



2012 Report Addendum

**Groundwater and Surface Water Monitoring Project:
Baseline Monitoring to Address Oil and Gas Development in South Park**



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September 2012

SUMMARY

This report is an addendum to the *2011 Groundwater and Surface Water Monitoring Project: Baseline Monitoring to Address Oil and Gas Development in South Park* report written by Coalition for the Upper South Platte (CUSP). The 2011 report discussed the entirety of the groundwater and surface water monitoring project in South Park and the results of CUSP's first round of sampling. This addendum will discuss the results of the 2012 round of sampling conducted by CUSP on surface and groundwater sources of note as well as any new information regarding the project and 2013 sampling activities.

INTRODUCTION

In 2012 the Coalition for the Upper South Platte continued the baseline water quality monitoring project initiated in 2011. The primary goal of the 2012 Baseline Study was to collect additional seasonal samples of surface water locations and selected water wells. The objective is to better establish the seasonal trends and to ensure that the Baseline Study captured representative samples of the current surface and groundwater conditions. Surface water sample locations includes eight surface water locations sampled in 2011, and three additional locations that were chosen because they are significant tributaries in the South Park area, they are in close proximity to historic oil and natural gas wells, or they are in a geographic or geologic area that was not sampled in 2011. The 2012 groundwater sample locations were chosen based on the screened interval of the well and the corresponding geologic unit of that screened interval. It was the intent of this round of sampling to ensure that the primary aquifers, classified by the Colorado Geologic Survey, were sampled. Additionally, three wells were added to the 2012 round of sampling due to the presence of methane in a neighboring well and proximity to historic hydrocarbon exploration wells.

In 2011 nine surface water locations were sampled in the spring and again in the fall. This sampling indicated that there are significant chemical differences between these seasons; because of this variation CUSP sampled 11 surface water locations in 2012 in the summer and again in the fall.

In 2011 we also sampled 30 groundwater wells and augmented springs. These showed less seasonal variability, so we only sample 10 wells and augmented springs in the 2012 season, and 8 of these were sampled twice in the 2012 season.

Additional surface water locations added to the 2012 round of sampling are highlighted.

Sample ID	Sample Location Description
MFBB	Middle Fork of the South Platte at Badger Basin Fishing Access north of Hartsel
MFGARO	Middle Fork of the South Platte at Garo
SPLATTE	South Platte River above Spinney Reservoir
FOURMILECR	Fourmile Creek near Garo
MICHIGANCR	Michigan Creek at Hwy 285
TARRYALLCR	Tarryall Creek at Hwy 285
129138	North Spring located in James Mark Jones SWA SW1/4, SW1/4, Sec 3, T10S, R76W
BUFFSP	Corner of Remington Rd and CR 15, Topographic Map label in Elkhorn Spring, NE1/4, NE1/4, Sec 17, T10S, R75S
BADGERSP	Badger Spring, just NE of Hwy 9, NE1/4, SW1/4, Sec 36, T11S, R76W
BLMSP	SW1/4, NE1/4, Sec 25, T10S, R76W
MILLSSP	Spring located adjacent to Fourmile Creek, NE1/4, NW1/4, Sec21, T11S, R76W

Table 1 Surface Water Sample Locations

As a second phase of this baseline study, a scoping study was initiated by CUSP and partners to focus on planning for the installation of monitoring wells to: 1.) aid in the collection of data needed to better understand the shallow groundwater movement and surface water interactions, and 2.) have wells in place for water quality monitoring prior to extensive hydrocarbon production. This study also outlines the current data gaps in knowledge and prioritizes next steps in data collection and geologic studies needed for the development of a hydrogeologic model for pollution-pathway risk assessment. This feasibility study was completed by the US Geological Survey and the Colorado Geologic Survey with direction from a steering committee in the fall of 2013. Additionally, a conceptual model of the South Park subsurface and aquifers was developed through this study. This tool will be a valuable tool in protecting our groundwater and surface water resources.

In May 2013, the USGS in cooperation with the Coalition for the Upper South Platte, began a program to install six groundwater monitoring wells in areas identified as needing new wells to provide adequate spatial coverage for monitoring water quality in the South Park Basin. This phase was funded in part by the Colorado Water Conservation Board and in-kind match from the USGS. Five wells were planned for completion in unconsolidated alluvial deposits, and one well was

planned for completion in bedrock materials. However, well drilling during May-June 2013 encountered unsaturated (dry) alluvium at two of the planned alluvial monitoring-well locations, so that only four wells (three alluvial wells and one bedrock well) were installed. Lithologic logs and well-construction reports were prepared for each well, and wells were developed after drilling to remove mud and foreign material to provide for good hydraulic connection between the well and aquifer. Slug tests were performed to estimate hydraulic-conductivity values for aquifer materials in the screened interval of each well, and groundwater samples were collected from each well for analysis of major inorganic constituents, trace metals, nutrients, dissolved organic carbon, volatile organic compounds, ethane, methane, and radon. Completed well depths range from 8.9 to 48.6 feet below land surface, and depth to water in wells ranged from 2.8 to 7.6 feet below land surface at the time of drilling. Average hydraulic-conductivity values determined by slug tests performed on wells completed in alluvium ranged from 30 to 77 feet per day and the average value of hydraulic conductivity determined by slug tests for the well completed in a Pierre Shale sandstone layer was 11 feet per day. The USGS Monitoring-Well Installation, Slug Testing, and Groundwater Quality for Selected Sites in South Park, Park County, Colorado 2013 report by L.R. Arnold provides a full report of well drilling activities in 2013.

BACKGROUND: El Paso E&P Company Status

When CUSP began the baseline water quality program in 2011 El Paso Co. held three oil and gas permits in the South Park area issued by the Colorado Oil and Gas Conservation Commission (CROW 3-25-10-76, CROW 11-13-10-76, and CROW 1-36-10-76). These permitted well locations are located within the James Mark Jones State Wildlife Area which is partly within the 36,733 acre Bald Hill Federal Unit (see Figure 1.) Well 11-13-10-76 was drilled in September 2010 to a measured depth of 8836 ft, though it was not hydraulically fractured. In the summer of 2011, well 11 was closed and reclaimed. In May of 2011 the COGCC approved an application for permit to drill (APD) for well 5-29-10-75, this APD is for the horizontal (deviated) portion of the well. This well permit is located on BLM property at the end of Vaquero Way

Methods

Sampling methodology was dictated by an updated Quality Assurance Project Plan and Sampling Analysis Plan based on the 2011 QAPP/SAP and field activities. All samples were sent to the Denver Test America Laboratory for analysis. Samples were analyzed for the same parameters as presented in Table 1 in the 2011 report. With the exception of surface water samples collected in the spring of 2012, for budgeting purposes volatile organic compounds were removed from the tested parameters with the assumption that any volatile compound would be lost to the atmosphere.

Results

Complete analytical result reports produced by Test America for the 2012 sampling events are provided upon request as Appendix A in this addendum. These reports provide the laboratory minimum reporting limits (MRL) and method detection limits (MDL) for each analyte during each

sampling event. They also contain the laboratory quality control results such as method blanks and duplicate sample runs. The following subsections highlight the field parameter observations and laboratory sample results for surface water samples, spring water samples, and groundwater samples.

Spring-Water Quality

Five spring locations were sampled in 2011. CUSP choose to sample four of the same five springs sampled in 2011 again in 2012. Badger Spring located just northeast of Hwy 9 was an additional spring location added to the 2012 sampling. All five springs sampled in 2012 were sampled once in the summer and again in the fall. Sample results and field data are summarized in Tables 1 and 2.

Buffalo Spring was tested on July 19th 2012 and again on October 18th 2012. This spring is located on the corner of Remington Rd. and CR 15 (Elkhorn Rd.), and is less than 200 yards from the Tarryall Federal natural gas well that was originally drilled by Hunt Oil Company in 1991, reentered by McMurry Oil Company in 1999, changed ownership to Jonah Energy Company LLC in 2011, and completed on 11/8/2002. This natural gas well was drilled to a total depth of 11,376 ft. A number of violations were associated with the reclamation of this well pad site. It also appears they may have used a mud system that contained 5% diesel when originally drilling the well in 1992. Their production target was the Apache Creek Sandstone interval at a depth of approximately 11,000 ft below ground surface.

Buffalo Spring had detections for methane in both 2011 and again in 2012. In 2011, methane was detected at 57 ug/L on June 21st 2011 but dropped to 8.7 ug/L on October 18th 2011. In 2012, methane was detected at 23 ug/L on July 19th 2012 and rose to 76 ug/L on October 18th 2012. The methane concentrations seen in both 2011 and again in 2012 warrant further investigation into the origin of the methane, particularly because of the proximity to a historic natural gas well. Both Diesel Range Organics and Gasoline Range Organics had qualified detections in 2011 and again in 2012 (above detection limits but below reporting limits).

Buffalo Springs exceeded both the state MCL and EPA SMCL of 50 ug/L for manganese in both sample events in 2011 and again in 2012. Manganese was measured at 330 ug/L on July 19th 2012 (found in the laboratory prepared blank as well) and again at 540 ug/L on October 18th 2012 which exceeds both the state MCL and the EPA SMCL of 50 ug/L. There was no other exceedance for manganese at the four other spring locations sampled in 2012. Buffalo Springs exceeded both the state MCL and the EPA SMCL for iron (300 ug/L) on July 19th 2012 (1400 ug/L) and October 18th 2012 (2000 ug/L). This was the case in 2011 as well where iron concentrations were measured at Buffalo Springs at 2300 ug/L on June 21st 2011 and 3400 ug/L on October 18th 2011. The BLM spring exceeded the state MCL and the EPA SMCL for iron in 2011 at 500 ug/L on both May 19th 2011 and October 18th 2011 but was well below or not detected in 2012. There were no other exceedances for iron in the other four spring locations sampled in 2012.

The BLM Spring located to the north of Bald Hill was tested in the summer and fall in 2012 and both samples exceeded the EPA SMCL of 250 mg/L for sulfate. This location exceeded the EPA SMCL limit in 2011 as well but had dropped nearly 7x the level, from 6,200 mg/L to 950mg/L, between the spring and fall sampling events that year. In 2012, however, the BLM Spring exceeded the EPA SMCL at 3,700 mg/L on August 7th 2012 and **increased** in the fall to 4,700 mg/L on October 23rd 2012. The BLM Spring also exceeded the EPA SMCL of 500 mg/L for total dissolved solids in both the summer (4800 mg/L on August 7th 2012) and fall (6800 mg/L on October 23rd 2012) sampling events in 2012. In 2011, the BLM spring exceeded the EPA SMCL for total dissolved solids in both the spring and fall sampling events as well but decreased concentration for from spring to fall as opposed to increasing from summer to fall. The BLM spring has numerous salt deposits along the water line. The increase or decrease in these salt deposits inversely correlates to the concentration of TDS observations and may also be influenced by precipitation events. Overall this spring has the lowest water quality observed for any sampling location included in this study.

Manganese concentrations in the CDOW North Spring sample ID 129138 exceeded the state MCL and EPA SMCL in 2011 but did not exceed MCL at either sampling events in 2012 (July 19th 2012 and October 18th 2012).

Both Mill Spring (located adjacent to Fourmile Creek) and Badger Spring (just NE of Hwy 9) were sampled in the summer and fall in 2012 but neither locations at either sampling events exceeded any MCL standards.

Surface-Water Quality

Generally, water quality in South Park in 2012 continued to be of high quality. Sample results and field data are summarized in Tables 3 and 4. Total Dissolved Solids values ranged from 86 mg/L to 280 mg/L, and were below the Environmental Protection Agency (EPA) secondary maximum contaminant level (SMCL) of 500 mg/L. With the exception of the detection of Gasoline Range Organics (GRO) in the South Platte River above Spinney Mountain Reservoir (sampled October 11th 2012) at 36 ug/L, above the reporting limit of 25ug/L, there were no significant detections of organic compounds in any of the other river samples.

Iron was detected above the state MCL and EPA SMCL of 300ug/L at three of the six river locations sampled in 2012; Tarryall Creek at Hwy 285 (1100 ug/L on July 31st 2012 and 400 ug/L on October 31st 2012); Michigan Creek at Hwy 285 (1500 ug/L on August 31st 2012 and 1100 ug/L on October 23rd 2012); and Four Mile Creek near Garo (660 ug/L on October 29th 2012). In 2011 all river water samples exceeded the state MCL and EPA SMCL for iron in the spring but fell below that standard in the fall. In 2012, however, all river locations that were sampled both years were below the state MCL and EPA SMCL for iron both the summer and fall except Fourmile Creek near Garo as noted above. Tarryall Creek at Hwy 285 and Michigan Creek at Hwy 285 were both new sample locations in 2012 and exceeded the state MCL and EPA SMCL for iron in both the summer and fall sample events.

In 2011, three of the four river locations sampled were above the state MCL and EPA SMCL level of 50 ug/L for manganese concentration and in 2012 none of the locations sampled in both 2011 and 2012 were above the state MCL and EPA SMCL concentrations. However, both new river locations were above the state MCL and EPA SMCL level of 50 ug/L for manganese concentration, one in the summer and the other in the fall; Tarryall Creek as Hwy 285 (65 ug/L on July 31st 2012); and Michigan Creek near Garo (53 ug/L on October 23rd 2012).

Lead was detected in all but two of the twelve samples taken at the six river locations in 2012 but none were above the EPA primary MCL of 15 ug/L and only one location (14 ug/L at Fourmile Creek on October 29th 2012) exceeded the hardness based aquatic life standard¹.

There were no unqualified methane detections in any of the river samples although five of the six river samples had qualified methane levels that were below reporting limits and therefore should only be considered estimates ranging from 0.42 µg/L to 3.8 µg/L.

Overall river water quality seems to highly depend on seasonal variation as well as variation from year to year depending on runoff and overland flow contributions.

Ground-Water Quality

Groundwater sampling was confined to seven previously sampled domestic wells and augmented springs and three new well locations. These selected wells represent specific groundwater conditions related to the geology of the screened interval of each well or have a unique water quality exceedance that warranted further investigation. Well locations have good geologic and geographic distribution throughout the South Park area. These groundwater wells are representative of the different aquifers delineated by the Colorado Geologic Survey in their 2003 Ground Water Atlas of Colorado; they also have a smaller screened interval than other wells sampled in the same geologic unit in 2011, therefore they capture a more representative sample of that unit rather than a large screened interval which captures water from a larger portion of the geologic unit or may even span multiple units. There were three wells proposed for sampling in the South Park Formation, this formation has two different aquifer units as characterized by the Colorado Geologic Survey.

The South Park Formation aquifers are the dominant sedimentary rock type aquifers in the South Park area and therefore it is important to characterize the water chemistry of this formation across a broad geographic area. As indicated by the 2011 sampling, seasonal variation is less pronounced in the groundwater wells than the surface water and springs.

Including summer and fall samples, 17 groundwater samples were collected between June and December 2012. Results for the well samples are provided in Table 5 and field parameters are provided in table 6. Three of the wells measured had pH values higher than the EPA SMCL range

¹ Hardness based aquatic life standards are calculated using the equations in Table III of: Colorado Department of Public Health and Environment (CDPHE). 2011. The Basic Standards and Methodologies for Surface Water (5 CCR 1002-31). Water Quality Control Commission. January 30 2014.

for pH of 6.5 to 8.5. Values of pH greater than 8.5 can cause aesthetic problems such as taste and scaling on piles and fixtures.

Fluoride was detected above EPA secondary MCL of 2 mg/L but not EPA primary MCL of 4 mg/L in well site BB on August 21st 2012 at 2.5 mg/L and again on December 17th 2012 at 2.2 mg/L. No other exceedances for fluoride were detected in the wells sampled in 2012.

Sulfate exceeded the EPA SMCL of 250 mg/L in well site J on August 28th 2012 (640 mg/L) and again on November 20th 2012 (690 mg/L). Well J also exceeded the EPA SMCL of 250 mg/L for sulfate in 2011 at both sampling events (680 mg/L on June 16th 2011 and 680 mg/L on November 17th 2011). No other exceedances for sulfate were detected at well sites sampled in 2012.

Three well sites exceeded the state MCL and EPA SMCL of 300 ug/L for iron in 2012; (well site D on June 29th 2012 at 7700 ug/L and again on October 10th 2012 at 13000 ug/L; well site J on August 28th 2012 at 4100 ug/L and again on November 20th 2012 at 3800 ug/L; and well site X on September 17th 2012 at 5400 ug/L). Well sites D, J and X exceeded the state MCL and EPA SMCL for iron in 2011 as well.

Manganese was detected above the state MCL and EPA SMCL of 50 ug/L in three wells in 2012; (well site D on October 10th 2012 at 52 ug/L; Well J on August 28th 2012 at 660 ug/L and again on November 20th 2012 at 600 ug/L; and well site X on September 17th 2012 at 95 ug/L). Well sites D, J and X exceeded the state MCL and EPA SMCL for manganese in 2011 as well. No other well sites sampled in 2012 exceeded levels for manganese.

Methane was detected at four well sites in 2012; (well site J had a very low qualified detection below reporting limits at 0.36 ug/L on August 28th 2012 and 0.52 ug/L on November 20th 2012; well site X at 690 ug/L on September 17th 2012; well site Y at 22 ug/L on August 22nd 2012 and 13 ug/L on December 20th 2012; and well site CC at 21 ug/L on August 31st 2012 and 8.4 ug/L on December 20th 2012). Methane was detected in 2011 in well site X at 680 ug/L on September 30th 2011 and at well site Y at 5.8 ug/L on January 19th 2011). There was no detection for methane in well site J in 2011 and well site CC was not sampled in 2011.

Total Dissolved Solids were detected above the EPA SMCL of 500 mg/L at four well sites sampled in 2012; (well site J at 1200 mg/L on August 28th 2012 and 1200 mg/L on November 20th 2012; well site X at 840 mg/L on September 17th 2012; well site Y at 630 mg/L on both August 22nd and December 20th 2012; and well site CC at 610mg/L on August 31st 2012 and 600 mg/L on December 20th 2012). The EPA SMCL for total Dissolved Solids was also exceeded in well site J on June 16th and November 17th 2011 at 1100mg/L, well site X on September 30th 2011 at 800 mg/L and well site Y on January 19th 2011 at 610 mg/L. Well site CC was not sampled in 2011.

Bis(2-ethylhexyl) phthalate was detected at very low qualified levels below reporting limits in multiple wells; (Well J on August 28th 2012 at 3 ug/L; Well M on August 28th 2012 at 2.9 ug/L; Well Y on August 22nd 2012 at 4.8 ug/L; and Well CC on August 31st 2012 at 2.8 ug/L). Bis(2-ethylhexyl) phthalate is a manufactured chemical commonly added to plastics to make them flexible. It is a

common laboratory contaminate and was frequently found in the samples analyzed by Test America and was also detected in the laboratory blanks.

Gasoline Range Organics (GRO) had qualified detected in five well locations that were below reporting limits; (well site J on August 28th 2012 at 25ug/L and on November 20th 2012 at 10 ug/L; well site M on August 28th 2012 at 25 ug/L and on December 17th 2012 at 13 ug/L; well site R on July 31st 2012 at 18 ug/L and on October 31st 2012 at 21 ug/L; well site U on August 7th 2012 at 19 ug/L and on October 29th 2012 at 16 ug/L; and well site CC on August 31st 2012 at 23 ug/L and on December 20th 2012 at 18 ug/L).

Summary

The 2012 sampling efforts helped to complete an intensive sampling program initiated in 2011. This season contributed valuable seasonal data and additional results that help verify baseline conditions. Overall water conditions in South Park are influenced by seasonality and subsurface geologic conditions. Much of the ground and surface water in the South Park basin is of high quality with few exceptions. Rivers and springs are also dependent on contributions from precipitation events, spring snowmelt runoff and resulting overland flow contributions that can add sediment, metals, and salts to the system. Park County through the Land and Water Trust has led the way both within Colorado and nationally with a proactive approach to address concerns raised from future mineral development.

Table 1
Laboratory Results for Spring Water Locations
2012 South Park Baseline



Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	BLMSP-8712	BLMSP-102312	MILLSSP-82112	MILLSSP-102912	9761-012513
N/A	Alkalinity	mg/L				60	110	170	170	140
N/A	Bicarbonate Alkalinity as CaCO ₃	mg/L				19	73	170	170	140
N/A	Carbonate Alkalinity as CaCO ₃	mg/L				40	33	ND	ND	ND
N/A	Hydroxide Alkalinity	mg/L				ND	ND	ND	ND	ND
14797-55-8	Nitrate as N	mg/L	10	10		ND	ND	0.44 J	0.45 J	0.5
14797-65-0	Nitrite as N	mg/L	1	1		ND	ND	ND	ND	ND
N/A	Orthophosphate as P	mg/L				ND	ND H	ND	1	ND
24959-67-9	Bromide	mg/L				1.1	1.2	ND	ND	ND
16887-00-6	Chloride	mg/L			250	150	200	11	10	2.1 J
16984-48-8	Fluoride	mg/L		4	2	0.54 J	0.59 J	ND	0.21 J	0.14 J
14808-79-8	Sulfate	mg/L			250	3700	4700	33	32	18
74-82-8	Methane	ug/L				3.1 J	1.2 J	ND	ND	ND
74-85-1	Ethylene	ug/L				ND	ND	ND	ND	ND
74-84-0	Ethane	ug/L				ND	ND	ND	ND	ND
N/A	HEM	mg/L				2.5 J B	ND	ND	ND	ND
7429-90-5	Aluminum	ug/L	5000		0.05 to 2. d	ND	33 J	ND	ND	ND
7440-70-2	Calcium	ug/L				170000	260000	46000	48000	46000
7439-89-6	Iron	ug/L	300		300	ND	34 J	ND	ND	ND
7439-95-4	Magnesium	ug/L				160000	220000	19000	19000	5200
2023695	Potassium	ug/L				43000	61000	1300 J	1600 J	250 J
7440-23-5	Sodium	ug/L				1000000	1600000 B	8000 B	9200 B	13000 B
7440-36-0	Antimony	ug/L	6	6		0.42 J	0.87 J	ND	ND	ND
7440-38-2	Arsenic	ug/L	10	10		5.7	8.3	0.39 J	ND	0.39 J
7440-39-3	Barium	ug/L	2000	2000		56	78	72	72	6.5

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Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	129138-71912	129138-101812	BUFFSP-71912	BUFFSP-101812	BADGERSP-82112	BADGERSP-103112
N/A	Alkalinity	mg/L				220	220	120	180	160	75
N/A	Bicarbonate Alkalinity as CaCO ₃	mg/L				220	220	48	180	160	75
N/A	Carbonate Alkalinity as CaCO ₃	mg/L				ND	ND	67	ND	ND	ND
N/A	Hydroxide Alkalinity	mg/L				ND	ND	ND	ND	ND	ND
14797-55-8	Nitrate as N	mg/L	10	10		0.093	J 0.083	J ND	ND	0.64	0.6
14797-65-0	Nitrite as N	mg/L	1	1		ND	ND	ND	ND	ND	ND
N/A	Orthophosphate as P	mg/L				ND	ND	ND	ND	ND	ND
24959-67-9	Bromide	mg/L				0.16	J 0.13	J 0.19	J 0.19	J ND	ND
16887-00-6	Chloride	mg/L			250	5	5.1	8.2	13	2.9	J 3
16984-48-8	Fluoride	mg/L		4	2	0.13	J 0.17	J 0.33	J 0.37	J ND	0.093
14808-79-8	Sulfate	mg/L			250	74	B 75	0.96	J B 2.8	J 69	67
74-82-8	Methane	ug/L				ND	ND	23	76	1.1	J 1.1
74-85-1	Ethylene	ug/L				ND	ND	ND	ND	ND	ND
74-84-0	Ethane	ug/L				ND	ND	ND	ND	ND	ND
N/A	HEM	mg/L				1.9	J B ND	1.9	J B ND	ND	ND
7429-90-5	Aluminum	ug/L	5000		0.05 to 2. d	ND	ND	170	740	ND	ND
7440-70-2	Calcium	ug/L				73000	73000	20000	34000	53000	53000
7439-89-6	Iron	ug/L	300		300	ND	ND	1400	2000	ND	ND
7439-95-4	Magnesium	ug/L				14000	13000	10000	11000	20000	21000
2023695	Potassium	ug/L				1800	J B 1300	J 7500	B 12000	1400	J 1400
7440-23-5	Sodium	ug/L				26000	B 27000	18000	B 21000	4000	B 5000
7440-36-0	Antimony	ug/L	6	6		ND	ND	ND	ND	ND	ND
7440-38-2	Arsenic	ug/L	10	10		ND	ND	3.9	J 2	J ND	ND
7440-39-3	Barium	ug/L	2000	2000		59	58	21	66	43	39

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Laboratory Results for Spring Water Locations
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7440-41-7	Beryllium	ug/L	4	4		ND		0.17	J	ND		ND		ND	
7440-43-9	Cadmium	ug/L	5	5		ND		ND		ND		ND		ND	
7440-47-3	Chromium	ug/L		100		ND		ND		ND		ND		ND	
7440-48-4	Cobalt	ug/L	50			0.24	J	0.16	J	ND		ND		ND	
7440-50-8	Copper	ug/L	200	1300	1000	1.3	J	ND		ND		ND		ND	
7439-92-1	Lead	ug/L	50	15		0.37	J	ND		ND		ND		ND	
7439-96-5	Manganese	ug/L	50		50	3.8		4.2		ND		ND		1.2	
7440-02-0	Nickel	ug/L	100			1	J	0.78	J	0.3	J	ND		ND	
7782-49-2	Selenium	ug/L	20	50		ND		1.2	J	0.7	J	ND		0.87	J
7440-22-4	Silver	ug/L	50		100	ND		ND		ND		ND		ND	
7440-28-0	Thallium	ug/L	2	2		ND		0.99	J B	ND		ND		ND	
7440-61-1	Uranium	ug/L		30		1.4		2.9		3.1		3.2		0.75	J
7440-62-2	Vanadium	ug/L	100			2.8	J	1.5	J	0.86	J	0.7	J	2.7	J
7440-66-6	Zinc	ug/L	2000		5000	ND		ND		ND		ND		ND	
67-56-1	Methanol	mg/L				0.21	J p	0.2	J p	ND		1.5		ND	
N/A	Diesel Range Organics [C10-C28]	mg/L				ND		0.12	J	ND		ND		ND	
8006-61-9	Gasoline Range Organics (GRO)-C6-C10	ug/L				18	J	11	J	23	J	23	J	ND	
92-52-4	1,1'-Biphenyl	ug/L				ND		ND		ND		ND		ND	
95-94-3	1,2,4,5-Tetrachlorobenzene	ug/L				ND		ND		ND		ND		ND	
120-82-1	1,2,4-Trichlorobenzene	ug/L	70	70		ND		ND		ND		ND		ND	
95-50-1	1,2-Dichlorobenzene	ug/L	600	600		ND		ND		ND		ND		ND	
541-73-1	1,3-Dichlorobenzene	ug/L	94			ND		ND		ND		ND		ND	
106-46-7	1,4-Dichlorobenzene	ug/L	75	75		ND		ND		ND		ND		ND	
123-91-1	1,4-Dioxane	ug/L	6.1			ND		ND		ND		ND		ND	
58-90-2	2,3,4,6-Tetrachlorophenol	ug/L				ND		ND		ND		ND		ND	
95-95-4	2,4,5-Trichlorophenol	ug/L	700			ND		ND		ND		ND		ND	

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Laboratory Results for Spring Water Locations
2012 South Park Baseline



Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	129138-71912	129138-101812	BUFFSP-71912	BUFFSP-101812	BADGERSP-82112	BADGERSP-103112								
7440-41-7	Beryllium	ug/L	4	4		ND	ND	ND	0.09	J	ND	ND							
7440-43-9	Cadmium	ug/L	5	5		ND	ND	ND	ND	ND	ND	ND							
7440-47-3	Chromium	ug/L		100		ND	ND	ND	ND	ND	ND	ND							
7440-48-4	Cobalt	ug/L	50			ND	ND	1.1	0.65	J	ND	ND							
7440-50-8	Copper	ug/L	200	1300	1000	ND	ND	0.98	J	1.2	J	ND	ND						
7439-92-1	Lead	ug/L	50	15		ND	ND	0.63	J	1.3	ND	ND							
7439-96-5	Manganese	ug/L	50		50	ND	1.5	330	B	540	0.53	J	0.37	J					
7440-02-0	Nickel	ug/L	100			0.54	J	ND	2.1	2.1	0.3	J	ND						
7782-49-2	Selenium	ug/L	20	50		1.6	J	1	J	0.88	J	ND	0.94	J	ND				
7440-22-4	Silver	ug/L	50		100	ND	ND	ND	ND	ND	ND	ND	ND						
7440-28-0	Thallium	ug/L	2	2		ND	0.41	J	B	ND	0.72	J	B	ND	ND				
7440-61-1	Uranium	ug/L		30		3.4		3.6		3.7		7.4		5.9		6			
7440-62-2	Vanadium	ug/L	100			ND		0.82	J	B	1.3	J	1.7	J	B	0.71	J	0.82	J
7440-66-6	Zinc	ug/L	2000		5000	4.1	J	3.6	J	2.8	J	4.2	J	2.4	J	ND	ND		
67-56-1	Methanol	mg/L						ND				ND		ND		ND	ND		
N/A	Diesel Range Organics [C10-C28]	mg/L				ND		ND		0.18	J	0.15	J	ND		ND	ND		
8006-61-9	Gasoline Range Organics (GRO)-C6-C10	ug/L				10	J	ND		11	J	ND		23	J	ND	ND		
92-52-4	1,1'-Biphenyl	ug/L				ND		ND		ND		ND		ND		ND	ND		
95-94-3	1,2,4,5-Tetrachlorobenzene	ug/L				ND		ND		ND		ND		ND		ND	ND		
120-82-1	1,2,4-Trichlorobenzene	ug/L	70	70		ND		ND		ND		ND		ND		ND	ND		
95-50-1	1,2-Dichlorobenzene	ug/L	600	600		ND		ND		ND		ND		ND		ND	ND		
541-73-1	1,3-Dichlorobenzene	ug/L	94			ND		ND		ND		ND		ND		ND	ND		
106-46-7	1,4-Dichlorobenzene	ug/L	75	75		ND		ND		ND		ND		ND		ND	ND		
123-91-1	1,4-Dioxane	ug/L	6.1			ND		ND		ND		ND		ND		ND	ND		
58-90-2	2,3,4,6-Tetrachlorophenol	ug/L				ND		ND		ND		ND		ND		ND	ND		
95-95-4	2,4,5-Trichlorophenol	ug/L	700			ND		ND		ND		ND		ND		ND	ND		

Table 1
Laboratory Results for Spring Water Locations
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Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	BLMSP-8712	BLMSP-102312	MILLSSP-82112	MILLSSP-102912	9761-012513
88-06-2	2,4,6-Trichlorophenol	ug/L	3.2			ND	ND	ND	ND	ND
120-83-2	2,4-Dichlorophenol	ug/L	21			ND	ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	ug/L	140			ND	ND	ND	ND	ND
51-28-5	2,4-Dinitrophenol	ug/L	14			ND	ND	ND	ND	ND
121-14-2	2,4-Dinitrotoluene	ug/L	0.11a			ND	ND	ND	ND	ND
606-20-2	2,6-Dinitrotoluene	ug/L	7			ND	ND	ND	ND	ND
91-58-7	2-Chloronaphthalene	ug/L	560			ND	ND	ND	ND	ND
95-57-8	2-Chlorophenol	ug/L	35			ND	ND	ND	ND	ND
91-57-6	2-Methylnaphthalene	ug/L	28			ND	ND	ND	ND	ND
95-48-7	2-Methylphenol	ug/L	350			ND	ND	ND	ND	ND
88-74-4	2-Nitroaniline	ug/L				ND	ND	ND	ND	ND
88-75-5	2-Nitrophenol	ug/L				ND	ND	ND	ND	ND
15831-10-4	3 & 4 Methylphenol	ug/L				ND	ND	ND	ND	ND
91-94-1	3,3'-Dichlorobenzidine	ug/L	0.078a			ND	ND	ND	ND	ND
99-09-2	3-Nitroaniline	ug/L				ND	ND	ND	ND	ND
534-52-1	4,6-Dinitro-2-methylphenol	ug/L				ND	ND	ND	ND	ND
101-55-3	4-Bromophenyl phenyl ether	ug/L				ND	ND	ND	ND	ND
59-50-7	4-Chloro-3-methylphenol	ug/L				ND	ND	ND	ND	ND
106-47-8	4-Chloroaniline	ug/L				ND	ND	ND	ND	ND
7005-72-3	4-Chlorophenyl phenyl ether	ug/L				ND	ND	ND	ND	ND
100-01-6	4-Nitroaniline	ug/L				ND	ND	ND	ND	ND
100-02-7	4-Nitrophenol	ug/L	56			ND	ND	ND	ND	ND
83-32-9	Acenaphthene	ug/L	420			ND	ND	ND	ND	ND
208-96-8	Acenaphthylene	ug/L				ND	ND	ND	ND	ND

Table 1
Laboratory Results for Spring Water Locations
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Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	129138-71912	129138-101812	BUFFSP-71912	BUFFSP-101812	BADGERSP-82112	BADGERSP-103112
88-06-2	2,4,6-Trichlorophenol	ug/L	3.2			ND	ND	ND	ND	ND	ND
120-83-2	2,4-Dichlorophenol	ug/L	21			ND	ND	ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	ug/L	140			ND	ND	ND	ND	ND	ND
51-28-5	2,4-Dinitrophenol	ug/L	14			ND	ND	ND	ND	ND	ND
121-14-2	2,4-Dinitrotoluene	ug/L	0.11a			ND	ND	ND	ND	ND	ND
606-20-2	2,6-Dinitrotoluene	ug/L	7			ND	ND	ND	ND	ND	ND
91-58-7	2-Chloronaphthalene	ug/L	560			ND	ND	ND	ND	ND	ND
95-57-8	2-Chlorophenol	ug/L	35			ND	ND	ND	ND	ND	ND
91-57-6	2-Methylnaphthalene	ug/L	28			ND	ND	ND	ND	ND	ND
95-48-7	2-Methylphenol	ug/L	350			ND	ND	ND	ND	ND	ND
88-74-4	2-Nitroaniline	ug/L				ND	ND	ND	ND	ND	ND
88-75-5	2-Nitrophenol	ug/L				ND	ND	ND	ND	ND	ND
15831-10-4	3 & 4 Methylphenol	ug/L				ND	ND	ND	ND	ND	ND
91-94-1	3,3'-Dichlorobenzidine	ug/L	0.078a			ND	ND	ND	ND	ND	ND
99-09-2	3-Nitroaniline	ug/L				ND	ND	ND	ND	ND	ND
534-52-1	4,6-Dinitro-2-methylphenol	ug/L				ND	ND	ND	ND	ND	ND
101-55-3	4-Bromophenyl phenyl ether	ug/L				ND	ND	ND	ND	ND	ND
59-50-7	4-Chloro-3-methylphenol	ug/L				ND	ND	ND	ND	ND	ND
106-47-8	4-Chloroaniline	ug/L				ND	ND	ND	ND	ND	ND
7005-72-3	4-Chlorophenyl phenyl ether	ug/L				ND	ND	ND	ND	ND	ND
100-01-6	4-Nitroaniline	ug/L				ND	ND	ND	ND	ND	ND
100-02-7	4-Nitrophenol	ug/L	56			ND	ND	ND	ND	ND	ND
83-32-9	Acenaphthene	ug/L	420			ND	ND	ND	ND	ND	ND
208-96-8	Acenaphthylene	ug/L				ND	ND	ND	ND	ND	ND

Table 1
Laboratory Results for Spring Water Locations
2012 South Park Baseline



Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	BLMSP-8712	BLMSP-102312	MILLSSP-82112	MILLSSP-102912	9761-012513
98-86-2	Acetophenone	ug/L	700			ND	ND	ND	ND	ND
120-12-7	Anthracene	ug/L	2100			ND	ND	ND	ND	ND
1912-24-9	Atrazine	ug/L		3		ND	ND	ND	ND	ND
100-52-7	Benzaldehyde	ug/L				ND	ND	ND	ND	ND
56-55-3	Benzo[a]anthracene	ug/L	0.0048a			ND	ND	ND	ND	ND
50-32-8	Benzo[a]pyrene	ug/L	0.0048a	0.2a		ND	ND	ND	ND	ND
205-99-2	Benzo[b]fluoranthene	ug/L	0.0048a			ND	ND	ND	ND	ND
191-24-2	Benzo[g,h,i]perylene	ug/L				ND	ND	ND	ND	ND
207-08-9	Benzo[k]fluoranthene	ug/L	0.0048a			ND	ND	ND	ND	ND
65-85-0	Benzoic acid	ug/L	28000			ND	ND	ND	ND	ND
100-51-6	Benzyl alcohol	ug/L	700			ND	ND	ND	ND	ND
111-91-1	Bis(2-chloroethoxy)methane	ug/L				ND	ND	ND	ND	ND
111-44-4	Bis(2-chloroethyl)ether	ug/L				ND	ND	ND	ND	ND
117-81-7	Bis(2-ethylhexyl) phthalate	ug/L	2.5	6		ND	ND	ND	ND	ND
85-68-7	Butyl benzyl phthalate	ug/L	1400			ND	ND	ND	ND	ND
105-60-2	Caprolactam	ug/L				ND	ND	ND	ND	ND
86-74-8	Carbazole	ug/L				ND	ND	ND	ND	ND
218-01-9	Chrysene	ug/L	0.0048a			ND	ND	ND	ND	ND
53-70-3	Dibenz(a,h)anthracene	ug/L	0.0048a			ND	ND	ND	ND	ND
132-64-9	Dibenzofuran	ug/L	7			ND	ND	ND	ND	ND
84-66-2	Diethyl phthalate	ug/L	5600			ND	ND	ND	ND	ND
131-11-3	Dimethyl phthalate	ug/L				ND	ND	ND	ND	ND
84-74-2	Di-n-butyl phthalate	ug/L	700			ND	ND	ND	ND	ND
117-84-0	Di-n-octyl phthalate	ug/L				ND	ND	ND	ND	ND
206-44-0	Fluoranthene	ug/L	280			ND	ND	ND	ND	ND

Table 1
Laboratory Results for Spring Water Locations
2012 South Park Baseline



Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	129138-71912	129138-101812	BUFFSP-71912	BUFFSP-101812	BADGERSP-82112	BADGERSP-103112		
98-86-2	Acetophenone	ug/L	700			ND	ND	ND	ND	ND	ND		
120-12-7	Anthracene	ug/L	2100			ND	ND	ND	ND	ND	ND		
1912-24-9	Atrazine	ug/L		3		ND	ND	ND	ND	ND	ND		
100-52-7	Benzaldehyde	ug/L				ND	ND	ND	ND	ND	ND		
56-55-3	Benzo[a]anthracene	ug/L	0.0048a			ND	ND	ND	ND	ND	ND		
50-32-8	Benzo[a]pyrene	ug/L	0.0048a	0.2a		ND	ND	ND	ND	ND	ND		
205-99-2	Benzo[b]fluoranthene	ug/L	0.0048a			ND	ND	ND	ND	ND	ND		
191-24-2	Benzo[g,h,i]perylene	ug/L				ND	ND	ND	ND	ND	ND		
207-08-9	Benzo[k]fluoranthene	ug/L	0.0048a			ND	ND	ND	ND	ND	ND		
65-85-0	Benzoic acid	ug/L	28000			ND	ND	ND	ND	ND	ND		
100-51-6	Benzyl alcohol	ug/L	700			ND	ND	0.33	J B	ND	ND		
111-91-1	Bis(2-chloroethoxy)methane	ug/L				ND	ND	ND	ND	ND	ND		
111-44-4	Bis(2-chloroethyl)ether	ug/L				ND	ND	ND	ND	ND	ND		
117-81-7	Bis(2-ethylhexyl) phthalate	ug/L	2.5	6		ND	ND	ND	0.57	J	ND	2.3	J B
85-68-7	Butyl benzyl phthalate	ug/L	1400			ND	ND	ND	ND	ND	ND		
105-60-2	Caprolactam	ug/L				ND	ND	ND	ND	ND	ND		
86-74-8	Carbazole	ug/L				ND	ND	ND	ND	ND	ND		
218-01-9	Chrysene	ug/L	0.0048a			ND	ND	ND	ND	ND	ND		
53-70-3	Dibenz(a,h)anthracene	ug/L	0.0048a			ND	ND	ND	ND	ND	ND		
132-64-9	Dibenzofuran	ug/L	7			ND	ND	ND	ND	ND	ND		
84-66-2	Diethyl phthalate	ug/L	5600			ND	ND	ND	ND	ND	ND		
131-11-3	Dimethyl phthalate	ug/L				ND	ND	ND	ND	ND	ND		
84-74-2	Di-n-butyl phthalate	ug/L	700			ND	ND	ND	ND	ND	ND		
117-84-0	Di-n-octyl phthalate	ug/L				ND	ND	ND	ND	ND	ND		
206-44-0	Fluoranthene	ug/L	280			ND	ND	ND	ND	ND	ND		

Table 1
Laboratory Results for Spring Water Locations
2012 South Park Baseline



Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	BLMSP-8712	BLMSP-102312	MILLSSP-82112	MILLSSP-102912	9761-012513	
86-73-7	Fluorene	ug/L	280			ND	ND	ND	ND	ND	
118-74-1	Hexachlorobenzene	ug/L	0.022a	1		ND	ND	ND	ND	ND	
87-68-3	Hexachlorobutadiene	ug/L	0.45a			ND	ND	ND	ND	ND	
77-47-4	Hexachlorocyclopentadiene	ug/L	42	50		ND	ND	ND	ND	ND	
67-72-1	Hexachloroethane	ug/L	0.7a			ND	ND	ND	ND	ND	
193-39-5	Indeno[1,2,3-cd]pyrene	ug/L	0.0048a			ND	ND	ND	ND	ND	
78-59-1	Isophorone	ug/L	140			0.34	J	ND	ND	ND	
91-20-3	Naphthalene	ug/L	140			ND	ND	ND	ND	ND	
98-95-3	Nitrobenzene	ug/L	3.5			ND	ND	ND	ND	ND	
621-64-7	N-Nitrosodi-n-propylamine	ug/L	0.005a			ND	ND	ND	ND	ND	
86-30-6	N-Nitrosodiphenylamine	ug/L	7.1			ND	ND	ND	ND	ND	
87-86-5	Pentachlorophenol	ug/L	0.29a	1a		ND	ND	ND	ND	ND	
85-01-8	Phenanthrene	ug/L				ND	ND	ND	ND	ND	
108-95-2	Phenol	ug/L	2100			ND	ND	ND	ND	ND	
129-00-0	Pyrene	ug/L	210			ND	ND	ND	ND	ND	
N/A	Total Dissolved Solids	mg/L			500	4800	6800	250	240	B	160
N/A	Total Suspended Solids	mg/L				2.8	J	4	J	ND	ND
71-55-6	1,1,1-Trichloroethane	ug/L	200	200		ND	ND	ND	ND	ND	
79-34-5	1,1,2,2-Tetrachloroethane	ug/L	0.18a			ND	ND	ND	ND	ND	
79-00-5	1,1,2-Trichloroethane	ug/L	28	5		ND	ND	ND	ND	ND	
76-13-1	1,1,2-Trichlorotrifluoroethane	ug/L	210000			ND	ND	ND	ND	ND	
75-34-3	1,1-Dichloroethane	ug/L	61			ND	ND	ND	ND	ND	
75-35-4	1,1-Dichloroethene	ug/L	7	7		ND	ND	ND	ND	ND	
87-61-6	1,2,3-Trichlorobenzene	ug/L				ND	ND	ND	ND	ND	
120-82-1	1,2,4-Trichlorobenzene	ug/L	70	70		ND	ND	ND	ND	ND	

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Laboratory Results for Spring Water Locations
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Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	129138-71912	129138-101812	BUFFSP-71912	BUFFSP-101812	BADGERSP-82112	BADGERSP-103112
86-73-7	Fluorene	ug/L	280			ND	ND	ND	ND	ND	ND
118-74-1	Hexachlorobenzene	ug/L	0.022a	1		ND	ND	ND	ND	ND	ND
87-68-3	Hexachlorobutadiene	ug/L	0.45a			ND	ND	ND	ND	ND	ND
77-47-4	Hexachlorocyclopentadiene	ug/L	42	50		ND	ND	ND	ND	ND	ND
67-72-1	Hexachloroethane	ug/L	0.7a			ND	ND	ND	ND	ND	ND
193-39-5	Indeno[1,2,3-cd]pyrene	ug/L	0.0048a			ND	ND	ND	ND	ND	ND
78-59-1	Isophorone	ug/L	140			ND	ND	0.42	0.85	ND	ND
91-20-3	Naphthalene	ug/L	140			ND	ND	ND	ND	ND	ND
98-95-3	Nitrobenzene	ug/L	3.5			ND	ND	ND	ND	ND	ND
621-64-7	N-Nitrosodi-n-propylamine	ug/L	0.005a			ND	ND	ND	ND	ND	ND
86-30-6	N-Nitrosodiphenylamine	ug/L	7.1			ND	ND	ND	ND	ND	ND
87-86-5	Pentachlorophenol	ug/L	0.29a	1a		ND	ND	ND	ND	ND	ND
85-01-8	Phenanthrene	ug/L				ND	ND	ND	ND	ND	ND
108-95-2	Phenol	ug/L	2100			ND	ND	ND	ND	ND	ND
129-00-0	Pyrene	ug/L	210			ND	ND	ND	ND	ND	ND
N/A	Total Dissolved Solids	mg/L			500	330	330	180	240	290	260
N/A	Total Suspended Solids	mg/L				ND	ND	8	33	ND	ND
71-55-6	1,1,1-Trichloroethane	ug/L	200	200		ND	ND	ND	ND	ND	ND
79-34-5	1,1,2,2-Tetrachloroethane	ug/L	0.18a			ND	ND	ND	ND	ND	ND
79-00-5	1,1,2-Trichloroethane	ug/L	28	5		ND	ND	ND	ND	ND	ND
76-13-1	1,1,2-Trichlorotrifluoroethane	ug/L	210000			ND	ND	ND	ND	ND	ND
75-34-3	1,1-Dichloroethane	ug/L	61			ND	ND	ND	ND	ND	ND
75-35-4	1,1-Dichloroethene	ug/L	7	7		ND	ND	ND	ND	ND	ND
87-61-6	1,2,3-Trichlorobenzene	ug/L				ND	ND	ND	ND	ND	ND
120-82-1	1,2,4-Trichlorobenzene	ug/L	70	70		ND	ND	ND	ND	ND	ND

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Laboratory Results for Spring Water Locations
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Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	BLMSP-8712		BLMSP-102312		MILLSSP-82112		MILLSSP-102912		9761-012513	
96-12-8	1,2-Dibromo-3-Chloropropane	ug/L	0.2a	0.2a		ND		ND		ND		ND		ND	
106-93-4	1,2-Dibromoethane	ug/L	0.02a	0.05a		ND		ND		ND		ND		ND	
95-50-1	1,2-Dichlorobenzene	ug/L	600	600		ND		ND		ND		ND		ND	
107-06-2	1,2-Dichloroethane	ug/L	0.38	5		ND		ND		ND		ND		ND	
78-87-5	1,2-Dichloropropane	ug/L	0.52	5		ND		ND		ND		ND		ND	
541-73-1	1,3-Dichlorobenzene	ug/L	94			ND		ND		ND		ND		ND	
106-46-7	1,4-Dichlorobenzene	ug/L	75	75		ND		ND		ND		ND		ND	
123-91-1	1,4-Dioxane	ug/L	6.1a			ND		ND		ND		ND		ND	
591-78-6	2-Hexanone	ug/L	35			ND		ND		ND		ND		ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	ug/L	560			ND		ND		ND		ND		ND	
67-64-1	Acetone	ug/L	6300			9.4	J	3.9	J	ND		ND		ND	
71-43-2	Benzene	ug/L	5	5		ND		ND		ND		ND		ND	
75-27-4	Bromodichloromethane	ug/L	0.56			ND		ND		ND		ND		ND	
75-25-2	Bromoform	ug/L	4			ND		ND		ND		ND		ND	
75-15-0	Carbon disulfide	ug/L	700			ND		ND		ND		ND		ND	
56-23-5	Carbon tetrachloride	ug/L	0.27	5		ND		ND		ND		ND		ND	
108-90-7	Chlorobenzene	ug/L	100	100		ND		ND		ND		ND		ND	
74-97-5	Chlorobromomethane	ug/L				ND		ND		ND		ND		ND	
124-48-1	Chlorodibromomethane	ug/L	14			ND		ND		ND		ND		ND	
75-00-3	Chloroethane	ug/L				ND		ND		ND		ND		ND	
67-66-3	Chloroform	ug/L	3.5			ND		ND		ND		ND		ND	
156-59-2	cis-1,2-Dichloroethene	ug/L	70	70		ND		ND		ND		ND		ND	
10061-01-5	cis-1,3-Dichloropropene	ug/L				ND		ND		ND		ND		ND	
110-82-7	Cyclohexane	ug/L				ND		ND		ND		ND		ND	
75-71-8	Dichlorodifluoromethane	ug/L	1400			ND		ND		ND		ND		ND	
100-41-4	Ethylbenzene	ug/L	700	700		ND		ND		ND		ND		ND	

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Laboratory Results for Spring Water Locations
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Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	129138-71912		129138-101812		BUFFSP-71912		BUFFSP-101812		BADGERSP-82112		BADGERSP-103112	
96-12-8	1,2-Dibromo-3-Chloropropane	ug/L	0.2a	0.2a		ND		ND		ND		ND		ND		ND	
106-93-4	1,2-Dibromoethane	ug/L	0.02a	0.05a		ND		ND		ND		ND		ND		ND	
95-50-1	1,2-Dichlorobenzene	ug/L	600	600		ND		ND		ND		ND		ND		ND	
107-06-2	1,2-Dichloroethane	ug/L	0.38	5		ND		ND		ND		ND		ND		ND	
78-87-5	1,2-Dichloropropane	ug/L	0.52	5		ND		ND		ND		ND		ND		ND	
541-73-1	1,3-Dichlorobenzene	ug/L	94			ND		ND		ND		ND		ND		ND	
106-46-7	1,4-Dichlorobenzene	ug/L	75	75		ND		ND		ND		ND		ND		ND	
123-91-1	1,4-Dioxane	ug/L	6.1a			ND		ND		ND		ND		ND		ND	
591-78-6	2-Hexanone	ug/L	35			ND		ND		ND		ND		ND		ND	
108-10-1	4-Methyl-2-pentanone (MIBK)	ug/L	560			ND		ND		ND		ND		ND		ND	
67-64-1	Acetone	ug/L	6300			ND		ND	8.7	J		ND		ND		ND	
71-43-2	Benzene	ug/L	5	5		ND		ND		ND		ND		ND		ND	
75-27-4	Bromodichloromethane	ug/L	0.56			ND		ND		ND		ND		ND		ND	
75-25-2	Bromoform	ug/L	4			ND		ND		ND		ND		ND		ND	
75-15-0	Carbon disulfide	ug/L	700			ND		ND		ND		ND		ND		ND	
56-23-5	Carbon tetrachloride	ug/L	0.27	5		ND		ND		ND		ND		ND		ND	
108-90-7	Chlorobenzene	ug/L	100	100		ND		ND		ND		ND		ND		ND	
74-97-5	Chlorobromomethane	ug/L				ND		ND		ND		ND		ND		ND	
124-48-1	Chlorodibromomethane	ug/L	14			ND		ND		ND		ND		ND		ND	
75-00-3	Chloroethane	ug/L				ND		ND		ND		ND		ND		ND	
67-66-3	Chloroform	ug/L	3.5			ND		ND		ND		ND		ND		ND	
156-59-2	cis-1,2-Dichloroethene	ug/L	70	70		ND		ND		ND		ND		ND		ND	
10061-01-5	cis-1,3-Dichloropropene	ug/L				ND		ND		ND		ND		ND		ND	
110-82-7	Cyclohexane	ug/L				ND		ND		ND		ND		ND		ND	
75-71-8	Dichlorodifluoromethane	ug/L	1400			ND		ND		ND		ND		ND		ND	
100-41-4	Ethylbenzene	ug/L	700	700		ND		ND		ND		ND		ND		ND	

Table 1
Laboratory Results for Spring Water Locations
2012 South Park Baseline



Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	BLMSP-8712	BLMSP-102312	MILLSSP-82112	MILLSSP-102912	9761-012513	
98-82-8	Isopropylbenzene	ug/L	700			ND	ND	ND	ND	ND	
79-20-9	Methyl acetate	ug/L				ND	ND	ND	ND	ND	
74-83-9	Methyl bromide	ug/L	10			ND	ND	ND	ND	ND	
74-87-3	Methyl chloride	ug/L				ND	ND	ND	ND	ND	
78-93-3	Methyl Ethyl Ketone (2-Butanone)	ug/L	4200			ND	ND	ND	ND	ND	
1634-04-4	Methyl tert-butyl ether	ug/L				ND	ND	ND	ND	ND	
108-87-2	Methylcyclohexane	ug/L				ND	ND	ND	ND	ND	
75-09-2	Methylene Chloride	ug/L	4.7	5		ND	ND	ND	ND	ND	
179601-23-1	m-Xylene & p-Xylene	ug/L				ND	ND	ND	ND	ND	
95-47-6	o-Xylene	ug/L				ND	ND	ND	ND	ND	
100-42-5	Styrene	ug/L	100	100		ND	ND	ND	ND	ND	
127-18-4	Tetrachloroethylene	ug/L	5	5		ND	ND	ND	ND	ND	
108-88-3	Toluene	ug/L	560	1000		ND	ND	ND	ND	ND	
156-60-5	trans-1,2-Dichloroethene	ug/L	100	100		ND	ND	ND	ND	ND	
10061-02-6	trans-1,3-Dichloropropene	ug/L				ND	ND	ND	ND	ND	
79-01-6	Trichloroethene	ug/L	5	5		ND	ND	ND	ND	ND	
75-69-4	Trichlorofluoromethane	ug/L	2100			ND	ND	ND	ND	ND	
108-05-4	Vinyl acetate	ug/L	7000			ND	ND	ND	ND	ND	
75-01-4	Vinyl chloride	ug/L	0.023a	2		ND	ND	ND	ND	ND	
1330-20-7	Xylenes, Total	ug/L	1400	10000		ND	ND	ND	ND	ND	
67-63-0	Isopropanol	ug/L				ND	ND	ND	ND	ND	
N/A	Coliform, Total	MPN/100ml		<5%		1095	21	65	6	<1	
N/A	Gross Alpha	pCi/L		15		7.10+-25.0	U -3.89E+01 +- 3.9E+01	ND	6.28 +- 2.2	2.64E+00 +- 1.6E+00 = 1.71 +- 1.0	J
N/A	Gross Beta	pCi/L				45.5+-15.0	U 1.09E+02 +- 2.5E+01	=	1.38 +- 2.7	3.37E+00 +- 1.3E+00 = 0.638 +- 1.1	U

¹ (MPN) most probable number method

² CDPHE Water Standards 2011

³ USEPA - Primary Drinking Water Standards

⁴ USEPA - Secondary Drinking Water Standards

^B Compound was found in the laboratory blank and sample.

* LCS or LCSD exceeds the control limit

J Result is less than the Reporting Limit (RL) but greater than or equal to the Method Detection Level (MDL) and the concentration is an approximate value.

U Analyzed for but not detected above limiting criteria. Limit criteria is less than the

= ERPIMS - Equal To, Analyte Detected

Table 1
Laboratory Results for Spring Water Locations
2012 South Park Baseline



Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	129138-71912		129138-101812		BUFFSP-71912		BUFFSP-101812		BADGERSP-82112		BADGERSP-103112	
98-82-8	Isopropylbenzene	ug/L	700			ND		ND		ND		ND		ND		ND	
79-20-9	Methyl acetate	ug/L				ND		ND		ND		ND		ND		ND	
74-83-9	Methyl bromide	ug/L	10			ND		ND		ND		ND		ND		ND	
74-87-3	Methyl chloride	ug/L				ND		ND		ND		ND		ND		ND	
78-93-3	Methyl Ethyl Ketone (2-Butanone)	ug/L	4200			ND		ND		ND		ND		ND		ND	
1634-04-4	Methyl tert-butyl ether	ug/L				ND		ND		ND		ND		ND		ND	
108-87-2	Methylcyclohexane	ug/L				ND		ND		ND		ND		ND		ND	
75-09-2	Methylene Chloride	ug/L	4.7	5		0.34	J B	ND		0.37	J B	ND		ND		ND	
179601-23-1	m-Xylene & p-Xylene	ug/L				ND		ND		ND		ND		ND		ND	
95-47-6	o-Xylene	ug/L				ND		ND		ND		ND		ND		ND	
100-42-5	Styrene	ug/L	100	100		ND		ND		ND		ND		ND		ND	
127-18-4	Tetrachloroethylene	ug/L	5	5		ND		ND		ND		ND		ND		ND	
108-88-3	Toluene	ug/L	560	1000		ND		ND		ND		ND		ND		ND	
156-60-5	trans-1,2-Dichloroethene	ug/L	100	100		ND		ND		ND		ND		ND		ND	
10061-02-6	trans-1,3-Dichloropropene	ug/L				ND		ND		ND		ND		ND		ND	
79-01-6	Trichloroethene	ug/L	5	5		ND		ND		ND		ND		ND		ND	
75-69-4	Trichlorofluoromethane	ug/L	2100			ND		ND		ND		ND		ND		ND	
108-05-4	Vinyl acetate	ug/L	7000			ND		ND		ND		ND		ND		ND	
75-01-4	Vinyl chloride	ug/L	0.023a	2		ND		ND		ND		ND		ND		ND	
1330-20-7	Xylenes, Total	ug/L	1400	10000		ND		ND		ND		ND		ND		ND	
67-63-0	Isopropanol	ug/L				ND		ND		ND		ND		ND		ND	
N/A	Coliform, Total	MPN/100ml		<5%		<1		<1		63		411		224		113	
N/A	Gross Alpha	pCi/L		15		1.41 +- 1.9	U	1.92E+00 +- 1.7E+00	ND	4.68 +- 1.5		1.12E+01 +- 3.2E+00	=	3.34 +- 1.7		4.34e+00 +- 1.8E+00	=
N/A	Gross Beta	pCi/L				0.821 +- 3.6	U	3.05E+00 +- 1.3E+00	=	7.16 +- 1.7		1.57E+01 +- 2.6E+00	=	1.55 +- 1.2	U	1.09+02 +- 1.1E+00	=

¹ (MPN) most probable number method

² CDPHE Water Standards 2011

³ USEPA - Primary Drinking Water Standards

⁴ USEPA - Secondary Drinking Water Standards

^B Compound was found in the laboratory blank and sample.

* LCS or LCSD exceeds the control limit

J Result is less than the Reporting Limit (RL) but greater than or equal to the Method Detection Level (MDL) and the concentration is an approximate value.

U Analyzed for but not detected above limiting criteria. Limit criteria is less than the = ERPIMS - Equal To, Analyte Detected

Table 2
Field Data for Spring Locations
2012 South Park Baseline



Sample Location ID	Sample ID	Date	Time	Field Personnel	SW, GW, or Spring	Laboratory Analysis to be Conducted
Badger Spring	BADGERSP-82112	8/21/2012	10:00 AM	JJ, MB	Spring	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta
Badger Spring	BADGERSP-103112	10/31/2012	11:30 AM	JJ, MB	Spring	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta, Methanol
BLM Spring	BLMSP-8712	8/7/2012	11:00AM	JJ, MB	Spring	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta
BLM Spring	BLMSP-102312	10/23/2012	11:45 AM	JJ, MB	Spring	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta, Methanol
Buffalo Spring	BUFFSP-71912	7/19/2012	12:15 PM	JJ, MB	Spring	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta

Table 2
Field Data for Spring Locations
2012 South Park Baseline



Sample Location ID	Sample ID	Date	Time	Field Personnel	SW, GW, or Spring	Laboratory Analysis to be Conducted
Buffalo Spring	BUFFSP-101812	10/18/2012	9:30 AM	JJ, MB	Spring	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta, Methanol
Mills Spring	MILLSSP-82112	8/21/2012	11:30 AM	JJ, MB	Spring	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta
Mills Spring	MILLSSP-102912	10/29/2012	11:45 AM	JJ, MB	Spring	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta, Methanol
North Spring Permit #129138	129138-71912	7/19/2012	10:45 AM	JJ, MB	Spring	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta
North Spring Permit #129138	129138-101812	10/18/2012	10:45 AM	JJ, MB	Spring	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta, Methanol
Spring 9761	9761-012513	5/22/2013	9:15 AM	JJ	Spring	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta, Methanol

Table 2
Field Data for Spring Locations
2012 South Park Baseline



Sample Location ID	Sample ID	Temperature °C	pH	Conductivity μS/cm at 25 °C	TDS ppm	DO ppm	Odor	Color	Effervescence	Bubbles/Gas
Badger Spring	BADGERSP-82112	9.57	8.26	182	129	8.92	None	None	None	None
Badger Spring	BADGERSP-103112	10.36	8.65	275	190	2.71	Sulphuro us odor	None	None	None
BLM Spring	BLMSP-8712	23.77	10.02	5843	2993	5.15	manure	yellow	none	foam
BLM Spring	BLMSP-102312	8.02	9.96	5402	3969	3.19	slight manure	light yellow	none	none
Buffalo Spring	BUFFSP-71912	25.13	10.18	233	116	9.22	Manure	Slight yellow	None	Yes

Table 2
Field Data for Spring Locations
2012 South Park Baseline



Sample Location ID	Sample ID	Temperature °C	pH	Conductivity μS/cm at 25 °C	TDS ppm	DO ppm	Odor	Color	Effervescence	Bubbles/Gas
Buffalo Spring	BUFFSP-101812	3.18	8.03	192	164	2.19	None - slight manure	slight turbidity	None	minor foam type bubbles
Mills Spring	MILLSSP-82112	8.02	7.82	250	184	6.75	None	None	None	None
Mills Spring	MILLSSP-102912	7.83	8.41	227	168	3.8	None	None	None	None
North Spring Permit #129138	129138-71912	8.78	8.2	347	255	2.47	None	None	None	None
North Spring Permit #129138	129138-101812	7.53	7.55	319	240	2.51	None	None	None	None
Spring 9761	9761-012513	3.32	7.66	161	137	0	None	None	None	None

Table 2
Field Data for Spring Locations
2012 South Park Baseline



Sample Location ID	Sample ID	Weather Conditions	River Conditions	Notes/Comments
Badger Spring	BADGERSP-82112	Sunny, overcast on horizon	Natural spring	Collected sample using grab sampler at one of three inflows, each evident from bubbling silt at bottom of spring pond; 90% of spring was overgrown with algae or marsh grass
Badger Spring	BADGERSP-103112	Clear	Natural spring next to Rt-9	Collected sample using grab sampler, directly above an inflow point, evident by bubbling silt; spring has more inflow points now than at time of last sampling event and is more full/at a higher level now as well; ducks were present in the marsh patch in the middle of the pool upon our arrival
BLM Spring	BLMSP-8712	clear, warm	spring emerges into bottom of pond approx. 15x15 ft.	spring pond is very low with many dead newts and extensive algae bloom, used glass 5 gal carboy as duplicate sampler, collected water from spring using decontaminated glass jar grab sampler and filled carboy then using Teflon valve split sample into lab prepared bottles for duplicate split, duplicate sample ID is BLMSP2-8712
BLM Spring	BLMSP-102312	sunny very windy	natural spring pond	very low water level and most salt deposit ever observed on site, water has significant algae growth, decontaminated glass grab sampler with liquinox and DI, collected sample using grab sampler to fill lab prepared bottles
Buffalo Spring	BUFFSP-71912	Hot, sunny, clouds on horizon	Spring flowing into a roadside pond with heavy growth	Collected sample at the corner of Remington road and CR-15; sampled closest to spring; many aquatic insects present

Table 2
Field Data for Spring Locations
2012 South Park Baseline



Sample Location ID	Sample ID	Weather Conditions	River Conditions	Notes/Comments
Buffalo Spring	BUFFSP-101812	cold sunny breezy	natural spring	collected samples using grab sampler to fill lab prepared bottles, decontaminated sampler following SOP prior to sampling, pond much lower than previous sample events, there was about 1/4 " ice on pond that was broken to collect sample, noted dead mouse next to pond, pond stagnant no flow and much lower than previous seasons
Mills Spring	MILLSSP-82112	Partly cloudy	Natural spring in a culvert	Collected sample directly into sample containers. Spring inflow was immediately isolated from the rest of spring pond by a 2.5' diameter culvert. Though growth was apparent on rocks/sides of culvert, water itself was significantly clearer than water in pond outside of culvert. Water in pond was significantly more turbid than last year. Livestock in the vicinity of pond, but likely not impacting culvert water
Mills Spring	MILLSSP-102912	Partly cloudy	Natural spring	Collected sample directly from metal culvert in a pool. Surrounding water appears clearer, with less algae growth, than last sampling event; fish were observed in pool upon arrival, and livestock presence was probable
North Spring Permit #129138	129138-71912	Hot, sunny, clouds on horizon	Augmented spring piped up into a used tire with algae growth present	Collected sample from pipe without touching tire pool
North Spring Permit #129138	129138-101812	cold sunny breezy	augmented spring	filled lab prepared bottles directly from spigot in center of stock tank, did not use grab sampler, spring water was piped from spring into stock tank, noted significant amount of algae growth in stock tank, iron and calcium precipitate on spigot
Spring 9761	9761-012513	cold sunny breezy	augmented spring	collected sample from pipe in stock tank

Table 3
Laboratory Results for River Water Locations
2012 South Park Baseline



Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	MFBB-62912	MFBB-101112	MFGARO-62612	MFGARO-101012	
N/A	Alkalinity	mg/L				100	130	99	120	B
N/A	Bicarbonate Alkalinity as CaCO ₃	mg/L				100	130	99	120	B
N/A	Carbonate Alkalinity as CaCO ₃	mg/L				ND	ND	ND	ND	
N/A	Hydroxide Alkalinity	mg/L				ND	ND	ND	ND	
14797-55-8	Nitrate as N	mg/L	10	10		ND	ND	ND	ND	
14797-65-0	Nitrite as N	mg/L	1	1		3.9	6	3.2	4.6	
N/A	Orthophosphate as P	mg/L				0.14	J 0.16	J 0.14	J 0.16	J
24959-67-9	Bromide	mg/L				28	45	27	45	
16887-00-6	Chloride	mg/L			250	0.052	J ND	J 0.054	J 0.052	J
16984-48-8	Fluoride	mg/L		4	2	ND	ND	ND	ND	
14808-79-8	Sulfate	mg/L			250	ND	ND	ND	ND	
74-82-8	Methane	ug/L				0.53	J 0.53	J ND	ND	
74-85-1	Ethylene	ug/L				ND	ND	ND	ND	
74-84-0	Ethane	ug/L				ND	ND	ND	ND	
N/A	HEM	mg/L				2.4	J B ND	J B 4.6	ND	
7429-90-5	Aluminum	ug/L	5000		0.05 to 2. d	180	77	J 58	J 48	J
7440-70-2	Calcium	ug/L				29000	41000	32000	41000	
7439-89-6	Iron	ug/L	300		300	290	160	120	120	
7439-95-4	Magnesium	ug/L				12000	15000	13000	16000	
2023695	Potassium	ug/L				1000	J 1200	J 1300	J B 1200	J
7440-23-5	Sodium	ug/L				3000	4900	2700	B 3500	B
7440-36-0	Antimony	ug/L	6	6		ND	ND	ND	ND	
7440-38-2	Arsenic	ug/L	10	10		ND	ND	ND	ND	
7440-39-3	Barium	ug/L	2000	2000		52	55	49	54	

Table 3
Laboratory Results for River Water Locations
2012 South Park Baseline



Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	SPLATTE-71112	SPLATTE - 101112	TARRYALLCR-73112	TARRYALLCR-103112	TARRYALLCR-52213
N/A	Alkalinity	mg/L				120	140	92	120	71 B
N/A	Bicarbonate Alkalinity as CaCO ₃	mg/L				120	140	92	110	71 B
N/A	Carbonate Alkalinity as CaCO ₃	mg/L				2.9 J	ND	ND	11	ND
N/A	Hydroxide Alkalinity	mg/L				ND	ND	ND	ND	ND
14797-55-8	Nitrate as N	mg/L	10	10		ND	ND	0.048 J	ND	ND
14797-65-0	Nitrite as N	mg/L	1	1		37	33	ND	ND	ND
N/A	Orthophosphate as P	mg/L				0.18 J	0.16 J	ND	ND	ND
24959-67-9	Bromide	mg/L				56	12	ND	ND	ND
16887-00-6	Chloride	mg/L			250	0.089 J	ND	0.26 J	0.33 J	0.51 J
16984-48-8	Fluoride	mg/L		4	2	ND	ND	ND	ND	ND
14808-79-8	Sulfate	mg/L			250	0.21 J	0.66	15 B	23	18
74-82-8	Methane	ug/L				0.89 J	0.89 J	3.8 J	2.3 J	0.37 J
74-85-1	Ethylene	ug/L				ND	ND	ND	ND	ND
74-84-0	Ethane	ug/L				ND	ND	ND	ND	ND
N/A	HEM	mg/L				2 J	ND	2 J B	1.4 J	ND
7429-90-5	Aluminum	ug/L	5000		0.05 to 2. d	180	96 J	210	ND	200
7440-70-2	Calcium	ug/L				40000	44000	33000	31000	21000
7439-89-6	Iron	ug/L	300		300	240	170	1100	400	580
7439-95-4	Magnesium	ug/L				18000	18000	5300	5600	3600
2023695	Potassium	ug/L				1600 J	1800 J	1000 J	790 J	910 J
7440-23-5	Sodium	ug/L				24000	25000	2400	2700 B	1700
7440-36-0	Antimony	ug/L	6	6		ND	ND	ND	ND	ND
7440-38-2	Arsenic	ug/L	10	10		0.46 J	ND	0.62 J	ND	0.47 J
7440-39-3	Barium	ug/L	2000	2000		61	60	96	72	58

Table 3
Laboratory Results for River Water Locations
2012 South Park Baseline



Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	MICHIGANCR-83112	MICHIGANCR-102312	MICHIGANCR-52213	FOURMILECR-82112	FOURMILECR-102912					
N/A	Alkalinity	mg/L				72	61	38	B	160	170				
N/A	Bicarbonate Alkalinity as CaCO ₃	mg/L				72	61	38	B	150	160				
N/A	Carbonate Alkalinity as CaCO ₃	mg/L				ND	ND	ND		14	5.6				
N/A	Hydroxide Alkalinity	mg/L				ND	ND	ND		ND	ND				
14797-55-8	Nitrate as N	mg/L	10	10		ND	ND	ND		ND	ND				
14797-65-0	Nitrite as N	mg/L	1	1		ND	ND	ND		ND	ND				
N/A	Orthophosphate as P	mg/L				ND	ND	H	ND	ND	0.77				
24959-67-9	Bromide	mg/L				ND	ND	ND		ND	ND				
16887-00-6	Chloride	mg/L			250	0.27	J	0.47	J	0.92	J	0.44	J	1.1	J
16984-48-8	Fluoride	mg/L		4	2	0.084	J	0.083	J	0.067	J	ND		ND	
14808-79-8	Sulfate	mg/L			250	4.8	J	10		14		33		41	
74-82-8	Methane	ug/L				1.6	J	0.48	J	1.1	J	1.6	J	0.42	J
74-85-1	Ethylene	ug/L				ND		ND		ND		ND		ND	
74-84-0	Ethane	ug/L				ND		ND		ND		ND		ND	
N/A	HEM	mg/L				ND		ND		ND		ND		ND	
7429-90-5	Aluminum	ug/L	5000		0.05 to 2. d	31	J	47	J	67	J	26	J	480	
7440-70-2	Calcium	ug/L				22000		19000		14000		40000		48000	
7439-89-6	Iron	ug/L	300		300	1500		1100		910		94	J	660	B
7439-95-4	Magnesium	ug/L				3700		3200		2600		20000		22000	
2023695	Potassium	ug/L				1200	J	760	J	890	J	810	J	2700	J
7440-23-5	Sodium	ug/L				3500	B	4300	B	3500		2100	B	4700	B
7440-36-0	Antimony	ug/L	6	6		ND		ND		ND		ND		0.57	J
7440-38-2	Arsenic	ug/L	10	10		0.87	J	0.56	J	0.53	J	0.6	J	0.77	J
7440-39-3	Barium	ug/L	2000	2000		18		18		13		100		120	

Table 3
Laboratory Results for River Water Locations
2012 South Park Baseline



Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	MFBB-62912	MFBB-101112	MFGARO-62612	MFGARO-101012
7440-41-7	Beryllium	ug/L	4	4		ND	0.2	J ND	ND
7440-43-9	Cadmium	ug/L	5	5		ND	0.17	J ND	ND
7440-47-3	Chromium	ug/L		100		ND	ND	ND	ND
7440-48-4	Cobalt	ug/L	50			0.12	J 0.099	J 0.058	J ND
7440-50-8	Copper	ug/L	200	1300	1000	1.5	J 0.69	J 1.2	J 0.77
7439-92-1	Lead	ug/L	50	15		2.2	0.86	J 1.1	0.85
7439-96-5	Manganese	ug/L	50		50	39	23	26	15
7440-02-0	Nickel	ug/L	100			0.41	J 0.6	J ND	ND
7782-49-2	Selenium	ug/L	20	50		ND	ND	ND	ND
7440-22-4	Silver	ug/L	50		100	ND	ND	ND	ND
7440-28-0	Thallium	ug/L	2	2		ND	0.79	J B	ND
7440-61-1	Uranium	ug/L		30		1.8	3	1.9	3.1
7440-62-2	Vanadium	ug/L	100			ND	ND	ND	ND
7440-66-6	Zinc	ug/L	2000		5000	15	7.5	J 14	12
67-56-1	Methanol	mg/L					0.17	J p	ND
N/A	Diesel Range Organics [C10-C28]	mg/L				ND	ND	ND	ND
8006-61-9	Gasoline Range Organics (GRO)-C6-C10	ug/L				ND	17	J ND	ND
92-52-4	1,1'-Biphenyl	ug/L				ND	ND	ND	ND
95-94-3	1,2,4,5-Tetrachlorobenzene	ug/L				ND	ND	ND	ND
120-82-1	1,2,4-Trichlorobenzene	ug/L	70	70		ND	ND	ND	ND
95-50-1	1,2-Dichlorobenzene	ug/L	600	600		ND	ND	ND	ND
541-73-1	1,3-Dichlorobenzene	ug/L	94			ND	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	ug/L	75	75		ND	ND	ND	ND
123-91-1	1,4-Dioxane	ug/L	6.1			ND	ND	ND	ND
58-90-2	2,3,4,6-Tetrachlorophenol	ug/L				ND	ND	ND	ND
95-95-4	2,4,5-Trichlorophenol	ug/L	700			ND	ND	ND	ND

Table 3
Laboratory Results for River Water Locations
2012 South Park Baseline



Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	SPLATTE-71112		SPLATTE - 101112		TARRYALLCR-73112	TARRYALLCR-103112	TARRYALLCR-52213			
7440-41-7	Beryllium	ug/L	4	4		ND		ND		ND		ND			
7440-43-9	Cadmium	ug/L	5	5		ND		ND		ND		ND			
7440-47-3	Chromium	ug/L		100		ND		ND		ND		ND			
7440-48-4	Cobalt	ug/L	50			0.14	J	ND		0.18	J	ND	0.22	J	
7440-50-8	Copper	ug/L	200	1300	1000	2.4		0.62	J	1.4	J	ND	1.6	J	
7439-92-1	Lead	ug/L	50	15		1.4		0.73	J	0.38	J	ND	0.4	J	
7439-96-5	Manganese	ug/L	50		50	27		18		65		33	37		
7440-02-0	Nickel	ug/L	100			0.69	J	0.3	J	0.58	J	ND	0.7	J	
7782-49-2	Selenium	ug/L	20	50		ND		ND		ND		ND	ND		
7440-22-4	Silver	ug/L	50		100	ND		ND		ND		ND	ND		
7440-28-0	Thallium	ug/L	2	2		ND	^	0.67	J B	ND		ND	ND		
7440-61-1	Uranium	ug/L		30		2.6		3.2		0.25	J	0.25	J	0.14	J
7440-62-2	Vanadium	ug/L	100			0.69	J	ND		0.65	J	ND	0.56	J	
7440-66-6	Zinc	ug/L	2000		5000	5.6	J	4.7	J	ND		ND	2.4	J	
67-56-1	Methanol	mg/L						0.22	J p	ND		ND	ND		
N/A	Diesel Range Organics [C10-C28]	mg/L				ND		ND		0.23	J	ND	0.067	J	
8006-61-9	Gasoline Range Organics (GRO)-C6-C10	ug/L				ND		36		ND		15	J	ND	
92-52-4	1,1'-Biphenyl	ug/L				ND		ND		ND		ND	ND		
95-94-3	1,2,4,5-Tetrachlorobenzene	ug/L				ND		ND		ND		ND	ND		
120-82-1	1,2,4-Trichlorobenzene	ug/L	70	70		ND		ND		ND		ND	ND		
95-50-1	1,2-Dichlorobenzene	ug/L	600	600		ND		ND		ND		ND	ND		
541-73-1	1,3-Dichlorobenzene	ug/L	94			ND		ND		ND		ND	ND		
106-46-7	1,4-Dichlorobenzene	ug/L	75	75		ND		ND		ND		ND	ND		
123-91-1	1,4-Dioxane	ug/L	6.1			ND		ND		ND		ND	ND		
58-90-2	2,3,4,6-Tetrachlorophenol	ug/L				ND		ND		ND		ND	ND		
95-95-4	2,4,5-Trichlorophenol	ug/L	700			ND		ND		ND		ND	ND		

Table 3
Laboratory Results for River Water Locations
2012 South Park Baseline



Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	MICHIGANCR-83112	MICHIGANCR-102312	MICHIGANCR-52213	FOURMILECR-82112	FOURMILECR-102912
7440-41-7	Beryllium	ug/L	4	4		ND	ND	ND	ND	ND
7440-43-9	Cadmium	ug/L	5	5		ND	ND	ND	ND	ND
7440-47-3	Chromium	ug/L		100		ND	ND	ND	ND	0.58 J
7440-48-4	Cobalt	ug/L	50			0.13 J	0.12 J	0.22 J	0.068 J	0.19 J
7440-50-8	Copper	ug/L	200	1300	1000	ND	ND	0.64 J	0.68 J	0.98 J
7439-92-1	Lead	ug/L	50	15		0.49 J	ND	0.2 J	2.6	14
7439-96-5	Manganese	ug/L	50		50	42	53	37	6.2	24
7440-02-0	Nickel	ug/L	100			0.53 J	0.61 J	0.51 J	0.43 J	0.5 J
7782-49-2	Selenium	ug/L	20	50		ND	ND	ND	ND	ND
7440-22-4	Silver	ug/L	50		100	ND	ND	ND	ND	0.062 J
7440-28-0	Thallium	ug/L	2	2		ND	0.61 J B	ND	ND	ND
7440-61-1	Uranium	ug/L		30		0.27 J	0.19 J	0.09 J	1.5	2.1
7440-62-2	Vanadium	ug/L	100			0.69 J	ND	0.96 J	ND	0.72 J
7440-66-6	Zinc	ug/L	2000		5000	ND	ND	ND	6.2 J	17
67-56-1	Methanol	mg/L				ND	ND	ND	0.17 J	5.2
N/A	Diesel Range Organics [C10-C28]	mg/L				ND	ND	0.052 J	ND	ND
8006-61-9	Gasoline Range Organics (GRO)-C6-C10	ug/L				ND	16 J	ND	ND	16 J
92-52-4	1,1'-Biphenyl	ug/L				ND	ND	ND	ND	ND
95-94-3	1,2,4,5-Tetrachlorobenzene	ug/L				ND	ND	ND	ND	ND
120-82-1	1,2,4-Trichlorobenzene	ug/L	70	70		ND	ND	ND	ND	ND
95-50-1	1,2-Dichlorobenzene	ug/L	600	600		ND	ND	ND	ND	ND
541-73-1	1,3-Dichlorobenzene	ug/L	94			ND	ND	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	ug/L	75	75		ND	ND	ND	ND	ND
123-91-1	1,4-Dioxane	ug/L	6.1			ND	ND	ND	ND	ND
58-90-2	2,3,4,6-Tetrachlorophenol	ug/L				ND	ND	ND	ND	ND
95-95-4	2,4,5-Trichlorophenol	ug/L	700			ND	ND	ND	ND	ND

Table 3
Laboratory Results for River Water Locations
2012 South Park Baseline



Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	MFBB-62912	MFBB-101112	MFGARO-62612	MFGARO-101012
88-06-2	2,4,6-Trichlorophenol	ug/L	3.2			ND	ND	ND	ND
120-83-2	2,4-Dichlorophenol	ug/L	21			ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	ug/L	140			ND	ND	ND	ND
51-28-5	2,4-Dinitrophenol	ug/L	14			ND	ND	ND	ND
121-14-2	2,4-Dinitrotoluene	ug/L	0.11a			ND	ND	ND	ND
606-20-2	2,6-Dinitrotoluene	ug/L	7			ND	ND	ND	ND
91-58-7	2-Chloronaphthalene	ug/L	560			ND	ND	ND	ND
95-57-8	2-Chlorophenol	ug/L	35			ND	ND	ND	ND
91-57-6	2-Methylnaphthalene	ug/L	28			ND	ND	ND	ND
95-48-7	2-Methylphenol	ug/L	350			ND	ND	ND	ND
88-74-4	2-Nitroaniline	ug/L				ND	ND	ND	ND
88-75-5	2-Nitrophenol	ug/L				ND	ND	ND	ND
15831-10-4	3 & 4 Methylphenol	ug/L				ND	ND	ND	ND
91-94-1	3,3'-Dichlorobenzidine	ug/L	0.078a			ND	ND	ND	ND
99-09-2	3-Nitroaniline	ug/L				ND	ND	ND	ND
534-52-1	4,6-Dinitro-2-methylphenol	ug/L				ND	ND	ND	ND
101-55-3	4-Bromophenyl phenyl ether	ug/L				ND	ND	ND	ND
59-50-7	4-Chloro-3-methylphenol	ug/L				ND	ND	ND	ND
106-47-8	4-Chloroaniline	ug/L				ND	ND	ND	ND
7005-72-3	4-Chlorophenyl phenyl ether	ug/L				ND	ND	ND	ND
100-01-6	4-Nitroaniline	ug/L				ND	ND	ND	ND
100-02-7	4-Nitrophenol	ug/L	56			ND	ND	ND	ND
83-32-9	Acenaphthene	ug/L	420			ND	ND	ND	ND
208-96-8	Acenaphthylene	ug/L				ND	ND	ND	ND

Table 3
Laboratory Results for River Water Locations
2012 South Park Baseline



Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	SPLATTE-71112	SPLATTE - 101112	TARRYALLCR-73112	TARRYALLCR-103112	TARRYALLCR-52213
88-06-2	2,4,6-Trichlorophenol	ug/L	3.2			ND	ND	ND	ND	ND
120-83-2	2,4-Dichlorophenol	ug/L	21			ND	ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	ug/L	140			ND	ND	ND	ND	ND
51-28-5	2,4-Dinitrophenol	ug/L	14			ND	ND	ND	ND	ND
121-14-2	2,4-Dinitrotoluene	ug/L	0.11a			ND	ND	ND	ND	ND
606-20-2	2,6-Dinitrotoluene	ug/L	7			ND	ND	ND	ND	ND
91-58-7	2-Chloronaphthalene	ug/L	560			ND	ND	ND	ND	ND
95-57-8	2-Chlorophenol	ug/L	35			ND	ND	ND	ND	ND
91-57-6	2-Methylnaphthalene	ug/L	28			ND	ND	ND	ND	ND
95-48-7	2-Methylphenol	ug/L	350			ND	ND	ND	ND	ND
88-74-4	2-Nitroaniline	ug/L				ND	ND	ND	ND	ND
88-75-5	2-Nitrophenol	ug/L				ND	ND	ND	ND	ND
15831-10-4	3 & 4 Methylphenol	ug/L				ND	ND	ND	ND	ND
91-94-1	3,3'-Dichlorobenzidine	ug/L	0.078a			ND	ND	ND	ND	ND
99-09-2	3-Nitroaniline	ug/L				ND	ND	ND	ND	ND
534-52-1	4,6-Dinitro-2-methylphenol	ug/L				ND	ND	ND	ND	ND
101-55-3	4-Bromophenyl phenyl ether	ug/L				ND	ND	ND	ND	ND
59-50-7	4-Chloro-3-methylphenol	ug/L				ND	ND	ND	ND	ND
106-47-8	4-Chloroaniline	ug/L				ND	ND	ND	ND	ND
7005-72-3	4-Chlorophenyl phenyl ether	ug/L				ND	ND	ND	ND	ND
100-01-6	4-Nitroaniline	ug/L				ND	ND	ND	ND	ND
100-02-7	4-Nitrophenol	ug/L	56			ND	ND	ND	ND	ND
83-32-9	Acenaphthene	ug/L	420			ND	ND	ND	ND	ND
208-96-8	Acenaphthylene	ug/L				ND	ND	ND	ND	ND

Table 3
Laboratory Results for River Water Locations
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Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	MICHIGANCR-83112	MICHIGANCR-102312	MICHIGANCR-52213	FOURMILECR-82112	FOURMILECR-102912
88-06-2	2,4,6-Trichlorophenol	ug/L	3.2			ND	ND	ND	ND	ND
120-83-2	2,4-Dichlorophenol	ug/L	21			ND	ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	ug/L	140			ND	ND	ND	ND	ND
51-28-5	2,4-Dinitrophenol	ug/L	14			ND	ND	ND	ND	ND
121-14-2	2,4-Dinitrotoluene	ug/L	0.11a			ND	ND	ND	ND	ND
606-20-2	2,6-Dinitrotoluene	ug/L	7			ND	ND	ND	ND	ND
91-58-7	2-Chloronaphthalene	ug/L	560			ND	ND	ND	ND	ND
95-57-8	2-Chlorophenol	ug/L	35			ND	ND	ND	ND	ND
91-57-6	2-Methylnaphthalene	ug/L	28			ND	ND	ND	ND	ND
95-48-7	2-Methylphenol	ug/L	350			ND	ND	ND	ND	ND
88-74-4	2-Nitroaniline	ug/L				ND	ND	ND	ND	ND
88-75-5	2-Nitrophenol	ug/L				ND	ND	ND	ND	ND
15831-10-4	3 & 4 Methylphenol	ug/L				ND	ND	ND	ND	ND
91-94-1	3,3'-Dichlorobenzidine	ug/L	0.078a			ND	ND	ND	ND	ND
99-09-2	3-Nitroaniline	ug/L				ND	ND	ND	ND	ND
534-52-1	4,6-Dinitro-2-methylphenol	ug/L				ND	ND	ND	ND	ND
101-55-3	4-Bromophenyl phenyl ether	ug/L				ND	ND	ND	ND	ND
59-50-7	4-Chloro-3-methylphenol	ug/L				ND	ND	ND	ND	ND
106-47-8	4-Chloroaniline	ug/L				ND	ND	ND	ND	ND
7005-72-3	4-Chlorophenyl phenyl ether	ug/L				ND	ND	ND	ND	ND
100-01-6	4-Nitroaniline	ug/L				ND	ND	ND	ND	ND
100-02-7	4-Nitrophenol	ug/L	56			ND	ND	ND	ND	ND
83-32-9	Acenaphthene	ug/L	420			ND	ND	ND	ND	ND
208-96-8	Acenaphthylene	ug/L				ND	ND	ND	ND	ND

Table 3
Laboratory Results for River Water Locations
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Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	MFBB-62912	MFBB-101112	MFGARO-62612	MFGARO-101012		
98-86-2	Acetophenone	ug/L	700			ND	ND	ND	ND		
120-12-7	Anthracene	ug/L	2100			ND	ND	ND	ND		
1912-24-9	Atrazine	ug/L		3		ND	ND	ND	ND		
100-52-7	Benzaldehyde	ug/L				ND	ND	ND	ND		
56-55-3	Benzo[a]anthracene	ug/L	0.0048a			ND	ND	ND	ND		
50-32-8	Benzo[a]pyrene	ug/L	0.0048a	0.2a		ND	ND	ND	ND		
205-99-2	Benzo[b]fluoranthene	ug/L	0.0048a			ND	ND	ND	ND		
191-24-2	Benzo[g,h,i]perylene	ug/L				ND	ND	ND	ND		
207-08-9	Benzo[k]fluoranthene	ug/L	0.0048a			ND	ND	ND	ND		
65-85-0	Benzoic acid	ug/L	28000			ND	ND	ND	ND		
100-51-6	Benzyl alcohol	ug/L	700			0.82	J	ND	0.41	JB	ND
111-91-1	Bis(2-chloroethoxy)methane	ug/L				ND	ND	ND	ND	ND	
111-44-4	Bis(2-chloroethyl)ether	ug/L				ND	ND	ND	ND	ND	
117-81-7	Bis(2-ethylhexyl) phthalate	ug/L	2.5	6		ND	ND	ND	ND	ND	
85-68-7	Butyl benzyl phthalate	ug/L	1400			ND	ND	ND	ND	ND	
105-60-2	Caprolactam	ug/L				ND	ND	ND	ND	ND	
86-74-8	Carbazole	ug/L				ND	ND	ND	ND	ND	
218-01-9	Chrysene	ug/L	0.0048a			ND	ND	ND	ND	ND	
53-70-3	Dibenz(a,h)anthracene	ug/L	0.0048a			ND	ND	ND	ND	ND	
132-64-9	Dibenzofuran	ug/L	7			ND	ND	ND	ND	ND	
84-66-2	Diethyl phthalate	ug/L	5600			ND	ND	ND	ND	ND	
131-11-3	Dimethyl phthalate	ug/L				ND	ND	ND	ND	ND	
84-74-2	Di-n-butyl phthalate	ug/L	700			ND	ND	ND	ND	ND	
117-84-0	Di-n-octyl phthalate	ug/L				ND	ND	ND	ND	ND	
206-44-0	Fluoranthene	ug/L	280			ND	ND	ND	ND	ND	

Table 3
Laboratory Results for River Water Locations
2012 South Park Baseline



Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	SPLATTE-71112	SPLATTE - 101112	TARRYALLCR-73112	TARRYALLCR-103112	TARRYALLCR-52213
98-86-2	Acetophenone	ug/L	700			ND	ND	ND	ND	ND
120-12-7	Anthracene	ug/L	2100			ND	ND	ND	ND	ND
1912-24-9	Atrazine	ug/L		3		ND	ND	ND	ND	ND
100-52-7	Benzaldehyde	ug/L				ND	ND	ND	ND	ND
56-55-3	Benzo[a]anthracene	ug/L	0.0048a			ND	ND	ND	ND	ND
50-32-8	Benzo[a]pyrene	ug/L	0.0048a	0.2a		ND	ND	ND	ND	ND
205-99-2	Benzo[b]fluoranthene	ug/L	0.0048a			ND	ND	ND	ND	ND
191-24-2	Benzo[g,h,i]perylene	ug/L				ND	ND	ND	ND	ND
207-08-9	Benzo[k]fluoranthene	ug/L	0.0048a			ND	ND	ND	ND	ND
65-85-0	Benzoic acid	ug/L	28000			11	J	ND	ND	ND
100-51-6	Benzyl alcohol	ug/L	700			1.5	J B	ND	1.7	J
111-91-1	Bis(2-chloroethoxy)methane	ug/L				ND	ND	ND	ND	ND
111-44-4	Bis(2-chloroethyl)ether	ug/L				ND	ND	ND	ND	ND
117-81-7	Bis(2-ethylhexyl) phthalate	ug/L	2.5	6		2.4	J B	ND	2.3	J B
85-68-7	Butyl benzyl phthalate	ug/L	1400			ND	ND	ND	ND	ND
105-60-2	Caprolactam	ug/L				ND	ND	ND	ND	ND
86-74-8	Carbazole	ug/L				ND	ND	ND	ND	ND
218-01-9	Chrysene	ug/L	0.0048a			ND	ND	ND	ND	ND
53-70-3	Dibenz(a,h)anthracene	ug/L	0.0048a			ND	ND	ND	ND	ND
132-64-9	Dibenzofuran	ug/L	7			ND	ND	ND	ND	ND
84-66-2	Diethyl phthalate	ug/L	5600			0.38	J	ND	ND	ND
131-11-3	Dimethyl phthalate	ug/L				ND	ND	ND	ND	ND
84-74-2	Di-n-butyl phthalate	ug/L	700			ND	ND	ND	ND	ND
117-84-0	Di-n-octyl phthalate	ug/L				ND	ND	ND	ND	ND
206-44-0	Fluoranthene	ug/L	280			ND	ND	ND	ND	ND

Table 3
Laboratory Results for River Water Locations
2012 South Park Baseline



Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	MICHIGANCR-83112	MICHIGANCR-102312	MICHIGANCR-52213	FOURMILECR-82112	FOURMILECR-102912
98-86-2	Acetophenone	ug/L	700			ND	ND	ND	ND	ND
120-12-7	Anthracene	ug/L	2100			ND	ND	ND	ND	ND
1912-24-9	Atrazine	ug/L		3		ND	ND	ND	ND	ND
100-52-7	Benzaldehyde	ug/L				ND	ND	ND	ND	ND
56-55-3	Benzo[a]anthracene	ug/L	0.0048a			ND	ND	ND	ND	ND
50-32-8	Benzo[a]pyrene	ug/L	0.0048a	0.2a		ND	ND	ND	ND	ND
205-99-2	Benzo[b]fluoranthene	ug/L	0.0048a			ND	ND	ND	ND	ND
191-24-2	Benzo[g,h,i]perylene	ug/L				ND	ND	ND	ND	ND
207-08-9	Benzo[k]fluoranthene	ug/L	0.0048a			ND	ND	ND	ND	ND
65-85-0	Benzoic acid	ug/L	28000			ND	ND	ND	ND	ND
100-51-6	Benzyl alcohol	ug/L	700			0.28	JB	ND	ND	ND
111-91-1	Bis(2-chloroethoxy)methane	ug/L				ND	ND	ND	ND	ND
111-44-4	Bis(2-chloroethyl)ether	ug/L				ND	ND	ND	ND	ND
117-81-7	Bis(2-ethylhexyl) phthalate	ug/L	2.5	6		3.7	J	ND	ND	ND
85-68-7	Butyl benzyl phthalate	ug/L	1400			ND	ND	ND	ND	ND
105-60-2	Caprolactam	ug/L				ND	ND	ND	ND	ND
86-74-8	Carbazole	ug/L				ND	ND	ND	ND	ND
218-01-9	Chrysene	ug/L	0.0048a			ND	ND	ND	ND	ND
53-70-3	Dibenz(a,h)anthracene	ug/L	0.0048a			ND	ND	ND	ND	ND
132-64-9	Dibenzofuran	ug/L	7			ND	ND	ND	ND	ND
84-66-2	Diethyl phthalate	ug/L	5600			ND	ND	ND	ND	ND
131-11-3	Dimethyl phthalate	ug/L				ND	ND	ND	ND	ND
84-74-2	Di-n-butyl phthalate	ug/L	700			ND	ND	ND	ND	ND
117-84-0	Di-n-octyl phthalate	ug/L				ND	ND	ND	ND	ND
206-44-0	Fluoranthene	ug/L	280			ND	ND	ND	ND	ND

Table 3
Laboratory Results for River Water Locations
2012 South Park Baseline



Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	MFBB-62912	MFBB-101112	MFGARO-62612	MFGARO-101012
86-73-7	Fluorene	ug/L	280			ND	ND	ND	ND
118-74-1	Hexachlorobenzene	ug/L	0.022a	1		ND	ND	ND	ND
87-68-3	Hexachlorobutadiene	ug/L	0.45a			ND	ND	ND	ND
77-47-4	Hexachlorocyclopentadiene	ug/L	42	50		ND	ND	ND	ND
67-72-1	Hexachloroethane	ug/L	0.7a			ND	ND	ND	ND
193-39-5	Indeno[1,2,3-cd]pyrene	ug/L	0.0048a			ND	ND	ND	ND
78-59-1	Isophorone	ug/L	140			ND	ND	ND	ND
91-20-3	Naphthalene	ug/L	140			ND	ND	ND	ND
98-95-3	Nitrobenzene	ug/L	3.5			ND	ND	ND	ND
621-64-7	N-Nitrosodi-n-propylamine	ug/L	0.005a			ND	ND	ND	ND
86-30-6	N-Nitrosodiphenylamine	ug/L	7.1			ND	ND	ND	ND
87-86-5	Pentachlorophenol	ug/L	0.29a	1a		ND	ND	ND	ND
85-01-8	Phenanthrene	ug/L				ND	ND	ND	ND
108-95-2	Phenol	ug/L	2100			ND	ND	ND	ND
129-00-0	Pyrene	ug/L	210			ND	ND	ND	ND
N/A	Total Dissolved Solids	mg/L			500	170	200	110	200
N/A	Total Suspended Solids	mg/L				9 J	2 J	4	2 J
71-55-6	1,1,1-Trichloroethane	ug/L	200	200			ND		ND
79-34-5	1,1,2,2-Tetrachloroethane	ug/L	0.18a				ND		ND
79-00-5	1,1,2-Trichloroethane	ug/L	28	5			ND		ND
76-13-1	1,1,2-Trichlorotrifluoroethane	ug/L	210000				ND		ND
75-34-3	1,1-Dichloroethane	ug/L	61				ND		ND
75-35-4	1,1-Dichloroethene	ug/L	7	7			ND		ND
87-61-6	1,2,3-Trichlorobenzene	ug/L					ND		ND
120-82-1	1,2,4-Trichlorobenzene	ug/L	70	70			ND		ND

Table 3
Laboratory Results for River Water Locations
2012 South Park Baseline



Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	SPLATTE-71112	SPLATTE - 101112	TARRYALLCR-73112	TARRYALLCR-103112	TARRYALLCR-52213
86-73-7	Fluorene	ug/L	280			ND	ND	ND	ND	ND
118-74-1	Hexachlorobenzene	ug/L	0.022a	1		ND	ND	ND	ND	ND
87-68-3	Hexachlorobutadiene	ug/L	0.45a			ND	ND	ND	ND	ND
77-47-4	Hexachlorocyclopentadiene	ug/L	42	50		ND	ND	ND	ND	ND
67-72-1	Hexachloroethane	ug/L	0.7a			ND	ND	ND	ND	ND
193-39-5	Indeno[1,2,3-cd]pyrene	ug/L	0.0048a			ND	ND	ND	ND	ND
78-59-1	Isophorone	ug/L	140			ND	ND	ND	ND	ND
91-20-3	Naphthalene	ug/L	140			ND	ND	ND	ND	ND
98-95-3	Nitrobenzene	ug/L	3.5			ND	ND	ND	ND	ND
621-64-7	N-Nitrosodi-n-propylamine	ug/L	0.005a			ND	ND	ND	ND	ND
86-30-6	N-Nitrosodiphenylamine	ug/L	7.1			ND	ND	ND	ND	ND
87-86-5	Pentachlorophenol	ug/L	0.29a	1a		ND	ND	ND	ND	ND
85-01-8	Phenanthrene	ug/L				ND	ND	ND	ND	ND
108-95-2	Phenol	ug/L	2100			ND	ND	ND	ND	ND
129-00-0	Pyrene	ug/L	210			ND	ND	ND	ND	ND
N/A	Total Dissolved Solids	mg/L			500	280	280	120	130	100
N/A	Total Suspended Solids	mg/L				11	3.6 J	8.8	ND	16
71-55-6	1,1,1-Trichloroethane	ug/L	200	200			ND	ND	ND	ND
79-34-5	1,1,2,2-Tetrachloroethane	ug/L	0.18a				ND	ND	ND	ND
79-00-5	1,1,2-Trichloroethane	ug/L	28	5			ND	ND	ND	ND
76-13-1	1,1,2-Trichlorotrifluoroethane	ug/L	210000				ND	ND	ND	ND
75-34-3	1,1-Dichloroethane	ug/L	61				ND	ND	ND	ND
75-35-4	1,1-Dichloroethene	ug/L	7	7			ND	ND	ND	ND
87-61-6	1,2,3-Trichlorobenzene	ug/L					ND	ND	ND	ND
120-82-1	1,2,4-Trichlorobenzene	ug/L	70	70			ND	ND	ND	ND

Table 3
Laboratory Results for River Water Locations
2012 South Park Baseline



Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	MICHIGANCR-83112	MICHIGANCR-102312	MICHIGANCR-52213	FOURMILECR-82112	FOURMILECR-102912
86-73-7	Fluorene	ug/L	280			ND	ND	ND	ND	ND
118-74-1	Hexachlorobenzene	ug/L	0.022a	1		ND	ND	ND	ND	ND
87-68-3	Hexachlorobutadiene	ug/L	0.45a			ND	ND	ND	ND	ND
77-47-4	Hexachlorocyclopentadiene	ug/L	42	50		ND	ND	ND	ND	ND
67-72-1	Hexachloroethane	ug/L	0.7a			ND	ND	ND	ND	ND
193-39-5	Indeno[1,2,3-cd]pyrene	ug/L	0.0048a			ND	ND	ND	ND	ND
78-59-1	Isophorone	ug/L	140			ND	ND	ND	ND	ND
91-20-3	Naphthalene	ug/L	140			ND	ND	ND	ND	ND
98-95-3	Nitrobenzene	ug/L	3.5			ND	ND	ND	ND	ND
621-64-7	N-Nitrosodi-n-propylamine	ug/L	0.005a			ND	ND	ND	ND	ND
86-30-6	N-Nitrosodiphenylamine	ug/L	7.1			ND	ND	ND	ND	ND
87-86-5	Pentachlorophenol	ug/L	0.29a	1a		ND	ND	ND	ND	ND
85-01-8	Phenanthrene	ug/L				ND	ND	ND	ND	ND
108-95-2	Phenol	ug/L	2100			ND	ND	ND	ND	ND
129-00-0	Pyrene	ug/L	210			ND	ND	ND	ND	ND
N/A	Total Dissolved Solids	mg/L			500	86	95	98	200	220
N/A	Total Suspended Solids	mg/L				ND	ND	4.4	2.4	16
71-55-6	1,1,1-Trichloroethane	ug/L	200	200		ND	ND	ND	ND	ND
79-34-5	1,1,2,2-Tetrachloroethane	ug/L	0.18a			ND	ND	ND	ND	ND
79-00-5	1,1,2-Trichloroethane	ug/L	28	5		ND	ND	ND	ND	ND
76-13-1	1,1,2-Trichlorotrifluoroethane	ug/L	210000			ND	ND	ND	ND	ND
75-34-3	1,1-Dichloroethane	ug/L	61			ND	ND	ND	ND	ND
75-35-4	1,1-Dichloroethene	ug/L	7	7		ND	ND	ND	ND	ND
87-61-6	1,2,3-Trichlorobenzene	ug/L				ND	ND	ND	ND	ND
120-82-1	1,2,4-Trichlorobenzene	ug/L	70	70		ND	ND	ND	ND	ND

Table 3
Laboratory Results for River Water Locations
2012 South Park Baseline



Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	MFBB-62912		MFBB-101112		MFGARO-62612		MFGARO-101012	
96-12-8	1,2-Dibromo-3-Chloropropane	ug/L	0.2a	0.2a					ND				ND
106-93-4	1,2-Dibromoethane	ug/L	0.02a	0.05a					ND				ND
95-50-1	1,2-Dichlorobenzene	ug/L	600	600					ND				ND
107-06-2	1,2-Dichloroethane	ug/L	0.38	5					ND				ND
78-87-5	1,2-Dichloropropane	ug/L	0.52	5					ND				ND
541-73-1	1,3-Dichlorobenzene	ug/L	94						ND				ND
106-46-7	1,4-Dichlorobenzene	ug/L	75	75					ND				ND
123-91-1	1,4-Dioxane	ug/L	6.1a						ND				ND
591-78-6	2-Hexanone	ug/L	35						ND				ND
108-10-1	4-Methyl-2-pentanone (MIBK)	ug/L	560						ND				ND
67-64-1	Acetone	ug/L	6300						ND			4.3	JB
71-43-2	Benzene	ug/L	5	5					ND				ND
75-27-4	Bromodichloromethane	ug/L	0.56						ND				ND
75-25-2	Bromoform	ug/L	4						ND				ND
75-15-0	Carbon disulfide	ug/L	700						ND				ND
56-23-5	Carbon tetrachloride	ug/L	0.27	5					ND				ND
108-90-7	Chlorobenzene	ug/L	100	100					ND				ND
74-97-5	Chlorobromomethane	ug/L							ND				ND
124-48-1	Chlorodibromomethane	ug/L	14						ND				ND
75-00-3	Chloroethane	ug/L							ND				ND
67-66-3	Chloroform	ug/L	3.5						ND				ND
156-59-2	cis-1,2-Dichloroethene	ug/L	70	70					ND				ND
10061-01-5	cis-1,3-Dichloropropene	ug/L							ND				ND
110-82-7	Cyclohexane	ug/L							ND				ND
75-71-8	Dichlorodifluoromethane	ug/L	1400						ND				ND

Table 3
Laboratory Results for River Water Locations
2012 South Park Baseline



Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	SPLATTE-71112	SPLATTE - 101112	TARRYALLCR-73112	TARRYALLCR-103112	TARRYALLCR-52213
96-12-8	1,2-Dibromo-3-Chloropropane	ug/L	0.2a	0.2a			ND	ND	ND	ND
106-93-4	1,2-Dibromoethane	ug/L	0.02a	0.05a			ND	ND	ND	ND
95-50-1	1,2-Dichlorobenzene	ug/L	600	600			ND	ND	ND	ND
107-06-2	1,2-Dichloroethane	ug/L	0.38	5			ND	ND	ND	ND
78-87-5	1,2-Dichloropropane	ug/L	0.52	5			ND	ND	ND	ND
541-73-1	1,3-Dichlorobenzene	ug/L	94				ND	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	ug/L	75	75			ND	ND	ND	ND
123-91-1	1,4-Dioxane	ug/L	6.1a				ND	ND	ND	ND
591-78-6	2-Hexanone	ug/L	35				ND	ND	ND	ND
108-10-1	4-Methyl-2-pentanone (MIBK)	ug/L	560				ND	ND	ND	ND
67-64-1	Acetone	ug/L	6300				ND	ND	ND	ND
71-43-2	Benzene	ug/L	5	5			ND	ND	ND	ND
75-27-4	Bromodichloromethane	ug/L	0.56				ND	ND	ND	ND
75-25-2	Bromoform	ug/L	4				ND	ND	ND	ND
75-15-0	Carbon disulfide	ug/L	700				ND	ND	ND	ND
56-23-5	Carbon tetrachloride	ug/L	0.27	5			ND	ND	ND	ND
108-90-7	Chlorobenzene	ug/L	100	100			ND	ND	ND	ND
74-97-5	Chlorobromomethane	ug/L					ND	ND	ND	ND
124-48-1	Chlorodibromomethane	ug/L	14				ND	ND	ND	ND
75-00-3	Chloroethane	ug/L					ND	ND	ND	ND
67-66-3	Chloroform	ug/L	3.5				ND	ND	ND	ND
156-59-2	cis-1,2-Dichloroethene	ug/L	70	70			ND	ND	ND	ND
10061-01-5	cis-1,3-Dichloropropene	ug/L					ND	ND	ND	ND
110-82-7	Cyclohexane	ug/L					ND	ND	ND	ND
75-71-8	Dichlorodifluoromethane	ug/L	1400				ND	ND	ND	ND

Table 3
Laboratory Results for River Water Locations
2012 South Park Baseline



Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	MICHIGANCR-83112	MICHIGANCR-102312	MICHIGANCR-52213	FOURMILECR-82112	FOURMILECR-102912
96-12-8	1,2-Dibromo-3-Chloropropane	ug/L	0.2a	0.2a		ND	ND	ND	ND	ND
106-93-4	1,2-Dibromoethane	ug/L	0.02a	0.05a		ND	ND	ND	ND	ND
95-50-1	1,2-Dichlorobenzene	ug/L	600	600		ND	ND	ND	ND	ND
107-06-2	1,2-Dichloroethane	ug/L	0.38	5		ND	ND	ND	ND	ND
78-87-5	1,2-Dichloropropane	ug/L	0.52	5		ND	ND	ND	ND	ND
541-73-1	1,3-Dichlorobenzene	ug/L	94			ND	ND	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	ug/L	75	75		ND	ND	ND	ND	ND
123-91-1	1,4-Dioxane	ug/L	6.1a			ND	ND	ND	ND	ND
591-78-6	2-Hexanone	ug/L	35			ND	ND	ND	ND	ND
108-10-1	4-Methyl-2-pentanone (MIBK)	ug/L	560			ND	ND	ND	ND	ND
67-64-1	Acetone	ug/L	6300			ND	ND	2.7 J	4.1 J	ND
71-43-2	Benzene	ug/L	5	5		ND	ND	ND	ND	ND
75-27-4	Bromodichloromethane	ug/L	0.56			ND	ND	ND	ND	ND
75-25-2	Bromoform	ug/L	4			ND	ND	ND	ND	ND
75-15-0	Carbon disulfide	ug/L	700			ND	ND	ND	ND	ND
56-23-5	Carbon tetrachloride	ug/L	0.27	5		ND	ND	ND	ND	ND
108-90-7	Chlorobenzene	ug/L	100	100		ND	ND	ND	ND	ND
74-97-5	Chlorobromomethane	ug/L				ND	ND	ND	ND	ND
124-48-1	Chlorodibromomethane	ug/L	14			ND	ND	ND	ND	ND
75-00-3	Chloroethane	ug/L				ND	ND	ND	ND	ND
67-66-3	Chloroform	ug/L	3.5			ND	ND	ND	ND	ND
156-59-2	cis-1,2-Dichloroethene	ug/L	70	70		ND	ND	ND	ND	ND
10061-01-5	cis-1,3-Dichloropropene	ug/L				ND	ND	ND	ND	ND
110-82-7	Cyclohexane	ug/L				ND	ND	ND	ND	ND
75-71-8	Dichlorodifluoromethane	ug/L	1400			ND	ND	ND	ND	ND

Table 3
Laboratory Results for River Water Locations
2012 South Park Baseline



Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	MFBB-62912		MFBB-101112		MFGARO-62612		MFGARO-101012	
100-41-4	Ethylbenzene	ug/L	700	700					ND				ND
98-82-8	Isopropylbenzene	ug/L	700						ND				ND
79-20-9	Methyl acetate	ug/L							ND				ND
74-83-9	Methyl bromide	ug/L	10						ND				ND
74-87-3	Methyl chloride	ug/L							ND				ND
78-93-3	Methyl Ethyl Ketone (2-Butanone)	ug/L	4200						ND				ND
1634-04-4	Methyl tert-butyl ether	ug/L							ND				ND
108-87-2	Methylcyclohexane	ug/L							ND				ND
75-09-2	Methylene Chloride	ug/L	4.7	5					ND			0.35	JB
179601-23-1	m-Xylene & p-Xylene	ug/L							ND				ND
95-47-6	o-Xylene	ug/L							ND				ND
100-42-5	Styrene	ug/L	100	100					ND				ND
127-18-4	Tetrachloroethylene	ug/L	5	5					ND				ND
108-88-3	Toluene	ug/L	560	1000					ND				ND
156-60-5	trans-1,2-Dichloroethene	ug/L	100	100					ND				ND
10061-02-6	trans-1,3-Dichloropropene	ug/L							ND				ND
79-01-6	Trichloroethene	ug/L	5	5					ND				ND
75-69-4	Trichlorofluoromethane	ug/L	2100						ND				ND
108-05-4	Vinyl acetate	ug/L	7000						ND				ND

Table 3
Laboratory Results for River Water Locations
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Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	SPLATTE-71112		SPLATTE - 101112		TARRYALLCR-73112	TARRYALLCR-103112	TARRYALLCR-52213
100-41-4	Ethylbenzene	ug/L	700	700						ND	ND	ND
98-82-8	Isopropylbenzene	ug/L	700							ND	ND	ND
79-20-9	Methyl acetate	ug/L								ND	ND	ND
74-83-9	Methyl bromide	ug/L	10							ND	ND	ND
74-87-3	Methyl chloride	ug/L								ND	ND	ND
78-93-3	Methyl Ethyl Ketone (2-Butanone)	ug/L	4200							ND	ND	ND
1634-04-4	Methyl tert-butyl ether	ug/L								ND	ND	ND
108-87-2	Methylcyclohexane	ug/L								ND	ND	ND
75-09-2	Methylene Chloride	ug/L	4.7	5						ND	ND	ND
179601-23-1	m-Xylene & p-Xylene	ug/L								ND	ND	ND
95-47-6	o-Xylene	ug/L								ND	ND	ND
100-42-5	Styrene	ug/L	100	100						ND	ND	ND
127-18-4	Tetrachloroethylene	ug/L	5	5						ND	ND	ND
108-88-3	Toluene	ug/L	560	1000						ND	ND	ND
156-60-5	trans-1,2-Dichloroethene	ug/L	100	100						ND	ND	ND
10061-02-6	trans-1,3-Dichloropropene	ug/L								ND	ND	ND
79-01-6	Trichloroethene	ug/L	5	5						ND	ND	ND
75-69-4	Trichlorofluoromethane	ug/L	2100							ND	ND	ND
108-05-4	Vinyl acetate	ug/L	7000							ND	ND	ND

Table 3
Laboratory Results for River Water Locations
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Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	MICHIGANCR-83112	MICHIGANCR-102312	MICHIGANCR-52213	FOURMILECR-82112	FOURMILECR-102912
100-41-4	Ethylbenzene	ug/L	700	700		ND	ND	ND	ND	ND
98-82-8	Isopropylbenzene	ug/L	700			ND	ND	ND	ND	ND
79-20-9	Methyl acetate	ug/L				ND	ND	ND	ND	ND
74-83-9	Methyl bromide	ug/L	10			ND	ND	ND	ND	ND
74-87-3	Methyl chloride	ug/L				ND	ND	ND	ND	ND
78-93-3	Methyl Ethyl Ketone (2-Butanone)	ug/L	4200			ND	ND	ND	ND	ND
1634-04-4	Methyl tert-butyl ether	ug/L				ND	ND	ND	ND	ND
108-87-2	Methylcyclohexane	ug/L				ND	ND	ND	ND	ND
75-09-2	Methylene Chloride	ug/L	4.7	5		0.93 JB	ND	ND	ND	ND
179601-23-1	m-Xylene & p-Xylene	ug/L				ND	ND	ND	ND	ND
95-47-6	o-Xylene	ug/L				ND	ND	ND	ND	ND
100-42-5	Styrene	ug/L	100	100		ND	ND	ND	ND	ND
127-18-4	Tetrachloroethylene	ug/L	5	5		ND	ND	ND	ND	ND
108-88-3	Toluene	ug/L	560	1000		ND	ND	ND	ND	ND
156-60-5	trans-1,2-Dichloroethene	ug/L	100	100		ND	ND	ND	ND	ND
10061-02-6	trans-1,3-Dichloropropene	ug/L				ND	ND	ND	ND	ND
79-01-6	Trichloroethene	ug/L	5	5		ND	ND	ND	ND	ND
75-69-4	Trichlorofluoromethane	ug/L	2100			ND	ND	ND	ND	ND
108-05-4	Vinyl acetate	ug/L	7000			ND	ND	ND	ND	ND

**Table 3
Laboratory Results for River Water Locations
2012 South Park Baseline**



Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	MFBB-62912		MFBB-101112		MFGARO-62612		MFGARO-101012	
75-01-4	Vinyl chloride	ug/L	0.023a	2					ND				ND
1330-20-7	Xylenes, Total	ug/L	1400	10000					ND				ND
67-63-0	Isopropanol	ug/L							ND				ND
N/A	Coliform, Total	MPN/100ml		<5%		420		70		26			172
N/A	Gross Alpha	pCi/L		15		1.77 +- 1.0	J	2.31 +- 1.2	J	0.595 +- 0.84	U	1.11 +- 1.1	U
N/A	Gross Beta	pCi/L				2.96 +- 1.2	J	0.879 +- 1.2	u	1.19 +- 1.1	U	1.32 +- 1.2	U

¹ (MPN) most probable number method
² CDPHE Water Standards 2011
³ USEPA - Primary Drinking Water Standards
⁴ USEPA - Secondary Drinking Water Standards

^B Compound was found in the laboratory blank and sample.
 * LCS or LCSD exceeds the control limit
 J Result is less than the Reporting Limit (RL) but greater than or equal to the Method Detection Level (MDL) and the concentration is an approximate value.
 U Analyzed for but not detected above limiting criteria. Limit criteria is less than the
 = ERPIMS - Equal To, Analyte Detected

Table 3
Laboratory Results for River Water Locations
2012 South Park Baseline



Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	SPLATTE-71112		SPLATTE - 101112		TARRYALLCR-73112		TARRYALLCR-103112		TARRYALLCR-52213	
75-01-4	Vinyl chloride	ug/L	0.023a	2					ND		ND		ND		ND
1330-20-7	Xylenes, Total	ug/L	1400	10000					ND		ND		ND		ND
67-63-0	Isopropanol	ug/L							ND		ND		ND		ND
N/A	Coliform, Total	MPN/100ml		<5%		384		187			1095		82		53
N/A	Gross Alpha	pCi/L		15		2.33 +- 1.3	J	2.66 +- 1.7	J	1.21 +- 0.89	U	1.04E+00 +- 8.2E-01	ND	0.836 +- 0.92	U
N/A	Gross Beta	pCi/L				1.85 +- 1.2	U	3.65 +- 1.3	J	1.35 +- 1.1	U	7.77E-01 +- 1.2E+00	ND	1.98 +- 1.2	J

¹ (MPN) most probable number method
² CDPHE Water Standards 2011
³ USEPA - Primary Drinking Water Standards
⁴ USEPA - Secondary Drinking Water Standards

^B Compound was found in the laboratory blank and sample.
^{*} LCS or LCSD exceeds the control limit
^J Result is less than the Reporting Limit (RL) but greater than or equal to the Method Detection Level (MDL) and the concentration is an approximate value.
^U Analyzed for but not detected above limiting criteria. Limit criteria is less than the
⁼ ERPIMS - Equal To, Analyte Detected

Table 3
Laboratory Results for River Water Locations
2012 South Park Baseline



Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	MICHIGANCR-83112	MICHIGANCR-102312	MICHIGANCR-52213	FOURMILECR-82112	FOURMILECR-102912
75-01-4	Vinyl chloride	ug/L	0.023a	2		ND	ND	ND	ND	ND
1330-20-7	Xylenes, Total	ug/L	1400	10000		ND	ND	ND	ND	ND
67-63-0	Isopropanol	ug/L				ND	ND	ND	ND	ND
N/A	Coliform, Total	MPN/100ml		<5%		1020	172	111	2599	770
N/A	Gross Alpha	pCi/L		15		0.500 +- 0.59 U	4.89E-01 +- 6.2E-01 ND	0.541 +- 0.86 U	1.32 +- 0.96 U	2.24E+00 +- 1.2E+00 =
N/A	Gross Beta	pCi/L				1.08 +- 1.0 U	1.93E+00 +- 1.1E+00 =	1.25 +- 1.1 U	1.70 +- 1.1 U	2.77E+00 +- 1.2E+00 =

¹ (MPN) most probable number method
² CDPHE Water Standards 2011
³ USEPA - Primary Drinking Water Standards
⁴ USEPA - Secondary Drinking Water Standards

^B Compound was found in the laboratory blank and sample.
^{*} LCS or LCSD exceeds the control limit
^J Result is less than the Reporting Limit (RL) but greater than or equal to the Method Detection Level (MDL) and the concentration is an approximate value.
^U Analyzed for but not detected above limiting criteria. Limit criteria is less than the
⁼ ERPIMS - Equal To, Analyte Detected

Table 4
Field Data for River Water Locations
2012 South Park Baseline



Sample Location ID	Sample ID	Date	Time	Field Personnel	SW, GW, or Spring	Laboratory Analysis to be Conducted
Middle Fork of South Platte at Badger Basin	MFBB-62912	6/29/2012	9:45 AM	JJ, MB	SW	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta
Middle Fork of South Platte at Badger Basin	MFBB-101112	10/11/2012	11:00 AM	JJ, MB	SW	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta, Methanol
Four Mile Creek near Mill Spring	FOURMILECR-82112	8/21/2012	12:15 PM	JJ, MB	SW	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta
Four Mile Creek near Mill Spring	FOURMILE-102912	10/29/2012	12:30 PM	JJ, MB	SW	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta, Methanol
South Platte above Spinney Reservoir	SPLATTE-71112	7/11/2012	11:00 AM	JJ, MB	SW	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta
South Platte above Spinney Reservoir	SPLATTE-101112	10/11/2012	8:45 AM	JJ, MB	SW	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta, Methanol
Middle Fork of South Platte at Garo	MFGARO-62612	6/26/2012	9:45 AM	JJ, MB	SW	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta
Middle Fork of South Platte at Garo	MFGARO-101012	10/10/2012	9:15 AM	JJ, MB	SW	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta

Table 4
Field Data for River Water Locations
2012 South Park Baseline



Sample Location ID	Sample ID	Date	Time	Field Personel	SW, GW, or Spring	Laboratory Analysis to be Conducted
Tarryall Creek	TARRYALLCR-73112	7/31/2012	8:30 AM	JJ, MB	SW	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta
Tarryall Creek	TARRYALLCR-103112	10/31/2012	1:30 PM	JJ, MB	SW	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta, Methanol
Tarryall Creek	TARRYALLCR-52213	5/22/2013	12:00 PM	JJ	SW	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta, Methanol
Michigan Creek	MICHIGANCR-83112	8/31/2012	10:30 AM	JJ, MB	SW	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta, Methanol
Michigan Creek	MICHIGANCR-102312	10/23/2012	2:15 PM	JJ, MB	SW	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta, Methanol
Michigan Creek	MICHIGANCR-52213	5/22/2013	11:30 AM	JJ	SW	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta, Methanol

Table 4
Field Data for River Water Locations
2012 South Park Baseline



Sample Location ID	Sample ID	Date	Temperature °C	pH	Conductivity μS/cm at 25 °C	TDS ppm	DO ppm	Odor	Color	Effervescence	Bubbles/Gas
Middle Fork of South Platte at Badger Basin	MFBB-62912	6/29/2012	16.55	8.61	128	76	6.1	None	None	None	None
Middle Fork of South Platte at Badger Basin	MFBB-101112	10/11/2012	7.2	8.76	197	149	7.02	None	Slightly cloudy, turbid	None	None
Four Mile Creek near Mill Spring	FOURMILECR-82112	8/21/2012	15.74	8.62	264	160	12.69	None	None	None	None
Four Mile Creek near Mill Spring	FOURMILE-102912	10/29/2012	1.03	10.33	155	142	6.04	None	Slightly cloudy	None	None
South Platte above Spinney Reservoir	SPLATTE-71112	7/11/2012	17.17	8.72	346	201	6.52	None	Slight yellow	None	None
South Platte above Spinney Reservoir	SPLATTE-101112	10/11/2012	4.62	9.37	260	212	7.68	None	None	None	None
Middle Fork of South Platte at Garo	MFGARO-62612	6/26/2012	14.83	8.45	180	112	6.04	None	None	None	None
Middle Fork of South Platte at Garo	MFGARO-101012	10/10/2012	3.54	9.34	130	110	8.85	None	None	None	None

Table 4
Field Data for River Water Locations
2012 South Park Baseline



Sample Location ID	Sample ID	Date	Temperature °C	pH	Conductivity μS/cm at 25 °C	TDS ppm	DO ppm	Odor	Color	Effervescence	Bubbles/Gas
Tarryall Creek	TARRYALLCR-73112	7/31/2012	14.1	7.91	156	98	5.04	None	None	None	None
Tarryall Creek	TARRYALLCR-103112	10/31/2012	5.11	9.42	96	77	9.15	None	None	None	None
Tarryall Creek	TARRYALLCR-52213	5/22/2013	8.04	6.98	73	54	5.6	None	Slightly turbid	None	None
Michigan Creek	MICHIGANCR-83112	8/31/2012	12.43	8.02	103	67	7.24	None	sightly cloudy	none	small occasional bubbles/foam
Michigan Creek	MICHIGANCR-102312	10/23/2012	8.77	9.23	64	46	5.18	None	None	None	None
Michigan Creek	MICHIGANCR-52213	5/22/2013	11.51	7.62	53	36	6.87	None	Slight yellow	None	None

Table 4
Field Data for River Water Locations
2012 South Park Baseline



Sample Location ID	Sample ID	Date	Weather Conditions	River Conditions	Notes/Comments
Middle Fork of South Platte at Badger Basin	MFBB-62912	6/29/2012	Partly cloudy, intermittent showers	river running through valley outside of Hartsel with cattle grazing around riparian zone	None
Middle Fork of South Platte at Badger Basin	MFBB-101112	10/11/2012	Clear, a few clouds	river at fishing area	Collected sample directly from stream in close proximity to cattle (in and around stream above our sampling location).
Four Mile Creek near Mills Spring	FOURMILECR-82112	8/21/2012	Partly cloudy	river in valley 200 feet from private residence	Collected sample within 50 feet of Mills Spring, 150 feet downstream from gauging station, using ambers to fill preserved sample containers. Water was very turbid and flow was too low to take cfs measurements
Four Mile Creek near Mills Spring	FOURMILE-102912	10/29/2012	Mostly cloudy	river in valley 200 feet from private residence	Collected sample directly from stream while sitting on a wooden plank bridge; ice was apparent upstream; livestock presence probable; samples, field observations, and flow measurements taken 100 feet downstream from gauge
South Platte above Spinney Reservoir	SPLATTE-71112	7/11/2012	Sunny, clear with cumulous clouds moving in from South	river running through valley near Rt. 9 South of Fairplay, North of Hartsel	None
South Platte above Spinney Reservoir	SPLATTE-101112	10/11/2012	Clear	river in valley	Signs of livestock presence, but none present at time of sampling
Middle Fork of South Platte at Garo	MFGARO-62612	6/26/2012	Clear, Hot	river running through valley near Rt. 9 outside of Fairplay	None
Middle Fork of South Platte at Garo	MFGARO-101012	10/10/2012	Partly cloudy	river running past fishing parking lot off of Rt-9	Collected sample directly above rock falls, next to gauge

Table 4
Field Data for River Water Locations
2012 South Park Baseline



Sample Location ID	Sample ID	Date	Weather Conditions	River Conditions	Notes/Comments
Tarryall Creek	TARRYALLCR-73112	7/31/2012	Overcast	dirt road with many overhanging shrubs and nearby cattle range, north of 285, east of Fairplay	Significant precipitation occurred over the last 24-hour, overcast day. New sample location for 2012. No fisherman present.
Tarryall Creek	TARRYALLCR-103112	10/31/2012	Mostly clear	dirt road with many overhanging shrubs and nearby cattle range, north of 285, east of Fairplay	Collected sample directly from stream; ice was observed on streambanks
Tarryall Creek	TARRYALLCR-52213	5/22/2013	Slightly overcast	River flowing below bankful	Access to sampling site via fishing access beat 1.
Michigan Creek	MICHIGANCR-83112	8/31/2012	Partly cloudy	river summer flows	collected sample near hardpan/livestock crossing site, water is slightly cloudy, brown algae covering most rocks in stream, manure odor slight at creek bank, small soap like bubbles occasionally on water surface
Michigan Creek	MICHIGANCR-102312	10/23/2012	sunny very windy	river	collected samples using a non-preserved lab prepared amber 1L bottle as grab sampler, river 2 ft below bankful fall low flow conditions
Michigan Creek	MICHIGANCR-52213	5/22/2013	Slightly overcast	river	None

Table 5
Laboratory Results for Groundwater Locations
2012 South Park Baseline



Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	D-62912		D-101012		J-82812		J-112012		M-82812		M-121712		R-73112		R-103112	
N/A	Alkalinity	mg/L				130		130	B	160		210	B	110		120		100		160	
N/A	Bicarbonate Alkalinity as	mg/L				130		130	B	160		210		110		120		99		160	
N/A	Carbonate Alkalinity as CaCO ₃	mg/L				ND		ND		ND		ND		ND		ND		6		ND	
N/A	Hydroxide Alkalinity	mg/L				ND		ND		ND		ND		ND		ND		ND		ND	
14797-55-8	Nitrate as N	mg/L	10	10		0.11	J	0.12	J	ND		ND		0.1	J	0.15	J	0.046	J	0.046	J
14797-65-0	Nitrite as N	mg/L	1	1		ND		ND		ND		ND		ND		ND		ND		ND	
N/A	Orthophosphate as P	mg/L				ND		ND		ND		ND		ND		0.61		ND		ND	
24959-67-9	Bromide	mg/L				ND		ND		0.35		0.37		0.14	J	ND		0.11	J	0.12	J
16887-00-6	Chloride	mg/L			250	4.2		3.6		24		24		6.1		6		3.2		3	
16984-48-8	Fluoride	mg/L		4	2	0.1	J	0.11	J	0.37	J	0.4	J	0.59		0.63		0.68		0.6	
14808-79-8	Sulfate	mg/L			250	42		45		640		690		130		130		87	B	67	
74-82-8	Methane	ug/L				ND		ND		0.36	J	0.52	J	ND		ND		ND		ND	
74-85-1	Ethylene	ug/L				ND		ND		ND		ND		ND		ND		ND		ND	
74-84-0	Ethane	ug/L				ND		ND		ND		ND		ND		ND		ND		ND	
N/A	HEM	mg/L				2.3	J B	ND		ND		ND		ND		ND		2	J B	ND	
7429-90-5	Aluminum	ug/L	5000		0.05 to 2. d	470		670		ND		ND		ND		ND		ND		ND	
7440-70-2	Calcium	ug/L				41000		46000		230000		230000		67000		57000		6100		5600	
7439-89-6	Iron	ug/L	300		300	7700		13000		4100		3800		ND		ND		ND		ND	
7439-95-4	Magnesium	ug/L				15000		15000		38000		41000		9400		8100		31	J	56	J
2023695	Potassium	ug/L				1100	J	1100	J	2100	J	2000	J	6400		5500		ND		270	J
7440-23-5	Sodium	ug/L				3200		3500	B	67000		67000		23000		20000		91000		84000	B
7440-36-0	Antimony	ug/L	6	6		ND		ND		ND		ND		ND		ND		ND		ND	
7440-38-2	Arsenic	ug/L	10	10		0.41	J	0.61	J	ND		ND		1.5	J	1.5	J	ND		ND	
7440-39-3	Barium	ug/L	2000	2000		27		27		6.9		6.4		56		53		0.64	J	0.7	J

Table 5
Laboratory Results for Groundwater Locations
2012 South Park Baseline



Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	U-8712	U-102912	X-91712	Y-82212	Y-122012	BB-82112	BB-121712	CC-83112	CC-122012
N/A	Alkalinity	mg/L				160	160	430	240	250	210	210	240	240
N/A	Bicarbonate Alkalinity as	mg/L				160	160	430	240	250	210	210	240	240
N/A	Carbonate Alkalinity as CaCO ₃	mg/L				ND	ND	ND	ND	ND	ND	ND	ND	ND
N/A	Hydroxide Alkalinity	mg/L				ND	ND	ND	ND	ND	ND	ND	ND	ND
14797-55-8	Nitrate as N	mg/L	10	10		0.8	0.67	ND	0.05 J	0.046 J	ND	0.12 J	0.043 J	0.16 J
14797-65-0	Nitrite as N	mg/L	1	1		ND	ND	ND	ND	ND	ND	ND	ND	ND
N/A	Orthophosphate as P	mg/L				ND	ND	ND	ND	ND	ND	ND	ND	ND
24959-67-9	Bromide	mg/L				0.14 J	ND	0.31	0.39	0.37	ND	ND	0.42	0.4
16887-00-6	Chloride	mg/L			250	4.8	4.2	210	34	34	2.6 J	3.5	32	33
16984-48-8	Fluoride	mg/L		4	2	0.31 J	0.31 J	1.5	0.27 J	0.27 J	2.5	2.2	0.23 J	0.2 J
14808-79-8	Sulfate	mg/L			250	18	17	41	230 B	240	63	60	220	220
74-82-8	Methane	ug/L				ND	ND	690	22	13	ND	ND	21	8.4
74-85-1	Ethylene	ug/L				ND	ND	ND	ND	ND	ND	ND	ND	ND
74-84-0	Ethane	ug/L				ND	ND	ND	ND	ND	ND	ND	ND	ND
N/A	HEM	mg/L				3.4 J B	ND	ND	ND	1.7	ND	ND	ND	ND
7429-90-5	Aluminum	ug/L	5000		0.05 to 2. d	ND	28 J	ND	ND	ND	ND	ND	ND	ND
7440-70-2	Calcium	ug/L				48000	51000	68000	28000	30000	50000	47000	49000	46000
7439-89-6	Iron	ug/L	300		300	ND	110 B	5400	72 J	33 J	65 J	77 J	110	140
7439-95-4	Magnesium	ug/L				9100	9000	22000	9800	11000	24000	23000	17000	16000
2023695	Potassium	ug/L				2600 J	5700	16000	1100 J	1500 J	7800	7600	2900 J	1700 J
7440-23-5	Sodium	ug/L				7400	11000 B	190000 B	190000	190000 B ^	15000 B	15000 B	140000 B	150000 B ^
7440-36-0	Antimony	ug/L	6	6		ND	ND	ND	ND	ND	ND	ND	ND	ND
7440-38-2	Arsenic	ug/L	10	10		0.96 J	0.82 J	ND	ND	ND	0.59 J	0.45 J	ND	ND
7440-39-3	Barium	ug/L	2000	2000		21	21	430	25	31	36	36	18	20

Table 5
Laboratory Results for Groundwater Locations
2012 South Park Baseline



Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	D-62912	D-101012		J-82812	J-112012	M-82812	M-121712	R-73112	R-103112							
7440-41-7	Beryllium	ug/L	4	4		ND	ND	^	0.14	J	0.13	J	ND	ND							
7440-43-9	Cadmium	ug/L	5	5		ND	ND		ND		ND		ND	ND							
7440-47-3	Chromium	ug/L		100		0.63	J	0.91	J	ND	ND	ND	ND	ND							
7440-48-4	Cobalt	ug/L	50			0.12	J	0.19	J	2.6		2.4	ND	0.072	J	ND	ND				
7440-50-8	Copper	ug/L	200	1300	1000	5		5.6		ND	ND	ND	ND	0.8	J	1.3	J				
7439-92-1	Lead	ug/L	50	15		3.3		5		ND	ND	ND	ND	0.38	J	0.54	J				
7439-96-5	Manganese	ug/L	50		50	36		52		660		600	ND	ND		2.8		2.7			
7440-02-0	Nickel	ug/L	100			0.56	J	0.55	J	4.4		3.9	0.51	J	0.55	J	ND	ND			
7782-49-2	Selenium	ug/L	20	50		ND		ND	^	ND		ND		1.2	J	ND	ND				
7440-22-4	Silver	ug/L	50		100	ND		ND		ND		ND		ND		ND	ND				
7440-28-0	Thallium	ug/L	2	2		ND		0.3	J B	ND		ND		ND		ND	ND				
7440-61-1	Uranium	ug/L		30		1.2		1.3		0.92	J	1		5.7		6.3		0.052	J	0.13	J
7440-62-2	Vanadium	ug/L	100			4.9	J	6.6		ND		ND	0.54	J	0.55	J	ND	ND			
7440-66-6	Zinc	ug/L	2000		5000	880		1000		ND		2.1	J	ND		ND		2.5	J	ND	ND
67-56-1	Methanol	mg/L						0.25	J p	ND		11		ND		ND		ND	ND	ND	ND
N/A	C28]	mg/L				ND		ND		ND		ND		0.044	J	ND		ND	ND	ND	ND
8006-61-9	(GRO)-C6-C10	ug/L				ND		ND		25		10	J	25		13	J	18	J	21	J
92-52-4	1,1'-Biphenyl	ug/L				ND		ND		ND		ND		ND		ND		ND	ND	ND	ND
95-94-3	1,2,4,5-Tetrachlorobenzene	ug/L				ND		ND		ND		ND		ND		ND		ND	ND	ND	ND
120-82-1	1,2,4-Trichlorobenzene	ug/L	70	70		ND		ND		ND		ND		ND		ND		ND	ND	ND	ND
95-50-1	1,2-Dichlorobenzene	ug/L	600	600		ND		ND		ND		ND		ND		ND		ND	ND	ND	ND
541-73-1	1,3-Dichlorobenzene	ug/L	94			ND		ND		ND		ND		ND		ND		ND	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	ug/L	75	75		ND		ND		ND		ND		ND		ND		ND	ND	ND	ND
123-91-1	1,4-Dioxane	ug/L	6.1			ND		ND		ND		ND		ND		ND		ND	ND	ND	ND
58-90-2	2,3,4,6-Tetrachlorophenol	ug/L				ND		ND		ND		ND		ND		ND		ND	ND	ND	ND

Table 5
Laboratory Results for Groundwater Locations
2012 South Park Baseline



Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	U-8712	U-102912	X-91712	Y-82212	Y-122012	BB-82112	BB-121712	CC-83112	CC-122012
7440-41-7	Beryllium	ug/L	4	4		ND	ND	ND	ND	ND	ND	ND	ND	ND
7440-43-9	Cadmium	ug/L	5	5		ND	ND	ND	ND	ND	ND	ND	ND	ND
7440-47-3	Chromium	ug/L		100		ND	ND	ND	ND	ND	ND	ND	ND	ND
7440-48-4	Cobalt	ug/L	50			ND	ND	ND	0.085	0.056	ND	ND	ND	0.066
7440-50-8	Copper	ug/L	200	1300	1000	17	8.4	4.7	36	4.9	6	10	3.2	9.9
7439-92-1	Lead	ug/L	50	15		1.3	0.34	0.47	ND	ND	ND	ND	0.42	0.46
7439-96-5	Manganese	ug/L	50		50	ND	1.2	95	26	30	4.5	3.9	39	37
7440-02-0	Nickel	ug/L	100			ND	ND	1.2	0.42	0.42	0.37	1.1	0.4	0.67
7782-49-2	Selenium	ug/L	20	50		1.9	2.3	ND	ND	ND	ND	ND	ND	ND
7440-22-4	Silver	ug/L	50		100	ND	ND	ND	ND	ND	0.076	ND	ND	ND
7440-28-0	Thallium	ug/L	2	2		ND	0.074	ND	ND	ND	0.059	ND	ND	ND
7440-61-1	Uranium	ug/L		30		20	20	ND	0.18	0.21	0.26	0.27	ND	0.071
7440-62-2	Vanadium	ug/L	100			2.4	2.9	ND	ND	ND	ND	ND	ND	ND
7440-66-6	Zinc	ug/L	2000		5000	5.2	2.8	3.7	ND	ND	6.8	8.6	48	57
67-56-1	Methanol	mg/L				ND	12	ND	ND	ND	ND	ND	ND	ND
N/A	C28]	mg/L				ND	ND	ND	ND	0.034	ND	ND	ND	ND
8006-61-9	(GRO)-C6-C10	ug/L				19	16	ND	ND	ND	ND	ND	23	18
92-52-4	1,1'-Biphenyl	ug/L				ND	ND	ND	ND	ND	ND	ND	ND	ND
95-94-3	1,2,4,5-Tetrachlorobenzene	ug/L				ND	ND	ND	ND	ND	ND	ND	ND	ND
120-82-1	1,2,4-Trichlorobenzene	ug/L	70	70		ND	ND	ND	ND	ND	ND	ND	ND	ND
95-50-1	1,2-Dichlorobenzene	ug/L	600	600		ND	ND	ND	ND	ND	ND	ND	ND	ND
541-73-1	1,3-Dichlorobenzene	ug/L	94			ND	ND	ND	ND	ND	ND	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	ug/L	75	75		ND	ND	ND	ND	ND	ND	ND	ND	ND
123-91-1	1,4-Dioxane	ug/L	6.1			ND	ND	ND	ND	ND	ND	ND	ND	ND
58-90-2	2,3,4,6-Tetrachlorophenol	ug/L				ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 5
Laboratory Results for Groundwater Locations
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Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	D-62912	D-101012	J-82812	J-112012	M-82812	M-121712	R-73112	R-103112
95-95-4	2,4,5-Trichlorophenol	ug/L	700			ND	ND	ND	ND	ND	ND	ND	ND
88-06-2	2,4,6-Trichlorophenol	ug/L	3.2			ND	ND	ND	ND	ND	ND	ND	ND
120-83-2	2,4-Dichlorophenol	ug/L	21			ND	ND	ND	ND	ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	ug/L	140			ND	ND	ND	ND	ND	ND	ND	ND
51-28-5	2,4-Dinitrophenol	ug/L	14			ND	ND	ND	ND	ND	ND	ND	ND
121-14-2	2,4-Dinitrotoluene	ug/L	0.11a			ND	ND	ND	ND	ND	ND	ND	ND
606-20-2	2,6-Dinitrotoluene	ug/L	7			ND	ND	ND	ND	ND	ND	ND	ND
91-58-7	2-Chloronaphthalene	ug/L	560			ND	ND	ND	ND	ND	ND	ND	ND
95-57-8	2-Chlorophenol	ug/L	35			ND	ND	ND	ND	ND	ND	ND	ND
91-57-6	2-Methylnaphthalene	ug/L	28			ND	ND	ND	ND	ND	ND	ND	ND
95-48-7	2-Methylphenol	ug/L	350			ND	ND	ND	ND	ND	ND	ND	ND
88-74-4	2-Nitroaniline	ug/L				ND	ND	ND	ND	ND	ND	ND	ND
88-75-5	2-Nitrophenol	ug/L				ND	ND	ND	ND	ND	ND	ND	ND
15831-10-4	3 & 4 Methylphenol	ug/L				ND	ND	ND	ND	ND	ND	ND	ND
91-94-1	3,3'-Dichlorobenzidine	ug/L	0.078a			ND	ND	ND	ND	ND	ND	ND	ND
99-09-2	3-Nitroaniline	ug/L				ND	ND	ND	ND	ND	ND	ND	ND
534-52-1	4,6-Dinitro-2-methylphenol	ug/L				ND	ND	ND	ND	ND	ND	ND	ND
101-55-3	4-Bromophenyl phenyl ether	ug/L				ND	ND	ND	ND	ND	ND	ND	ND
59-50-7	4-Chloro-3-methylphenol	ug/L				ND	ND	ND	ND	ND	ND	ND	ND
106-47-8	4-Chloroaniline	ug/L				ND	ND	ND	ND	ND	ND	ND	ND
7005-72-3	4-Chlorophenyl phenyl ether	ug/L				ND	ND	ND	ND	ND	ND	ND	ND
100-01-6	4-Nitroaniline	ug/L				ND	ND	ND	ND	ND	ND	ND	ND
100-02-7	4-Nitrophenol	ug/L	56			ND	ND	ND	ND	ND	ND	ND	ND
83-32-9	Acenaphthene	ug/L	420			ND	ND	ND	ND	ND	ND	ND	ND
208-96-8	Acenaphthylene	ug/L				ND	ND	ND	ND	ND	ND	ND	ND

Table 5
Laboratory Results for Groundwater Locations
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Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	U-8712	U-102912	X-91712	Y-82212	Y-122012	BB-82112	BB-121712	CC-83112	CC-122012
95-95-4	2,4,5-Trichlorophenol	ug/L	700			ND	ND	ND	ND	ND	ND	ND	ND	ND
88-06-2	2,4,6-Trichlorophenol	ug/L	3.2			ND	ND	ND	ND	ND	ND	ND	ND	ND
120-83-2	2,4-Dichlorophenol	ug/L	21			ND	ND	ND	ND	ND	ND	ND	ND	ND
105-67-9	2,4-Dimethylphenol	ug/L	140			ND	ND	ND	ND	ND	ND	ND	ND	ND
51-28-5	2,4-Dinitrophenol	ug/L	14			ND	ND	ND	ND	ND	ND	ND	ND	ND
121-14-2	2,4-Dinitrotoluene	ug/L	0.11a			ND	ND	ND	ND	ND	ND	ND	ND	ND
606-20-2	2,6-Dinitrotoluene	ug/L	7			ND	ND	ND	ND	ND	ND	ND	ND	ND
91-58-7	2-Chloronaphthalene	ug/L	560			ND	ND	ND	ND	ND	ND	ND	ND	ND
95-57-8	2-Chlorophenol	ug/L	35			ND	ND	ND	ND	ND	ND	ND	ND	ND
91-57-6	2-Methylnaphthalene	ug/L	28			ND	ND	ND	ND	ND	ND	ND	ND	ND
95-48-7	2-Methylphenol	ug/L	350			ND	ND	ND	ND	ND	ND	ND	ND	ND
88-74-4	2-Nitroaniline	ug/L				ND	ND	ND	ND	ND	ND	ND	ND	ND
88-75-5	2-Nitrophenol	ug/L				ND	ND	ND	ND	ND	ND	ND	ND	ND
15831-10-4	3 & 4 Methylphenol	ug/L				ND	ND	ND	ND	ND	ND	ND	ND	ND
91-94-1	3,3'-Dichlorobenzidine	ug/L	0.078a			ND	ND	ND	ND	ND	ND	ND	ND	ND
99-09-2	3-Nitroaniline	ug/L				ND	ND	ND	ND	ND	ND	ND	ND	ND
534-52-1	4,6-Dinitro-2-methylphenol	ug/L				ND	ND	ND	ND	ND	ND	ND	ND	ND
101-55-3	4-Bromophenyl phenyl ether	ug/L				ND	ND	ND	ND	ND	ND	ND	ND	ND
59-50-7	4-Chloro-3-methylphenol	ug/L				ND	ND	ND	ND	ND	ND	ND	ND	ND
106-47-8	4-Chloroaniline	ug/L				ND	ND	ND	ND	ND	ND	ND	ND	ND
7005-72-3	4-Chlorophenyl phenyl ether	ug/L				ND	ND	ND	ND	ND	ND	ND	ND	ND
100-01-6	4-Nitroaniline	ug/L				ND	ND	ND	ND	ND	ND	ND	ND	ND
100-02-7	4-Nitrophenol	ug/L	56			ND	ND	ND	ND	ND	ND	ND	ND	ND
83-32-9	Acenaphthene	ug/L	420			ND	ND	ND	ND	ND	ND	ND	ND	ND
208-96-8	Acenaphthylene	ug/L				ND	ND	ND	ND	ND	ND	ND	ND	ND

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Laboratory Results for Groundwater Locations
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Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	D-62912	D-101012	J-82812	J-112012	M-82812	M-121712	R-73112	R-103112		
98-86-2	Acetophenone	ug/L	700			ND	ND	ND	ND	ND	ND	ND	ND		
120-12-7	Anthracene	ug/L	2100			ND	ND	ND	ND	ND	ND	ND	ND		
1912-24-9	Atrazine	ug/L		3		ND	ND	ND	ND	ND	ND	ND	ND		
100-52-7	Benzaldehyde	ug/L				ND	ND	ND	ND	ND	ND	ND	ND		
56-55-3	Benzo[a]anthracene	ug/L	0.0048a			ND	ND	ND	ND	ND	ND	ND	ND		
50-32-8	Benzo[a]pyrene	ug/L	0.0048a	0.2a		ND	ND	ND	ND	ND	ND	ND	ND		
205-99-2	Benzo[b]fluoranthene	ug/L	0.0048a			ND	ND	ND	ND	ND	ND	ND	ND		
191-24-2	Benzo[g,h,i]perylene	ug/L				ND	ND	ND	ND	ND	ND	ND	ND		
207-08-9	Benzo[k]fluoranthene	ug/L	0.0048a			ND	ND	ND	ND	ND	ND	ND	ND		
65-85-0	Benzoic acid	ug/L	28000			ND	ND	ND	ND	ND	ND	ND	ND		
100-51-6	Benzyl alcohol	ug/L	700			0.45	J	ND	ND	ND	ND	ND	ND		
111-91-1	Bis(2-chloroethoxy)methane	ug/L				ND	ND	ND	ND	ND	ND	ND	ND		
111-44-4	Bis(2-chloroethyl)ether	ug/L				ND	ND	ND	ND	ND	ND	*	ND		
117-81-7	Bis(2-ethylhexyl) phthalate	ug/L	2.5	6		ND	ND	3	J	ND	2.9	J	ND	2.3	J B
85-68-7	Butyl benzyl phthalate	ug/L	1400			ND	ND	ND	ND	ND	ND	ND	ND		
105-60-2	Caprolactam	ug/L				ND	ND	ND	ND	ND	ND	ND	ND		
86-74-8	Carbazole	ug/L				ND	ND	ND	ND	ND	ND	ND	ND		
218-01-9	Chrysene	ug/L	0.0048a			ND	ND	ND	ND	ND	ND	ND	ND		
53-70-3	Dibenz(a,h)anthracene	ug/L	0.0048a			ND	ND	ND	ND	ND	ND	ND	ND		
132-64-9	Dibenzofuran	ug/L	7			ND	ND	ND	ND	ND	ND	ND	ND		
84-66-2	Diethyl phthalate	ug/L	5600			ND	ND	ND	ND	ND	ND	ND	ND		
131-11-3	Dimethyl phthalate	ug/L				ND	ND	ND	ND	ND	ND	ND	ND		
84-74-2	Di-n-butyl phthalate	ug/L	700			ND	ND	ND	ND	ND	ND	ND	ND		
117-84-0	Di-n-octyl phthalate	ug/L				ND	ND	ND	ND	ND	ND	ND	ND		
206-44-0	Fluoranthene	ug/L	280			ND	ND	ND	ND	ND	ND	ND	ND		

Table 5
Laboratory Results for Groundwater Locations
2012 South Park Baseline



Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	U-8712	U-102912	X-91712	Y-82212	Y-122012	BB-82112	BB-121712	CC-83112	CC-122012
98-86-2	Acetophenone	ug/L	700			ND	ND	ND	ND	ND	ND	ND	ND	ND
120-12-7	Anthracene	ug/L	2100			ND	ND	ND	ND	ND	ND	ND	ND	ND
1912-24-9	Atrazine	ug/L		3		ND	ND	ND	ND	ND	ND	ND	ND	ND
100-52-7	Benzaldehyde	ug/L				ND	ND	ND	ND	ND	ND	ND	ND	ND
56-55-3	Benzo[a]anthracene	ug/L	0.0048a			ND	ND	ND	ND	ND	ND	ND	ND	ND
50-32-8	Benzo[a]pyrene	ug/L	0.0048a	0.2a		ND	ND	ND	ND	ND	ND	ND	ND	ND
205-99-2	Benzo[b]fluoranthene	ug/L	0.0048a			ND	ND	ND	ND	ND	ND	ND	ND	ND
191-24-2	Benzo[g,h,i]perylene	ug/L				ND	ND	ND	ND	ND	ND	ND	ND	ND
207-08-9	Benzo[k]fluoranthene	ug/L	0.0048a			ND	ND	ND	ND	ND	ND	ND	ND	ND
65-85-0	Benzoic acid	ug/L	28000			ND	ND	ND	ND	ND	ND	ND	ND	ND
100-51-6	Benzyl alcohol	ug/L	700			ND	ND	ND	ND	ND	ND	ND	ND	ND
111-91-1	Bis(2-chloroethoxy)methane	ug/L				ND	ND	ND	ND	ND	ND	ND	ND	ND
111-44-4	Bis(2-chloroethyl)ether	ug/L				ND	ND	ND	ND	ND	ND	ND	ND	ND
117-81-7	Bis(2-ethylhexyl) phthalate	ug/L	2.5	6		ND	2 J	ND	4.8 JB	ND	ND	ND	2.8 J	ND
85-68-7	Butyl benzyl phthalate	ug/L	1400			ND	ND	ND	ND	ND	ND	ND	ND	ND
105-60-2	Caprolactam	ug/L				ND	ND	ND	ND	ND	ND	ND	ND	ND
86-74-8	Carbazole	ug/L				ND	ND	ND	ND	ND	ND	ND	ND	ND
218-01-9	Chrysene	ug/L	0.0048a			ND	ND	ND	ND	ND	ND	ND	ND	ND
53-70-3	Dibenz(a,h)anthracene	ug/L	0.0048a			ND	ND	ND	ND	ND	ND	ND	ND	ND
132-64-9	Dibenzofuran	ug/L	7			ND	ND	ND	ND	ND	ND	ND	ND	ND
84-66-2	Diethyl phthalate	ug/L	5600			ND	ND	ND	ND	ND	ND	ND	ND	ND
131-11-3	Dimethyl phthalate	ug/L				ND	ND	ND	ND	ND	ND	ND	ND	ND
84-74-2	Di-n-butyl phthalate	ug/L	700			ND	ND	ND	ND	ND	ND	ND	ND	ND
117-84-0	Di-n-octyl phthalate	ug/L				ND	ND	ND	ND	ND	ND	ND	ND	ND
206-44-0	Fluoranthene	ug/L	280			ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 5
Laboratory Results for Groundwater Locations
2012 South Park Baseline



Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	D-62912	D-101012	J-82812	J-112012	M-82812	M-121712	R-73112	R-103112
86-73-7	Fluorene	ug/L	280			ND	ND	ND	ND	ND	ND	ND	ND
118-74-1	Hexachlorobenzene	ug/L	0.022a	1		ND	ND	ND	ND	ND	ND	ND	ND
87-68-3	Hexachlorobutadiene	ug/L	0.45a			ND	ND	ND	ND	ND	ND	ND	ND
77-47-4	Hexachlorocyclopentadiene	ug/L	42	50		ND	ND	ND	ND	ND	ND	ND	ND
67-72-1	Hexachloroethane	ug/L	0.7a			ND	ND	ND	ND	ND	ND	ND	ND
193-39-5	Indeno[1,2,3-cd]pyrene	ug/L	0.0048a			ND	ND	ND	ND	ND	ND	ND	ND
78-59-1	Isophorone	ug/L	140			ND	ND	ND	ND	ND	ND	ND	ND
91-20-3	Naphthalene	ug/L	140			ND	ND	ND	ND	ND	ND	ND	ND
98-95-3	Nitrobenzene	ug/L	3.5			ND	ND	ND	ND	ND	ND	ND	ND
621-64-7	N-Nitrosodi-n-propylamine	ug/L	0.005a			ND	ND	ND	ND	ND	ND	ND	ND
86-30-6	N-Nitrosodiphenylamine	ug/L	7.1			ND	ND	ND	ND	ND	ND	ND	ND
87-86-5	Pentachlorophenol	ug/L	0.29a	1a		ND	ND	ND	ND	ND	ND	ND	ND
85-01-8	Phenanthrene	ug/L				ND	ND	ND	ND	ND	ND	ND	ND
108-95-2	Phenol	ug/L	2100			ND	ND	ND	ND	ND	ND	ND	ND
129-00-0	Pyrene	ug/L	210			ND	ND	ND	ND	ND	ND	ND	ND
N/A	Total Dissolved Solids	mg/L			500	220	200	1200	1200	360	340	240	250
N/A	Total Suspended Solids	mg/L				48	58	6 J	2.4 J	ND	ND	4.4	ND
71-55-6	1,1,1-Trichloroethane	ug/L	200	200		ND	ND	ND	ND	ND	ND	ND	ND
79-34-5	1,1,2,2-Tetrachloroethane	ug/L	0.18a			ND	ND	ND	ND	ND	ND	ND	ND
79-00-5	1,1,2-Trichloroethane	ug/L	28	5		ND	ND	ND	ND	ND	ND	ND	ND
76-13-1	1,1,2-Trichlorotrifluoroethane	ug/L	210000			ND	ND	ND	ND	ND	ND	ND	ND
75-34-3	1,1-Dichloroethane	ug/L	61			ND	ND	ND	ND	ND	ND	ND	ND
75-35-4	1,1-Dichloroethene	ug/L	7	7		ND	ND	ND	ND	ND	ND	ND	ND
87-61-6	1,2,3-Trichlorobenzene	ug/L				ND	ND	ND	ND	ND	ND	ND	ND
120-82-1	1,2,4-Trichlorobenzene	ug/L	70	70		ND	ND	ND	ND	ND	ND	ND	ND
96-12-8	1,2-Dibromo-3-Chloropropane	ug/L	0.2a	0.2a		ND	ND	ND	ND	ND	ND	ND	ND
106-93-4	1,2-Dibromoethane	ug/L	0.02a	0.05a		ND	ND	ND	ND	ND	ND	ND	ND

Table 5
Laboratory Results for Groundwater Locations
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Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	U-8712	U-102912	X-91712	Y-82212	Y-122012	BB-82112	BB-121712	CC-83112	CC-122012		
86-73-7	Fluorene	ug/L	280			ND	ND	ND	ND	ND	ND	ND	ND	ND		
118-74-1	Hexachlorobenzene	ug/L	0.022a	1		ND	ND	ND	ND	ND	ND	ND	ND	ND		
87-68-3	Hexachlorobutadiene	ug/L	0.45a			ND	ND	ND	ND	ND	ND	ND	ND	ND		
77-47-4	Hexachlorocyclopentadiene	ug/L	42	50		ND	ND	ND	ND	ND	ND	ND	ND	ND		
67-72-1	Hexachloroethane	ug/L	0.7a			ND	ND	ND	ND	ND	ND	ND	ND	ND		
193-39-5	Indeno[1,2,3-cd]pyrene	ug/L	0.0048a			ND	ND	ND	ND	ND	ND	ND	ND	ND		
78-59-1	Isophorone	ug/L	140			ND	ND	ND	ND	ND	ND	ND	ND	ND		
91-20-3	Naphthalene	ug/L	140			ND	ND	ND	ND	ND	ND	ND	ND	ND		
98-95-3	Nitrobenzene	ug/L	3.5			ND	ND	ND	ND	ND	ND	ND	ND	ND		
621-64-7	N-Nitrosodi-n-propylamine	ug/L	0.005a			ND	ND	ND	ND	ND	ND	ND	ND	ND		
86-30-6	N-Nitrosodiphenylamine	ug/L	7.1			ND	ND	ND	ND	ND	ND	ND	ND	ND		
87-86-5	Pentachlorophenol	ug/L	0.29a	1a		ND	ND	ND	ND	ND	ND	ND	ND	ND		
85-01-8	Phenanthrene	ug/L				ND	ND	ND	ND	ND	ND	ND	ND	ND		
108-95-2	Phenol	ug/L	2100			ND	ND	ND	ND	ND	ND	ND	ND	ND		
129-00-0	Pyrene	ug/L	210			ND	ND	ND	ND	ND	ND	ND	ND	ND		
N/A	Total Dissolved Solids	mg/L			500	220	210	B	840	630	630	300	280	610	600	
N/A	Total Suspended Solids	mg/L				ND	1.2	J	12	ND	ND	ND	ND	ND	1.2	J
71-55-6	1,1,1-Trichloroethane	ug/L	200	200		ND	ND	ND	ND	ND	ND	ND	ND	ND		
79-34-5	1,1,2,2-Tetrachloroethane	ug/L	0.18a			ND	ND	ND	ND	ND	ND	ND	ND	ND		
79-00-5	1,1,2-Trichloroethane	ug/L	28	5		ND	ND	ND	ND	ND	ND	ND	ND	ND		
76-13-1	1,1,2-Trichlorotrifluoroethane	ug/L	210000			ND	ND	ND	ND	ND	ND	ND	ND	ND		
75-34-3	1,1-Dichloroethane	ug/L	61			ND	ND	ND	ND	ND	ND	ND	ND	ND		
75-35-4	1,1-Dichloroethene	ug/L	7	7		ND	ND	ND	ND	ND	ND	ND	ND	ND		
87-61-6	1,2,3-Trichlorobenzene	ug/L				ND	ND	ND	ND	ND	ND	ND	ND	ND		
120-82-1	1,2,4-Trichlorobenzene	ug/L	70	70		ND	ND	ND	ND	ND	ND	ND	ND	ND		
96-12-8	1,2-Dibromo-3-Chloropropane	ug/L	0.2a	0.2a		ND	ND	ND	ND	ND	ND	ND	ND	ND		
106-93-4	1,2-Dibromoethane	ug/L	0.02a	0.05a		ND	ND	ND	ND	ND	ND	ND	ND	ND		

Table 5
Laboratory Results for Groundwater Locations
2012 South Park Baseline



Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	D-62912	D-101012	J-82812	J-112012	M-82812	M-121712	R-73112	R-103112
95-50-1	1,2-Dichlorobenzene	ug/L	600	600		ND	ND	ND	ND	ND	ND	ND	ND
107-06-2	1,2-Dichloroethane	ug/L	0.38	5		ND	ND	ND	ND	ND	ND	ND	ND
78-87-5	1,2-Dichloropropane	ug/L	0.52	5		ND	ND	ND	ND	ND	ND	ND	ND
541-73-1	1,3-Dichlorobenzene	ug/L	94			ND	ND	ND	ND	ND	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	ug/L	75	75		ND	ND	ND	ND	ND	ND	ND	ND
123-91-1	1,4-Dioxane	ug/L	6.1a			ND	ND	ND	ND	ND	ND	ND	ND
591-78-6	2-Hexanone	ug/L	35			ND	ND	ND	ND	ND	ND	ND	ND
108-10-1	4-Methyl-2-pentanone (MIBK)	ug/L	560			ND	ND	ND	ND	ND	ND	ND	ND
67-64-1	Acetone	ug/L	6300			ND	2.6	JB	ND	ND	ND	ND	ND
71-43-2	Benzene	ug/L	5	5		ND	ND	ND	ND	ND	ND	ND	ND
75-27-4	Bromodichloromethane	ug/L	0.56			ND	ND	ND	ND	ND	ND	ND	ND
75-25-2	Bromoform	ug/L	4			ND	ND	ND	ND	ND	ND	ND	ND
75-15-0	Carbon disulfide	ug/L	700			ND	ND	ND	ND	ND	ND	ND	ND
56-23-5	Carbon tetrachloride	ug/L	0.27	5		ND	ND	ND	ND	ND	ND	ND	ND
108-90-7	Chlorobenzene	ug/L	100	100		ND	ND	ND	ND	ND	ND	ND	ND
74-97-5	Chlorobromomethane	ug/L				ND	ND	ND	ND	ND	ND	ND	ND
124-48-1	Chlorodibromomethane	ug/L	14			ND	ND	ND	ND	ND	ND	ND	ND
75-00-3	Chloroethane	ug/L				ND	ND	ND	ND	ND	ND	ND	ND
67-66-3	Chloroform	ug/L	3.5			ND	ND	ND	ND	ND	ND	ND	ND
156-59-2	cis-1,2-Dichloroethene	ug/L	70	70		ND	ND	ND	ND	ND	ND	ND	ND
10061-01-5	cis-1,3-Dichloropropene	ug/L				ND	ND	ND	ND	ND	ND	ND	ND
110-82-7	Cyclohexane	ug/L				ND	ND	ND	ND	ND	ND	ND	ND
75-71-8	Dichlorodifluoromethane	ug/L	1400			ND	ND	ND	ND	ND	ND	ND	ND
100-41-4	Ethylbenzene	ug/L	700	700		ND	ND	ND	ND	ND	ND	ND	ND
98-82-8	Isopropylbenzene	ug/L	700			ND	ND	ND	ND	ND	ND	ND	ND
79-20-9	Methyl acetate	ug/L				ND	ND	ND	ND	ND	ND	ND	ND
74-83-9	Methyl bromide	ug/L	10			ND	ND	ND	ND	ND	ND	ND	ND

Table 5
Laboratory Results for Groundwater Locations
2012 South Park Baseline



Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	U-8712	U-102912	X-91712	Y-82212	Y-122012	BB-82112	BB-121712	CC-83112	CC-122012
95-50-1	1,2-Dichlorobenzene	ug/L	600	600		ND	ND	ND	ND	ND	ND	ND	ND	ND
107-06-2	1,2-Dichloroethane	ug/L	0.38	5		ND	ND	ND	ND	ND	ND	ND	ND	ND
78-87-5	1,2-Dichloropropane	ug/L	0.52	5		ND	ND	ND	ND	ND	ND	ND	ND	ND
541-73-1	1,3-Dichlorobenzene	ug/L	94			ND	ND	ND	0.34	J	ND	ND	ND	ND
106-46-7	1,4-Dichlorobenzene	ug/L	75	75		ND	ND	ND	0.35	J	0.25	J	ND	ND
123-91-1	1,4-Dioxane	ug/L	6.1a			ND	ND	ND	ND	ND	ND	ND	ND	ND
591-78-6	2-Hexanone	ug/L	35			ND	ND	ND	ND	ND	ND	ND	ND	ND
108-10-1	4-Methyl-2-pentanone (MIBK)	ug/L	560			ND	ND	ND	ND	ND	ND	ND	ND	ND
67-64-1	Acetone	ug/L	6300			3.9	J	ND	ND	ND	ND	ND	ND	ND
71-43-2	Benzene	ug/L	5	5		ND	ND	ND	ND	ND	ND	ND	ND	ND
75-27-4	Bromodichloromethane	ug/L	0.56			ND	ND	ND	ND	ND	ND	ND	ND	ND
75-25-2	Bromoform	ug/L	4			ND	ND	ND	ND	ND	ND	ND	ND	ND
75-15-0	Carbon disulfide	ug/L	700			ND	ND	ND	ND	ND	ND	ND	ND	ND
56-23-5	Carbon tetrachloride	ug/L	0.27	5		ND	ND	ND	ND	ND	ND	ND	ND	ND
108-90-7	Chlorobenzene	ug/L	100	100		ND	ND	ND	ND	ND	ND	ND	ND	ND
74-97-5	Chlorobromomethane	ug/L				ND	ND	ND	ND	ND	ND	ND	ND	ND
124-48-1	Chlorodibromomethane	ug/L	14			ND	ND	ND	ND	ND	ND	ND	ND	ND
75-00-3	Chloroethane	ug/L				ND	ND	ND	ND	ND	ND	ND	ND	ND
67-66-3	Chloroform	ug/L	3.5			ND	ND	0.3	J	ND	ND	ND	ND	ND
156-59-2	cis-1,2-Dichloroethene	ug/L	70	70		ND	ND	ND	ND	ND	ND	ND	ND	ND
10061-01-5	cis-1,3-Dichloropropene	ug/L				ND	ND	ND	ND	ND	ND	ND	ND	ND
110-82-7	Cyclohexane	ug/L				ND	ND	ND	ND	ND	ND	ND	ND	ND
75-71-8	Dichlorodifluoromethane	ug/L	1400			ND	ND	ND	ND	ND	ND	ND	ND	ND
100-41-4	Ethylbenzene	ug/L	700	700		ND	ND	ND	ND	ND	ND	ND	ND	ND
98-82-8	Isopropylbenzene	ug/L	700			ND	ND	ND	ND	ND	ND	ND	ND	ND
79-20-9	Methyl acetate	ug/L				ND	ND	ND	ND	ND	ND	ND	ND	ND
74-83-9	Methyl bromide	ug/L	10			ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 5
Laboratory Results for Groundwater Locations
2012 South Park Baseline



Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	D-62912	D-101012	J-82812	J-112012	M-82812	M-121712	R-73112	R-103112		
74-87-3	Methyl chloride	ug/L				ND	ND	ND	ND	ND	ND	ND	ND		
78-93-3	Butanone)	ug/L	4200			ND	ND	ND	ND	ND	ND	ND	ND		
1634-04-4	Methyl tert-butyl ether	ug/L				ND	ND	ND	ND	ND	ND	ND	ND		
108-87-2	Methylcyclohexane	ug/L				ND	ND	ND	ND	ND	ND	ND	ND		
75-09-2	Methylene Chloride	ug/L	4.7	5		0.38 J B	ND	0.44 J B	ND	0.42 J B	ND	ND	ND		
179601-23-1	m-Xylene & p-Xylene	ug/L				ND	ND	ND	ND	ND	ND	ND	ND		
95-47-6	o-Xylene	ug/L				ND	ND	ND	ND	ND	ND	ND	ND		
100-42-5	Styrene	ug/L	100	100		ND	ND	ND	ND	ND	ND	ND	ND		
127-18-4	Tetrachloroethylene	ug/L	5	5		ND	ND	ND	ND	ND	ND	ND	ND		
108-88-3	Toluene	ug/L	560	1000		ND	ND	ND	ND	ND	ND	ND	ND		
156-60-5	trans-1,2-Dichloroethene	ug/L	100	100		ND	ND	ND	ND	ND	ND	ND	ND		
10061-02-6	trans-1,3-Dichloropropene	ug/L				ND	ND	ND	ND	ND	ND	ND	ND		
79-01-6	Trichloroethene	ug/L	5	5		ND	ND	ND	ND	ND	ND	ND	ND		
75-69-4	Trichlorofluoromethane	ug/L	2100			ND	ND	ND	ND	ND	ND	ND	ND		
108-05-4	Vinyl acetate	ug/L	7000			ND	ND	ND	ND	ND	ND	ND	ND		
75-01-4	Vinyl chloride	ug/L	0.023a	2		ND	ND	ND	ND	ND	ND	ND	ND		
1330-20-7	Xylenes, Total	ug/L	1400	10000		ND	ND	ND	ND	ND	ND	ND	ND		
67-63-0	Isopropanol	ug/L				ND	ND	ND	ND	ND	ND	ND	ND		
N/A	Coliform, Total	MPN/100ml		<5%		2	<1	<1	<1	<1	49	<1	<1		
N/A	Gross Alpha	pCi/L		15		6.31 +- 2.3	3.02 +- 1.6	9.55 +- 3.5	-8.16E-02 + 6.1E+00	ND	10.8 +- 6.3	7.53 +- 3.6	0.297 +- 1.2 U	1.18E+00 + 1.0E+00	ND
N/A	Gross Beta	pCi/L				4.57 +- 1.5	2.95 +- 1.3	J 9.55 +- 2.3	5.81E+00 + 2.0E+00	=	5.44 +- 2.9	16.0 +- 7.5	0.806 +- 1.0 U	5.26E-01 + 1.1E+00	ND

¹ (MPN) most probable number method

² CDPHE Water Standards 2011

³ USEPA - Primary Drinking Water Standards

⁴ USEPA - Secondary Drinking Water Standards

^B Compound was found in the laboratory blank and sample.

* LCS or LCSD exceeds the control limit

^J Result is less than the Reporting Limit (RL) but greater than or equal to the Method Detection Level (MDL) and the concentration is an approximate value.

^U Analyzed for but not detected above limiting criteria. Limit criteria is less than the = ERPIMS - Equal To, Analyte Detected

Table 5
Laboratory Results for Groundwater Locations
2012 South Park Baseline



Analyte CAS Number	Analyte	Units	Colorado MCL ²	EPA Primary MCL ³	EPA Secondary MCL ⁴	U-8712	U-102912	X-91712	Y-82212	Y-122012	BB-82112	BB-121712	CC-83112	CC-122012
74-87-3	Methyl chloride	ug/L				ND	ND	ND	ND	ND	ND	ND	ND	ND
78-93-3	Butanone)	ug/L	4200			ND	ND	ND	ND	ND	ND	ND	ND	ND
1634-04-4	Methyl tert-butyl ether	ug/L				ND	ND	ND	ND	ND	ND	ND	ND	ND
108-87-2	Methylcyclohexane	ug/L				ND	ND	ND	ND	ND	ND	ND	ND	ND
75-09-2	Methylene Chloride	ug/L	4.7	5		ND	ND	ND	ND	ND	ND	ND	0.53 JB	ND
179601-23-1	m-Xylene & p-Xylene	ug/L				ND	ND	ND	ND	ND	ND	ND	ND	ND
95-47-6	o-Xylene	ug/L				ND	ND	ND	ND	ND	ND	ND	ND	ND
100-42-5	Styrene	ug/L	100	100		ND	ND	ND	ND	ND	ND	ND	ND	ND
127-18-4	Tetrachloroethylene	ug/L	5	5		ND	ND	ND	ND	ND	ND	ND	ND	ND
108-88-3	Toluene	ug/L	560	1000		ND	ND	ND	ND	ND	ND	ND	ND	ND
156-60-5	trans-1,2-Dichloroethene	ug/L	100	100		ND	ND	ND	ND	ND	ND	ND	ND	ND
10061-02-6	trans-1,3-Dichloropropene	ug/L				ND	ND	ND	ND	ND	ND	ND	ND	ND
79-01-6	Trichloroethene	ug/L	5	5		ND	ND	ND	ND	ND	ND	ND	ND	ND
75-69-4	Trichlorofluoromethane	ug/L	2100			ND	ND	ND	ND	ND	ND	ND	ND	ND
108-05-4	Vinyl acetate	ug/L	7000			ND	ND	ND	ND	ND	ND	ND	ND	ND
75-01-4	Vinyl chloride	ug/L	0.023a	2		ND	ND	ND	ND	ND	ND	ND	ND	ND
1330-20-7	Xylenes, Total	ug/L	1400	10000		ND	ND	ND	ND	ND	ND	ND	ND	ND
67-63-0	Isopropanol	ug/L				ND	ND	ND	ND	ND	ND	ND	ND	ND
N/A	Coliform, Total	MPN/100ml		<5%		<1	<1	<1	<1	<1	<1	<1	<1	<1
N/A	Gross Alpha	pCi/L		15		40.2 +- 11.0	3.44E+01 +- 8.4E+00	= 1.40E+01 +- 6.1E+00	= 2.82 +- 3.3	U 1.36 +- 4.6	U 6.59 +- 2.4	3.46 +- 2.0	-0.0859 +- 2.7	U 2.51 +- 4.7
N/A	Gross Beta	pCi/L				9.96 +- 6.8	U 1.39E+01 +- 5.1E+00	= 2.26E+01 +- 4.8E+00	= 2.05 +- 1.9	U 5.85 +- 3.3	8.59 +- 2.5	15.4 +- 5.3	2.49 +- 1.7	U 3.71 +- 3.0

¹ (MPN) most probable number method
² CDPHE Water Standards 2011
³ USEPA - Primary Drinking Water Standards
⁴ USEPA - Secondary Drinking Water Standards

^B Compound was found in the laboratory blank and sample.
^{*} LCS or LCSD exceeds the control limit
^J Result is less than the Reporting Limit (RL) but greater than or equal to the Method Detection Level (MDL) and the concentration is an approximate value.
^U Analyzed for but not detected above limiting criteria. Limit criteria is less than the
⁼ ERPIMS - Equal To, Analyte Detected

Table 6
Field Data for Groundwater Locations
2012 South Park Baseline



Sample ID	Date	Time	Field Personnel	SW, GW, or Spring	Laboratory Analysis to be Conducted
D-62912	6/29/2012	10:15 AM	JJ, MB	GW	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta
D-101012	10/10/2012	11:15 AM	JJ, MB	GW	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta
R-73112	7/31/2012	12:30 PM	JJ, MB	GW	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta
R-103112	10/31/2012	11:30 AM	JJ, MB	GW	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta, Methanol
U-8712	8/7/2012	9:45 AM	JJ, MB	GW	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta
U-102912	10/29/2012	9:45 AM	JJ, MB	GW	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta, Methanol

Table 6
Field Data for Groundwater Locations
2012 South Park Baseline



Sample ID	Date	Time	Field Personnel	SW, GW, or Spring	Laboratory Analysis to be Conducted
Y-82212	8/22/2012	11:00 AM	JJ, MB	GW	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta, Methanol
Y-122012	12/20/2012	10:30 AM	JJ, MB	GW	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta, Methanol
J-82812	8/28/2012	10:45 AM	JJ, MB	GW	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta, Methanol
J-112012	11/20/2012	10:30 AM	JJ	GW	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta, Methanol
BB-82112	8/21/2012	8:30 AM	JJ, MB	GW	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta
BB-121712	12/17/2012	9:00 AM	JJ, MB	GW	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta, Methanol

Table 6
Field Data for Groundwater Locations
2012 South Park Baseline



Sample ID	Date	Time	Field Personnel	SW, GW, or Spring	Laboratory Analysis to be Conducted
CC-83112	8/31/2012	8:45 AM	JJ, NP	GW	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta, Methanol
CC-122012	12/20/2012	12:30 PM	JJ, MB	GW	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta, Methanol
M-82812	8/28/2012	9:15 AM	JJ, MB	GW	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta, Methanol
M-121712	12/17/2012	10:30 AM	JJ, MB	Spring	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta, Methanol
X-9172012	9/17/2012	10:00 AM	JJ, MB	GW	GRO, DRO, VOC, SVOC, Coliform, TDS, TSS, Anions, Alkalinity, Dissolved Gasses (RSK-175), Total Metals, HEM oil and grease, Gross Alpha/Beta, Methanol

Table 6
Field Data for Groundwater Locations
2012 South Park Baseline



Sample ID	Date	Temperature °C	pH	Conductivity $\mu\text{S}/\text{cm}$ at 25 °C	TDS ppm	DO ppm	Odor	Color	Effervesce	Bubbles/Gas
D-62912	6/29/2012	5.76	8.04	207	163	0.4	None	Brown/red	None	None
D-101012	10/10/2012	6.22	8.18	190	147	1.11	None	Iron-brown	None	Partly cloudy
R-73112	7/31/2012	9.29	8.89	281	200	0.18	None	None	None	None
R-103112	10/31/2012	9.61	9.84	234	165	0	Slight sulphurous odor by the end of sampling	None	None	None
U-8712	8/7/2012	10.73	9.19	239	164	4.61	None	Clear	None	None
U-102912	10/29/2012	10.57	7.5	202	139	0.41	None	None	None	None

Table 6
Field Data for Groundwater Locations
2012 South Park Baseline



Sample ID	Date	Temperature °C	pH	Conductivity μS/cm at 25 °C	TDS ppm	DO ppm	Odor	Color	Effervesce	Bubbles/Gas
Y-82212	8/22/2012	8.52	8.42	663	483	5.57	None	None	None	None
Y-122012	12/20/2012	8.07	NT	641	472	2.02	None	None	None	None
J-82812	8/28/2012	6.43	7.36	828	639	0	None	None	None	None
J-112012	11/20/2012	6.25	7.6	855	664	0	slight sulfur	None	None	None
BB-82112	8/21/2012	11.79	7.43	351	233	0.88	None	None	None	None
BB-121712	12/17/2012	9.77	8.3	314	221	0	None	None	None	None

Table 6
Field Data for Groundwater Locations
2012 South Park Baseline



Sample ID	Date	Temperature °C	pH	Conductivity μS/cm at 25 °C	TDS ppm	DO ppm	Odor	Color	Effervesce	Bubbles/Gas
CC-83112	8/31/2012	9.99	7.46	627	439	1.12	None	None	None	None
CC-122012	12/20/2012	7.86	NT	603	446	0	None	None	None	None
M-82812	8/28/2012	8.06	6.93	317	234	3.13	None	None	None	None
M-121712	12/17/2012	4.07	8.89	253	210	0	None	None	None	None
X-9172012	9/17/2012	18.91	7.31	1231	696	3.67	sulphur	slight rust	None	None

Table 6
Field Data for Groundwater Locations
2012 South Park Baseline



Sample ID	Date	Weather Conditions	Stream Conditions	Notes/Comments
D-62912	6/29/2012	Sunny, Hot	Well at old Garo school house across the street from the "Middle Fork at Garo" surface water sampling site	Well was pumped for one hour prior to taking measurements to clean well out before sampling
D-101012	10/10/2012	Domestic well in the valley next to the old Garo Schoolhouse next to Rt-9		Collected sample directly from hand-pump well after 50 minutes of pumping well. Water seemed clearer than last sampling event, but this time got more turbid if pumping stops for a moment. Turbidity also increases with bigger rather than smaller pumps, indicating that rust may be present at a joint in the well structure, located 3 feet below the outflow.
R-73112	7/31/2012	Partly cloudy	Domestic water well	Collected sample using newly fabricated tube, after purging over 250 gallons of water from the well
R-103112	10/31/2012	Clear	Domestic well	Collected sample directly from copper pipe in greenhouse; compared to last sample's July readings, and a cheap pH meter available on site, pH is high in our readings, suggesting our meter is not accurate (all other measurements were still comparable to last sampling's readings)
U-8712	8/7/2012	overcast, significant rain over the last week	domestic well	collected sample from base of pressure tank using Teflon tube sampler directly into lab prepared bottles
U-102912	10/29/2012	Partly cloudy	Domestic well	Collected sample directly from copper pipe in house, next to 250 gallon water boiler, after 1.5+ hours of purging well

Table 6
Field Data for Groundwater Locations
2012 South Park Baseline



Sample ID	Date	Weather Conditions	Stream Conditions	Notes/Comments
Y-82212	8/22/2012	Partly cloudy	Domestic well	Collected sample from where filter would attach with filter removed, home owner noted more grit in the filter than previously observed. Well was purged for 2 hrs prior to sampling. Filled directly into lab prepared bottles.
Y-122012	12/20/2012	clear, sunny	domestic well	collected sample from where filter would attach, filter and case removed, unable to calibrate probe suspect broken pH probe, temp and conductivity calibrated
J-82812	8/28/2012	Clear	Domestic well with cistern receptacle in greenhouse	Collected sample directly from cistern below ground after pulling float from cistern and pumping for 45 minutes (100+ gallons). There was a slight iron deposit on the inside of the PVC pipe that pours water into cistern
J-112012	11/20/2012	Clear	domestic well, solar powered well pump	collected sample from PVC pipe that discharges water from well into cistern
BB-82112	8/21/2012	Sunny, clear	Domestic well	Collected sample at home off of Rt-9. Well output was located in a small closet in the garage. Sample was collected after >250 gallons had been purged
BB-121712	12/17/2012	Snowing, cloudy	Domestic well	Collected sample from base of pressure tank prior to any filtration, located in a small closet in the garage. Sample was collected after 200 gallons had been purged

Table 6
Field Data for Groundwater Locations
2012 South Park Baseline



Sample ID	Date	Weather Conditions	Stream Conditions	Notes/Comments
CC-83112	8/31/2012	cold and clear	domestic well	collected sample from outside spigot hand pull type, pump rate approximately 3 gal/min according to well records, let water run 45 min prior to sampling
CC-122012	12/20/2012	clear, snow on ground	domestic well, hand pull spigot	collected sample from spigot, was not able to calibrate pH probe suspect broken probe
M-82812	8/28/2012	Clear	Spring piped 250 ft. downhill	Collected sample directly from black plastic pipe, which came 250 ft. from ground source. We had to remove a rock to access outflow, and there was algae growth on the rock under the outflow. There had been minimal rain the last 24 hours at the time of sampling
M-121712	12/17/2012	Cloudy, snow holding but imminent	Spring piped 250 ft. downhill	Collected sample directly from black plastic pipe, which came 250 ft. from ground source. We had to remove a rock to access outflow, and there was algae growth on the rock under the outflow. When toilet was flushed, flow was reduced to a trickle as a result of the Wilson's in-house cistern re-filling
X-9172012	9/17/2012	Cloudy, Over	domestic well	Collected sample from spigot next to easternmost door. Different than last year's location because last year's location produced a large amount of turbulence and may have caused more degassing. New location has ability for low flow sampling.