	19	5.1J	0.38
Radiological											
U	µg/L	436	27.9R	391	349	328	310J	240	340	150	200
U-234	pCi/L	172J	--	--	--	--	--	--	--	--	--
U-238	pCi/L	167J	--	--	--	--	--	--	--	--	--

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- T01-18[a,b]

Analyte	Unit	07/20/01	10/10/01	01/31/02	04/04/02	04/08/03	10/08/03	04/13/04	10/07/04	10/05/05	10/03/06	10/08/07	10/08/08	10/06/09
Field Measurements														
Alkalinity	mg/L	--	--	--	--	--	--	--	--	688	--	--	640	--
Conductivity[c]	µmhos/cm	3150	2230	2450	2180	2297	--	2369	1860	2586	--	--	--	3547
DO[c]	mg/L	--	--	--	--	--	--	--	2.92	5.41	--	--	--	--
ORP[c]	mV	--	-51	--	37	--	--	--	-18	33	--	--	--	--
pH[c]	s.u.	6.75	7.02	7.22	7.3	6.89	--	7.02	7.02	6.98	--	--	--	6.77
Temperature[c]	C	16	13.7	5.8	14.7	11.04	--	14.72	13.7	14.5	--	--	--	16.03
Turbidity[c]	NTU	24.5	347	127	60.3	25.4	--	6.05	11.6	8.48	--	--	--	118.0
Common Ions														
Ca	mg/L	325	322	362	360	371	342	420	400	410	420	390	420	530J
Chloride	mg/L	--	--	--	--	--	--	--	--	--	260	220	230	--
Fluoride	µg/L	--	--	--	--	--	--	--	--	--	500.U	380.	1200.	--
Hardness	mg/L	1110	1070	1230	1220	1240	1150	1380	1370	1320	1380	1340	1400	1860J
K	mg/L	4.10	3.44	4.22	3.80	3.65	3.57	7.30	7.20	5.80	5.40	6.20	4.70J	7.00J
Mg	mg/L	72.4	64.8	78.8	78.8	77.0	71.9	80.0	89.0	73.0	80.0	89.0	85.0	130
Na	mg/L	173	156	184	179	184	176	160	160	150	180	200	190	190J
NO_3+NO_2 as N	µg/L	--	--	--	--	4090J	--	--	--	--	1400.	1400.	1900.	25000.
SO_4	mg/L	--	--	--	--	--	--	--	--	--	980	840	950	--
Metals														
As	µg/L	1.9	0.6U	0.6U	0.33	0.260	0.170	0.36	0.26	1.1	0.023U	0.4	0.46	1.2
Fe	µg/L	1040	86.7	852	899	330	37.9	340	290	580	75	160	110	780
Mn	µg/L	2150	2070	2190	2100	1700	1530	1700	1700	1900	1400	1500	1100	1800
Mo	µg/L	8.7	5.8	1.5U	1.8U	2.00U	1.70U	12	3.5J	4.2J	1.4J	3.2	2.3	3
Se	µg/L	9	1.9	25.2	16.3	26.1	2.30	29	17	8.7	8.5	6.5	5.7	66
U	µg/L	247	191	367	307	261	230	360J	340J	240	260	250	250	560
V	µg/L	2.1	0.82	0.4U	0.3U	0.300U	0.380	0.58	0.71J	0.1U	0.21U	0.42J	0.15	0.42J
Radiological														
U	µg/L	247	191	367	307	261	230	360J	340J	240	260	250	250	560
U-234	pCi/L	88.4J	--	--	--	--	--	--	--	--	--	--	--	--
U-238	pCi/L	98.3J	--	--	--	--	--	--	--	--	--	--	--	--

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- T01-19[a,b]

Analyte	Unit	07/12/01	10/10/01	01/31/02	04/04/02	07/10/02	10/08/02	04/08/03	07/08/03	10/08/03	04/13/04	10/07/04	04/06/05	10/05/05
Field Measurements														
Alkalinity	mg/L	--	--	--	--	--	--	--	--	--	518	--	528	536
Conductivity[c]	µmhos/cm	1943	1984	2120	1780	3268	--	1764	1783	1778	1833	1931	1688	2196
DO[c]	mg/L	--	--	--	--	--	--	--	--	--	--	2.45	--	4.94
ORP[c]	mV	-89	-39	--	-11	--	--	--	-43	-43	--	-81	157	-58
pH[c]	s.u.	6.59	6.98	7.3	7.19	6.8	7.04	6.97	6.78	6.96	7.02	7.06	6.79	6.95
Temperature[c]	C	17.1	14.9	5	12.5	19.77	17.69	10.61	18	18.46	11.35	15.1	9.60	15.9
Turbidity[c]	NTU	>1000	507	414	148	155	32.7	21.1	33.9	188	17.1	33.7	19.5	26.7
Common Ions														
Ca	mg/L	273	280	244	253	212	236	249	251	241	300	310	330	330
Chloride	mg/L	134	--	114	--	--	--	--	--	--	--	--	140	--
Fluoride	µg/L	277	--	194	--	--	--	--	--	--	--	--	200.U	--
Hardness	mg/L	894	903	798	838	728	774	813	821	794	963	988	1070	1030
K	mg/L	4.29	4.31	3.89	3.69	3.97	4.12	3.46	3.78	3.98	6.50	7.30	6.20	6.80
Mg	mg/L	51.5	49.4	45.9	50.2	48.3	44.8	46.4	47.1	46.6	52.0	52.0	60.0	49.0
Na	mg/L	132	126	118	119	118	119	108	108	108	96.0	91.0	100	94.0
NO_3+NO_2 as N	µg/L	56.9	230	253	317	--	--	42.7	--	204	140.	120.	59	10.U
SO_4	mg/L	488	--	404	--	--	--	--	--	--	--	--	590	--
Metals														
As	µg/L	3.8	4.1	5.9	3.7	4.2	4.9	9.90	5.00	4.50	3.1	3.1	7.9	6.4
Fe	µg/L	612	783	1540	850	417	63.7	1030	592	262	220	210	1600	1200
Mn	µg/L	6740	7150	5020	5010	4760	4420	4450	4720	3750	3800	4300	5200	8300
Mo	µg/L	11.5	9.8	3.8	6.1	5.5	6.2	2.00U	6.20	3.20	8.8	5.1	7.3	7.9
Se	µg/L	0.41	0.5	0.3U	0.2U	0.16	0.23	0.100U	0.160	0.180	0.15	0.16	0.12	0.023U
U	µg/L	109	111	130	128	110	105	109	109	110	110J	99J	130	76
V	µg/L	27.9	19.8	8	6.3	4.4	5.9	4.10	4.70	1.90	3	2.3J	8.3	0.1U
Radiological														
Alpha[d]	pCi/L	--	--	--	--	--	--	--	--	--	--	--	81.5	--
Alpha-U[e]	pCi/L	--	--	--	--	--	--	--	--	--	--	--	0[f]	--
Beta	pCi/L	--	--	--	--	--	--	--	--	--	--	--	28.6	--
U	µg/L	109	111	130	128	110	105	109	109	110	110J	99J	130	76

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- T01-19[a,b]

Analyte	Unit	04/28/06	10/03/06	04/11/07	10/08/07	04/10/08[c]	10/08/08	04/06/09	10/06/09	04/21/10
Field Measurements										
Alkalinity	mg/L	--	503	505	428	409	464	488	--	429
Conductivity[c]	µmhos/cm	--	1890	1913	1707	1897	1931	1543	1123	2324
DO[c]	mg/L	--	2.59	2.21	--	--	--	--	--	--
ORP[c]	mV	--	7	-21.7	-8.4	74.9	-28	94.2	--	153.7
pH[c]	s.u.	--	6.76	7.06	7.00	7.21	7.01	7.11	6.88	6.70
Temperature[c]	C	--	15.60	9.47	15.98	8.76	17.1	9.71	16.28	7.89
Turbidity[c]	NTU	--	68.0	73.6	30.2	--	252	40.5	99.3	88.4
Common Ions										
Ca	mg/L	290	330	350	280	280	280	310J	290J	340
Chloride	mg/L	120	150	--	--	130	130	140	--	--
Fluoride	µg/L	230.	350.	--	--	240.	610.	460.	--	--
Hardness	mg/L	926	1040	1090	901	901	897	992J	930J	1090
K	mg/L	6.00	6.80	5.70	6.30	6.50	6.40J	5.60J	4.80J	5.50J
Mg	mg/L	49.0	53.0	52.0	49.0	49.0	48.0	53.0	50.0	58.0
Na	mg/L	95.0	130	100	120	94.0	110	140J	120J	160
NO_3+NO_2 as N	µg/L	10.U	140.	--	--	16	59	42	--	--
SO_4	mg/L	470	450	--	--	450	490	460	--	--
Metals										
As	µg/L	11	7.5	5.1	11	13	8.4	5.8	12	2.1
Fe	µg/L	1400	700	750	750	8200	550	390	770	94
Mn	µg/L	6700	6000	8800	5400	8000	7300	5600	4600	5000
Mo	µg/L	6.1	6.7	6.4	7	6.6	6.7	6	6.8	5.5
Se	µg/L	0.02U	0.025U	0.038U	0.1	0.26	0.024U	0.12U	0.28	0.61
U	µg/L	91	96	70	84	72	72	99	98	100
V	µg/L	2	1.9	0.24UJ	1.6J	36	1.7	1.8	1.6	1.8
Radiological										
Alpha[d]	pCi/L	--	--	--	--	--	--	--	--	--
Alpha-U[e]	pCi/L	--	--	--	--	--	--	--	--	--
Beta	pCi/L	--	--	--	--	--	--	--	--	--
U	µg/L	91	96	70	84	72	72	99	98	100

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- T01-20[a,b]

Analyte	Unit	07/19/01	10/11/01	01/31/02	04/03/02	07/10/02	10/10/02	04/08/03	10/07/03	04/14/04	10/07/04	10/05/05	10/03/06	10/09/07
Field Measurements														
Alkalinity	mg/L	--	--	--	--	340	--	--	380	427	421	476	476	452
Conductivity[c]	µmhos/cm	3890	3940	3960	3880	7138	3802	3583	3643	3461	3585	3755	3749	3483
DO[c]	mg/L	--	--	--	--	--	--	--	--	--	0.66	4.45	2.48	--
ORP[c]	mV	--	100	--	--	--	--	--	-14.7	--	-17	-7	8	-35
pH[c]	s.u.	6.6	6.92	7.17	7.02	6.81	6.9	6.8	7.13	6.98	6.91	6.77	6.68	6.84
Temperature[c]	C	15.6	13.2	8.2	11.1	15.64	16.01	9.69	15.56	12.64	14.8	16.2	13.89	14.32
Turbidity[c]	NTU	70.3	58.4	49.4	29.4	26.7	19.6	24.7	12.1	6.60	22.0	24.2	107	41.0
Common Ions														
Ca	mg/L	321	348	322	340	325	348	301	295	360	310	430	420	380
Chloride	mg/L	120	147	--	73.5	--	--	--	135	130	140	270	200	150
Fluoride	µg/L	310	231	--	78.2J	--	--	--	229	500.U	200.U	500.U	500.U	500.U
Hardness	mg/L	1020	1090	1010	1100	1050	1120	951	932	1090	955	1350	1400	1220
K	mg/L	27.0	21.0	22.4	14.9	16.3	16.3	16.2	15.6	34.0	26.0	15.0	17.0	17.0
Mg	mg/L	52.1	53.4	50.5	61.0	58.2	61.6	48.5	47.4	46.0	44.0	66.0	85.0	67.0
Na	mg/L	660	557	523	478	495	499	488	492	410	430	390	420	440
NO_3+NO_2 as N	µg/L	230	201	--	25	21	26.3	24.9	4.50U	50.	180.	10.U	24	160.
SO_4	mg/L	1780	1950	--	1610	--	--	--	1430	1200	1400	1700	1700	1600
TDS[c]	mg/L	3250	--	--	--	--	--	--	--	--	--	--	--	--
Metals														
As	µg/L	0.58	0.6U	0.6U	0.37	0.31	0.16	0.350	0.350	0.41	0.57	0.93	1.2	1.1
Fe	µg/L	99.4	18.2	38.9	47	8.4	0.8U	78.1	16.3	9.8U	7U	320	450	410
Mn	µg/L	2180	3260	3510	4590	4670	5390	4390	4360	3900	4900	4900	9300	7800
Mo	µg/L	39.1	38.7	33.8	31.3	26	28.9	30.9	28.9	40	32	37	24	24
Se	µg/L	0.32	0.3U	0.3U	0.2U	0.2	0.18	0.100U	0.100U	0.1	0.099	0.56	0.82	0.88
U	µg/L	255	239	69.6R	258	271J	252	319	287	360	260J	450	330	260
V	µg/L	7.6	2.8	3.2	1.3	1.8	1.8	1.10	2.50	2	1.4J	0.1U	0.42	0.87J
Radiological														
Alpha[d]	pCi/L	134J	--	--	--	--	--	--	--	--	--	--	--	--
Alpha-U[e]	pCi/L	0[f]	--	--	--	--	--	--	--	--	--	--	--	--
Beta	pCi/L	45.0	--	--	--	--	--	--	--	--	--	--	--	--
U	µg/L	255	239	69.6R	258	271J	252	319	287	360	260J	450	330	260
U-234	pCi/L	97.8J	--	--	--	--	--	--	--	--	--	--	--	--
U-238	pCi/L	103J	--	--	--	--	--	--	--	--	--	--	--	--

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- T01-20[a,b]

Analyte	Unit	10/09/08	10/06/09
Field Measurements			
Alkalinity	mg/L	472	--
Conductivity[c]	µmhos/cm	3997	4084
DO[c]	mg/L	--	--
ORP[c]	mV	15	--
pH[c]	s.u.	6.78	6.48
Temperature[c]	C	13.8	15.08
Turbidity[c]	NTU	45.3	33.5
Common Ions			
Ca	mg/L	460	540J
Chloride	mg/L	250	270
Fluoride	µg/L	900.	560.
Hardness	mg/L	1540	1800J
K	mg/L	12.0J	4.60J
Mg	mg/L	95.0	110
Na	mg/L	390	340J
NO_3+NO_2 as N	µg/L	16	18
SO_4	mg/L	1700	1700
TDS[c]	mg/L	--	--
Metals			
As	µg/L	1	0.91
Fe	µg/L	3.1U	170
Mn	µg/L	7300	9300
Mo	µg/L	25	25
Se	µg/L	3.6	2.2
U	µg/L	570	590
V	µg/L	0.52	3.5
Radiological			
Alpha[d]	pCi/L	--	--
Alpha-U[e]	pCi/L	--	--
Beta	pCi/L	--	--
U	µg/L	570	590
U-234	pCi/L	--	--
U-238	pCi/L	--	--

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- T01-23[a,b]

Analyte	Unit	07/11/01	10/08/01	01/30/02	04/03/02	07/09/02	10/07/02	04/08/03	07/07/03	10/07/03	04/12/04	10/06/04	10/05/05	10/03/06
Field Measurements														
Alkalinity	mg/L	420	412	426	399	384	412	441	412	415	425	411	398	318
Conductivity[c]	µmhos/cm	1544	1511	1546	1350	2445	1413	1460	1348	1417	1605	1429	1370	1464
DO[c]	mg/L	--	--	--	--	--	--	--	--	--	--	0.44	2.24	0.96
ORP[c]	mV	-110	-109	--	32	--	--	--	-30	-46	--	-51	-42	-11
pH[c]	s.u.	6.84	7.06	7.3	7.2	6.75	6.91	6.88	6.75	6.91	6.99	6.95	7.01	6.74
Temperature[c]	C	11.6	12.1	7.2	12	12.32	12.92	10.74	14.61	12.63	11.24	11.7	12.1	11.65
Turbidity[c]	NTU	3.58	1.55	4.49	1.33	0.72	1.14	0.43	1.96	0.79	0.69	2.94	4.61	0.68
Common Ions														
Ca	mg/L	212	230	219	202	195	228	233	220	222	270	260	210	300
Chloride	mg/L	68.8	59.2	55.7	47.5	35.2	41.6	64.6	48.2	36.2	87.0	24.0	55.0	58.0
Fluoride	µg/L	307	26.2U	485	269J	1920	423	17.2UJ	130	222	240.	200.U	200.U	200.
Hardness	mg/L	697	739	706	654	631	730	748	702	712	855	810	669	943
K	mg/L	2.63	2.54	2.91	2.72	2.75	3.01	2.88	2.69	2.83	5.20	4.40	3.90	4.10
Mg	mg/L	40.7	39.9	38.7	36.4	35.0	39.0	40.4	37.1	38.2	44.0	39.0	35.0	47.0
Na	mg/L	79.0	64.7	59.5	57.9	54.5	61.6	61.1	57.5	59.4	65.0	52.0	66.0	63.0
NO_3+NO_2 as N	µg/L	7.8	92.6	7.3U	124	7.4	59.1	10.00J	24.0	4.50U	10.U	10.U	10.U	93
SO_4	mg/L	352	398	361	296	4820	372	330	346	346	340	380	360	420
TDS[c]	mg/L	1090	--	--	--	--	--	--	--	--	--	--	--	--
Metals														
As	µg/L	0.5U	0.6U	0.6U	0.1U	0.1U	0.1U	0.100U	0.100U	0.100U	0.016U	0.018U	0.007U	0.012U
Fe	µg/L	553	510	570	493	422	430	674	610	695	780	770	590	1300
Mn	µg/L	902	831	735	634	585	639	742	670	678	760	680	600	800
Mo	µg/L	3U	1.9U	1.5U	1.8U	1.8U	1.7U	2.00U	1.70U	1.70U	0.66	0.17U	0.068U	0.13U
Se	µg/L	0.3U	0.3U	0.3U	0.2U	0.1U	0.1U	0.100U	0.100U	0.100U	0.043U	0.029U	0.023U	0.025U
U	µg/L	48.5	44	46.5	43.2	35.7	42.5	50.2	37.9	40.6	50J	33J	50	46
V	µg/L	0.3U	0.55	0.4U	0.65	0.3U	0.3U	0.300U	0.580	0.300U	0.46	0.36J	0.1U	0.21U
Radiological														
Alpha[d]	pCi/L	19.1J	17.8J	21.1	13.2J	19.3	26.1	28.7	19.6	19.6	28.9	22.9	--	--
Alpha-U[e]	pCi/L	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0.23	--	--
Beta	pCi/L	15.0U	11.6U	8.5	20.6	7.5U	11.1	17.1	9.7U	9.7	16.0	10.0	--	--
U	µg/L	48.5	44	46.5	43.2	35.7	42.5	50.2	37.9	40.6	50J	33J	50	46

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- T01-23[a,b]

Analyte	Unit	10/08/07	10/08/08	10/06/09
Field Measurements				
Alkalinity	mg/L	372	376	363
Conductivity[c]	µmhos/cm	1460	1362	1460
DO[c]	mg/L	--	--	--
ORP[c]	mV	-45.4	-53	--
pH[c]	s.u.	6.87	6.94	6.78
Temperature[c]	C	10.91	11.26	10.62
Turbidity[c]	NTU	1.62	2.06	2.34
Common Ions				
Ca	mg/L	280	190	260J
Chloride	mg/L	30.0	34.0	24.0
Fluoride	µg/L	340.	360.	310.
Hardness	mg/L	889	619	818J
K	mg/L	4.10	3.70J	3.00J
Mg	mg/L	46.0	35.0	41.0
Na	mg/L	61.0	66.0	55.0J
NO_3+NO_2 as N	µg/L	10.U	17	10.U
SO_4	mg/L	510	360	470
TDS[c]	mg/L	--	--	--
Metals				
As	µg/L	0.018U	0.012U	0.0084U
Fe	µg/L	2100	1500	2400
Mn	µg/L	760	550	630
Mo	µg/L	0.46	0.69	0.52
Se	µg/L	0.042	0.024U	0.1
U	µg/L	35	40	33
V	µg/L	0.48J	0.2	0.27J
Radiological				
Alpha[d]	pCi/L	--	--	--
Alpha-U[e]	pCi/L	--	--	--
Beta	pCi/L	--	--	--
U	µg/L	35	40	33

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- T01-24[a,b]

Analyte	Unit	07/11/01	01/30/02	04/03/02	04/07/03	04/12/04
Field Measurements						
Alkalinity	mg/L	279	--	286	282	299
Conductivity[c]	µmhos/cm	1269	1605	1258	1343	1266
ORP[c]	mV	-13	--	37	--	--
pH[c]	s.u.	6.6	7.39	6.91	6.71	6.85
Temperature[c]	C	13	7	9.1	7.61	10.23
Turbidity[c]	NTU	4.9	871	1.47	4.06	1.00
Common Ions						
Ca	mg/L	187	215	203	223	200
Chloride	mg/L	20.9	--	19.4	44.7	42.0
Fluoride	µg/L	171	--	187J	17.2U	150.
Hardness	mg/L	603	686	649	709	631
K	mg/L	3.53	3.14	3.01	3.10	4.70
Mg	mg/L	33.0	36.2	34.5	37.0	32.0
Na	mg/L	45.9	39.6	39.9	45.4	45.0
NO_3+NO_2 as N	µg/L	41.5	--	186	26.7J	11
SO_4	mg/L	406	--	385	304J	340
TDS[c]	mg/L	950	--	--	--	--
Metals						
As	µg/L	0.5U	0.83	0.24	0.100U	0.21
Fe	µg/L	15	288	85.4	2.10	9.8U
Mn	µg/L	337	296	168	37.6	59
Mo	µg/L	3U	1.5U	1.8U	2.00U	2.6
Se	µg/L	0.3U	0.3U	0.2U	0.160	0.26
U	µg/L	33.1	28.5	28.8	31.0	27J
V	µg/L	0.3U	0.4U	0.3U	0.300U	0.25U
Radiological						
Alpha[d]	pCi/L	14.8J	--	10.3J	17.1	15.0
Alpha-U[e]	pCi/L	0[f]	--	0[f]	0[f]	0[f]
Beta	pCi/L	11.6	--	18.7	11.8	9.6
U	µg/L	33.1	28.5	28.8	31.0	27J

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- T01-25[a,b]

Analyte	Unit	10/11/01	01/31/02	04/03/02	07/10/02	10/10/02	04/08/03	10/07/03	04/14/04	10/07/04	10/05/05	10/03/06	10/09/07	10/09/08
Field Measurements														
Alkalinity	mg/L	--	--	--	522	--	--	526	--	612	704	733	720	644
Conductivity[c]	µmhos/cm	4140	3860	3360	6825	3403	3395	3323	3154	3192	3410	3197	2949	3082
DO[c]	mg/L	--	--	--	--	--	--	--	--	0.80	6.35	2.43	--	--
ORP[c]	mV	96	--	47	--	--	--	-35.8	--	-70	-32	-29	-46	-29
pH[c]	s.u.	6.65	6.8	7.4	6.43	6.57	6.56	6.91	6.67	6.64	6.54	6.44	6.55	6.63
Temperature[c]	C	11.5	8.1	13.5	15.32	15.5	8.14	15.14	10.91	15.0	15.4	14.12	13.93	13.92
Turbidity[c]	NTU	187	137	73.5	40.7	71.8	6.68	8.86	5.03	15.8	8.84	60.1	6.43	32.8
Common Ions														
Ca	mg/L	556	527	544	471	511	508	496	480	490	500	480	500	380
Chloride	mg/L	--	--	68.6	30.3	--	61.1	64.5	60.0	72.0	190	190	200	180
Fluoride	µg/L	--	--	153J	233	--	17.2U	179	500.U	500.U	500.U	500.U	330.	850.
Hardness	mg/L	2190	2000	2050	1740	1860	1810	1720	1730	1680	1660	1650	1650	1330
K	mg/L	20.5	19.9	17.2	15.9	15.5	12.9	12.8	19.0	17.0	18.0	17.0	20.0	16.0J
Mg	mg/L	195	167	169	138	143	131	116	130	110	100	110	98.0	92.0
Na	mg/L	220	188	178	161	142	143	145	130	130	170	200	190	190
NO_3+NO_2 as N	µg/L	--	--	206	4.9U	24.4	26.5J	4.50U	10.U	18	10.U	41	10.U	10.U
SO_4	mg/L	--	--	1800	1670	--	1540J	1480	1100	1300	1200	1100	810	900
Metals														
As	µg/L	1	0.64	1.5	0.26	0.34	3.30	0.760	0.74	2.5	7	7.4	8.7	2.2
Fe	µg/L	141	520	1140	105	595	3600	3860	9200	8400	18000	17000	19000	1700
Mn	µg/L	3350	3780	4430	4420	6400	8730	9640	6500	6500	4600	3800	3500	3300
Mo	µg/L	10.9	1.5U	1.8U	1.8U	1.7U	2.00U	1.70U	8.4	0.17U	4.4J	4.1	4.4	3.7
Se	µg/L	0.3U	0.3U	0.2U	0.18	0.12	0.100U	0.100U	0.17	0.15	0.63	0.75	1.5	4.2
U	µg/L	52.1	49.1	48.8	48.1	50.2	48.4	53.0	29	32J	44	61	40	48
V	µg/L	1.7	0.4U	0.66	0.7	0.52	0.300U	0.300U	0.27	0.39J	0.1U	0.41	0.71J	0.1U
Radiological														
Alpha[d]	pCi/L	--	--	--	--	--	--	28.9	--	--	--	--	--	--
Alpha-U[e]	pCi/L	--	--	--	--	--	--	0[f]	--	--	--	--	--	--
Beta	pCi/L	--	--	--	--	--	--	21.6	--	--	--	--	--	--
U	µg/L	52.1	49.1	48.8	48.1	50.2	48.4	53.0	29	32J	44	61	40	48

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- T01-25[a,b]

Analyte	Unit	10/06/09
Field Measurements		
Alkalinity	mg/L	575
Conductivity[c]	µmhos/cm	2862
DO[c]	mg/L	--
ORP[c]	mV	--
pH[c]	s.u.	6.45
Temperature[c]	C	15.04
Turbidity[c]	NTU	33.2
Common Ions		
Ca	mg/L	460J
Chloride	mg/L	64.0
Fluoride	µg/L	510.
Hardness	mg/L	1600J
K	mg/L	16.0J
Mg	mg/L	110
Na	mg/L	140J
NO_3+NO_2 as N	µg/L	25
SO_4	mg/L	1200
Metals		
As	µg/L	11
Fe	µg/L	14000
Mn	µg/L	5500
Mo	µg/L	4.4
Se	µg/L	0.59
U	µg/L	18
V	µg/L	0.21J
Radiological		
Alpha[d]	pCi/L	--
Alpha-U[e]	pCi/L	--
Beta	pCi/L	--
U	µg/L	18

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- T01-26[a,b]

Analyte	Unit	07/11/01	10/08/01	01/30/02	04/03/02	07/09/02	10/07/02	04/07/03	10/07/03	04/12/04
Field Measurements										
Alkalinity	mg/L	442	425	593	464	418	436	460	469	509
Conductivity[c]	µmhos/cm	1711	1735	1754	1552	2543	1368	1606	1465	1862
ORP[c]	mV	-141	-129	--	-61	--	--	--	-68	--
pH[c]	s.u.	6.77	7.06	7.3	7.15	6.75	6.96	6.98	7.02	6.97
Temperature[c]	C	10.4	12	8.2	12.6	11.75	12.77	10.11	13.15	11.12
Turbidity[c]	NTU	8.82	4.23	2.6	4.25	4.68	4.57	1.74	2.66	1.07
Common Ions										
Ca	mg/L	233	256	235	229	194	205	261	220	340
Chloride	mg/L	81.6	95.4	86.7	77.2	44.7	34.7	84.5	43.9	110
Fluoride	µg/L	271	343	236	176J	367	255	280	210	280.
Hardness	mg/L	761	829	766	746	633	664	841	710	1070
K	mg/L	2.13	2.25	2.45	2.33	2.17	2.18	2.40	2.37	4.90
Mg	mg/L	43.4	46.2	43.5	42.3	36.2	36.9	46.0	38.9	53.0
Na	mg/L	93.8	83.3	77.3	76.8	65.3	64.0	63.7	72.3	77.0
NO_3+NO_2 as N	µg/L	25.6	76	75.4	151	4.9U	67	4.50UJ	4.50U	10.U
SO_4	mg/L	410	431	382	332	295	324	363	315	370
TDS[c]	mg/L	1230	--	--	--	--	--	--	--	--
Metals										
As	µg/L	0.5U	0.6U	0.6U	0.13	0.1U	0.1U	0.100U	0.100U	0.016U
Fe	µg/L	2610	2660	2550	2220	1810	1390	1940	1600	2600
Mn	µg/L	1100	1130	1060	994	831	802	1080	889	1200
Mo	µg/L	3U	1.9U	1.5U	1.8U	1.8U	1.7U	2.00U	1.70U	0.92
Se	µg/L	0.3U	0.3U	0.3U	0.2U	0.1U	0.1U	0.100U	0.100U	0.043U
U	µg/L	80.6	83.1	71.5	63.6	54.4	59.9	64.8	64.5	73J
V	µg/L	0.3U	0.31	0.53	0.53	0.3U	0.3U	0.300U	0.300U	0.25U
Radiological										
Alpha[d]	pCi/L	36.7J	35.8J	40.2	28.4J	26.7	30.3	36.8	30.4	38.8
Alpha-U[e]	pCi/L	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]
Beta	pCi/L	13.5U	11.8U	14.8	28.1	7.5U	10.5	19.2	11.0	19.2
U	µg/L	80.6	83.1	71.5	63.6	54.4	59.9	64.8	64.5	73J

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- T01-27[a,b]

Analyte	Unit	07/12/01	04/03/02	07/10/02	04/08/03
Field Measurements					
Alkalinity	mg/L	--	--	333	314
Conductivity[c]	µmhos/cm	2100	2320	4421	2330
ORP[c]	mV	--	47	--	--
pH[c]	s.u.	7.05	7.05	6.75	6.88
Temperature[c]	C	20.4	7.4	16.05	5.13
Turbidity[c]	NTU	57	147	54.2	88.3
Common Ions					
Ca	mg/L	363	404	370	438
Chloride	mg/L	--	30.7	26.3	38.6
Fluoride	µg/L	--	189J	244	17.2U
Hardness	mg/L	1150	1370	1200	1410
K	mg/L	4.64	4.52	3.18	2.89
Mg	mg/L	59.4	86.9	67.7	77.8
Na	mg/L	86.8	104	94.9	87.7
NO_3+NO_2 as N	µg/L	--	320	75.7	127J
SO_4	mg/L	--	1200	1140	1240J
Metals					
As	µg/L	0.5U	0.4	0.15	0.100U
Fe	µg/L	5.6	1U	4U	1.30U
Mn	µg/L	32.9	1560	373	12.0
Mo	µg/L	4.4	1.8U	1.8U	2.00U
Se	µg/L	68.1	1.8	0.9	9.30
U	µg/L	8.6	29.3	19.3	27.6
V	µg/L	0.36	0.74	0.85	0.420
Radiological					
Alpha[d]	pCi/L	--	14.6UJ	--	13.9U
Alpha-U[e]	pCi/L	--	14.6UJ	--	13.9U
Beta	pCi/L	--	18.2	--	14.1U
U	µg/L	8.6	29.3	19.3	27.6

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- T01-28[a,b]

Analyte	Unit	01/31/02	04/03/02
Field Measurements			
Conductivity[c]	µmhos/cm	3090	2920
pH[c]	s.u.	7.11	6.94
Temperature[c]	C	2.5	11.9
Turbidity[c]	NTU	>1000	805
Common Ions			
Ca	mg/L	526	496
Hardness	mg/L	1800	1680
K	mg/L	1.49	1.31
Mg	mg/L	119	108
Na	mg/L	143	130
Metals			
As	µg/L	0.6U	0.24
Fe	µg/L	135	33.4
Mn	µg/L	1410	830
Mo	µg/L	1.5U	1.8U
Se	µg/L	2.1	2.1
U	µg/L	9.3	9.3
V	µg/L	0.4U	1.2
Radiological			
U	µg/L	9.3	9.3

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- T01-35[a,b]

Analyte	Unit	10/23/01	01/31/02	04/01/02	07/09/02	10/07/02	01/13/03	04/08/03	07/07/03	10/07/03	01/20/04	04/13/04	10/06/04	04/05/05
Field Measurements														
Alkalinity	mg/L	331	352	358	378	371	388	322	406	346	554	365	360	316
Conductivity[c]	µmhos/cm	1961	1900	1916	3220	1762	1906	2305	1716	2001	1715	1971	1789	2401
DO[c]	mg/L	--	--	--	--	--	--	--	--	--	6.74	--	4.59	--
ORP[c]	mV	--	--	151	--	--	--	--	135	129	-5.1	--	44	172
pH[c]	s.u.	6.94	7.13	6.72	6.68	6.79	6.87	6.75	6.84	7.08	6.92	6.97	6.88	6.81
Temperature[c]	C	13.9	10.5	12.29	12.58	12.29	10.8	11	11.9	13.18	9.89	10.68	12.1	10.62
Turbidity[c]	NTU	2.46	4.5	0.82	2.18	2.24	0.78	1.35	4.85	0.34	0.99	0.55	2.65	0.82
Common Ions														
Ca	mg/L	278	270	276	247	259	293	346	262	281	280	340	270	360
Chloride	mg/L	76.6	74.4	79.3	53.0	75.5	61.9	158	66.5	94.0	68.0	100	56.0	190
Fluoride	µg/L	433	232	281	361	246	265	17.2UJ	164	219	290.	280.	250.	200.U
Hardness	mg/L	926	904	927	834	866	978	1150	872	944	926	1100	880	1200
K	mg/L	5.06	5.28	4.81	3.96	4.29	4.70	4.77	3.66	4.45	6.20	7.20	5.80	8.20
Mg	mg/L	56.2	55.9	57.7	52.8	53.3	59.9	70.6	52.9	58.9	55.0	62.0	50.0	73.0
Na	mg/L	94.7	92.0	93.3	81.8	90.3	95.8	131	90.7	118	95.0	98.0	82.0	170
NO_3+NO_2 as N	µg/L	2010	1840	1710J	893	1600	2390	5910	1430	2700	1700.	3800.	1000.	15000.
SO_4	mg/L	778	646	631	447	591	677	819	573	688	630	580	590	860
Metals														
As	µg/L	11.7	12	10.7	9.2	9	10	8.70	9.60	10.9	11J	9.3	9.4	9.8
Fe	µg/L	0.8U	0.8U	1U	4U	23.2	2.9U	1.30U	1U	0.800U	6.7U	9.8U	7U	7.5U
Mn	µg/L	1.7	0.1U	0.1U	0.1U	0.1U	0.3U	0.100U	0.290	0.100U	0.2	0.077U	0.066U	0.13U
Mo	µg/L	3.9	3.1	4.7	5.5	3.3	6.4U	2.00U	1.80	1.70U	5J	6.5	4.4J	3.3
Se	µg/L	36.7	40.5	39.1	34.4	50.3	43.6	73.8	25.7	40.0	22	32	22	61
U	µg/L	159	166	155	125	115	126	148	117	114	120	110J	81J	150
V	µg/L	243	262	248	222	249	250	219	212	217	220	200	200J	200
Radiological														
Alpha[d]	pCi/L	14.6	89.7	94.2	70.7	65.5	73.5	68.0	64.3	54.7	78.2	69.0	53.7	101
Alpha-U[e]	pCi/L	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]
Beta	pCi/L	11.3	29.2	43.1	10.2U	25.3	32.8	39.1	18.7	24.6	22.2	27.2	23.0	42.6
U	µg/L	159	166	155	125	115	126	148	117	114	120	110J	81J	150

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- On-Site -- T01-35[a,b]

Analyte	Unit	10/05/05	04/28/06	10/02/06	04/11/07	10/09/07	04/09/08[c]	10/09/08	04/07/09	10/06/09	04/20/10
Field Measurements											
Alkalinity	mg/L	320	374	342	393	346	317	126	326	390	114
Conductivity[c]	µmhos/cm	1817	1999	1987	1988	1908	2641	2469	2487	2074	2816
DO[c]	mg/L	8.29	5.11	4.73	6.08	--	--	--	--	--	--
ORP[c]	mV	77	-30.1	139	174.5	32	155.4	155.5	135	--	184.7
pH[c]	s.u.	6.91	6.93	6.67	6.98	6.90	6.84	7.14	7.04	6.76	6.93
Temperature[c]	C	12.8	11.35	12.57	11.18	13.40	8.61	12.37	10.21	12.55	9.68
Turbidity[c]	NTU	2.47	0.39	0.44	0.33	1.38	0.54	0.85	3.63	2.71	1.38
Common Ions											
Ca	mg/L	260	310	430	390	360	350	300	360J	370J	370
Chloride	mg/L	91.0	110	83.0	100	76.0	190	79.0	120	90.0	180
Fluoride	µg/L	210.	210.	220.	240.	380.	200.U	520.	480.	320.	310.
Hardness	mg/L	859	1020	1360	1250	1170	1170	1000	1190J	1200J	1240
K	mg/L	6.20	6.30	6.50	5.70	6.10	6.60	6.20J	6.40J	5.20J	7.20J
Mg	mg/L	51.0	60.0	70.0	66.0	65.0	71.0	61.0	71.0	68.0	77.0
Na	mg/L	96.0	110	110	110	100	170	120	140J	120J	180
NO_3+NO_2 as N	µg/L	3700.	6100.	3800.	5200.	3700.	15000.	6100.	5200.	3600.	13000.
SO_4	mg/L	650	690	790	670	790	940	760	760	740	930
Metals											
As	µg/L	8.9	9.5	9.7	9.3	8.4	9.3	9.2	10	10	8.6
Fe	µg/L	7.8U	14U	2.2U	3.7U	5.6U	1.4U	12	1.3UJ	1.6U	4.9U
Mn	µg/L	4.4	2.5	0.097U	0.084U	0.16U	0.78	0.2U	0.34	0.1U	0.11U
Mo	µg/L	6.3	6.3	5.6	6	5.8	5.3	5.4	5.3	5.6	4.5
Se	µg/L	21	27	20	27	20	56	16	22	18	51
U	µg/L	140	160	120	130	100	140	120	130	110	87
V	µg/L	190	160	150	180J	210J	170	180	180	190	160
Radiological											
Alpha[d]	pCi/L	--	--	--	--	--	--	--	--	--	--
Alpha-U[e]	pCi/L	--	--	--	--	--	--	--	--	--	--
Beta	pCi/L	--	--	--	--	--	--	--	--	--	--
U	µg/L	140	160	120	130	100	140	120	130	110	87

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- 0200[a,b]

Analyte	Unit	10/05/04	04/07/05	10/04/05	04/05/06	10/04/06	04/12/07	10/10/07	04/10/08[c]	10/09/08	04/09/09	10/07/09	04/21/10
Field Measurements													
Alkalinity	mg/L	388	389	518	338	477	393	--	390	270	376	470	356
Conductivity[c]	µmhos/cm	2502	3651	3532	2205	3491	2421	2960	3010	1392	2852	2800	2230
DO[c]	mg/L	--	0.83	3.34	1.41	0.77	--	--	0.29	--	--	--	--
ORP[c]	mV	56	85.0	3	191.9	147	190	17	45.8	16.6	--	--	--
pH[c]	s.u.	6.89	6.83	7.03	6.76	6.69	6.87	6.84	6.88	7.08	7.00	6.69	7.28
Temperature[c]	C	12.7	7.31	13.3	6.57	13.46	6.57	14.05	6.41	13.58	7.16	14.30	6.4
Turbidity[c]	NTU	4.17	2.05	1.08	0.74	4.00	--	0.63	0.67	1.41	3.55	1.86	3.82
Common Ions													
Ca	mg/L	340	420	410	280	370	320	360	350	340	400J	350J	260
Chloride	mg/L	150	390	330	95.0	360	140	160	230	180	160	100	230
Fluoride	µg/L	250.	500.U	500.U	260.	500.U	500.U	600.	500.U	540.	440.	480.	390.
Hardness	mg/L	1170	1500	1440	1000	1460	1170	1350	1280	1260	1410J	1290J	966
K	mg/L	15.0	14.0	14.0	9.00	17.0	9.10	13.0	11.0J	11.0J	11.0J	11.0J	8.10J
Mg	mg/L	79.0	110	100	74.0	130	89.0	110	98.0	100	100	100	77.0
Na	mg/L	150	240	300	150	460	200	280	230	280	210J	210J	210
NO_3+NO_2 as N	µg/L	560.	8200.	3000.	1800.	1400.	2300.	740.	2700.	270.	1600.	360.	8400.
SO_4	mg/L	920	1100	1100	840	1300	980	1300	1100	1200	1000	1200	690
Metals													
As	µg/L	0.018U	0.14	0.007U	0.0075U	0.012U	0.012U	0.19	0.17	0.19	0.11U	0.18	0.32
Fe	µg/L	7U	15U	11U	14U	2.2U	7.4U	11U	1.4U	6.2U	6.3J	1.6U	4.9U
Mn	µg/L	5.5	2.4	0.095U	0.23U	0.097U	0.17U	6.2	0.64	0.41U	0.87	3	1.8
Mo	µg/L	13	12	34	17	26	15	26	20	28	18	27	24
Se	µg/L	84	33	6.4	93	17	110	56	59	4.1	76	9	23
U	µg/L	290J	460	260	260	280	290	340	420	320	410	260	210
V	µg/L	0.21J	0.62J	0.1U	0.18J	0.41	0.072U	0.64J	0.16	0.29	0.099U	0.38J	0.26
Radiological													
Alpha[d]	pCi/L	142	221	--	--	--	--	--	--	--	--	--	--
Alpha-U[e]	pCi/L	0[f]	0[f]	--	--	--	--	--	--	--	--	--	--
Beta	pCi/L	71.4	82.2	--	--	--	--	--	--	--	--	--	--
U	µg/L	290J	460	260	260	280	290	340	420	320	410	260	210

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- 0202[a,b]

Analyte	Unit	10/05/04	04/05/05	10/04/05	04/04/06	10/03/06	04/10/07	10/10/07	04/08/08[c]	10/08/08	04/08/09	10/08/09	04/20/10
Field Measurements													
Alkalinity	mg/L	363	274	338	--	356	325	365	365	312	299	--	283
Conductivity[c]	µmhos/cm	2018	2329	2063	2051	2193	1532	2031	2231	1934	2186	1876	1760
DO[c]	mg/L	1.65	1.75	6.09	4.54	1.24	4.56	--	--	1.93	--	--	--
ORP[c]	mV	-36	179.9	-7	63.9	10	158.3	--	141.2	78.1	--	--	--
pH[c]	s.u.	6.54	6.84	6.69	6.86	6.52	6.64	7.19	6.64	6.77	6.75	6.71	6.82
Temperature[c]	C	13.2	6.90	13.3	11.23	14.7	7.73	14.8	8.33	13.66	10.72	13.78	7.8
Turbidity[c]	NTU	>1000	3.32	2.47	--	4.50	2.63	83.5	0.77	3.0	274	295	1.01
Common Ions													
Ca	mg/L	270	350	260	280	440	270	270	330	270	350J	290J	300
Chloride	mg/L	74.0	140	110	94.0	100	77.0	81.0	130	98.0	120	--	110
Fluoride	µg/L	450.	340.	430.	440.	500.U	440.	630.	280.	440.	510.	--	300.
Hardness	mg/L	925	1180	888	963	1450	909	934	1120	917	1200J	984J	992
K	mg/L	12.0	8.90	9.90	11.0	12.0	8.10	11.0	9.70	10.0J	10.0J	9.40J	9.80J
Mg	mg/L	61.0	74.0	58.0	64.0	85.0	57.0	63.0	71.0	59.0	78.0	63.0	59.0
Na	mg/L	110	110	140	110	170	93.0	140	110	130	150J	120J	94.0
NO_3+NO_2 as N	µg/L	1500.	9800.	5100.	3500.	5100.	4700.	3300.	8200.	5800.	6500.	--	6000.
SO_4	mg/L	660	810	710	760	830	530	630	840	660	860	--	660
Metals													
As	µg/L	1.3	4	4.5	1.4	2.9	4.2	2.4	2.9	4.2	1.6	2	2.9
Fe	µg/L	770	7.5U	11U	39	2.2U	3.7U	21	1.4U	13	160	320	4.9U
Mn	µg/L	750	1.7	0.095U	29	8.9	0.084U	14	0.51	0.2U	36	43	0.11U
Mo	µg/L	63	16	26	28	30	23	31	24	23	26	25	20
Se	µg/L	25	43	29	32	31	37	31	66	27	31	20	69
U	µg/L	300J	260	180	230	210	230	250	280	190	220	180	190
V	µg/L	21	60	72	39	53	68J	54J	50	68	34	41	42
Radiological													
Alpha[d]	pCi/L	220	165	--	--	--	--	--	--	--	--	--	--
Alpha-U[e]	pCi/L	13.9	0[f]	--	--	--	--	--	--	--	--	--	--
Beta	pCi/L	80.0	40.8	--	--	--	--	--	--	--	--	--	--
U	µg/L	300J	260	180	230	210	230	250	280	190	220	180	190

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- 82-07[a,b]

Analyte	Unit	04/14/00	07/27/00	04/07/03
Field Measurements				
Alkalinity	mg/L	339	236	334
Conductivity[c]	µmhos/cm	1481	1929	1881
DO[c]	mg/L	--	2.06	3.71
ORP[c]	mV	97	143	89
pH[c]	s.u.	6.67	6.5	6.77
Temperature[c]	C	7.6	23.4	8.2
Turbidity[c]	NTU	156	237	3.77
Common Ions				
Ca	mg/L	267	313	278
Chloride	mg/L	61.3	91.1	88.0
Fluoride	µg/L	338	329	17.2UJ
Hardness	mg/L	915	1090	969
K	mg/L	6.10	8.19	8.93
Mg	mg/L	60.4	74.2	66.8
Na	mg/L	96.1	135	118
NO_3+NO_2 as N	µg/L	3450	5620	3820
SO_4	mg/L	754	961	744
TDS[c]	mg/L	1530	1890	--
Metals				
As	µg/L	1.3	1.5	1.80
Fe	µg/L	7.4U	38.3	1.30U
Mn	µg/L	0.4U	6.6	0.590
Mo	µg/L	17.2	14.8	16.0
Se	µg/L	54.4	71.3	82.0
U	µg/L	120	102	277
V	µg/L	39.6	40.9	42.8
Radiological				
Alpha[d]	pCi/L	69.2J	36.2J	109J
Alpha-U[e]	pCi/L	0[f]	0[f]	0[f]
Beta	pCi/L	33.2	34.1	74.0
U	µg/L	120	102	277

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- 82-08[a,b]

Analyte	Unit	01/12/00	04/14/00	07/28/00	11/02/00	04/10/01	07/19/01	10/17/01	01/30/02	04/02/02	07/10/02	10/02/02	04/09/03	10/07/03
Field Measurements														
Alkalinity	mg/L	209	224	141	142	100	54	104	95	99	184	285	260	245
Conductivity[c]	µmhos/cm	3190	3400	2480	2910	2910	2890	2720	2660	2506	5442	3487	3237	2260
DO[c]	mg/L	1.82	1.12	0.86	3.3	4.3	--	--	--	--	--	--	--	--
ORP[c]	mV	88	90	189	185	125	--	187	--	147	--	--	20.5	98
pH[c]	s.u.	--	6.35	5.92	5.57	6.25	5.45	5.72	5.81	5.83	6.08	6.44	6.63	6.3
Temperature[c]	C	10.5	9	13.3	13.2	8.7	13.7	14	7.6	10.76	12.17	14.8	11.3	15.6
Turbidity[c]	NTU	21.4	1.29	0.66	1.23	0.74	1.73	0.46	0.71	0.76	0.45	1.36	2.32	0.63
Common Ions														
Ca	mg/L	402	432	387	369	374	348	312	283	283	323	343	290	268
Chloride	mg/L	228	252	196	194	191	175	170	125	128	166	170	6.71J	125
Fluoride	µg/L	557	764	749	625	825	828	887	536	574	1250	521	687	848
Hardness	mg/L	1520	1660	1480	1410	1450	1350	1200	1100	1120	1260	1280	1090	1020
K	mg/L	8.39	7.49	7.34	7.33	6.48	6.87	6.22	5.98	5.63	6.57	7.12	5.51	5.83
Mg	mg/L	126	140	124	118	126	117	102	96.2	99.3	111	104	89.7	84.9
Na	mg/L	198	213	192	186	210	197	177	171	175	218	202	155	163
NO_3+NO_2 as N	µg/L	2830J	3650	5030	7790	7130	4880	3860	3530	3110J	4040	3430	2740J	3920
SO_4	mg/L	1380	1490	1440	1410	704	1370	1350	1160	1120	1190	1240	54.8	1030
TDS[c]	mg/L	2910	2900	2670	2500	2620	2540	--	--	--	--	--	--	--
Metals														
As	µg/L	0.67	0.38	0.3U	0.45	0.5U	0.5U	0.6U	0.6U	0.39	0.32	0.22	0.250	0.310
Fe	µg/L	783	7.4U	9.1U	12.1	1.0U	0.8U	18.4	0.8U	1U	4U	70.4	94.4	34.5
Mn	µg/L	251	9.4	18.2	65.6	27.4	39.9	60.9	58.9	20.2	9.9	64.7	23.4	12.2
Mo	µg/L	3.9	9.1	4.6	2.5	0.4U	3U	1.9U	1.5U	1.8U	3.8	1.7	2.50	4.60
Se	µg/L	5.8	17.5	12.3	15.5	54.2	37.6	26.4	41.8	44.4	57.9	47	58.8	55.9
U	µg/L	46.5	111	17.1	5.2	3.6	4	3.4	4	6.1	59.4	79.1	92.5	151
V	µg/L	13.6	7.4	4.8	6	6	4.8	5	5	4	4.7	10	4.00	5.50
Radiological														
Alpha[d]	pCi/L	24.0	51.4J	23.4	13.2UJ	12.1U	13.4UJ	13.7U	11.7U	11.5U	31.3	35.5	65.0J	88.4J
Alpha-U[e]	pCi/L	0[f]	0[f]	11.7	13.2UJ	12.1U	13.4UJ	13.7U	11.7U	11.5U	0[f]	0[f]	1.5J	0[f]
Beta	pCi/L	16.9	36.9	21.1	13.2U	11.9U	10.6U	13.4U	10U	13.2	11.3U	13.0	30.7	49.0
U	µg/L	46.5	111	17.1	5.2	3.6	4	3.4	4	6.1	59.4	79.1	92.5	151
U-234	pCi/L	--	--	--	--	--	1.5J	--	--	--	--	--	--	--
U-238	pCi/L	--	--	--	--	--	1.6J	--	--	--	--	--	--	--

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- 82-08[a,b]

Analyte	Unit	04/14/04	10/04/04	04/06/05	10/04/05	04/05/06	10/03/06	04/10/07	10/10/07	04/08/08[c]	10/08/08	04/08/09	10/07/09	04/21/10
Field Measurements														
Alkalinity	mg/L	213	256	323	161	146	362	234	303	322	192	142	177	315
Conductivity[c]	µmhos/cm	2098	2177	4416	2525	2412	3435	2683	2990	4154	2658	2990	2640	4230
DO[c]	mg/L	--	1.27	1.31	3.83	2.47	0.39	4.92	--	0.79	--	--	--	--
ORP[c]	mV	--	35	218.2	115	160.0	16	210.4	--	163.2	115.4	--	--	208
pH[c]	s.u.	6.48	6.29	6.72	6.24	6.23	6.46	6.18	6.90	6.73	6.41	6.16	6.11	6.85
Temperature[c]	C	10.71	13.9	8.38	13.3	8.67	13.6	9.12	14.1	9.72	13.90	11.53	13.15	7.7
Turbidity[c]	NTU	0.40	1.34	1.21	0.86	1.91	1.94	1.00	0.98	0.64	0.61	1.91	1.54	2.08
Common Ions														
Ca	mg/L	280	270	620	350	320	400	410	410	520	380	460J	380J	590
Chloride	mg/L	100	94.0	480	180	130	220	190	180	450	220	230	190	530
Fluoride	µg/L	1100.	1100.	600.	510.	590.	520.	790.	920.	630.	770.	830.	1000.	960.
Hardness	mg/L	1020	971	2210	1250	1170	1450	1480	1440	1960	1400	1680J	1400J	2210
K	mg/L	9.00	8.50	16.0	11.0	9.00	9.30	7.60	22.0	15.0	12.0J	9.80J	8.40J	16.0J
Mg	mg/L	78.0	72.0	160	91.0	91.0	110	110	100	160	110	130	110	180
Na	mg/L	120	120	280	150	130	170	160	190	280	190	200J	180J	340
NO_3+NO_2 as N	µg/L	3300.	2400.	10000.	6800.	5500.	1800.	4500.	3600.	6800.	6100.	3200.	2500.	4300.
SO_4	mg/L	850	850	1600	1200	1000	1300	1300	1200	1800	1300	1400	1200	1800
TDS[c]	mg/L	--	--	--	--	--	2700	2400	2400	3700	2400	2600	2200	3300
Metals														
As	µg/L	0.31	0.33	0.74	0.32	0.31	0.39	0.012U	0.79	0.68	0.63	0.52	0.46	0.91
Fe	µg/L	9.8U	7U	15U	11U	14U	4.3U	7.4U	5.6U	1.4U	3.1U	2.6J	1.6U	9.9U
Mn	µg/L	4.7	7.2	4.3	24	3.3	57	27	38	1.2	17	5	8.1	0.23U
Mo	µg/L	18	14	15	5.7	4.8	5.7	5.8	11	18	5.8	4.7	5.6	17
Se	µg/L	39	32	54	16	23	20	22	23	59	18	20	16	78
U	µg/L	220	220J	360	47	26	60	65	92	300	33	32	30	230
V	µg/L	3.7	4.1	8.6	3.1	3.9	3.6	3.7J	13J	8.5	6.6	4.4	5.2	7.5
Radiological														
Alpha[d]	pCi/L	149	113	126	--	--	--	--	--	--	--	--	--	--
Alpha-U[e]	pCi/L	0[f]	0[f]	0[f]	--	--	--	--	--	--	--	--	--	--
Beta	pCi/L	57.1	52.2	60.6	--	--	--	--	--	--	--	--	--	--
U	µg/L	220	220J	360	47	26	60	65	92	300	33	32	30	230
U-234	pCi/L	--	--	--	--	--	--	--	--	--	--	--	--	--
U-238	pCi/L	--	--	--	--	--	--	--	--	--	--	--	--	--

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- 88-85[a,b]

Analyte	Unit	01/12/00	04/13/00	07/27/00	10/18/00	01/30/01	04/11/01	07/19/01	10/17/01	01/29/02	04/02/02	07/10/02	10/01/02	01/14/03
Field Measurements														
Alkalinity	mg/L	384	348	311	--	316	463	348	348	376	327	342	377	342
Conductivity[c]	µmhos/cm	3460	3250	2850	--	2880	1829	2450	2240	2180	2060	1927	2015	2012
DO[c]	mg/L	1.08	0.24	0.41	--	1.3	1	0.2	0.3	0.499	--	0.49	0.9	2.4
ORP[c]	mV	137	125	196	--	151	190	100.0	212	165	127	213	80.8	-345
pH[c]	s.u.	--	6.13	6.65	--	6.74	6.73	5.87	6.58	6.61	6.6	6.66	6.6	6.44
Temperature[c]	C	9.7	8.1	15.1	--	7.7	6.7	13.8	14.4	6.6	7.9	13.76	15.6	7.5
Turbidity[c]	NTU	3.52	1.64	1.52	--	2.67	3.62	1.42	0.12	0.77	152	0.41	3.02	1.67
Common Ions														
Ca	mg/L	371	362	269	321	288	282	272	252	252	251	238	256	263
Chloride	mg/L	190	182	123	149	172	161	147	110	91.3	89.5	83.7	82.6	86.6
Fluoride	µg/L	298	279	410	410	343	308	355	422	376	25.1UJ	25.1UJ	264	25.1U
Hardness	mg/L	1330	1290	946	1120	1020J	997	962	895	898	913	864	902	926
K	mg/L	17.1	14.9	16.6	18.1	15.5	14.1	17.1	15.0	11.9	11.6	12.3	12.0	9.35
Mg	mg/L	98.7	93.0	66.7	77.9	73.5J	71.0	68.7	64.6	65.3	69.5	65.5	63.9	65.3
Na	mg/L	318	292	283	295	248	233	222	163	140	140	136	131	125
NO_3 as N	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--
NO_3+NO_2 as N	µg/L	16700J	24600	15800	14200	15200	14700	6260	3740	3360	2870	2480	2270	3100
SO_4	mg/L	1220	1130	1040	1060	1050	455	895	844	782	717	663	694	704
TDS[c]	mg/L	2880J	2610	2210	2380	2290	2170	1880	--	--	--	--	--	--
Metals														
As	µg/L	7.8	3.8	8.5	12	7.3	7.7	10.9	10	9.4	8.5	11.6	10.9	9.2
Fe	µg/L	8.9U	7.4U	9.1U	13.1	11U	1.0U	0.8U	0.8U	0.8U	1U	9.6	0.8U	2.9U
Mn	µg/L	375	155	102	124	153	99.9	91.5	99.4	49.1	9	9.3	1.8	0.3U
Mo	µg/L	46.2	37.5	50.9	54.6	43.9	38.5	40.4	41.2	24.9	28.6	32.6	35.8	6.4U
Se	µg/L	61	87	36.6	57.6	112	135	127	75.2	93	99.4	97	90.2	110
U	µg/L	745	539	323	402	442	419	393	366	350	374	417	417	397
V	µg/L	325	304	363	441	295	291	365	385	301	299	375	417	325
Radiological														
Alpha[d]	pCi/L	468	333J	167J	244J	299	172	202J	159	174	194J	236	276	232
Alpha-U[e]	pCi/L	0[f]	0[f]	0[f]	0[f]	12.0	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]
Beta	pCi/L	132	173	111	115	65.0	140	87.1	82.4	65.7	117	112	68.6	80.5
U	µg/L	745	539	323	402	442	419	393	366	350	374	417	417	397
U-234	pCi/L	--	--	--	--	143	--	130J	--	--	--	--	--	--
U-238	pCi/L	--	--	--	--	144	--	152J	--	--	--	--	--	--

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- 88-85[a,b]

Analyte	Unit	04/08/03	07/09/03	10/07/03	01/22/04	04/15/04	10/07/04	04/07/05	10/04/05	04/04/06	10/03/06	04/10/07	10/09/07	04/08/08[c]
Field Measurements														
Alkalinity	mg/L	324	381	390	351	330	378	274	318	328	351	361	352	326
Conductivity[c]	µmhos/cm	1988	2082	2041	2001	1708	1843	2176	1665	2012	2082	2099	1917	2470
DO[c]	mg/L	1.71	--	1.26	2.56	2.12	0.59	1.18	3.60	2.63	0.94	3.12	0.93	2.50
ORP[c]	mV	196	223	137	-22	51.2	144	103.9	189	105.0	135	191.5	153	150.2
pH[c]	s.u.	6.61	6.62	6.67	6.67	6.82	6.75	6.85	6.80	6.62	6.56	6.78	7.09	6.74
Temperature[c]	C	8.07	18.3	15.7	7.83	9.97	13.0	8.37	12.8	8.72	13.4	7.48	14.6	9.25
Turbidity[c]	NTU	1.04	2.74	1.44	1.63	0.87	2.90	4.19	3.49	0.91	3.79	1.03	3.72	0.53
Common Ions														
Ca	mg/L	270	277	271	290	340	270	270	230	300	420	390	320	360
Chloride	mg/L	106	98.1	96.9	81.0	100	51.0	140	82.0	92.0	85.0	120	73.0	190
Fluoride	µg/L	17.2UJ	388	321	380.	430.	340.	320.	360.	350.	530.	380.	580.	230.
Hardness	mg/L	941	954	940	971	1120	901	897	756	1000	1360	1270	1070	1200
K	mg/L	9.40	10.1	9.72	12.0J	14.0	12.0	12.0	12.0	13.0	14.0	12.0	12.0	10.0
Mg	mg/L	64.8	63.7	63.9	60.0	67.0	55.0	54.0	44.0	61.0	76.0	73.0	66.0	73.0
Na	mg/L	131	131	130	120	110	95.0	120	99.0	110	130	120	120	140
NO_3 as N	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--
NO_3+NO_2 as N	µg/L	6140	3520	3260	2500.	4900.	1400.	8200.	3300.	5100.	4800.	6400.	3900.	20000.
SO_4	mg/L	734	707	734	710	640	600	710	500	710	820	770	780	920
TDS[c]	mg/L	--	--	--	--	--	1400	1500	1300	1500	1700	1800	1600	2000
Metals														
As	µg/L	8.60	11.1	14.0	9.9J	10	13	10	12	10	12	11	13	8.8
Fe	µg/L	1.30U	1U	0.800U	6.7U	9.8U	7U	7.5U	11U	14U	2.2U	3.7U	5.6U	1.4U
Mn	µg/L	0.100U	0.560	1.50	0.043U	0.077U	0.066U	0.13U	3.5	0.23U	0.097U	0.084U	0.16U	0.66
Mo	µg/L	26.4	37.4	30.2	30J	28	34	27	42	30	36	33	30	29
Se	µg/L	120	79.8	73.5	56J	65	42	66	34	46	39	46	33	90
U	µg/L	329	475	355	340	290J	310J	290	260	330	290	330	240	290
V	µg/L	315	402	392	340	340	390	270	400	360	340	350J	410J	280
Radiological														
Alpha[d]	pCi/L	141J	236	168J	239	196	226	180	--	--	--	--	--	--
Alpha-U[e]	pCi/L	0[f]	0[f]	0[f]	5.4	0[f]	13.0	0[f]	--	--	--	--	--	--
Beta	pCi/L	86.0	76.7	89.8	53.1	85.2	64.5	44.5	--	--	--	--	--	--
U	µg/L	329	475	355	340	290J	310J	290	260	330	290	330	240	290
U-234	pCi/L	--	--	--	--	--	--	--	--	--	--	--	--	--
U-238	pCi/L	--	--	--	--	--	--	--	--	--	--	--	--	--

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- 88-85[a,b]

Analyte	Unit	10/08/08	04/07/09	04/09/09[c]	10/07/09	04/19/10
Field Measurements						
Alkalinity	mg/L	310	317	329	355	261
Conductivity[c]	µmhos/cm	2044	1308	2284	2081	2180
DO[c]	mg/L	1.35	3.14	3.8	3.84	3.90
ORP[c]	mV	-21.0	-74	-10	163.5	62
pH[c]	s.u.	6.96	6.87	6.97	6.73	6.96
Temperature[c]	C	12.96	8.67	9.8	13.10	8.5
Turbidity[c]	NTU	0.89	1.48	--	1.07	1.17
Common Ions						
Ca	mg/L	280	380J	--	330J	340
Chloride	mg/L	87.0	140	126	110	170
Fluoride	µg/L	480.	530.	--	580.	390.
Hardness	mg/L	926	1250J	--	1100J	1140
K	mg/L	12.0J	12.0J	--	10.0J	11.0J
Mg	mg/L	55.0	74.0	--	66.0	70.0
Na	mg/L	120	140J	--	130J	150
NO_3 as N	µg/L	--	--	8810	--	--
NO_3+NO_2 as N	µg/L	5100.	6500.	--	3000.	19000.
SO_4	mg/L	660	800	841	770	850
TDS[c]	mg/L	1500	1800	--	1600	1900
Metals						
As	µg/L	13	10	--	13	10
Fe	µg/L	3.1U	1.3UJ	--	1.6U	4.9U
Mn	µg/L	0.2U	1.7	--	0.1U	0.11U
Mo	µg/L	34	27	--	31	25
Se	µg/L	29	40	--	29	100
U	µg/L	290	260	266.9	240	210
V	µg/L	380	320	--	390	280
Radiological						
Alpha[d]	pCi/L	--	--	--	--	--
Alpha-U[e]	pCi/L	--	--	--	--	--
Beta	pCi/L	--	--	--	--	--
U	µg/L	290	260	266.9	240	210
U-234	pCi/L	--	--	--	--	--
U-238	pCi/L	--	--	--	--	--

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- 92-07[a,b]

Analyte	Unit	01/12/00	04/18/00	07/27/00	10/18/00	01/30/01	04/11/01	07/19/01	10/16/01	01/29/02	04/02/02	07/10/02	10/01/02	01/14/03
Field Measurements														
Alkalinity	mg/L	327	269	247	315	274	261	243	305	281	294	272	281	274
Conductivity[c]	µmhos/cm	3470	3150	3010	3330	2940	2610	2370	2270	2063	2236	2007	2176	1987
DO[c]	mg/L	2.5	2.96	3.45	3.1	0.8	0.7	2.6	1.5	0.37	--	0.63	0.3	0.63
ORP[c]	mV	167	103	146	194	145	149	55	192	73.9	137	195.1	111	169
pH[c]	s.u.	--	6.66	6.66	6.23	6.79	6.67	6.02	6.64	6.61	6.56	6.77	6.58	6.69
Temperature[c]	C	10.9	8.7	16.3	13.2	10.2	8.7	11.2	13	10.62	11.02	11.61	13.4	10.7
Turbidity[c]	NTU	2.53	0.83	3.84	1.43	0.31	4.2	1.91	0.2	0.9	0.73	1.31	3.83	1.12
Common Ions														
Ca	mg/L	333	325	309	344	265	358	214	214	216	230	203	223	223
Chloride	mg/L	135	117	92.5	94.2	92.0	94.9	83.2	87.3	71.8	73.3	67.3	69.4	63.8
Fluoride	µg/L	328	348	373	437	417	355	365	476	315J	274	513J	280	206
Hardness	mg/L	1160	1130	1070	1200	934J	1280	751	745	758	817	733	784	785
K	mg/L	25.8	23.4	24.2	28.0	24.5	27.5	21.0	22.0	21.2	20.5	20.0	20.9	19.9
Mg	mg/L	79.0	77.0	73.5	82.3	66.1J	93.1	52.7	51.2	53.0	59.0	54.8	55.2	55.4
Na	mg/L	391	349	356	394	317	402	264	220	201	180	171	209	173
NO_3 as N	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--
NO_3+NO_2 as N	µg/L	26900J	36600	27000	26500	19300	17800	10700	6040	5430	5080J	3980	4430	3150
SO_4	mg/L	1310	1280	1390	1430	1220	492	907	919	821	840	785	844	782
TDS[c]	mg/L	2880J	2630	2700	2820	2390	2180	2850	--	--	--	--	--	--
Metals														
As	µg/L	7.9	8	7.2	9.6	7	7.9	8.2	8.5	7.6	7.9	8.7	9.1	8.6
Fe	µg/L	8.9U	7.4U	9.1U	11.7U	11U	18.9	0.8U	0.8U	0.8U	1U	29.2	0.8U	2.9U
Mn	µg/L	75.4	209	378	481	464	754	466	566	599	558	579	543	450
Mo	µg/L	82.7	73.3	82.8	94.9	114	95.6	89.7	104	87	90	88.3	99.7	92.8
Se	µg/L	10	14.4	4.2	6.3	16.6	27	49.6	44.8	62.6	93.7	83.1	80.5	146
U	µg/L	788	593	603	709	647	1170	576	620	645	661	747	806	838
V	µg/L	366	302	327	394	351	291	332	393	335	321	316	395	350
Radiological														
Alpha[d]	pCi/L	571	484	275J	607J	540	528	288J	450	456	528	511	586	587
Alpha-U[e]	pCi/L	29.6	76.6	0[f]	120J	112	0[f]	0[f]	24.1	12.9	73.9	0[f]	32.3	11.3
Beta	pCi/L	143	214	197	250	102	211	122	138	95.1	170	205	127	192
U	µg/L	788	593	603	709	647	1170	576	620	645	661	747	806	838
U-234	pCi/L	--	--	--	--	214	--	183J	--	--	--	--	--	--
U-238	pCi/L	--	--	--	--	214	--	214J	--	--	--	--	--	--

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- 92-07[a,b]

Analyte	Unit	04/08/03	07/09/03	10/07/03	01/22/04	04/15/04	10/04/04	04/05/05	10/04/05	04/04/06	10/03/06	04/10/07	10/09/07	04/08/08[c]
Field Measurements														
Alkalinity	mg/L	258	321	345	282	271	315	284	267	284	311	329	323	--
Conductivity[c]	µmhos/cm	2010	2017	1844	1837	1641	1676	1938	1203	1683	1888	1941	1727	2066
DO[c]	mg/L	0.35	3.48	1.2	--	0.99	0.37	0.93	2.36	0.57	0.33	1.09	0.21	1.78
ORP[c]	mV	182	102	125	-33	226.6	63	147.3	50	114.4	89	208.7	151	139.0
pH[c]	s.u.	6.79	6.65	6.72	6.76	6.84	6.65	6.86	6.92	6.70	6.64	6.78	7.06	6.71
Temperature[c]	C	9.06	20.9	14.4	8.83	9.14	14.0	8.13	12.2	9.31	13.1	7.12	13.4	8.48
Turbidity[c]	NTU	1.73	2.18	1.4	0.71	1.57	2.36	0.97	1.22	0.87	2.45	1.44	2.60	0.74
Common Ions														
Ca	mg/L	235	223	211	210	300	210	240	120	210	340	350	260	280
Chloride	mg/L	88.8	86.4	79.3	68.0	85.0	41.0	99.0	38.0	54.0	61.0	69.0	52.0	120
Fluoride	µg/L	17.2UJ	420J	387	450.	450.	510.	400.	470.	430.	620.	380.	620.	310.
Hardness	mg/L	826	775	741	722	1010	710	809	403	722	1120	1150	888	959
K	mg/L	18.1	17.5	19.4	24.0J	25.0	22.0	21.0	18.0	21.0	27.0	22.0	24.0	19.0
Mg	mg/L	58.2	53.1	52.0	48.0	63.0	45.0	51.0	25.0	48.0	65.0	68.0	58.0	63.0
Na	mg/L	171	168	164	130	120	110	130	94.0	100	130	120	110	110
NO_3 as N	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--
NO_3+NO_2 as N	µg/L	7340	2700	1850	680.	3900.	120.	5800.	580.	1500.	990.	1700.	920.	5000.
SO_4	mg/L	804	735	654	680	690	580	640	320	630	740	760	720	760
TDS[c]	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals														
As	µg/L	6.30	7.80	10.00	8.5J	7.2	11	8	10	7.9	9.2	8.1	9.1	6.7
Fe	µg/L	1.30U	1U	0.800U	6.7U	9.8U	7U	7.5U	11U	14U	2.2U	3.7U	5.6U	1.4U
Mn	µg/L	300	387	286	130	38	68	55	75	59	190	400	360	250
Mo	µg/L	80.1	85.4	89.7	86J	68	100	58	140	98	110	110	110	93
Se	µg/L	155	85.6	123	51J	100	27	43	14	47	38	51	45	70
U	µg/L	759	845	905	960	970	910J	1000	700	1200	970	1300	1100	1100
V	µg/L	285	322	394	350	310	370	270	380	340	340	350J	390J	260
Radiological														
Alpha[d]	pCi/L	472J	487	481J	563	647	607	682	--	--	--	--	--	--
Alpha-U[e]	pCi/L	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	--	--	--	--	--	--
Beta	pCi/L	166	145	249	147	273	251	137	--	--	--	--	--	--
U	µg/L	759	845	905	960	970	910J	1000	700	1200	970	1300	1100	1100
U-234	pCi/L	--	--	--	--	--	--	--	--	--	--	--	--	--
U-238	pCi/L	--	--	--	--	--	--	--	--	--	--	--	--	--

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- 92-07[a,b]

Analyte	Unit	10/08/08	04/08/09	04/09/09[c]	10/08/09	04/20/10
Field Measurements						
Alkalinity	mg/L	310	292	307	172	266
Conductivity[c]	µmhos/cm	1676	1162	1911	1864	1815
DO[c]	mg/L	0.40	0.40	3.4	2.43	0.36
ORP[c]	mV	10.9	-74	-32.9	24.9	128
pH[c]	s.u.	7.03	6.90	7.22	6.85	6.95
Temperature[c]	C	12.14	8.17	9.8	11.66	7.6
Turbidity[c]	NTU	1.20	0.91	--	1.01	1.71
Common Ions						
Ca	mg/L	190	310J	--	270J	280
Chloride	mg/L	52.0	64.0	64.0	67.0	89.0
Fluoride	µg/L	470.	530.	--	630.	480.
Hardness	mg/L	652	1040J	--	905J	946
K	mg/L	21.0J	21.0J	--	21.0J	20.0J
Mg	mg/L	43.0	64.0	--	56.0	60.0
Na	mg/L	110	120J	--	110J	110
NO_3 as N	µg/L	--	--	1360	--	--
NO_3+NO_2 as N	µg/L	930.	1200.	--	810.	8100.
SO_4	mg/L	520	730	760	710	730
TDS[c]	mg/L	--	--	--	--	--
Metals						
As	µg/L	11	8.1	--	9.5	7.8
Fe	µg/L	3.1U	1.3UJ	--	1.6U	4.9U
Mn	µg/L	260	220	--	310	44
Mo	µg/L	130	97	--	110	75
Se	µg/L	30	52	--	37	110
U	µg/L	990	1100	1047.9	960	870
V	µg/L	380	320	--	370	250
Radiological						
Alpha[d]	pCi/L	--	--	--	--	--
Alpha-U[e]	pCi/L	--	--	--	--	--
Beta	pCi/L	--	--	--	--	--
U	µg/L	990	1100	1047.9	960	870
U-234	pCi/L	--	--	--	--	--
U-238	pCi/L	--	--	--	--	--

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[c] Sample was unfiltered.
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[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- 92-08[a,b]

Analyte	Unit	01/10/00	04/13/00	07/26/00	11/02/00	01/29/01	04/10/01	07/19/01	10/16/01	04/02/02	07/11/02	10/07/02	04/09/03	10/06/03
Field Measurements														
Alkalinity	mg/L	333	301	270	261	319	326	314	340	328	308	346	336	323
Conductivity[c]	µmhos/cm	2490	2190	1998	2190	2580	2390	2400	2420	2236	4049	2262	2279	2168
DO[c]	mg/L	1.83	2.16	0.13	3.43	2.1	2.7	--	--	--	--	--	--	--
ORP[c]	mV	186	90	102	161	22	158	86	110	158	--	--	115	50
pH[c]	s.u.	6.25	6.69	6.92	6.7	6.75	6.62	6.28	6.59	6.48	6.52	6.53	6.83	6.62
Temperature[c]	C	9.5	9.8	11.2	11.6	10.8	9	11.1	11.7	11.13	11.44	13.2	9.66	12.4
Turbidity[c]	NTU	6.36	1.79	1.14	0.86	1.66	1.1	1.07	0.51	1.29	0.92	1.13	1.87	2.09
Common Ions														
Ca	mg/L	349	293	265	312	360	326	329	319	294	275	298	326	295
Chloride	mg/L	119	87.4	69.5	81.8	127	113	118	120	90.6	91.2	107	8.85J	109
Fluoride	µg/L	283	244	286	272	260	255	280	359	145	242	289	17.2U	255
Hardness	mg/L	1170	978	888	1030	1210J	1100	1110	1070	1000	937	1010	1090	1010
K	mg/L	13.3	11.5	11.3	12.1	13.1	11.9	12.3	12.3	12.3	11.3	11.8	10.8	11.3
Mg	mg/L	72.7	59.8	55.0	61.5	76.6J	70.1	70.0	66.2	65.0	60.7	64.6	65.9	65.3
Na	mg/L	157	152	134	134	143	139	148	145	152	149	147	166	138
NO_3+NO_2 as N	µg/L	1310J	2150	3520	2580	3560	4040	5790	5360	2540J	3370	3280	736	3050
SO_4	mg/L	948	874	793	876	1070	454	897	981	843	815	872	98.5	855
TDS[c]	mg/L	2170	1780	1630	1780	2180	2000	1990	--	--	--	--	--	--
Metals														
As	µg/L	0.4U	0.22	0.3U	0.2U	0.2U	0.5U	0.5U	0.6U	0.27	0.16	0.1U	0.140	0.140
Fe	µg/L	8.9U	8.4	9.1U	11.7U	11U	1.0U	0.8U	0.8U	1U	4U	0.8U	1.30U	0.800U
Mn	µg/L	1180	393	456	777	1050	754	625	630	468	427	602	135	362
Mo	µg/L	64	36.2	33.7	45.6	43.4	33.3	23.9	28.4	25.8	25.1	26.4	34.0	23.0
Se	µg/L	24.6	190	54.4	30.7	33.2	69.8	123	68	90.3	96.2	70.4	110	81.4
U	µg/L	467	337	227	276	363	316	281	292	257	241	261	488	311
V	µg/L	1.0U	1.3	1.3U	1.5	1.9	2.4	2.3	2.7	1.9	1.6	2.8	0.660	1.70
Radiological														
Alpha[d]	pCi/L	190	161J	107J	146J	177	163	149J	128	136	129	143	268J	157J
Alpha-U[e]	pCi/L	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]
Beta	pCi/L	102	93.2	81.2	82.9	60.8	100	36.5	54.3	78.8	11.6U	49.0	129	79.1
U	µg/L	467	337	227	276	363	316	281	292	257	241	261	488	311
U-234	pCi/L	--	--	--	--	128	--	90.9J	--	--	--	--	--	--
U-238	pCi/L	--	--	--	--	121	--	117J	--	--	--	--	--	--

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[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- 92-08[a,b]

Analyte	Unit	04/14/04	10/07/04	04/06/05	10/04/05	04/04/06	10/04/06	04/10/07	10/10/07	04/08/08[c]	10/08/08	04/08/09	10/07/09	04/20/10
Field Measurements														
Alkalinity	mg/L	309	357	338	330	270	330	280	375	281	220	288	357	326
Conductivity[c]	µmhos/cm	1885	1991	2109	1690	1727	1965	1784	2013	1972	1176	1896	2021	1990
DO[c]	mg/L	--	0.42	0.82	2.65	0.63	0.67	2.87	--	--	0.71	--	--	--
ORP[c]	mV	--	78	204.8	102	121.6	129	210.9	43	130.8	94.0	--	--	--
pH[c]	s.u.	6.78	6.73	6.77	6.83	6.72	6.57	6.79	6.69	6.81	7.03	6.80	6.59	6.84
Temperature[c]	C	10.52	12.5	7.51	12.1	9.41	13.5	8.15	12.39	7.73	14.67	8.76	11.56	9.3
Turbidity[c]	NTU	0.64	1.56	0.83	1.13	0.78	0.24	0.47	0.64	1.47	3.48	1.55	2.49	1.64
Common Ions														
Ca	mg/L	410	320	320	230	260	420	350	350	300	210	320J	340J	330
Chloride	mg/L	75.0	80.0	100	68.0	40.0	60.0	60.0	85.0	72.0	55.0	54.0	87.0	87.0
Fluoride	µg/L	270.	210.	200.U	250.	230.	350.	250.	410.	200.U	300.	370.	420.	310.
Hardness	mg/L	1330	1050	1050	751	863	1350	1150	1160	1010	697	1060J	1120J	1100
K	mg/L	17.0	15.0	14.0	13.0	13.0	16.0	13.0	15.0	11.0	11.0J	12.0J	12.0J	12.0J
Mg	mg/L	74.0	61.0	61.0	43.0	52.0	72.0	66.0	69.0	63.0	42.0	63.0	66.0	68.0
Na	mg/L	110	100	110	100	91.0	110	86.0	110	84.0	57.0	94.0J	120J	120
NO_3+NO_2 as N	µg/L	950.	1500.	2200.	840.	470.	1300.	1900.	2800.	1500.	1200.	1500.	1600.	1800.
SO_4	mg/L	730	660	740	530	710	810	760	830	790	470	710	800	860
TDS[c]	mg/L	--	1500	1600	1300	1300	--	--	--	--	--	--	--	--
Metals														
As	µg/L	0.2	0.29	0.2	0.007U	0.0075U	0.023U	0.012U	0.28	0.21	0.22	0.27	0.29	0.26
Fe	µg/L	9.8U	7U	7.5U	11U	14U	2.2U	3.7U	5.6U	1.4U	3.1U	1.3UJ	1.6U	4.9U
Mn	µg/L	220	300	140	140	100	270	180	310	310	67	220	210	0.96
Mo	µg/L	39	39	17	48	39	43	39	39	35	38	37	34	22
Se	µg/L	60	43	55	14	20	25	36	36	49	14	44	33	130
U	µg/L	380	410J	380	380	330	340	330	390	310	210	320	330	310
V	µg/L	1.3	2.1	0.95J	0.1U	1.2J	0.3	1.7J	2.1J	0.98	0.9	0.78	1.3	1.2
Radiological														
Alpha[d]	pCi/L	262	239	214	--	--	--	--	--	--	--	--	--	--
Alpha-U[e]	pCi/L	0.94	0[f]	0[f]	--	--	--	--	--	--	--	--	--	--
Beta	pCi/L	99.4	101	78.1	--	--	--	--	--	--	--	--	--	--
U	µg/L	380	410J	380	380	330	340	330	390	310	210	320	330	310
U-234	pCi/L	--	--	--	--	--	--	--	--	--	--	--	--	--
U-238	pCi/L	--	--	--	--	--	--	--	--	--	--	--	--	--

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- 92-09[a,b]

Analyte	Unit	04/12/00	10/31/00	04/10/01	10/16/01	04/03/02	10/08/02	04/07/03	10/07/03	04/16/04	10/05/04	04/07/05	10/04/05	04/26/06
Field Measurements														
Alkalinity	mg/L	356	347	367	356	427	368	212	360	340	378	335	386	348
Conductivity[c]	µmhos/cm	2610	2540	2530	2400	2524	2404	2628	2399	2622	2690	2751	2732	2657
DO[c]	mg/L	0.47	--	0.9	--	--	--	--	--	1.48	0.31	0.91	2.65	--
ORP[c]	mV	54	-52	9	-26	37	--	--	-63	-23.4	-67	-48.5	-48	-22.9
pH[c]	s.u.	6.91	7.35	6.93	6.9	6.87	6.89	6.89	6.93	7.04	6.91	7.11	7.06	7.03
Temperature[c]	C	8.8	11.9	8.1	13.6	9.77	12.3	9.85	14.1	8.88	11.7	7.94	12.6	9.75
Turbidity[c]	NTU	1.22	20.9	3.41	3.83	6.76	4.27	2.32	3.06	2.23	2.91	2.01	4.34	2.58
Common Ions														
Ca	mg/L	342	341	308	296	316	299	354	299	390	380	350	390	380
Chloride	mg/L	105	110	110	114	101	107	6.00J	104	120	110	130	180	200
Fluoride	µg/L	12U	187	149	276	25.1U	188J	17.2U	198	500.U	200.U	200.U	500.U	500.U
Hardness	mg/L	1220	1200	1090	1050	1130	1060	1240	1050	1470	1290	1200	1320	1320
K	mg/L	1.29	1.59	1.27	1.66	1.78	1.85	1.96	1.95	5.10	4.00	3.00	3.00	2.60
Mg	mg/L	88.7	84.4	78.6	74.5	82.7	76.1	87.2	74.1	120	83.0	80.0	83.0	89.0
Na	mg/L	186	191	179	177	196	184	206	203	200	180	180	180	180
NO_3+NO_2 as N	µg/L	32.4U	32.4UJ	6.2	152	4.9UJ	12.3	4.50UJ	4.50U	10.U	10.U	10.U	10.U	18
SO_4	mg/L	1010	986	1020	1030	969	956	58.0	1050	1300	1100	1100	1000	1000
TDS[c]	mg/L	2140	2070	2140	--	--	--	--	--	--	--	--	--	--
Metals														
As	µg/L	1.2	1.8	1.4	1.3	1.6	1.6	1.30	1.50	1.3	1.6	1.1	1.4	1.2
Fe	µg/L	1570	1730	1700	1540	1930	1870	2120	1930	2400	1800	1300	1100	1400
Mn	µg/L	145	181	155	191	216	218	273	236	280	230	160	110	140
Mo	µg/L	2.7	2.3	2.5	2.2	1.8U	1.7U	2.00U	1.70U	3.1	3.4J	2.8J	5.4	2.9J
Se	µg/L	0.2U	0.1U	0.3U	0.3U	0.2U	0.1U	0.100U	0.100U	0.063	0.082	0.068U	0.023U	0.02U
U	µg/L	271	283	281	265	272	260	319	285	460J	360J	390	320	340
V	µg/L	0.4U	1.3U	0.4U	0.3U	0.3U	0.3U	0.300U	0.300U	0.25	0.13J	0.41UR	0.1U	1.1J
Radiological														
Alpha[d]	pCi/L	146J	126J	147	137	166	178	224J	134J	346	234	288	--	--
Alpha-U[e]	pCi/L	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	4.8J	0[f]	30.0	0[f]	20.1	--	--
Beta	pCi/L	85.4	82.7	76.2	43.5	72.3	43.1	84.0	67.0	128	84.0	52.5	--	--
U	µg/L	271	283	281	265	272	260	319	285	460J	360J	390	320	340

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- 92-09[a,b]

Analyte	Unit	10/04/06	04/09/07	10/10/07	04/10/08[c]	10/09/08	04/09/09	10/06/09	04/20/10
Field Measurements									
Alkalinity	mg/L	408	350	386	387	430	368	385	341
Conductivity[c]	µmhos/cm	2896	2728	2534	2745	2822	3112	2869	2840
DO[c]	mg/L	0.29	1.25	--	--	--	--	--	--
ORP[c]	mV	-19	7.1	-57	22.4	-40.3	--	--	--
pH[c]	s.u.	6.82	7.00	6.91	6.93	7.13	7.14	6.91	7.08
Temperature[c]	C	13.1	8.87	12.51	7.26	13.78	7.86	12.76	9.0
Turbidity[c]	NTU	4.19	1.93	2.96	0.86	1.45	3.06	2.91	2.47
Common Ions									
Ca	mg/L	410	380	380	350	420	460J	400J	420
Chloride	mg/L	250	260	210	220	340	260	260	290
Fluoride	µg/L	500.U	500.U	280.	500.U	500.U	670.	300.	210.
Hardness	mg/L	1410	1320	1290	1220	1440	1560J	1360J	1450
K	mg/L	3.10	0.050U	3.10	2.50	2.00J	2.10J	2.50J	2.90J
Mg	mg/L	93.0	89.0	84.0	84.0	96.0	100	88.0	97.0
Na	mg/L	230	200	210	200	240	230J	230J	210
NO_3+NO_2 as N	µg/L	14	10.U	10.U	10.U	10.U	24	10.U	13
SO_4	mg/L	1100	990	1000	1000	1100	980	1100	1100
TDS[c]	mg/L	--	--	--	--	--	--	--	--
Metals									
As	µg/L	1.6	1.3	1.6	0.95	1.2	1.1	1.3	0.54
Fe	µg/L	1600	1100	1600	1200	330	1100	1500	470
Mn	µg/L	150	82	160	140	87	86	160	130
Mo	µg/L	3.2J	3.1	3	3.5	2.9	2.7	2.7	2.4
Se	µg/L	0.025U	0.038U	0.028U	0.019U	0.088	0.11U	0.13	1.7
U	µg/L	320	400	310	450	380	370	330	380
V	µg/L	0.21U	0.072UJ	0.18J	0.15U	0.1U	0.099U	0.065J	0.12
Radiological									
Alpha[d]	pCi/L	--	--	--	--	--	--	--	--
Alpha-U[e]	pCi/L	--	--	--	--	--	--	--	--
Beta	pCi/L	--	--	--	--	--	--	--	--
U	µg/L	320	400	310	450	380	370	330	380

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- 92-11[a,b]

Analyte	Unit	01/12/00	04/18/00	08/02/00	11/02/00	01/30/01	04/12/01	07/11/01	10/15/01	01/30/02	04/02/02	07/10/02	10/02/02	01/14/03
Field Measurements														
Alkalinity	mg/L	396	312	377	307	371	360	309	271	382	308	335	394	330
Conductivity[c]	µmhos/cm	3370	3110	5270	2600	3200	3040	2300	1994	1980	1920	3458	1883	1884
DO[c]	mg/L	1.29	0.93	0.4	--	4.1	5.3	0.8	3.3	1.1	--	4.49	1.5	2.8
ORP[c]	mV	147	102	212	160	161	117	80	133	168	177	182	263	254
pH[c]	s.u.	--	6.54	6.57	6.54	6.72	6.8	5.37	6.6	6.87	6.63	6.51	6.6	6.61
Temperature[c]	C	11.5	9.8	13.7	12.6	9.5	8.2	10.4	13.5	9	11.36	15.92	12.2	10.9
Turbidity[c]	NTU	1.03	0.95	1.34	1.55	0.64	1.38	0.92	0.74	1.11	8.78	0.46	1.69	0.97
Common Ions														
Ca	mg/L	357	358	385	297	339	347	257	245	255	252	245	254	265
Chloride	mg/L	207	208	221	149	226	213	123	91.9	85.7	78.1	69.6	73.4	73.8
Fluoride	µg/L	467	408	447	441	436	489	424	437	499	353	446	25.1U	286
Hardness	mg/L	1280	1270	1360	1040	1210J	1230	904	848	884	875	847	870	901
K	mg/L	25.6	20.7	19.8	17.3	16.2	14.5	13.0	11.3	10.7	9.45	8.35	8.93	8.35
Mg	mg/L	94.9	90.7	96.8	72.9	89.1J	87.9	63.7	57.3	60.1	59.6	57.2	57.2	58.2
Na	mg/L	306	284	267	249	245	233	168	132	114	110	104	110	109
NO_3+NO_2 as N	µg/L	15500J	22100	16200	23300J	13900	14700	5340	4700	2950	2650J	1950	1970	3080
SO_4	mg/L	1190	1100	1220	966	1120	506	769	767	718	685	609	628	670
TDS[c]	mg/L	2780	2480	2700	2090	2520	2460	1780	--	--	--	--	--	--
Metals														
As	µg/L	17.9	18.1	14.3	16.1	13.6	14.4	15.2	16.2	17.9	15.8	12.8	16.5	15.1
Fe	µg/L	8.9U	7.4U	9.1U	11.7U	11U	15.5	2.1	0.8U	0.8U	1U	15.1	0.8U	2.9U
Mn	µg/L	2040	1210	1520	77.3	11.2	2.6	0.96	0.66	0.1U	1	2.5	1.3	0.3U
Mo	µg/L	84.3	54.8	56.1	43	46.7	31.4	29.9	25.8	26.2	26.3	25.2	25	6.4U
Se	µg/L	104	142	133	122	173	197	125	106	104	113	88.7	85	106
U	µg/L	677	492	566	270	423	370	307	254	292	321	362	317	303
V	µg/L	625	574	560	578	556	494	534	577	530	502	518	562	525
Radiological														
Alpha[d]	pCi/L	342	282	186	126	191	186	126J	130	151	210	199	161	166
Alpha-U[e]	pCi/L	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]
Beta	pCi/L	131	166	186	91.1	60.4	107	44.1	44.6	54.9	85.3	64.0	54.2	62.4
U	µg/L	677	492	566	270	423	370	307	254	292	321	362	317	303
U-234	pCi/L	--	--	--	--	137	--	--	--	--	--	--	--	--
U-238	pCi/L	--	--	--	--	135	--	--	--	--	--	--	--	--

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- 92-11[a,b]

Analyte	Unit	04/09/03	07/08/03	10/07/03	01/22/04	04/15/04	10/05/04	04/05/05	10/04/05	04/27/06	10/03/06	04/11/07	10/10/07	04/08/08[c]
Field Measurements														
Alkalinity	mg/L	292	383	332	362	368	360	200	298	326	330	362	307	241
Conductivity[c]	µmhos/cm	1876	1810	1863	1833	1468	1745	1282	1614	1849	1987	1968	1845	1648
DO[c]	mg/L	4.48	8.98	2.87	4.45	--	2.23	1.22	4.45	3.00	3.60	5.24	0.58	3.29
ORP[c]	mV	85	206	84	13.0	--	150	188.4	23	93.3	35	195.7	142	150.0
pH[c]	s.u.	6.86	6.74	6.73	6.71	6.92	6.81	6.99	6.83	6.96	6.73	6.88	7.08	6.83
Temperature[c]	C	11.9	12.9	13.7	10.47	10.76	12.7	8.19	14.3	14.69	13.5	9.55	12.5	10.37
Turbidity[c]	NTU	4.27	2.17	0.73	1.54	2.29	2.57	1.00	1.24	0.60	0.67	0.28	1.90	0.71
Common Ions														
Ca	mg/L	260	266	264	280	280	280	160	220	310	420	380	330	210
Chloride	mg/L	10.8J	81.0	87.5	66.0	73.0	42.0	64.0	20.0	100	69.0	100	62.0	93.0
Fluoride	µg/L	17.2U	342	251	420.	470.	450.	410.	200.U	400.	460.	390.	480.	400.
Hardness	mg/L	884	896	895	917	917	913	531	718	1030	1350	1220	1080	701
K	mg/L	10.8	8.74	9.17	12.0J	15.0	11.0	13.0	14.0	12.0	12.0	10.0	9.50	10.0
Mg	mg/L	56.9	56.2	57.3	53.0	53.0	52.0	32.0	41.0	62.0	72.0	67.0	63.0	43.0
Na	mg/L	122	113	116	100	94.0	87.0	80.0	99.0	100	110	110	100	94.0
NO_3+NO_2 as N	µg/L	5730J	2650	2850	2200.	2300.	1200.	1100.	2700.	6300.	3300.	5500.	2900.	4900.
SO_4	mg/L	69.7	628	693	660	570	610	380	500	660	810	740	780	570
TDS[c]	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals														
As	µg/L	13.8	16.9	18.9	19J	18	23	18	20	17	17	17	15	14
Fe	µg/L	1.30U	1U	0.800U	6.7U	9.8U	18	7.5U	11U	14U	2.2U	3.7U	5.6U	45
Mn	µg/L	0.100U	1.80	5.30	0.043U	0.077U	0.066U	0.13U	0.095U	0.23U	0.097U	0.084U	0.16U	0.76
Mo	µg/L	27.9	25.3	24.2	27J	25	25J	34	17	28	20	23	15	35
Se	µg/L	135	68.1	93.6	55J	50	50	18	38	47	39	43	30	55
U	µg/L	360	355	291	280	360	240J	370	290	320	200	270	150	320
V	µg/L	473	537	541	550	470	540	390	520	440	410	410J	430J	350
Radiological														
Alpha[d]	pCi/L	166J	184	151J	190	235	148	226	--	--	--	--	--	--
Alpha-U[e]	pCi/L	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	--	--	--	--	--	--
Beta	pCi/L	93.0	58.5	88.2	48.7	100	67.9	64.3	--	--	--	--	--	--
U	µg/L	360	355	291	280	360	240J	370	290	320	200	270	150	320
U-234	pCi/L	--	--	--	--	--	--	--	--	--	--	--	--	--
U-238	pCi/L	--	--	--	--	--	--	--	--	--	--	--	--	--

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[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- 92-11[a,b]

Analyte	Unit	10/09/08	04/08/09	10/08/09	04/21/10
Field Measurements					
Alkalinity	mg/L	338	322	370	213
Conductivity[c]	µmhos/cm	1226	1516	2082	1150
DO[c]	mg/L	3.29	5.59	1.21	2.61
ORP[c]	mV	7.6	-22	85.3	200
pH[c]	s.u.	7.08	7.06	6.86	7.23
Temperature[c]	C	12.16	11.06	12.54	9.0
Turbidity[c]	NTU	--	4.57	1.09	4.23
Common Ions					
Ca	mg/L	290	380J	330J	150
Chloride	mg/L	81.0	120	97.0	62.0
Fluoride	µg/L	360.	460.	500.	400.
Hardness	mg/L	955	1240J	1090J	502
K	mg/L	11.0J	11.0J	8.60J	8.80J
Mg	mg/L	56.0	71.0	64.0	31.0
Na	mg/L	120	130J	120J	85.0
NO_3+NO_2 as N	µg/L	6300.	6400.	3500.	4700.
SO_4	mg/L	700	780	730	370
TDS[c]	mg/L	--	--	--	--
Metals					
As	µg/L	17	16	17	16
Fe	µg/L	3.1U	2.2U	1.6U	4.9U
Mn	µg/L	0.2U	1.4	0.1U	1.9
Mo	µg/L	18	19	17	41
Se	µg/L	26	35	26	52
U	µg/L	210	220	180	220
V	µg/L	450	390	490	320
Radiological					
Alpha[d]	pCi/L	--	--	--	--
Alpha-U[e]	pCi/L	--	--	--	--
Beta	pCi/L	--	--	--	--
U	µg/L	210	220	180	220
U-234	pCi/L	--	--	--	--
U-238	pCi/L	--	--	--	--

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- 95-01[a,b]

Analyte	Unit	04/10/00	11/01/00	04/10/01	10/17/01	10/08/02	10/05/04	10/04/05	10/04/06	10/10/07	10/09/08	10/06/09
Field Measurements												
Alkalinity	mg/L	213	175	222	167	195	169	166	183	173	182	179
Conductivity[c]	µmhos/cm	6730	610	732	603	599	593	591	598	552	468	587
DO[c]	mg/L	0.57	6.4	0.4	--	--	0.23	1.30	0.64	--	--	--
ORP[c]	mV	48	-89	-18	-50	--	-73	-82	1	-61	-60.0	--
pH[c]	s.u.	7	7.35	7.17	7.2	7.19	7.22	7.17	6.88	7.16	7.36	7.19
Temperature[c]	C	9.2	12.3	8.8	13.1	14	13.3	13.1	12.6	12.72	13.83	13.34
Turbidity[c]	NTU	2.12	4.98	4.7	2.13	4.51	3.89	4.73	4.48	2.34	4.57	3.35
Common Ions												
Ca	mg/L	48.1	42.2	45.8	36.9	36.8	41.0	40.0	40.0	36.0	39.0	40.0J
Chloride	mg/L	8.18	7.03	8.41	7.04	6.76	6.50	6.90	7.60	6.70	7.70	6.50
Fluoride	µg/L	260	276	222	400	189	280.	260.	280.	310.	360.	320.
Hardness	mg/L	177	154	171	136	138	148	145	149	139	143	145J
K	mg/L	3.14	2.98	2.81	2.64	2.83	4.70	4.30	4.30	4.00	3.90J	3.10J
Mg	mg/L	13.9	11.7	13.8	10.7	11.1	11.0	11.0	12.0	12.0	11.0	11.0
Na	mg/L	79.0	73.0	76.8	70.0	69.3	62.0	65.0	70.0	69.0	68.0J	63.0J
NO_3+NO_2 as N	µg/L	32.4U	32.4UJ	5.4	944	68.1	10.U	10.U	10.U	13	10.U	10.U
SO_4	mg/L	114	117	150	126	123	120	120	120	120	120	120
TDS[c]	mg/L	410	385	460	--	--	--	--	--	--	--	--
Metals												
As	µg/L	3.5	2.6	3.2	2.4	2	2	2.4	2.1	2.1	1.7	2.9
Fe	µg/L	805	644	1280	555	634	560	710	560	630	220	900
Mn	µg/L	336	237	354	193	194	190	200	190	180	200	220
Mo	µg/L	0.4U	0.42	0.4U	1.9U	1.7U	0.17U	0.068U	0.13U	0.78	0.76	0.75
Se	µg/L	0.2U	0.1U	0.3U	1.2	0.1U	0.029U	0.023U	0.025U	0.028U	0.024U	0.032U
U	µg/L	3.7	2.6	2.1	0.26	0.47	0.3J	0.56	0.52	0.48	0.57	0.5
V	µg/L	3.5	1.3U	0.4U	0.47	0.3U	0.12J	0.1U	0.21U	0.15J	0.1U	0.13J
Radiological												
Alpha[d]	pCi/L	2.5UJ	7.8U	5.2	4.0UJ	4.4U	5.2	--	--	--	--	--
Alpha-U[e]	pCi/L	2.5UJ	7.8U	4.2	4.0UJ	4.4U	5.0	--	--	--	--	--
Beta	pCi/L	4.8	7.5U	4.0U	5.1	5.0U	5.7	--	--	--	--	--
U	µg/L	3.7	2.6	2.1	0.26	0.47	0.3J	0.56	0.52	0.48	0.57	0.5
U-234	pCi/L	1.1U	0.52U	0.40U	--	--	--	--	--	--	--	--
U-238	pCi/L	1.5	1.2	1.0	--	--	--	--	--	--	--	--

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- 95-03[a,b]

Analyte	Unit	04/10/00	10/31/00	04/10/01	10/11/01	10/08/02	10/07/03	10/05/04	10/04/05	10/04/06	10/10/07	10/09/08	10/06/09
Field Measurements													
Alkalinity	mg/L	234	225	244	235	237	231	233	238	235	237	40	245
Conductivity[c]	µmhos/cm	1519	1490	1490	1353	1415	1267	1309	1294	1345	1278	997	1415
DO[c]	mg/L	0.57	--	2.5	--	--	--	0.53	1.79	0.23	--	--	--
ORP[c]	mV	23	-84	0	-75	--	-111	-86	-72	-21	-62	-49.0	--
pH[c]	s.u.	6.92	7.16	8.02	7.27	7.13	7.22	7.21	7.19	6.93	7.14	7.45	7.15
Temperature[c]	C	9	11.7	8	11.8	14.3	12.4	12.2	13.6	12.6	12.50	12.56	12.60
Turbidity[c]	NTU	4.44	10.2	1.97	3.76	2.1	1.77	3.48	2.36	2.98	1.63	1.52	2.05
Common Ions													
Ca	mg/L	151	147	135	145	137	127	140	140	160	140	140	150J
Chloride	mg/L	67.8	73.6	2.85	72.0	67.9	62.0	53.0	57.0	64.0	61.0	65.0	68.0
Fluoride	µg/L	243	12.5U	230	259	550	237	210.	200.U	200.U	210.	220.	210.
Hardness	mg/L	597	586	537	570	546	507	539	535	610	555	547	580J
K	mg/L	3.17	3.40	2.86	3.05	3.09	2.90	5.10	4.80	4.90	4.80	4.70J	3.70J
Mg	mg/L	53.3	53.1	48.5	50.4	49.6	46.0	46.0	45.0	51.0	50.0	48.0	50.0
Na	mg/L	111	110	106	106	102	103	87.0	85.0	100	100	100	97.0J
NO_3+NO_2 as N	µg/L	32.4U	32.4UJ	4.7U	100	16.1	4.50U	10.U	10.U	10.U	10.U	10.U	10.U
SO_4	mg/L	478	488	76.9	512	475	443	410	410	440	440	450	460
TDS[c]	mg/L	1080	1090	1100	--	--	--	--	--	--	--	--	--
Metals													
As	µg/L	0.2U	0.2U	0.5U	0.6U	0.1U	0.100U	0.018U	0.007U	0.012U	0.079	0.067	0.084
Fe	µg/L	1320	1280	1200	1250	1180	1100	970	900	1100	1200	260	1100
Mn	µg/L	368	366	332	347	336	305	300	290	320	310	320	330
Mo	µg/L	5.5	6.4	4.6	3.1	4.4	5.10	4.7J	5.3	4.6J	5.2	4.4	4.5
Se	µg/L	0.2U	0.1U	0.3U	0.3U	0.1U	0.100U	0.029U	0.023U	0.025U	0.028U	0.025	0.032U
U	µg/L	7.8	8.1	7.5	6.8	7.4	8.00	6.5J	6.9	7.9	7.2J	7.7	6.7
V	µg/L	0.40U	1.3U	0.4U	0.3U	0.3U	0.300U	0.12U	0.1U	0.21U	0.095U	0.1U	0.05U
Radiological													
Alpha[d]	pCi/L	10.5J	8.2UJ	9.4	10.8UJ	9.2	7.8J	11.6	--	--	--	--	--
Alpha-U[e]	pCi/L	7.2J	8.2UJ	2.1	10.8UJ	4.1	2.3J	7.1	--	--	--	--	--
Beta	pCi/L	9.8	9.9	7.5U	11.5U	10.1	12.4	8.4	--	--	--	--	--
U	µg/L	7.8	8.1	7.5	6.8	7.4	8.00	6.5J	6.9	7.9	7.2J	7.7	6.7
U-234	pCi/L	1.1U	0.52U	3.9	--	--	--	--	--	--	--	--	--
U-238	pCi/L	3.3	2.9	3.4	--	--	--	--	--	--	--	--	--

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- H Well[a,b]

Analyte	Unit	12/12/01	12/13/01
Metals			
As	µg/L	0.6U	0.6U
Fe	µg/L	18600	35100
Mn	µg/L	603	656
Mo	µg/L	2.5	1.5U
Se	µg/L	0.36	1
U	µg/L	0.42	0.44
V	µg/L	0.4U	0.4U
Radiological			
U	µg/L	0.42	0.44

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- MW00-06[a,b]

Analyte	Unit	08/02/00	11/01/00	01/30/01	04/10/01	07/19/01	10/16/01	01/30/02	04/02/02	07/10/02	10/02/02	04/07/03	07/09/03	10/06/03
Field Measurements														
Alkalinity	mg/L	172	172	163	104	92	117	75	131	165	210	187	199	195
Conductivity[c]	µmhos/cm	3030	2940	2720	2390	2080	1805	1841	1671	3206	1915	1756	1780	1565
DO[c]	mg/L	0.7	--	1.5	0.9	--	--	--	--	--	--	1.88	--	--
ORP[c]	mV	-68	164	97	211	69	--	--	132	--	--	72	188	-58
pH[c]	s.u.	6.63	6.73	6.4	6.4	5.98	6.33	6.44	6.41	6.44	6.51	6.9	6.64	6.71
Temperature[c]	C	11.6	11	9.8	8.9	11.3	12.2	7	12.17	11.73	12.4	9.5	18	13.5
Turbidity[c]	NTU	13.2	334	1	3.94	1.14	0.56	1.71	6.47	1.46	1.83	1.21	2.8	0.91
Common Ions														
Ca	mg/L	208	273	217	167	150	111	123	121	131	159	165	160	132
Chloride	mg/L	51.1	104	108	134	127	99.3	77.9	85.8	76.5	74.6	88.9	99.2	88.4
Fluoride	µg/L	363	354	296	241	280	285	211	258	348	239	17.2UJ	111J	227
Hardness	mg/L	748	974	786J	630	584	436	505	524	556	618	708	651	544
K	mg/L	11.6	18.4	17.4	14.1	13.9	13.2	15.0	13.8	14.8	16.4	13.4	13.7	13.7
Mg	mg/L	55.5	71.1	59.2J	51.8	50.9	38.6	48.1	53.9	55.6	53.7	71.9	61.1	52.1
Na	mg/L	145	330	308	265	243	191	178	166	173	199	143	152	141
NO_3+NO_2 as N	µg/L	2340J	22300	16400	7280	3000	2660	2400	969J	2220	3590	869	1150	216
SO_4	mg/L	818	1220	1150	459	837	715	697	621	642	722	712	675	566
TDS[c]	mg/L	1540	2390	2200	1880	1560	--	--	--	--	--	--	--	--
Metals														
As	µg/L	2.9	4.1	3.3	2.6	2.9	3	3.1	2.8	2.5	3.6	2.90	3.00	4.00
Fe	µg/L	9.1U	11.7U	11U	1.0U	0.8U	0.8U	0.8U	1U	4U	0.8U	1.30U	1U	0.800U
Mn	µg/L	69.6	53.6	15.9	52.4	89.5	117	6.6	1.8	0.63	0.1U	0.100U	0.100U	1.50
Mo	µg/L	43.1	43.6	44.2	29.1	23.7	33.1	28.5	29.8	34.8	44.6	29.8	27.8	24.0
Se	µg/L	3.2	14	14.3	11.5	7	6.2	10	5.6	19.9	39.7	23.8	16.2	6.20
U	µg/L	152	379	367	119	59.5	87.1	127	83.9	250	411	206	211	161
V	µg/L	146	173	150	114	114	130	119	114	127	147	127	130	148
Radiological														
Alpha[d]	pCi/L	87.1	275J	260	49.5	22.8J	48.0	65.9	50.3	158	267	111J	113	106
Alpha-U[e]	pCi/L	0[f]	14.6J	24.0	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]
Beta	pCi/L	61.3	111	51.2	31.6	21.8	28.3	34.7	36.8	57.1	78.2	56.5	39.2	33.4
U	µg/L	152	379	367	119	59.5	87.1	127	83.9	250	411	206	211	161
U-234	pCi/L	--	--	117	--	17.7J	--	--	--	--	--	--	--	--
U-238	pCi/L	--	--	119	--	24.2J	--	--	--	--	--	--	--	--

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Alluvial Groundwater -- Down Gradient -- MW00-06[a,b]

Analyte	Unit	04/14/04	10/07/04	04/06/05	10/04/05	04/04/06	10/03/06	04/10/07	10/09/07	04/08/08[c]	10/08/08	04/08/09	10/08/09	04/20/10
Field Measurements														
Alkalinity	mg/L	180	201	190	176	168	221	250	306	278	210	257	297	318
Conductivity[c]	µmhos/cm	1532	1392	1874	983	1499	1736	1794	1753	2123	1751	1897	1885	1905
DO[c]	mg/L	--	1.26	1.88	4.72	3.86	1.03	3.29	--	--	1.39	--	--	--
ORP[c]	mV	--	61	213.0	-5	146.5	90	188.2	--	112.1	117.8	--	--	--
pH[c]	s.u.	6.84	6.77	6.73	6.65	6.68	6.48	6.63	7.00	6.70	6.95	6.64	6.67	6.86
Temperature[c]	C	10.20	12.6	9.22	11.7	9.76	12.0	8.52	12.2	8.38	11.65	9.26	10.53	9.5
Turbidity[c]	NTU	0.63	1.84	0.84	0.77	3.01	0.63	0.36	1.35	0.51	1.03	2.36	1.02	0.86
Common Ions														
Ca	mg/L	180	130	170	85.0	150	250	270	250	270	200	270J	250J	260
Chloride	mg/L	85.0	48.0	130	52.0	75.0	72.0	100	69.0	160	83.0	81.0	82.0	140
Fluoride	µg/L	290.	240.	220.	150.	250.	320.	200.U	420.	200.U	370.	380.	490.	360.
Hardness	mg/L	717	518	688	319	580	913	962	892	962	693	934J	859J	921
K	mg/L	18.0	16.0	13.0	11.0	16.0	20.0	18.0	19.0	14.0	17.0J	18.0J	17.0J	17.0J
Mg	mg/L	65.0	47.0	64.0	26.0	50.0	70.0	70.0	65.0	70.0	47.0	63.0	57.0	66.0
Na	mg/L	110	100	110	90.0	98.0	140	120	120	110	120	130J	130J	140
NO_3+NO_2 as N	µg/L	310.	89	1200.	360.	510.	430.	2600.	460.	2600.	1900.	2100.	6500.R	8300.
SO_4	mg/L	580	450	600	250	550	680	710	720	720	550	690	690	660
TDS[c]	mg/L	--	960	1300	690	1100	1300	1500	1400	1600	1200	1500	1500	1400
Metals														
As	µg/L	3.1	3.6	2.8	3.3	2.6	2.9	3	3.2	2.5	3.4	3.1	3.6	3.2
Fe	µg/L	9.8U	7U	37U	7.8U	14U	2.2U	3.7U	5.6U	1.4U	4.5	9.5	1.6U	4.9U
Mn	µg/L	0.077U	0.066U	0.64U	0.58	0.23U	0.097U	0.084U	0.16U	0.81	0.2U	1.3	0.1U	0.85
Mo	µg/L	16	20	14	14	25	23	26	31	24	44	42	65	34
Se	µg/L	4.8	1.8	9.2	4	11	11	29	8.4	24	36	42	37	91
U	µg/L	140	120J	130	71	170	240	310	330	210	510	530	760	510
V	µg/L	120	140	120	130	120	100	120J	150J	100	130	120	150	120
Radiological														
Alpha[d]	pCi/L	83.3	67.1	86.5	--	--	--	--	--	--	--	--	--	--
Alpha-U[e]	pCi/L	0[f]	0[f]	0[f]	--	--	--	--	--	--	--	--	--	--
Beta	pCi/L	44.7	35.4	29.5	--	--	--	--	--	--	--	--	--	--
U	µg/L	140	120J	130	71	170	240	310	330	210	510	530	760	510
U-234	pCi/L	--	--	--	--	--	--	--	--	--	--	--	--	--
U-238	pCi/L	--	--	--	--	--	--	--	--	--	--	--	--	--

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[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- MW00-07[a,b]

Analyte	Unit	08/02/00	07/20/01	10/16/01	01/30/02	10/07/02	04/09/03	10/06/03	04/14/04	10/04/04	10/04/05	10/03/06	10/10/07	10/08/08
Field Measurements														
Alkalinity	mg/L	181	--	367	--	--	206	382	261	239	242	263	318	332
Conductivity[c]	µmhos/cm	2720	2200	1990	--	1880	1716	1525	1632	1553	1144	1796	1850	1721
DO[c]	mg/L	1.54	--	--	--	--	--	--	--	2.24	5.14	1.38	--	3.05
ORP[c]	mV	180	118	--	--	--	54	-50	--	5	52	28	--	92.2
pH[c]	s.u.	6.69	6.33	6.74	--	6.76	6.79	6.85	6.84	6.55	6.65	6.53	7.16	6.79
Temperature[c]	C	10.5	12.6	12	--	12	10.2	15.1	11.66	11.6	11.0	11.4	11.0	10.90
Turbidity[c]	NTU	3.37	>1000	--	--	338	1.02	95.7	2.39	3.16	2.84	1.95	139	4.07
Common Ions														
Ca	mg/L	212	222	235	177	226	190	222	230	150	120	260	260	220
Chloride	mg/L	35.0	--	81.9	61.5	80.5	8.11J	85.3	75.0	55.0	52.0	72.0	79.0	85.0
Fluoride	µg/L	305	--	308	421J	25.1U	17.2UJ	269	320.	280.	250.	300.	400.	370.
Hardness	mg/L	740	759	792	607	758	721	755	838	564	423	921	888	763
K	mg/L	11.0	12.4	14.0	16.4	12.7	12.5	13.0	18.0	16.0	9.80	18.0	18.0	15.0J
Mg	mg/L	51.1	49.6	49.8	40.0	47.1	59.9	48.8	64.0	46.0	30.0	66.0	58.0	52.0
Na	mg/L	103	169	149	118	152	135	168	100	110	89.0	150	150	120
NO_3+NO_2 as N	µg/L	2080	--	778	464	475	1090	576	1600.	190.	850.	690.	460.	2700.
SO_4	mg/L	725	--	725	69.2	724	68.7	670	580	500	290	690	700	560
TDS[c]	mg/L	1390	--	--	--	--	--	--	--	--	--	--	--	--
Metals														
As	µg/L	1.9	0.55	0.62	0.67	1.3	2.00	2.10	2.6	2.5	2.1	2.4	1.2	2.4
Fe	µg/L	9.1U	121	51	365	899	177	982	9.8U	180	7.8U	2.2U	540	3.5
Mn	µg/L	6.4	324	501	805	1260	54.4	918	3	110	5.8	9.3	480	0.2U
Mo	µg/L	42.7	34.9	38.9	24.3	29.9	45.4	40.5	48	38	31	30	40	42
Se	µg/L	7.8	10	9.9	7.4	18.5	29.9	12.7	25	5.7	9	16	11	35
U	µg/L	154	214	319	232	297	290	310	390	210J	71	260	420	410
V	µg/L	74.1	24.9	18.5	11.6	8.4	69.9	15.6	84	79	78	61	14J	89
Radiological														
Alpha[d]	pCi/L	76.2	--	168	--	176	186J	145	251	141	--	--	--	--
Alpha-U[e]	pCi/L	0[f]	--	0[f]	--	0[f]	0[f]	0[f]	0[f]	0[f]	--	--	--	--
Beta	pCi/L	53.3	--	71.6	--	88.1	70.0	47.2	98.2	59.5	--	--	--	--
U	µg/L	154	214	319	232	297	290	310	390	210J	71	260	420	410
U-234	pCi/L	--	64.2J	--	--	--	--	--	--	--	--	--	--	--
U-238	pCi/L	--	79.4J	--	--	--	--	--	--	--	--	--	--	--

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- MW00-07[a,b]

Analyte	Unit	10/08/09
Field Measurements		
Alkalinity	mg/L	357
Conductivity[c]	µmhos/cm	2044
DO[c]	mg/L	--
ORP[c]	mV	--
pH[c]	s.u.	6.57
Temperature[c]	C	10.98
Turbidity[c]	NTU	32.1
Common Ions		
Ca	mg/L	290J
Chloride	mg/L	98.0
Fluoride	µg/L	420.
Hardness	mg/L	967J
K	mg/L	16.0J
Mg	mg/L	59.0
Na	mg/L	150J
NO_3+NO_2 as N	µg/L	1100.
SO_4	mg/L	730
TDS[c]	mg/L	--
Metals		
As	µg/L	0.93
Fe	µg/L	1.6U
Mn	µg/L	100
Mo	µg/L	34
Se	µg/L	24
U	µg/L	460
V	µg/L	37
Radiological		
Alpha[d]	pCi/L	--
Alpha-U[e]	pCi/L	--
Beta	pCi/L	--
U	µg/L	460
U-234	pCi/L	--
U-238	pCi/L	--

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- P92-02[a,b]

Analyte	Unit	04/12/00	10/31/00	04/10/01	10/17/01	04/03/02	10/09/02	04/07/03
Field Measurements								
Alkalinity	mg/L	410	428	411	438	431	429	211
Conductivity[c]	µmhos/cm	2490	3180	3000	3080	3062	2908	2608
DO[c]	mg/L	1.45	0.6	1.8	--	--	--	--
ORP[c]	mV	39	-28	-17	--	47	--	--
pH[c]	s.u.	6.9	7.17	6.83	6.9	6.8	6.88	6.91
Temperature[c]	C	10	11.4	9.1	11.4	11.33	12.9	10.43
Turbidity[c]	NTU	1.23	1.23	0.85	0.7	5.2	1.13	4.77
Common Ions								
Ca	mg/L	381	393	331	348	342	323	299
Chloride	mg/L	201	175	169	191	180	173	149
Fluoride	µg/L	277	315	242	411	50.2U	50.2UJ	17.2U
Hardness	mg/L	1580	1580	1360	1420	1410	1330	1220
K	mg/L	1.86	1.85	1.65	1.79	1.74	1.70	1.59
Mg	mg/L	153	146	129	135	135	126	114
Na	mg/L	244	229	219	217	200	211	205
NO_3+NO_2 as N	µg/L	55.4	32.4UJ	19.3	7.3U	6.9J	373	4.50UJ
SO_4	mg/L	1340	1270	1220	1280	1130	1180	996
TDS[c]	mg/L	2810	2680	2600	--	--	--	--
Metals								
As	µg/L	0.2U	0.24	0.5U	0.6U	0.22	0.1U	0.100U
Fe	µg/L	845	978	904	1120	888	480	320
Mn	µg/L	184	191	156	184	147	209	101
Mo	µg/L	3.3	2.4	2.5	1.9U	1.8U	1.7U	2.00U
Se	µg/L	1.3	1.2	0.88	0.73	0.2U	0.71	0.610
U	µg/L	65.9	62.1	58.5	54.3	54.2	52	46.2
V	µg/L	0.4U	1.3U	0.4U	0.3U	0.3U	0.3U	0.300U
Radiological								
Alpha[d]	pCi/L	28.5J	19.9J	18.1	22.2	32.0	39.2	19.0J
Alpha-U[e]	pCi/L	0[f]	0[f]	0[f]	0[f]	0[f]	3.5	0[f]
Beta	pCi/L	13.5U	18.3	12.0U	20.1	17.5	11.9U	15.0U
U	µg/L	65.9	62.1	58.5	54.3	54.2	52	46.2

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- P92-03[a,b]

Analyte	Unit	04/12/00	10/31/00	04/11/01	10/17/01	04/03/02
Field Measurements						
Alkalinity	mg/L	383	--	400	409	450
Conductivity[c]	µmhos/cm	2770	2510	2670	2730	2541
DO[c]	mg/L	1.74	--	1.6	--	--
ORP[c]	mV	27	-35	31	-35	95
pH[c]	s.u.	6.97	7.01	7.02	6.91	6.98
Temperature[c]	C	8.6	11.4	7.5	12.3	9.87
Turbidity[c]	NTU	1.77	19.7	4.48	2.99	7.1
Common Ions						
Ca	mg/L	325	358	297	327	287
Chloride	mg/L	123	155	138	173	144
Fluoride	µg/L	12U	317	727	404	25.1U
Hardness	mg/L	1210	1310	1110	1220	1100
K	mg/L	2.89	3.66	2.70	3.84	3.75
Mg	mg/L	97.9	101	89.0	99.0	92.6
Na	mg/L	219	222	202	214	197
NO_3+NO_2 as N	µg/L	140	61.1J	13.4	478	11.9J
SO_4	mg/L	1040	1060	464	1100	895
TDS[c]	mg/L	2260	2300	2150	--	--
Metals						
As	µg/L	0.2U	0.25	0.5U	0.6U	0.21
Fe	µg/L	596	1310	943	1310	324
Mn	µg/L	234	235	227	193	93.7
Mo	µg/L	11.8	13.5	11.4	7.7	12.3
Se	µg/L	6.6	3.7	1.5	1.3	0.2U
U	µg/L	104	113	111	114	112
V	µg/L	0.77	1.3U	0.4U	0.42	0.35
Radiological						
Alpha[d]	pCi/L	46.2J	53.1J	46.9	55.5	49.6
Alpha-U[e]	pCi/L	0[f]	0[f]	0[f]	0[f]	0[f]
Beta	pCi/L	28.3	34.6	32.1	18.6	35.2
U	µg/L	104	113	111	114	112

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- P92-04[a,b]

Analyte	Unit	01/10/00	04/13/00	07/26/00	11/01/00	04/10/01	10/16/01
Field Measurements							
Alkalinity	mg/L	388	399	375	331	445	342
Conductivity[c]	µmhos/cm	2350	2190	2100	1640	2350	2450
DO[c]	mg/L	5.48	2.14	4.4	3.6	6.7	--
ORP[c]	mV	69	51	106	60	44	112
pH[c]	s.u.	--	6.72	6.97	6.82	6.73	6.59
Temperature[c]	C	9.4	11.3	13.2	10.6	8.7	9.4
Turbidity[c]	NTU	0.47	3.43	1.31	4.85	1.44	4.92
Common Ions							
Ca	mg/L	277	248	250	344	268	282
Chloride	mg/L	136	141	158	156	137	162
Fluoride	µg/L	317	327	384	288	336	378
Hardness	mg/L	1080	975	955	1340	1060	1100
K	mg/L	2.09	2.09	1.84	2.13	2.09	2.01
Mg	mg/L	93.2	86.5	80.3	116	94.4	95.4
Na	mg/L	148	142	137	153	146	135
NO_3+NO_2 as N	µg/L	1640J	1420	3360	3570J	1580	3310
SO_4	mg/L	702	591	630	999	472	954
TDS[c]	mg/L	1860	1630	1610	2140	1870	--
Metals							
As	µg/L	0.4U	0.2U	0.3U	0.2U	0.5U	0.6U
Fe	µg/L	8.9U	7.4U	9.1U	11.7U	1.0U	9.6
Mn	µg/L	0.9U	0.4U	1.5U	2U	0.1U	0.23
Mo	µg/L	0.4U	0.40U	0.3U	0.3U	0.40U	1.9U
Se	µg/L	2.4	2.6	2.1	6.2	3.6	0.41
U	µg/L	37	32.1	31.3	33.1	36.2	26.7
V	µg/L	1U	0.4U	1.3U	1.3U	0.4U	0.3U
Radiological							
Alpha[d]	pCi/L	18.7	9.8J	20.1J	15.0UJ	14.3	11.7
Alpha-U[e]	pCi/L	0[f]	0[f]	0[f]	15.0UJ	0[f]	0[f]
Beta	pCi/L	22.9	8.1U	12.0U	13.2U	13.8	8.2U
U	µg/L	37	32.1	31.3	33.1	36.2	26.7

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- P92-05[a,b]

Analyte	Unit	01/11/00	04/13/00	07/26/00	04/10/01
Field Measurements					
Alkalinity	mg/L	--	315	380	--
Conductivity[c]	µmhos/cm	3300	2880	2800	3130
DO[c]	mg/L	--	--	1.52	--
ORP[c]	mV	183	81	-61	225
pH[c]	s.u.	6.68	6.84	6.14	7.09
Temperature[c]	C	6	7.7	16	5.8
Turbidity[c]	NTU	25.1	34.2	4.17	91.3
Common Ions					
Ca	mg/L	345	341	342	323
Chloride	mg/L	189	201	216	--
Fluoride	µg/L	538	596	742	--
Hardness	mg/L	1320	1260	1230	1190
K	mg/L	3.33	3.34	5.28	3.59
Mg	mg/L	112	100	90.9	93.0
Na	mg/L	223	211	258	201
NO_3+NO_2 as N	µg/L	1960J	2940	703	--
SO_4	mg/L	1140	1110	1100	--
TDS[c]	mg/L	--	2290J	2360	--
Metals					
As	µg/L	0.4U	0.2U	0.3U	0.5U
Fe	µg/L	8.9U	7.4U	34	1.0U
Mn	µg/L	44.6	2.3	10	26.1
Mo	µg/L	0.4U	0.4U	0.3U	0.4U
Se	µg/L	52	56.6	2.8	152
U	µg/L	36.8	28.1	34.3	43.8
V	µg/L	1.7	0.99	1.3U	0.4U
Radiological					
Alpha[d]	pCi/L	--	11.0UJ	22.6J	--
Alpha-U[e]	pCi/L	--	11.0UJ	0[f]	--
Beta	pCi/L	--	10.3	14.3U	--
U	µg/L	36.8	28.1	34.3	43.8

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- P92-06[a,b]

Analyte	Unit	01/12/00	04/13/00	07/26/00	11/02/00	04/10/01	07/19/01	10/16/01	04/02/02	07/11/02	10/07/02	04/09/03	07/09/03	10/06/03
Field Measurements														
Alkalinity	mg/L	423	347	345	374	337	306	325	296	291	299	273	295	312
Conductivity[c]	µmhos/cm	4970	4440	4250	4180	4250	4560	4080	3583	6124	2937	2675	3337	3813
DO[c]	mg/L	2.7	2.83	3.49	5.4	8.3	--	--	--	--	--	--	--	--
ORP[c]	mV	195	85	104	191	229	84	124	169	--	--	110	211	69
pH[c]	s.u.	--	6.91	6.83	6.73	6.77	6.47	6.71	6.7	6.65	6.71	6.91	6.71	6.95
Temperature[c]	C	9	8.1	10	10.2	7.3	11.1	11.8	9.51	10.86	12.6	8.5	12	11.6
Turbidity[c]	NTU	>1000	1.66	1.58	4.75	1.97	1.26	0.83	9.87	1.23	3.64	1.09	2.52	2.34
Common Ions														
Ca	mg/L	587	485	477	455	445	511	421	344	309	265	253	321	355
Chloride	mg/L	229	215	212	201	207	242	222	164	150	130	5.34J	170	156
Fluoride	µg/L	180	192	219	205	205	227	323	272	448	331	17.2UJ	162	268
Hardness	mg/L	2020	1720	1710	1650	1630	1880	1590	1330	1190	1010	956	1180	1290
K	mg/L	6.84	7.33	7.21	7.56	6.74	8.61	8.12	7.72	7.35	6.67	6.39	7.02	7.42
Mg	mg/L	134	123	126	124	127	147	130	115	102	84.3	78.7	90.7	98.5
Na	mg/L	526	518	499	459	414	510	416	355	355	321	301	374	512
NO_3+NO_2 as N	µg/L	28300J	20900	18600	20300	20500	20300	17700	12500J	10100	8310	6220	7870	3730
SO_4	mg/L	2170	1860	1920	1860	1850	2150	2070	1540	1430	1290	60.2	1410	1840
TDS[c]	mg/L	4560J	3910	3920	3650	3770	4220	--	--	--	--	--	--	--
Metals														
As	µg/L	0.4U	0.2U	0.3U	0.2U	0.5U	0.5U	0.6U	0.13	0.1	0.1U	0.100U	0.100U	0.100U
Fe	µg/L	8.9U	7.4U	9.1U	11.7U	1.0U	0.8U	0.8U	1U	4U	0.8U	1.30U	1U	0.800U
Mn	µg/L	2.5	0.4U	1.5U	2U	0.4	0.1U	0.1U	0.1U	0.1U	1.2	0.100U	0.100U	0.100U
Mo	µg/L	17.6	19.9	18.8	19.3	15.4	12	13.8	12	12.5	12.6	12.1	1.70U	29.0
Se	µg/L	29	40	30.4	26.9	31.8	38.3	34.9	43.6	47.7	45.1	65.3	72.3	48.4
U	µg/L	1080	895	697	546	550	604	492	414	364	306	322	439	903
V	µg/L	1U	0.4U	1.3U	1.3U	0.4U	0.3U	0.39	0.3U	0.3U	0.67	0.300U	0.300U	0.300U
Radiological														
Alpha[d]	pCi/L	650	645J	609J	319J	13.8U	336J	299	256	235	236	190J	284	543J
Alpha-U[e]	pCi/L	0[f]	30.1J	130J	0[f]	13.8U	0[f]	0[f]	0[f]	0[f]	25.8	0[f]	0[f]	0[f]
Beta	pCi/L	171	250	237	142	14.4U	83.6	83.8	104	18.7U	54.3	77.0	77.9	185
U	µg/L	1080	895	697	546	550	604	492	414	364	306	322	439	903
U-234	pCi/L	--	--	--	--	--	199J	--	--	--	--	--	--	--
U-238	pCi/L	--	--	--	--	--	226J	--	--	--	--	--	--	--

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- P92-06[a,b]

Analyte	Unit	04/14/04	10/04/04	04/06/05	10/04/05	04/04/06	10/03/06	04/10/07	10/10/07	04/08/08[c]	10/08/08	04/08/09	10/07/09	04/20/10
Field Measurements														
Alkalinity	mg/L	305	349	348	350	310	342	315	330	364	344	371	337	370
Conductivity[c]	µmhos/cm	2414	2606	3056	2963	2488	2515	2706	2490	2599	3840	2983	2632	2915
DO[c]	mg/L	--	2.60	2.13	3.57	4.60	2.57	5.07	--	--	2.30	--	--	--
ORP[c]	mV	--	39.0	208.9	84	112.0	98	223	60	146.9	98.1	--	--	--
pH[c]	s.u.	6.90	6.65	6.89	6.83	6.77	6.74	6.28	6.74	6.71	6.95	6.88	6.67	7.01
Temperature[c]	C	9.26	11.5	6.82	12.4	8.12	11.1	7.22	11.70	8.44	11.02	7.69	10.71	8.2
Turbidity[c]	NTU	0.51	2.70	3.93	4.22	0.91	0.92	0.89	1.33	1.85	1.96	2.38	1.46	3.81
Common Ions														
Ca	mg/L	310	280	350	390	270	360	340	330	300	430	410J	360J	410
Chloride	mg/L	97.0	96.0	130	150	110	100	140	96.0	110	190	150	120	180
Fluoride	µg/L	500.U	220.	200.U	500.U	200.U	500.U	500.U	450.	200.U	290.	340.	260.	260.
Hardness	mg/L	1090	987	1220	1340	967	1240	1220	1190	1100	1570	1480J	1290J	1520
K	mg/L	12.0	11.0	10.0	12.0	12.0	14.0	12.0	15.0	13.0	16.0J	17.0J	14.0J	16.0J
Mg	mg/L	77.0	70.0	83.0	89.0	71.0	83.0	89.0	88.0	86.0	120	110	96.0	120
Na	mg/L	230	240	220	270	210	310	240	230	200	250	230J	210J	230
NO_3+NO_2 as N	µg/L	3000.	2500.	3900.	6000.	4200.	3100.	3800.	2500.	1700.	6900.	4200.	2400.	1900.
SO_4	mg/L	930	1000	1100	1200	960	1000	1200	1100	1100	1600	1100	1100	1400
TDS[c]	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals														
As	µg/L	0.13	0.18	0.22	0.014U	0.0075U	0.023U	0.012U	0.2	0.22	0.24	0.15U	0.2	0.31
Fe	µg/L	9.8U	7U	7.5U	7.8U	14U	2.2U	7.4U	5.6U	60	6.2U	1.3UJ	1.6U	4.9U
Mn	µg/L	0.077U	0.066U	1.6	0.86	0.23U	0.097U	0.17U	0.16U	4	0.41U	0.7U	0.1U	0.11U
Mo	µg/L	22	21	12	23	23	23	18	19	26	21	24	25	31
Se	µg/L	46	39	25	21	33	34	47	29	45	40	50	25	86
U	µg/L	490	520J	590	620	660	570	860	700	910	1100	1000	690	940
V	µg/L	0.47	0.41J	0.57J	0.1U	0.21J	0.21U	0.84J	0.76J	0.45	0.38	0.099U	0.45J	0.36
Radiological														
Alpha[d]	pCi/L	305	252	498	--	--	--	--	--	--	--	--	--	--
Alpha-U[e]	pCi/L	0[f]	0[f]	92.7	--	--	--	--	--	--	--	--	--	--
Beta	pCi/L	124	122	105	--	--	--	--	--	--	--	--	--	--
U	µg/L	490	520J	590	620	660	570	860	700	910	1100	1000	690	940
U-234	pCi/L	--	--	--	--	--	--	--	--	--	--	--	--	--
U-238	pCi/L	--	--	--	--	--	--	--	--	--	--	--	--	--

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- P92-07[a,b]

Analyte	Unit	01/12/00	04/14/00	08/02/00
Field Measurements				
Conductivity[c]	µmhos/cm	2760	2610	3930
DO[c]	mg/L	5.48	--	2.33
ORP[c]	mV	132	88	14
pH[c]	s.u.	--	6.89	6.8
Temperature[c]	C	7.6	10.1	13.6
Turbidity[c]	NTU	166	>1000	>1000
Common Ions				
Ca	mg/L	276	276	256
Chloride	mg/L	--	182	172
Fluoride	µg/L	--	319	390
Hardness	mg/L	1000	992	917
K	mg/L	1.90	1.87	1.66
Mg	mg/L	75.5	73.6	67.5
Na	mg/L	240	245	234
NO_3+NO_2 as N	µg/L	--	2840	5070
SO_4	mg/L	--	701	772
TDS[c]	mg/L	--	1990J	1920
Metals				
As	µg/L	0.4U	0.2U	0.3U
Fe	µg/L	8.9U	8.2	9.1U
Mn	µg/L	17	12.9	5.8
Mo	µg/L	0.44	3.5	2.9
Se	µg/L	0.88	0.93	1.4
U	µg/L	68.6	85.6	66.3
V	µg/L	8.1	0.4U	1.3U
Radiological				
Alpha[d]	pCi/L	--	37.8J	--
Alpha-U[e]	pCi/L	--	0[f]	--
Beta	pCi/L	--	19.8	--
U	µg/L	68.6	85.6	66.3

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- P92-09[a,b]

Analyte	Unit	01/11/00	04/13/00	07/28/00	11/01/00	04/10/01
Field Measurements						
Alkalinity	mg/L	600	575	441	511	385
Conductivity[c]	µmhos/cm	2710	2720	1820	660	2780
DO[c]	mg/L	2.47	3.85	4.1	--	7.9
ORP[c]	mV	9	59	-25	46	59
pH[c]	s.u.	--	6.87	6.82	7.07	6.96
Temperature[c]	C	9.1	8.7	11.3	11	7.2
Turbidity[c]	NTU	2.15	1.07	0.55	17.7	4.74
Common Ions						
Ca	mg/L	217	226	243	256	208
Chloride	mg/L	105	112	146	138	162
Fluoride	µg/L	466	491	492	508	459
Hardness	mg/L	1010	1050	1110	1140	939
K	mg/L	1.45	1.29	1.31	1.52	1.18
Mg	mg/L	113	117	121	122	102
Na	mg/L	269	267	276	286	268
NO_3+NO_2 as N	µg/L	9720J	8830	8650	9390J	5490
SO_4	mg/L	740	814	971	934	969
TDS[c]	mg/L	2040J	2160	2340	2310	2220
Metals						
As	µg/L	0.4U	0.28	0.3U	0.2U	0.5U
Fe	µg/L	8.9U	7.4U	9.1U	11.7U	1.0U
Mn	µg/L	20.1	15.5	1.5U	36.5	0.62
Mo	µg/L	18	15.1	14	15	17.7
Se	µg/L	9	7.8	10.8	9.9	9.8
U	µg/L	60	55.5	54.9	59.8	53.7
V	µg/L	1.7	0.4U	1.3U	1.3U	0.42
Radiological						
Alpha[d]	pCi/L	25.6	18.1J	41.8	28.9J	21.9
Alpha-U[e]	pCi/L	0[f]	0[f]	4.1	0[f]	0[f]
Beta	pCi/L	21.1	19.8	22.9	15.8	11.2
U	µg/L	60	55.5	54.9	59.8	53.7

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- PW-10[a,b]

Analyte	Unit	01/29/01	07/19/01	10/16/01	04/02/02	07/10/02	10/01/02	04/08/03	07/09/03	10/06/03	04/14/04	04/08/08[c]	10/08/08	04/08/09
Field Measurements														
Alkalinity	mg/L	--	280	316	298	276	289	316	--	360	269	--	290	280
Conductivity[c]	µmhos/cm	3600	2930	2530	2600	2337	3786	2190	2247	2100	1976	--	2005	2769
DO[c]	mg/L	--	--	--	--	--	--	--	--	--	--	--	4.14	--
ORP[c]	mV	173	--	--	137	--	--	93	23	43.4	--	--	91.0	-70
pH[c]	s.u.	6.9	6.36	6.94	6.64	7	6.88	6.99	6.67	6.8	6.88	--	6.60	6.97
Temperature[c]	C	--	19.2	14.2	13.4	16.72	13.1	13.9	29	14.2	11.46	--	14.10	10.94
Turbidity[c]	NTU	172	30.2	95.9	306	147	46.7	1.64	6.05	879	--	--	116.0	98.3
Common Ions														
Ca	mg/L	331	291	244	257	225	240	238	220	211	320	270	210	300J
Chloride	mg/L	--	89.2	94.5	81.3	75.0	73.9	86.6	85.1	78.0	82.0	110	68.0	69.0
Fluoride	µg/L	--	627	582	468	330J	331	17.2UJ	176J	328	360.	300.	820.	440.
Hardness	mg/L	1100J	977	846	899	806	841	838	771	736	1070	917	710	1000J
K	mg/L	18.2	19.0	22.2	20.5	19.8	20.0	19.1	17.3	18.2	27.0	21.0	21.0J	22.0J
Mg	mg/L	66.8J	60.8	57.6	62.4	59.4	58.6	59.3	53.9	50.8	66.0	59.0	45.0	62.0
Na	mg/L	371	355	266	231	214	248	203	185	176	140	140	140	130J
NO_3+NO_2 as N	µg/L	--	16200	11000	9270J	7340	6910	8050	3860	2680	4000.	3400.	1300.	1200.
SO_4	mg/L	--	1120	1070	997	899	927	861	783	680	740	790	610	760
Metals														
As	µg/L	0.2U	2	4.8	4.2	3.9	5.6	6.10	7.00	9.10	6.4	11	7.2	7.1
Fe	µg/L	26.6	66.8	20.5	1U	11.6	0.8U	1.30U	54.6	0.800U	9.8U	6500	69	19
Mn	µg/L	199	79.6	22	23.9	29.7	14	5.60	6.50	6.50	12	350	49	9.8
Mo	µg/L	74.1	63.3	93.7	83.3	83.5	91.5	87.2	90.9	93.2	91	98	120	100
Se	µg/L	56	85	59.1	112	91.5	92.3	137	87.2	117	100	50	25	50
U	µg/L	799	711	719	714	811	828	794	869	917	1000	1100	960	1100
V	µg/L	8.6	59.7	179	138	115	191	218	228	266	240	280	240	250
Radiological														
Alpha[d]	pCi/L	--	--	587	578	--	615	492J	558J	559	663	--	--	--
Alpha-U[e]	pCi/L	--	--	93.0	87.5	--	46.2	0[f]	0[f]	0[f]	0[f]	--	--	--
Beta	pCi/L	--	--	153	191	--	127	203	187	141	260	--	--	--
U	µg/L	799	711	719	714	811	828	794	869	917	1000	1100	960	1100
U-234	pCi/L	238	225J	--	--	--	--	--	--	--	--	--	--	--
U-238	pCi/L	253	263J	--	--	--	--	--	--	--	--	--	--	--

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- PW-10[a,b]

Analyte	Unit	10/08/09	04/20/10
Field Measurements			
Alkalinity	mg/L	339	275
Conductivity[c]	µmhos/cm	2004	1920
DO[c]	mg/L	--	--
ORP[c]	mV	--	--
pH[c]	s.u.	7.22	7.33
Temperature[c]	C	12.67	9.4
Turbidity[c]	NTU	183	893
Common Ions			
Ca	mg/L	270J	280
Chloride	mg/L	73.0	80.0
Fluoride	µg/L	450.	470.
Hardness	mg/L	892J	950
K	mg/L	18.0J	21.0J
Mg	mg/L	53.0	61.0
Na	mg/L	140J	160
NO_3+NO_2 as N	µg/L	1200.	5800.
SO_4	mg/L	740	810
Metals			
As	µg/L	4.6	6
Fe	µg/L	21	10
Mn	µg/L	40	17
Mo	µg/L	100	92
Se	µg/L	36	78
U	µg/L	950	940
V	µg/L	170	190
Radiological			
Alpha[d]	pCi/L	--	--
Alpha-U[e]	pCi/L	--	--
Beta	pCi/L	--	--
U	µg/L	950	940
U-234	pCi/L	--	--
U-238	pCi/L	--	--

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- PW-16[a,b]

Analyte	Unit	04/11/01	07/19/01	10/16/01	01/29/02	04/03/02	07/11/02	10/01/02	04/09/03	10/07/03	04/15/04
Field Measurements											
Alkalinity	mg/L	69	101	99	93	124	106	121	156	188	170
Conductivity[c]	µmhos/cm	1930	1832	1635	1605	1611	1357	1368	1773	1483	1361
DO[c]	mg/L	0	--	--	--	--	--	--	--	--	1.41
ORP[c]	mV	120	54	--	--	-49	--	--	-72	-107	-91.7
pH[c]	s.u.	6.52	6.35	6.94	7.19	7.12	7	7.07	7.12	7.06	7.25
Temperature[c]	C	8.3	12.8	14.3	8.7	10.4	12.68	15.8	9.6	14.2	10.85
Turbidity[c]	NTU	2.25	0.81	1.08	2.5	2.61	1.1	2.16	3.61	3.84	2.15
Common Ions											
Ca	mg/L	91.7	95.8	76.5	86.0	106	78.3	68.8	164	116	190
Chloride	mg/L	105	102	94.4	74.6	77.5	71.4	68.8	9.92J	84.4	81.0
Fluoride	µg/L	149	216	223	134	108J	25.1U	25.1U	366	180	200.U
Hardness	mg/L	454	429	392	440	520	400	379	659	520	726
K	mg/L	17.1	16.1	18.0	17.5	16.5	16.5	17.3	16.0	16.4	20.0
Mg	mg/L	54.6	46.2	48.9	54.7	62.0	49.7	50.2	60.7	55.9	61.0
Na	mg/L	237	228	175	154	150	157	147	155	141	110
NO_3+NO_2 as N	µg/L	1140	195	111	335	353	19.2	29.4	632J	4.50U	30.
SO_4	mg/L	501	727	652	612	606	510	488	73.2	544	530
TDS[c]	mg/L	1440	1320	--	--	--	--	--	--	--	--
Metals											
As	µg/L	3	5	6.2	4	2.4	2.3	3.5	1.50	3.60	3.2
Fe	µg/L	8.4	0.8U	18.1	0.8U	1U	25.7	79.8	3170	5940	13000
Mn	µg/L	1190	1990	1650	844	693	871	1040	1430	698	1800
Mo	µg/L	13.2	24.8	12.6	5	5.8	3	4.1	7.70	1.70U	6
Se	µg/L	1.1	1.4	0.56	0.55	0.94	0.25	0.18	10.00	0.320	0.48
U	µg/L	5.9	20.7	28.4	32.3	52.9	20.3	20.5	33.8	24.4	12J
V	µg/L	90.4	101	70.8	52	37.1	25.2	17.8	26.5	10.00	0.96
Radiological											
Alpha[d]	pCi/L	10.3U	11.2UJ	9.6	14.5	29.5J	8.6U	8.9	23.7J	16.7J	7.1
Alpha-U[e]	pCi/L	10.3U	11.2UJ	0[f]	0[f]	0[f]	8.6U	0[f]	0.48J	0[f]	0[f]
Beta	pCi/L	18.1	13.6	18.1	21.3	36.3	19.6	18.7	22.2	23.7	14.3
U	µg/L	5.9	20.7	28.4	32.3	52.9	20.3	20.5	33.8	24.4	12J
U-234	pCi/L	--	6.2J	--	--	--	--	--	--	--	--
U-238	pCi/L	--	8.2J	--	--	--	--	--	--	--	--

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- PW-17[a,b]

Analyte	Unit	04/13/00	08/15/00	10/18/00	01/29/01	04/11/01	07/19/01	10/16/01	01/29/02	04/02/02	07/10/02	10/01/02	01/14/03	04/08/03
Field Measurements														
Alkalinity	mg/L	--	403	--	281	248	252	318	273	217	272	309	275	254
Conductivity[c]	µmhos/cm	--	3590	--	3230	2960	2720	2600	--	2548	2411	2403	2275	2197
DO[c]	mg/L	--	--	--	--	1	--	--	--	--	--	--	--	--
ORP[c]	mV	--	--	--	191	158	--	--	--	122	--	--	--	114
pH[c]	s.u.	--	6.52	6.48	6.7	6.44	6.02	6.9	--	6.6	6.33	6.48	6.95	6.81
Temperature[c]	C	--	15	--	8.7	9.7	12.8	13	--	12.75	15.75	12.7	10.6	17.1
Turbidity[c]	NTU	--	>1000	--	>1000	56.8	47.1	19.2	--	824	--	204	--	1.45
Common Ions														
Ca	mg/L	--	--	452	296	280	254	243	246	257	235	246	232	237
Chloride	mg/L	--	--	109	101	102	85.9	93.8	76.7	83.6	73.9	75.1	67.9	8.59J
Fluoride	µg/L	--	--	332	452	342	370	643	320J	909	418J	225	25.1U	17.2UJ
Hardness	mg/L	--	--	1580	1040J	988	893	852	867	916	847	868	817	835
K	mg/L	--	--	32.2	25.8	22.6	22.8	23.1	23.0	22.4	21.3	21.6	20.6	18.7
Mg	mg/L	--	--	109	74.1J	70.2	62.8	59.6	61.4	66.5	63.3	61.7	57.7	59.0
Na	mg/L	--	--	485	356	320	317	266	248	229	222	262	228	205
NO_3+NO_2 as N	µg/L	--	--	33100	24300	21800	15700	11000	10200	9300J	8410	7610	5830	8380
SO_4	mg/L	--	--	1670	1410	618	1120	1100	1060	1010	977	998	894	89.6
TDS[c]	mg/L	--	--	--	2740	2570	2160	--	--	--	--	--	--	--
Metals														
As	µg/L	2.9	5.4	7.8	6	6.8	7.6	8.4	7.8	8.3	8.8	8.8	9.1	6.70
Fe	µg/L	--	--	101	11U	10	11.9	15.9	0.8U	26.3	8.5	0.8U	2.9U	1.30U
Mn	µg/L	--	--	420	537	141	112	211	33.9	11.2	22.8	3.9	2.5	7.60
Mo	µg/L	124	86.1	94.9	116	91	86.5	98.5	85.6	91.3	90.9	94.3	96.3	88.5
Se	µg/L	18.1	5.9	9.4	15.5	48.4	44	38.9	54.5	83.4	76.3	77.2	129	139
U	µg/L	902	916	973	833	727	761	759	686	753	881	836	803	792
V	µg/L	121	211	273	221	219	232	292	269	264	254	293	297	254
Radiological														
Alpha[d]	pCi/L	--	--	--	--	509	492J	536	374	548	708	642	574	481J
Alpha-U[e]	pCi/L	--	--	--	--	9.6	0[f]	14.6	0[f]	30.7	103	67.7	22.3	0[f]
Beta	pCi/L	--	--	--	--	266	101	148	101	188	234	128	184	205
U	µg/L	902	916	973	833	727	761	759	686	753	881	836	803	792
U-234	pCi/L	--	--	--	249	--	247J	--	--	--	--	--	--	--
U-238	pCi/L	--	--	--	1480	--	276J	--	--	--	--	--	--	--

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- PW-17[a,b]

Analyte	Unit	07/09/03	10/06/03	01/22/04	04/14/04	10/04/04	04/06/05	10/04/05	04/04/06	10/03/06	04/10/07	10/09/07	04/08/08[c]	10/08/08
Field Measurements														
Alkalinity	mg/L	--	309	283	270	292	256	279	304	307	--	316	190	280
Conductivity[c]	µmhos/cm	2233	1973	1931	1905	1754	2170	1479	1842	1972	--	1792	2096	1939
DO[c]	mg/L	2.86	--	--	--	2.40	--	--	6.98	--	--	--	--	2.72
ORP[c]	mV	-71	-44.1	-18	--	51	25.8	150	154.3	94	--	-73	81.0	114.6
pH[c]	s.u.	7.08	7	6.83	7.00	6.88	6.96	7.00	7.13	6.76	--	7.35	6.55	6.86
Temperature[c]	C	36.6	15.7	9.59	13.91	13.2	10.04	10.9	11.99	12.3	--	13.5	9.80	14.30
Turbidity[c]	NTU	74.4	526	--	--	>1000	--	131	25.2	173	--	231	54.7	50.4
Common Ions														
Ca	mg/L	225	209	210	300	210	240	180	220	330	320	260	270	220
Chloride	mg/L	84.7	77.3	70.0	81.0	44.0	99.0	46.0	58.0	55.0	99.0	51.0	100	58.0
Fluoride	µg/L	93.0J	318	400.	440.	420.	220.	420.	400.	580.	200.U	380.	290.	840.
Hardness	mg/L	789	734	726	1010	722	826	614	759	1090	1080	896	934	747
K	mg/L	17.7	19.1	25.0J	27.0	23.0	23.0	18.0	22.0	27.0	23.0	25.0	21.0	22.0J
Mg	mg/L	55.2	51.5	49.0	64.0	48.0	55.0	40.0	51.0	65.0	68.0	60.0	63.0	48.0
Na	mg/L	197	179	160	140	130	150	120	130	160	140	130	130	130
NO_3+NO_2 as N	µg/L	4360	2820	1700.	4000.	600.	6200.	2100.	2400.	1500.	10.U	1200.	3300.	1700.
SO_4	mg/L	798	722	760	730	620	790	380	730	790	500	780	800	640
TDS[c]	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--
Metals														
As	µg/L	7.30	10.00	9.5J	7.9	11	8.7	10	8.3	9.4	9.5	7.3	10	10
Fe	µg/L	781	128	6.7U	9.8U	7U	7.5U	7.8U	14U	2.2U	440	5.6U	2600	3.1U
Mn	µg/L	37.4	72.6	3.6	0.077U	69	8.1	9.4	3.1	8.5	53	200	220	0.2U
Mo	µg/L	90.3	98.9	98J	87	110	57	140	110	120	120	120	110	130
Se	µg/L	79.1	119	50J	98	27	40	14	43	32	46	39	58	27
U	µg/L	866	911	930	990	930J	1000	770	1200	1000	1400	1200	1300	1100
V	µg/L	229	308	320	280	310	250	330	310	270	350J	320J	300	320
Radiological														
Alpha[d]	pCi/L	553	663	472	705	647	705	--	--	--	--	--	--	--
Alpha-U[e]	pCi/L	0[f]	37.1	0[f]	24.9	8.1	18.0	--	--	--	--	--	--	--
Beta	pCi/L	149	144	136	253	237	148	--	--	--	--	--	--	--
U	µg/L	866	911	930	990	930J	1000	770	1200	1000	1400	1200	1300	1100
U-234	pCi/L	--	--	--	--	--	--	--	--	--	--	--	--	--
U-238	pCi/L	--	--	--	--	--	--	--	--	--	--	--	--	--

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- PW-17[a,b]

Analyte	Unit	04/08/09	10/06/09	04/20/10
Field Measurements				
Alkalinity	mg/L	274	320	274
Conductivity[c]	µmhos/cm	1831	2006	1850
DO[c]	mg/L	--	8.33	--
ORP[c]	mV	-58	46.5	--
pH[c]	s.u.	6.99	6.82	7.12
Temperature[c]	C	10.64	11.11	8.9
Turbidity[c]	NTU	58.7	--	31.0
Common Ions				
Ca	mg/L	300J	270J	270
Chloride	mg/L	61.0	66.0	78.0
Fluoride	µg/L	430.	530.	490.
Hardness	mg/L	1020J	913J	934
K	mg/L	24.0J	20.0J	22.0J
Mg	mg/L	65.0	58.0	63.0
Na	mg/L	140J	130J	140
NO_3+NO_2 as N	µg/L	1600.	1400.	6300.
SO_4	mg/L	760	780	790
TDS[c]	mg/L	--	--	--
Metals				
As	µg/L	9.4	8.4	8
Fe	µg/L	1.3UJ	48	4.9U
Mn	µg/L	4.1	12	2.8
Mo	µg/L	89	120	98
Se	µg/L	49	37	88
U	µg/L	960	1100	980
V	µg/L	240	320	250
Radiological				
Alpha[d]	pCi/L	--	--	--
Alpha-U[e]	pCi/L	--	--	--
Beta	pCi/L	--	--	--
U	µg/L	960	1100	980
U-234	pCi/L	--	--	--
U-238	pCi/L	--	--	--

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- PW-18[a,b]

Analyte	Unit	04/11/01	07/11/01	10/16/01	01/29/02	04/01/02	07/11/02	10/01/02	04/08/03	07/08/03
Field Measurements										
Alkalinity	mg/L	309	338	357	317	355	363	375	341	384
Conductivity[c]	µmhos/cm	2960	2300	2300	1915	2043	1967	2044	2072	1922
DO[c]	mg/L	4.1	--	--	0.92	--	--	--	--	--
ORP[c]	mV	219	--	--	11.1	151	--	--	194	148
pH[c]	s.u.	6.49	6.49	6.28	6.52	6.44	6.65	6.55	6.55	6.82
Temperature[c]	C	6.6	15	13.8	5.63	9.87	14.4	14.7	9	18.2
Turbidity[c]	NTU	219	3.64	0.85	4	9.28	3.38	3.13	1.67	1.81
Common Ions										
Ca	mg/L	308	292	267	260	266	267	264	281	287
Chloride	mg/L	179	144	124	85.0	83.9	87.9	85.3	11.8	101
Fluoride	µg/L	292	357	741	253J	289	277	229	17.2UJ	347
Hardness	mg/L	1100	1040	945	925	948	929	938	983	992
K	mg/L	14.6	15.5	12.8	9.43	9.07	9.38	10.1	8.14	8.92
Mg	mg/L	81.0	74.4	67.5	66.9	69.0	63.7	67.6	68.3	66.8
Na	mg/L	240	219	161	124	125	117	135	134	137
NO_3+NO_2 as N	µg/L	14700	6200	3750	2830	2370J	2440	2160	5960	3440
SO_4	mg/L	477	943	876	763	727	692	706	74.6	730
TDS[c]	mg/L	2300	2090	--	--	--	--	--	--	--
Metals										
As	µg/L	3.6	5.5	5	4.1	4.4	6	6	4.40	5.70
Fe	µg/L	1U	4	9.5	0.8U	1U	8.9	0.8U	1.30U	1U
Mn	µg/L	28.1	47.2	74.1	1.9	0.1U	1.1	3.2	0.100U	0.550
Mo	µg/L	25.1	33.1	32.1	19.4	24.1	31.2	32.9	20.2	31.6
Se	µg/L	151	104	82.6	73.6	82.6	75.8	72.6	98.6	63.6
U	µg/L	373	339	314	309	306	339	338	281	381
V	µg/L	196	266	272	200	205	278	308	222	280
Radiological										
Alpha[d]	pCi/L	179	148J	143	180	179	189	201	93.0J	192
Alpha-U[e]	pCi/L	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]
Beta	pCi/L	126	70.2	57.9	15.7U	73.8	87.6	49.6	80.0	66.4
U	µg/L	373	339	314	309	306	339	338	281	381

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- PW-20[a,b]

Analyte	Unit	04/11/01	07/11/01	10/16/01	01/29/02	04/01/02	07/11/02	10/01/02	04/08/03
Field Measurements									
Alkalinity	mg/L	420	435	351	312	328	343	380	338
Conductivity[c]	µmhos/cm	2870	2480	2290	1854	2025	1968	2046	2050
DO[c]	mg/L	2.1	--	--	2	--	--	--	--
ORP[c]	mV	129	--	--	-25	133	--	--	130
pH[c]	s.u.	6.47	6.5	6.25	6.51	6.51	6.66	6.56	6.8
Temperature[c]	C	6.8	13.7	14.2	6.34	10.98	14.05	14.7	8.6
Turbidity[c]	NTU	5	2.61	1.58	6.5	8.24	4.61	2.68	2.92
Common Ions									
Ca	mg/L	303	289	263	253	260	259	263	281
Chloride	mg/L	176	145	74.8	78.1	81.1	86.9	85.2	11.9
Fluoride	µg/L	293	384	253	244J	226	363	218	17.2UJ
Hardness	mg/L	1090	1030	938	902	924	924	932	983
K	mg/L	14.4	15.1	13.1	9.29	8.59	10.4	10.1	8.18
Mg	mg/L	80.7	74.1	68.3	65.7	66.8	67.4	66.8	68.4
Na	mg/L	238	223	164	117	118	131	134	134
NO_3+NO_2 as N	µg/L	14400	6470	569	2470	2310	2450	2130	6060
SO_4	mg/L	473	949	878	750	711	684	709	75.4
TDS[c]	mg/L	2250	2080	--	--	--	--	--	--
Metals									
As	µg/L	4	6.2	5.6	4.3	4.6	6.6	6.7	4.20
Fe	µg/L	13.7	2.3	11.3	0.8U	1U	12.7	0.8U	1.30U
Mn	µg/L	15.5	24.4	42.4	1.7	2.5	0.1U	1.3	0.540
Mo	µg/L	26.6	28.8	32.3	20.9	25.3	30.1	28.9	22.2
Se	µg/L	152	110	82.9	67.4	71.8	79.2	71.5	101
U	µg/L	375	335	315	310	318	343	330	284
V	µg/L	207	259	278	197	195	273	309	207
Radiological									
Alpha[d]	pCi/L	189	168J	152	169	177J	183	185	108J
Alpha-U[e]	pCi/L	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]
Beta	pCi/L	132	66.2	71.9	10U	98.2	93.8	56.0	77.0
U	µg/L	375	335	315	310	318	343	330	284

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- PW-22[a,b]

Analyte	Unit	04/11/01	07/11/01	10/16/01	01/29/02	04/03/02	07/11/02	10/02/02	04/08/03	10/07/03	04/15/04
Field Measurements											
Alkalinity	mg/L	306	362	371	362	310	361	382	358	387	350
Conductivity[c]	µmhos/cm	2300	2500	2310	2090	1993	2002	2069	2107	2094	1812
ORP[c]	mV	75	--	--	--	-42	--	--	56	85	--
pH[c]	s.u.	7.35	6.53	6.56	4.35	6.75	6.66	6.57	6.77	6.68	6.78
Temperature[c]	C	7.5	13.7	14.4	8	9.7	14.03	14.5	9.3	14.7	9.49
Turbidity[c]	NTU	568	5.74	3.13	6.1	4.71	3.73	4.18	4.79	3.73	4.72
Common Ions											
Ca	mg/L	305	292	264	251	262	261	263	286	281	330
Chloride	mg/L	178	154	126	83.6	80.9	89.2	86.0	11.3J	110	120
Fluoride	µg/L	393	359	760	26.2U	234J	260	253	17.2UJ	294	380.
Hardness	mg/L	1090	1040	940	906	945	925	931	1010	992	1110
K	mg/L	11.6	13.5	13.1	10.6	9.10	9.68	10.4	8.15	9.29	13.0
Mg	mg/L	80.3	76.2	68.2	67.8	70.7	66.4	66.5	72.4	70.6	70.0
Na	mg/L	227	220	167	132	112	125	139	134	145	120
NO_3+NO_2 as N	µg/L	14000	6660	3840	3550	2410	2490	2100	5590	3550	5700.
SO_4	mg/L	480	974	867	800	714	702	464	78.0	784	690
TDS[c]	mg/L	2310	2110	--	--	--	--	--	--	--	--
Metals											
As	µg/L	2.6	3.7	3.8	3.7	3.3	4.1	4.6	2.90	4.50	3.5
Fe	µg/L	1.0U	3.8	12	0.8U	1U	13.6	0.8U	1.30U	0.800U	9.8U
Mn	µg/L	35.6	32.5	42.3	2.3	6.6	4.7	4.6	4.00	14.8	0.077U
Mo	µg/L	24.6	27	33	21.4	26.8	30	31.4	23.0	27.8	24
Se	µg/L	162	108	76	74	82.2	80.5	74.5	104	67.5	61
U	µg/L	379	339	321	286	362	350	331	325	335	290
V	µg/L	172	210	244	194	178	229	264	194	247	210
Radiological											
Alpha[d]	pCi/L	95.2	166J	155	174	187J	195	179	141J	161J	186
Alpha-U[e]	pCi/L	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]
Beta	pCi/L	83.1	60.4	60.1	15.6U	120	97.2	54.4	83.0	84.3	79.0
U	µg/L	379	339	321	286	362	350	331	325	335	290

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- PW-23[a,b]

Analyte	Unit	04/11/01	07/19/01	10/16/01	01/29/02	04/02/02	07/10/02	10/01/02	04/08/03	10/06/03	04/14/04
Field Measurements											
Alkalinity	mg/L	369	375	314	--	354	273	339	288	335	294
Conductivity[c]	µmhos/cm	3720	3370	3300	3200	3240	2996	3113	2572	2131	2104
DO[c]	mg/L	2.1	--	--	--	--	--	--	--	--	--
ORP[c]	mV	157	--	--	91	117	--	--	181	83.6	--
pH[c]	s.u.	6.58	5.92	7.04	6.64	6.56	6.76	6.79	6.79	6.99	6.79
Temperature[c]	C	10	12.9	13.2	7.6	13.3	22.59	12	11.1	19.9	11.29
Turbidity[c]	NTU	108	464	1.24	>1000	378	10.9	993	4.92	232	1.00
Common Ions											
Ca	mg/L	242	330	317	287	323	257	283	260	215	280
Chloride	mg/L	113	98.3	106	--	95.7	86.0	90.5	82.3	75.2	76.0
Fluoride	µg/L	335	477	473	--	487	376J	482	17.2UJ	250	390.
Hardness	mg/L	859	1160	1120	1020	1150	965	1000	912	761	959
K	mg/L	21.7	25.9	26.1	23.7	24.5	23.8	22.4	19.2	18.8	28.0
Mg	mg/L	61.9	81.6	78.9	73.5	83.5	78.4	71.9	63.9	54.5	63.0
Na	mg/L	286	424	345	312	347	303	366	297	245	190
NO_3+NO_2 as N	µg/L	29200	23800	20400	--	18300J	16600	14500	11000	5420	4500.
SO_4	mg/L	1120	1510	1540	--	1410	1320	1390	1170	904	870
TDS[c]	mg/L	3180	2200	--	--	--	--	--	--	--	--
Metals											
As	µg/L	6.8	8.9	9	8.8	9.2	9.9	9.5	7.90	11.8	8.9
Fe	µg/L	1U	17.1	12.6	0.8U	37.8	18.1	0.8U	1.30U	0.800U	9.8U
Mn	µg/L	437	570	748	615	266	315	229	2.80	3.90	0.077U
Mo	µg/L	91.3	93.8	108	92.9	104	106	109	96.8	116	94
Se	µg/L	51	32	19.6	29.3	49.1	41.8	39.3	96.4	92.5	64
U	µg/L	558	1040	922	891	996	1030	929	877	826	990
V	µg/L	303	296	350	275	308	302	317	294	358	320
Radiological											
Alpha[d]	pCi/L	830	428J	795	--	667	708	--	548J	725	688
Alpha-U[e]	pCi/L	447	0[f]	162	--	0[f]	0.39	--	0[f]	158	7.9
Beta	pCi/L	393	204	208	--	260	272	--	196	132	251
U	µg/L	558	1040	922	891	996	1030	929	877	826	990
U-234	pCi/L	--	353J	--	--	--	--	--	--	--	--
U-238	pCi/L	--	382J	--	--	--	--	--	--	--	--

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- PW-28[a,b]

Analyte	Unit	10/18/00	01/30/01	04/11/01	07/11/01	10/16/01	01/29/02	04/01/02	07/11/02	10/01/02	04/08/03	10/07/03	04/15/04	10/04/04
Field Measurements														
Alkalinity	mg/L	360	358	309	320	329	368	310	347	358	346	389	358	395
Conductivity[c]	µmhos/cm	3560	3530	2800	2700	2600	2440	2380	2173	2181	2385	2340	2089	2104
DO[c]	mg/L	2.3	3	2.8	--	--	--	--	--	--	--	--	--	0.97
ORP[c]	mV	74	148	79	--	--	--	157	--	--	190	15	--	-104
pH[c]	s.u.	6.55	6.64	7.27	6.39	6.24	6.6	6.31	6.58	6.48	6.62	6.59	6.76	6.58
Temperature[c]	C	15	8.7	8.8	13	13.2	8.8	10.85	12.88	13.9	10.4	13.9	10.62	13.2
Turbidity[c]	NTU	132	89.7	3.73	4.34	4.63	3.1	9.98	2.01	5.6	3.2	4.79	1.05	2.18
Common Ions														
Ca	mg/L	444	364	371	340	289	279	278	268	266	309	301	430	300
Chloride	mg/L	225	240	219	178	149	118	117	95.8	95.7	14.2J	134	140	78.0
Fluoride	µg/L	429	463	451	491	640	353	487	405	373	17.2UJ	358	470.	480.
Hardness	mg/L	1640	1370J	1410	1280	1090	1050	1050	1020	977	1140	1100	1480	1060
K	mg/L	13.5	11.5	10.1	9.31	8.24	7.27	6.64	7.07	7.23	6.02	6.07	11.0	8.30
Mg	mg/L	130	113J	117	104	89.3	85.5	87.5	85.4	76.0	90.5	84.2	99.0	75.0
Na	mg/L	300	266	268	245	193	167	167	160	154	167	169	140	120
NO_3+NO_2 as N	µg/L	17300	15700	15800	7820	5170	4530	3760J	3600	3020	6670	4760	6700.	2300.
SO_4	mg/L	1480	1350	687	1200	1090	925	868	813	772	90.6	920	850	730
TDS[c]	mg/L	--	2870	2920	2540	--	--	--	--	--	--	--	--	--
Metals														
As	µg/L	2	1.4	1.7	2	1.9	2	1.9	2	1.8	1.60	2.30	2	2.1
Fe	µg/L	11.7U	11U	70	4.7	11.2	0.8U	1U	9.5	0.8U	1.30U	0.800U	200	7U
Mn	µg/L	44.6	36.5	1.1	1.9	0.92	2.7	7.5	1.7	1.1	0.570	1.20	3.5	0.066U
Mo	µg/L	22.2	22.4	17.9	15.3	13.9	9.9	13.8	17.5	17.4	12.9	13.3	11	18
Se	µg/L	128	142	131	98.3	70.6	59.6	65.6	58	60.4	73.9	60.1	48	28
U	µg/L	324	370	304	247	206	216	233	263	256	270	246	250	220J
V	µg/L	221	179	172	194	210	188	187	205	225	195	217	200	210
Radiological														
Alpha[d]	pCi/L	--	187	59.4	99.8J	99.1	98.0	134	123	139	111J	119J	172	138
Alpha-U[e]	pCi/L	--	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0.25	0[f]
Beta	pCi/L	--	61.3	34.1	46.0	37.0	39.2	59.5	73.6	42.2	62.0	65.6	68.0	52.2
U	µg/L	324	370	304	247	206	216	233	263	256	270	246	250	220J
U-234	pCi/L	--	123	--	--	--	--	--	--	--	--	--	--	--
U-238	pCi/L	--	124	--	--	--	--	--	--	--	--	--	--	--

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- PW-28[a,b]

Analyte	Unit	04/05/05	10/04/05	04/27/06	10/03/06	04/11/07	10/10/07	04/08/08[c]	10/08/08	04/08/09	10/07/09	04/20/10
Field Measurements												
Alkalinity	mg/L	327	344	372	362	363	338	325	382	338	400	369
Conductivity[c]	µmhos/cm	3586	2215	2269	2363	2396	2173	3255	1088	2650	2387	3070
DO[c]	mg/L	--	3.89	0.93	1.26	2.94	--	0.71	1.96	--	--	--
ORP[c]	mV	203.5	-53	51.0	25	-57.9	--	163.7	2.1	--	--	--
pH[c]	s.u.	6.71	6.67	6.74	6.52	6.67	6.94	6.60	6.76	6.74	6.70	6.83
Temperature[c]	C	9.34	13.6	10.53	13.7	9.23	13.1	10.17	12.85	10.40	13.00	9.2
Turbidity[c]	NTU	2.24	3.67	0.79	2.79	4.82	4.92	2.25	4.89	4.97	4.20	4.90
Common Ions												
Ca	mg/L	480	350	350	440	360	340	430	300	430J	340J	450
Chloride	mg/L	230	140	150	120	160	110	250	120	160	130	240
Fluoride	µg/L	500.U	350.	330.	570.	350.	610.	500.U	690.	530.	480.	430.
Hardness	mg/L	1650	1200	1230	1490	1270	1190	1530	1050	1480J	1180J	1620
K	mg/L	11.0	8.50	9.30	9.30	7.20	8.40	8.80	8.30J	8.80J	7.10J	9.90J
Mg	mg/L	110	80.0	87.0	95.0	90.0	82.0	110	72.0	99.0	80.0	120
Na	mg/L	230	150	150	180	150	150	210	160	180J	160J	220
NO_3+NO_2 as N	µg/L	20000.	6100.	10000.	6500.	11000.	9400.	29000.	8900.	11000.	5500.	35000.
SO_4	mg/L	1200	740	900	910	910	900	1300	860	960	850	1300
TDS[c]	mg/L	--	--	--	--	--	--	--	--	--	--	--
Metals												
As	µg/L	1.7	1.7	1.3	1.6	2.3	2	1.6	2.2	2	2.2	2.1
Fe	µg/L	7.5U	7.8U	14U	2.2U	7.4U	5.6U	48	3.9	3.7U	1.6U	4.9U
Mn	µg/L	2.4	19	0.23U	0.097U	0.17U	0.16U	1.1	0.2U	1.9	0.1U	0.54
Mo	µg/L	9	17	15J	16	18	16	18	16	14	16	16
Se	µg/L	65	29	42	32	44	29	62	28	38	27	76
U	µg/L	240	170	210	200	250	190	260	200	200	180	260
V	µg/L	180	190	150	180	180J	220J	160	190	160	200	170
Radiological												
Alpha[d]	pCi/L	151	--	--	--	--	--	--	--	--	--	--
Alpha-U[e]	pCi/L	0[f]	--	--	--	--	--	--	--	--	--	--
Beta	pCi/L	43.7	--	--	--	--	--	--	--	--	--	--
U	µg/L	240	170	210	200	250	190	260	200	200	180	260
U-234	pCi/L	--	--	--	--	--	--	--	--	--	--	--
U-238	pCi/L	--	--	--	--	--	--	--	--	--	--	--

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- PW99-16[a,b]

Analyte	Unit	10/18/00	01/31/01	04/11/01	07/11/01	10/16/01	01/29/02	04/01/02	07/11/02	10/01/02	01/14/03	04/08/03	07/08/03	10/07/03
Field Measurements														
Alkalinity	mg/L	405	329	356	386	343	380	323	333	362	358	339	409	382
Conductivity[c]	µmhos/cm	3490	3470	3420	2810	2530	2450	2314	2121	2165	2218	2352	2208	2296
DO[c]	mg/L	1.2	3.4	0.4	--	--	--	--	--	--	--	--	--	--
ORP[c]	mV	88	117	209	--	--	--	156	--	--	--	185	202	125
pH[c]	s.u.	6.39	6.75	6.41	6.46	6.49	6.25	6.3	6.6	6.5	6.58	6.68	6.68	6.61
Temperature[c]	C	14.3	8.1	8.4	12.5	13.2	7.3	11.93	13.21	13.4	10.1	10.3	17.1	14.2
Turbidity[c]	NTU	22	4.15	4.4	3.44	1.92	3	2.83	15.4	3.71	4.36	4.19	1.52	2.53
Common Ions														
Ca	mg/L	430	364	372	318	286	272	276	274	262	278	305	297	298
Chloride	mg/L	221	235	216	172	143	106	113	98.5	95.4	104	14.3J	118	125
Fluoride	µg/L	415	421	379	794	564	339	489	409	25.1U	25.1U	361J	100.0	336
Hardness	mg/L	1590	1380J	1410	1190	1070	1010	1030	998	962	1020	1120	1070	1080
K	mg/L	24.3	12.3	11.7	10.5	8.89	7.40	7.49	6.49	6.97	6.73	6.38	6.48	6.56
Mg	mg/L	125	114J	118	95.0	85.4	81.0	83.8	76.2	74.8	80.1	86.8	78.6	81.7
Na	mg/L	295	268	272	241	186	159	159	134	150	148	163	157	163
NO_3+NO_2 as N	µg/L	26000	15100	16000	7450	4900	5550	3570J	3350	2990	4020	6770	3240	4620
SO_4	mg/L	1440	1350	643	1140	1030	852	827	780	774	798	88.8	807	859
TDS[c]	mg/L	--	2820	2840	2430	--	--	--	--	--	--	--	--	--
Metals														
As	µg/L	3.4	2.6	3	3.4	2.9	3.3	3.3	3.5	3.1	3.5	2.40	3.60	3.40
Fe	µg/L	11.7U	11U	1.0U	1.6	0.8U	0.8U	1U	10	0.8U	2.9U	1.30U	1U	0.800U
Mn	µg/L	2.0U	3U	0.10U	0.15	0.51	1.3	0.1U	0.1U	1.6	0.3U	0.100U	0.580	0.200
Mo	µg/L	25.8	26	19.5	17.4	17.2	11.3	16.9	18.4	18.5	6.4U	14.0	18.3	15.3
Se	µg/L	126	140	150	103	72.9	65.4	71.7	60.6	59.8	73.3	82.4	56.2	62.3
U	µg/L	330	387	327	263	218	227	251	272	253	282	272	309	256
V	µg/L	224	207	204	218	231	202	211	226	237	230	202	240	234
Radiological														
Alpha[d]	pCi/L	--	172	134	89.4J	107	144	146	130	145	168	136J	161	120J
Alpha-U[e]	pCi/L	--	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]	0[f]
Beta	pCi/L	--	48.2	104	59.9	46.5	15.5U	67.0	79.3	40.0	60.5	69.0	53.8	58.7
U	µg/L	330	387	327	263	218	227	251	272	253	282	272	309	256
U-234	pCi/L	--	122	--	--	--	--	--	--	--	--	--	--	--
U-238	pCi/L	--	129	--	--	--	--	--	--	--	--	--	--	--

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- PW99-16[a,b]

Analyte	Unit	01/22/04	04/15/04
Field Measurements			
Alkalinity	mg/L	338	357
Conductivity[c]	µmhos/cm	2129	2024
DO[c]	mg/L	4.34	--
ORP[c]	mV	-21	--
pH[c]	s.u.	6.70	6.72
Temperature[c]	C	8.81	10.24
Turbidity[c]	NTU	0.59	3.63
Common Ions			
Ca	mg/L	280	320
Chloride	mg/L	100	140
Fluoride	µg/L	460.	420.
Hardness	mg/L	983	1120
K	mg/L	9.10J	11.0
Mg	mg/L	69.0	77.0
Na	mg/L	140	140
NO_3+NO_2 as N	µg/L	3500.	6700.
SO_4	mg/L	800	820
TDS[c]	mg/L	--	--
Metals			
As	µg/L	3.5J	2.8
Fe	µg/L	6.7U	9.8U
Mn	µg/L	0.043U	0.077U
Mo	µg/L	18J	110
Se	µg/L	41J	50
U	µg/L	250	250
V	µg/L	230	210
Radiological			
Alpha[d]	pCi/L	157	162
Alpha-U[e]	pCi/L	0[f]	0[f]
Beta	pCi/L	36.4	64.7
U	µg/L	250	250
U-234	pCi/L	--	--
U-238	pCi/L	--	--

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R1-M1[a,b]

Analyte	Unit	01/10/00	04/13/00	08/16/00	10/17/00	01/23/01	04/16/01	07/10/01
Field Measurements								
Alkalinity	mg/L	283	225	206	263	235	215	272
Conductivity[c]	µmhos/cm	3180	4480	4400	2940	2500	2300	2170
DO[c]	mg/L	0.44	0.28	0.45	0.26	1.7	0.676	0.713
ORP[c]	mV	133	164	42	76	92	-145	154
pH[c]	s.u.	--	6.17	6.71	6.78	6.45	7.16	6.59
Temperature[c]	C	10.8	9.3	14.4	14.4	9.5	9.9	12.2
Turbidity[c]	NTU	1.22	8.71	8.85	5.25	4.59	3.27	6.39
Common Ions								
Ca	mg/L	--	--	--	--	--	194	207
Chloride	mg/L	--	--	--	--	--	--	82.9
Fluoride	µg/L	--	--	--	--	--	--	385
Hardness	mg/L	--	--	--	--	--	692	733
K	mg/L	--	--	--	--	--	18.9	20.5
Mg	mg/L	--	--	--	--	--	50.3	52.4
Na	mg/L	--	--	--	--	--	224	223
NO_3+NO_2 as N	µg/L	--	--	--	--	--	--	9520
SO_4	mg/L	--	--	--	--	--	--	759
Metals								
As	µg/L	9.4	8.7	12.1	13.6	12.4	9.3	11.3
Fe	µg/L	--	--	--	--	17.7	1.0U	0.7U
Mn	µg/L	--	--	--	--	757	645	634
Mo	µg/L	96J	77.6	83.8	90.8	91.8	83.4	88.9
Se	µg/L	18.9	25.2	3.8	5.5	36.5	68.4	76.7
U	µg/L	706	456	391	455	436	419	424
V	µg/L	450	345	396	455	420	339	420
Radiological								
U	µg/L	706	456	391	455	436	419	424

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R1-M2[a,b]

Analyte	Unit	01/11/00	04/11/00	08/16/00	10/17/00	01/23/01	04/17/01	07/09/01
Field Measurements								
Alkalinity	mg/L	280	240	230	302	241	170	235
Conductivity[c]	µmhos/cm	3130	4800	2930	2880	2490	2340	2170
DO[c]	mg/L	0.74	0.85	0.2	0.22	0.0R	1.6	0.058
ORP[c]	mV	107	68	168	98	171	22	9
pH[c]	s.u.	6.52	6.19	6.44	6.69	6.74	6.5	6.68
Temperature[c]	C	10.7	9	13	14.9	9.4	10.2	11.5
Turbidity[c]	NTU	22.2	1.6	>1000	26.7	114	42.3	6.09
Common Ions								
Ca	mg/L	303	259	253	275	218	193	207
Chloride	mg/L	151	121	82.7	85.1	97.4	18.3J	88.6
Fluoride	µg/L	--	--	--	--	387	351	436J
Hardness	mg/L	1070	924	888	961	776	692	734
K	mg/L	23.6	20.2	21.4	23.6	22.1	18.7	20.5
Mg	mg/L	77.3	67.4	62.3	66.5	56.3	51.0	52.8
Na	mg/L	367	294	316	326	266	217	221
NO_2 as N	µg/L	8.5U	27.2U	183	27.2U	--	--	--
NO_3 as N	µg/L	22200	36800	21400	18400	--	--	--
NO_3+NO_2 as N	µg/L	--	--	--	--	14200	13500	9070J
SO_4	mg/L	1220	1150	1170	1180	935	579	757
Metals								
As	µg/L	11.2	8.6	11.9	13.3	11.1	8.3	11.4
Fe	µg/L	8.9U	7.4U	9.1U	11.6U	22.3	1.0U	0.7U
Mn	µg/L	845	765	681	789	759	638	679
Mo	µg/L	84.9	73.2J	80.4	94	91.5	78.1J	87.7
Se	µg/L	17.2	30.4	4.1	9	40.4	82.7	77.3
U	µg/L	609	447J	394	446	442	410	418
V	µg/L	424	293	370	439	388	323	405
Radiological								
U	µg/L	609	447J	394	446	442	410	418

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[c] Sample was unfiltered.
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[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R1-M3[a,b]

Analyte	Unit	01/11/00	04/11/00	08/16/00	10/17/00	01/23/01	04/17/01	07/10/01	10/15/01	01/28/02	04/02/02	07/09/02	09/30/02	01/14/03
Field Measurements														
Alkalinity	mg/L	303	255	241	290	266	235	281	327	283	315	315	340	317
Conductivity[c]	µmhos/cm	3220	4950	2540	2580	2650	2380	2400	2100	1863	2010	1812	1941	1905
DO[c]	mg/L	0.64	0.7	0.16	0.35	0.9	0.707	0.4	0.306	684R	0.5	0.86	2.3	2.9
ORP[c]	mV	-9	-114	-132	75	-48	-133	-11	33	14.1	-24	80	-50	-286
pH[c]	s.u.	7.17	6.52	6.65	6.77	6.81	7.18	6.42	6.46	6.38	6.64	6.61	6.61	6.65
Temperature[c]	C	10.5	8.8	13.2	15.2	9.1	9.8	12.3	13.8	9.54	12	13.19	13.9	9.2
Turbidity[c]	NTU	5.67	5.4	66	33.1	37.4	31.4	28.8	25	1	22.8	5.37	31.3	24.9
Common Ions														
Ca	mg/L	322	281	216	266	255	228	237	230	233	239	228	236	213
Chloride	mg/L	172	146	85.7	114	132	113J	116	105	79.9	81.0	75.1	74.3	76.6
Fluoride	µg/L	--	--	--	--	343	311	369	749	335J	233	270J	245	25.1U
Hardness	mg/L	1150	1000	759	921	903	810	848	807	820	851	797	828	749
K	mg/L	21.4	17.8	18.8	20.9	20.7	17.8	20.9	18.9	15.8	14.6	14.0	16.0	11.3
Mg	mg/L	83.3	73.0	53.3	62.3	64.6	58.4	62.2	56.6	57.9	61.7	55.3	57.9	52.8
Na	mg/L	353	285	275	271	258	226	245	164	144	135	123	133	111
NO_2 as N	µg/L	8.5U	27.2U	27.0U	13.6U	--	--	--	--	--	--	--	--	--
NO_3 as N	µg/L	21100	34600	14400	14200	--	--	--	--	--	--	--	--	--
NO_3+NO_2 as N	µg/L	--	--	--	--	14600	14000	8060	2090	3030	3150	2480	2110	3170
SO_4	mg/L	1270	1140	980	990	913	623	811	800	744	697	662	666	677
Metals														
As	µg/L	10	7.6	9.8	12.7	8.5	10	11	10	9.9	8.9	11.5	12.4	10
Fe	µg/L	8.9U	7.4U	9.1U	11.6U	11.0U	1.0U	0.7U	14.3	0.8U	1U	4.7	0.8U	2.9U
Mn	µg/L	560	376	293	386	398	330	341	307	303	243	172	206	72.6
Mo	µg/L	70.2	54.9J	68.3	73.8	59.7	54	61.3	62.6	45.4	47	53.8	59.8	6.4U
Se	µg/L	26.9	49.6	12.2	38	72	102	117	97.3	119	122	125	109	164
U	µg/L	722	464J	288	356	409	361	391	495	447	497	629	636	566
V	µg/L	357	248	371	413	343	298	365	419	344	314	385	428	347
Radiological														
U	µg/L	722	464J	288	356	409	361	391	495	447	497	629	636	566

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[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R1-M3[a,b]

Analyte	Unit	04/07/03	07/10/03	10/08/03	01/21/04	04/16/04	10/04/04	04/06/05	10/03/05	04/04/06	10/02/06	04/10/07	10/08/07	04/07/08[c]
Field Measurements														
Alkalinity	mg/L	269	349	364	532	294	352	232	274	302	538	310	332	273
Conductivity[c]	µmhos/cm	1597	1828	1901	1846	1614	1742	1917	1345	1806	1966	1580	1763	2266
DO[c]	mg/L	2	2.08	0.95	2.55	2.45	0.50	1.03	1.74	1.74	0.63	0.91	0.29	2.32
ORP[c]	mV	9.4	41	22	-8.8	-12.4	-20	13.7	-6	53.4	-28	-58.0	-165	-4.5
pH[c]	s.u.	6.93	6.56	6.77	6.67	6.89	6.76	6.96	6.91	6.75	6.79	6.85	7.16	6.54
Temperature[c]	C	9.99	13.4	14.1	8.55	9.73	13.7	9.38	13.8	8.33	14.0	8.49	13.6	8.04
Turbidity[c]	NTU	41	18.4	335	44.3	114	27.7	228	218	153	20.4	76.2	59.0	13.3
Common Ions														
Ca	mg/L	245	251	253	260	330	260	230	210	260	380	350	290	320
Chloride	mg/L	93.8	89.6	90.0	74.0	86.0	47.0	110	67.0	79.0	66.0	83.0	59.0	170
Fluoride	µg/L	139	145J	442	430.	450.	480.	320.	440.	370.	630.	410.	560.	270.
Hardness	mg/L	853	861	880	876	1080	872	768	689	867	1230	1150	967	1070
K	mg/L	12.7	12.8	13.3	15.0J	17.0	14.0	14.0	14.0	16.0	20.0	16.0	20.0	14.0
Mg	mg/L	58.5	57.0	60.4	55.0	63.0	54.0	47.0	40.0	53.0	69.0	66.0	59.0	66.0
Na	mg/L	140	130	130	110	100	91.0	110	89.0	97.0	130	110	110	120
NO_2 as N	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--
NO_3 as N	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--
NO_3+NO_2 as N	µg/L	7740	3330	2870	2200.	3900.	1100.	6200.	1800.	3800.	2800.	3700.	2200.	15000.
SO_4	mg/L	706	681	674	680	610	600	570	390	670	770	760	740	770
Metals														
As	µg/L	9.00	11.5	13.3	11J	11	16	12	14	11	13	11	14	11
Fe	µg/L	19.2	1U	0.800U	6.7U	9.8U	7U	86	7.8U	14U	2.2U	3.7U	5.6U	310
Mn	µg/L	98.7	16.8	64.9	41	45	54	180	94	8.7	37	10	49	17
Mo	µg/L	37.2	47.5	45.4	44J	39	49	43	71	52	62	60	71	51
Se	µg/L	161	105	92.5	75J	78	54	55	26	65	52	68	55	99
U	µg/L	432	635	524	510	420J	460J	370	370	570	530	690	670	550
V	µg/L	313	399	418	370	370	420	310	430	390	360	380J	470J	330
Radiological														
U	µg/L	432	635	524	510	420J	460J	370	370	570	530	690	670	550

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R1-M3[a,b]

Analyte	Unit	10/08/08	04/08/09	10/06/09	04/19/10
Field Measurements					
Alkalinity	mg/L	198	307	309	256
Conductivity[c]	µmhos/cm	1916	1449	1855	1790
DO[c]	mg/L	9.55	0.84	1.10	1.35
ORP[c]	mV	171.0	209	27	15
pH[c]	s.u.	6.74	6.91	6.89	6.97
Temperature[c]	C	10.78	8.12	12	8.3
Turbidity[c]	NTU	11.4	8.93	29.6	18.8
Common Ions					
Ca	mg/L	230	330J	280J	270
Chloride	mg/L	76.0	79.0	77.0	110
Fluoride	µg/L	990.	510.	560.	510.
Hardness	mg/L	772	1090J	926J	909
K	mg/L	16.0J	17.0J	18.0J	15.0J
Mg	mg/L	48.0	65.0	55.0	57.0
Na	mg/L	110	120J	110J	110
NO_2 as N	µg/L	--	--	--	--
NO_3 as N	µg/L	--	--	--	--
NO_3+NO_2 as N	µg/L	3300.	3000.	1600.	12000.
SO_4	mg/L	620	750	640	650
Metals					
As	µg/L	15	12	14	12
Fe	µg/L	4	1.3UJ	1.6U	6.8
Mn	µg/L	21	4.5	38	13
Mo	µg/L	64	51	67	49
Se	µg/L	36	57	50	110
U	µg/L	520	600	600	460
V	µg/L	420	340	410	300
Radiological					
U	µg/L	520	600	600	460

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R1-M4[a,b]

Analyte	Unit	01/11/00	04/11/00	08/15/00	10/16/00	01/23/01	04/17/01	07/10/01	10/11/01	10/15/01	01/28/02	04/02/02	07/09/02	09/30/02
Field Measurements														
Alkalinity	mg/L	384	319	284	300	325	304	350	342	--	350	322	311	360
Conductivity[c]	µmhos/cm	3290	3300	4330	2690	2580	2640	2620	2280	--	1889	2080	1877	2012
DO[c]	mg/L	0.52	0.45	0.54	1.4	0.3	0.742	0.316	0.324	--	0.694	0.3	7.47R	1.3
ORP[c]	mV	205	90	102	35	44	225	-51	26	--	-44	-24	194	-9.5
pH[c]	s.u.	6.3	6.49	6	6.56	6.78	6.6	6.27	6.71	--	6.69	6.69	6.45	6.6
Temperature[c]	C	10.5	8.5	15	14.3	9.1	9	12.1	14	--	8.4	12	12.74	15.6
Turbidity[c]	NTU	26	4.35	56.4	150	24.6	24.3	7.44	6.53	--	30.7	53.8	0.59	6.17
Common Ions														
Ca	mg/L	410	303	273	277	276	268	297	258	--	257	257	240	244
Chloride	mg/L	207	214	126	121	152	161J	148	109	121	90.3	92.7	83.7	81.8
Fluoride	µg/L	--	--	--	--	537	349	350	506	558	26.2UJ	25.1U	407	379
Hardness	mg/L	1470	1100	973	971	981	951	1050	902	--	907	923	865	858
K	mg/L	14.5	10.5	13.3	14.0	13.8	12.3	15.9	14.2	--	12.9	12.2	12.0	12.8
Mg	mg/L	108	83.5	70.7	67.9	70.8	68.4	75.5	62.6	--	64.3	68.2	64.6	60.4
Na	mg/L	326	245	291	284	262	221	260	187	--	150	144	132	132
NO_2 as N	µg/L	8.5U	27.2U	27.0U	13.6U	--	--	--	--	--	--	--	--	--
NO_3 as N	µg/L	14900	25000	15900	12400	--	--	--	--	--	--	--	--	--
NO_3+NO_2 as N	µg/L	--	--	--	--	15400	14800	8870	3760	3800	3400	3020	2460	2050
SO_4	mg/L	1320	1260	1040	985	1020	460	896	822	848	777	728	687	691
Metals														
As	µg/L	6.3	5.6	6.6	7.3	7.1	7.7	7.6	7.5	--	6.9	6.3	7.8	8.8
Fe	µg/L	--	--	9.1U	11.6U	11U	1.0U	6	34	--	14.7	1U	4U	0.8U
Mn	µg/L	--	--	6.7	17.4	59.8	37	58	171	--	113	120	102	135
Mo	µg/L	35.6J	24.8J	39.9	47.5	43.9	37.3	39.6	44.8	--	31.1	33.1	37	44.3
Se	µg/L	53	96.7	25	13.3	68.8	139	131	93.8	--	97.9	93.9	99.4	97.5
U	µg/L	526	449	332	342	420	401	360	388	--	363	386	398	434
V	µg/L	330	208	313	354	295	261	324	356	--	295	272	317	356
Radiological														
U	µg/L	526	449	332	342	420	401	360	388	--	363	386	398	434

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R1-M4[a,b]

Analyte	Unit	01/14/03	04/07/03	07/10/03	10/08/03	01/21/04	04/16/04	10/04/04	04/06/05	10/03/05	04/04/06	10/02/06	04/10/07	10/08/07
Field Measurements														
Alkalinity	mg/L	350	343	347	389	586	316	414	203	290	307	343	323	317
Conductivity[c]	µmhos/cm	2000	2084	2082	2017	1797	1659	2001	1973	1474	1865	1994	1639	1785
DO[c]	mg/L	1.5	1.55	1.78	0.86	1.81	1.95	0.59	0.97	2.13	1.71	0.86	1.59	0.60
ORP[c]	mV	-335	12.9	57	-9	69.0	-11.0	-23	-5.8	128	49.1	84	75.1	3.3
pH[c]	s.u.	6.59	6.91	6.69	6.74	6.66	6.83	6.74	6.91	6.82	6.62	6.52	6.81	7.16
Temperature[c]	C	9.7	8.75	13.6	14.7	8.14	10.20	13.7	9.53	14.4	8.04	14.50	8.80	13.8
Turbidity[c]	NTU	8.41	31.3	9.14	13.4	3.75	6.66	4.03	19.2	31.4	25.5	18.0	42.5	14.8
Common Ions														
Ca	mg/L	244	268	271	263	280	260	290	230	180	270	400	360	290
Chloride	mg/L	87.9	95.7	100	99.6	84.0	88.0	53.0	120	73.0	84.0	72.0	100	61.0
Fluoride	µg/L	25.1U	112	345J	267	380.	370.	220.	310.	400.	380.	580.	460.	540.
Hardness	mg/L	864	946	947	925	946	880	975	768	598	905	1290	1180	971
K	mg/L	10.8	10.6	11.3	12.2	14.0	15.0	14.0	13.0	13.0	15.0	18.0	15.0	17.0
Mg	mg/L	61.9	67.3	65.6	65.2	60.0	56.0	61.0	47.0	36.0	56.0	71.0	69.0	60.0
Na	mg/L	122	129	136	137	110	110	96.0	110	97.0	99.0	130	120	110
NO_2 as N	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--
NO_3 as N	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--
NO_3+NO_2 as N	µg/L	3220	6010	3830	3130	2500.	4300.	1300.	6700.	2300.	4200.	3300.	4400.	2100.
SO_4	mg/L	682	741	712	723	720	620	600	590	430	680	790	770	730
Metals														
As	µg/L	7.5	6.40	7.10	9.40	8J	7.6	9.8	8.2	9.7	7.5	9.3	8.6	9.6
Fe	µg/L	2.9U	1.30U	1U	27.1	6.7U	9.8U	7U	7.5U	7.8U	14U	2.2U	3.7U	5.6U
Mn	µg/L	131	90.2	116	130	32	13	33	11	25	9.3	12	11	24
Mo	µg/L	6.4U	30.2	36.3	40.1	35J	36	46	38	57	44	53	48	60
Se	µg/L	120	131	85.4	72.5	61J	76	46	62	30	57	49	55	49
U	µg/L	447	390	472	465	420	350J	420J	300	300	440	440	510	620
V	µg/L	310	269	314	351	310	280	340	260	340	310	290	310J	370J
Radiological														
U	µg/L	447	390	472	465	420	350J	420J	300	300	440	440	510	620

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[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R1-M4[a,b]

Analyte	Unit	04/07/08[c]	10/07/08	04/07/09	10/05/09	04/19/10
Field Measurements						
Alkalinity	mg/L	285	230	--	340	260
Conductivity[c]	µmhos/cm	2315	1750	1077	1855	1893
DO[c]	mg/L	3.11	4.37	1.02	2.77	1.67
ORP[c]	mV	0.6	-36	-258	-13	-15
pH[c]	s.u.	6.44	6.76	6.94	6.86	6.95
Temperature[c]	C	8.98	12.5	9.69	13.0	8.6
Turbidity[c]	NTU	4.85	15.9	16.8	20.1	22.1
Common Ions						
Ca	mg/L	330	220	310J	280J	290
Chloride	mg/L	170	69.0	86.0	78.0	130
Fluoride	µg/L	320.	810.	580.	560.	520.
Hardness	mg/L	1110	735	1030J	930J	975
K	mg/L	14.0	14.0J	15.0J	14.0J	16.0J
Mg	mg/L	70.0	45.0	62.0	56.0	61.0
Na	mg/L	120	100	120J	110J	120
NO_2 as N	µg/L	--	--	--	--	--
NO_3 as N	µg/L	--	--	--	--	--
NO_3+NO_2 as N	µg/L	17000.	2300.	1600.	1000.	13000.
SO_4	mg/L	830	550	740	640	690
Metals						
As	µg/L	8.1	9.7	7.8	9.6	7.5
Fe	µg/L	480	3.1U	10	1.6U	6.8
Mn	µg/L	22	26	9.1	35	2.5
Mo	µg/L	47	64	52	69	47
Se	µg/L	100	36	33	35	100
U	µg/L	460	480	490	540	410
V	µg/L	280	340	270	330	240
Radiological						
U	µg/L	460	480	490	540	410

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
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[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R1-M5[a,b]

Analyte	Unit	01/12/00	04/12/00	08/15/00	10/16/00	01/22/01	04/16/01	07/09/01
Field Measurements								
Alkalinity	mg/L	391	330	413	336	333	292	309
Conductivity[c]	µmhos/cm	3080	4680	4540	2780	2860	2690	2680
DO[c]	mg/L	0.32	0.5	0.88	1.4	3R	1.1	0.245
ORP[c]	mV	122	-88	177	-32	16	31	-84
pH[c]	s.u.	6.39	6.13	6.88	6.56	6.75	6.67	6.22
Temperature[c]	C	10.3	8.2	15.5	15	9.1	10	12.6
Turbidity[c]	NTU	13.6	5.27	16	2.41	3.22	2.05	4.29
Common Ions								
Ca	mg/L	--	340	291	295	289	287	315
Chloride	mg/L	--	193	138	128	171	174J	159
Fluoride	µg/L	--	--	--	--	584	305	366
Hardness	mg/L	--	1210	1030	1030	1030	1020	1120
K	mg/L	--	9.70	12.2	13.0	12.6	11.4	14.1
Mg	mg/L	--	87.6	74.1	72.3	75.1	74.2	81.2
Na	mg/L	--	230	285	291	263	230	251
NO_2 as N	µg/L	--	--	27.0U	27.2U	--	--	--
NO_3 as N	µg/L	--	--	15100	12400	--	--	--
NO_3+NO_2 as N	µg/L	--	21300	--	--	17000	14800	8560
SO_4	mg/L	--	1150	1030	1030	1080	474R	949
Metals								
As	µg/L	5.8	5.1	5.3	5.8	4.7	3.3	5
Fe	µg/L	--	7.4U	9.1U	11.6U	11.9	22.6	11.3
Mn	µg/L	--	8.6	17.5	38.5	43.8	39.5	45
Mo	µg/L	37.8	26.7	30.7	35.4	29.5	24.5	26.2
Se	µg/L	50.4	80.6	41.8	18.5	87	143	121
U	µg/L	536	397	245	258	306	310	300
V	µg/L	304	214	306	350	284	243	296
Radiological								
U	µg/L	536	397	245	258	306	310	300

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R1-M6[a,b]

Analyte	Unit	10/18/00	01/29/01	04/17/01	07/09/01
Field Measurements					
Alkalinity	mg/L	480	336	290	319
Conductivity[c]	µmhos/cm	2720	2860	2940	2690
DO[c]	mg/L	0.28	1.6	9.1R	0.463
ORP[c]	mV	177	244	-1	-71
pH[c]	s.u.	6.79	6.73	6.42	6.13
Temperature[c]	C	15.7	9.1	10.1	13.6
Turbidity[c]	NTU	550	8.3	24.4	3.27
Common Ions					
Ca	mg/L	--	--	291	325
Chloride	mg/L	--	--	--	164
Fluoride	µg/L	--	--	--	319
Hardness	mg/L	--	--	1040	1150
K	mg/L	--	--	10.6	13.3
Mg	mg/L	--	--	75.2	82.1
Na	mg/L	--	--	234	242
NO_3+NO_2 as N	µg/L	--	--	--	9060
SO_4	mg/L	--	--	--	954
Metals					
As	µg/L	5.9	6.3	5	5.3
Fe	µg/L	--	11U	1.0U	11.2
Mn	µg/L	--	48.3	55.4	73.4
Mo	µg/L	38.5	29	24.7J	27.5
Se	µg/L	26.7	68.2	143	127
U	µg/L	270	314	316	298
V	µg/L	288	276	243	301
Radiological					
U	µg/L	270	314	316	298

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R10-M1[a,b]

Analyte	Unit	01/12/00	02/29/00	04/11/00	08/15/00	10/16/00	01/23/01	04/17/01	07/10/01	10/11/01	10/15/01	01/29/02	04/02/02	07/10/02
Field Measurements														
Alkalinity	mg/L	52	78	110	76	87	71	82	72	107	--	91	114	137
Conductivity[c]	µmhos/cm	2440	2500	4490	2160	2140	2130	2220	2150	1714	--	1450	1660	1424
DO[c]	mg/L	--	0.28	0.23	0.38	1.4	2.3	2.6	0.7	0.274	--	1.1	0.8	1.15
ORP[c]	mV	51	-111	-60	-58	189	146	173	47	-86	--	-70	-49	-97
pH[c]	s.u.	6.07	6.67	6.8	6.61	6.58	6.21	6.45	6.71	6.9	--	6.66	6.94	7.05
Temperature[c]	C	10.3	9.5	9	18.5	14.5	8.8	11.3	12	13.5	--	9.77	12.2	13.28
Turbidity[c]	NTU	>1000	6.94	1.15	>1000	57	5.54	32.5	1.94	74.4	--	7	8.33	0.97
Common Ions														
Ca	mg/L	191	199	197	110	120	111	114	143	93.8	--	95.7	104	92.7
Chloride	mg/L	166	178	199	101	100	136	128J	140	108	109	85.9	92.2	80.3
Fluoride	µg/L	--	401	--	--	--	208	181	285	267	411	185J	182J	202J
Hardness	mg/L	779	820	859	479	514	499	541	631	429	--	462	522	471
K	mg/L	14.7	12.1	13.5	12.1	13.5	12.8	12.3	14.7	12.6	--	12.8	11.8	13.1
Mg	mg/L	73.4	78.5	89.1	49.6	52.1	53.9	62.2	66.5	47.2	--	54.2	63.8	58.2
Na	mg/L	364	284	297	284	294	266	228	229	183	--	152	148	136
NO_2 as N	µg/L	--	--	27.2U	27.0U	13.6U	--	--	--	--	--	--	--	--
NO_3 as N	µg/L	960	--	695	950	17500	--	--	--	--	--	--	--	--
NO_3+NO_2 as N	µg/L	--	91.8	--	--	--	2240	1470	1100	606	483	346	508	140
SO_4	mg/L	1070	1090	1140	864	843	837	577	799	635	648	608	597	520
Metals														
As	µg/L	3.7	2.5	3.8	4.7	3.1	3.4	2.8	3.9	4.2	--	3.1	3.2	3.8
Fe	µg/L	8.9U	8.9U	7.4U	9.1U	11.6U	28	1.0U	5.1	14	--	24.8	1U	7
Mn	µg/L	945J	1070	1490	1050	1310	1110	812	659	481	--	42.6	23.2	6
Mo	µg/L	29.6	59.4	44.6J	26	17	12.7	11.5J	17.2	14.9	--	9	14.9	7.3
Se	µg/L	0.37	0.15	0.56	0.2	0.1U	0.14	0.47	0.3U	0.3U	--	0.32	0.77	0.38
U	µg/L	5.4	59.8	69J	8.8	4.1	1.9	6.4	7.6	15.1	--	12.2	34.9	35.1
V	µg/L	163	123	116	142	168	121	101	125	145	--	111	96.3	123
Radiological														
U	µg/L	5.4	59.8	69J	8.8	4.1	1.9	6.4	7.6	15.1	--	12.2	34.9	35.1

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[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R10-M1[a,b]

Analyte	Unit	10/01/02	01/14/03	04/07/03	07/10/03	10/07/03	01/21/04	04/15/04	10/04/04	04/06/05	10/03/05	04/04/06	10/02/06	04/10/07
Field Measurements														
Alkalinity	mg/L	147	185	185	189	190	325	190	235	147	165	157	336	344
Conductivity[c]	µmhos/cm	1436	1564	1760	1597	1499	1568	1437	1435	1730	1029	1551	2008	1668
DO[c]	mg/L	2.5	1.71	2.15	1.99	0.72	1.39	2.25	0.61	1.84	1.65	1.14	0.62	1.01
ORP[c]	mV	-14.4	-231	24.3	-86	14	-47	73.2	-36	94.6	-45	48.6	-71	-111
pH[c]	s.u.	6.85	6.8	7.11	6.93	6.82	6.74	6.87	6.85	6.79	7.04	6.89	6.76	6.89
Temperature[c]	C	14.8	10.2	8.82	15	14.9	7.42	10.16	14.4	10.14	14.6	9.30	14.2	8.21
Turbidity[c]	NTU	2.58	153	2.17	12.8	2.54	0.75	18.9	4.61	3.87	3.37	2.13	11.8	8.59
Common Ions														
Ca	mg/L	93.4	129	179	140	127	160	170	150	160	96.0	150	350	360
Chloride	mg/L	76.2	83.2	94.8	95.6	92.0	82.0	85.0	51.0	130	63.0	82.0	69.0	100
Fluoride	µg/L	25.1U	25.1U	80.6	152J	228	200.U	200.U	180.	200.U	210.	200.U	290.	320.
Hardness	mg/L	456	586	746	573	546	663	676	597	647	363	618	1210	1200
K	mg/L	13.5	12.1	11.6	13.8	11.9	15.0J	16.0	14.0	13.0	11.0	14.0	18.0	14.0
Mg	mg/L	54.1	64.2	72.7	54.3	55.7	64.0	61.0	54.0	60.0	30.0	59.0	82.0	72.0
Na	mg/L	133	131	135	137	136	110	100	100	110	88.0	100	130	120
NO_2 as N	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--
NO_3 as N	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--
NO_3+NO_2 as N	µg/L	150	455R	365	540	111	58	100.	35	41	68	77	430.	3900.
SO_4	mg/L	500	570	723	603	560	610	560	490	590	260	590	790	770
Metals														
As	µg/L	4.2	4	3.30	2.80	3.30	2.5J	1.6	1.4	0.98	1.4	0.7	1.1	3.5
Fe	µg/L	21	2.9U	1.30U	15.5	14.1	6.7U	9.8U	7U	7.5U	12	72	2.2U	3.7U
Mn	µg/L	6.2	2.2	20.0	780	220	230	1400	1200	1100	830	800	970	46
Mo	µg/L	6.3	6.4U	16.3	7.80	1.70U	4.2J	13	5.6	3.1	13	4.9	14	25
Se	µg/L	0.22	2.4	19.0	0.130	0.260	0.11J	0.28	0.14	0.16	0.083	0.02U	6.2	38
U	µg/L	30.5	63.1	79.0	22.8	26.5	43	29J	29J	15	16	21	120	130
V	µg/L	131	136	114	99.8	112	80	63	57	33	50	24	33	130J
Radiological														
U	µg/L	30.5	63.1	79.0	22.8	26.5	43	29J	29J	15	16	21	120	130

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[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R10-M1[a,b]

Analyte	Unit	10/09/07	04/08/08[c]	10/08/08	04/08/09	10/06/09	04/19/10
Field Measurements							
Alkalinity	mg/L	356	144	134	87	200	141
Conductivity[c]	µmhos/cm	1884	2081	1084	1375	1625	1375
DO[c]	mg/L	0.38	-22.14	4.05	1.03	1.62	1.60
ORP[c]	mV	-106	-53.7	-56.2	-214	-8.0	-6
pH[c]	s.u.	7.25	6.86	7.29	7.04	6.78	6.87
Temperature[c]	C	12.9	7.37	12.78	8.51	12.1	8.6
Turbidity[c]	NTU	6.88	2.11	8.14	32.0	64.7	7.09
Common Ions							
Ca	mg/L	310	260	95.0	130J	160J	150
Chloride	mg/L	68.0	170	74.0	87.0	91.0	95.0
Fluoride	µg/L	340.	240.	430.	270.	240.	180.
Hardness	mg/L	1040	913	348	506J	651J	593
K	mg/L	14.0	12.0	11.0J	12.0J	15.0J	13.0J
Mg	mg/L	64.0	64.0	27.0	44.0	61.0	53.0
Na	mg/L	120	110	87.0	120J	120J	110
NO_2 as N	µg/L	--	--	--	--	--	--
NO_3 as N	µg/L	--	--	--	--	--	--
NO_3+NO_2 as N	µg/L	10.U	100.	17	68	69	1400.
SO_4	mg/L	750	730	310	500	550	520
Metals							
As	µg/L	1.9	1.2	0.93	0.55	0.86	1.2
Fe	µg/L	5.6U	110	12	2.6U	16	9.3
Mn	µg/L	2500	1600	680	870	1100	9.5
Mo	µg/L	29	12	6.9	3.6	4.6	2.8
Se	µg/L	0.028U	0.28	0.26	0.12U	0.46	13
U	µg/L	44	32	5.6	2.1	8.6	29
V	µg/L	83J	38	28	18	31	36
Radiological							
U	µg/L	44	32	5.6	2.1	8.6	29

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R11-M1[a,b]

Analyte	Unit	01/12/00	02/29/00	04/11/00	08/16/00	10/16/00	01/29/01	04/17/01	07/10/01	10/11/01	10/15/01	01/29/02	04/02/02	07/10/02
Field Measurements														
Alkalinity	mg/L	>70	153	100	120	130	59	84	92	100	--	--	124	122
Conductivity[c]	µmhos/cm	2550	1727	4070	2130	2080	2180	2210	2230	1739	--	1620	1597	1446
DO[c]	mg/L	--	1.6	0.7	--	--	--	--	--	--	--	--	2	--
ORP[c]	mV	-30	34	57	-139	178	155	217	-17	-52	--	95	-28	-38
pH[c]	s.u.	7.17	6.65	6.65	6.47	6.57	6.2	6.63	6.82	6.9	--	7	6.94	7.04
Temperature[c]	C	11	6	7.9	19.7	15.9	6.6	10.4	15	13.9	--	6.2	12.5	15.27
Turbidity[c]	NTU	--	11.9	4.56	>1000	311	184	>1000	>1000	200	--	312	441	6.32
Common Ions														
Ca	mg/L	207	228	211	130	123	113	117	149	91.9	--	84.1	108	90.3
Chloride	mg/L	186	53.8	169	122	102	--	131J	156	113	113	83.1	88.8	85.9
Fluoride	µg/L	--	361	--	--	--	--	258	218	358	263	234J	25.1RUJ	273J
Hardness	mg/L	829	809	815	528	501	487	546	677	416	--	415	541	462
K	mg/L	13.9	7.30	9.16	10.5	11.9	11.7	11.8	14.9	11.1	--	10.2	11.1	12.3
Mg	mg/L	75.7	58.1	69.9	49.4	47.0	49.8	61.7	74.0	45.2	--	49.9	66.0	57.4
Na	mg/L	330	108	215	259	284	256	234	241	188	--	137	146	144
NO_2 as N	µg/L	--	--	27.2U	53.1	34.3	--	--	--	--	--	--	--	--
NO_3 as N	µg/L	1050	--	1060	452	6070	--	--	--	--	--	--	--	--
NO_3+NO_2 as N	µg/L	--	772	--	--	--	--	1020	914J	781	785	706	616	179
SO_4	mg/L	1100	713	1020	831	829	--	570	828	621	630	570	581	511
Metals														
As	µg/L	3.5	1.7	2.2	2.2	1.3	1	0.97	1.5	1.5	--	1.2	1.8	1.9
Fe	µg/L	2040	8.9U	7.4U	9.1U	11.6U	87.5	17.4	200	25.8	--	80	1U	14.5
Mn	µg/L	1010J	17.7	587	1250	1050	1220	1040	1080	662	--	387	211	100
Mo	µg/L	32.6	42.7	51.5J	34.1	26.4	16.7	15.9J	17.8	18.3	--	11.7	14.7	10.6
Se	µg/L	0.1U	3.6	5.1	0.56	0.10U	0.13	0.3U	0.32	0.3U	--	0.3U	0.55	0.31
U	µg/L	22.8	144	67.6J	12.9	6.8	2.3	9.4	10	11.5	--	18.9	48.8	25.8
V	µg/L	114	132	112	118	117	80.9	78	93.9	101	--	76.6	86.7	91.3
Radiological														
U	µg/L	22.8	144	67.6J	12.9	6.8	2.3	9.4	10	11.5	--	18.9	48.8	25.8

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R11-M1[a,b]

Analyte	Unit	10/01/02	04/07/03	07/10/03	10/07/03	04/15/04
Field Measurements						
Alkalinity	mg/L	130	182	185	165	152
Conductivity[c]	µmhos/cm	1420	1684	1566	1487	1401
DO[c]	mg/L	6.8	1.89	2.77	1.13	2.10
ORP[c]	mV	-23.1	42.4	11	5	41.0
pH[c]	s.u.	7	7.13	6.76	6.86	6.94
Temperature[c]	C	15	8.45	20.1	15.2	10.41
Turbidity[c]	NTU	125	423	360	216	84
Common Ions						
Ca	mg/L	83.0	159	136	116	140
Chloride	mg/L	--	96.3	104	97.0	91.0
Fluoride	µg/L	--	17.2UJ	237J	208	200.U
Hardness	mg/L	416	713	588	521	588
K	mg/L	11.7	10.6	11.5	11.3	14.0
Mg	mg/L	50.7	76.8	60.4	56.2	58.0
Na	mg/L	135	135	136	140	110
NO_2 as N	µg/L	--	--	--	--	--
NO_3 as N	µg/L	--	--	--	--	--
NO_3+NO_2 as N	µg/L	--	263	310	152	120.
SO_4	mg/L	--	711	600	538	560
Metals						
As	µg/L	2.2	1.70	1.70	2.00	1.6
Fe	µg/L	51.6	1.30U	21.3	0.800U	9.8U
Mn	µg/L	89.1	20.6	604	343	120
Mo	µg/L	9.4	10.5	9.40	11.6	9.2
Se	µg/L	0.25	6.00	0.100U	0.220	0.3
U	µg/L	24.5	54.1	24.7	23.0	23J
V	µg/L	104	89.0	84.7	104	77
Radiological						
U	µg/L	24.5	54.1	24.7	23.0	23J

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R2-M1[a,b]

Analyte	Unit	01/11/00	04/12/00	08/16/00	10/17/00	01/23/01	04/16/01	07/09/01
Field Measurements								
Alkalinity	mg/L	107	--	108	226	228	265	275
Conductivity[c]	µmhos/cm	2570	5040	2490	2660	2440	2360	2170
DO[c]	mg/L	0.16	0.09	0.31	0.3	3.2	0.639	0.056
ORP[c]	mV	-312	-228	-283	-214	-99	32	-71
pH[c]	s.u.	8.02	6.74	7.73	7.87	7.23	7.37	7.23
Temperature[c]	C	10.6	9.5	14	15.1	9.6	10.7	14.5
Turbidity[c]	NTU	17.4	9.07	3.2	5.21	2.43	9.43	9.7
Common Ions								
Ca	mg/L	--	--	--	--	--	191	211
Chloride	mg/L	--	--	--	--	--	--	89.4
Fluoride	µg/L	--	--	--	--	--	--	1380J
Hardness	mg/L	--	--	--	--	--	693	748
K	mg/L	--	--	--	--	--	16.1	19.1
Mg	mg/L	--	--	--	--	--	52.5	53.8
Na	mg/L	--	--	--	--	--	231	239
NO_3+NO_2 as N	µg/L	--	--	--	--	--	--	1530J
SO_4	mg/L	--	--	--	--	--	--	771
Metals								
As	µg/L	0.4U	0.2U	0.3U	0.2U	0.2U	0.5U	0.5U
Fe	µg/L	--	--	--	--	10600	12400	15100
Mn	µg/L	--	--	--	--	434	360	455
Mo	µg/L	21.8	53.5	20.1	20.5	21.2	26.6	25.6
Se	µg/L	3.5	28.7	0.45	2.2	15.7	42.4	37.4
U	µg/L	18.7	79.7	12.6	35.6	53.3	77.8	70.5
V	µg/L	1U	0.4U	1.2U	1.2U	1.4U	0.4U	0.3U
Radiological								
U	µg/L	18.7	79.7	12.6	35.6	53.3	77.8	70.5

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R2-M10[a,b]

Analyte	Unit	01/12/00	04/12/00	08/15/00	10/18/00	01/22/01	04/16/01	07/09/01
Field Measurements								
Alkalinity	mg/L	123	180	275	170	340	304	375
Conductivity[c]	µmhos/cm	2570	4500	3570	2330	2530	2666	2710
DO[c]	mg/L	0.25	0.04	0.51	0.742	0.7	1	0.178
ORP[c]	mV	-299	-316	-130	-236	-178	-192	-219
pH[c]	s.u.	7.63	7.41	7.98	7.76	7.6	7.7	7.03
Temperature[c]	C	10.7	9.2	16.4	16.6	8.9	9.8	13.9
Turbidity[c]	NTU	7.33	43.9	12	6.48	19	2.8	3.7
Common Ions								
Ca	mg/L	--	--	--	--	--	240	290
Chloride	mg/L	--	--	--	--	--	--	163
Fluoride	µg/L	--	--	--	--	--	--	152
Hardness	mg/L	--	--	--	--	--	901	1070
K	mg/L	--	--	--	--	--	10.9	13.7
Mg	mg/L	--	--	--	--	--	73.2	83.2
Na	mg/L	--	--	--	--	--	222	246
NO_3+NO_2 as N	µg/L	--	--	--	--	--	--	34.2
SO_4	mg/L	--	--	--	--	--	--	940
Metals								
As	µg/L	0.4U	0.2U	0.3U	0.2U	0.2U	0.5U	0.5U
Fe	µg/L	--	--	--	--	35500	36400	43800
Mn	µg/L	--	--	--	--	449	383	542
Mo	µg/L	0.4U	4.9	4.9	6.8	13.7	17.5	3.9
Se	µg/L	1.5	10	0.25	0.87	10	82.5	14.4
U	µg/L	0.1U	0.1U	0.1U	0.10U	0.27	3.4	1.2
V	µg/L	1U	0.4U	1.2U	1.2U	1.4U	0.4U	0.3U
Radiological								
U	µg/L	0.1U	0.1U	0.1U	0.10U	0.27	3.4	1.2

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R2-M2[a,b]

Analyte	Unit	01/11/00	04/11/00	08/16/00	10/17/00	01/23/01	04/16/01	07/09/01
Field Measurements								
Alkalinity	mg/L	265	285	211	279	250	249	257
Conductivity[c]	µmhos/cm	2900	4930	2600	2740	2480	2270	2210
DO[c]	mg/L	0.21	0.22	0.35	0.3	2.5	0.504	0.063
ORP[c]	mV	48	-36	56	-69	7	-20	-50
pH[c]	s.u.	7.26	6.72	7.08	7.23	6.9	6.93	6.85
Temperature[c]	C	10.9	9	14.2	15	9.2	10.4	11.8
Turbidity[c]	NTU	11.2	5.37	8.19	1.43	8.35	12.5	3.29
Common Ions								
Ca	mg/L	265	255	203	266	219	195	212
Chloride	mg/L	156	127	83.5	85.3	104	94.8J	90.5
Fluoride	µg/L	--	--	--	--	380	327	504J
Hardness	mg/L	984	914	749	939	780	695	747
K	mg/L	21.0	19.2	20.7	22.4	21.6	18.6	20.1
Mg	mg/L	78.3	67.4	58.8	66.8	56.6	50.6	52.8
Na	mg/L	365	282	308	316	261	218	221
NO_2 as N	µg/L	1270	1710	623	1220	--	--	--
NO_3 as N	µg/L	9580	28700	4370	9630	--	--	--
NO_3+NO_2 as N	µg/L	--	--	--	--	10200	10700	6450J
SO_4	mg/L	1230	1170	1080	1130	939	567	757
Metals								
As	µg/L	0.4U	0.24	0.3U	0.2U	0.2U	0.5U	0.5U
Fe	µg/L	5600	7250	3040	1920	2950	1640	1410
Mn	µg/L	583	548	353	437	489	439	545
Mo	µg/L	28.5	41.2J	56.4	42.6	66.1	62.8	70.5
Se	µg/L	12.8	29.4	2	6.1	39.1	69.2	67.3
U	µg/L	145	161J	143	265	323	329	367
V	µg/L	1U	0.4U	1.2U	1.2U	20.1	26.9	40.8
Radiological								
U	µg/L	145	161J	143	265	323	329	367

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[c] Sample was unfiltered.
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[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R2-M3[a,b]

Analyte	Unit	01/11/00	04/12/00	08/16/00	10/17/00	01/24/01	04/17/01	07/10/01
Field Measurements								
Alkalinity	mg/L	343	280	197	333	252	253	273
Conductivity[c]	µmhos/cm	3000	4800	3420	2650	2430	2280	2240
DO[c]	mg/L	0.4	0.13	0.3	0.19	0.1	0.879	0.366
ORP[c]	mV	-149	-144	-158	-142	31	107	-52
pH[c]	s.u.	7.01	6.74	7.58	7.29	7.34	6.86	6.81
Temperature[c]	C	10.9	8.9	16.6	15.8	8.2	8.5	12
Turbidity[c]	NTU	3.93	8.25	4.47	7.05	6.42	3.65	2.36
Common Ions								
Ca	mg/L	--	--	--	--	--	202	228
Chloride	mg/L	--	--	--	--	--	--	98.5
Fluoride	µg/L	--	--	--	--	--	--	362
Hardness	mg/L	--	--	--	--	--	719	801
K	mg/L	--	--	--	--	--	17.0	19.4
Mg	mg/L	--	--	--	--	--	52.2	56.3
Na	mg/L	--	--	--	--	--	219	220
NO_3+NO_2 as N	µg/L	--	--	--	--	--	--	5800J
SO_4	mg/L	--	--	--	--	--	--	768
Metals								
As	µg/L	0.4U	0.2U	0.3U	0.2U	0.2U	0.5U	0.5U
Fe	µg/L	--	--	--	--	1380	1290	2770
Mn	µg/L	--	--	--	--	305	286	355
Mo	µg/L	32.4J	32.8	46	18	30.8	34.4	45.8
Se	µg/L	17.4	29.3	2.2	11.1	38	59.4	76.4
U	µg/L	228	138	153	206	151	211	288
V	µg/L	1U	0.4U	1.2U	1.2U	1.4U	0.40U	4.6
Radiological								
U	µg/L	228	138	153	206	151	211	288

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R2-M4[a,b]

Analyte	Unit	01/11/00	04/11/00	08/16/00	10/17/00	01/23/01	04/17/01	07/11/01	10/15/01	01/28/02	04/02/02	07/09/02	09/30/02	04/07/03
Field Measurements														
Alkalinity	mg/L	195	250	319	282	267	272	315	363	355	350	354	356	318
Conductivity[c]	µmhos/cm	3000	4830	2390	2540	2530	2360	2340	2120	1883	2000	1795	1898	1762
DO[c]	mg/L	0.4	0.46	0.26	0.08	0.7	0.71	0.376	0.207	8.12R	0.7	0.82	2.2	2.05
ORP[c]	mV	-121	-133	-184	-116	-125	24	-118	-67	-31	-155	-133	-34.1	-53.6
pH[c]	s.u.	7.63	6.73	7.13	7.42	7.11	7.13	7.01	6.81	6.64	7.06	7	7.2	7.07
Temperature[c]	C	11.3	8.3	14.8	15.2	9.2	8.5	11.9	14.4	9.23	12.4	14.42	14.6	9
Turbidity[c]	NTU	14.7	14.7	--	8.09	12.7	3.23	2.98	7.85	15.9	55.3	3.67	12.2	93.8
Common Ions														
Ca	mg/L	239	236	177	230	227	202	237	222	222	229	205	201	221
Chloride	mg/L	174	149	86.6	107	138	115J	115	99.2	79.9	80.7	75.5	74.6	97.1
Fluoride	µg/L	--	--	--	--	303	280	261	422	162J	364	319J	25.1U	149
Hardness	mg/L	917	901	656	843	829	732	845	785	785	826	754	739	789
K	mg/L	16.0	16.5	18.3	21.1	20.1	16.8	19.6	18.8	15.3	14.7	15.9	15.8	13.4
Mg	mg/L	77.8	75.8	51.9	65.3	63.6	55.2	61.4	56.1	56.0	61.7	58.8	57.5	57.7
Na	mg/L	347	289	275	280	251	217	217	163	142	136	138	132	140
NO_2 as N	µg/L	218	603	578	964	--	--	--	--	--	--	--	--	--
NO_3 as N	µg/L	5490	13500	4210	4470	--	--	--	--	--	--	--	--	--
NO_3+NO_2 as N	µg/L	--	--	--	--	7720	5260	2760	1420	223	656	498	201	1550
SO_4	mg/L	1230	1120	956	983	925	589	783	645	656	671	638	613	708
Metals														
As	µg/L	0.4U	0.2U	0.3U	0.2U	0.2U	0.5U	0.5U	0.6U	0.6U	0.2	0.58	0.21	0.100
Fe	µg/L	4480	5870	4590	9370	14500	9730	19800	20500	20600	22400	28100	34500	15000
Mn	µg/L	431	426	277	470	419	383	467	304	339	293	264	260	220
Mo	µg/L	24.3	19.1J	35.6	24.2	25.6	28.4	24.9	28.6	16.3	19	19.9	11.6	29.2
Se	µg/L	14.1	27.6	5.9	18.9	45.7	66.7	39.8	43.6	41.5	37	30.6	8.9	51.2
U	µg/L	101	136J	86.4	104	113	124	130	259	178	169	172	90	221
V	µg/L	1U	0.4U	1.2U	1.2U	2.5	0.40U	4.5	31.1	15.4	10	34.6	12.3	5.60
Radiological														
U	µg/L	101	136J	86.4	104	113	124	130	259	178	169	172	90	221

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R2-M4[a,b]

Analyte	Unit	07/10/03	10/08/03	04/16/04
Field Measurements				
Alkalinity	mg/L	350	377	280
Conductivity[c]	µmhos/cm	1909	1918	1549
DO[c]	mg/L	1.85	0.84	1.40
ORP[c]	mV	-66	-52	-52.4
pH[c]	s.u.	6.79	6.85	7.10
Temperature[c]	C	13.7	14.2	9.13
Turbidity[c]	NTU	29.1	50.9	29.1
Common Ions				
Ca	mg/L	233	237	220
Chloride	mg/L	91.6	91.1	80.0
Fluoride	µg/L	310J	265	290.
Hardness	mg/L	820	837	763
K	mg/L	13.8	13.5	20.0
Mg	mg/L	57.9	59.6	52.0
Na	mg/L	133	128	110
NO_2 as N	µg/L	--	--	--
NO_3 as N	µg/L	--	--	--
NO_3+NO_2 as N	µg/L	870	960	610.
SO_4	mg/L	637	679	560
Metals				
As	µg/L	0.460	0.700	0.56
Fe	µg/L	13900	13400	8100
Mn	µg/L	190	170	160
Mo	µg/L	35.0	38.9	50
Se	µg/L	36.4	40.4	25
U	µg/L	394	416	360J
V	µg/L	26.9	46.8	35
Radiological				
U	µg/L	394	416	360J

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R2-M5[a,b]

Analyte	Unit	01/11/00	04/11/00	08/16/00	10/17/00	01/23/01	04/17/01	07/10/01
Field Measurements								
Alkalinity	mg/L	331	265	375	311	301	252	295
Conductivity[c]	µmhos/cm	3010	3110	2510	2610	2570	2440	2340
DO[c]	mg/L	0.25	0.5	0.88	0.3	0	0.867	0.358
ORP[c]	mV	-173	-35	-99	-60	-119	-98	-99
pH[c]	s.u.	6.93	6.9	6.74	7.05	6.83	6.86	6.33
Temperature[c]	C	10.1	8.3	16	15.1	9.1	8.8	13.2
Turbidity[c]	NTU	5.35	6.08	21.1	1.24	3.68	3.16	9.79
Common Ions								
Ca	mg/L	--	--	--	--	--	223	243
Chloride	mg/L	--	--	--	--	--	--	122
Fluoride	µg/L	--	--	--	--	--	--	341
Hardness	mg/L	--	--	--	--	--	792	865
K	mg/L	--	--	--	--	--	16.8	20.3
Mg	mg/L	--	--	--	--	--	57.0	62.8
Na	mg/L	--	--	--	--	--	219	240
NO_3+NO_2 as N	µg/L	--	--	--	--	--	--	5230
SO_4	mg/L	--	--	--	--	--	--	816
Metals								
As	µg/L	0.4U	0.2U	0.34	0.83	1.7	3	2.6
Fe	µg/L	--	--	--	--	3920	2540	5010
Mn	µg/L	--	--	--	--	302	285	357
Mo	µg/L	33.3J	39	50.6	52.6	45.5	48.4	47.8
Se	µg/L	26.1	41.7	9.3	41.4	68.4	106	92.6
U	µg/L	346	344	209	283	320	321	298
V	µg/L	1U	6.1	39.7	78.2	105	132	144
Radiological								
U	µg/L	346	344	209	283	320	321	298

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R2-M6[a,b]

Analyte	Unit	01/11/00	04/12/00	08/16/00	10/17/00	01/23/01	04/17/01	07/10/01
Field Measurements								
Alkalinity	mg/L	354	315	250	311	307	300	329
Conductivity[c]	µmhos/cm	3050	5180	4210	2640	2690	2530	2590
DO[c]	mg/L	0.27	0.31	0.78	0.6	0.2	0.494	0.378
ORP[c]	mV	-63	-82	214	13	23	-29	-80
pH[c]	s.u.	6.57	6.28	7.08	6.84	6.85	6.7	6.35
Temperature[c]	C	10	9.3	16.1	15.9	9.6	9	11.9
Turbidity[c]	NTU	3.67	2.96	1.86	1.65	96.3	2.03	11.1
Common Ions								
Ca	mg/L	--	--	--	--	--	256	295
Chloride	mg/L	--	--	--	--	--	--	147
Fluoride	µg/L	--	--	--	--	--	--	336
Hardness	mg/L	--	--	--	--	--	897	1040
K	mg/L	--	--	--	--	--	13.6	16.1
Mg	mg/L	--	--	--	--	--	62.7	74.4
Na	mg/L	--	--	--	--	--	220	264
NO_3+NO_2 as N	µg/L	--	--	--	--	--	--	6540
SO_4	mg/L	--	--	--	--	--	--	900
Metals								
As	µg/L	0.86	1.1	0.51	0.27	0.73	0.5U	0.91
Fe	µg/L	--	--	--	--	617	575	3610
Mn	µg/L	--	--	--	--	173	116	201
Mo	µg/L	43.2J	38.9	53.1	32.4	36.7	33.4J	36.3
Se	µg/L	37.6	63	10	12.9	69.1	110	106
U	µg/L	677	466	310	257	334	358	316
V	µg/L	103	82.3	39.9	30.6	51.5	44.3	83.9
Radiological								
U	µg/L	677	466	310	257	334	358	316

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R2-M7[a,b]

Analyte	Unit	01/11/00	04/11/00	08/15/00	10/16/00	01/23/01	04/17/01	07/10/01	10/11/01	10/15/01	01/28/02	04/02/02	07/09/02	09/30/02
Field Measurements														
Alkalinity	mg/L	382	316	279	237	275	292	333	428	--	825	363	392	421
Conductivity[c]	µmhos/cm	3260	3230	4030	2460	2490	2600	2580	2290	--	2140	2090	1888	2043
DO[c]	mg/L	0.45	0.67	0.48	0.6	0	0.602	0.292	0.171	--	0.354	0.7	--	3
ORP[c]	mV	31	102	-56	-90	-25	-80	-196	-164	--	-82	-94	-104	-24.1
pH[c]	s.u.	6.59	6.49	7	7	7.22	6.83	6.78	7.3	--	6.89	6.91	7.04	7.02
Temperature[c]	C	10.5	8.6	14.8	15.4	9.4	9.3	12.2	14.1	--	8.3	10.9	13.96	16.1
Turbidity[c]	NTU	8.58	3.15	5.29	9.17	4.8	8.9	4.01	1.87	--	25.8	13.9	1.19	7.75
Common Ions														
Ca	mg/L	383	301	223	211	227	232	263	233	--	242	251	229	229
Chloride	mg/L	198	196	109	107	149	133J	151	118	120	90.4	93.7	85.2	81.8
Fluoride	µg/L	--	--	--	--	271	252	230	372	443	26.2UJ	25.1U	536	236
Hardness	mg/L	1380	1090	806	778	856	849	976	833	--	867	907	833	823
K	mg/L	17.7	12.9	13.8	14.6	13.6	12.0	15.7	13.9	--	12.7	12.1	12.5	13.0
Mg	mg/L	102	81.9	60.4	60.9	70.2	65.5	77.5	61.1	--	63.9	68.0	63.5	61.1
Na	mg/L	332	260	279	284	265	222	262	186	--	152	143	143	132
NO_2 as N	µg/L	65.8	48.4	44.2	49.9	--	--	--	--	--	--	--	--	--
NO_3 as N	µg/L	14000	23800	4110	3190	--	--	--	--	--	--	--	--	--
NO_3+NO_2 as N	µg/L	--	--	--	--	4670	6760	128	175	22.2	280	366	129	188
SO_4	mg/L	1280	1200	976	933	967	787	877	780	812	755	718	653	656
Metals														
As	µg/L	0.79	0.86	0.3U	0.2U	0.2U	0.5U	0.5U	0.6U	--	0.6U	0.13	0.11	0.1U
Fe	µg/L	--	--	3780	3630	2140	5050	20400	40900J	--	30100	24600	30000	27200
Mn	µg/L	--	--	197	191	221	258	607	447	--	512	333	327	268
Mo	µg/L	42.1J	37J	46.3	46.2	32	24.7	13.5	7.6	--	9.3	1.8U	9.8	13.3
Se	µg/L	48.6	83	6.4	4	28.8	73.8	11.1	11.5	--	13.5	22	12.1	13.8
U	µg/L	654	522	274	168	249	291	109	104	--	108	130	90	128
V	µg/L	133	88.3	24.2	17.3	15.9	14.7	4.2	1.1	--	0.57	2.1	1.3	4.3
Radiological														
U	µg/L	654	522	274	168	249	291	109	104	--	108	130	90	128

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R2-M7[a,b]

Analyte	Unit	04/07/03	07/10/03	10/08/03	04/16/04
Field Measurements					
Alkalinity	mg/L	356	368	391	281
Conductivity[c]	µmhos/cm	1821	1963	1934	1479
DO[c]	mg/L	1.55	1.97	0.84	2.62
ORP[c]	mV	-61.1	-90	-65	-116.1
pH[c]	s.u.	6.9	6.95	6.93	7.24
Temperature[c]	C	8.64	14.4	15.2	10.10
Turbidity[c]	NTU	47.6	17	21.2	18.0
Common Ions					
Ca	mg/L	247	236	248	210
Chloride	mg/L	92.8	98.6	98.0	80.0
Fluoride	µg/L	121	92.4J	344	340.
Hardness	mg/L	886	854	884	739
K	mg/L	10.9	11.0	12.1	16.0
Mg	mg/L	65.3	64.3	64.4	52.0
Na	mg/L	127	132	136	100
NO_2 as N	µg/L	--	--	--	--
NO_3 as N	µg/L	--	--	--	--
NO_3+NO_2 as N	µg/L	603	117	838	25
SO_4	mg/L	711	663	679	510
Metals					
As	µg/L	0.100U	0.100U	0.100U	0.016U
Fe	µg/L	16000	12000	12500	14000
Mn	µg/L	263	275	192	200
Mo	µg/L	10.9	21.6	30.0	27
Se	µg/L	39.4	11.1	27.2	0.34
U	µg/L	249	334	339	190J
V	µg/L	1.10	1.40	19.8	2.9
Radiological					
U	µg/L	249	334	339	190J

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R2-M8[a,b]

Analyte	Unit	01/12/00	04/12/00	08/16/00	10/18/00	01/23/01	04/16/01	07/10/01
Field Measurements								
Alkalinity	mg/L	391	370	312	318	404	353	328
Conductivity[c]	µmhos/cm	3190	5150	2770	2660	2550	2710	2610
DO[c]	mg/L	0.57	0.14	0.24	--	0	0.794	0.263
ORP[c]	mV	-157	-206	-134	-146	-73	-100	-144
pH[c]	s.u.	7.16	6.82	6.96	7.35	7.24	6.93	6.59
Temperature[c]	C	8.1	9	16.3	15.7	7.4	9.8	12.4
Turbidity[c]	NTU	22.6	43.9	6.2	5.72	12.6	23.2	15.9
Common Ions								
Ca	mg/L	--	--	--	--	--	262	291
Chloride	mg/L	--	--	--	--	--	--	152
Fluoride	µg/L	--	--	--	--	--	--	289
Hardness	mg/L	--	--	--	--	--	934	1050
K	mg/L	--	--	--	--	--	11.7	16.2
Mg	mg/L	--	--	--	--	--	67.9	77.8
Na	mg/L	--	--	--	--	--	219	231
NO_3+NO_2 as N	µg/L	--	--	--	--	--	--	3420
SO_4	mg/L	--	--	--	--	--	--	911
Metals								
As	µg/L	0.4U	0.21	0.3U	0.2U	0.2U	0.5U	0.56
Fe	µg/L	--	--	--	--	10000	9770	14500
Mn	µg/L	--	--	--	--	228	223	336
Mo	µg/L	27.4	12	20.4	17	16.7	16.3	15
Se	µg/L	35.1	49	15.5	11.5	54.6	95	71.1
U	µg/L	208	108	147	155	190	251	204
V	µg/L	1.1	0.4U	11.3	6.9	15.1	23.4	21.8
Radiological								
U	µg/L	208	108	147	155	190	251	204

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R2-M9[a,b]

Analyte	Unit	01/12/00	04/12/00	08/15/00	10/16/00	01/22/01	04/16/01	07/09/01
Field Measurements								
Alkalinity	mg/L	330	365	227	334	364	354	346
Conductivity[c]	µmhos/cm	2890	5260	4340	2700	2800	2700	2680
DO[c]	mg/L	0.3	0.18	0.62	1.4	0.2	0.769	0.779
ORP[c]	mV	-224	-158	-60	-62	-71	-100	-157
pH[c]	s.u.	7.23	6.64	6.79	6.44	7.01	7.08	6.56
Temperature[c]	C	10.4	8.1	16.2	16.4	8.3	10.5	13.3
Turbidity[c]	NTU	7.51	8.54	9.43	4.6	13.2	12.7	11.3
Common Ions								
Ca	mg/L	--	317	237	261	265	267	303
Chloride	mg/L	--	200	134	124	165	167J	156
Fluoride	µg/L	--	--	--	--	303	306	262
Hardness	mg/L	--	1160	892	949	971	961	1090
K	mg/L	--	9.65	12.3	12.6	12.3	11.8	15.2
Mg	mg/L	--	90.5	72.9	72.3	75.1	71.4	80.1
Na	mg/L	--	267	283	281	264	228	251
NO_2 as N	µg/L	--	--	627	643	--	--	--
NO_3 as N	µg/L	--	--	4570	5640	--	--	--
NO_3+NO_2 as N	µg/L	--	12100	--	--	6380	6970	2980
SO_4	mg/L	--	1180	1010	1020	1060	466	925
Metals								
As	µg/L	0.4U	0.2U	0.3U	0.21	0.2U	0.5U	0.52
Fe	µg/L	--	22000	15800	13000	14700	16500	22600
Mn	µg/L	--	483	264	203	240	269	311
Mo	µg/L	20.4	16.9	19.5	24.9	17.5	16.4	14
Se	µg/L	18.4	56.6	16.1	9.7	49.6	91.1	68.6
U	µg/L	60.1	96.6	124	121	118	112	118
V	µg/L	1U	0.40U	8.7	23.8	30.2	31.4	43.8
Radiological								
U	µg/L	60.1	96.6	124	121	118	112	118

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R3-M1[a,b]

Analyte	Unit	01/11/00	04/11/00	08/16/00	10/17/00	01/23/01	04/16/01	07/09/01
Field Measurements								
Alkalinity	mg/L	236	--	230	288	280	267	298
Conductivity[c]	µmhos/cm	2910	--	2610	2700	2540	2340	2230
DO[c]	mg/L	0.2	--	0.22	0.1	--	0.967	0.044
ORP[c]	mV	-75	--	-132	-184	-52	-57	-111
pH[c]	s.u.	7.44	--	7.12	7.46	7.25	7.1	7.06
Temperature[c]	C	10.9	--	14.7	15.6	7.3	10.7	12
Turbidity[c]	NTU	14.4	--	4.45	2.77	2.13	3.47	2.26
Common Ions								
Ca	mg/L	220	241	205	247	217	192	219
Chloride	mg/L	159	129	83.9	86.8	108	97.3J	91.9
Fluoride	µg/L	--	--	--	--	325	337	379J
Hardness	mg/L	873	867	754	892	783	688	768
K	mg/L	21.7	18.2	20.9	22.0	21.1	17.8	19.5
Mg	mg/L	78.5	64.5	58.9	66.8	58.5	50.7	53.6
Na	mg/L	362	274	306	312	260	217	227
NO_2 as N	µg/L	734	1120	646	1260	--	--	--
NO_3 as N	µg/L	3840	29500	3940	5850	--	--	--
NO_3+NO_2 as N	µg/L	--	--	--	--	4500	6940	3510J
SO_4	mg/L	1240	1170	1080	1110	949	578	765
Metals								
As	µg/L	0.4U	0.2U	0.3U	0.2U	0.2U	0.5U	0.5U
Fe	µg/L	21600	13200	7820	8970	14600	10800	12600
Mn	µg/L	880	466	360	484	529	480	508
Mo	µg/L	18.7	44.5J	55.8	34.6	42.9	47.4	43.8
Se	µg/L	9	31.5	2.7	5.3	35	60.8	53.3
U	µg/L	41.4	157J	135	160	131	166	184
V	µg/L	1U	3	1.2U	1.5	6	18.1	5.4
Radiological								
U	µg/L	41.4	157J	135	160	131	166	184

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R3-M2[a,b]

Analyte	Unit	01/11/00	04/11/00	08/16/00	10/17/00	01/23/01	04/16/01	07/11/01	09/30/02	04/07/03	07/10/03	10/08/03	04/16/04	10/04/04
Field Measurements														
Alkalinity	mg/L	180	330	220	294	293	276	318	399	308	357	399	315	366
Conductivity[c]	µmhos/cm	2850	4920	2450	2550	2510	2390	2370	1961	1915	1731	1907	1549	1740
DO[c]	mg/L	0.23	0.28	0.22	0.196	0.9	0.78	0.369	3.2	1.82	2.05	1	2.20	0.57
ORP[c]	mV	-187	-211	-177	-156	-129	-13	-85	-34	-97.2	-93	-111	-148.1	-119
pH[c]	s.u.	7.55	7	7.08	7.52	7.16	7.03	6.89	7.19	7.06	6.95	6.96	7.38	6.95
Temperature[c]	C	11.2	8.1	15.3	15.2	9.2	8.5	12.3	15	9.08	14.6	14.6	9.53	13.8
Turbidity[c]	NTU	2.46	7.4	2.8	13.6	14.3	7.16	4.18	14.5	47.9	16	126	19.8	19.7
Common Ions														
Ca	mg/L	224	263	184	239	234	232	246	222	238	232	242	240	250
Chloride	mg/L	175	146	85.6	108	108	115J	116	74.3	103	90.1	92.7	80.0	46.0
Fluoride	µg/L	--	--	--	--	209	330	337	259	188	390J	279	350.	400.
Hardness	mg/L	894	955	679	866	852	825	870	794	838	817	853	822	847
K	mg/L	16.6	16.2	18.3	21.4	20.5	17.7	20.0	15.7	14.0	13.7	14.0	20.0	15.0
Mg	mg/L	81.3	72.5	53.4	65.4	65.0	59.7	62.0	58.1	59.3	57.8	60.4	54.0	54.0
Na	mg/L	355	270	283	283	255	227	215	129	145	132	131	110	95.0
NO_2 as N	µg/L	8.5U	712	795	988	--	--	--	--	--	--	--	--	--
NO_3 as N	µg/L	1810	15000	4630	4860	--	--	--	--	--	--	--	--	--
NO_3+NO_2 as N	µg/L	--	--	--	--	4300	7970	3720	118	1930	813	534	310.	200.
SO_4	mg/L	1260	1110	956	981	755	608	791	624	729	652	678	580	580
Metals														
As	µg/L	0.4U	0.25	0.3U	0.2U	0.2U	0.5U	0.5U	0.1U	0.100U	0.120	0.100	0.12	0.17
Fe	µg/L	7710	11900	8710	20000	19400	12400	17300	36700	15800	22600	21500	20000	11000
Mn	µg/L	635	498	343	488	417	345	431	288	277	240	194	240	120
Mo	µg/L	24.8	21.2J	42.4	24.9	31.4	35	32.5	16.9	37.2	38.9	33.0	51	55
Se	µg/L	8.5	33.2	6.5	19.8	43.4	93.4	62.8	10.6	68.4	22.0	19.6	12	18
U	µg/L	15.9	98.2J	70.6	65	69.9	188	215	97	263	255	282	350J	450J
V	µg/L	1U	0.4U	1.2U	1.2U	1.4U	6.5	15.6	2.4	1.10	3.40	12.8	3.4	11
Radiological														
U	µg/L	15.9	98.2J	70.6	65	69.9	188	215	97	263	255	282	350J	450J

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R3-M2[a,b]

Analyte	Unit	04/06/05	10/03/05	04/04/06	10/02/06	04/10/07	10/08/07	04/07/08[c]	10/08/08	04/08/09	10/06/09	04/19/10
Field Measurements												
Alkalinity	mg/L	255	283	316	336	334	335	262	250	322	333	281
Conductivity[c]	µmhos/cm	1613	1137	1734	1930	1603	1737	2006	1408	1402	1875	1650
DO[c]	mg/L	0.90	1.80	1.11	1.07	0.78	0.22	1.62	9.26	1.02	1.45	0.60
ORP[c]	mV	-168.5	-104	-12.6	-65	-88.0	-170	-72.6	-6.1	-174	-113	-92
pH[c]	s.u.	7.50	7.09	6.88	6.90	7.37	7.31	7.07	7.15	7.33	7.23	7.49
Temperature[c]	C	9.70	13.6	8.01	14.40	7.85	13.9	8.14	11.69	8.30	12.0	8.8
Turbidity[c]	NTU	13.1	9.69	32.6	15.0	18.5	24.5	16.0	3.98	4.47	8.58	25.2
Common Ions												
Ca	mg/L	190	140	250	360	330	280	260	190	310J	260J	240
Chloride	mg/L	99.0	49.0	72.0	59.0	86.0	56.0	140	62.0	78.0	79.0	85.0
Fluoride	µg/L	400.	450.	390.	610.	330.	630.	320.	880.	410.	510.	420.
Hardness	mg/L	660	469	843	1170	1100	950	900	652	1040J	876J	826
K	mg/L	17.0	14.0	18.0	22.0	18.0	21.0	16.0	17.0J	18.0J	16.0J	16.0J
Mg	mg/L	45.0	29.0	53.0	67.0	68.0	61.0	61.0	43.0	65.0	55.0	55.0
Na	mg/L	110	87.0	93.0	130	110	110	110	100	120J	110J	110
NO_2 as N	µg/L	--	--	--	--	--	--	--	--	--	--	--
NO_3 as N	µg/L	--	--	--	--	--	--	--	--	--	--	--
NO_3+NO_2 as N	µg/L	880.	170.	230.	220.	190.	46	1100.	10.U	110.	10.U	140.
SO_4	mg/L	520	300	640	750	750	690	680	480	720	640	620
Metals												
As	µg/L	0.17	0.007U	0.0075U	0.012U	0.012U	0.17	0.53	0.26	0.15U	0.24	0.24
Fe	µg/L	5200	4200	6500	7900	6900	6300	5200	5500	7000	6500	4800
Mn	µg/L	140	130	200	220	200	220	180	180	260	250	180
Mo	µg/L	76	73	60	70	74	72	110	87	69	69	120
Se	µg/L	12	6.7	12	14	11	5.8	12	2.3	6.4	3.1	3.1
U	µg/L	500	290	600	540	640	560	490	430	550	480	590
V	µg/L	4.4	3.4	8.3	3.5	6.8J	5.3J	21	0.97	1.2	1.3	1.1
Radiological												
U	µg/L	500	290	600	540	640	560	490	430	550	480	590

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R3-M3[a,b]

Analyte	Unit	01/11/00	04/11/00	08/15/00	10/16/00	01/23/01	04/17/01	07/10/01	09/30/02	04/07/03	07/10/03	10/08/03	04/16/04	10/04/04
Field Measurements														
Alkalinity	mg/L	389	317	292	235	316	303	387	399	343	367	414	280	440
Conductivity[c]	µmhos/cm	3220	3250	3970	2320	2670	2540	2630	2061	1910	1907	1952	1547	1815
DO[c]	mg/L	0.47	0.44	0.56	0.7	0.1	1.014	0.295	3.9	1.43	2.08	0.79	2.21	0.40
ORP[c]	mV	-72	113	-39	-107	-126	-126	-192	-13.8	-50.1	-65	-107	-149.5	-169
pH[c]	s.u.	6.66	6.47	7.23	7.18	7.32	7.03	6.75	6.85	6.93	6.85	6.96	7.45	7.29
Temperature[c]	C	10.4	8.5	15.1	16	10.1	9.1	12.6	16.3	8.73	14.9	14.9	10.52	14.3
Turbidity[c]	NTU	8.85	3.03	2.79	9.26	3.77	22.7	7.94	11.8	33.3	15.4	20.2	11.6	3.40
Common Ions														
Ca	mg/L	380	258	227	208	241	241	293	247	246	225	232	230	260
Chloride	mg/L	199	196	106	103	150	131J	151	81.7	98.6	97.4	96.4	77.0	52.0
Fluoride	µg/L	--	--	--	--	302	250	254	350	192	151J	242	390.	440.
Hardness	mg/L	1360	929	812	755	885	876	1050	877	890	825	828	801	884
K	mg/L	18.2	11.0	14.5	15.0	13.3	12.4	15.7	13.3	10.3	11.1	11.3	17.0	13.0
Mg	mg/L	100	69.2	59.5	57.3	68.8	66.6	77.3	63.3	66.9	63.8	60.3	55.0	57.0
Na	mg/L	334	220	278	285	260	227	261	134	127	132	134	110	98.0
NO_2 as N	µg/L	104	65.1	125	64.8	--	--	--	--	--	--	--	--	--
NO_3 as N	µg/L	13500	23300	3820	1940	--	--	--	--	--	--	--	--	--
NO_3+NO_2 as N	µg/L	--	--	--	--	6490	4340	1500	390	484	502	456	10.U	24
SO_4	mg/L	1290	1200	981	921	976	790	900	665	704	650	661	520	570
Metals														
As	µg/L	0.4U	0.36	0.3U	0.2U	0.2U	0.5U	0.5U	0.1U	0.100U	0.100U	0.100U	0.016U	0.018U
Fe	µg/L	--	--	1010	1290	6830	2610	17800	23000	6030	8870	10000	9900	28000
Mn	µg/L	--	--	197	172	269	296	587	212	161	204	148	170	230
Mo	µg/L	38J	35.1J	51.2	53.6	25.6	23.9J	18	16.3	23.6	30.6	23.0	51	22
Se	µg/L	45.2	82.4	8.4	4	37.2	56.9	30.4	18.1	39.5	20.5	19.1	0.33	1.2
U	µg/L	594	534	345	202	268	286	164	192	326	262	322	190J	300J
V	µg/L	40.5	53	15.1	7.9	4.7	6.7	2.1	4.4	6.40	5.20	3.40	0.41	0.13J
Radiological														
U	µg/L	594	534	345	202	268	286	164	192	326	262	322	190J	300J

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R3-M3[a,b]

Analyte	Unit	04/06/05	10/03/05	04/04/06	10/02/06	04/10/07	10/08/07	04/07/08[c]	10/07/08	04/07/09	10/06/09	04/19/10
Field Measurements												
Alkalinity	mg/L	197	324	371	392	335	343	228	216	288	671	283
Conductivity[c]	µmhos/cm	1743	1381	1892	1902	1915	1695	2078	1520	1232	1775	1700
DO[c]	mg/L	1.03	1.51	0.90	5.87	2.66	0.30	1.99	3.47	0.60	0.57	0.44
ORP[c]	mV	-216.6	-184	-76.5	-76	-92.0	-168	-75.9	-143	-189	-137	-155
pH[c]	s.u.	8.01	7.54	6.96	6.81	7.41	7.49	7.01	7.47	7.65	7.55	7.74
Temperature[c]	C	10.22	14.3	7.70	14.4	8.67	13.9	8.30	12.57	8.87	11.2	9.3
Turbidity[c]	NTU	5.63	9.20	6.87	6.02	13.5	17.0	3.79	5.6	1.55	6.87	8.28
Common Ions												
Ca	mg/L	160	170	270	310	320	250	260	170	280J	240J	240
Chloride	mg/L	110	65.0	84.0	67.0	86.0	56.0	160	59.0	78.0	79.0	110
Fluoride	µg/L	270.	370.	310.	470.	360.	580.	230.	560.	510.	460.	300.
Hardness	mg/L	597	573	905	1050	1090	871	921	597	971J	826J	834
K	mg/L	16.0	13.0	16.0	19.0	17.0	20.0	16.0J	16.0J	18.0J	16.0J	16.0J
Mg	mg/L	48.0	36.0	56.0	67.0	70.0	60.0	66.0	42.0	66.0	55.0	57.0
Na	mg/L	110	95.0	98.0	130	120	110	110	98.0	120J	110J	110
NO_2 as N	µg/L	--	--	--	--	--	--	--	--	--	--	--
NO_3 as N	µg/L	--	--	--	--	--	--	--	--	--	--	--
NO_3+NO_2 as N	µg/L	16	10.U	56	13	10.U	10.U	10.U	10.U	100.U	10.U	10.U
SO_4	mg/L	520	350	680	730	730	670	720	460	700	610	630
Metals												
As	µg/L	0.081	0.007U	0.0075U	0.012U	0.012U	0.12	0.14	0.15	0.11U	0.19	0.22
Fe	µg/L	4900	12000	21000	13000	13000	11000	8100	5200	8600	8800	8900
Mn	µg/L	77	180	230	220	190	220	150	130	190	200	180
Mo	µg/L	55	46	18	33	36	42	51	65	53	56	47
Se	µg/L	0.38	0.34	1.4	0.8	0.038U	0.13	0.56	0.31	0.12U	0.3	0.33
U	µg/L	150	170	500	270	430	400	400	290	310	310	260
V	µg/L	0.41UR	0.1U	0.14UJ	0.21U	0.29J	0.095U	0.69	0.1U	0.099U	0.094J	0.14
Radiological												
U	µg/L	150	170	500	270	430	400	400	290	310	310	260

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[c] Sample was unfiltered.
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[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R3-M4[a,b]

Analyte	Unit	01/12/00	04/12/00	08/15/00	10/16/00	01/22/01	04/16/01	07/09/01
Field Measurements								
Alkalinity	mg/L	247	375	225	300	342	388	345
Conductivity[c]	µmhos/cm	2810	5300	4070	2600	2770	2800	2690
DO[c]	mg/L	0.27	0.11	0.5	1.5	0.4	0.974	0.296
ORP[c]	mV	-290	-212	-203	-182	-121	-112	-151
pH[c]	s.u.	7.5	6.84	7.32	7.4	7.38	7.12	6.61
Temperature[c]	C	10.4	8.1	16.8	16.5	8.2	10.3	13.1
Turbidity[c]	NTU	2.95	11.9	7.81	8.49	13.2	16.9	6.2
Common Ions								
Ca	mg/L	--	312	197	246	259	275	303
Chloride	mg/L	--	201	130	122	165	170J	155
Fluoride	µg/L	--	--	--	--	321	273	288
Hardness	mg/L	--	1150	785	919	956	984	1090
K	mg/L	--	9.49	12.3	12.9	12.5	11.7	15.5
Mg	mg/L	--	90.9	71.1	73.9	75.1	72.1	80.3
Na	mg/L	--	247	289	288	263	228	253
NO_2 as N	µg/L	--	--	168	827	--	--	--
NO_3 as N	µg/L	--	--	470	3380	--	--	--
NO_3+NO_2 as N	µg/L	--	10900	--	--	5060	9040	3340
SO_4	mg/L	--	1190	1010	1020	1050	470	919
Metals								
As	µg/L	0.4U	0.2U	0.3U	0.2U	0.2U	0.5U	0.5U
Fe	µg/L	--	31100	25700	20700	22700	15300	24200
Mn	µg/L	--	606	401	359	321	224	309
Mo	µg/L	10	15.1	10.6	16	16.8	18.9	17.7
Se	µg/L	13.1	54	6.1	6.4	47.4	97.1	69
U	µg/L	1.7	36.5	27	85	73.2	164	161
V	µg/L	1U	0.4U	1.2U	1.2U	3.6	11.2	15.6
Radiological								
U	µg/L	1.7	36.5	27	85	73.2	164	161

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R4-M1[a,b]

Analyte	Unit	01/11/00	04/11/00	08/16/00	10/17/00	01/23/01	04/16/01	07/09/01
Field Measurements								
Alkalinity	mg/L	43	83	50	39	67	118	105
Conductivity[c]	µmhos/cm	2610	4320	2360	2330	2080	2060	1913
DO[c]	mg/L	0.18	0.06	0.16	0.19	1.6	0.605	0.099
ORP[c]	mV	-186	-533	-393	-380	-325	-148	-181
pH[c]	s.u.	7.76	8.34	9.38	9.4	8.1	8.28	7.94
Temperature[c]	C	11.2	10.4	13.7	15.1	9.7	9.9	12.2
Turbidity[c]	NTU	7.62	84	4.34	3.78	3.79	8.78	3.97
Common Ions								
Ca	mg/L	120	137	127	94.6	83.6	106	102
Chloride	mg/L	157	126	85.3	89.3	108	98.5J	90.9
Fluoride	µg/L	--	--	--	--	194	417	742J
Hardness	mg/L	610	625	548	561	449	493	474
K	mg/L	21.6	19.4	20.9	22.3	21.1	18.7	19.5
Mg	mg/L	75.4	68.8	56.0	78.9	58.4	55.5	53.2
Na	mg/L	363	289	316	311	262	234	220
NO_2 as N	µg/L	8.5U	560	27.0U	13.6U	--	--	--
NO_3 as N	µg/L	18.1U	5750	31.0U	14.8U	--	--	--
NO_3+NO_2 as N	µg/L	--	--	--	--	7.1U	4.7U	4.7UJ
SO_4	mg/L	1140	1140	1070	1060	837	495	709
Metals								
As	µg/L	0.4U	0.2U	0.3U	0.2U	0.2U	0.5U	0.5U
Fe	µg/L	95.8	13200	338	687	7950	15300	15900
Mn	µg/L	223	744	89	562	616	342	364
Mo	µg/L	0.4U	10.8J	5	5.1	0.73	0.30U	2.9U
Se	µg/L	0.1U	3.8	0.11	0.1U	0.12	2.7	2.6
U	µg/L	0.1U	0.10UJ	0.10U	0.10U	0.1U	0.10U	0.1U
V	µg/L	1U	0.4U	1.2U	1.2U	1.4U	0.4U	0.3U
Radiological								
U	µg/L	0.1U	0.10UJ	0.10U	0.10U	0.1U	0.10U	0.1U

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R4-M2[a,b]

Analyte	Unit	01/11/00	04/12/00	08/16/00	10/17/00	01/24/01	04/16/01	07/10/01
Field Measurements								
Alkalinity	mg/L	32	105	31	110	120	149	218
Conductivity[c]	µmhos/cm	2500	4420	3500	2320	2230	2180	2160
DO[c]	mg/L	0.14	0.09	0.53	0.37	0	1.1	0.193
ORP[c]	mV	-390	-308	-15	-239	-273	-190	-177
pH[c]	s.u.	9.03	7.45	8.65	7.86	7.97	8.06	7.58
Temperature[c]	C	11.7	9.8	17.2	16.3	9.3	12.2	12.1
Turbidity[c]	NTU	5.05	5.18	3.69	10.5	7.68	4.71	3.02
Common Ions								
Ca	mg/L	--	--	--	--	--	129	174
Chloride	mg/L	--	--	--	--	--	--	109
Fluoride	µg/L	--	--	--	--	--	--	539
Hardness	mg/L	--	--	--	--	--	547	680
K	mg/L	--	--	--	--	--	16.5	19.5
Mg	mg/L	--	--	--	--	--	54.5	59.6
Na	mg/L	--	--	--	--	--	220	220
NO_3+NO_2 as N	µg/L	--	--	--	--	--	--	4.7UJ
SO_4	mg/L	--	--	--	--	--	--	767
Metals								
As	µg/L	0.4U	0.2U	0.3U	0.2U	0.2U	0.5U	0.5U
Fe	µg/L	--	--	--	--	21600	25000	36200
Mn	µg/L	--	--	--	--	402	350	483
Mo	µg/L	0.4UJ	4.6	5.7	0.3U	1.9	6.4	2.9U
Se	µg/L	0.1U	6.8	0.11	0.1U	2.4	25.9	4
U	µg/L	0.11	0.10U	0.10U	0.10U	0.1U	0.1U	0.1U
V	µg/L	1U	0.4U	1.2U	1.2U	1.4U	0.4U	0.3U
Radiological								
U	µg/L	0.11	0.10U	0.10U	0.10U	0.1U	0.1U	0.1U

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R4-M3[a,b]

Analyte	Unit	01/11/00	04/11/00	08/16/00	10/17/00	01/23/01	04/17/01	07/11/01	10/15/01	01/31/02	04/02/02	07/09/02	09/30/02	04/07/03
Field Measurements														
Alkalinity	mg/L	39	45	30	93	60	92	88	278	241	288	355	284	267
Conductivity[c]	µmhos/cm	2710	4330	2100	2240	2080	2090	1936	1870	1730	1874	1767	1647	1735
DO[c]	mg/L	0.43	0.05	0.13	0.06	0	0.856	0.597	0.178	0.78	0.6	0.83	1.6	1.69
ORP[c]	mV	-352	-414	-423	-316	-286	-74	-162	-189	-137	-203	-216	-52	-138.8
pH[c]	s.u.	9.3	8.05	8.5	8.19	8.05	7.64	7.73	7.61	7.48	7.45	7.54	7.51	7.07
Temperature[c]	C	11.8	8.8	14.7	15.7	9.2	8.8	12.5	14.5	8.47	11.6	14.98	15.5	8.87
Turbidity[c]	NTU	2.99	6.8	3.22	3.28	13.6	4.42	3.39	8.31	4.2	17	6.84	12.1	16.5
Common Ions														
Ca	mg/L	137	138	82.5	105	102	118	103	144	169	182	188	150	163
Chloride	mg/L	177	158	87.6	108	136	117J	117	98.1	80.1	80.4	73.8	73.1	93.1
Fluoride	µg/L	--	--	--	--	416	731	695	413	177	248	25.1UJ	141	90.7
Hardness	mg/L	697	646	409	544	509	543	515	591	661	710	699	606	644
K	mg/L	18.5	15.8	18.1	21.4	19.2	17.5	18.9	18.7	15.5	14.8	14.0	16.3	14.4
Mg	mg/L	86.2	73.1	49.2	68.4	61.8	60.2	62.7	56.3	58.0	62.1	55.8	56.2	57.5
Na	mg/L	365	277	274	280	247	231	214	163	143	136	121	130	143
NO_2 as N	µg/L	8.5U	13.6U	13.5U	13.6U	--	--	--	--	--	--	--	--	--
NO_3 as N	µg/L	18.1U	41.6	15.5U	14.8U	--	--	--	--	--	--	--	--	--
NO_3+NO_2 as N	µg/L	--	--	--	--	150	6.9	7.9	7.3U	7.3U	156	4.9U	30.6	4.50U
SO_4	mg/L	1210	1090	876	930	865	530	710	680	675	636	601	557	683
Metals														
As	µg/L	0.4U	0.2U	0.3U	0.2U	0.2U	0.5U	0.5U	0.6U	0.6U	0.1U	0.1U	0.1U	0.100U
Fe	µg/L	348	7250	1880	12400	12000	16600	12300	29900	39800	45900	46000	36400	28200
Mn	µg/L	1070	616	171	885	338	357	336	396	519	454	411	321	374
Mo	µg/L	8.8	4.5J	6.5	9.1	3.8	0.3U	2.9U	1.9U	1.5U	1.8U	1.8U	1.7U	3.80
Se	µg/L	0.13	0.49	0.1U	0.1U	0.88	4.2	0.3U	0.3U	0.3U	0.2U	0.21	0.12	0.220
U	µg/L	0.1U	0.10UJ	0.10U	0.10U	0.1U	0.10U	0.1U	0.1U	0.17	0.1U	0.1U	0.1U	0.160
V	µg/L	1U	0.4U	1.2U	1.2U	1.4U	0.4U	0.3U	0.3U	0.4U	0.3U	0.3U	0.3U	0.300U
Radiological														
U	µg/L	0.1U	0.10UJ	0.10U	0.10U	0.1U	0.10U	0.1U	0.1U	0.17	0.1U	0.1U	0.1U	0.160

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[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R4-M3[a,b]

Analyte	Unit	07/10/03	10/08/03	04/16/04	10/04/04	04/06/05	10/03/05	04/04/06	10/02/06	04/10/07	10/08/07	04/08/08[c]	10/08/08	04/08/09
Field Measurements														
Alkalinity	mg/L	315	405	127	244	75	207	165	58	37.0	23	60	70	48
Conductivity[c]	µmhos/cm	1845	1755	641	1206	1056	878	1155	1178	1109	847	1021	506	889
DO[c]	mg/L	1.45	2.82	1.05	0.87	1.31	1.72	1.55	3.55	1.10	0.39	-5.76	6.06	3.08
ORP[c]	mV	-169	-196	-221	-115	-255	-239	-200.3	-66	-121	-252	-70.04	-18.1	-172
pH[c]	s.u.	7.31	7.41	8.15	7.41	8.39	8.11	8.26	8.07	8.80	10.06	9.04	8.94	9.27
Temperature[c]	C	15.6	14.8	9.80	14.8	10.81	13.9	8.10	14.6	8.15	13.8	8.97	11.92	8.31
Turbidity[c]	NTU	31.1	49.3	31.1	57.3	27.9	29.1	18.8	37.5	24.7	33.6	5.80	5.04	6.25
Common Ions														
Ca	mg/L	171	232	110	140	46.0	76.0	140	110	66.0	26.0	61.0	6.60	48.0J
Chloride	mg/L	87.9	91.3	78.0	46.0	100	48.0	73.0	57.0	83.0	56.0	130	--	81.0
Fluoride	µg/L	17.2UR	314	200.U	120.	220.	230.	200.U	200.U	200.U	190.	200.U	--	120.
Hardness	mg/L	655	830	505	580	280	313	580	555	420	246	428	103	375J
K	mg/L	12.9	13.9	20.0	15.0	19.0	15.0	19.0	22.0	13.0	22.0	18.0	20.0J	18.0J
Mg	mg/L	55.3	60.8	56.0	56.0	40.0	30.0	56.0	68.0	62.0	44.0	67.0	21.0	62.0
Na	mg/L	127	132	110	95.0	110	86.0	95.0	120	95.0	120	100	59.0	120J
NO_2 as N	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--
NO_3 as N	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--
NO_3+NO_2 as N	µg/L	4.50U	4.50U	10.U	10.U	10.U	10.U	35	19	10.U	10.U	10.U	380.	10.U
SO_4	mg/L	543	666	470	470	320	220	590	540	560	430	500	--	490
Metals														
As	µg/L	0.100U	0.100U	0.016U	0.018U	0.057	0.007U	0.0075U	0.012U	0.012U	0.047	0.059	0.037	0.066U
Fe	µg/L	37300	46700	20000	35000	320	7500	21000	8400	1200	49	1100	18	2.2J
Mn	µg/L	353	330	260	310	51	210	300	300	150	17	27	12	9.2
Mo	µg/L	2.00	1.70U	8.6	10	36	47	21	43	39	280	40	24	50
Se	µg/L	0.210	0.100U	0.068	0.058	0.068U	0.023U	0.25	0.025U	0.038U	0.16	0.019U	0.024U	0.12U
U	µg/L	0.100U	0.100U	0.0069UJ	0.0083U	0.0022U	0.0048U	0.0034U	0.12J	0.16	0.061	0.1U	0.054	0.08U
V	µg/L	0.300U	0.300U	0.25U	0.12U	0.41UR	0.1U	0.14UJ	0.21U	0.072UJ	0.095U	0.15U	0.1U	0.099U
Radiological														
U	µg/L	0.100U	0.100U	0.0069UJ	0.0083U	0.0022U	0.0048U	0.0034U	0.12J	0.16	0.061	0.1U	0.054	0.08U

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R4-M3[a,b]

Analyte	Unit	10/06/09	04/19/10
Field Measurements			
Alkalinity	mg/L	--	46
Conductivity[c]	µmhos/cm	895	928
DO[c]	mg/L	1.85	1.57
ORP[c]	mV	-150.0	-74
pH[c]	s.u.	9.0	8.48
Temperature[c]	C	11.6	8.5
Turbidity[c]	NTU	24.5	2.67
Common Ions			
Ca	mg/L	11.0J	33.0
Chloride	mg/L	--	65.0
Fluoride	µg/L	--	160.
Hardness	mg/L	122J	317
K	mg/L	17.0J	18.0J
Mg	mg/L	23.0	57.0
Na	mg/L	66.0J	110
NO_2 as N	µg/L	--	--
NO_3 as N	µg/L	--	--
NO_3+NO_2 as N	µg/L	--	110.
SO_4	mg/L	--	370
Metals			
As	µg/L	0.0084U	0.11
Fe	µg/L	25	7.3
Mn	µg/L	20	14
Mo	µg/L	12	49
Se	µg/L	0.14	0.13
U	µg/L	0.13	0.054
V	µg/L	0.13J	0.089
Radiological			
U	µg/L	0.13	0.054

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R4-M4[a,b]

Analyte	Unit	01/11/00	04/11/00	08/16/00	10/17/00	01/23/01	04/17/01	07/10/01
Field Measurements								
Alkalinity	mg/L	44	117	50	102	85	140	196
Conductivity[c]	µmhos/cm	2720	2870	2120	2220	2150	2160	2110
DO[c]	mg/L	0.22	0.12	0.34	0.19	0	0.735	0.258
ORP[c]	mV	-378	47	-289	-375	-272	-191	-266
pH[c]	s.u.	9.17	7.96	8.7	8.58	7.96	7.72	7.46
Temperature[c]	C	11	9.7	15.5	15.2	9.9	9.2	13.1
Turbidity[c]	NTU	3.73	9.17	17.7	3.02	5.21	4	7.45
Common Ions								
Ca	mg/L	--	--	--	--	--	119	153
Chloride	mg/L	--	--	--	--	--	--	123
Fluoride	µg/L	--	--	--	--	--	--	292
Hardness	mg/L	--	--	--	--	--	535	641
K	mg/L	--	--	--	--	--	16.5	20.1
Mg	mg/L	--	--	--	--	--	57.8	62.8
Na	mg/L	--	--	--	--	--	219	243
NO_3+NO_2 as N	µg/L	--	--	--	--	--	--	16.8
SO_4	mg/L	--	--	--	--	--	--	765
Metals								
As	µg/L	0.4U	0.42	0.3U	0.2U	0.2U	0.5U	0.5U
Fe	µg/L	--	--	--	--	12200	22400	33100
Mn	µg/L	--	--	--	--	399	446	487
Mo	µg/L	0.4UJ	0.4U	3.4	0.3U	1	0.3U	2.9U
Se	µg/L	0.1U	6.4	0.1U	0.1U	0.34	7.3	0.3U
U	µg/L	0.1U	0.10U	0.1U	0.10U	0.12	0.1U	0.1U
V	µg/L	1U	0.4U	1.2	1.2U	1.4U	0.4U	0.3U
Radiological								
U	µg/L	0.1U	0.10U	0.1U	0.10U	0.12	0.1U	0.1U

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[c] Sample was unfiltered.
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[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R4-M5[a,b]

Analyte	Unit	01/11/00	04/12/00	08/16/00	10/17/00	01/23/01	04/17/01	07/10/01
Field Measurements								
Alkalinity	mg/L	156	110	44	35	30	81	65
Conductivity[c]	µmhos/cm	2760	4500	3120	1960	2060	2080	2030
DO[c]	mg/L	0.17	0.08	0.54	0.636	0.3	0.988	0.3
ORP[c]	mV	-262	-286	59	-350	-415	-229	-331
pH[c]	s.u.	7.51	7.36	9.18	9.36	9.33	8.18	7.83
Temperature[c]	C	10.5	9.1	16	16	10.2	9.6	12.5
Turbidity[c]	NTU	5.18	15.4	9.87	3.13	9.02	10.2	5.75
Common Ions								
Ca	mg/L	--	--	--	--	--	77.7	105
Chloride	mg/L	--	--	--	--	--	--	138
Fluoride	µg/L	--	--	--	--	--	--	296
Hardness	mg/L	--	--	--	--	--	481	559
K	mg/L	--	--	--	--	--	13.7	17.5
Mg	mg/L	--	--	--	--	--	69.6	72.0
Na	mg/L	--	--	--	--	--	226	248
NO_3+NO_2 as N	µg/L	--	--	--	--	--	--	19.5
SO_4	mg/L	--	--	--	--	--	--	782
Metals								
As	µg/L	0.4U	0.2U	0.3U	0.2U	0.2U	0.5U	0.5U
Fe	µg/L	--	--	--	--	146	4150	11800
Mn	µg/L	--	--	--	--	35.7	107	483
Mo	µg/L	13.1J	20.5	24.1	31.6	21.8	11.4J	3
Se	µg/L	0.1U	3.3	0.1U	0.1	0.1	0.3U	0.3U
U	µg/L	0.43	0.10U	0.1U	0.10U	0.11	0.12	0.1U
V	µg/L	1U	0.4U	1.2U	1.2U	1.4U	0.4U	0.3U
Radiological								
U	µg/L	0.43	0.10U	0.1U	0.10U	0.11	0.12	0.1U

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[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R4-M6[a,b]

Analyte	Unit	01/11/00	04/11/00	08/16/00	10/16/00	01/23/01	04/17/01	07/10/01	10/11/01	10/15/01	01/28/02	04/02/02	07/09/02	09/30/02
Field Measurements														
Alkalinity	mg/L	69	42	34	38	45	241	10	48	--	199	243	258	293
Conductivity[c]	µmhos/cm	2730	2720	3100	1935	2000	1990	2090	1472	--	1809	1845	1612	1695
DO[c]	mg/L	0.34	0.42	1.3	0.6	0.1	0.58	0.193	0.195	--	0.396	0.295	0.82	3.3
ORP[c]	mV	-320	124	153	-162	-343	-202	-322	-200	--	-193	-253	-245	-53
pH[c]	s.u.	9.59	8.12	9.24	9.37	9.28	8.58	8.33	9.04	--	7.59	7.76	7.54	7.52
Temperature[c]	C	10.9	9	14.1	15.1	9.7	9.1	12.4	13.9	--	8.6	11	15.06	16.5
Turbidity[c]	NTU	5.49	6.39	1.61	2.07	2.12	8.34	8.93	4.66	--	8.81	9.3	5.33	389
Common Ions														
Ca	mg/L	165	147	66.8	51.3	55.0	67.8	101	23.8	--	123	158	137	128
Chloride	mg/L	206	195	111	102	141	132J	149	112	108	89.4	91.6	84.2	80.8
Fluoride	µg/L	--	--	--	--	322	513	215	26.2U	26.2U	925J	537	265	139
Hardness	mg/L	821	732	353	341	393	441	578	283	--	584	686	613	580
K	mg/L	17.7	13.8	15.0	15.7	14.5	12.8	16.1	15.1	--	13.0	12.2	12.4	13.0
Mg	mg/L	99.2	88.7	45.1	51.8	62.0	66.1	79.2	54.4	--	67.2	70.7	65.8	63.3
Na	mg/L	334	281	283	285	248	225	256	178	--	151	144	140	136
NO_2 as N	µg/L	8.5U	27.2U	27.0U	13.6U	--	--	--	--	--	--	--	--	--
NO_3 as N	µg/L	18.1U	29.6U	31.0U	14.8U	--	--	--	--	--	--	--	--	--
NO_3+NO_2 as N	µg/L	--	--	--	--	7.1U	10	33.2	7.3U	7.3U	104	190	4.9U	23.4
SO_4	mg/L	1200	1100	788	763	788	462	805	566	542	672	644	572	569
Metals														
As	µg/L	0.4U	0.2U	0.3U	0.2U	0.2U	0.5U	0.5U	0.6U	--	0.6U	0.1U	0.1U	0.1U
Fe	µg/L	--	--	9.1U	93.2	593	1100	382	753J	--	29300	46600	39300	39300
Mn	µg/L	--	--	13.2	27.9	194	163	92.5	160	--	432	469	391	354
Mo	µg/L	0.4UJ	0.4UJ	3.9	5.9	4.6	4.4J	9.2	2.2	--	1.5U	1.8U	1.8U	1.7U
Se	µg/L	0.1U	0.2U	0.1U	0.1U	0.1U	0.3U	0.3U	0.3U	--	0.3U	0.2U	0.12	0.13
U	µg/L	0.42	0.10U	0.10U	0.10U	0.11	0.1U	0.1U	0.1U	--	0.1U	0.1U	0.1U	0.1U
V	µg/L	1.5	0.4U	1.2U	1.2U	1.4U	0.4U	0.3U	0.3U	--	0.4U	0.3U	0.3U	0.3U
Radiological														
U	µg/L	0.42	0.10U	0.10U	0.10U	0.11	0.1U	0.1U	0.1U	--	0.1U	0.1U	0.1U	0.1U

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[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R4-M6[a,b]

Analyte	Unit	04/07/03	07/10/03	10/08/03	04/16/04	10/04/04	04/06/05	10/03/05	04/04/06	10/02/06	04/10/07	10/08/07	04/07/08[c]	10/07/08
Field Measurements														
Alkalinity	mg/L	117	97	138	58	113	54	113	93	36	19.0	38	54	52
Conductivity[c]	µmhos/cm	1240	1381	1358	935	1003	1073	765	1240	982	1050	818	1094	698
DO[c]	mg/L	1.14	1.85	0.65	2.21	0.65	0.85	1.15	0.66	3.94	0.97	0.43	2.64	2.86
ORP[c]	mV	-149.9	-150	-214	-244.8	-311	-227.4	-148	-250.4	-125	-122	-192	-82.3	-170
pH[c]	s.u.	7.05	7.38	7.74	9.05	8.74	9.76	9.48	8.03	8.48	9.44	9.72	9.61	9.70
Temperature[c]	C	9.67	15	14.9	10.03	14.3	10.02	14.2	7.90	14.7	8.87	14.2	8.17	12.64
Turbidity[c]	NTU	23.9	17.9	32.1	11.2	25.5	16.4	13.6	9.49	9.91	14.9	20.1	4.37	7.14
Common Ions														
Ca	mg/L	77.6	53.4	66.0	34.0	39.0	19.0	5.70	100	23.0	43.0	6.90	35.0	4.50
Chloride	mg/L	101	99.1	93.7	87.0	52.0	120	63.0	84.0	70.0	95.0	62.0	120	63.0
Fluoride	µg/L	702	151J	863	100.U	100.U	220.	100.U	200.U	100.U	100.U	100.U	100.U	260.
Hardness	mg/L	428	373	432	221	328	155	130	538	263	359	124	330	73.0
K	mg/L	10.7	10.8	12.3	15.0J	14.0	14.0	13.0	15.0	17.0	15.0	17.0	18.0	11.0J
Mg	mg/L	57.0	58.2	64.9	33.0	56.0	26.0	28.0	70.0	50.0	61.0	26.0	59.0	15.0
Na	mg/L	123	128	136	97.0	99.0	100	92.0	96.0	120	100J	110	100	81.0
NO_2 as N	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--
NO_3 as N	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--
NO_3+NO_2 as N	µg/L	4.50U	4.50U	4.50U	10.U	10.U	10.U	10.U	29	44	10.U	10.U	10.U	10.U
SO_4	mg/L	533	484	496	300	370	220	150	590	390	400	290	380	130
Metals														
As	µg/L	0.100U	0.100U	0.100U	0.016U	0.018U	0.081	0.007U	0.0075U	0.012U	0.012U	0.022	0.066	0.064
Fe	µg/L	15300	11000	17500	450	6700	7.5U	7.8U	15000	2.2U	53	5.6U	370	12
Mn	µg/L	236	170	318	77	380	32	32	550	37	80	16	35	16
Mo	µg/L	2.00U	2.40	1.70U	3	0.17U	2.5	15	4.8	29	6.9	70	17	15
Se	µg/L	0.100U	0.100U	0.100U	0.051	0.041	0.068U	0.023U	0.02U	0.025U	0.038U	0.1	0.019U	0.024U
U	µg/L	0.100U	0.100U	0.100U	0.0069U	0.0083U	0.0022U	0.052	0.0034U	0.0048U	0.0014U	0.012U	0.1U	0.061
V	µg/L	0.310	0.300U	0.300U	0.25U	0.12U	0.41UR	0.1U	0.14UJ	0.21U	0.072U	0.13J	0.15U	0.1U
Radiological														
U	µg/L	0.100U	0.100U	0.100U	0.0069U	0.0083U	0.0022U	0.052	0.0034U	0.0048U	0.0014U	0.012U	0.1U	0.061

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R4-M6[a,b]

Analyte	Unit	04/07/09	10/06/09	04/19/10
Field Measurements				
Alkalinity	mg/L	53	56	42
Conductivity[c]	µmhos/cm	527	820	1075
DO[c]	mg/L	1.60	1.45	0.92
ORP[c]	mV	-284	-86	-43
pH[c]	s.u.	9.81	9.48	9.67
Temperature[c]	C	9.51	9.3	9.8
Turbidity[c]	NTU	7.69	29.2	16.5
Common Ions				
Ca	mg/L	17.0J	13.0J	26.0
Chloride	mg/L	77.0	83.0	83.0
Fluoride	µg/L	120.	100.U	100.U
Hardness	mg/L	182J	135J	287
K	mg/L	14.0J	13.0J	18.0J
Mg	mg/L	34.0	25.0	54.0
Na	mg/L	87.0J	86.0J	100
NO_2 as N	µg/L	--	--	--
NO_3 as N	µg/L	--	--	--
NO_3+NO_2 as N	µg/L	10.U	10.U	26
SO_4	mg/L	180	270	330
Metals				
As	µg/L	0.054U	0.0084U	0.069
Fe	µg/L	3.5J	13	35
Mn	µg/L	25	19	36
Mo	µg/L	17	18	21
Se	µg/L	0.061U	0.032U	0.14
U	µg/L	0.074	0.015	0.063
V	µg/L	0.099U	0.052J	0.037
Radiological				
U	µg/L	0.074	0.015	0.063

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R4-M7[a,b]

Analyte	Unit	01/12/00	04/12/00	08/16/00	10/18/00	01/23/01	04/16/01	07/10/01
Field Measurements								
Alkalinity	mg/L	143	80	34	35	35	98	18
Conductivity[c]	µmhos/cm	5190	4500	2110	2160	1935	2040	2020
DO[c]	mg/L	0.2	0.07	0.2	0.382	1.5	0.26	0.305
ORP[c]	mV	-365	-308	-315	-299	-343	-193	-291
pH[c]	s.u.	7.93	7.73	9.14	9	8.92	8.08	7.86
Temperature[c]	C	9.6	9.6	--	16	8.4	10.7	13.1
Turbidity[c]	NTU	6.31	4.51	7.8	1.84	3.27	7.23	5.66
Common Ions								
Ca	mg/L	--	--	--	--	--	68.4	86.2
Chloride	mg/L	--	--	--	--	--	--	156
Fluoride	µg/L	--	--	--	--	--	--	355
Hardness	mg/L	--	--	--	--	--	438	518
K	mg/L	--	--	--	--	--	11.5	16.0
Mg	mg/L	--	--	--	--	--	64.8	73.4
Na	mg/L	--	--	--	--	--	217	264
NO_3+NO_2 as N	µg/L	--	--	--	--	--	--	58.3
SO_4	mg/L	--	--	--	--	--	--	758
Metals								
As	µg/L	0.4U	0.2U	0.3U	0.2U	0.2U	0.5U	0.5U
Fe	µg/L	--	--	--	--	1450	1810	1880
Mn	µg/L	--	--	--	--	279	223	181
Mo	µg/L	0.4U	0.4U	5.7	8.6	4.8	4.5	5.3
Se	µg/L	0.2	0.2U	0.15	0.1U	0.13	0.3U	0.3U
U	µg/L	0.1U	0.10U	0.10U	0.10U	0.11	0.1U	0.1U
V	µg/L	1U	0.4U	1.2U	1.2U	1.4U	0.4U	0.3U
Radiological								
U	µg/L	0.1U	0.10U	0.10U	0.10U	0.11	0.1U	0.1U

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R4-M8[a,b]

Analyte	Unit	01/12/00	04/12/00	08/15/00	10/16/00	01/22/01	04/16/01	07/09/01
Field Measurements								
Alkalinity	mg/L	58	55	74	46	47	118	121
Conductivity[c]	µmhos/cm	2650	4440	3380	2200	2250	2400	2350
DO[c]	mg/L	0.3	0.01	0.54	1.2	0.2	1.027	0.252
ORP[c]	mV	-375	-400	-14	-206	-241	-209	-241
pH[c]	s.u.	8.98	8.48	9.19	9.51	8.1	7.64	7.17
Temperature[c]	C	10.8	8.7	15.5	16.2	7.5	10.3	16
Turbidity[c]	NTU	2.24	3.23	5.42	3.98	6.42	8.86	14.5
Common Ions								
Ca	mg/L	--	171	79.8	60.3	114	144	156
Chloride	mg/L	--	197	121	119	160	165J	153
Fluoride	µg/L	--	--	--	--	1230	963	1270
Hardness	mg/L	--	797	450	531	596	652	717
K	mg/L	--	11.3	12.7	14.0	13.0	12.0	16.2
Mg	mg/L	--	89.8	60.8	92.4	75.5	70.9	79.5
Na	mg/L	--	265	291	291	269	228	266
NO_2 as N	µg/L	--	--	27.0U	13.6U	--	--	--
NO_3 as N	µg/L	--	--	31.0U	14.8U	--	--	--
NO_3+NO_2 as N	µg/L	--	32.4U	--	--	570	7.3	33.9
SO_4	mg/L	--	1100	851	911	916	457	862
Metals								
As	µg/L	0.4U	0.2U	0.3U	0.2U	0.2U	0.5U	0.7
Fe	µg/L	--	2930	9.1U	65.1	15600	34600	29100
Mn	µg/L	--	573	84.4	85.9	721	429	440
Mo	µg/L	0.4U	0.4U	3.4	0.3U	1.1	0.30U	2.9U
Se	µg/L	0.1U	0.2U	0.1U	0.18	0.11	10	1.9
U	µg/L	0.1U	0.10U	0.10U	0.10U	0.1U	0.1U	0.1U
V	µg/L	1U	0.4U	1.2U	1.2U	1.4U	0.4U	0.3U
Radiological								
U	µg/L	0.1U	0.10U	0.10U	0.10U	0.1U	0.1U	0.1U

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R5-M1[a,b]

Analyte	Unit	01/11/00	04/12/00	08/16/00	10/18/00	01/23/01	04/16/01	07/09/01
Field Measurements								
Alkalinity	mg/L	25	61	53	40	43	88	92
Conductivity[c]	µmhos/cm	2290	4280	2330	2410	2050	2030	1857
DO[c]	mg/L	0.25	0.02	0.71	0.1	3	0.678	0.166
ORP[c]	mV	-325	-346	-234	-165	-331	-173	-199
pH[c]	s.u.	9.68	8.72	9.86	10.09	8.75	8.18	7.9
Temperature[c]	C	10.9	9.9	14.4	15.1	10.4	10.4	12.5
Turbidity[c]	NTU	2.8	5.49	2.92	1.92	6.63	8.32	8.98
Common Ions								
Ca	mg/L	--	--	--	--	--	86.0	90.8
Chloride	mg/L	--	--	--	--	--	--	87.5
Fluoride	µg/L	--	--	--	--	--	--	331J
Hardness	mg/L	--	--	--	--	--	433	448
K	mg/L	--	--	--	--	--	16.7	19.5
Mg	mg/L	--	--	--	--	--	52.9	53.8
Na	mg/L	--	--	--	--	--	226	230
NO_3+NO_2 as N	µg/L	--	--	--	--	--	--	5.5J
SO_4	mg/L	--	--	--	--	--	--	701
Metals								
As	µg/L	0.4U	0.2U	0.3U	0.2U	0.2U	0.5U	0.5U
Fe	µg/L	--	--	--	--	540	8600	13300
Mn	µg/L	--	--	--	--	531	515	696
Mo	µg/L	0.4U	7.8	9	10.5	3.3	0.3U	2.9U
Se	µg/L	0.1U	0.2U	0.1U	0.1U	0.1U	1.6	0.73
U	µg/L	0.1U	0.10U	0.1U	0.10U	0.1U	0.1U	0.1U
V	µg/L	1U	0.4U	1.2U	1.2U	1.4U	0.4U	0.3U
Radiological								
U	µg/L	0.1U	0.10U	0.1U	0.10U	0.1U	0.1U	0.1U

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R5-M10[a,b]

Analyte	Unit	01/12/00	04/12/00	08/15/00	10/18/00	01/22/01	04/16/01	07/09/01
Field Measurements								
Alkalinity	mg/L	45	90	40	21	45	47	39
Conductivity[c]	µmhos/cm	2590	4260	3440	2170	2200	2200	2120
DO[c]	mg/L	0.25	0.06	0.53	--	1.3	0.1	0.263
ORP[c]	mV	-349	-315	229	-65	-355	-262	-395
pH[c]	s.u.	9.08	8.07	8.95	9.4	9.27	8.5	7.67
Temperature[c]	C	11.3	10.1	15.7	16.4	9.4	10.4	13.7
Turbidity[c]	NTU	2.84	5.32	4.49	1.15	10.4	4.71	8.63
Common Ions								
Ca	mg/L	--	--	--	--	--	119	125
Chloride	mg/L	--	--	--	--	--	--	159
Fluoride	µg/L	--	--	--	--	--	--	1940
Hardness	mg/L	--	--	--	--	--	599	645
K	mg/L	--	--	--	--	--	11.2	14.0
Mg	mg/L	--	--	--	--	--	73.2	80.8
Na	mg/L	--	--	--	--	--	231	246
NO_3+NO_2 as N	µg/L	--	--	--	--	--	--	40.3
SO_4	mg/L	--	--	--	--	--	--	822
Metals								
As	µg/L	0.4U	0.2U	0.3U	0.2U	0.2U	0.5U	0.5U
Fe	µg/L	--	--	--	--	1470	4750	4480
Mn	µg/L	--	--	--	--	243	385	346
Mo	µg/L	6.8	0.4U	6.1	7.4	1.7	0.3U	2.9U
Se	µg/L	0.1U	0.2U	0.1U	0.33	0.1U	3.1	0.3U
U	µg/L	0.1U	0.10U	0.1U	0.10U	0.1U	0.1U	0.1U
V	µg/L	1U	0.4U	1.2U	1.4	1.4U	0.4U	0.3U
Radiological								
U	µg/L	0.1U	0.10U	0.1U	0.10U	0.1U	0.1U	0.1U

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[c] Sample was unfiltered.
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[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R5-M2[a,b]

Analyte	Unit	01/11/00	04/11/00	08/16/00	10/17/00	01/23/01	04/16/01	07/09/01
Field Measurements								
Alkalinity	mg/L	31	66	41	40	46	65	100
Conductivity[c]	µmhos/cm	2620	4370	2350	2290	2040	1990	1822
DO[c]	mg/L	0.19	0.05	0.14	0.09	1.2	0.594	0.033
ORP[c]	mV	-362	-475	-386	-154	-344	-185	-188
pH[c]	s.u.	9.81	8.3	9.38	9.85	8.43	8.03	7.69
Temperature[c]	C	11.8	8.8	13.5	14.6	10	10.3	12.7
Turbidity[c]	NTU	2.47	9.1	2.46	5.31	3.94	2.53	2.88
Common Ions								
Ca	mg/L	119	121	128	90.7	72.0	93.8	89.4
Chloride	mg/L	159	127	84.4	90.6	103	99.3J	91.5
Fluoride	µg/L	--	--	--	--	12.5U	195	981J
Hardness	mg/L	603	584	536	563	422	462	445
K	mg/L	21.5	19.4	20.6	22.8	21.7	18.7	20.2
Mg	mg/L	74.2	68.5	52.5	81.8	58.7	55.3	53.9
Na	mg/L	363	289	307	316	264	229	247
NO_2 as N	µg/L	8.5U	319	27.0U	13.6U	--	--	--
NO_3 as N	µg/L	18.1U	1750	31.0U	14.8U	--	--	--
NO_3+NO_2 as N	µg/L	--	--	--	--	7.1U	4.7U	4.7UJ
SO_4	mg/L	1140	1140	1070	1060	835	481	698
Metals								
As	µg/L	0.4U	0.2U	0.3U	0.2U	0.2U	0.5U	0.5U
Fe	µg/L	125	7100	228	11.6U	2620	9760	10900
Mn	µg/L	327	800	93.4	66.8	486	378	408
Mo	µg/L	0.4U	9.3J	6.7	10	1.4	0.30U	2.9U
Se	µg/L	0.1U	1.6	0.1U	0.1U	0.1U	0.89	0.71
U	µg/L	0.1U	0.1UJ	0.10U	0.10U	0.1U	0.10U	0.1U
V	µg/L	1U	0.4U	1.2U	1.2U	1.4U	0.4U	0.3U
Radiological								
U	µg/L	0.1U	0.1UJ	0.10U	0.10U	0.1U	0.10U	0.1U

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R5-M3[a,b]

Analyte	Unit	01/11/00	04/12/00	08/16/00	10/17/00	01/24/01	04/16/01	07/10/01
Field Measurements								
Alkalinity	mg/L	42	80	36	80	54	77	77
Conductivity[c]	µmhos/cm	2500	4400	3510	2210	2050	2060	2000
DO[c]	mg/L	0.4	0.1	0.35	0.3	0	0.968	0.916
ORP[c]	mV	-238	-378	-6	-345	-275	-183	-158
pH[c]	s.u.	9.8	8.06	9.17	9.22	8.23	7.98	7.39
Temperature[c]	C	11.8	9.7	15.8	16.1	9.2	11.2	12.1
Turbidity[c]	NTU	1.43	5.79	9.87	6.85	5.24	3.2	2.75
Common Ions								
Ca	mg/L	--	--	--	--	--	109	121
Chloride	mg/L	--	--	--	--	--	112J	112
Fluoride	µg/L	--	--	--	--	--	621	1980
Hardness	mg/L	--	--	--	--	--	516	553
K	mg/L	--	--	--	--	--	17.5	19.4
Mg	mg/L	--	--	--	--	--	59.1	61.0
Na	mg/L	--	--	--	--	--	230	220
NO_3+NO_2 as N	µg/L	--	--	--	--	--	4.7U	4.7UJ
SO_4	mg/L	--	--	--	--	--	532	757
Metals								
As	µg/L	0.4U	0.2U	0.3U	0.2U	0.2U	0.5U	0.5U
Fe	µg/L	--	--	--	--	7780	14100	15500
Mn	µg/L	--	--	--	--	595	381	460
Mo	µg/L	0.4UJ	4.6	5.3	0.3U	1.2	0.30U	2.9U
Se	µg/L	0.1U	1	0.1U	0.1U	0.13	1.9	0.3U
U	µg/L	0.1U	0.10U	0.1U	0.10U	0.1U	0.10U	0.1U
V	µg/L	1U	0.68	1.2U	1.2U	1.4U	0.4U	0.3U
Radiological								
U	µg/L	0.1U	0.10U	0.1U	0.10U	0.1U	0.10U	0.1U

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R5-M4[a,b]

Analyte	Unit	01/11/00	04/11/00	08/16/00	10/17/00	01/23/01	04/17/01	07/11/01	07/09/02
Field Measurements									
Alkalinity	mg/L	27	31	50	35	24	43	46	246
Conductivity[c]	µmhos/cm	2720	4180	2050	2890	1958	2010	1927	1575
DO[c]	mg/L	0.27	0	0.14	0.1	0	0.874	0.474	0.63
ORP[c]	mV	-400	-445	-316	-237	-288	-20	-198	-221
pH[c]	s.u.	10.28	8.84	9.52	9.96	8.7	7.51	8.04	7.51
Temperature[c]	C	11.9	9.2	15.7	16	9.2	8.8	12.3	14.55
Turbidity[c]	NTU	1.63	6.81	1.83	0.67	4.55	3.32	6.94	6.88
Common Ions									
Ca	mg/L	146	132	66.7	56.9	75.0	94.2	92.8	132
Chloride	mg/L	183	157	88.7	104	141	116J	115	75.8
Fluoride	µg/L	--	--	--	--	445	964	1120	374J
Hardness	mg/L	720	633	365	467	442	488	497	571
K	mg/L	17.7	16.5	17.9	21.4	19.6	17.7	19.5	14.9
Mg	mg/L	86.2	73.6	48.2	78.8	61.9	61.3	64.5	58.5
Na	mg/L	360	290	277	277	249	230	215	128
NO_2 as N	µg/L	8.5U	13.6U	13.5U	13.6U	--	--	--	--
NO_3 as N	µg/L	18.1U	14.8U	15.5U	14.8U	--	--	--	--
NO_3+NO_2 as N	µg/L	--	--	--	--	122	4.7U	7.3U	4.9U
SO_4	mg/L	1300	1050	835	886	824	479	719	569
Metals									
As	µg/L	0.4U	0.2U	0.3U	0.2U	0.2U	0.5U	0.5U	0.1U
Fe	µg/L	128	849	85.4	11.6U	609	5740	6150	32300
Mn	µg/L	437	515	81.1	80.7	439	561	560	394
Mo	µg/L	0.4U	7.4	8.7	10	4.8	0.3U	3.8	1.8U
Se	µg/L	0.1U	0.2U	0.1U	0.1U	0.1U	0.44	0.3U	0.23
U	µg/L	0.1U	0.1U	0.1U	0.10U	0.1U	0.10U	0.1U	0.1U
V	µg/L	1U	0.4U	1.2U	1.2U	1.4U	0.4U	0.3U	0.3U
Radiological									
U	µg/L	0.1U	0.1U	0.1U	0.10U	0.1U	0.10U	0.1U	0.1U

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R5-M5[a,b]

Analyte	Unit	01/11/00	04/11/00	08/16/00	10/17/00	01/23/01	04/17/01	07/10/01
Field Measurements								
Alkalinity	mg/L	41	51	31	67	51	83	49
Conductivity[c]	µmhos/cm	2580	2810	2040	2140	2090	2030	1818
DO[c]	mg/L	0.22	2.44	0.42	0.17	0.1U	1.086	0.227
ORP[c]	mV	-232	78	-291	-437	-320	-88	-274
pH[c]	s.u.	9.92	7.94	9.1	8.86	8.36	7.51	7.58
Temperature[c]	C	11.1	10.2	18.1	15.3	10	9.4	12.8
Turbidity[c]	NTU	3.84	10.6	11.1	3.28	5.69	31.1	13.4
Common Ions								
Ca	mg/L	--	--	--	--	--	102	88.0
Chloride	mg/L	--	--	--	--	--	--	124
Fluoride	µg/L	--	--	--	--	--	--	819
Hardness	mg/L	--	--	--	--	--	487	473
K	mg/L	--	--	--	--	--	16.2	19.9
Mg	mg/L	--	--	--	--	--	56.4	61.4
Na	mg/L	--	--	--	--	--	212	237
NO_3+NO_2 as N	µg/L	--	--	--	--	--	--	16.3
SO_4	mg/L	--	--	--	--	--	--	715
Metals								
As	µg/L	0.4U	0.2U	0.3U	0.2U	0.2U	0.5U	0.5U
Fe	µg/L	--	--	--	--	4370	18700	13300
Mn	µg/L	--	--	--	--	489	647	491
Mo	µg/L	7.4J	0.4U	6	0.3U	1.3	3.8	2.9U
Se	µg/L	0.1U	0.59	0.1U	0.1U	0.15	0.3U	0.3U
U	µg/L	0.46	0.10U	0.1U	0.10U	0.1U	0.1U	0.1U
V	µg/L	1U	0.40U	1.2U	1.2U	1.4U	0.4U	0.3U
Radiological								
U	µg/L	0.46	0.10U	0.1U	0.10U	0.1U	0.1U	0.1U

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R5-M6[a,b]

Analyte	Unit	01/11/00	04/12/00	08/16/00	10/17/00	01/23/01	04/17/01	07/10/01
Field Measurements								
Alkalinity	mg/L	38	45	54	34	58	67	57
Conductivity[c]	µmhos/cm	2590	4390	3240	2040	2090	2060	1896
DO[c]	mg/L	0.17	0	0.72	0.72	0	0.522	0.276
ORP[c]	mV	-332	-370	33	-262	-289	-223	-343
pH[c]	s.u.	8.3	7.97	8.97	9.22	8.26	7.87	8.07
Temperature[c]	C	10.5	9.3	16.6	15.4	9.9	9.5	12
Turbidity[c]	NTU	4.36	2.18	4.95	1.93	3.91	4.74	6.7
Common Ions								
Ca	mg/L	--	--	--	--	--	85.5	69.0
Chloride	mg/L	--	--	--	--	--	--	140
Fluoride	µg/L	--	--	--	--	--	--	79
Hardness	mg/L	--	--	--	--	--	487	458
K	mg/L	--	--	--	--	--	13.1	16.9
Mg	mg/L	--	--	--	--	--	66.5	69.4
Na	mg/L	--	--	--	--	--	230	248
NO_3+NO_2 as N	µg/L	--	--	--	--	--	--	27.1
SO_4	mg/L	--	--	--	--	--	--	699
Metals								
As	µg/L	0.4U	0.2U	0.3U	0.2U	0.2U	0.5U	0.5U
Fe	µg/L	--	--	--	--	6000	9750	4450
Mn	µg/L	--	--	--	--	366	391	224
Mo	µg/L	0.4U	0.4U	4.6	6.4	2	0.3UJ	2.9U
Se	µg/L	0.1U	0.2U	0.1U	0.1U	0.14	0.3U	0.3U
U	µg/L	0.1U	0.10U	0.1U	0.10U	0.1U	0.1U	0.1U
V	µg/L	1U	0.4U	1.2U	1.2U	1.4U	0.4U	0.3U
Radiological								
U	µg/L	0.1U	0.10U	0.1U	0.10U	0.1U	0.1U	0.1U

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R5-M7[a,b]

Analyte	Unit	01/11/00	04/11/00	08/16/00	10/16/00	01/23/01	04/17/01	07/10/01	07/09/02
Field Measurements									
Alkalinity	mg/L	66	40	--	51	44	117	72	174
Conductivity[c]	µmhos/cm	2650	2740	3270	2050	2070	2090	1994	1465
DO[c]	mg/L	0.41	1.34	0.87	0.3	1.9	1.064	0.225	0.64
ORP[c]	mV	-337	145	-61	-354	-222	-145	-335	-275
pH[c]	s.u.	9.21	8.58	8.89	8.95	8.21	7.59	7.9	7.77
Temperature[c]	C	11.4	9.1	14.1	15.1	9.5	9.2	12.8	13.88
Turbidity[c]	NTU	5.17	4.15	2.13	1.99	7.73	4.03	4.23	5.23
Common Ions									
Ca	mg/L	181	150	77.1	65.4	67.5	88.9	90.7	98.3
Chloride	mg/L	200	203	93.1	99.3	141	128J	138	84.7
Fluoride	µg/L	--	--	--	--	105	57.9	168	791
Hardness	mg/L	880	747	406	432	437	487	518	500
K	mg/L	18.3	14.0	17.4	17.2	16.3	13.5	16.8	11.5
Mg	mg/L	104	90.5	51.9	65.3	65.3	64.3	70.8	61.9
Na	mg/L	348	289	283	286	256	221	249	125
NO_2 as N	µg/L	8.5U	27.2U	27.0U	13.6U	--	--	--	--
NO_3 as N	µg/L	18.1U	29.6U	31.0U	14.8U	--	--	--	--
NO_3+NO_2 as N	µg/L	--	--	--	--	151	6.1	27.1	4.9U
SO_4	mg/L	1170	1120	859	838	809	497	732	542
Metals									
As	µg/L	0.4U	0.2	0.3U	0.2U	0.2U	0.5U	0.5U	0.1U
Fe	µg/L	--	--	804	876	3620	14300	9600	26000
Mn	µg/L	--	--	226	183	389	452	457	360
Mo	µg/L	0.4UJ	0.4UJ	9.1	7.8	5.3	0.3UJ	2.9U	1.8U
Se	µg/L	0.1U	0.2U	0.1U	0.1U	0.1U	0.3U	0.3U	0.1U
U	µg/L	0.1U	0.10U	0.1U	0.10U	0.1U	0.1U	0.1U	0.1U
V	µg/L	1U	0.4U	1.2U	1.2U	1.4U	0.4U	0.3U	0.3U
Radiological									
U	µg/L	0.1U	0.10U	0.1U	0.10U	0.1U	0.1U	0.1U	0.1U

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R5-M8[a,b]

Analyte	Unit	01/12/00	04/12/00	08/16/00	10/18/00	01/23/01	04/16/01	07/10/01
Field Measurements								
Alkalinity	mg/L	41	35	35	34	22	74	20
Conductivity[c]	µmhos/cm	2690	4290	1970	2090	1901	2950	2000
DO[c]	mg/L	0.13	0.05	0.23	--	0.1	0.64	0.272
ORP[c]	mV	-423	-381	-178	-141	-160	-206	-381
pH[c]	s.u.	8.64	8.27	9.52	9.5	9.47	7.91	8.68
Temperature[c]	C	10.8	9.8	15	16.5	8.9	11.9	12.3
Turbidity[c]	NTU	5.76	2.8	9.6	1.56	2.01	40.7	19.9
Common Ions								
Ca	mg/L	--	--	--	--	--	70.3	95.0
Chloride	mg/L	--	--	--	--	--	--	151
Fluoride	µg/L	--	--	--	--	--	--	432
Hardness	mg/L	--	--	--	--	--	413	499
K	mg/L	--	--	--	--	--	12.9	16.0
Mg	mg/L	--	--	--	--	--	57.7	63.5
Na	mg/L	--	--	--	--	--	208	261
NO_3+NO_2 as N	µg/L	--	--	--	--	--	--	60.3
SO_4	mg/L	--	--	--	--	--	--	743
Metals								
As	µg/L	0.4U	0.2U	0.3U	0.2U	0.2U	0.5U	0.5U
Fe	µg/L	--	--	--	--	286	3050	737
Mn	µg/L	--	--	--	--	242	241	189
Mo	µg/L	0.4U	0.4U	6.3	8.3	4.5	5.4	2.9U
Se	µg/L	0.1U	0.2U	0.1U	0.1U	0.1U	0.3U	0.3U
U	µg/L	0.1U	0.10U	0.10U	0.10U	0.1U	0.1U	0.1U
V	µg/L	1U	0.4U	1.4	1.2U	1.4U	0.4U	0.3U
Radiological								
U	µg/L	0.1U	0.10U	0.10U	0.10U	0.1U	0.1U	0.1U

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R5-M9[a,b]

Analyte	Unit	01/12/00	04/12/00	08/15/00	10/16/00	01/22/01	04/16/01	07/09/01
Field Measurements								
Alkalinity	mg/L	45	50	75	66	60	123	70
Conductivity[c]	µmhos/cm	2640	4350	3220	2150	2160	2180	2150
DO[c]	mg/L	0.31	0.2	0.48	1.1	0.3	1.025	0.204
ORP[c]	mV	-345	-296	109	-69	-323	-211	-358
pH[c]	s.u.	9.2	8.81	9.2	9.42	8.52	7.75	7.87
Temperature[c]	C	10.9	8.8	15.6	16.2	8.8	11.1	13.5
Turbidity[c]	NTU	3.37	2.7	5.05	3.43	8.45	3.94	5.18
Common Ions								
Ca	mg/L	--	159	66.9	60.7	87.0	111	117
Chloride	mg/L	--	195	107	114	149	162J	151
Fluoride	µg/L	--	--	--	--	787	1260	1160
Hardness	mg/L	--	759	409	503	500	563	619
K	mg/L	--	12.6	14.7	14.5	12.2	12.0	16.1
Mg	mg/L	--	88.0	58.8	85.4	68.6	69.5	79.3
Na	mg/L	--	272	308	289	257	228	265
NO_2 as N	µg/L	--	--	27.0U	13.6U	--	--	--
NO_3 as N	µg/L	--	--	31.0U	14.8U	--	--	--
NO_3+NO_2 as N	µg/L	--	32.4U	--	--	134	5.9	28.6
SO_4	mg/L	--	1070	837	901	861	439	794
Metals								
As	µg/L	0.4U	0.2U	0.3U	0.2U	0.2U	0.5U	0.5U
Fe	µg/L	--	423	9.1U	11.6U	4640	15400	9030
Mn	µg/L	--	324	61.2	57.7	538	560	662
Mo	µg/L	6.8	0.4U	4.3	5.1	1.1	0.30U	2.9U
Se	µg/L	0.1U	0.2U	0.1U	0.1U	0.1U	0.43	0.3U
U	µg/L	0.1U	0.1U	0.10U	0.10U	0.1U	0.1U	0.1U
V	µg/L	1U	0.41	1.2U	1.2U	1.4U	0.4U	0.3U
Radiological								
U	µg/L	0.1U	0.1U	0.10U	0.10U	0.1U	0.1U	0.1U

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R6-M1[a,b]

Analyte	Unit	04/12/00	10/18/00	04/16/01	07/10/01
Field Measurements					
Alkalinity	mg/L	48	150	56	76
Conductivity[c]	µmhos/cm	4380	--	2070	1868
DO[c]	mg/L	0.4	--	0.913	0.438
ORP[c]	mV	-29	14	45	114
pH[c]	s.u.	6.25	6.58	6.84	6.5
Temperature[c]	C	11.1	14.4	10.9	13
Turbidity[c]	NTU	4.65	--	10.4	2.06
Common Ions					
Ca	mg/L	--	--	84.2	96.7
Chloride	mg/L	--	--	--	89.8
Fluoride	µg/L	--	--	--	185
Hardness	mg/L	--	--	412	434
K	mg/L	--	--	15.4	16.2
Mg	mg/L	--	--	48.9	46.8
Na	mg/L	--	--	232	225
NO_3+NO_2 as N	µg/L	--	--	--	614
SO_4	mg/L	--	--	--	699
Metals					
As	µg/L	4.1	1.4	3.4	4
Fe	µg/L	--	--	1.0U	0.7U
Mn	µg/L	--	--	1170	1580
Mo	µg/L	53.5	8.6	13.8	25.3
Se	µg/L	2	1.6	1.3	0.93
U	µg/L	9.3	37.5	6.2	7.5
V	µg/L	126	44.8	81	95.9
Radiological					
U	µg/L	9.3	37.5	6.2	7.5

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R6-M2[a,b]

Analyte	Unit	01/11/00	02/29/00	04/11/00	08/16/00	10/17/00	01/23/01	04/17/01	07/09/01	10/15/01	01/28/02	04/02/02	07/10/02	10/01/02
Field Measurements														
Alkalinity	mg/L	18	32	70	50	30	82	68	82	141	113	104	125	201
Conductivity[c]	µmhos/cm	2690	2420	4240	2260	2250	2210	2040	1825	1562	1636	1492	1366	1569
DO[c]	mg/L	0.27	0.18	0.36	0.15	0.47	3.3	0	0.099	0.276	1.100	0.500	0.79	3.7
ORP[c]	mV	-198	-212	-283	-342	-214	-282	-211	-210	-169	-44	-151	-156	-41.1
pH[c]	s.u.	9.22	9.37	8.43	8.78	8.95	8.24	7.72	8.24	7.48	7.13	7.51	7.52	7.33
Temperature[c]	C	11.5	9.7	9.1	13.8	13.3	10.1	9.6	12.1	14.6	9.1	13	13.08	14.2
Turbidity[c]	NTU	2.24	150	7.7	13.6	6.53	6.63	62.8	4.67	5.49	23.4	11.8	2.33	6.18
Common Ions														
Ca	mg/L	135	117	117	111	106	102	86.6	77.3	69.9	87.1	76.6	71.0	94.1
Chloride	mg/L	160	137	141	86.9	90.3	140	102J	90.7	94.5	74.7	76.9	69.5	68.1
Fluoride	µg/L	--	177	--	--	--	309	61.5	60.9J	52.4U	157J	127J	116J	143
Hardness	mg/L	620	572	589	467	505	545	432	413	377	446	429	393	466
K	mg/L	19.5	20.5	18.2	19.3	22.1	21.0	16.9	19.3	19.8	16.4	16.8	15.9	18.5
Mg	mg/L	68.7	68.0	72.0	46.1	58.3	70.4	52.5	53.4	49.2	55.4	57.7	52.4	56.1
Na	mg/L	363	328	288	301	311	270	211	224	177	150	146	136	143
NO_2 as N	µg/L	8.5U	--	46.0	13.5U	13.6U	--	--	--	--	--	--	--	--
NO_3 as N	µg/L	18.1U	--	29.6U	15.5U	14.8U	--	--	--	--	--	--	--	--
NO_3+NO_2 as N	µg/L	--	12U	--	--	--	7.1U	9.9	23.8J	7.3U	354	145	4.9U	33.9
SO_4	mg/L	1150	1070	1100	980	998	866	474	663	616	588	569	493	507
Metals														
As	µg/L	3.7	1.7	0.41	2.3	2.5	1.8	0.68	0.89	0.71	0.88	0.98	1	3.4
Fe	µg/L	8.9U	8.9U	616	9.1U	11.6U	1560	3800	307	3800	5220	3360	943	6700
Mn	µg/L	834	306	840	293	362	1000	823	576	428	532	538	583	872
Mo	µg/L	0.4U	5.4	6.1J	4.8	13	2.5	0.3UJ	2.9U	1.9U	1.5U	1.8U	1.8U	1.7U
Se	µg/L	0.1U	0.1U	0.2U	0.1U	0.1U	0.95	0.31	0.3U	0.3U	0.3U	0.2U	0.1U	0.1U
U	µg/L	0.1U	0.1U	0.1UJ	0.10U	0.10U	0.47	0.1U	0.1U	0.12	0.2	0.6	0.4	1.6
V	µg/L	1U	1U	0.4U	1.2U	1.2U	1.4U	0.4U	0.3U	0.3U	0.57	0.83	0.33	1.1
Radiological														
U	µg/L	0.1U	0.1U	0.1UJ	0.10U	0.10U	0.47	0.1U	0.1U	0.12	0.2	0.6	0.4	1.6

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R6-M2[a,b]

Analyte	Unit	01/14/03	04/07/03	07/10/03	10/08/03	01/21/04	04/16/04
Field Measurements							
Alkalinity	mg/L	248	181	251	317	360	214
Conductivity[c]	µmhos/cm	1630	1745	1739	1700	1527	1550
DO[c]	mg/L	0.81	1.58	2.13	0.78	1.14	1.87
ORP[c]	mV	-245	-108.2	-139	-168	-185	-171.2
pH[c]	s.u.	7.11	7.02	7.1	7.23	7.41	7.56
Temperature[c]	C	10.7	8.78	13.5	14.5	8.35	9.65
Turbidity[c]	NTU	15.2	18	14.7	15.2	2.8	8.17
Common Ions							
Ca	mg/L	146	149	145	130	140	180
Chloride	mg/L	70.4	95.9	86.4	83.4	70.0	82.0
Fluoride	µg/L	116	66.9	17.2U	225	200.U	200.U
Hardness	mg/L	592	612	581	547	568	684
K	mg/L	16.4	16.4	15.1	16.5	20.0J	19.0
Mg	mg/L	55.3	58.2	53.2	53.9	53.0	57.0
Na	mg/L	131	155	148	140	110	100
NO_2 as N	µg/L	--	--	--	--	--	--
NO_3 as N	µg/L	--	--	--	--	--	--
NO_3+NO_2 as N	µg/L	299R	4.50U	11.4	4.50U	11	20.
SO_4	mg/L	599	676	630	580	570	500
Metals							
As	µg/L	1.6	0.760	0.780	0.780	0.46J	0.55
Fe	µg/L	24200	20400	28300	27500	29000	23000
Mn	µg/L	801	651	624	474	440	540
Mo	µg/L	6.4U	4.40	1.70U	1.70U	1.5J	2.4
Se	µg/L	0.1U	0.100U	0.100U	0.100U	0.01U	0.13
U	µg/L	1.3	1.20	0.880	0.870	0.31	0.45J
V	µg/L	0.9U	0.530	0.300U	0.300U	0.083UJ	0.25U
Radiological							
U	µg/L	1.3	1.20	0.880	0.870	0.31	0.45J

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R6-M3[a,b]

Analyte	Unit	02/29/00	04/11/00	08/16/00	10/18/00	01/24/01	04/18/01	07/11/01	10/16/01	01/28/02	04/02/02	07/09/02	10/01/02	01/14/03
Field Measurements														
Alkalinity	mg/L	--	171	--	--	532	--	--	--	448	429	232	--	393
Conductivity[c]	µmhos/cm	2500	2700	2550	2590	2510	2460	2440	2400	2077	2010	1994	2113	2020
DO[c]	mg/L	--	--	0.55	--	--	--	--	--	--	3.7	--	--	0.69
ORP[c]	mV	-123	65	-142	-93	66	-13	-22	-44	-25	-51	-50	-52.7	-220
pH[c]	s.u.	6.47	6.9	6.76	7.09	6.66	6.9	6.73	7.2	6.46	6.86	6.73	6.72	6.59
Temperature[c]	C	9.2	8.9	16.1	16.3	8.7	13.7	13.4	15.9	9.23	13.7	15.04	16.5	9.8
Turbidity[c]	NTU	150	--	283	>1000	178	839	--	576	274	488	246	--	145
Common Ions														
Ca	mg/L	295	268	224	--	252	243	270	199	213	205	150	221	239
Chloride	mg/L	--	176	151	--	154	--	139	130	127	124	83.9	110	109
Fluoride	µg/L	--	--	--	--	344	--	259	361	307	192	273J	215	110
Hardness	mg/L	1000	925	773	--	860	831	918	697	727	737	559	752	817
K	mg/L	15.4	13.6	12.8	--	12.8	12.1	13.4	13.7	11.8	11.9	11.7	12.6	11.8
Mg	mg/L	65.1	62.2	52.0	--	56.1	54.4	59.2	48.6	47.4	54.7	44.8	48.6	53.4
Na	mg/L	229	218	209	--	206	203	211	193	188	167	138	204	200
NO_2 as N	µg/L	--	37.7	27.0U	--	--	--	--	--	--	--	--	--	--
NO_3 as N	µg/L	--	229	31.0U	--	--	--	--	--	--	--	--	--	--
NO_3+NO_2 as N	µg/L	214	--	--	--	1010	--	1310	701	62.9	171	4.9U	321	366R
SO_4	mg/L	--	814	717	--	706	--	715	721	679	664	513	667	653
Metals														
As	µg/L	0.66	1.2	1.1	1	0.68	0.66	0.6	0.91	0.85	0.95	0.88	1.2	3.4
Fe	µg/L	8.9U	261	9.1U	--	282	286	325	57.3	437	1430	210	990	2560
Mn	µg/L	5580	4300	2740	--	3310	3040	3130	2220	3580	2820	3260	3330	2970
Mo	µg/L	50.5	34.2J	48.5	38.4	30.8	30.1	29.6	32.2	27.2	17.5	22.6	37.8	6.4U
Se	µg/L	2.4	1.7	0.79	0.9	0.3	0.3U	0.3U	0.3U	0.3U	0.2U	0.26	0.21	0.1U
U	µg/L	250	169J	158	119	111	129	94.4	69	70.3	41.3	36.3	76.4	74.7
V	µg/L	45.5	33.7	52.2	54.2	61.4	59.6	59.6	105	62	28.9	39.7	63.5	8.5
Radiological														
U	µg/L	250	169J	158	119	111	129	94.4	69	70.3	41.3	36.3	76.4	74.7

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R6-M3[a,b]

Analyte	Unit	04/07/03	07/10/03	10/08/03	01/21/04	04/15/04	10/04/04	04/06/05	10/03/05	04/04/06	10/02/06	04/10/07	10/09/07	04/07/08[c]
Field Measurements														
Alkalinity	mg/L	311	455	387	437	255	208	229	348	202	337	217	286	--
Conductivity[c]	µmhos/cm	2171	2149	1860	1562	1660	1405	1940	1294	1894	1760	1462	1652	1900
DO[c]	mg/L	1.73	2.04	0.58	3.67	1.26	0.42	1.29	1.70	1.14	0.43	0.59	0.47	-4.52
ORP[c]	mV	-25	-21	-28	-123	-34.2	-160	-17.9	-88	-22.4	-76	-93.0	-56	-59.2
pH[c]	s.u.	6.88	6.69	6.8	7.14	6.88	7.22	6.88	7.02	6.86	6.72	6.87	6.93	6.70
Temperature[c]	C	8.52	14.9	14.7	7.75	10.39	14.7	8.89	14.3	8.95	14.8	7.75	11.7	7.82
Turbidity[c]	NTU	152	51.4	89.1	6.49	19.5	87.2	130	53.1	20.9	43.0	13.2	12.7	29.7
Common Ions														
Ca	mg/L	219	257	239	180	230	100	180	220	170	230	200	240	160
Chloride	mg/L	101	107	108	74.0	88.0	49.0	110	83.0	85.0	96.0	95.0	84.0	100
Fluoride	µg/L	79.8	251J	258	200.U	200.	100.U	200.U	260.	210.	440.	280.	470.	210.
Hardness	mg/L	801	862	824	684	834	468	651	726	663	768	693	805	642
K	mg/L	14.2	11.3	12.5	15.0J	19.0	14.0	15.0	15.0	16.0	17.0	14.0	16.0	16.0
Mg	mg/L	61.7	53.5	55.2	57.0	63.0	53.0	49.0	43.0	58.0	47.0	47.0	50.0	59.0
Na	mg/L	156	188	192	110	110	99.0	120	130	100	160	130	160	110
NO_2 as N	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--
NO_3 as N	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--
NO_3+NO_2 as N	µg/L	346	25.7	4.50U	10.U	17	10.U	27	10.U	18	18	10.U	10.U	68
SO_4	mg/L	714	663	695	610	590	460	550	470	590	610	570	560	590
Metals														
As	µg/L	0.420	2.50	3.60	0.58J	0.58	0.55	1	4.2	2.1	2.6	5.5	6.4	2.5
Fe	µg/L	360	1290	2790	25000	3000	15000	5700	4200	6300	960	4200	4900	3700
Mn	µg/L	3330	2240	2790	2000	2100	580	1200	1100	1300	1100	1800	1100	1400
Mo	µg/L	12.8	26.4	20.4	3.5J	5.8	6.3	2.9	26	9.6	49	21	24	9.6
Se	µg/L	36.3	0.100U	0.100U	0.01U	1.1	0.08	0.14	0.023U	0.02U	1.8	0.038U	0.069	0.87
U	µg/L	43.9	93.7	66.9	6.4	21J	2.7J	14	65	42	140	46	36	20
V	µg/L	5.80	54.3	8.50	0.086J	1.9	0.18J	0.41UR	1.6	0.25J	280	3.6J	5J	24
Radiological														
U	µg/L	43.9	93.7	66.9	6.4	21J	2.7J	14	65	42	140	46	36	20

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R6-M3[a,b]

Analyte	Unit	10/08/08	04/08/09	10/06/09	04/19/10
Field Measurements					
Alkalinity	mg/L	240	340	--	438
Conductivity[c]	µmhos/cm	1874	1179	1950	1810
DO[c]	mg/L	4.39	1.02	1.75	0.98
ORP[c]	mV	-53.8	-181	-73	-50
pH[c]	s.u.	7.21	7.00	6.86	6.91
Temperature[c]	C	12.23	8.04	12.0	8.6
Turbidity[c]	NTU	11.4	778	110	142
Common Ions					
Ca	mg/L	160	240J	240J	120
Chloride	mg/L	70.0	--	--	91.0
Fluoride	µg/L	620.	--	--	210.
Hardness	mg/L	560	793J	801J	526
K	mg/L	15.0J	14.0J	13.0J	17.0J
Mg	mg/L	39.0	47.0	49.0	55.0
Na	mg/L	120	150J	140J	110
NO_2 as N	µg/L	--	--	--	--
NO_3 as N	µg/L	--	--	--	--
NO_3+NO_2 as N	µg/L	10.U	--	--	130.
SO_4	mg/L	450	--	--	530
Metals					
As	µg/L	7	2.6	6.8	0.36
Fe	µg/L	3600	3400	3000	160
Mn	µg/L	1400	590	1300	140
Mo	µg/L	22	28	20	3
Se	µg/L	0.16	0.73	0.094	2.3
U	µg/L	39	53	41	11
V	µg/L	2.1	6.6	6.2	0.4
Radiological					
U	µg/L	39	53	41	11

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R6-M4[a,b]

Analyte	Unit	01/11/00	03/01/00	04/11/00	08/16/00	10/16/00	01/23/01	04/17/01	07/10/01	10/11/01	10/15/01	01/28/02	04/02/02	07/09/02
Field Measurements														
Alkalinity	mg/L	54	47	141	--	51	--	98	--	99	--	133	122	141
Conductivity[c]	µmhos/cm	2540	2540	3090	--	2210	2090	2150	2020	1632	--	1618	1661	1416
DO[c]	mg/L	0.58	1.5	1.45	--	2.6	--	8R	0.395	0.87	--	0.573	0.908	--
ORP[c]	mV	-302	-103	152	--	86	-35	-78	-135	7	--	-122	-94	-103
pH[c]	s.u.	8.74	8.11	7.29	--	6.57	7.56	7.54	7.19	7.45	--	7.29	7.36	7.11
Temperature[c]	C	11.6	7.8	8.4	--	15.5	9.4	12	12.8	14.7	--	8.9	9.6	15.95
Turbidity[c]	NTU	20.4	--	97.5	--	28.6	22.1	19.4	94.5	314	--	211	86.6	97.2
Common Ions														
Ca	mg/L	139	146	234	105	116	96.9	117	117	78.1	--	94.5	102	96.8
Chloride	mg/L	166	159	198	88.3	94.6	128	119J	140	106	110	88.7	92.8	83.9
Fluoride	µg/L	--	143	--	--	--	120	121	128	26.2U	172	124J	66	220J
Hardness	mg/L	665	685	955	456	498	486	548	565	440	--	509	552	481
K	mg/L	18.8	16.9	15.7	14.6	16.3	17.1	15.3	16.0	15.1	--	13.6	12.8	12.1
Mg	mg/L	77.3	77.7	90.1	47.0	50.7	59.2	62.1	66.2	59.4	--	66.2	72.3	58.1
Na	mg/L	350	310	288	277	296	245	218	251	181	--	152	147	126
NO_2 as N	µg/L	8.5U	--	1080	156	312	--	--	--	--	--	--	--	--
NO_3 as N	µg/L	18.1U	--	6260	1090	4450	--	--	--	--	--	--	--	--
NO_3+NO_2 as N	µg/L	--	12U	--	--	--	2410	201	217	8.5	86.4	158	291	4.9U
SO_4	mg/L	1090	1110	1230	853	876	825	544	757	649	648	627	601	539
Metals														
As	µg/L	23.4	22.8	0.73	0.62	0.83	11.7	0.94	0.5U	2	--	2.4	2.3	0.82
Fe	µg/L	8.9U	8.9U	7.4U	304	116	354	53.2	57.4	1970J	--	5840	7110	1280
Mn	µg/L	615J	881	3400	1400	1240	990	1410	921	639	--	1140	1040	1280
Mo	µg/L	16.6J	14.3	22.1J	17.4	20.5	5.4	12.8J	11.3	9.5	--	4.6	1.8U	7.5
Se	µg/L	0.1U	0.1U	15.1	0.84	0.37	0.23	0.3U	0.3U	0.3U	--	0.3U	0.2U	0.14
U	µg/L	20.3	37.8	50	6	4.6	13	14.4	3.7	2.5	--	3.2	4.4	4.8
V	µg/L	84.8	95.5	3.9	5.1	2.7	10.6	3.7	2.5	2.8	--	2	1.5	0.3U
Radiological														
U	µg/L	20.3	37.8	50	6	4.6	13	14.4	3.7	2.5	--	3.2	4.4	4.8

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R6-M4[a,b]

Analyte	Unit	09/30/02	01/14/03	04/07/03	07/10/03	10/08/03	01/21/04	04/15/04	10/04/04	04/06/05	10/03/05	04/04/06	10/02/06	04/10/07
Field Measurements														
Alkalinity	mg/L	171	278	206	256	198	421	152	181	110	126	155	70	28.0
Conductivity[c]	µmhos/cm	1488	1647	1727	1643	1544	1541	1274	1280	1558	833	1510	1071	1224
DO[c]	mg/L	10.2R	0.85	0.93	1.98	1.42	1.71	1.96	0.69	1.31	1.35	1.14	0.79	0.93
ORP[c]	mV	-18.6	-207	-70.5	-103	-138	-150	-152.1	-192	-132.3	-227	-115.9	-123	-212
pH[c]	s.u.	6.98	6.95	6.81	6.99	7.08	7.29	7.44	7.53	7.50	8.19	7.28	7.99	8.09
Temperature[c]	C	17.8	10	8.87	15	14.8	8.44	11.21	14.4	9.93	13.9	7.62	14.6	8.06
Turbidity[c]	NTU	318	529	167	339	118	7.36	8.65	7.35	15.3	14.2	11.6	8.30	10.5
Common Ions														
Ca	mg/L	96.8	148	157	145	122	150	150	84.0	120	37.0	110	34.0	67.0
Chloride	mg/L	78.7	85.4	93.6	97.6	93.4	82.0	83.0	54.0	120	35.0	82.0	68.0	--
Fluoride	µg/L	165	25.1U	76.5	17.2UR	20.3U	200.U	200.U	100.U	150.	120.	200.U	200.U	--
Hardness	mg/L	486	636	653	607	557	626	593	440	473	224	621	270	447
K	mg/L	13.7	11.9	12.5	11.9	12.0	14.0J	16.0	13.0	13.0	13.0	17.0	17.0	15.0
Mg	mg/L	59.3	64.7	63.4	59.4	61.2	61.0	53.0	56.0	42.0	32.0	84.0	45.0	68.0
Na	mg/L	133	123	135	133	135	110	99.0	95.0	110	93.0	99.0	120	110
NO_2 as N	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--
NO_3 as N	µg/L	--	--	--	--	--	--	--	--	--	--	--	--	--
NO_3+NO_2 as N	µg/L	35.7	466R	51.8	4.50U	36.3	50.U	10.U	10.U	10.U	10.U	28	10.U	--
SO_4	mg/L	525	570	657	590	550	600	500	430	480	120	620	390	--
Metals														
As	µg/L	0.4	2	0.210	1.60	1.90	1.3J	1	1	1.1	1	1	1.3	1.4
Fe	µg/L	723	33600	4540	27000	26900	39000	12000	16000	6400	1300	8900	380	910
Mn	µg/L	748	816	929	908	726	590	940	410	750	140	1300	160	650
Mo	µg/L	7	6.4U	3.40	4.20	1.70U	3.9J	6.5	3.1J	3.9	19	6.1	15	13
Se	µg/L	0.27	0.1U	17.5	0.100U	0.100U	0.01U	0.27	0.049	0.12	0.023U	0.28	0.025U	0.038U
U	µg/L	9	2.9	5.50	3.70	2.80	1	1.1J	0.43J	0.78	3.3	3.4	0.12	0.19
V	µg/L	0.3U	0.9U	0.620	0.300U	0.300U	0.12J	0.39	0.12U	0.47	0.1U	0.14UJ	0.24	0.4J
Radiological														
U	µg/L	9	2.9	5.50	3.70	2.80	1	1.1J	0.43J	0.78	3.3	3.4	0.12	0.19

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R6-M4[a,b]

Analyte	Unit	10/08/07	04/07/08[c]	10/07/08	04/07/09	10/06/09	04/19/10
Field Measurements							
Alkalinity	mg/L	59	208	96	55	--	64
Conductivity[c]	µmhos/cm	894	2049	794	731	1110	1150
DO[c]	mg/L	0.34	5.22	3.09	1.25	0.89	1.01
ORP[c]	mV	-240	-99.3	-105	-272	-105	74
pH[c]	s.u.	7.87	7.03	7.57	8.56	7.46	6.60
Temperature[c]	C	14.7	7.66	12.89	9.85	10.3	11.9
Turbidity[c]	NTU	6.60	4.00	39.9	46.8	15.7	20.3
Common Ions							
Ca	mg/L	31.0	220	24.0	46.0J	45.0J	63.0
Chloride	mg/L	66.0	170	65.0	92.0	--	92.0
Fluoride	µg/L	160.	200.U	300.	120.	--	100.U
Hardness	mg/L	222	862	134	329J	285J	388
K	mg/L	15.0	17.0	11.0J	16.0J	13.0J	16.0J
Mg	mg/L	35.0	76.0	18.0	52.0	42.0	56.0
Na	mg/L	100	110	90.0	110J	98.0J	100
NO_2 as N	µg/L	--	--	--	--	--	--
NO_3 as N	µg/L	--	--	--	--	--	--
NO_3+NO_2 as N	µg/L	10.U	10.U	10.U	10.U	--	23
SO_4	mg/L	320	740	210	380	--	450
Metals							
As	µg/L	2.6	2.4	1.3	1.5	2.2	0.61
Fe	µg/L	1800	10000	1100	380	2600	1000
Mn	µg/L	240	1100	120	130	250	260
Mo	µg/L	46	5.5	21	49	13	13
Se	µg/L	0.085	0.33	0.27	0.23U	0.29	1.9
U	µg/L	1.5	6.7	0.24	2.3	0.83	0.84
V	µg/L	2.2J	5.9	0.65	0.75	0.72	0.45
Radiological							
U	µg/L	1.5	6.7	0.24	2.3	0.83	0.84

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R6-M5[a,b]

Analyte	Unit	01/12/00	03/01/00	04/12/00	08/15/00	10/16/00	01/22/01	04/16/01	07/09/01	10/11/01	10/15/01	01/31/02	04/02/02	07/09/02
Field Measurements														
Alkalinity	mg/L	105	80	100	73	96	68	113	97	105	--	93	136	98
Conductivity[c]	µmhos/cm	2660	2560	4350	3340	2120	1966	2130	2110	1684	--	1451	1715	1291
DO[c]	mg/L	0.35	0.4	0.2	0.47	0.4	0	1.1	0.326	0.2	--	0.34	0.581	1.75
ORP[c]	mV	-257	-135	-66	-42	-76	-277	-155	-242	-224	--	-137	-18	-162
pH[c]	s.u.	7.94	8.28	8.24	8.31	7.26	7.41	7.51	7.4	7.99	--	7.5	7.89	7.25
Temperature[c]	C	11.3	7.9	8.7	16.5	16.4	9.1	11	13.5	14.7	--	9.76	10	16.1
Turbidity[c]	NTU	1.45	--	3.6	0.62	4.56	4.58	3.76	8.69	22.5	--	14.2	27.1	10.9
Common Ions														
Ca	mg/L	--	166	170	92.4	99.5	80.8	102	133	68.1	--	83.2	102	59.0
Chloride	mg/L	--	169	190	92.7	99.0	137	142J	145	112	110	89.9	91.2	84.9
Fluoride	µg/L	--	69	--	--	--	158	49.7	61.6	118	75.3	67	71	340J
Hardness	mg/L	--	754	765	424	448	449	515	634	419	--	477	540	390
K	mg/L	--	16.0	13.8	15.1	17.3	18.0	15.1	15.8	14.4	--	12.9	12.0	11.6
Mg	mg/L	--	82.4	82.8	46.9	48.5	60.0	63.1	73.4	60.4	--	65.3	69.4	58.9
Na	mg/L	--	305	276	290	292	256	215	263	176	--	145	140	125
NO_2 as N	µg/L	--	--	--	27.0U	501	--	--	--	--	--	--	--	--
NO_3 as N	µg/L	--	--	--	47.4	2760	--	--	--	--	--	--	--	--
NO_3+NO_2 as N	µg/L	--	12U	32.4U	--	--	225	65	30.9	7.3U	7.3U	7.3U	475	4.9U
SO_4	mg/L	--	1110	1110	845	845	813	427	796	624	624	607	564	478
Metals														
As	µg/L	8.5	4	2.4	5.4	2	1.7	1.8	2.8	1.8	--	1.4	1.4	1.3
Fe	µg/L	--	8.9U	353	280	91.6	58.2	1060	1500	1020	--	3730	5170	2680
Mn	µg/L	--	4270	3590	1600	2620	1610	1940	2150	880	--	1130	1160	721
Mo	µg/L	53.5	47	33.4	28.5	27.4	20.7	10	14.2	5.7	--	1.5U	1.8U	2.4
Se	µg/L	0.1	0.1U	0.92	0.1U	0.25	0.1U	0.84	0.3U	0.3U	--	0.3U	0.2U	0.1U
U	µg/L	14.7	13.1	9.9	5.3	4.6	3.1	4.1	3.5	2.3	--	0.93	3.6	0.27
V	µg/L	8.4	23.5	2.3	1.7	13	13.6	1.7	1.2	0.57	--	0.4U	0.3U	0.3U
Radiological														
U	µg/L	14.7	13.1	9.9	5.3	4.6	3.1	4.1	3.5	2.3	--	0.93	3.6	0.27

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R6-M5[a,b]

Analyte	Unit	09/30/02	01/14/03	04/07/03	07/10/03	10/08/03	01/21/04	04/16/04	04/06/05
Field Measurements									
Alkalinity	mg/L	121	187	164	201	199	390	230	138
Conductivity[c]	µmhos/cm	1361	1488	1652	1559	1647	1539	1284	1678
DO[c]	mg/L	4.9	0.6	0.57	1.15	0.7	1.36	2.45	0.83
ORP[c]	mV	-83.3	-222	-120.9	-145	-147	-179	-141.6	-158.1
pH[c]	s.u.	7.46	7.04	6.57	7.21	6.93	7.37	7.62	7.50
Temperature[c]	C	16.85	9.9	8.58	15.4	15.8	8.70	9.77	9.95
Turbidity[c]	NTU	7.13	51.1	28.6	148	115	13.5	39.5	409
Common Ions									
Ca	mg/L	52.0	96.3	143	122	124	150	120	130
Chloride	mg/L	80.7	88.1	95.5	102	103	88.0	89.0	120
Fluoride	µg/L	123	25.1U	59.6	107J	153	200.U	200.U	200.U
Hardness	mg/L	383	530	626	573	600	642	526	510
K	mg/L	12.6	10.4	12.0	10.7	11.2	12.0J	14.0J	13.0
Mg	mg/L	61.4	70.2	65.2	65.2	70.6	65.0	55.0	45.0
Na	mg/L	132	124	138	137	138	110	110	110
NO_2 as N	µg/L	--	--	--	--	--	--	--	--
NO_3 as N	µg/L	--	--	--	--	--	--	--	--
NO_3+NO_2 as N	µg/L	48.8	284R	4.60	4.50U	4.50U	50.U	190.	28
SO_4	mg/L	475	548	653	579	612	630	510	520
Metals									
As	µg/L	1	1.1	1.10	1	1.30	0.54J	0.31	0.25
Fe	µg/L	3250	15200	11200	23700	17000	34000	1900	7500
Mn	µg/L	614	1150	1080	891	856	520	630	800
Mo	µg/L	1.7U	6.4U	2.00U	3.00	1.70U	1.4J	5.8	3.9
Se	µg/L	0.1U	0.1U	3.80	0.100U	0.340	0.01U	3.2	0.13
U	µg/L	0.48	1.2	5.80	0.700	0.930	0.19	2.4	1.4
V	µg/L	0.3U	1	0.300U	0.300U	0.300U	0.083UJ	0.25U	0.41UR
Radiological									
U	µg/L	0.48	1.2	5.80	0.700	0.930	0.19	2.4	1.4

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R6-M6[a,b]

Analyte	Unit	10/18/00	01/29/01	04/17/01	07/09/01
Field Measurements					
Alkalinity	mg/L	75	254	75	83
Conductivity[c]	µmhos/cm	2110	2370	2310	2180
DO[c]	mg/L	0.13	--	2.4	0.528
ORP[c]	mV	-113	-46	-134	-60
pH[c]	s.u.	7.08	7.04	6.98	5.96
Temperature[c]	C	16.5	6.2	10.4	16.7
Turbidity[c]	NTU	20.3	138	5.51	4.4
Common Ions					
Ca	mg/L	--	--	112	146
Chloride	mg/L	--	--	--	27.8
Fluoride	µg/L	--	--	--	122
Hardness	mg/L	--	--	567	685
K	mg/L	--	--	11.0	12.8
Mg	mg/L	--	--	69.7	77.9
Na	mg/L	--	--	228	244
NO_3+NO_2 as N	µg/L	--	--	--	275
SO_4	mg/L	--	--	--	823
Metals					
As	µg/L	13.2	2.7	12	7.3
Fe	µg/L	--	1080	1140	1120
Mn	µg/L	--	2880	2360	2700
Mo	µg/L	14.3	14.4	5.8J	9.1
Se	µg/L	0.35	10	0.3U	0.3U
U	µg/L	9.7	142	5.3	11.3
V	µg/L	1.2U	5.6	3.6	6.7
Radiological					
U	µg/L	9.7	142	5.3	11.3

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R7-M1[a,b]

Analyte	Unit	02/29/00	04/11/00	01/29/01	04/17/01	07/10/01
Field Measurements						
Alkalinity	mg/L	48	60	188	73	18.5
Conductivity[c]	µmhos/cm	2430	4440	2730	2100	2010
DO[c]	mg/L	--	0.9	--	1.8	0.697
ORP[c]	mV	-54	24	158	95	-67
pH[c]	s.u.	6.05	6.93	6.37	6.61	7
Temperature[c]	C	8.7	8.5	8.3	10.9	13.9
Turbidity[c]	NTU	172	55	99.1	223	83
Common Ions						
Ca	mg/L	176	155	178	86.9	110
Chloride	mg/L	150	140	--	107J	104
Fluoride	µg/L	311	--	--	137	365
Hardness	mg/L	705	686	697	432	495
K	mg/L	17.5	19.4	19.8	16.1	17.6
Mg	mg/L	64.6	72.5	61.4	52.3	53.6
Na	mg/L	315	306	304	217	221
NO_2 as N	µg/L	--	336	--	--	--
NO_3 as N	µg/L	--	5530	--	--	--
NO_3+NO_2 as N	µg/L	2810	--	--	263	127
SO_4	mg/L	1090	1140	--	472	703
Metals						
As	µg/L	1.6	6	2.1	4.5	13.5
Fe	µg/L	8.9U	7.4U	11.0U	155	230
Mn	µg/L	2060	852	497	1940	1630
Mo	µg/L	51.6	38.5J	37.8	13.7J	22.6
Se	µg/L	1.3	3.1	0.84	0.3U	0.3U
U	µg/L	45.3	40.6J	92.7	16.8	30.7
V	µg/L	93	103	103	22.9	22
Radiological						
U	µg/L	45.3	40.6J	92.7	16.8	30.7

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R7-M2[a,b]

Analyte	Unit	03/01/00	04/11/00	01/24/01	04/18/01	07/10/01
Field Measurements						
Alkalinity	mg/L	--	66	311	--	93
Conductivity[c]	µmhos/cm	--	1539	2890	2750	2360
DO[c]	mg/L	--	--	--	--	1.1
ORP[c]	mV	--	73	152	75	14
pH[c]	s.u.	--	6.92	6.57	6.53	7.18
Temperature[c]	C	--	11	7.4	11.1	14.7
Turbidity[c]	NTU	--	25	80.5	--	24
Common Ions						
Ca	mg/L	325	220	274	239	171
Chloride	mg/L	--	182	--	--	122
Fluoride	µg/L	--	--	--	--	241
Hardness	mg/L	1140	823	970	850	646
K	mg/L	16.1	14.7	14.6	12.4	15.2
Mg	mg/L	79.7	66.5	69.4	61.5	53.1
Na	mg/L	282	285	265	240	217
NO_2 as N	µg/L	--	131	--	--	--
NO_3 as N	µg/L	--	7980	--	--	--
NO_3+NO_2 as N	µg/L	--	--	--	--	5190
SO_4	mg/L	--	1240	--	--	762
Metals						
As	µg/L	0.4U	0.43	1.1	2.1	3.7
Fe	µg/L	8.9U	7.4U	41	1.0U	0.7U
Mn	µg/L	1050	168	190	111	186
Mo	µg/L	94.9	48.7J	48.1	41.2	19.5
Se	µg/L	176	14	10.6	15.5	2.3
U	µg/L	376	57.9J	279	210	21.5
V	µg/L	16.7	33.5	60.2	89.3	165
Radiological						
U	µg/L	376	57.9J	279	210	21.5

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R8-M1[a,b]

Analyte	Unit	04/11/00
Field Measurements		
Alkalinity	mg/L	71
Conductivity[c]	µmhos/cm	4440
ORP[c]	mV	17
pH[c]	s.u.	6.72
Temperature[c]	C	9.7
Turbidity[c]	NTU	2.05
Common Ions		
Ca	mg/L	178
Chloride	mg/L	164
Hardness	mg/L	728
K	mg/L	14.8
Mg	mg/L	68.9
Na	mg/L	274
NO_2 as N	µg/L	649
NO_3 as N	µg/L	8760
SO_4	mg/L	1150
Metals		
As	µg/L	3.9
Fe	µg/L	7.4U
Mn	µg/L	1200
Mo	µg/L	66J
Se	µg/L	5.3
U	µg/L	48.1J
V	µg/L	81.3
Radiological		
U	µg/L	48.1J

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R9-M1[a,b]

Analyte	Unit	01/12/00	02/29/00	04/11/00	10/16/00	04/17/01	07/10/01	10/11/01	10/15/01	01/29/02	04/02/02	07/10/02	10/01/02	01/14/03
Field Measurements														
Alkalinity	mg/L	99	51	90	103	74	99	120	--	125	138	167	160	188
Conductivity[c]	µmhos/cm	2550	2590	4570	2210	2130	1980	1694	--	1518	1593	1452	1442	1607
DO[c]	mg/L	--	0.35	0.58	--	2.1	0.568	0.653	--	2.6	1.7	0.94	0.5	2.84
ORP[c]	mV	110	36	-25	201	164	62	-108	--	82	-61	-8.2	-15.5	-240
pH[c]	s.u.	6.57	6.5	6.7	6.15	6.37	6.97	7.05	--	6.36	7.03	7.01	6.88	6.9
Temperature[c]	C	9.3	8.1	9.5	14.3	12	12.2	13.7	--	8.98	13	13.95	15	9.5
Turbidity[c]	NTU	--	4.53	1.56	39	6.94	12.7	24.7	--	93	35.1	1.13	2.89	10.1
Common Ions														
Ca	mg/L	185	178	188	132	110	132	94.0	--	104	125	116	99.9	137
Chloride	mg/L	168	164	176	96.8	118J	123	98.3	100	80.8	83.6	76.9	74.9	78.6
Fluoride	µg/L	--	361	--	--	154	359	301	246	26.2RUJ	150J	117J	159	25.1U
Hardness	mg/L	745	748	783	544	518	566	445	--	485	574	511	468	584
K	mg/L	15.4	13.2	13.9	14.5	15.9	15.7	16.0	--	13.8	14.0	13.0	14.5	12.2
Mg	mg/L	68.7	73.7	76.1	52.0	59.1	57.3	51.1	--	54.6	63.7	53.7	53.1	58.8
Na	mg/L	342	299	273	280	221	218	173	--	136	139	123	131	125
NO_2 as N	µg/L	--	--	789	13.6U	--	--	--	--	--	--	--	--	--
NO_3 as N	µg/L	1030	--	6580	17500	--	--	--	--	--	--	--	--	--
NO_3+NO_2 as N	µg/L	--	301	--	--	1830	200	463	373	245	388	107	66.1	503R
SO_4	mg/L	1060	1100	1180	872	538	744	616	588	624	602	532	493	578
Metals														
As	µg/L	2.8	2.8	3.4	3.2	2.8	3.5	3.9	--	3.4	2.8	3.2	3	3.5
Fe	µg/L	8.9U	8.9U	7.4U	11.6U	21.7	0.7U	17.6	--	0.8U	1U	5.8	0.8U	2.9U
Mn	µg/L	932J	1590	1890	1040	807	1540	1230	--	1.3	13.2	102	11	16.9
Mo	µg/L	28.2	46.9	62.9J	13.4	10J	26.1	15.5	--	7.3	7.4	12.1	6.9	6.4U
Se	µg/L	0.49	0.39	4.8	0.1U	0.51	0.67	0.41	--	0.96	1.1	0.63	0.44	3.8
U	µg/L	12	23.2	80.7J	4.4	4.7	17.8	28	--	33.4	41.6	33.6	26.9	59.9
V	µg/L	97.4	108	74.5	122	75.9	89.5	91.1	--	87.9	72.3	84.1	73.2	97.9
Radiological														
U	µg/L	12	23.2	80.7J	4.4	4.7	17.8	28	--	33.4	41.6	33.6	26.9	59.9

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- R9-M1[a,b]

Analyte	Unit	04/07/03	07/10/03	10/07/03	01/21/04	04/15/04
Field Measurements						
Alkalinity	mg/L	222	187	209	347	221
Conductivity[c]	µmhos/cm	1856	1591	1513	1555	1481
DO[c]	mg/L	1.7	2.17	0.98	1.81	1.48
ORP[c]	mV	10.2	17	-28	-8.6	-59.1
pH[c]	s.u.	7.03	6.72	6.85	6.77	6.93
Temperature[c]	C	9.23	14.9	14.6	7.35	9.91
Turbidity[c]	NTU	4.54	4.18	15.1	4.12	14.6
Common Ions						
Ca	mg/L	199	142	138	170	200
Chloride	mg/L	96.5	93.0	88.0	74.0	85.0
Fluoride	µg/L	219	93.7J	171	200.U	200.U
Hardness	mg/L	766	561	567	672	759
K	mg/L	12.6	12.7	13.0	15.0J	17.0
Mg	mg/L	65.4	50.2	54.1	60.0	63.0
Na	mg/L	138	139	132	110	110
NO_2 as N	µg/L	--	--	--	--	--
NO_3 as N	µg/L	--	--	--	--	--
NO_3+NO_2 as N	µg/L	1220	395	128	53	24
SO_4	mg/L	729	592	557	600	580
Metals						
As	µg/L	3.20	1.40	2.70	1.6J	0.41
Fe	µg/L	1.30U	1U	13.9	6.7U	320
Mn	µg/L	257	256	139	720	5300
Mo	µg/L	11.4	1.70U	1.70U	6.5J	8.8
Se	µg/L	33.8	0.160	0.400	0.17J	0.084
U	µg/L	63.7	18.4	30.3	39	26J
V	µg/L	103	43.5	85.0	64	11
Radiological						
U	µg/L	63.7	18.4	30.3	39	26J

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- T1-D[a,b]

Analyte	Unit	01/11/00	04/11/00	08/16/00	10/17/00	01/23/01	04/17/01	07/10/01
Field Measurements								
Alkalinity	mg/L	321	243	250	293	267	265	291
Conductivity[c]	µmhos/cm	3200	3100	3830	2570	2600	2520	2420
DO[c]	mg/L	0.63	0.45	1.16	0.658	0.3	0.623	0.397
ORP[c]	mV	206	100	172	188	24	-28	-1
pH[c]	s.u.	6.36	6.45	6.7	6.54	6.72	6.78	6.25
Temperature[c]	C	9.8	8.4	14.1	13.7	9.4	9.4	12.3
Turbidity[c]	NTU	12.2	4.71	28.1	18.1	5.52	1.28	2.88
Common Ions								
Ca	mg/L	322	280	224	253	261	255	266
Chloride	mg/L	191	160	91.7	106	144	124J	131
Fluoride	µg/L	--	--	--	--	356	298	351
Hardness	mg/L	1150	1000	790	882	921	899	941
K	mg/L	19.9	16.6	17.0	18.3	18.1	16.1	18.6
Mg	mg/L	84.3	73.0	56.0	60.7	65.3	63.6	67.3
Na	mg/L	344	275	282	282	258	228	247
NO_2 as N	µg/L	8.5U	27.2U	27.0U	13.6U	--	--	--
NO_3 as N	µg/L	20600	34200	14300	12900	--	--	--
NO_3+NO_2 as N	µg/L	--	--	--	--	14900	14500	8280
SO_4	mg/L	1340	1170	960	961	959	704	849
Metals								
As	µg/L	9.7	6.9	8.6	9.4	9.4	8.4	9.2
Fe	µg/L	8.9U	7.4U	9.1U	11.6U	11.0U	10.6	0.7U
Mn	µg/L	426	384	203	266	240	167	180
Mo	µg/L	60.4	51.1J	57.4	62.4	52.4	45	51.5
Se	µg/L	41.1	54.6	12.5	17.9	79.6	126	116
U	µg/L	739	466	266	312	358	361	376
V	µg/L	341	236	318	367	310	278	328
Radiological								
U	µg/L	739	466	266	312	358	361	376

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- T1-S[a,b]

Analyte	Unit	01/11/00	04/11/00	08/16/00	10/17/00	01/23/01	04/17/01	07/10/01
Field Measurements								
Alkalinity	mg/L	324	245	256	292	288	260	309
Conductivity[c]	µmhos/cm	3330	3150	3830	2680	2680	2560	2470
DO[c]	mg/L	0.77	0.62	0.83	1.1	0.3	0.458	0.383
ORP[c]	mV	196	98	157	2.03	6	-37	43
pH[c]	s.u.	6.37	6.54	6.87	6.59	6.78	6.79	6.28
Temperature[c]	C	7.9	8.1	14.3	12.3	9	9	13.1
Turbidity[c]	NTU	10.2	4.67	0.56	0.46	24.1	2.36	4.1
Common Ions								
Ca	mg/L	335	269	224	269	252	263	277
Chloride	mg/L	187	161	91.9	115	152	125J	135
Fluoride	µg/L	--	--	--	--	339	303	374
Hardness	mg/L	1200	962	788	934	892	924	974
K	mg/L	20.7	16.4	16.9	19.2	17.7	15.7	18.1
Mg	mg/L	88.1	70.4	55.5	63.7	63.7	65.0	68.5
Na	mg/L	351	267	277	283	248	227	246
NO_2 as N	µg/L	8.5U	27.2U	27.0U	13.6U	--	--	--
NO_3 as N	µg/L	19900	35300	13700	12500	--	--	--
NO_3+NO_2 as N	µg/L	--	--	--	--	14800	14500	8090
SO_4	mg/L	1310	1190	963	967	975	710	858
Metals								
As	µg/L	9.7	7.5	8.8	9.7	9.2	8.6	9.5
Fe	µg/L	8.9U	7.4U	9.1U	11.6U	11U	1.0U	14.9
Mn	µg/L	259	255	79.2	112	95.8	71.6	89.8
Mo	µg/L	56.1	50.1J	53.6	59.9	48.7	42	47
Se	µg/L	35.6	54.3	13.5	25.5	89	124	118
U	µg/L	753	451	245	324	364	366	367
V	µg/L	344	217	325	386	295	277	329
Radiological								
U	µg/L	753	451	245	324	364	366	367

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- T2-D[a,b]

Analyte	Unit	01/11/00	04/11/00	08/16/00	10/17/00	01/23/01	04/17/01	07/10/01
Field Measurements								
Alkalinity	mg/L	390	323	273	313	298	280	322
Conductivity[c]	µmhos/cm	3170	3130	3970	2620	2650	2540	2450
DO[c]	mg/L	0.46	0.4	0.99	0.572	0.1	0.627	0.291
ORP[c]	mV	-165	76	-19	-12	-6	-38	-77
pH[c]	s.u.	7.21	7.23	7	6.79	6.89	7.02	6.36
Temperature[c]	C	10.3	8.1	15.2	14.5	9.6	10.6	12.9
Turbidity[c]	NTU	10.7	3.7	3.85	3.65	3.82	4.88	10.9
Common Ions								
Ca	mg/L	316	306	231	269	258	264	274
Chloride	mg/L	201	171	94.2	111	149	125J	133
Fluoride	µg/L	--	--	--	--	349	304	339
Hardness	mg/L	1170	1110	808	931	914	928	962
K	mg/L	18.4	17.2	16.3	18.9	17.6	15.5	18.3
Mg	mg/L	92.4	84.9	56.2	63.0	65.5	65.2	67.4
Na	mg/L	349	307	277	281	253	239	245
NO_2 as N	µg/L	779	1330	656	733	--	--	--
NO_3 as N	µg/L	2710	12200	5680	6670	--	--	--
NO_3+NO_2 as N	µg/L	--	--	--	--	7790	8770	5690
SO_4	mg/L	1350	1180	967	960	963	711	856
Metals								
As	µg/L	0.4U	0.2U	0.3U	0.2U	0.2U	0.5U	0.5U
Fe	µg/L	28800	13800	1370	2110	2050	2660	1480
Mn	µg/L	627	537	299	415	356	278	238
Mo	µg/L	16.4	22J	36.3	32.7	31.8	30.1	38.9
Se	µg/L	17.8	43.9	10	17.3	52.8	102	88.9
U	µg/L	107	151	172	226	227	260	323
V	µg/L	1.0U	0.4U	11.2	9.3	3.2	10.8	35.4
Radiological								
U	µg/L	107	151	172	226	227	260	323

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- T2-S[a,b]

Analyte	Unit	01/11/00	04/11/00	08/16/00	10/17/00	01/23/01	04/17/01	07/10/01
Field Measurements								
Alkalinity	mg/L	303	264	--	324	333	285	316
Conductivity[c]	µmhos/cm	3090	3150	1390	2610	2640	2570	2490
DO[c]	mg/L	0.41	0.42	0.86	1.084	0	0.582	0.388
ORP[c]	mV	-177	100	-47	-71	-111	-85	-51
pH[c]	s.u.	7.44	6.67	7.13	6.91	7.11	6.95	6.31
Temperature[c]	C	10.1	7.9	15.2	14.3	9.1	9.3	13.3
Turbidity[c]	NTU	3.69	13.6	3.22	0.66	7.81	6.03	32.6
Common Ions								
Ca	mg/L	266	285	205	245	249	264	276
Chloride	mg/L	199	159	93.2	111	149	126J	135
Fluoride	µg/L	--	--	--	--	298	329	341
Hardness	mg/L	1010	1030	741	871	891	926	972
K	mg/L	17.2	16.9	16.7	18.3	17.1	15.2	18.0
Mg	mg/L	84.8	76.4	55.6	62.9	65.4	64.7	68.8
Na	mg/L	342	288	268	278	248	227	248
NO_2 as N	µg/L	335	39.2	248	258	--	--	--
NO_3 as N	µg/L	5260	30400	3330	4040	--	--	--
NO_3+NO_2 as N	µg/L	--	--	--	--	6400	13200	7430
SO_4	mg/L	1320	1160	938	949	958	715	861
Metals								
As	µg/L	0.4U	1	0.3U	0.2U	0.2U	4.5	4.3
Fe	µg/L	21800	7730	4630	8540	9680	381	708
Mn	µg/L	835	283	288	367	360	101	115
Mo	µg/L	16	38.1J	28.5	30	24.2	39.1	43.3
Se	µg/L	15.2	51.7	6.6	11.7	48.8	120	86.7
U	µg/L	86.2	342	100	168	194	347	343
V	µg/L	1U	49.6	4	10	7.6	180	195
Radiological								
U	µg/L	86.2	342	100	168	194	347	343

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- T3-D[a,b]

Analyte	Unit	01/11/00	04/11/00	08/16/00	10/17/00	01/23/01	04/17/01	07/10/01
Field Measurements								
Alkalinity	mg/L	405	295	272	307	296	305	322
Conductivity[c]	µmhos/cm	3120	3110	3980	2580	2590	2500	2390
DO[c]	mg/L	0.42	0.72	1.07	0.322	0	0.958	0.3
ORP[c]	mV	-229	12	-96	-106	-123	-53	-196
pH[c]	s.u.	7.43	7.55	7.19	7.02	7.08	7.23	6.77
Temperature[c]	C	10.7	9.1	14.9	14.8	9.6	9.7	12.7
Turbidity[c]	NTU	4.06	6.14	3.42	3.8	6.72	7.47	8.52
Common Ions								
Ca	mg/L	283	255	209	231	216	230	236
Chloride	mg/L	193	184	93.3	108	151	125J	130
Fluoride	µg/L	--	--	--	--	223	174	251
Hardness	mg/L	1060	981	752	838	807	847	859
K	mg/L	16.6	15.1	17.1	18.8	17.3	15.4	18.1
Mg	mg/L	86.8	83.5	55.8	63.4	64.9	66.1	65.6
Na	mg/L	323	281	276	282	247	233	243
NO_2 as N	µg/L	597	368	480	347	--	--	--
NO_3 as N	µg/L	933	2760	2550	1660	--	--	--
NO_3+NO_2 as N	µg/L	--	--	--	--	1220	1060	917
SO_4	mg/L	1280	1180	961	951	960	696	824
Metals								
As	µg/L	0.4U	0.2U	0.3U	0.2U	0.2U	0.5U	0.5U
Fe	µg/L	36900	28700	8170	18000	24700	20300	26300
Mn	µg/L	584	527	413	499	514	520	490
Mo	µg/L	11.7	10.9J	26.4	16	11.3	11	14
Se	µg/L	11.7	16.9	5.2	5.5	8.6	26.5	27.4
U	µg/L	30	31.4	61.3	82.9	24	44.6	80.8
V	µg/L	1U	0.4U	1.4	1.2U	1.4U	1.4	1.7
Radiological								
U	µg/L	30	31.4	61.3	82.9	24	44.6	80.8

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- T3-S[a,b]

Analyte	Unit	01/11/00	04/11/00	08/16/00	10/17/00	01/23/01	04/17/01	07/10/01
Field Measurements								
Alkalinity	mg/L	273	273	284	393	306	287	352
Conductivity[c]	µmhos/cm	2960	3070	3950	2620	2600	2500	2470
DO[c]	mg/L	0.41	0.61	0.99	0.539	0	0.978	0.34
ORP[c]	mV	-246	59	-97	-100	-122	-136	-127
pH[c]	s.u.	7.68	7.02	7.16	6.95	7.19	7.18	6.45
Temperature[c]	C	10.7	8.8	16.1	15.1	9.2	10.3	13.2
Turbidity[c]	NTU	11.9	19.2	0.94	7.26	11.2	15.2	6.74
Common Ions								
Ca	mg/L	266	274	220	255	232	253	271
Chloride	mg/L	193	168	94.6	111	149	125J	133
Fluoride	µg/L	--	--	--	--	291	293	327
Hardness	mg/L	1050	1010	785	895	849	900	955
K	mg/L	14.6	16.9	16.7	18.3	17.0	15.6	18.4
Mg	mg/L	92.9	78.9	57.3	62.8	65.6	65.1	67.5
Na	mg/L	338	291	284	280	247	231	248
NO_2 as N	µg/L	329	289	1180	789	--	--	--
NO_3 as N	µg/L	734	19700	4520	5160	--	--	--
NO_3+NO_2 as N	µg/L	--	--	--	--	4930	7740	4780
SO_4	mg/L	1240	1200	964	952	938	720	857
Metals								
As	µg/L	0.4U	0.2U	0.3U	0.2U	0.2U	0.5U	0.5U
Fe	µg/L	19300	11100	6150	12200	11300	2900	9270
Mn	µg/L	1200	531	274	408	394	294	296
Mo	µg/L	14.8	23.7J	38.8	24.4	22.5	27.4	33
Se	µg/L	11.7	36.4	9.1	13.9	47	99.9	85.7
U	µg/L	30.6	166	115	149	102	258	282
V	µg/L	1U	3.5	1.2U	1.5	1.4U	22.6	11
Radiological								
U	µg/L	30.6	166	115	149	102	258	282

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- T4-D[a,b]

Analyte	Unit	01/11/00	04/11/00	08/16/00	10/17/00	01/23/01	04/17/01	07/10/01
Field Measurements								
Alkalinity	mg/L	149	125	119	232	235	236	302
Conductivity[c]	µmhos/cm	2870	2840	3470	2380	2420	2350	2290
DO[c]	mg/L	0.32	0.19	0.7	0.733	0	1.1	0.154
ORP[c]	mV	-327	94	-229	-240	-241	-40	-265
pH[c]	s.u.	7.67	7.68	7.59	7.65	7.64	7.48	7.3
Temperature[c]	C	10.5	9.4	15	14.9	9.6	11.4	12.9
Turbidity[c]	NTU	3.47	4.16	5.69	7.63	4.2	25.9	7.68
Common Ions								
Ca	mg/L	198	172	117	153	177	165	196
Chloride	mg/L	192	185	92.8	103	151	126J	127
Fluoride	µg/L	--	--	--	--	269	42	55.5
Hardness	mg/L	895	768	517	645	715	667	754
K	mg/L	18.8	14.6	17.5	18.9	17.3	14.6	19.7
Mg	mg/L	97.3	82.1	54.6	63.9	66.4	62.0	64.2
Na	mg/L	353	270	277	277	256	227	240
NO_2 as N	µg/L	8.5U	27.2U	27.0U	13.6U	--	--	--
NO_3 as N	µg/L	18.1U	29.6U	31.0U	14.8U	--	--	--
NO_3+NO_2 as N	µg/L	--	--	--	--	117	7.3	10.8
SO_4	mg/L	1220	1170	907	925	933	651	799
Metals								
As	µg/L	0.4U	0.2U	0.3U	0.2U	0.2U	0.5U	0.5U
Fe	µg/L	47000	34000	17000	34100	43100	38000	53300
Mn	µg/L	596	439	336	612	561	575	663
Mo	µg/L	0.41U	0.4UJ	3.1	0.3U	8.2	0.3U	3.5
Se	µg/L	0.1U	2.9	0.1U	0.1U	0.14	0.3U	0.59
U	µg/L	0.1U	0.10U	0.10U	0.10U	0.1U	0.11	0.1U
V	µg/L	1U	0.4U	1.2U	1.2U	1.4U	0.4U	0.3U
Radiological								
U	µg/L	0.1U	0.10U	0.10U	0.10U	0.1U	0.11	0.1U

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- T4-S[a,b]

Analyte	Unit	01/11/00	04/11/00	08/16/00	10/17/00	01/23/01	04/17/01	07/10/01
Field Measurements								
Alkalinity	mg/L	117	48	42	57	32	74	315
Conductivity[c]	µmhos/cm	2660	2730	3320	1989	2030	2100	2420
DO[c]	mg/L	0.27	0.12	1.8	0.852	0	1.1	0.239
ORP[c]	mV	-413	72	-39	-152	-372	-177	-302
pH[c]	s.u.	8.88	8.27	9.24	7.67	9	7.81	7.23
Temperature[c]	C	11.4	9	15.7	15.6	9.7	9.8	13.5
Turbidity[c]	NTU	6.41	6.01	1.6	0.66	3.92	4.77	6.27
Common Ions								
Ca	mg/L	174	166	78.8	59.5	66.7	111	232
Chloride	mg/L	187	186	88.7	98.8	143	123J	133
Fluoride	µg/L	--	--	--	--	258	375	133
Hardness	mg/L	817	766	402	403	410	530	856
K	mg/L	16.2	14.2	18.2	19.2	19.3	16.4	18.2
Mg	mg/L	92.9	85.4	49.9	61.7	59.1	61.3	67.1
Na	mg/L	347	275	281	281	248	228	244
NO_2 as N	µg/L	8.5U	27.2U	13.5U	13.6U	--	--	--
NO_3 as N	µg/L	18.1U	29.6U	15.5U	14.8U	--	--	--
NO_3+NO_2 as N	µg/L	--	--	--	--	123	4.7U	13.9
SO_4	mg/L	1190	1130	848	819	788	580	857
Metals								
As	µg/L	0.4U	0.2U	0.3U	0.2U	0.2U	0.5U	0.5U
Fe	µg/L	925	2480	9.1U	11.6U	1220	14200	52800
Mn	µg/L	1220	467	73	33.6	444	428	490
Mo	µg/L	31.5	14.4J	47.4	81.2	18.4	4.1	6.4
Se	µg/L	0.1U	0.2U	0.1U	0.1U	0.1U	2.8	31
U	µg/L	0.1U	0.10U	0.10U	0.1U	0.1U	0.1U	0.1U
V	µg/L	1U	0.4U	1.2U	1.2U	1.4U	0.4U	0.3U
Radiological								
U	µg/L	0.1U	0.10U	0.10U	0.1U	0.1U	0.1U	0.1U

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- T5-D[a,b]

Analyte	Unit	01/11/00	04/11/00	08/16/00	10/17/00	01/23/01	04/17/01	07/10/01
Field Measurements								
Alkalinity	mg/L	76	45	40	158	196	218	282
Conductivity[c]	µmhos/cm	2760	2700	3100	2340	2250	2340	2240
DO[c]	mg/L	0.29	0.13	0.51	0.499	0	0.69	0.228
ORP[c]	mV	-315	19	-273	-240	-256	-177	-207
pH[c]	s.u.	7.81	9.66	8.23	7.75	7.78	7.65	7.35
Temperature[c]	C	11.2	9	15.3	14.9	9.8	10.1	12.6
Turbidity[c]	NTU	3.42	3.74	8.1	2.5	6.55	3.91	5.17
Common Ions								
Ca	mg/L	183	152	83.4	134	162	171	186
Chloride	mg/L	208	185	90.0	106	150	126J	124
Fluoride	µg/L	--	--	--	--	273	105	68.8
Hardness	mg/L	858	718	431	589	673	694	726
K	mg/L	19.9	14.8	18.2	19.0	17.7	15.1	19.7
Mg	mg/L	97.4	82.3	54.2	61.8	65.3	64.9	63.4
Na	mg/L	349	274	281	277	252	234	236
NO_2 as N	µg/L	8.5U	27.2U	13.5U	13.6U	--	--	--
NO_3 as N	µg/L	18.1U	29.6U	15.5U	14.8U	--	--	--
NO_3+NO_2 as N	µg/L	--	--	--	--	109	5.3	13
SO_4	mg/L	1300	1150	853	927	934	653	788
Metals								
As	µg/L	0.4U	0.2U	0.3U	0.2U	0.2U	0.5U	0.5U
Fe	µg/L	26300	19300	2860	27400	36900	33700	46100
Mn	µg/L	896J	448	227	608	491	567	622
Mo	µg/L	0.4UJ	0.4UJ	2.6	0.3U	4.8	0.3U	2.9U
Se	µg/L	0.1U	1.3	0.13	0.1U	5.2	0.3U	0.3U
U	µg/L	0.1U	0.1U	0.10U	0.10U	0.1U	0.10U	0.1U
V	µg/L	1U	0.4U	1.2U	1.2U	1.4U	0.4U	0.3U
Radiological								
U	µg/L	0.1U	0.1U	0.10U	0.10U	0.1U	0.10U	0.1U

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- T5-S[a,b]

Analyte	Unit	01/11/00	04/11/00	08/16/00	10/17/00	01/23/01	04/17/01	07/10/01
Field Measurements								
Alkalinity	mg/L	48	37	60	30	43	60	117
Conductivity[c]	µmhos/cm	2650	2680	3250	2000	1975	2090	2070
DO[c]	mg/L	0.42	0.32	0.86	0.626	0	0.426	0.25
ORP[c]	mV	-326	15	-167	-211	-218	-34	-305
pH[c]	s.u.	9.44	9.72	9.34	7.51	9.44	7.78	7.72
Temperature[c]	C	11.4	9	15.8	15.8	9.9	10.1	13.1
Turbidity[c]	NTU	2.6	4.17	1.09	2.02	4.43	3.37	6.49
Common Ions								
Ca	mg/L	164	169	84.1	64.5	63.8	94.9	143
Chloride	mg/L	192	201	87.9	96.5	142	124J	131
Fluoride	µg/L	--	--	--	--	290	469	501
Hardness	mg/L	774	763	399	396	407	505	631
K	mg/L	16.8	14.1	18.5	19.9	20.0	16.0	18.7
Mg	mg/L	88.4	82.8	45.9	57.0	60.1	65.0	66.6
Na	mg/L	351	276	281	284	252	231	240
NO_2 as N	µg/L	597	27.2U	13.5U	13.6U	--	--	--
NO_3 as N	µg/L	935	29.6U	15.5U	14.8U	--	--	--
NO_3+NO_2 as N	µg/L	--	--	--	--	118	4.7U	18.6
SO_4	mg/L	1280	1160	838	834	781	537	800
Metals								
As	µg/L	0.4U	0.29	0.3U	0.2U	0.2U	0.5U	0.5U
Fe	µg/L	187	79.6	9.1U	11.6U	211	6980	19200
Mn	µg/L	323J	269	93	67.6	302	1780	424
Mo	µg/L	64.7J	39.4J	80.8	134	36.4	10	5.2
Se	µg/L	0.1U	0.2U	0.1U	0.1U	0.1U	0.3U	3.9
U	µg/L	0.1U	0.10U	0.10U	0.10U	0.1U	0.1U	0.1U
V	µg/L	1U	0.4U	1.2U	1.2U	1.4U	0.4U	0.3U
Radiological								
U	µg/L	0.1U	0.10U	0.10U	0.10U	0.1U	0.1U	0.1U

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- T6-D[a,b]

Analyte	Unit	01/12/00	03/01/00	04/11/00	08/16/00	10/17/00	01/23/01	04/17/01	07/12/01	10/15/01	01/28/02	04/02/02	07/09/02	09/30/02
Field Measurements														
Alkalinity	mg/L	50	--	75	--	33	--	--	--	155	170	211	173	174
Conductivity[c]	µmhos/cm	2590	2400	2610	1990	2200	2070	1990	1977	1710	1667	1776	1437	1469
DO[c]	mg/L	--	--	--	0.77	--	--	--	--	1.1	--	1.1	2.24	5.2R
ORP[c]	mV	222	-170	74	-159	-86	-282	-142	-163	218	-76	-166	-140	-82.6
pH[c]	s.u.	6.44	7.2	7.72	6.93	6.67	7.26	7.44	7.24	7.48	7.08	7.33	7.11	7.01
Temperature[c]	C	7.5	8.5	10.5	17.4	16.1	9.3	11.7	13.6	15.5	7.9	11	16.99	18.36
Turbidity[c]	NTU	34.3	>1000	35.2	--	696	165	--	99	80.8	>1000	>1000	52.4	331
Common Ions														
Ca	mg/L	165	164	178	95.1	103	--	121	126	93.0	116	137	104	91.5
Chloride	mg/L	177	169	174	92.1	99.0	--	120J	17.5	103	83.9	83.3	77.6	77.0
Fluoride	µg/L	--	94.1	--	--	--	--	97.8	90.6	125	171J	126	133J	25.1U
Hardness	mg/L	718	743	750	417	478	--	560	572	463	527	615	494	475
K	mg/L	16.4	16.5	15.4	15.0	19.0	--	16.8	18.7	18.0	14.2	14.4	13.3	14.5
Mg	mg/L	74.2	81.1	74.3	43.7	53.7	--	62.5	62.6	56.0	57.6	66.3	56.8	59.9
Na	mg/L	363	304	279	288	286	--	230	247	169	140	142	123	129
NO_2 as N	µg/L	8.5U	--	95.5	58.6	28.4	--	--	--	--	--	--	--	--
NO_3 as N	µg/L	3500	--	1300	911	1950	--	--	--	--	--	--	--	--
NO_3+NO_2 as N	µg/L	--	179	--	--	--	--	1080	8.4	98.6	7.3U	182	4.9U	14.8
SO_4	mg/L	1090	1090	1150	820	881	--	557	736	630	634	576	389	516
Metals														
As	µg/L	3.4	18.5	3.3	5.2	2.6	0.97	3.6	1.1	0.6U	0.6U	0.77	2.2	0.68
Fe	µg/L	377	105	7.4U	9.1U	11.6U	13.6	2260	859	44.6	7080	13900	11000	5580
Mn	µg/L	1760J	2870	2240	1770	3210	828	2760	2140	159	873	1150	940	816
Mo	µg/L	53.7J	24.8	36.7J	28.8	13.3	11.2	4.7	13.5	9.5	1.5U	1.8U	1.8U	1.7U
Se	µg/L	0.39	0.1U	1.4	0.1U	0.1U	0.26	0.41	0.3U	0.79	0.3U	0.2U	0.1U	0.1U
U	µg/L	6.6	15.7	22.6J	19.7	1.8	2.1	6.5	5.9	7.3	2.4	4.8	3.1	2.4
V	µg/L	84.4	10	28.2	9.3	16	1.4U	1.5	0.37	1.5	0.4U	0.3U	0.3U	0.3U
Radiological														
U	µg/L	6.6	15.7	22.6J	19.7	1.8	2.1	6.5	5.9	7.3	2.4	4.8	3.1	2.4

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- T6-D[a,b]

Analyte	Unit	01/14/03	04/07/03	07/10/03	10/08/03	01/21/04	04/16/04
Field Measurements							
Alkalinity	mg/L	283	215	207	259	452	187
Conductivity[c]	µmhos/cm	1685	1875	1567	1588	1569	1352
DO[c]	mg/L	0.78	1.18	2.51	0.63	1.52	2.06
ORP[c]	mV	-369	-80.9	-42	-160	-171	-136.5
pH[c]	s.u.	7.02	6.95	7.11	7.25	7.28	7.28
Temperature[c]	C	10.1	9.64	14.5	14.3	8.56	10.49
Turbidity[c]	NTU	491	248	>1000	955	37.5	455
Common Ions							
Ca	mg/L	150	206	125	136	170	150
Chloride	mg/L	80.1	97.3	91.8	90.1	78.0	83.0
Fluoride	µg/L	25.1U	45.0	17.2UR	20.3U	200.U	200.U
Hardness	mg/L	621	774	538	596	663	568
K	mg/L	12.4	12.3	12.3	13.5	15.0J	16.0
Mg	mg/L	59.9	63.1	54.8	62.2	58.0	47.0
Na	mg/L	122	142	132	131	110	100
NO_2 as N	µg/L	--	--	--	--	--	--
NO_3 as N	µg/L	--	--	--	--	--	--
NO_3+NO_2 as N	µg/L	375R	112	4.50U	4.50U	50.U	10.U
SO_4	mg/L	589	748	554	576	620	530
Metals							
As	µg/L	1.6	0.240	0.190	2.10	1.5J	1.5
Fe	µg/L	38500	11600	2450	29200	46000	14000
Mn	µg/L	667	861	829	537	450	640
Mo	µg/L	6.4U	2.00U	2.60	1.70U	3.7J	4
Se	µg/L	0.1U	32.6	0.340	0.100U	0.01U	0.26
U	µg/L	4.6	2.80	0.820	2.30	0.89	2.3J
V	µg/L	1.1	0.580	0.320	0.300U	0.083UJ	0.25U
Radiological							
U	µg/L	4.6	2.80	0.820	2.30	0.89	2.3J

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- T6-S[a,b]

Analyte	Unit	02/29/00	04/11/00	10/17/00	04/17/01	07/12/01
Field Measurements						
Alkalinity	mg/L	75	68	--	--	--
Conductivity[c]	µmhos/cm	2490	2740	1771	1910	2040
DO[c]	mg/L	--	--	--	--	0.425
ORP[c]	mV	-167	65	77	-58	-218
pH[c]	s.u.	7.81	8.04	6.48	7.13	7.38
Temperature[c]	C	7.9	10.4	16.7	11.3	14.6
Turbidity[c]	NTU	--	24.2	436	--	144
Common Ions						
Ca	mg/L	170	171	89.3	128	118
Chloride	mg/L	171	174	98.1	120J	--
Fluoride	µg/L	910	--	--	76.5	--
Hardness	mg/L	771	742	463	575	545
K	mg/L	16.8	15.2	19.9	16.8	18.1
Mg	mg/L	84.1	76.5	58.4	62.1	60.7
Na	mg/L	301	279	282	229	234
NO_2 as N	µg/L	--	554	63.9	--	--
NO_3 as N	µg/L	--	5440	414	--	--
NO_3+NO_2 as N	µg/L	12U	--	--	29	--
SO_4	mg/L	1120	1160	877	571	--
Metals						
As	µg/L	7.2	1.2	1.1	0.78	2.6
Fe	µg/L	151	7.4U	699	15500	2850
Mn	µg/L	2380	1410	3200	1910	2490
Mo	µg/L	15	16.5J	17	0.3U	38.2
Se	µg/L	0.1	3.3	0.1U	0.3U	0.3U
U	µg/L	5.6	5.3	1.7	1.4	2.8
V	µg/L	4.6	3.9	7.9	0.4U	1.1
Radiological						
U	µg/L	5.6	5.3	1.7	1.4	2.8

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- T7-D[a,b]

Analyte	Unit	02/29/00	04/11/00	10/17/00	01/24/01	04/18/01	07/12/01
Field Measurements							
Alkalinity	mg/L	79	70	--	--	--	--
Conductivity[c]	µmhos/cm	2520	2790	2370	2120	2110	2000
DO[c]	mg/L	3	--	--	--	--	--
ORP[c]	mV	-215	76	135	-278	128	-160
pH[c]	s.u.	8.08	7.66	6.24	6.93	7.19	7.13
Temperature[c]	C	9	10.8	16	9	10.3	14.3
Turbidity[c]	NTU	269	30.3	73.3	167	50.9	76
Common Ions							
Ca	mg/L	176	210	123	--	124	126
Chloride	mg/L	169	181	96.6	--	118J	--
Fluoride	µg/L	307	--	--	--	113	--
Hardness	mg/L	778	885	520	--	564	566
K	mg/L	18.4	17.5	16.8	--	16.6	18.0
Mg	mg/L	82.2	87.6	51.6	--	61.8	61.0
Na	mg/L	307	330	282	--	224	247
NO_2 as N	µg/L	--	489	135	--	--	--
NO_3 as N	µg/L	--	1510	6820	--	--	--
NO_3+NO_2 as N	µg/L	86.7	--	--	--	1110	--
SO_4	mg/L	1120	1170	887	--	553	--
Metals							
As	µg/L	23.2	2.8	0.96	4.5	0.5U	3
Fe	µg/L	8.9U	7.4U	11.6U	564	2080	1340
Mn	µg/L	2880	1690	2320	1120	2020	2970
Mo	µg/L	35.2	43J	10	8.3	4.1	29.5
Se	µg/L	0.44	2.3	0.13	0.28	0.3U	0.35
U	µg/L	50.2	20.7J	6	8.2	5.7	10.8
V	µg/L	94.6	52.3	18.8	15.2	3.7	4.1
Radiological							
U	µg/L	50.2	20.7J	6	8.2	5.7	10.8

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- T99-01[a,b]

Analyte	Unit	01/13/00	04/19/00	07/27/00
Field Measurements				
Alkalinity	mg/L	--	152	182
Conductivity[c]	µmhos/cm	3340	3910	2300
DO[c]	mg/L	5.32	--	2.63
ORP[c]	mV	194	138	177
pH[c]	s.u.	--	6.19	6.61
Temperature[c]	C	8	8.8	18.6
Turbidity[c]	NTU	311	138	>1000
Common Ions				
Ca	mg/L	287	253	232
Chloride	mg/L	140	130	75.3
Fluoride	µg/L	237	282	298
Hardness	mg/L	1030	898	831
K	mg/L	23.7	18.5	15.9
Mg	mg/L	76.3	64.7	61.0
Na	mg/L	352	262	227
NO_3+NO_2 as N	µg/L	16800J	8310	10600
SO_4	mg/L	1220	1070	992
TDS[c]	mg/L	2580	2000	2200
Metals				
As	µg/L	2.4	2	2.4
Fe	µg/L	8.9U	7.4U	9.1U
Mn	µg/L	0.9U	1.2	1.5U
Mo	µg/L	63.5	50.7	48.3
Se	µg/L	25	14	9
U	µg/L	443	199	257
V	µg/L	86.5	72.6	78.5
Radiological				
Alpha[d]	pCi/L	195	113	138J
Alpha-U[e]	pCi/L	0[f]	0[f]	0[f]
Beta	pCi/L	86.2	88.7	90.9
U	µg/L	443	199	257

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- T99-03[a,b]

Analyte	Unit	01/13/00	04/19/00
Field Measurements			
Conductivity[c]	µmhos/cm	8850	--
DO[c]	mg/L	3.4	--
ORP[c]	mV	221	--
Temperature[c]	C	9.1	--
Turbidity[c]	NTU	502	--
Common Ions			
Ca	mg/L	403	444
Hardness	mg/L	5410	5560
K	mg/L	2.53	2.20
Mg	mg/L	1070	1080
Na	mg/L	760	744
Metals			
As	µg/L	0.89	0.7
Fe	µg/L	8.9U	11.7
Mn	µg/L	479	337
Mo	µg/L	2.3J	3.4
Se	µg/L	6	3.7
U	µg/L	36.3	33.5
V	µg/L	1.0U	5
Radiological			
U	µg/L	36.3	33.5

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- T99-05[a,b]

Analyte	Unit	04/10/00	11/01/00	04/10/01
Field Measurements				
Alkalinity	mg/L	191	--	247
Conductivity[c]	µmhos/cm	552	320	620
DO[c]	mg/L	1.2	--	7.5
ORP[c]	mV	65	-60	-37
pH[c]	s.u.	7.16	7.36	7.62
Temperature[c]	C	8.9	7.9	7.7
Turbidity[c]	NTU	4.53	511	2.49
Common Ions				
Ca	mg/L	56.1	58.2	57.9
Chloride	mg/L	1.51	--	2.79
Fluoride	µg/L	228	--	200
Hardness	mg/L	203	62.2	210
			145	
K	mg/L	0.980	1.76	0.938
Mg	mg/L	15.2	15.1	15.9
Na	mg/L	38.8	38.9	43.6
NO_3+NO_2 as N	µg/L	32.4U	--	5.8
SO_4	mg/L	67.4	--	78.9
TDS[c]	mg/L	323	--	400
Metals				
As	µg/L	0.42	0.2U	0.5U
Fe	µg/L	11.9	11.7U	18.2
Mn	µg/L	60	25.5	28.7
Mo	µg/L	0.4U	5.1	0.4U
Se	µg/L	0.2U	2.4	0.3U
U	µg/L	8.8	10.9	13
V	µg/L	0.40U	1.3U	0.47
Radiological				
Alpha[d]	pCi/L	2.2UJ	--	4.2
Alpha-U[e]	pCi/L	2.2UJ	--	0[f]
Beta	pCi/L	2.7	--	4.0U
U	µg/L	8.8	10.9	13

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- T99-11[a,b]

Analyte	Unit	01/13/00	04/18/00	07/27/00
Field Measurements				
Alkalinity	mg/L	268	122	360
Conductivity[c]	µmhos/cm	3270	2430	2050
DO[c]	mg/L	3.32	--	0.93
ORP[c]	mV	188	166	103
pH[c]	s.u.	--	6.33	6.63
Temperature[c]	C	10.2	9.3	10.8
Turbidity[c]	NTU	3.85	2.34	4.7
Common Ions				
Ca	mg/L	297	231	196
Chloride	mg/L	142	149	69.2
Fluoride	µg/L	262	335	354
Hardness	mg/L	1070	849	720
K	mg/L	21.9	14.4	12.9
Mg	mg/L	78.6	66.0	56.1
Na	mg/L	372	238	193
NO_3+NO_2 as N	µg/L	20200J	3380	3890
SO_4	mg/L	1290	993	871
TDS[c]	mg/L	2690	1840	1640
Metals				
As	µg/L	4.5	2.6	3.5
Fe	µg/L	8.9U	9.3	10
Mn	µg/L	0.9U	3.9	14
Mo	µg/L	56.4	40.9	41.9
Se	µg/L	28.4	4.7	3.8
U	µg/L	775	96.5	134
V	µg/L	164	134	157
Radiological				
Alpha[d]	pCi/L	524	63.0	70.8J
Alpha-U[e]	pCi/L	0[f]	0[f]	0[f]
Beta	pCi/L	151	34.9	49.3
U	µg/L	775	96.5	134

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- TW-01[a,b]

Analyte	Unit	08/15/00	10/17/00	01/23/01	04/17/01	07/09/01
Field Measurements						
Alkalinity	mg/L	225	315	236	210	242
Conductivity[c]	µmhos/cm	2860	2850	2480	2340	2170
DO[c]	mg/L	0.34	0.23	1.6	1.2	0.152
ORP[c]	mV	132	68	115	-19	36
pH[c]	s.u.	6.43	6.88	6.39	6.45	6.67
Temperature[c]	C	14.3	14.1	10	9.7	10.9
Turbidity[c]	NTU	2.98	1.38	3.56	1.53	1.23
Common Ions						
Ca	mg/L	--	--	--	193	204
Chloride	mg/L	--	--	--	--	85.7
Fluoride	µg/L	--	--	--	--	443J
Hardness	mg/L	--	--	--	691	722
K	mg/L	--	--	--	19.1	20.5
Mg	mg/L	--	--	--	50.7	51.7
Na	mg/L	--	--	--	220	221
NO_3+NO_2 as N	µg/L	--	--	--	--	9110J
SO_4	mg/L	--	--	--	--	757
Metals						
As	µg/L	10.9	13.2	12.5	8.6	11.7
Fe	µg/L	--	--	13.5	1.0U	0.7U
Mn	µg/L	--	--	823	694	729
Mo	µg/L	86	103	97	82.4J	91.7
Se	µg/L	3.5	11	44.8	70.9	72.4
U	µg/L	418	498	471	422	437
V	µg/L	381	442	413	337	416
Radiological						
U	µg/L	418	498	471	422	437

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- TW-02[a,b]

Analyte	Unit	08/15/00	10/17/00	01/24/01	04/17/01	07/10/01
Field Measurements						
Alkalinity	mg/L	240	287	239	222	231
Conductivity[c]	µmhos/cm	2650	2690	2450	2280	2230
DO[c]	mg/L	0.25	0.21	5.5R	0.397	0.451
ORP[c]	mV	129	72	180	-37	11
pH[c]	s.u.	6.53	6.79	6.78	6.74	6.75
Temperature[c]	C	14	14.9	8.7	9.6	11.4
Turbidity[c]	NTU	12.5	1.38	52.8	1.37	0.61
Common Ions						
Ca	mg/L	--	--	--	191	218
Chloride	mg/L	--	--	--	--	95.4
Fluoride	µg/L	--	--	--	--	403
Hardness	mg/L	--	--	--	684	768
K	mg/L	--	--	--	17.9	20.0
Mg	mg/L	--	--	--	50.4	54.4
Na	mg/L	--	--	--	216	217
NO_3+NO_2 as N	µg/L	--	--	--	--	8650J
SO_4	mg/L	--	--	--	--	758
Metals						
As	µg/L	11	12.4	8.6	10.5	11.6
Fe	µg/L	--	--	11U	1U	1.5
Mn	µg/L	--	--	2210	573	614
Mo	µg/L	74.7	84.4	68.7	71.8	76.6
Se	µg/L	7	14.8	47.6	87	86.1
U	µg/L	348	391	396	381	396
V	µg/L	356	412	310	303	389
Radiological						
U	µg/L	348	391	396	381	396

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- TW-03[a,b]

Analyte	Unit	08/15/00	10/17/00	01/23/01	04/17/01	07/10/01
Field Measurements						
Alkalinity	mg/L	240	288	279	249	262
Conductivity[c]	µmhos/cm	2450	2670	2590	2400	2190
DO[c]	mg/L	0.38	0.25	0.3	0.713	0.675
ORP[c]	mV	128	85	-158	1	-27
pH[c]	s.u.	6.57	6.82	6.73	6.72	6.26
Temperature[c]	C	13.9	15.1	9.8	10.4	12.3
Turbidity[c]	NTU	6.97	0.96	3.53	3.42	19.3
Common Ions						
Ca	mg/L	--	--	--	218	236
Chloride	mg/L	--	--	--	--	116
Fluoride	µg/L	--	--	--	--	352
Hardness	mg/L	--	--	--	777	835
K	mg/L	--	--	--	17.2	25.0
Mg	mg/L	--	--	--	56.4	59.6
Na	mg/L	--	--	--	223	224
NO_3+NO_2 as N	µg/L	--	--	--	--	7170
SO_4	mg/L	--	--	--	--	769
Metals						
As	µg/L	10.6	11.9	9.5	9.7	10.8
Fe	µg/L	--	--	11.0U	1.0U	24
Mn	µg/L	--	--	456	264	398
Mo	µg/L	64.1	68.4	60	51.6	57.9
Se	µg/L	11.7	49.4	74.2	110	102
U	µg/L	263	345	401	367	376
V	µg/L	363	399	311	277	338
Radiological						
U	µg/L	263	345	401	367	376

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- TW-04[a,b]

Analyte	Unit	08/15/00	10/17/00	01/23/01	04/17/01	07/10/01
Field Measurements						
Alkalinity	mg/L	265	282	290	262	291
Conductivity[c]	µmhos/cm	2570	2700	2710	2480	2440
DO[c]	mg/L	0.24	0.874	0.4	0.5	0.262
ORP[c]	mV	126	136	34	-24	-47
pH[c]	s.u.	6.58	6.6	6.74	6.56	6.26
Temperature[c]	C	14.2	15.5	10.2	8.9	11.8
Turbidity[c]	NTU	7.79	68.9	45.7	2.85	10.3
Common Ions						
Ca	mg/L	--	--	--	240	248
Chloride	mg/L	--	--	--	--	130
Fluoride	µg/L	--	--	--	--	352
Hardness	mg/L	--	--	--	848	876
K	mg/L	--	--	--	15.7	17.5
Mg	mg/L	--	--	--	60.5	62.4
Na	mg/L	--	--	--	218	219
NO_3+NO_2 as N	µg/L	--	--	--	--	7910
SO_4	mg/L	--	--	--	--	833
Metals						
As	µg/L	9.5	11.3	9.4	7.2	9.1
Fe	µg/L	--	--	11U	1U	17.7
Mn	µg/L	--	--	144	163	182
Mo	µg/L	54.3	62.3	50.2	47.2J	44.9
Se	µg/L	13.2	30.6	94.4	121	120
U	µg/L	265	330	371	374	385
V	µg/L	324	372	296	259	303
Radiological						
U	µg/L	265	330	371	374	385

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- TW-05[a,b]

Analyte	Unit	08/15/00	10/18/00	01/23/01	04/16/01	07/10/01
Field Measurements						
Alkalinity	mg/L	365	336	327	309	332
Conductivity[c]	µmhos/cm	2840	2860	2720	2840	2860
DO[c]	mg/L	1.45	0.93	3R	1.2	0.331
ORP[c]	mV	119	83	181	4	104
pH[c]	s.u.	6.65	6.66	6.78	6.73	6.34
Temperature[c]	C	15.5	15.4	8.7	10.6	11.6
Turbidity[c]	NTU	28.9	7.08	13	8.23	14.6
Common Ions						
Ca	mg/L	--	--	--	258	317
Chloride	mg/L	--	--	--	--	166
Fluoride	µg/L	--	--	--	--	322
Hardness	mg/L	--	--	--	915	1130
K	mg/L	--	--	--	9.89	12.1
Mg	mg/L	--	--	--	65.7	82.5
Na	mg/L	--	--	--	207	282
NO_3+NO_2 as N	µg/L	--	--	--	--	10900
SO_4	mg/L	--	--	--	--	976
Metals						
As	µg/L	1.1	2	3.6	3.9	4.4
Fe	µg/L	--	--	19.2	14.8	12.4
Mn	µg/L	--	--	655	314	574
Mo	µg/L	81.3	76.5	42.2	34.4	37.9
Se	µg/L	26.7	16.3	67.8	105	98.7
U	µg/L	260	302	343	339	337
V	µg/L	81.2	165	237	204	245
Radiological						
U	µg/L	260	302	343	339	337

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- TW-06[a,b]

Analyte	Unit	08/15/00	10/18/00	01/22/01	04/16/01	07/09/01
Field Measurements						
Alkalinity	mg/L	360	324	330	309	318
Conductivity[c]	µmhos/cm	2780	2770	2880	2520	2760
DO[c]	mg/L	0.6	0.485	0.6	2.7	0.343
ORP[c]	mV	122	80	140	229	56
pH[c]	s.u.	6.82	6.52	6.81	6.71	6.29
Temperature[c]	C	15.5	16	9.4	10.2	13
Turbidity[c]	NTU	7.29	8.17	4.58	5.8	1.64
Common Ions						
Ca	mg/L	--	--	--	300	327
Chloride	mg/L	--	--	--	--	163
Fluoride	µg/L	--	--	--	--	331
Hardness	mg/L	--	--	--	1060	1150
K	mg/L	--	--	--	10.0	12.4
Mg	mg/L	--	--	--	76.1	81.8
Na	mg/L	--	--	--	231	241
NO_3+NO_2 as N	µg/L	--	--	--	--	8900
SO_4	mg/L	--	--	--	--	951
Metals						
As	µg/L	5.5	5.6	6	3.4	6.1
Fe	µg/L	--	--	17	1.0U	15.9
Mn	µg/L	--	--	63.2	72.1	86.5
Mo	µg/L	34.5	38.9	35.3	29.8	31.8
Se	µg/L	47.3	10.9	60	139	124
U	µg/L	291	271	317	321	293
V	µg/L	323	352	297	258	307
Radiological						
U	µg/L	291	271	317	321	293

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- TW-07[a,b]

Analyte	Unit	04/17/01	07/10/01
Field Measurements			
Alkalinity	mg/L	137	107
Conductivity[c]	µmhos/cm	2310	1961
DO[c]	mg/L	--	1.092
ORP[c]	mV	42	8
pH[c]	s.u.	6.57	7.22
Temperature[c]	C	10.3	12.3
Turbidity[c]	NTU	46.7	19
Common Ions			
Ca	mg/L	117	128
Chloride	mg/L	--	110
Fluoride	µg/L	--	182
Hardness	mg/L	502	549
K	mg/L	16.1	17.6
Mg	mg/L	51.0	55.7
Na	mg/L	222	221
NO_3+NO_2 as N	µg/L	--	712
SO_4	mg/L	--	721
Metals			
As	µg/L	0.5U	7.5
Fe	µg/L	1U	55.3
Mn	µg/L	2350	2310
Mo	µg/L	22.9J	24.1
Se	µg/L	3.3	7.9
U	µg/L	14.7	31
V	µg/L	10.8	19.3
Radiological			
U	µg/L	14.7	31

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- TW-08[a,b]

Analyte	Unit	08/17/00	10/17/00	01/24/01	04/17/01	07/10/01
Field Measurements						
Alkalinity	mg/L	--	--	--	234	118
Conductivity[c]	µmhos/cm	--	2550	2300	2480	2090
DO[c]	mg/L	--	--	--	--	0.759
ORP[c]	mV	--	132	-196	43	49
pH[c]	s.u.	--	6.62	7.42	7.54	7.21
Temperature[c]	C	--	14.6	9.8	9.2	12.8
Turbidity[c]	NTU	--	>1000	62.4	--	19.6
Common Ions						
Ca	mg/L	158	--	--	164	142
Chloride	mg/L	115	--	--	--	128
Fluoride	µg/L	246	--	--	--	209
Hardness	mg/L	648	--	--	653	626
K	mg/L	15.8	--	--	12.4	16.5
Mg	mg/L	61.6	--	--	59.1	65.8
Na	mg/L	291	--	--	235	221
NO_3+NO_2 as N	µg/L	--	--	--	--	112
SO_4	mg/L	1030	--	--	--	773
Metals						
As	µg/L	1.6	2.2	1.8	0.5U	4.1
Fe	µg/L	9.1U	--	95.7	1.0U	51.8
Mn	µg/L	2650	--	2330	1130	2800
Mo	µg/L	32.3	35.5	40.7	22.4	23.4
Se	µg/L	0.21	0.1U	0.21	1.2	0.41
U	µg/L	23.2	23.6	53.4	36.1	23
V	µg/L	51.5	61.6	45.2	67.2	50.5
Radiological						
U	µg/L	23.2	23.6	53.4	36.1	23

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- TW-09[a,b]

Analyte	Unit	08/17/00	10/17/00	01/23/01	04/16/01	07/10/01
Field Measurements						
Alkalinity	mg/L	420	396	433	211	274
Conductivity[c]	µmhos/cm	2040	1855	1925	569	1047
DO[c]	mg/L	--	0.764	--	0.2	0.552
ORP[c]	mV	-37	156	-220	19	-22
pH[c]	s.u.	7.26	7.12	7.32	7.91	7.27
Temperature[c]	C	16.6	14.3	10.9	9.6	11.7
Turbidity[c]	NTU	>1000	1.43	3.5	27.7	8.14
Common Ions						
Ca	mg/L	106	--	--	20.3	52.5
Chloride	mg/L	124	--	--	--	32.0
Fluoride	µg/L	1100	--	--	--	678
Hardness	mg/L	382	--	--	70.3	177
K	mg/L	10.5	--	--	12.9	10.5
Mg	mg/L	28.6	--	--	4.76	11.1
Na	mg/L	248	--	--	59.3	105
NO_3+NO_2 as N	µg/L	--	--	--	--	576
SO_4	mg/L	375	--	--	--	90.3
Metals						
As	µg/L	0.78	0.47	0.87	0.50U	2.3
Fe	µg/L	81.8	--	68	315	1120
Mn	µg/L	496	--	526	142	435
Mo	µg/L	41.7	35.5	20.7	10.7	13.2
Se	µg/L	0.52	2.4	0.1U	0.3U	0.3U
U	µg/L	18.3	7.1	4.4	1.3	2.3
V	µg/L	1.2U	2.2	1.4U	1.1	0.32
Radiological						
U	µg/L	18.3	7.1	4.4	1.3	2.3

[a] Definition of Qualifiers: -- – No Data. R – Data unusable. J – Estimated quantity. U – Not detected; value is sample detection limit. UJ – Not detected, associated value is estimated.
[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- TW-10[a,b]

Analyte	Unit	08/15/00	11/02/00	01/23/01	04/16/01	07/10/01
Field Measurements						
Alkalinity	mg/L	85	64	68	99	93
Conductivity[c]	µmhos/cm	3720	2180	2180	2250	2140
DO[c]	mg/L	0.6	0.931	1.5	1.8	0.193
ORP[c]	mV	-154	54	-49	-28	-127
pH[c]	s.u.	7.95	7.18	7.71	7.6	7.09
Temperature[c]	C	16.6	14.2	10.1	9.7	12.9
Turbidity[c]	NTU	11.9	1.28	7.05	1.45	2.7
Common Ions						
Ca	mg/L	--	106	--	109	141
Chloride	mg/L	--	--	--	--	153
Fluoride	µg/L	--	--	--	--	97.9
Hardness	mg/L	--	511	--	543	643
K	mg/L	--	16.8	--	13.5	14.2
Mg	mg/L	--	59.9	--	65.8	70.6
Na	mg/L	--	293	--	217	258
NO_3+NO_2 as N	µg/L	--	--	--	--	509
SO_4	mg/L	--	--	--	--	795
Metals						
As	µg/L	9.4	2	3.3	0.5U	1.5
Fe	µg/L	--	243	175	86.5	10
Mn	µg/L	--	2580	1420	1550	1000
Mo	µg/L	14	12.7	7.6	5.8	9.6
Se	µg/L	0.1U	0.1U	0.1U	0.3U	0.3U
U	µg/L	2.3	0.1U	3.7	5	5.6
V	µg/L	1.9	6.8	4.6	14.5	23.4
Radiological						
U	µg/L	2.3	0.1U	3.7	5	5.6

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- TW-11[a,b]

Analyte	Unit	08/16/00	10/17/00	01/24/01	04/16/01	07/10/01
Field Measurements						
Alkalinity	mg/L	30	37	46	99	189
Conductivity[c]	µmhos/cm	3560	2200	2060	2070	2100
DO[c]	mg/L	0.22	0.2	0	0.568	0.077
ORP[c]	mV	-62	-289	-321	-204	-171
pH[c]	s.u.	9.18	9.19	8.3	8.71	6.83
Temperature[c]	C	17.5	15.6	9.6	10.7	11.7
Turbidity[c]	NTU	2.96	5.37	4.84	3.5	1.47
Common Ions						
Ca	mg/L	--	--	--	102	157
Chloride	mg/L	--	--	--	--	94.4
Fluoride	µg/L	--	--	--	--	172
Hardness	mg/L	--	--	--	468	614
K	mg/L	--	--	--	17.0	19.6
Mg	mg/L	--	--	--	51.7	54.0
Na	mg/L	--	--	--	218	219
NO_3+NO_2 as N	µg/L	--	--	--	--	4.7UJ
SO_4	mg/L	--	--	--	--	754
Metals						
As	µg/L	0.3U	0.2U	0.2U	0.5U	0.5U
Fe	µg/L	--	--	6960	13700	28200
Mn	µg/L	--	--	245	365	451
Mo	µg/L	3.5	8.2	4.2	3.6	4.8
Se	µg/L	0.1U	0.1U	0.12	7.9	7.4
U	µg/L	0.1U	0.10U	0.1U	0.1U	0.1U
V	µg/L	1.2U	1.2U	1.4U	0.4U	0.3U
Radiological						
U	µg/L	0.1U	0.10U	0.1U	0.1U	0.1U

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- TW-12[a,b]

Analyte	Unit	08/16/00	10/17/00	01/23/01	04/17/01	07/10/01
Field Measurements						
Alkalinity	mg/L	72	180	268	249	300
Conductivity[c]	µmhos/cm	2150	2330	2480	2370	2290
DO[c]	mg/L	0.41	0.19	0	0.594	0.202
ORP[c]	mV	-267	-257	-166	-58	-248
pH[c]	s.u.	7.85	7.99	7.33	7.28	7.32
Temperature[c]	C	16	16	9	10	13.2
Turbidity[c]	NTU	5.77	2.84	8.02	7.41	11
Common Ions						
Ca	mg/L	--	--	--	181	205
Chloride	mg/L	--	--	--	--	119
Fluoride	µg/L	--	--	--	--	233
Hardness	mg/L	--	--	--	699	769
K	mg/L	--	--	--	17.6	20.5
Mg	mg/L	--	--	--	60.0	62.4
Na	mg/L	--	--	--	228	241
NO_3+NO_2 as N	µg/L	--	--	--	--	20
SO_4	mg/L	--	--	--	--	810
Metals						
As	µg/L	0.3U	0.2U	0.2U	0.5U	0.5U
Fe	µg/L	--	--	43900	45600	49300
Mn	µg/L	--	--	622	562	496
Mo	µg/L	1.5	0.3U	8.7	17.6	8.3
Se	µg/L	0.1U	4	5.2	65.5	24.5
U	µg/L	0.10U	0.10U	0.1U	0.10U	0.1U
V	µg/L	1.2U	1.2U	1.4U	0.4U	0.3U
Radiological						
U	µg/L	0.10U	0.10U	0.1U	0.10U	0.1U

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- TW-13[a,b]

Analyte	Unit	08/16/00	10/18/00	01/23/01	04/17/01	07/10/01
Field Measurements						
Alkalinity	mg/L	45	42	33	67	231
Conductivity[c]	µmhos/cm	2970	1844	1986	2020	2440
DO[c]	mg/L	0.26	0.586	0	0.798	0.265
ORP[c]	mV	67	-100	-151	-54	-313
pH[c]	s.u.	9.44	9.55	9.58	9.4	7.53
Temperature[c]	C	16.5	14.7	10.6	9.3	13.2
Turbidity[c]	NTU	1.84	3.31	4.51	2.39	5.37
Common Ions						
Ca	mg/L	--	--	--	74.4	207
Chloride	mg/L	--	--	--	--	148
Fluoride	µg/L	--	--	--	--	70.6
Hardness	mg/L	--	--	--	454	836
K	mg/L	--	--	--	13.2	16.3
Mg	mg/L	--	--	--	65.2	77.4
Na	mg/L	--	--	--	224	266
NO_3+NO_2 as N	µg/L	--	--	--	--	17.4
SO_4	mg/L	--	--	--	--	884
Metals						
As	µg/L	0.3U	0.2U	0.2U	0.5U	0.74
Fe	µg/L	--	--	105	136	42700
Mn	µg/L	--	--	24.6	38.8	636
Mo	µg/L	4.7	9.3	11.1	17J	2.9U
Se	µg/L	0.1U	0.1U	0.1U	0.3U	1.2
U	µg/L	0.10U	0.10U	0.1U	0.1U	0.1U
V	µg/L	1.2U	2.1	1.4U	0.4U	0.3U
Radiological						
U	µg/L	0.10U	0.10U	0.1U	0.1U	0.1U

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[b] Samples were filtered in the field unless otherwise noted.
[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.

Alluvial Groundwater -- Down Gradient -- TW-14[a,b]

Analyte	Unit	08/16/00	10/18/00	01/24/01	04/16/01	07/10/01
Field Measurements						
Alkalinity	mg/L	33	42	22	60	24
Conductivity[c]	µmhos/cm	1920	1955	1901	2120	2080
DO[c]	mg/L	0.12	0.626	0.6	0.436	0.162
ORP[c]	mV	-354	-252	-273	-210	-355
pH[c]	s.u.	9.44	9.19	9.68	8.84	9.26
Temperature[c]	C	14.9	15.7	9.8	9.8	13.2
Turbidity[c]	NTU	6.77	1.85	1.06	4.64	6.64
Common Ions						
Ca	mg/L	--	--	--	65.2	124
Chloride	mg/L	--	--	--	--	154
Fluoride	µg/L	--	--	--	--	481
Hardness	mg/L	--	--	--	432	586
K	mg/L	--	--	--	12.4	15.6
Mg	mg/L	--	--	--	65.3	67.0
Na	mg/L	--	--	--	221	263
NO_3+NO_2 as N	µg/L	--	--	--	--	31
SO_4	mg/L	--	--	--	--	815
Metals						
As	µg/L	0.3U	0.2U	0.2U	0.5U	0.5U
Fe	µg/L	--	--	2100	495	190
Mn	µg/L	--	--	215	123	66.1
Mo	µg/L	8.1	12.2	4.1	7.1	6.2
Se	µg/L	0.1U	0.1U	0.12	0.3U	0.3U
U	µg/L	0.1U	0.10U	0.1U	0.1U	0.1U
V	µg/L	1.2U	1.3	1.4U	0.4U	0.3U
Radiological						
U	µg/L	0.1U	0.10U	0.1U	0.1U	0.1U

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[c] Sample was unfiltered.
[d] Total gross alpha excluding radon which is lost during analysis.
[e] Gross alpha minus uranium activity. Result rounded as appropriate.
[f] Uranium activity greater than gross alpha.