

**Table 2.1:  
Well Identification Information and Sampling History  
Page 1 of 2**

Well ID	Well Owner	Physical Well Address	City	Township	Range	Section	Previously Sampled?	Gas Analysis?	Well Depth*
ARMSTRONG-5S91W-30	Armstrong, Susan and Harvey	413 Ingersoll Lane	Silt	5S	91W	30	No	Yes	
ELDERKIN-5S91W-30	Elderkin, Bob	1513 CR 250	Silt	5S	91W	30	No	Yes	400
LYONS-5S91W-31	Lyons, Doug and Sue	2160 CR 250	Silt	5S	91W	31	No	No	155
ORTON-5S91W-31	Orton, Rich	966 CR 228	Silt	5S	91W	31	No	Yes	
SAM-5S91W-31	Samuelson, Terrie	381 CR 228	Silt	5S	91W	31	No	No	
BELLIO2-5S91W-32	Bellio, John	2543 CR 214	Silt	5S	91W	32	No	Yes	200
FAZZI-5S91W-32	Fazzi, Richard and Ester	1740 CR 214	Silt	5S	91W	32	No	No	
LAYMAN-5S92W-25	Layman, Mary	403 CR 250	Silt	5S	92W	25	No	Yes	
WALKER-5S92W-25	Walker, Chuck	769 CR 250	Silt	5S	92W	25	Yes	No	
ASG-5S92W-26	Asgard Water System (Dennis Webb)	2237 CR 456	Silt	5S	92W	26	No	No	
MELLO-5S92W-26	Mello, Mike	896 CR 266	Silt	5S	92W	26	No	No	200
OLIVER-5S92W-26	Oliver, Lyle	435 Odin Drive	Silt	5S	92W	26	No	Yes	200
THOMAS-5S92W-26	Thomas, Jerry and Nancy	1491 CR 237	Silt	5S	92W	26	Yes	No	430
PATR-5S92W-28	Patrick, Terry	1175 CR 259	Rifle	5S	92W	28	No	Yes	85
ALLEN-5S92W-30	Allen, Ed and Sheila	488 CR 251	Rifle	5S	92W	30	No	Yes	100
RCE-5S92W-30	Rifle Creek Estates (Michael Brown)	1046 SR 325	Rifle	5S	92W	30	No	No	
PENN-5S92W-31	Pennington, John	318 CR 297	Rifle	5S	92W	31	No	Yes	
BROW-5S92W-32	Brownson, Jim and Jackie	3181 CR 233	Rifle	5S	92W	32	Yes	No	
TREV-5S92W-32	Trevathan, Troy	2900 CR 233	Rifle	5S	92W	32	No	Yes	200
TYB-5S92W-32	Tybar Ranch (Mark Nieslanik)	1179 CR 233	Rifle	5S	92W	32	No	No	
WARD-5S92W-32	Ward, Barbara and Bob	2359 CR 250	Silt	5S	92W	32	Yes	No	160
LOWD-5S92W-33	Lowdermilk, Darrell	313 Roundtree Road	Rifle	5S	92W	33	No	No	123
URBAN-5S92W-33	Urban, Leroy	284 CR 259A	Rifle	5S	92W	33	No	No	
COULTER-5S92W-34	Coulter, Frances	4487 CR 233	Rifle	5S	92W	34	No	No	
MILLER-5S92W-34	Miller, Robert and Karen	520 CR 259	Rifle	5S	92W	34	No	Yes	300
SPAULDING-5S92W-34	Spaulding, Larry	531 CR 260	Silt	5S	92W	34	No	No	148
BARRIE-5S92W-35	Barrie, Tony	5721 CR 233	Silt	5S	92W	35	Yes	No	
SUITES-5S92W-35	Suits, Drew	225 CR 266	Silt	5S	92W	35	No	Yes	
BLAIR-5S92W-36	Blair, John and Deena	407 CR 261	Silt	5S	92W	36	No	Yes	120
PATTON-5S92W-36	Patton, Max and Leota	7393 CR 233	Silt	5S	92W	36	No	Yes	120
SILLS-5S93W-36	Sills, Maria and Newby	273 Hwy 13	Rifle	5S	93W	36	No	No	
COLLER-6S91W-4	Coller, Marvin	7000 CR 214	New Castle	6S	91W	4	Yes	No	102
HUGHES-6S91W-4	Hughes, Norma	6599 CR 214	New Castle	6S	91W	4	No	No	
TALBOTT-6S91W-4	Talbott, Russel and Dennie	6851 CR 214	New Castle	6S	91W	4	No	Yes	
CHENO-6S91W-5	Chenowetch, Jim	6411 CR 214	Silt	6S	91W	5	No	Yes	
GUCCINI-6S91W-5	Guccini, T.J	6070 CR 214	Silt	6S	91W	5	No	No	
MARTIN-6S91W-5	Martin, David	5818 CR 214	New Castle	6S	91W	5	No	No	
BECKER-6S91W-6	Becker, Jim	4520 CR 214	Silt	6S	91W	6	No	No	115
HOLSAN-6S91W-6	Holsan, Richard	4773 CR 214	Silt	6S	91W	6	Yes	No	100
WHITT-6S91W-6	Whittington, Del	4791 CR 214	Silt	6S	91W	6	No	Yes	
ALESSANDRO-6S92W-1	Alessandro, Marjorie	3445 CR 214	Silt	6S	92W	1	No	No	

\* Well depth (ft) as reported in Well Construction Diagrams obtained from CO Division of Water Resources

**Table 2.1:  
Well Identification Information and Sampling History  
Page 2 of 2**

Well ID	Well Owner	Physical Well Address	City	Township	Range	Section	Previously Sampled?	Gas Analysis?	Well Depth*
CHR-6S92W-1	Cedar Hills Ranch HOA (Kent Lohse)	4073 CR 214	Silt	6S	92W	1	No	Yes	
BELLIO1-6S92W-2	Bellio, John	2980 CR 214	Silt	6S	92W	2	No	No	100
BELLIO3-6S92W-2	Bellio, John	3204 CR 214	Silt	6S	92W	2	No	No	
COPE-6S92W-2	Copeland, Iris	925 CR 218	Silt	6S	92W	2	No	Yes	124
RUSCH-6S92W-3	Rusch, Jerry	353 East Vista Drive	Silt	6S	92W	3	No	No	
ZAR-6S92W-3	Zarlingo, Robert	970 CR 231	Silt	6S	92W	3	No	Yes	60
HINKLE-6S92W-4	Hinkle, Amber and Phil	573 CR 229	Silt	6S	92W	4	Yes	Yes	
POLLARD-6S92W-4	Pollard, Wayne	6448 CR 233	Silt	6S	92W	4	Yes	No	200
WALTER-6S92W-4	Walter, Lowell	969 CR 231	Silt	6S	92W	4	No	No	
NESBIT-6S92W-5	Nesbit, Dale and Julie	594 CR 216	Rifle	6S	92W	5	No	No	58
SCHOUTEN-6S92W-5	Schouten, Roger and Kathryn	394 Fox Run	Rifle	6S	92W	5	No	Yes	110
COSTANZ-6S92W-6	Costanzo, Kevin and Lynda	514 CR 225	Rifle	6S	92W	6	No	Yes	80
MOEN-6S92W-6	Moen, Nathan	1101 CR 227	Rifle	6S	92W	6	Yes	No	
MURPH-6S92W-6	Murphy, Steve	854 Antlers Lane	Rifle	6S	92W	6	No	Yes	
GULLYVENTURES-6S92W-9	Hulslander, Joyce	32339 Hwy 6	Silt	6S	92W	9	No	No	
FIELDS-6S93W-1	Fields, Scott	2492 CR 210	Rifle	6S	93W	1	Yes	No	
GREEN-6S93W-1	Green, Judy and Darrell	1009 CR 223	Rifle	6S	93W	1	Yes	Yes	95
STEWART-6S93W-1	Stewart, Douglas	2888 CR 210	Rifle	6S	93W	1	Yes	Yes	150
PRADO-6S93W-2	Prado, Jesus	1743 CR 210	Rifle	6S	93W	2	No	No	
TYB-6S93W-3	Tybar Ranch (Mark Nieslanik)	1179 CR 233	Rifle	6S	93W	3	Yes	No	
WIGINGTON-6S93W-3	Wigington, Jack	720 CR 233	Rifle	6S	93W	3	No	Yes	110
BAIN-6S93W-10	Bain, Phil	1983 CR 293	Rifle	6S	93W	10	No	Yes	200
KRIZ-6S93W-10	Kriz, Ken		Rifle	6S	93W	10	No	No	140
SHOUP-6S93W-10	Shoup, Richard	1318 CR 294	Rifle	6S	93W	10	No	No	
BRE-6S93W-11	Big R Ent. LLC (Bob Regulski)	28485 Hwy 6124	Rifle	6S	93W	11	No	No	68
COPE-6S93W-11	Copeland Concrete (Tim Copeland)	28803 Hwy 6	Rifle	6S	93W	11	Yes	No	
GREEN-6S93W-11	Green, Ardis	603 CR 221	Rifle	6S	93W	11	No	Yes	150
MGD-6S93W-11	Meadow Gold Dairy (Craig Peterson)	836 CR 210	Rifle	6S	93W	11	Yes	No	
SALB-6S93W-12	Salbidres, Ramon	51 CR 223	Rifle	6S	93W	12	No	No	

\* Well depth (ft) as reported in Well Construction Diagrams obtained from CO Division of Water Resources

**Table 2.2**  
**Final Field Parameter Measurements**  
Page 1 of 2

Well ID	Sample Date	Time	pH	Temp °C	Specific Cond. mS/cm °C	Dissolved Oxygen mg/L
ARMSTRONG-5S91W-30	8/7/2006	16:41	7.7	13.1	0.59	*
ELDERKIN-5S91W-30	8/1/2006	12:03	7.1	14.4	0.70	6.4
LYONS-5S91W-31	8/2/2006	14:31	7.5	14.5	1.04	*
ORTON-5S91W-31	8/2/2006	13:16	6.9	12.9	0.85	*
SAM-5S91W-31	8/9/2006	12:04	7.4	14.1	1.71	4.6
BELLIO2-5S91W-32	8/9/2006	11:05	7.5	12.5	0.99	*
FAZZI-5S91W-32	8/2/2006	9:28	6.7	14.1	2.16	1.2
LAYMAN-5S92W-25	8/9/2006	10:42	6.5	14.8	2.25	1.3
WALKER-5S92W-25	8/9/2006	19:13	7.3	14.5	1.07	6.6
ASG-5S92W-26	8/16/2006	9:04	7.6	13.6	0.59	7.4
MELLO-5S92W-26	8/8/2006	17:09	7.7	15.2	0.82	*
OLIVER-5S92W-26	8/8/2006	14:38	7.0	16.8	0.85	8.6
THOMAS-5S92W-26	8/15/2006	13:26	7.4	12.8	1.47	0.1
PATR-5S92W-28	8/15/2006	16:25	6.3	15.3	4.50	4.2
ALLEN-5S92W-30	8/4/2006	12:41	8.1	11.0	1.78	3.4
RCE-5S92W-30	8/16/2006	18:06	8.0	12.0	1.15	3.5
PENN-5S92W-31	8/1/2006	13:00	7.5	13.2	0.98	2.6
BROW-5S92W-32	8/15/2006	18:21	8.2	13.9	4.65	0.3
TREV-5S92W-32	8/4/2006	10:29	8.0	13.7	5.59	2.5
TYB-5S92W-32	8/16/2006	14:44	7.6	12.7	1.21	8.6
WARD-5S92W-32	8/15/2006	11:02	8.1	12.1	2.13	0.8
LOWD-5S92W-33	8/4/2006	14:37	7.5	13.8	0.99	10.4
URBAN-5S92W-33	8/3/2006	13:22	8.0	14.5	0.63	4.0
COULTER-5S92W-34	8/7/2006	15:31	8.0	17.3	2.42	2.0
MILLER-5S92W-34	8/7/2006	12:02	7.9	17.9	7.03	2.1
SPAULDING-5S92W-34	8/14/2006	16:25	8.3	14.0	1.63	5.5
BARRIE-5S92W-35	8/14/2006	18:26	8.2	12.5	4.43	1.1
SUITES-5S92W-35	7/31/2006	15:08	7.4	14.5	0.85	8.6
BLAIR-5S92W-36	8/1/2006	12:17	7.6	18.1	1.76	3.2
PATTON-5S92W-36	7/31/2006	13:21	7.0	13.2	1.64	3.6
SILLS-5S93W-36	8/15/2006	13:11	7.8	14.7	2.62	4.4
COLLER-6S91W-4	8/10/2006	11:40	7.2	19.4	0.69	5.8
HUGHES-6S91W-4	8/3/2006	12:35	7.2	13.3	0.51	1.7
TALBOTT-6S91W-4	8/3/2006	11:04	7.4	19.3	0.57	6.4
CHENO-6S91W-5	8/4/2006	11:23	7.4	15.0	0.41	8.1
GUCCINI-6S91W-5	8/7/2006	10:47	7.3	14.1	0.53	4.0
MARTIN-6S91W-5	8/7/2006	12:12	7.3	19.9	0.63	8.9
BECKER-6S91W-6	8/8/2006	11:43	7.6	13.6	0.80	*
HOLSAN-6S91W-6	8/10/2006	10:28	7.9	13.7	0.90	*
WHITT-6S91W-6	8/8/2006	9:54	7.3	13.0	0.78	*
ALESSANDRO-6S92W-1	8/14/2006	11:23	8.0	12.1	1.81	0.6
CHR-6S92W-1	8/1/2006	11:59	7.1	13.7	0.89	0.2
BELLIO1-6S92W-2	8/9/2006	12:08	7.2	14.0	1.34	*
BELLIO3-6S92W-2	8/9/2006	13:09	7.2	13.4	1.09	6.5
COPE-6S92W-2	8/4/2006	14:39	7.4	14.1	1.14	11.3
RUSCH-6S92W-3	8/15/2006	19:33	7.4	13.2	1.86	6.7
ZAR-6S92W-3	8/9/2006	15:21	7.3	13.3	1.15	*
HINKLE-6S92W-4	8/8/2006	9:34	7.8	15.5	1.50	6.9
POLLARD-6S92W-4	8/1/2006	8:39	7.0	19.9	1.49	4.1
WALTER-6S92W-4	8/8/2006	16:43	7.8	14.0	1.56	5.7

\* Field instrument malfunction

**Table 2.2**  
**Final Field Parameter Measurements**  
**Page 2 of 2**

Well ID	Sample Date	Time	pH	Temp °C	Specific Cond. mS/cm °C	Dissolved Oxygen mg/L
NESBIT-6S92W-5	8/2/2006	11:21	7.3	14.5	1.49	7.7
SCHOUTEN-6S92W-5	8/2/2006	10:05	7.3	15.2	1.53	5.0
COSTANZ-6S92W-6	8/1/2006	18:04	7.2	16.9	1.70	4.0
MOEN-6S92W-6	8/10/2006	9:20	7.3	15.5	2.76	8.0
MURPH-6S92W-6	8/2/2006	14:21	7.1	18.0	4.05	4.1
GULLYVENTURES-6S92W-9	8/15/2006	17:23	7.5	14.0	1.73	1.5
FIELDS-6S93W-1	8/14/2006	19:55	7.3	14.3	1.88	0.5
GREEN-6S93W-1	7/31/2006	13:47	7.3	12.3	5.75	1.7
STEWART-6S93W-1	7/31/2006	9:52	7.3	12.3	1.28	1.9
PRADO-6S93W-2	8/14/2006	10:03	7.9	15.9	1.53	9.7
TYB-6S93W-3	8/15/2006	10:12	7.1	14.0	1.36	6.4
WIGINGTON-6S93W-3	7/31/2006	17:20	7.1	16.8	1.04	7.8
BAIN-6S93W-10	8/1/2006	9:16	7.6	15.3	1.68	4.4
KRIZ-6S93W-10	8/14/2006	16:27	6.1	11.6	2.05	10.7
SHOUP-6S93W-10	8/2/2006	15:38	8.0	13.0	0.91	10.2
BRE-6S93W-11	8/2/2006	14:27	7.9	12.5	1.60	1.3
COPE-6S93W-11	8/14/2006	12:12	8.1	14.5	1.74	0.8
GREEN-6S93W-11	8/2/2006	11:37	7.9	12.3	1.42	1.4
MGD-6S93W-11	8/14/2006	14:49	8.2	12.9	2.43	0.4
SALB-6S93W-12	8/2/2006	10:24	7.7	12.4	1.67	1.4

\* Field instrument malfunction

**Table 3.1:**  
**Water Quality Results: Ions, pH and Total Dissolved Solids**  
Page 1 of 2

Well ID	Sodium	Calcium	Magnesium	Potassium	Chloride	Sulfate	Nitrate	Nitrite	Bicarbonate, as CaCO3	Carbonate, as CaCO3	pH	Total Dissolved Solids
MCL/CO Human Health Standard							10	1				
Colorado Drinking Water Standard					250	250					6.5-8.5	
ARMSTRONG-5S91W-30	170	19	2.4	<3	6.3	130	<0.5	<0.5	260	<5	7.8	520
ELDERKIN-5S91W-30	25	84	59	<3	9.2	170	<0.5	<0.5	280	<5	7.5	610
LYONS-5S91W-31	180	60	30	<3	51	<b>280</b>	3.1	<0.5	260	<5	7.7	800
ORTON-5S91W-31	110	63	53	3.3	12	220	1.3	<0.5	330	<5	7.6	710
SAM-5S91W-31	340	28	10	<3	22	<b>370</b>	0.92	<0.5	420	<5	7.9	980
BELLIO2-5S91W-32	190	67	46	<3	10	<b>260</b>	<0.5	<0.5	500	<5	7.5	910
FAZZI-5S91W-32	600	32	1.1	<3	220	<b>600</b>	<b>13</b>	<0.5	400	<5	8	1800
LAYMAN-5S92W-25	290	150	67	4.1	<b>250</b>	<b>790</b>	<b>22</b>	<0.5	450	<5	7.3	1600
WALKER-5S92W-25	180	38	17	<3	14	180	<0.5	<0.5	340	<5	7.8	650
ASG-5S92W-26	69	57	27	<3	10	110	<0.5	<0.5	250	<5	7.7	450
MELLO-5S92W-26	110	50	52	6.3	11	180	8.3	<0.5	340	<5	7.7	680
OLIVER-5S92W-26	34	61	58	5.4	9.4	150	<0.5	<0.5	290	<5	7.7	530
THOMAS-5S92W-26	150	130	56	<3	19	<b>300</b>	0.64	<0.5	520	<5	7.4	1000
PATR-5S92W-28	1200	63	71	<3	<b>490</b>	<b>1700</b>	1.6	<1	630	<5	7.7	3700
ALLEN-5S92W-30	320	160	65	4.3	39	<b>660</b>	1	<0.5	560	<5	7.1	1600
RCE-5S92W-30	91	150	74	3.4	25	<b>460</b>	0.69	<0.5	360	<5	7.3	1100
PENN-5S92W-31	71	150	67	4	12	<b>340</b>	0.63	<0.5	390	<5	7.3	940
BROW-5S92W-32	1300	130	65	7.2	<b>330</b>	<b>1900</b>	<b>53</b>	<1	630	<5	7.6	4200
TREV-5S92W-32	1500	170	160	12	<b>370</b>	<b>3400</b>	7.3	<1	510	<5	7.5	3000
TYB-5S92W-32	200	73	67	<3	15	<b>470</b>	0.86	<0.5	360	<5	7.6	1100
WARD-5S92W-32	460	58	10	<3	78	<b>690</b>	<b>18</b>	<0.5	240	<5	8	1500
LOWD-5S92W-33	60	100	83	<3	38	<b>260</b>	0.94	<0.5	370	<5	7.5	880
URBAN-5S92W-33	74	48	37	<3	9.4	140	<0.5	<0.5	250	<5	7.8	500
COULTER-5S92W-34	310	97	86	<3	160	<b>630</b>	1.9	<0.5	410	<5	7.6	1600
MILLER-5S92W-34	1500	250	47	6.1	<b>780</b>	<b>2700</b>	5.4	<1	290	<5	7.5	5500
SPAULDING-5S92W-34	370	14	4.3	<3	13	<b>460</b>	1	<0.5	360	<5	8.3	1000
BARRIE-5S92W-35	1400	5.6	0.32	49	<b>930</b>	<b>1100</b>	11	<1	310	<5	8	3400
SUITES-5S92W-35	46	68	59	4.5	8.6	170	0.58	<0.5	310	<5	7.6	610
BLAIR-5S92W-36	400	30	1	<3	170	<b>300</b>	0.89	<0.5	340	17	8	1200
PATTON-5S92W-36	200	150	66	3.7	26	<b>600</b>	0.76	<0.5	350	<5	7.2	1300
SILLS-5S93W-36	740	27	33	<3	42	<b>1000</b>	<1	<1	620	<5	8.1	2200
COLLER-6S91W-4	10	90	30	<3	3	29	1.2	<0.5	320	<5	7.4	400
HUGHES-6S91W-4	15	79	38	<3	<3	51	<0.5	<0.5	320	<5	7.4	410
TALBOTT-6S91W-4	18	85	29	<3	<3	49	<0.5	<0.5	310	<5	7.6	390
CHENO-6S91W-5	9.6	87	13	<3	<3	25	<0.5	<0.5	250	<5	7.4	330
GUCCINI-6S91W-5	57	77	17	<3	3.8	74	<0.5	<0.5	290	<5	7.5	440
MARTIN-6S91W-5	29	100	21	<3	7.8	51	1.1	<0.5	340	<5	7.4	440

Units in mg/L

Bold type indicates levels that exceed standard

**Table 3.1:**  
**Water Quality Results: Ions, pH and Total Dissolved Solids**  
Page 2 of 2

Well ID	Sodium	Calcium	Magnesium	Potassium	Chloride	Sulfate	Nitrate	Nitrite	Bicarbonate, as CaCO3	Carbonate, as CaCO3	pH	Total Dissolved Solids
MCL/CO Human Health Standard							10	1				
Colorado Drinking Water Standard					250	250					6.5-8.5	
BECKER-6S91W-6	200	43	15	<3	9.5	110	0.7	<0.5	450	<5	7.6	680
HOLSAN-6S91W-6	270	19	1.3	<3	70	130	<0.5	<0.5	360	<5	7.9	730
WHITT-6S91W-6	120	80	32	<3	26	130	0.6	<0.5	420	<5	7.4	670
ALESSANDRO-6S92W-1	380	38	16	<3	25	<b>430</b>	0.81	<0.5	470	<5	7.9	1200
CHR-6S92W-1	210	50	16	<3	19	150	<0.5	<0.5	420	<5	7.7	720
BELLIO1-6S92W-2	230	100	76	3.4	21	<b>410</b>	2.7	<0.5	550	<5	7.4	1200
BELLIO3-6S92W-2	95	100	100	3.6	7.8	<b>280</b>	<0.5	<0.5	510	<5	7.3	990
COPE-6S92W-2	150	100	63	3.2	86	<b>370</b>	<0.5	<0.5	310	<5	7.5	1100
RUSCH-6S92W-3	260	110	49	<3	87	<b>530</b>	1	<0.5	390	<5	7.3	1300
ZAR-6S92W-3	180	100	62	3.1	30	<b>360</b>	0.96	<0.5	440	<5	7.4	1000
HINKLE-6S92W-4	170	90	59	4.1	51	<b>300</b>	<0.5	<0.5	400	<5	7.4	970
POLLARD-6S92W-4	110	140	84	4.8	10	<b>520</b>	0.69	<0.5	350	<5	7.2	1200
WALTER-6S92W-4	170	110	66	3.4	32	<b>380</b>	<0.5	<0.5	430	<5	7.4	1000
NESBIT-6S92W-5	170	100	59	<3	99	<b>280</b>	0.7	<0.5	390	<5	7.4	1000
SCHOUTEN-6S92W-5	200	89	60	3.7	79	<b>370</b>	1.2	<0.5	360	<5	7.6	1100
COSTANZ-6S92W-6	150	110	100	3.7	160	<b>260</b>	1.4	<0.5	480	<5	7.4	1200
MOEN-6S92W-6	570	42	33	4.8	210	<b>690</b>	8.6	<0.5	450	<5	7.9	1800
MURPH-6S92W-6	380	140	170	6.1	<b>270</b>	<b>960</b>	2.3	<1	490	<5	7.4	2400
GULLYVENTURES-6S92W-9	230	110	65	3.3	55	<b>460</b>	0.75	<0.5	440	<5	7.5	1200
FIELDS-6S93W-1	350	100	69	4.7	150	<b>540</b>	6.5	<0.5	510	<5	7.5	1500
GREEN-6S93W-1	1600	280	180	15	<b>790</b>	<b>2500</b>	<2.5	<2.5	370	<5	7.4	6300
STEWART-6S93W-1	220	110	54	3.6	150	<b>370</b>	0.9	<0.5	370	<5	7.5	1200
PRADO-6S93W-2	240	93	84	<3	24	<b>640</b>	1.2	<0.5	370	5	8.4	1300
TYB-6S93W-3	110	150	99	<3	18	<b>560</b>	1.3	<0.5	440	<5	7.3	1300
WINGTON-6S93W-3	39	130	74	<3	8.2	<b>340</b>	<0.5	<0.5	350	<5	7.3	940
BAIN-6S93W-10	220	150	100	8.9	17	<b>380</b>	1.6	<0.5	410	<5	7.3	1600
KRIZ-6S93W-10	560	47	16	5.5	240	<b>840</b>	<0.5	<0.5	250	<5	8	1800
SHOUP-6S93W-10	31	130	75	<3	9.5	<b>360</b>	0.68	<0.5	300	<5	7.3	920
BRE-6S93W-11	360	75	46	3.8	160	<b>390</b>	<0.5	<0.5	540	<5	7.5	1400
COPE-6S93W-11	360	90	49	4.4	160	<b>420</b>	2.2	<0.5	510	<5	7.5	1400
GREEN-6S93W-11	310	72	47	3.9	140	<b>330</b>	<0.5	<0.5	490	<5	7.5	1300
MGD-6S93W-11	480	170	100	5.3	150	<b>1100</b>	1.3	<1	480	<5	7.3	2300
SALB-6S93W-12	390	94	57	4.7	150	<b>480</b>	2.4	<0.5	550	<5	7.5	1600

Units in mg/L

Bold type indicates levels that exceed standard

**Table 3.2:**  
**Water Quality Results: Drinking Water Metals and Halides**  
Page 1 of 2

Well ID	Arsenic	Barium	Cadmium	Chromium	Iron	Lead	Manganese	Selenium	Fluoride	Bromide
MCL/CO Human Health Standard	0.01	2	0.005	0.1		0.05		0.05	4	
Colorado Drinking Water Standard					0.3		0.05			
ARMSTRONG-5S91W-30	<.005	0.024	<.001	<.003	0.21	<.001	0.0061	<0.005	1.1	<0.2
ELDERKIN-5S91W-30	<.005	0.017	<.001	0.0035	<0.1	<.001	0.0014	<0.005	1	<0.2
LYONS-5S91W-31	<.005	0.014	<.001	<.003	<0.1	<.001	0.0230	0.0091	1.3	<0.2
ORTON-5S91W-31	<.005	0.015	<.001	<.003	<0.1	<.001	<0.001	0.0076	0.99	<0.2
SAM-5S91W-31	<.005	0.013	<.001	<.003	0.16	<.001	0.0021	0.0220	1.1	<0.2
BELLIO2-5S91W-32	<.005	0.01	<.001	<.003	<0.1	<.001	<0.001	<0.005	0.84	<0.2
FAZZI-5S91W-32	0.0098	0.016	<.001	<.003	<0.1	0.0010	0.0037	<b>0.2900</b>	1.3	1.8
LAYMAN-5S92W-25	<.005	0.042	<.001	<.003	<0.1	<.001	0.0087	0.0270	0.92	0.61
WALKER-5S92W-25	<.005	0.015	<.001	<.003	<0.1	<.001	<0.001	0.0160	1.5	<0.2
ASG-5S92W-26	<.005	0.031	<.001	<.003	<0.1	<.001	<0.001	<0.005	0.62	<0.2
MELLO-5S92W-26	<.005	0.018	<.001	<.003	<0.1	<.001	<0.001	0.0057	0.83	<0.2
OLIVER-5S92W-26	<.005	0.02	<.001	<.003	0.23	0.0011	0.0022	<0.005	0.55	<0.2
THOMAS-5S92W-26	<.005	0.019	<.001	<.003	<0.1	<.001	0.0011	0.0120	0.66	<0.2
PATR-5S92W-28	<0.010	0.01	<.002	<.006	0.2	<.002	0.0050	<b>0.0670</b>	1.5	0.62
ALLEN-5S92W-30	<.005	0.031	<.001	<.003	<0.1	0.0011	0.0033	0.0098	0.88	<0.2
RCE-5S92W-30	<.005	0.019	<.001	<.003	<0.1	<.001	<0.001	0.0140	0.5	<0.2
PENN-5S92W-31	<.005	0.017	<.001	<.003	<0.1	0.0011	<0.001	<0.005	0.62	<0.2
BROW-5S92W-32	0.01	0.009	<.002	<.006	<0.1	0.0022	<b>0.2700</b>	0.2200	<1	1.9
TREV-5S92W-32	0.0066	0.0066	<.001	<.003	<0.1	<.001	0.0049	<b>0.1000</b>	<1	1.8
TYB-5S92W-32	<.005	0.0083	<.001	<.003	<0.1	<.001	<0.001	0.0088	0.62	0.2
WARD-5S92W-32	<0.01	0.011	<.002	<.006	<0.1	<.002	0.0070	0.0440	0.95	0.23
LOWD-5S92W-33	<.005	0.019	<.001	<.003	<0.1	<.001	<0.001	0.0071	0.54	<0.2
URBAN-5S92W-33	<.005	0.022	<.001	<.003	<0.1	<.001	0.0022	0.0079	0.9	<0.2
COULTER-5S92W-34	<.005	0.014	<.001	<.003	<0.1	0.0021	0.0016	0.0200	1.2	0.3
MILLER-5S92W-34	0.0082	0.014	<.001	<.003	<0.1	0.0010	0.0053	<b>0.1200</b>	<1	2.5
SPAULDING-5S92W-34	<.005	0.011	<.001	<.003	<0.1	<.001	<0.001	0.0310	0.96	<0.2
BARRIE-5S92W-35	<0.01	0.018	<.002	<.006	0.16	<.002	0.0043	<b>0.0980</b>	2.1	1.5
SUITES-5S92W-35	<.005	0.016	<.001	<.003	<0.1	<.001	<0.001	<0.005	0.54	<0.2
BLAIR-5S92W-36	<.005	0.012	<.001	<.003	<0.1	<.001	0.0067	0.0160	1.4	0.28
PATTON-5S92W-36	<.005	0.0085	<.001	<.003	<0.1	0.0014	<0.001	0.0160	0.8	0.21
SILLS-5S93W-36	<.005	0.0061	<.001	<.003	0.14	<.001	0.0088	0.0073	1.5	<0.4
COLLER-6S91W-4	<.005	0.079	<.001	<.003	<0.1	<.001	<0.001	<0.005	<0.5	<0.2
HUGHES-6S91W-4	<.005	0.023	<.001	<.003	<b>0.35</b>	<.001	0.0100	<0.005	<0.5	<0.2
TALBOTT-6S91W-4	<.005	0.052	<.001	<.003	<0.1	<.001	0.0055	<0.005	<0.5	<0.2
CHENO-6S91W-5	<.005	0.11	<.001	<.003	<0.1	<.001	0.0013	<0.005	<0.5	<0.2
GUCCINI-6S91W-5	<.005	0.032	<.001	<.003	0.11	<.001	0.0410	<0.005	0.59	<0.2
MARTIN-6S91W-5	<.005	0.038	<.001	<.003	<0.1	<.001	<0.001	<0.005	0.65	<0.2

Units in mg/L  
Bold type indicates levels that exceed standard

**Table 3.2:**  
**Water Quality Results: Drinking Water Metals and Halides**  
Page 2 of 2

Well ID	Arsenic	Barium	Cadmium	Chromium	Iron	Lead	Manganese	Selenium	Fluoride	Bromide
MCL/CO Human Health Standard	0.01	2	0.005	0.1		0.05		0.05	4	
Colorado Drinking Water Standard					0.3		0.05			
BECKER-6S91W-6	<.005	0.02	<.001	<.003	<0.1	<.001	<0.001	0.0210	1.4	<0.2
HOLSAN-6S91W-6	<.005	0.029	<.001	<.003	0.15	<.001	<b>0.0850</b>	<0.005	3.4	<0.2
WHITT-6S91W-6	<.005	0.035	<.001	<.003	0.1	<.001	0.0150	0.0067	1.2	<0.2
ALESSANDRO-6S92W-1	<.005	0.011	<.001	<.003	0.24	<.001	0.0310	0.0300	2.5	<0.2
CHR-6S92W-1	<.005	0.029	<.001	<.003	<0.1	<.001	<b>0.0620</b>	<0.005	1.7	<0.2
BELLIO1-6S92W-2	<.005	0.011	<.001	<.003	<0.1	<.001	0.0019	<0.005	0.95	<0.2
BELLIO3-6S92W-2	<.005	0.011	<.001	<.003	<0.1	<.001	0.0014	0.0120	0.6	<0.2
COPE-6S92W-2	<.005	0.012	<.001	0.0041	<0.1	<.001	0.0080	0.0110	0.82	<0.2
RUSCH-6S92W-3	<.005	0.015	<.001	<.003	<0.1	<.001	0.0016	<0.005	1.3	0.68
ZAR-6S92W-3	<.005	0.0094	<.001	<.003	<0.1	<.001	0.0018	0.0059	0.54	<0.2
HINKLE-6S92W-4	<.005	0.017	<.001	<.003	<b>0.9</b>	<.001	0.0030	0.0063	0.5	<0.2
POLLARD-6S92W-4	<.005	0.014	<.001	<.003	<0.1	0.0016	0.0011	0.0058	0.56	<0.2
WALTER-6S92W-4	<.005	0.012	<.001	<.003	<0.1	<.001	<0.001	0.0069	0.54	<0.2
NESBIT-6S92W-5	<.005	0.019	<.001	<.003	<0.1	<.001	<0.001	0.0072	0.77	<0.2
SCHOUTEN-6S92W-5	<.005	0.011	<.001	<.003	<0.1	<.001	<0.001	0.0078	0.8	<0.2
COSTANZ-6S92W-6	<.005	0.024	<.001	0.0034	<0.1	<.001	<0.001	0.0095	0.88	<0.2
MOEN-6S92W-6	<.005	0.014	<.001	<.003	<0.1	<.001	<0.001	<b>0.1000</b>	1.3	0.58
MURPH-6S92W-6	<.005	0.03	<.001	<.003	<0.1	<.001	0.0020	0.0350	<1	0.68
GULLYVENTURES-6S92W-9	<.005	0.016	<.001	<.003	<0.1	<.001	0.0012	<0.005	0.58	0.2
FIELDS-6S93W-1	<.005	0.024	<.001	<.003	<0.1	<.001	<b>0.3500</b>	0.0120	0.56	0.4
GREEN-6S93W-1	<b>0.029</b>	0.008	<.001	<.003	<0.1	0.0071	<b>0.1300</b>	<b>0.8100</b>	<2.5	3.4
STEWART-6S93W-1	<.005	0.02	<.001	<.003	<0.1	0.0013	<b>0.4600</b>	0.0058	0.6	0.26
PRADO-6S93W-2	<.005	0.016	<.001	<.003	<0.1	<.001	0.0010	0.0094	<0.5	0.25
TYB-6S93W-3	<.005	0.016	<.001	<.003	<0.1	<.001	<0.001	0.0075	1	<0.2
WINGINGTON-6S93W-3	<.005	0.0098	<.001	<.003	<0.1	0.0011	0.0018	0.0050	<0.5	<0.2
BAIN-6S93W-10	<.005	0.0097	<.001	<.003	<0.1	0.0031	0.0041	0.0360	<0.5	<0.2
KRIZ-6S93W-10	<b>0.025</b>	0.22	<.001	0.0037	<b>6.5</b>	0.0041	<b>0.0740</b>	<0.005	0.52	0.33
SHOUP-6S93W-10	<.005	0.013	<.001	<.003	<0.1	<.001	<0.001	0.0075	<0.5	<0.2
BRE-6S93W-11	<.005	0.022	<.001	<.003	<0.1	0.0020	<b>0.0900</b>	<0.005	0.85	0.25
COPE-6S93W-11	<.005	0.023	<.001	<.003	<0.1	<.001	<b>0.5700</b>	0.0074	0.71	0.32
GREEN-6S93W-11	<.005	0.025	<.001	<.003	<0.1	<.001	<b>0.2500</b>	<0.005	0.74	0.21
MGD-6S93W-11	<.005	0.014	<.001	<.003	<0.1	<.001	<b>0.7100</b>	0.0081	1.3	<0.4
SALB-6S93W-12	<.005	0.025	<.001	<.003	<0.1	<.001	<b>0.6900</b>	0.0087	0.77	0.41

Units in mg/L  
Bold type indicates levels that exceed standard



**Table 3.3:  
Summary of Gas Composition and Stable Isotope Analyses**

Well ID	*He %	Ar %	O <sub>2</sub> %	CO <sub>2</sub> %	N <sub>2</sub> %	CO %	C <sub>1</sub> %	δ <sup>13</sup> CO <sub>2</sub> ‰	Specific Gravity	Headspace Sample
ARMSTRONG-5S91W-30	0.0029	1.04	8.94	0.68	89.32	0.011	0.0049	-18.84	0.988	Yes
ELDERKIN-5S91W-30		1.33	17.59	4.88	76.13	0.072	0	-19.14	1.024	No
ORTON-5S91W-31		1.42	16.64	5.54	76.4	0	0	-20.29	1.027	No
BELLIO2-5S91W-32		1.35	18.25	7.47	72.9	0.028	0	-22.27	1.039	No
LAYMAN-5S92W-25		1.5	3.5	11.79	83.17	0.039	0	-21.16	1.043	No
OLIVER-5S92W-26		1.45	25.1	3.08	70.37	0	0	-18.61	1.025	No
PATR-5S92W-28		1.3	10.07	6.62	82	0	0.0092	-16.6	1.023	No
ALLEN-5S92W-30		1.32	6.3	19.54	72.84	0	0	-22.53	1.089	No
PENN-5S92W-31		1.42	6.78	11.55	80.25	0	0	-20.96	1.046	No
TREV-5S92W-32		1.26	8.13	7.13	83.48	0	0	-20.8	1.023	No
MILLER-5S92W-34	0.13	0.832	2.37	1.3	95.37	0	0.0022	-20.95	0.98	Yes
SUITES-5S92W-35	0.0019	1.04	19.07	1.26	78.63	0	0	-19.24	1.005	Yes
BLAIR-5S92W-36		1.35	11.04	2.55	85.06	0	0	-21.66	1.002	No
PATTON-5S92W-36		1.27	10.68	11.97	76.08	0	0	-20.9	1.053	No
TALBOTT-6S91W-4		1.39	17.1	5.31	76.15	0.055	0	-20.48	1.026	No
CHENO-6S91W-5	0.0021	1.16	11.3	1.83	85.71	0	0	-20.07	0.998	Yes
WHITT-6S91W-6	0.0288	1.29	5.04	3.07	90.57	0	0.0044	-21.57	0.996	Yes
CHR-6S92W-1		1.45	1.83	5.67	91.01	0	0.0393	-21.47	1.007	No
COPE-6S92W-2		1.29	24.03	6.41	68.27	0	0	-20.72	1.041	No
ZAR-6S92W-3		1.48	13.48	11.22	73.82	0	0	-21.47	1.054	No
HINKLE-6S92W-4		1.54	17.12	8.6	72.74	0	0	-20.97	1.045	No
SCHOUTEN-6S92W-5		1.51	17.23	6.94	74.27	0.054	0	-20.65	1.036	No
COSTANZ-6S92W-6		1.33	13.92	12.74	72.01	0	0	-22.39	1.062	No
MURPH-6S92W-6		1.46	13.51	11.65	73.32	0.06	0	-21.67	1.056	No
GREEN-6S93W-1	0.002	0.938	0.554	2.24	96.27	0	0	-21.38	0.984	Yes
STEWART-6S93W-1		1.49	1.89	6.89	89.73	0	0	-21.54	1.014	No
WIGINGTON-6S93W-3		1.29	20.57	8.34	69.8	0	0	-20.14	1.047	No
BAIN-6S93W-10		1.27	17.67	8.75	72.31	0	0	-21.29	1.045	No
GREEN-6S93W-11		1.39	2.69	6.88	89.04	0	0	-21.8	1.015	No

\* Helium was measured only in headspace samples