



DEPARTMENT OF ENVIRONMENTAL PROTECTION

Isiah Leggett
County Executive

Lisa Feldt
Director

December 9, 2015

Mrs. Martha Hynson, Chief
Landfill Operations
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore, Maryland 21230

Dear Mrs. Hynson:

Please find enclosed the results of the latest water quality monitoring performed at the Gude Landfill for the Fall 2015. This report has been developed based on the approved Groundwater and Surface Water Monitoring Plan (G&SWM) to monitor the water quality in and around the Gude Landfill in Montgomery County. This report is submitted in fulfillment of the G&SWM requirements approved on May 11, 2009, by Maryland Department of the Environment (MDE).

This report provides a summary of the results for water quality monitoring performed for the semiannual period from March 2015 to September 2015. In addition to sampling results and analysis for the 20 observation wells and 5 stream locations specified in the approved G&SWM, this report also includes the monitoring results for an additional 16 monitoring wells constructed in 2010 at the site as part of an ongoing Nature and Extent Study being conducted by the County's Department of Environmental Protection - Division of Solid Waste Management in coordination with your Office. To differentiate between the two sets of observation wells; the observation wells installed in 2010 have been designated by the prefix "MW", while the pre-existing (prior to 2010) wells are designated by an "OB".

For this reporting period revisions and updates have been implemented with respect to sample collection, laboratory analysis, and data interpretations. These revisions and updates are based on directives and recommendations made by MDE through recent communications and a meeting that was held in March, 2015. These revisions and updates include:

- Change in sample collection methodology from "Three Well Volume" to "Low Flow".
- Conducting laboratory analysis for metals under a lower Practical Quantitation Limit (PQL) for added precision.
- Update and expansion of the statistical analysis to include additional data interpretations.

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Revisions in sampling methodology and laboratory analysis primarily relate to the metal concentrations in samples collected from Landfill's groundwater monitoring wells. Changing the sampling methodology was based on MDE's preferred sampling methodology as recommended during a coordination meeting held in March, 2015, and the purpose of conducting the laboratory analysis for metals under the lower PQL was for added precision of the analytical results reported by the laboratory. The lower PQL was obtained by utilizing a certified laboratory subcontracted to the WSSC laboratory. Also, the statistical analysis have been updated and expanded to include additional data interpretations as requested by MDE. The expanded statistical analysis was performed by the County's Consultant (EA Engineering) and the results are included in Appendix F of this report.

The results obtained from the laboratory sample analyses for this reporting period are similar and comparable to the prior monitoring results with respect to the types and concentrations of pollutants. Conclusions derived from the statistical analyses (Appendix F) developed for this reporting period also correlate and are consistent with graphical representation of the historical laboratory results shown in "Appendix C" of this report. Results represent typical fluctuations in terms of pollutant concentration trends in water quality that have been observed previously during the past several years' reports. The following sections provide a brief overview of the results obtained from the laboratory and statistical analyses for all the monitoring sites. Please refer to the attached tables, diagrams, and the enclosed CD for additional information.

VOLATILE ORGANIC COMPOUNDS:

The highlights of the results for this reporting period are listed below. Please note that MCL (Maximum Contaminant Level) is a drinking water standard adopted by the U.S. EPA, its use in this report is as a reference only since this groundwater is not a source of drinking water. Please refer to Table 1 of the report for all the VOC results.

- No VOCs were detected above recommended Maximum Contaminant Level (MCL) in the following monitoring wells and stream locations:
 - **Pre-existing monitoring wells:** OB01, OB02, OB02A, OB04, OB06, OB07, OB07A, OB08, OB102, OB105, and OB15.
 - **Monitoring wells installed in 2010:** MW1B, MW2A, MW2B, MW3A, MW3B, MW04, MW06, MW07, MW08, MW10, MW11A, MW11B, and MW12.
 - **Stream Locations:** No VOCs were detected above the recommended MCL in any of the monitored stream locations.
- Ten (10) VOCs were identified as having increasing statistical trends, and sixteen (16) of the monitoring wells had one (1) or more VOCs with increasing statistical trends.
- Twelve (12) VOCs were identified as having decreasing trends, and thirteen (13) of the monitoring wells had one (1) or more VOCs with decreasing statistical trends.

- Seven (7) VOCs (benzene; chlorobenzene; 1,1-dichloroethane; cis-1,2-dichloroethene; 1,2-dichloropropane; tetrachloroethene; vinyl chloride) had both decreasing and increasing trends.
- Three (3) VOCs had only increasing trends: 1,2-dichlorobenzene (OB03, OB11); 1,4-dichlorobenzene (OB03, OB03A, OB04, OB04A, OB08, OB08A, OB10, OB11, OB11A, OB12, OB105); and trans-1,2-dichloroethene (OB12).
- Five (5) VOCs had only decreasing trends: chloroethane (OB03, OB03A, OB12), dichlorodifluoromethane (MW-13A, MW-13B, OB03, OB03A, OB10, OB11A), methylene chloride (MW-13A, OB11A), trichloroethene (OB01, OB02A, OB08A, OB11A), and trichlorofluoromethane (OB11A).
- A total of 36 VOCs exceeded the recommended MCL in the following monitoring wells:
 - **Pre-existing monitoring wells:** OB03 (4 exceedances), OB03A (3 exceedances), OB08A (1 exceedance), OB10 (2 exceedances), OB11 (6 exceedances), OB11A (4 exceedances), OB12 (4 exceedances), and OB125 (1 exceedance).
 - **Monitoring wells installed in 2010:** MW09 (1 exceedance), MW13A (5 exceedances), and MW13B (5 exceedances).

The following include a summary of these 36 VOC concentrations exceeding the recommended MCLs:

- 1,2-Dichloropropane concentration exceeded the MCL of 5 ug/l in observation wells OB03, OB03A, OB11, OB12, MW13A, and MW13B. Concentrations exceeding the MCL for this compound ranged from 5.41 ug/l in MW13A to 11.6 ug/l in OB12.
- cis-1,2-Dichloroethene concentration exceeded the MCL of 70 ug/l in observation wells OB03, OB11, OB11A, MW13A, and MW13B. Concentrations exceeding the MCL for this compound ranged from 73.5 ug/l in MW13B to 88.5 ug/l in OB03.
- Dichloromethane concentration exceeded the MCL of 5 ug/l in observation well OB11 at 8.71 ug/l.
- Tetrachloroethene concentration exceeded the MCL of 5 ug/l in observation wells OB11, OB11A, OB12, MW09, MW13A, and MW13B. Concentrations exceeding the MCL for this compound ranged from 6.78 ug/l in OB11A to 26.2 ug/l in OB12.
- Trichloroethene concentration exceeded the MCL of 5 ug/l in observation wells OB03, OB03A, OB10, OB11, OB11A, OB12, MW13A, and MW13B. Concentrations exceeding the MCL for this compound ranged from 15.6 ug/l in OB10 to 35.2 ug/l at OB03.
- Vinyl Chloride concentration exceeded the MCL of 2 ug/l in observation wells OB03, OB03A, OB08A, OB10, OB11, OB11A, OB12, OB25, MW13A, and MW13B. Concentrations exceeding the MCL for this compound ranged from 2.6 ug/l in OB08A to 23.5 ug/l in OB10.

METALS AND OTHER PARAMETERS:

Starting with the Spring 2015 sampling event, revisions were made in sampling methodology and samples laboratory analyses for metals. These revisions were recommended By MDE and included changes in collecting samples from “Three Well Volumes” to “Low Flow”. The main reason for this change was to minimize and reduce the samples turbidity level associated with the “Three Well Volumes” method which could potentially contribute to higher levels of turbidity and consequently interfering with the accuracy of metal analyses.

A summary of the metals and other parameters (non-organic contaminants) laboratory results and statistical analysis for this reporting period are included below. Please refer to attached tables in “Appendix D” and statistical analysis in “Appendix F” of this report for additional information on metals and other water quality parameter results.

- Twenty-four (24) metals (total and dissolved) were identified as having increasing statistical trends and nineteen (19) of the monitoring wells had one (1) or more metals with increasing statistical trends.
- Twenty-seven (27) metals (total and dissolved) were identified as having decreasing statistical trends, and twenty-eight (28) of the monitoring wells had one (1) or more metals with decreasing statistical trends.
- A total of 5 metals and other non-organic contaminants exceeded the recommended MCL in the following monitoring locations:
 - **Pre-existing monitoring wells:** OB11 (1 exceedance) and OB102 (1 exceedance).
 - **Monitoring wells installed in 2010:** MW2A (1 exceedance), MW06 (1 exceedance), and MW13A (1 exceedance).
 - **Stream Locations:** No exceedances.

The following include a summary of these 5 metals and non-organic contaminants exceeding the recommended MCLs:

- Arsenic with a recommended MCL of 0.01 mg/l was exceeded in samples collected from OB102 at 0.012 mg/l concentration.
- Cadmium with a recommended MCL of 0.005 mg/l was exceeded in sample collected from OB11 at 0.011 mg/l concentration.
- Chromium with a recommended MCL of 0.1 mg/l was exceeded in samples collected from OB02A at 0.27 mg/l and MW06 at 0.53 mg/l concentrations.
- Mercury with a recommended MCL of 0.002 mg/l was exceeded in a sample collected from OB13A with 0.0031 mg/l concentration.

As part of a recent study (Nature and Extend Study) under the guidance of MDE, the County also collected filtered samples to evaluate turbidity and its potential interferences to metals analysis. For this sampling event, only two samples exceeded the MCL concentrations in filtered samples. Cadmium with a recommended MCL of 0.005 mg/l was exceeded in filtered sample collected from OB11 at 0.011 mg/l concentration. As indicated above, the Cadmium concentrations exceeding the recommended MCL are identical for both filtered and unfiltered samples collected from the same monitoring location (OB11). Also, Chromium concentrations in both filter and unfiltered samples collected from MW06 exceeded the

recommended MCL of 0.1 mg/l even though the Chromium concentration exceeding the MCL was reduced from 0.53 mg/l in unfiltered sample to 0.21 mg/l in filtered sample. Mercury and Arsenic concentrations were not detectable in filtered samples collected from the same monitoring locations where MCL exceedances were recorded for unfiltered samples. These include unfiltered samples collected from OB102 for Arsenic and OB13A for Mercury.

In comparing the sample turbidity measurements obtained for this reporting period through “Low Flow” to the previous sample turbidity levels obtained through the “Three Well Volumes”, the effectiveness of the “Low Flow” technique in reducing the samples turbidity level seem to be more noticeable in samples collected from monitoring wells with historically higher turbidities. However, in comparing the obtained metal results using the “Low Flow” sampling method to prior results which were obtained through the “Three Well Volume” sampling, it appears that the Low Flow methodology has an overall effectiveness in reducing the samples turbidity level as indicated in Table-B, Appendix-D of this report. Please refer to Appendix D (Tables of Metals) for additional information on both the most recent and historical sampling results for metals. The County intends to continue to conduct the sampling through “Low Flow” methodology to collect additional data for further evaluation.

Overall, data collected during this reporting period represent typical seasonal fluctuations in water quality with respect to monitored parameters for this landfill. Based on the latest monitoring and sample analysis obtained during this reporting period, there are no indications of any unexpected or unusual results that would require special attention and therefore no further actions are recommended at this time. The County continues to closely monitor the presence of VOCs and other contaminants and will notify MDE prior to the next report in the event that any detection is found to be significantly different from previous levels.

Please contact Nasser Kamazani at (240) 777-7717 with any questions about this report.

Sincerely,

A handwritten signature in black ink, appearing to read "David Lake". The signature is fluid and cursive, with the first name "David" being more prominent than the last name "Lake".

David Lake, Manager
Water and Wastewater Policy Group

cc: Lisa Feldt, Director,
Department of Environmental Protection

Dan Locke, Chief, Division of Solid Waste Services,
Department of Environmental Protection

**WATER QUALITY
MONITORING REPORT**

for

GUDE LANDFILL

Montgomery County, Maryland

FALL 2015

Prepared by Montgomery County Department of Environmental Protection

Prepared for Maryland Department of Environment, Solid Waste Program

December 9, 2015

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Introduction:

The Gude Landfill is located on the north side of Gude Drive near Southlawn Lane, northeast of the City of Rockville in Montgomery County. The site encompasses approximately 160 acres, of which approximately 100 acres have been used for the disposal of municipal waste and incinerator residues. It operated from the early 1960s until June 1, 1982. The Gude Landfill was constructed prior to the promulgation of regulations for landfill lining and leachate collection systems.

Since 1984, to monitor the quality of ground and surface water, the Montgomery County Department of Environmental Protection (DEP) has been collecting samples at a total of 25 monitoring sites, which include 20 observation wells and 5 stream locations. Beginning in fall 2010, as part of a Nature and Extent Study, sixteen (16) additional monitoring wells have been installed at the site. The purpose of the Nature and Extent Study, directed by MDE and managed by Montgomery County, is to assess and investigate the nature and extent of environmental impacts in the vicinity of and potentially resulting from the Gude Landfill. Locations of these monitoring sites can be found on the attached aerial photo titled Groundwater and Surface Water Monitoring Locations in Appendix A. Sampling and analysis are conducted semi-annually and include laboratory analysis for Volatile Organic Compounds (VOCs), Heavy Metals, field parameters (temperature, pH, conductivity) and other water quality parameters and indicators.

This report is organized into four sections, which discuss the results and observations based on the landfill water quality monitoring program. The four sections include a discussion of:

- VOC sampling results;
- Metals sampling results;
- Groundwater elevation and flow;
- Trends Analysis/Conclusions

The appendices provide data tables for reference, as well as aerial photos and maps.

1. Volatile Organic Chemical Sampling Results:

The results obtained from both laboratory and statistical analyses for this reporting period are similar and comparable with the prior monitoring results with respect to the types and concentrations of pollutants. The highlights of the results for this reporting period are listed below. Please note that MCL (Maximum Contaminant Level) is a drinking water standard adopted by the U.S. EPA, its use in this report is as a reference only since this groundwater is not a source of drinking water. Please refer to Table 1 of the report for all the VOC results.

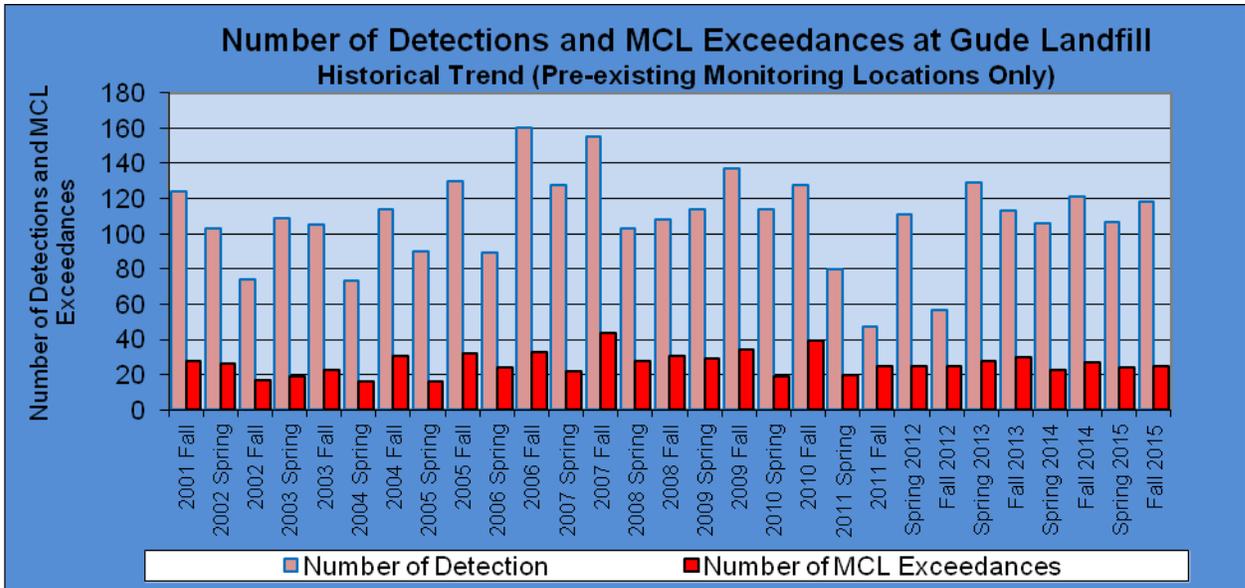
- No VOCs were detected above recommended Maximum Contaminant Level (MCL) in the following monitoring wells and stream locations:
 - **Pre-existing monitoring wells:** OB01, OB02, OB02A, OB04, OB06, OB07, OB07A, OB08, OB102, OB105, and OB15.
 - **Monitoring wells installed in 2010:** MW1B, MW2A, MW2B, MW3A, MW3B, MW04, MW06, MW07, MW08, MW10, MW11A, MW11B, and MW12.

- **Stream Locations:** No VOCs were detected above the recommended MCL in any of the monitored stream locations.
- Ten (10) VOCs were identified as having increasing statistical trends, and sixteen (16) of the monitoring wells had one (1) or more VOCs with increasing statistical trends.
- Twelve (12) VOCs were identified as having decreasing trends, and thirteen (13) of the monitoring wells had one (1) or more VOCs with decreasing statistical trends.
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- A total of 36 VOCs exceeded the recommended MCL in the following monitoring wells:
 - **Pre-existing monitoring wells:** OB03 (4 exceedances), OB03A (3 exceedances), OB08A (1 exceedance), OB10 (2 exceedances), OB11 (6 exceedances), OB11A (4 exceedances), OB12 (4 exceedances), and OB125 (1 exceedance).
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The following include a summary of these 36 VOC concentrations exceeding the recommended MCLs:

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- cis-1-2-Dichloroethene concentration exceeded the MCL of 70 ug/l in observation wells OB03, OB11, OB11A, MW13A, and MW13B. Concentrations exceeding the MCL for this compound ranged from 73.5 ug/l in MW13B to 88.5 ug/l in OB03.
- Dichloromethane concentration exceeded the MCL of 5 ug/l in observation well OB11 at 8.71 ug/l.
- Tetrachloroethene concentration exceeded the MCL of 5 ug/l in observation wells OB11, OB11A, OB12, MW09, MW13A, and MW13B. Concentrations exceeding the MCL for this compound ranged from 6.78 ug/l in OB11A to 26.2 ug/l in OB12.

- Trichloroethene concentration exceeded the MCL of 5 ug/l in observation wells OB03, OB03A, OB10, OB11, OB11A, OB12, MW13A, and MW13B. Concentrations exceeding the MCL for this compound ranged from 15.6 ug/l in OB10 to 35.2 ug/l at OB03.
- Vinyl Chloride concentration exceeded the MCL of 2 ug/l in observation wells OB03, OB03A, OB08A, OB10, OB11, OB11A, OB12, OB25, MW13A, and MW13B. Concentrations exceeding the MCL for this compound ranged from 2.6 ug/l in OB08A to 23.5 ug/l in OB10.



Note: The above Graph does not include data collected from the monitoring wells installed in 2010.

2. Inorganic and Metals Sampling Results:

Starting with the Spring 2015 sampling event, revisions were made in sampling methodology and samples laboratory analyses for metals. These revisions were recommended By MDE and included changes in collecting samples from “Three Well Volumes” to “Low Flow”. The main reason for this change was to minimize and reduce the samples turbidity level associated with the “Three Well Volumes” method which could potentially contribute to higher levels of turbidity and consequently interfering with the accuracy of metal analyses.

A summary of the metals and other parameters (non-organic contaminants) laboratory results and statistical analysis for this reporting period are included below. Please refer to attached tables in “Appendix D” and statistical analysis in “Appendix F” of this report for additional information on metals and other water quality parameter results.

- Twenty-four (24) metals (total and dissolved) were identified as having increasing statistical trends and nineteen (19) of the monitoring wells had one (1) or more metals with increasing statistical trends.
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- A total of 5 metals and other non-organic contaminants exceeded the recommended MCL in the following monitoring locations:
 - **Pre-existing monitoring wells:** OB11 (1 exceedance) and OB102 (1 exceedance).
 - **Monitoring wells installed in 2010:** MW2A (1 exceedance), MW06 (1 exceedance), and MW13A (1 exceedance).
 - **Stream Locations:** No exceedances.

The following include a summary of these 5 metals and non-organic contaminants exceeding the recommended MCLs:

- Arsenic with a recommended MCL of 0.01 mg/l was exceeded in samples collected from OB102 at 0.012 mg/l concentration.
- Cadmium with a recommended MCL of 0.005 mg/l was exceeded in sample collected from OB11 at 0.011 mg/l concentration.
- Chromium with a recommended MCL of 0.1 mg/l was exceeded in samples collected from OB02A at 0.27 mg/l and MW06 at 0.53 mg/l concentrations.
- Mercury with a recommended MCL of 0.002 mg/l was exceeded in a sample collected from OB13A with 0.0031 mg/l concentration.

As part of a recent study (Nature and Extend Study) under the guidance of MDE, the County also collected filtered samples to evaluate turbidity and its potential interferences to metals analysis. For this sampling event, only two samples exceeded the MCL concentrations in filtered samples. Cadmium with a recommended MCL of 0.005 mg/l was exceeded in filtered sample collected from OB11 at 0.011 mg/l concentration. As indicated above, the Cadmium concentrations exceeding the recommended MCL are identical for both filtered and unfiltered samples collected from the same monitoring location (OB11). Also, Chromium concentrations in both filter and unfiltered samples collected from MW06 exceeded the recommended MCL of 0.1 mg/l even though the Chromium concentration exceeding the MCL was reduced from 0.53 mg/l in unfiltered sample to 0.21 mg/l in filtered sample. Mercury and Arsenic concentrations were not detectable in filtered samples collected from the same monitoring locations where MCL exceedances were recorded for unfiltered samples. These include unfiltered samples collected from OB102 for Arsenic and OB13A for Mercury.

In comparing the sample turbidity measurements obtained for this reporting period through “Low Flow” to the previous sample turbidity levels obtained through the “Three Well Volumes”, the effectiveness of the “Low Flow” technique in reducing the samples turbidity level seem to be more noticeable in samples collected from monitoring wells with historically higher turbidities. However, in comparing the obtained metal results using the “Low Flow” sampling method to prior results which were obtained through the “Three Well Volume” sampling, it appears that the Low Flow methodology has an overall effectiveness in reducing the samples turbidity level as indicated in Table-B, Appendix-D of this report. Please refer to Appendix D (Tables of Metals) for additional information on both the most recent and historical sampling results for metals. The County intends to continue to conduct the sampling through “Low Flow” methodology to collect additional data for further evaluation.

3. Physical Water Quality Measurements:

Additional physical water quality parameter measurements and analysis were conducted during the latest monitoring period and the results are included in this report. These water quality parameters are based on the monitoring requirements specified in the approved G&SWM Plan and include the followings:

Alkalinity	Ammonia
Calcium	Chloride
Nitrate	pH
Potassium	Sodium
Specific Conductance	Sulfate
Total Dissolved Solids (TDS)	Turbidity

Results for the above water quality parameters are included in Appendix D, Tables 3 and 4 of this report.

4. Groundwater Elevations and Flow:

The groundwater elevation measurements of all the monitoring wells for the past monitoring events are included in Table-5 of this report. The results obtained from all the pre-existing and monitoring wells installed in 2010 indicate that the overall average groundwater elevation at Gude Landfill has decreased by 2.8 ft. from March to September 2015. Based on the groundwater elevation measurements collected from all (36) monitoring wells around the perimeter of the landfill, it appears that the groundwater flow at Gude Landfill is consistent with the topography of the Landfill itself. The groundwater appears to be flowing outward from the center toward the edges of the landfill. These outward flow directions seem to be more distinct on the southern and eastern portion of the landfill with minor flow components to the north and northeast. In general, the groundwater flow appears to basically follow the direction of surface water around the Gude Landfill.

5. Conclusions/Trend Analysis:

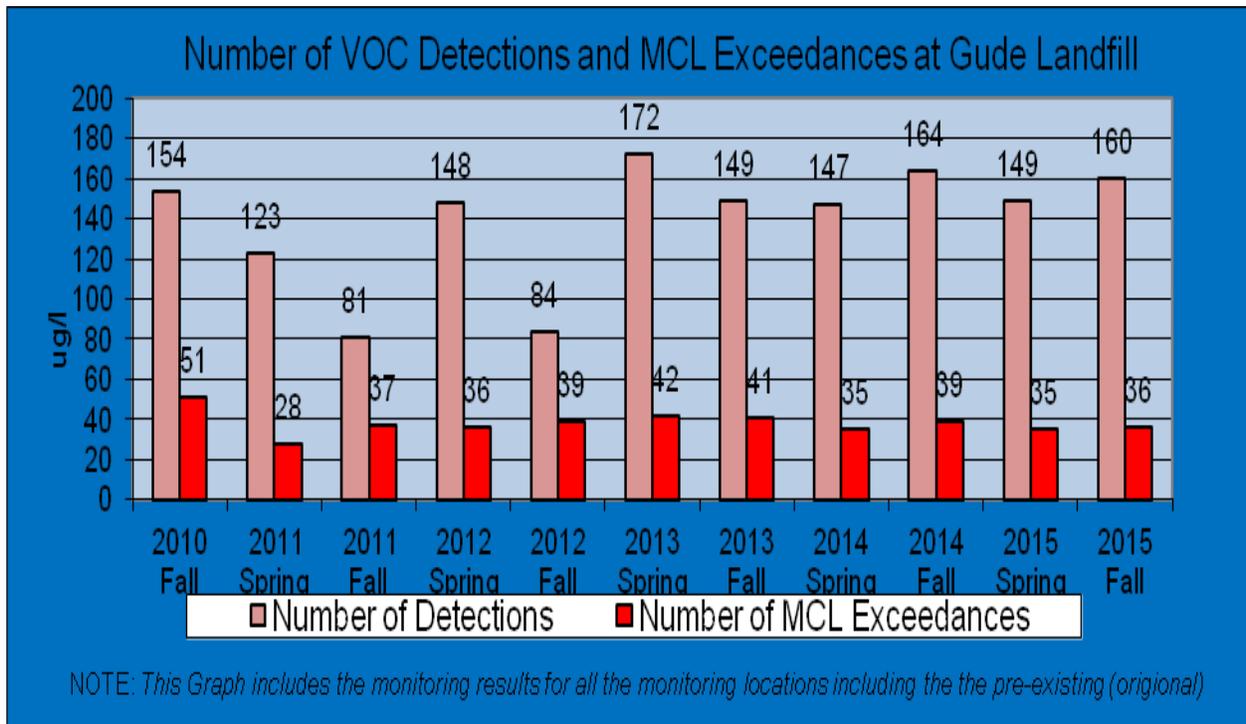
Results obtained from the latest monitoring activities (Spring 2015) are similar and comparable to those collected from prior monitoring results for the past several years. Major findings indicate that:

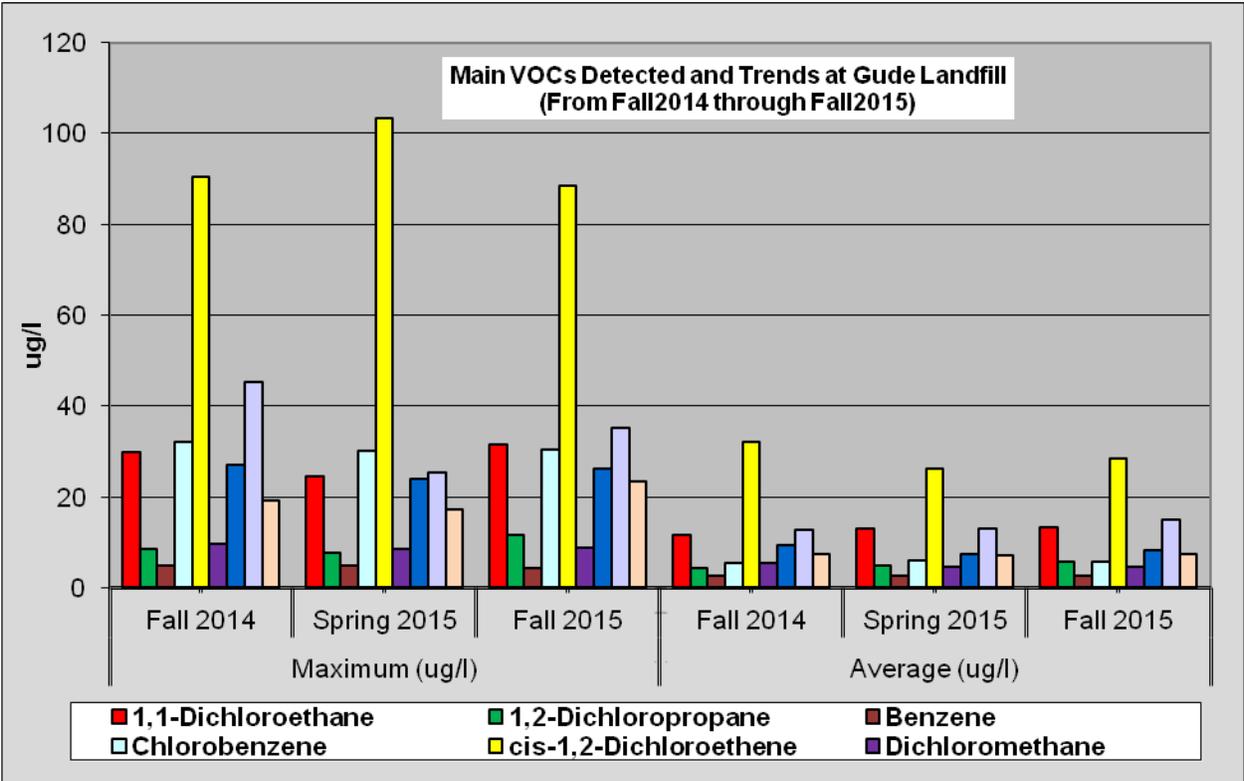
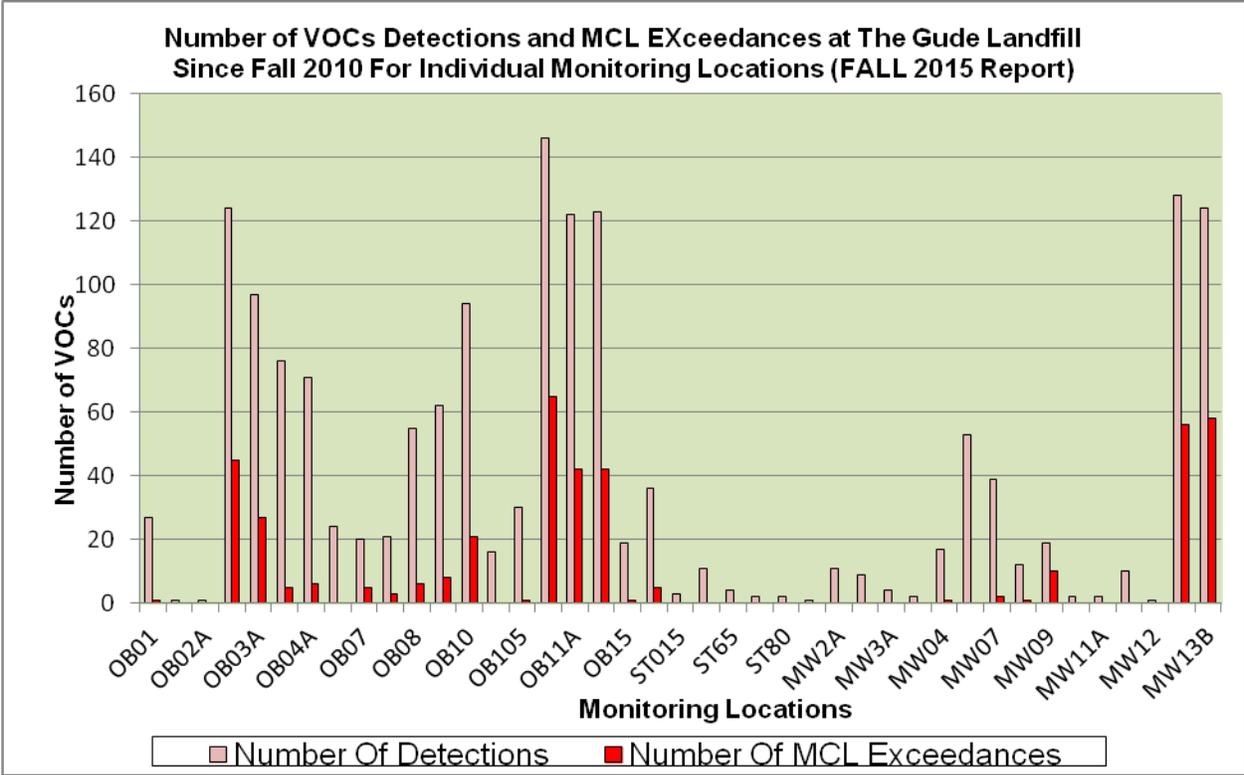
- I. There are indications of some low level groundwater and surface water contamination in the vicinity of Gude Landfill including multiple MCL exceedances.
- II. Detected contaminants at Gude Landfill mainly involve chlorinated solvent degradation products including 1,1-Dichloroethane, 1,2-Dichloropropane, cis-1,2-Dichloroethene, Tetrachloroethene, Trichloroethene, and Vinyl Chloride.
- III. Historically most of the contaminants and MCL exceedances have been detected at OB11/OB11A located on the south side (front side) of the landfill and observation wells OB03/OB03A and MW13A/MW13B on the north side (back side) of the landfill.

To provide an overall perspective on the quality of groundwater and surface water around the Gude Landfill, a summary of statistical trend analyses and observations are provided below and are included in Appendix C of this report. Please refer to the attached tables and diagrams for

additional information.

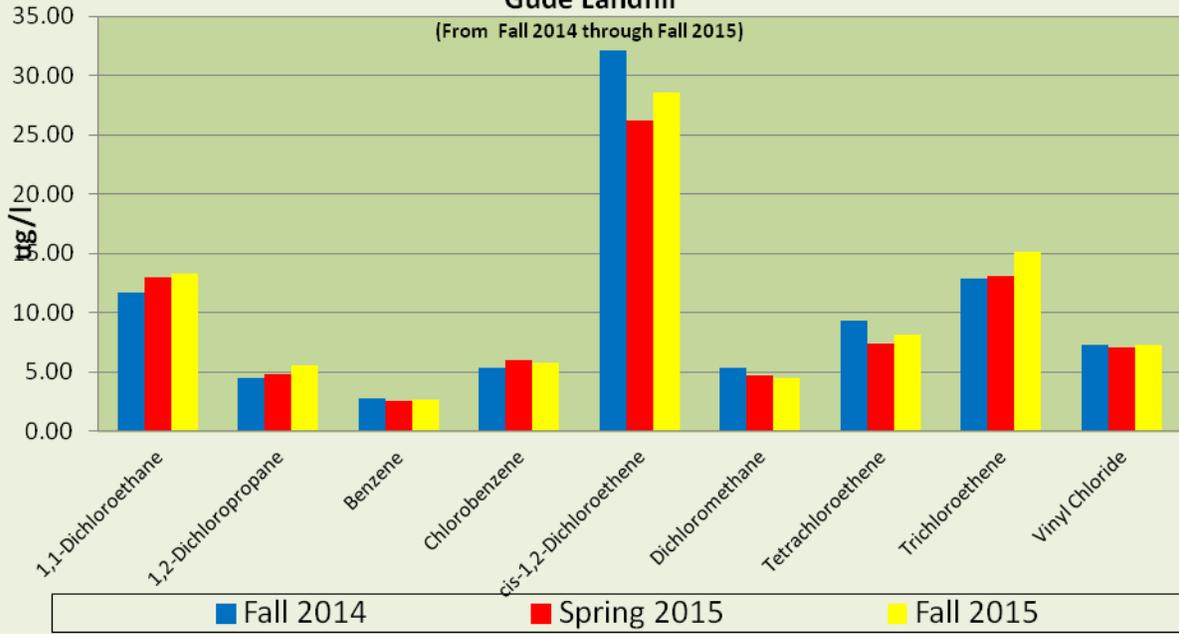
- Groundwater flow around the landfill appears to follow the general topography of the area where the landfill is located and it follows the general surface water flow direction. The overall surface water flow in the area is towards the east and south away from the landfill.
- Most of the detected groundwater contaminants at Gude Landfill are Volatile Organic Compounds (VOCs). These low levels of VOCs detected in groundwater are generally not transported to surface waters.
- The overall number of detections per year has remained relatively constant over the past 10 year time period.
- While some detected VOC concentrations (1,2-Dichloropropane in OB03) appear to be trending upwards, the concentration for other VOC (Tetrachloroethene in OB03) seem to be decreasing over the same period suggesting an ongoing VOC degradation process. Contaminants at Gude Landfill mainly involve chlorinated solvent degradation products including 1,1-Dichloroethane, 1,2-Dichloropropane, cis-1,2-Dichloroethene, Tetrachloroethene, Trichloroethene, and Vinyl Chloride.
- Since April 2001, most of all detections exceeding MCL have occurred in observation wells located on the northern and southern part of the landfill which includes OB11/OB11A located on the south side (front side) of the landfill and observation wells OB03/OB03A and MW13A/MW13B on the north side (back side) of the landfill.





Average Concentrations of Main VOCs Detected On Regular Basis At The Gude Landfill

(From Fall 2014 through Fall 2015)



Appendix A

Gude Landfill Aerial Photo and Sample

Locations

Appendix B

Tables of Volatile Organic Compounds

Results in ($\mu\text{g/l}$)

TABAL 1 - Volatile Organic Compounds

	Parameter	OB01	OB02	OB02A	OB03	OB03A	OB04	OB04A	OB06	OB07
FALL 2015	1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
	1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
	1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
	1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
	1,1-Dichloroethane	ND	ND	ND	31.5	19.5	ND	ND	ND	ND
	1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND
	1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND
	1,2-Dibromo-3-chloropropan	ND	ND	ND	ND	ND	ND	ND	ND	ND
	1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
	1,2-Dichlorobenzene	ND	ND	ND	1.51	ND	ND	ND	ND	ND
	1,2-Dichloroethane	ND	ND	ND	4.29	2.37	ND	ND	ND	ND
	1,2-Dichloropropane	ND	ND	ND	9.63	5.64	ND	ND	ND	ND
	1,4-Dichlorobenzene	ND	ND	ND	14	8.08	5.85	7.66	1.35	ND
	2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND
	2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4-Methyl-2-Pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Acrylonitrile	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Benzene	ND	ND	ND	4.27	2.32	1.86	1.86	ND	ND
	Bromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Carbon disulfide	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Carbon Tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Chlorobenzene	ND	ND	ND	1.95	1.62	1.53	1.33	1.3	ND
	Chloroethane	ND	ND	ND	1.1	ND	ND	ND	ND	ND
	Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
	cis-1,2-Dichloroethene	1.63	ND	ND	88.5	53.2	13.3	17.3	1.21	1.64
	cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Dibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Dichloromethane	ND	ND	ND	ND	ND	1.8	3.43	ND	ND
	Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Methyl Iodide	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Methyl Tertiary Butyl Ether	ND	ND	ND	ND	ND	ND	ND	ND	ND
	ortho-Xylene	ND	ND	ND	ND	ND	ND	ND	ND	ND
	para-Xylene & meta-Xylene	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	1.45	1.36	ND	1.14	
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	
trans-1,2-Dichloroethene	ND	ND	ND	6.41	3.83	ND	ND	ND	ND	
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	
trans-1,4-Dichloro-2-buten	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Trichloroethene	ND	ND	ND	35.2	20.7	1.49	1.63	ND	ND	
Trichlorofluoromethane	ND	ND	ND	1.45	ND	ND	ND	ND	ND	
Vinyl Acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Vinyl Chloride	ND	ND	ND	12.8	8.16	1.41	1.98	ND	ND	
Xylenes (Total)	NT	NT	NT	NT	NT	NT	NT	NT	NT	

NT: Not Tested, NS: Not Sampled, ND: Not Detected,

Note: MCL exceedances are indicted in Red

Note: Stream Monitoring ocations ST015 and ST065 were dried and not sampled

TABAL 1 - Volatile Organic Compounds

	Parameter	OB07A	OB08	OB08A	OB10	OB102	OB105	OB11	OB11A	OB12
FALL 2015	1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
	1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
	1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
	1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
	1,1-Dichloroethane	ND	ND	ND	3.45	ND	ND	18.1	15.1	18.6
	1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND
	1,2,3-Trichloropropane	ND	ND	ND	ND	ND	ND	ND	ND	ND
	1,2-Dibromo-3-chloropropan	ND	ND	ND	ND	ND	ND	ND	ND	ND
	1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
	1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND	2.89	2.05	ND
	1,2-Dichloroethane	ND	ND	ND	1.01	ND	ND	3.42	2.68	1.78
	1,2-Dichloropropane	ND	1.02	2.06	4.26	ND	ND	5.53	4.7	11.6
	1,4-Dichlorobenzene	ND	2.39	3.92	10.4	1.62	2.37	16.3	12.2	10
	2-Butanone	ND	ND	ND	ND	ND	ND	ND	ND	ND
	2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4-Methyl-2-Pentanone	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Acrylonitrile	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Benzene	ND	ND	1.03	2.43	ND	ND	4.32	2.47	4.41
	Bromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Bromoform	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Bromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Carbon disulfide	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Carbon Tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Chlorobenzene	ND	4.01	7.05	3.46	2.74	ND	30.3	20.2	3.38
	Chloroethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Chloroform	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Chloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
	cis-1,2-Dichloroethene	1.73	10.4	11.9	46.1	ND	5.54	79	74.2	43.2
	cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Dibromomethane	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Dichloromethane	ND	ND	ND	ND	ND	ND	8.71	ND	4.73
	Ethylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Methyl Iodide	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Methyl Tertiary Butyl Ether	ND	ND	ND	ND	ND	ND	ND	ND	ND
	ortho-Xylene	ND	ND	ND	ND	ND	ND	ND	ND	ND
	para-Xylene & meta-Xylene	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Styrene	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1.43	ND	ND	ND	ND	ND	21.7	6.78	26.2	
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	
trans-1,2-Dichloroethene	ND	ND	ND	3.05	ND	ND	3.79	2.93	2.65	
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	
trans-1,4-Dichloro-2-buten	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Trichloroethene	ND	ND	ND	15.6	ND	ND	26.3	18.6	28.9	
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	1.6	ND	2.47	
Vinyl Acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Vinyl Chloride	ND	1.55	2.6	23.5	ND	ND	14.6	14	3.84	
Xylenes (Total)	NT	NT	NT	NT	NT	NT	NT	NT	NT	

NT: Not Tested, NS: Not Sampled, ND: Not Detected,

Note: MCL exceedances are indicted in Red

Note: Stream Monitoring ocations ST015 and ST065 were dried and not sampled

TABAL 1 - Volatile Organic Compounds

	Parameter	OB15	OB25	ST015	ST120	ST65	ST70	ST80	MW1B	MW2A
FALL 2015	1,1,1,2-Tetrachloroethane	ND	ND	NS	ND	NS	ND	ND	ND	ND
	1,1,1-Trichloroethane	ND	ND	NS	ND	NS	ND	ND	ND	ND
	1,1,2,2-Tetrachloroethane	ND	ND	NS	ND	NS	ND	ND	ND	ND
	1,1,2-Trichloroethane	ND	ND	NS	ND	NS	ND	ND	ND	ND
	1,1-Dichloroethane	1	ND	NS	ND	NS	ND	ND	ND	ND
	1,1-Dichloroethene	ND	ND	NS	ND	NS	ND	ND	ND	ND
	1,2,3-Trichloropropane	ND	ND	NS	ND	NS	ND	ND	ND	ND
	1,2-Dibromo-3-chloropropan	ND	ND	NS	ND	NS	ND	ND	ND	ND
	1,2-Dibromoethane	ND	ND	NS	ND	NS	ND	ND	ND	ND
	1,2-Dichlorobenzene	ND	ND	NS	ND	NS	ND	ND	ND	ND
	1,2-Dichloroethane	ND	ND	NS	ND	NS	ND	ND	ND	ND
	1,2-Dichloropropane	ND	ND	NS	ND	NS	ND	ND	ND	ND
	1,4-Dichlorobenzene	ND	1.15	NS	ND	NS	ND	ND	ND	ND
	2-Butanone	ND	ND	NS	ND	NS	ND	ND	ND	ND
	2-Hexanone	ND	ND	NS	ND	NS	ND	ND	ND	ND
	4-Methyl-2-Pentanone	ND	ND	NS	ND	NS	ND	ND	ND	ND
	Acetone	ND	ND	NS	ND	NS	ND	ND	ND	ND
	Acrylonitrile	ND	ND	NS	ND	NS	ND	ND	ND	ND
	Benzene	ND	ND	NS	ND	NS	ND	ND	ND	ND
	Bromochloromethane	ND	ND	NS	ND	NS	ND	ND	ND	ND
	Bromodichloromethane	ND	ND	NS	ND	NS	ND	ND	ND	ND
	Bromoform	ND	ND	NS	ND	NS	ND	ND	ND	ND
	Bromomethane	ND	ND	NS	ND	NS	ND	ND	ND	ND
	Carbon disulfide	ND	ND	NS	ND	NS	ND	ND	ND	ND
	Carbon Tetrachloride	ND	ND	NS	ND	NS	ND	ND	ND	ND
	Chlorobenzene	ND	2.15	NS	ND	NS	ND	ND	ND	ND
	Chloroethane	ND	ND	NS	ND	NS	ND	ND	ND	ND
	Chloroform	ND	ND	NS	ND	NS	ND	ND	ND	ND
	Chloromethane	ND	ND	NS	ND	NS	ND	ND	ND	ND
	cis-1,2-Dichloroethene	ND	7.14	NS	1.13	NS	ND	ND	ND	ND
	cis-1,3-Dichloropropene	ND	ND	NS	ND	NS	ND	ND	ND	ND
	Dibromochloromethane	ND	ND	NS	ND	NS	ND	ND	ND	ND
	Dibromomethane	ND	ND	NS	ND	NS	ND	ND	ND	ND
	Dichloromethane	ND	ND	NS	ND	NS	ND	ND	ND	ND
	Ethylbenzene	ND	ND	NS	ND	NS	ND	ND	ND	ND
	Methyl Iodide	ND	ND	NS	ND	NS	ND	ND	ND	ND
	Methyl Tertiary Butyl Ether	ND	ND	NS	ND	NS	ND	ND	ND	ND
	ortho-Xylene	ND	ND	NS	ND	NS	ND	ND	ND	ND
	para-Xylene & meta-Xylene	ND	ND	NS	ND	NS	ND	ND	ND	ND
	Styrene	ND	ND	NS	ND	NS	ND	ND	ND	ND
Tetrachloroethene	ND	ND	NS	ND	NS	ND	ND	ND	2.02	
Toluene	ND	ND	NS	ND	NS	ND	ND	ND	ND	
trans-1,2-Dichloroethene	ND	ND	NS	ND	NS	ND	ND	ND	ND	
trans-1,3-Dichloropropene	ND	ND	NS	ND	NS	ND	ND	ND	ND	
trans-1,4-Dichloro-2-buten	ND	ND	NS	ND	NS	ND	ND	ND	ND	
Trichloroethene	ND	2.07	NS	ND	NS	ND	ND	ND	ND	
Trichlorofluoromethane	ND	ND	NS	ND	NS	ND	ND	ND	ND	
Vinyl Acetate	ND	ND	NS	ND	NS	ND	ND	ND	ND	
Vinyl Chloride	ND	2.78	NS	ND	NS	ND	ND	ND	ND	
Xylenes (Total)	NT	NT	NS	NT	NS	NT	NT	NT	NT	

NT: Not Tested, NS: Not Sampled, ND: Not Detected,

Note: MCL exceedances are indicted in Red

Note: Stream Monitoring ocations ST015 and ST065 were dried and not sampled

TABAL 1 - Volatile Organic Compounds

	Parameter	MW2B	MW3A	MW3B	MW04	MW06	MW07	MW08	MW09	MW10
FALL 2015	1,1,1,2-Tetrachloroethane	ND								
	1,1,1-Trichloroethane	ND								
	1,1,2,2-Tetrachloroethane	ND								
	1,1,2-Trichloroethane	ND								
	1,1-Dichloroethane	ND	ND	ND	ND	1.15	ND	ND	ND	ND
	1,1-Dichloroethene	ND								
	1,2,3-Trichloropropane	ND								
	1,2-Dibromo-3-chloropropan	ND								
	1,2-Dibromoethane	ND								
	1,2-Dichlorobenzene	ND								
	1,2-Dichloroethane	ND								
	1,2-Dichloropropane	ND								
	1,4-Dichlorobenzene	ND	ND	ND	ND	3.92	3.39	ND	ND	ND
	2-Butanone	ND								
	2-Hexanone	ND								
	4-Methyl-2-Pentanone	ND								
	Acetone	ND								
	Acrylonitrile	ND								
	Benzene	ND								
	Bromochloromethane	ND								
	Bromodichloromethane	ND								
	Bromoform	ND								
	Bromomethane	ND								
	Carbon disulfide	ND								
	Carbon Tetrachloride	ND								
	Chlorobenzene	ND	ND	ND	ND	7.9	ND	ND	ND	ND
	Chloroethane	ND								
	Chloroform	ND	1.28	ND						
	Chloromethane	ND								
	cis-1,2-Dichloroethene	ND	ND	ND	ND	12.9	1.54	ND	ND	ND
	cis-1,3-Dichloropropene	ND								
	Dibromochloromethane	ND								
	Dibromomethane	ND								
	Dichloromethane	ND								
	Ethylbenzene	ND								
	Methyl Iodide	ND								
	Methyl Tertiary Butyl Ether	ND	ND	ND	6.07	ND	ND	ND	ND	ND
	ortho-Xylene	ND								
	para-Xylene & meta-Xylene	ND								
	Styrene	ND								
Tetrachloroethene	2.28	ND	ND	ND	ND	2.22	ND	17.1	ND	
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	
trans-1,4-Dichloro-2-buten	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	2.03	ND	
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Vinyl Acetate	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Vinyl Chloride	ND	ND	ND	ND	1.42	ND	ND	ND	ND	
Xylenes (Total)	NT	NT	NT	NT	NT	NT	NT	NT	NT	

NT: Not Tested, NS: Not Sampled, ND: Not Detected,

Note: MCL exceedances are indicted in Red

Note: Stream Monitoring ocations ST015 and ST065 were dried and not sampled

TABAL 1 - Volatile Organic Compounds

	Parameter	MW11A	MW11B	MW12	MW13A	MW13B
FALL 2015	1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND
	1,1,1-Trichloroethane	ND	ND	ND	ND	ND
	1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND
	1,1,2-Trichloroethane	ND	ND	ND	ND	ND
	1,1-Dichloroethane	ND	ND	ND	13	12
	1,1-Dichloroethene	ND	ND	ND	ND	ND
	1,2,3-Trichloropropane	ND	ND	ND	ND	ND
	1,2-Dibromo-3-chloropropan	ND	ND	ND	ND	ND
	1,2-Dibromoethane	ND	ND	ND	ND	ND
	1,2-Dichlorobenzene	ND	ND	ND	ND	ND
	1,2-Dichloroethane	ND	ND	ND	2.06	2.19
	1,2-Dichloropropane	ND	ND	ND	5.41	6.03
	1,4-Dichlorobenzene	ND	ND	ND	3.68	7.91
	2-Butanone	ND	ND	ND	ND	ND
	2-Hexanone	ND	ND	ND	ND	ND
	4-Methyl-2-Pentanone	ND	ND	ND	ND	ND
	Acetone	ND	ND	ND	ND	ND
	Acrylonitrile	ND	ND	ND	ND	ND
	Benzene	ND	ND	ND	1.71	2.96
	Bromochloromethane	ND	ND	ND	ND	ND
	Bromodichloromethane	ND	ND	ND	ND	ND
	Bromoform	ND	ND	ND	ND	ND
	Bromomethane	ND	ND	ND	ND	ND
	Carbon disulfide	ND	ND	ND	ND	ND
	Carbon Tetrachloride	ND	ND	ND	ND	ND
	Chlorobenzene	ND	ND	ND	1.28	1.75
	Chloroethane	ND	ND	ND	ND	ND
	Chloroform	ND	ND	ND	1.17	ND
	Chloromethane	ND	ND	ND	ND	ND
	cis-1,2-Dichloroethene	ND	1.15	ND	81.5	73.5
	cis-1,3-Dichloropropene	ND	ND	ND	ND	ND
	Dibromochloromethane	ND	ND	ND	ND	ND
	Dibromomethane	ND	ND	ND	ND	ND
	Dichloromethane	ND	ND	ND	3.63	4.71
	Ethylbenzene	ND	ND	ND	ND	ND
	Methyl Iodide	ND	ND	ND	ND	ND
	Methyl Tertiary Butyl Ether	ND	ND	ND	ND	ND
	ortho-Xylene	ND	ND	ND	ND	ND
	para-Xylene & meta-Xylene	ND	ND	ND	ND	ND
	Styrene	ND	ND	ND	ND	ND
Tetrachloroethene	ND	3.33	ND	11.9	15.2	
Toluene	ND	ND	ND	ND	ND	
trans-1,2-Dichloroethene	ND	ND	ND	2.57	2.89	
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	
trans-1,4-Dichloro-2-buten	ND	ND	ND	ND	ND	
Trichloroethene	ND	1.17	ND	21.8	20.7	
Trichlorofluoromethane	ND	ND	ND	ND	ND	
Vinyl Acetate	ND	ND	ND	ND	ND	
Vinyl Chloride	ND	ND	ND	6	7.37	
Xylenes (Total)	NT	NT	NT	NT	NT	

NT: Not Tested, NS: Not Sampled, ND: Not Detected,

Note: MCL exceedances are indicted in Red

Note: Stream Monitoring ocations ST015 and ST065 were dried and not sampled

TABLE 2: Volatile Organic Compounds - Historical Results

Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F
OB01	1,1,1,2-Tetrachloroethane	ND	NS	ND													
	1,1,1-Trichloroethane	ND	NS	ND													
	1,1,2,2-Tetrachloroethane	ND	NS	ND													
	1,1,2-Trichloroethane	ND	NS	ND													
	1,1-Dichloroethane	1.09	NS	1.02	1.85	0.75	1.33	ND	ND	ND	ND	1.09	ND	ND	ND	ND	ND
	1,1-Dichloroethene	ND	NS	ND	ND	ND	ND	1.1	ND								
	1,2,3-Trichloropropane	ND	NS	ND	NT	ND	ND	ND	ND	ND							
	1,2-Dibromo-3-chloropropan	ND	NS	ND													
	1,2-Dibromoethane	ND	NS	ND													
	1,2-Dichlorobenzene	ND	NS	ND	NT	1	1.48	ND	ND	ND	ND	ND	ND	NT	ND	ND	ND
	1,2-Dichloroethane	ND	NS	ND	ND	0.46	ND										
	1,2-Dichloropropane	ND	NS	ND	ND	0.59	ND										
	1,4-Dichlorobenzene	ND	NS	ND	1.94	2.81	3.19	ND	ND	1.9	ND	1.64	ND	ND	ND	ND	ND
	2-Butanone	NT	NT	NT	ND												
	2-Hexanone	NT	NT	NT	ND												
	4-Methyl-2-Pentanone	NT	NT	NT	ND												
	Acetone	NT	NT	NT	ND												
	Acrylonitrile	NT	NT	NT	ND												
	Benzene	ND	NS	ND	ND	0.39	ND										
	Bromochloromethane	ND	NS	ND	NT	ND	NT	ND	ND	ND							
	Bromodichloromethane	ND	NS	ND													
	Bromoform	ND	NS	ND													
	Bromomethane	ND	NS	ND													
	Carbon disulfide	ND	NT	NT	ND												
	Carbon Tetrachloride	ND	NS	ND													
	Chlorobenzene	ND	NS	ND	1.03	1.57	1.43	ND	ND	1.3	ND	1.1	ND	ND	ND	ND	ND
	Chloroethane	ND	NS	ND	ND	0.25	ND										
	Chloroform	ND	NS	ND	ND	0.92	0.74	ND	ND	ND	ND	1.38	ND	ND	ND	ND	ND
	Chloromethane	ND	NS	ND													
	cis-1,2-Dichloroethene	14.78	NS	ND	11.8	ND	7.71	6.6	ND	6.2	ND	6.68	1.9	2.81	2.39	2.97	1.63
	cis-1,3-Dichloropropene	ND	NS	ND													
	Dibromochloromethane	ND	NS	ND													
	Dibromomethane	ND	NS	ND													
	Dichloromethane	ND	NS	ND													
	Ethylbenzene	ND	NS	ND	ND	0.36	ND										
	Methyl Iodide	NT	NT	NT	ND	5.12	ND	ND	ND	ND	ND						
	Methyl Tertiary Butyl Ether	ND	NS	ND	ND	ND	0.77	ND									
	ortho-Xylene	ND	NS	ND	ND	0.34	ND	NT	NT	NT	NT	ND	ND	ND	ND	ND	ND
	para-Xylene & meta-Xylene	ND	NS	ND	ND	ND	ND	NT	NT	NT	NT	ND	ND	ND	ND	ND	ND
	Styrene	ND	NS	ND													
	Tetrachloroethene	ND	NS	1.2	ND	0.51	ND										
	Toluene	ND	NS	ND													
	trans-1,2-Dichloroethene	ND	NS	ND	ND	0.67	0.70	ND									
	trans-1,3-Dichloropropene	ND	NS	ND													
	trans-1,4-Dichloro-2-buten	ND	NT	NT	ND												
Trichloroethene	ND	NS	ND	ND	0.85	ND											
Trichlorofluoromethane	ND	NS	ND														
Vinyl Acetate	NT	NT	NT	NT	0.01	ND											
Vinyl Chloride	1.31	NS	ND	ND	2.77	5.09	ND	ND	1.2	ND	1.3	ND	ND	ND	ND	ND	
Xylene (Total)	NT	NT	NT	NT	NT	NT	NT	ND	ND	ND	NT	NT	ND	NT	NT	NT	

NT: Not Tested, NS: Not Sampled, ND: Not Detected, S: Spring, F: Fall

Note: MCL exceedances are indicated in Red. Stream monitoring locations SW015 and SW65 were dried and not sampled.

TABLE 2: Volatile Organic Compounds - Historical Results

Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F	
OB02	1,1,1,2-Tetrachloroethane	ND																
	1,1,1-Trichloroethane	ND																
	1,1,2,2-Tetrachloroethane	ND																
	1,1,2-Trichloroethane	ND																
	1,1-Dichloroethane	ND																
	1,1-Dichloroethene	ND	ND															
	1,2,3-Trichloropropane	ND	NT	ND	ND	ND	ND	ND										
	1,2-Dibromo-3-chloropropan	ND	ND															
	1,2-Dibromoethane	ND	ND															
	1,2-Dichlorobenzene	ND	ND	ND	NT	ND	NT	ND	ND	ND								
	1,2-Dichloroethane	ND	ND															
	1,2-Dichloropropane	ND	ND															
	1,4-Dichlorobenzene	ND	ND	ND	ND	0.48	ND	ND										
	2-Butanone	NT	NT	NT	ND	ND												
	2-Hexanone	NT	NT	NT	ND	ND												
	4-Methyl-2-Pentanone	NT	NT	NT	ND	ND												
	Acetone	NT	NT	NT	ND	0.18	ND	14.5	ND									
	Acrylonitrile	NT	NT	NT	ND	ND												
	Benzene	ND	ND															
	Bromochloromethane	ND	ND	ND	NT	ND	NT	ND	ND	ND								
	Bromodichloromethane	ND	ND															
	Bromoform	ND	ND															
	Bromomethane	ND	ND															
	Carbon disulfide	ND	NT	NT	ND	ND												
	Carbon Tetrachloride	ND	ND															
	Chlorobenzene	ND	ND															
	Chloroethane	ND	ND															
	Chloroform	ND	ND															
	Chloromethane	ND	ND															
	cis-1,2-Dichloroethene	1.96	1.38	1.15	ND	ND												
	cis-1,3-Dichloropropene	ND	ND															
	Dibromochloromethane	ND	ND															
	Dibromomethane	ND	ND															
	Dichloromethane	ND	ND															
	Ethylbenzene	ND	ND															
	Methyl Iodide	NT	NT	NT	ND	ND												
	Methyl Tertiary Butyl Ether	ND	ND															
	ortho-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND	ND						
	para-Xylene & meta-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND	ND						
	Styrene	ND	ND															
	Tetrachloroethene	ND	ND															
	Toluene	ND	ND															
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
trans-1,4-Dichloro-2-buten	ND	NT	NT	ND														
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Vinyl Acetate	NT	NT	NT	NT	0.01	ND												
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Xylene (Total)	NT	NT	NT	NT	NT	NT	NT	ND	ND	ND	NT	NT	ND	NT	NT	NT	NT	

NT: Not Tested, NS: Not Sampled, ND: Not Detected, S: Spring, F: Fall

Note: MCL exceedances are indicated in Red. Stream monitoring locations SW015 and SW65 were dried and not sampled.

TABLE 2: Volatile Organic Compounds - Historical Results

Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F	
OB02A	1,1,1,2-Tetrachloroethane	ND																
	1,1,1-Trichloroethane	ND																
	1,1,2,2-Tetrachloroethane	ND																
	1,1,2-Trichloroethane	ND																
	1,1-Dichloroethane	ND																
	1,1-Dichloroethene	ND																
	1,2,3-Trichloropropane	ND	NT	NT	ND	ND	ND	ND										
	1,2-Dibromo-3-chloropropan	ND	ND															
	1,2-Dibromoethane	ND	ND															
	1,2-Dichlorobenzene	ND	ND	ND	NT	ND	NT	ND	ND	ND								
	1,2-Dichloroethane	ND	ND															
	1,2-Dichloropropane	ND	ND															
	1,4-Dichlorobenzene	ND	ND	ND	ND	0.33	ND	ND										
	2-Butanone	NT	NT	NT	ND	ND												
	2-Hexanone	NT	NT	NT	ND	ND												
	4-Methyl-2-Pentanone	NT	NT	NT	ND	ND												
	Acetone	NT	NT	NT	ND	ND												
	Acrylonitrile	NT	NT	NT	ND	ND												
	Benzene	ND	ND															
	Bromochloromethane	ND	ND	ND	NT	ND	NT	ND	ND	ND								
	Bromodichloromethane	ND	ND															
	Bromoform	ND	ND															
	Bromomethane	ND	ND															
	Carbon disulfide	ND	NT	NT	ND	ND												
	Carbon Tetrachloride	ND	ND															
	Chlorobenzene	ND	ND															
	Chloroethane	ND	ND															
	Chloroform	ND	ND															
	Chloromethane	ND	ND	ND	ND	ND	ND	1.5	ND	ND								
	cis-1,2-Dichloroethene	ND	6.87	9.19	ND	0.65	ND	ND										
	cis-1,3-Dichloropropene	ND	ND															
	Dibromochloromethane	ND	ND															
	Dibromomethane	ND	ND															
	Dichloromethane	ND	ND															
	Ethylbenzene	ND	ND															
	Methyl Iodide	NT	NT	NT	ND	ND												
	Methyl Tertiary Butyl Ether	ND	ND															
	ortho-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND	ND						
	para-Xylene & meta-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND	ND						
	Styrene	ND	ND															
	Tetrachloroethene	ND	ND															
	Toluene	ND	ND															
	trans-1,2-Dichloroethene	ND	ND															
	trans-1,3-Dichloropropene	ND	ND															
	trans-1,4-Dichloro-2-buten	ND	NT	NT	ND	ND												
Trichloroethene	ND	1.39	1.01	ND														
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Vinyl Acetate	NT	NT	NT	NT	ND													
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Xylene (Total)	NT	NT	NT	NT	NT	NT	NT	ND	ND	ND	NT							

NT: Not Tested, NS: Not Sampled, ND: Not Detected, S: Spring, F: Fall

Note: MCL exceedances are indicated in Red. Stream monitoring locations SW015 and SW65 were dried and not sampled.

TABLE 2: Volatile Organic Compounds - Historical Results

Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F
OB03	1,1,1,2-Tetrachloroethane	ND															
	1,1,1-Trichloroethane	ND															
	1,1,2,2-Tetrachloroethane	ND															
	1,1,2-Trichloroethane	ND															
	1,1-Dichloroethane	47.23	36.07	48.38	45	13.2	36.40	23	ND	23	34.4	34.3	37.8	18	29.8	24.6	31.5
	1,1-Dichloroethene	ND	ND	ND	ND	ND	0.71	ND									
	1,2,3-Trichloropropane	ND															
	1,2-Dibromo-3-chloropropan	ND	ND	ND	ND	ND	1.52	ND									
	1,2-Dibromoethane	ND															
	1,2-Dichlorobenzene	1.82	1.34	ND	NT	0.83	1.92	ND	ND	1.2	ND	1.47	1.57	NT	1.29	1.06	1.51
	1,2-Dichloroethane	4.98	4.09	4.81	ND	1.24	3.84	ND	6	ND	ND	3.68	2.61	1.87	3.74	2.69	4.29
	1,2-Dichloropropane	14.47	12.33	16.14	15.8	3.6	10.10	4.1	11	6.8	12.8	10.5	15.3	5.49	8.57	6.9	9.63
	1,4-Dichlorobenzene	7.97	ND	ND	13.6	11.7	11.30	ND	ND	9.7	16.6	12.4	18.2	8.08	12.2	8.84	14
	2-Butanone	NT	NT	NT	ND												
	2-Hexanone	NT	NT	NT	ND												
	4-Methyl-2-Pentanone	NT	NT	NT	ND												
	Acetone	NT	NT	NT	ND	0.12	ND	8.1	ND								
	Acrylonitrile	NT	NT	NT	ND												
	Benzene	4.62	3.2	5.53	4.56	1.83	4.24	ND	5.5	1.9	ND	3.44	5.38	1.32	4.18	1.62	4.27
	Bromochloromethane	ND	ND	ND	NT	ND	NT	ND	ND	ND							
	Bromodichloromethane	ND															
	Bromoform	ND															
	Bromomethane	ND															
	Carbon disulfide	ND	NT	NT	ND	ND	ND	3.9	ND								
	Carbon Tetrachloride	ND															
	Chlorobenzene	2.32	2.04	2.76	2.98	7.22	2.26	5.7	2.4	3.1	ND	2.04	2.43	1.8	1.79	1.35	1.95
	Chloroethane	1.23	1.19	1.61	1.55	0.79	1.51	ND	ND	ND	ND	1.2	ND	ND	ND	ND	1.1
	Chloroform	ND															
	Chloromethane	ND	ND	ND	ND	ND	ND	5.3	1.7	ND							
	cis-1,2-Dichloroethene	161.47	120.9	164.77	156	31.7	117.00	38	ND	71	94.9	97.1	126	54.7	86	74	88.5
	cis-1,3-Dichloropropene	ND															
	Dibromochloromethane	ND															
	Dibromomethane	ND															
	Dichloromethane	ND															
	Ethylbenzene	ND															
	Methyl Iodide	NT	NT	NT	ND												
	Methyl Tertiary Butyl Ether	ND	5.57	ND	2.05	ND	1.71	2.6	ND								
	ortho-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND						
	para-Xylene & meta-Xylene	1.33	ND	ND	ND	ND	ND	NT	NT	NT	ND						
	Styrene	ND															
	Tetrachloroethene	ND	ND	4.49	ND	ND	11.00	ND	6.2	ND	ND	2.39	ND	3.19	ND	ND	ND
	Toluene	2.46	ND	ND	1.49	ND											
	trans-1,2-Dichloroethene	8.87	12.43	11.02	9.59	3.11	7.01	6.3	14	4.8	7.24	6.92	3.98	3.72	6.61	4.59	6.41
	trans-1,3-Dichloropropene	ND															
	trans-1,4-Dichloro-2-buten	ND	NT	NT	ND												
	Trichloroethene	132.6	107.44	130.79	131	17.4	81.60	21	82	47	75.6	57.9	87.4	24.2	45.4	21.9	35.2
	Trichlorofluoromethane	ND	ND	ND	4.88	ND	ND	ND	8.3	ND	1.45						
Vinyl Acetate	NT	NT	NT	NT	0.01	ND											
Vinyl Chloride	23.16	17.61	29.48	30.5	7.84	28.00	11	41	14	17.5	17.4	16.8	8.89	18.2	11.1	12.8	
Xylene (Total)	NT	NT	NT	NT	NT	NT	ND	ND	ND	NT	NT	ND	NT	NT	NT	NT	

NT: Not Tested, NS: Not Sampled, ND: Not Detected, S: Spring, F: Fall

Note: MCL exceedances are indicated in Red. Stream monitoring locations SW015 and SW65 were dried and not sampled.

TABLE 2: Volatile Organic Compounds - Historical Results

Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F
OB03A	1,1,1,2-Tetrachloroethane	ND															
	1,1,1-Trichloroethane	ND															
	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F
	1,1,2-Trichloroethane	ND															
	1,1-Dichloroethane	50.9	41.01	46.99	25.3	3.23	32.40	ND	ND	11	30.5	12.5	32.5	7.46	21.2	3.77	19.5
	1,1-Dichloroethene	ND	ND	ND	ND	ND	0.57	ND									
	1,2,3-Trichloropropane	ND	NT	ND	ND	ND	ND										
	1,2-Dibromo-3-chloropropan	ND															
	1,2-Dibromoethane	ND															
	1,2-Dichlorobenzene	2	1.65	ND	NT	0.42	0.81	ND	NT	ND	ND						
	1,2-Dichloroethane	5.07	4.4	4.1	ND	ND	3.30	ND	3.7	ND	ND	1.47	2.76	ND	2.66	ND	2.37
	1,2-Dichloropropane	14.83	13.07	13.54	9.1	0.92	10.80	ND	8.1	2.9	10.5	3.67	12.8	2.25	6.24	ND	5.64
	1,4-Dichlorobenzene	7.67	ND	ND	12.6	5.92	9.28	ND	ND	6.3	14.1	5.64	16	3.82	9.01	2.09	8.08
	2-Butanone	NT	NT	NT	ND	0.6	ND										
	2-Hexanone	NT	NT	NT	ND												
	4-Methyl-2-Pentanone	NT	NT	NT	ND												
	Acetone	NT	NT	NT	ND	0.13	ND										
	Acrylonitrile	NT	NT	NT	ND												
	Benzene	4.47	5.44	4.08	4.19	1.2	4.06	ND	4.7	1.3	ND	1.51	4.53	ND	3.33	ND	2.32
	Bromochloromethane	ND	ND	ND	NT	ND	NT	ND	ND								
	Bromodichloromethane	ND															
	Bromoform	ND															
	Bromomethane	ND															
	Carbon disulfide	ND	NT	NT	ND												
	Carbon Tetrachloride	ND															
	Chlorobenzene	1.98	2.87	3.73	5.52	5.21	2.78	ND	3.3	3.4	ND	2.46	2.78	1.83	2.1	ND	1.62
	Chloroethane	1.43	1.38	1.69	1.21	0.33	1.31	ND	ND	ND	ND	1.43	ND	ND	ND	ND	
	Chloroform	ND															
	Chloromethane	ND	ND	ND	ND	ND	1.54	ND	1.5	ND							
	cis-1,2-Dichloroethene	168.82	141.19	137.52	84.9	6.23	98.10	11	ND	33	94.6	34.1	94.8	22.9	56.2	11.2	53.2
	cis-1,3-Dichloropropene	ND															
	Dibromochloromethane	ND															
	Dibromomethane	ND															
	Dichloromethane	ND	ND	ND	ND	ND	ND	2	ND								
	Ethylbenzene	ND															
	Methyl Iodide	NT	NT	NT	ND												
	Methyl Tertiary Butyl Ether	ND	ND	ND	1.39	1.15	ND										
	ortho-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND						
	para-Xylene & meta-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND						
	Styrene	ND															
	Tetrachloroethene	1.66	26.21	3.67	7.11	ND	17.80	ND	1.18	ND	ND						
	Toluene	1.05	ND														
trans-1,2-Dichloroethene	9.93	11.68	9.08	6.06	1.01	5.93	ND	9	2.3	6.13	2.69	5.83	1.46	4.06	ND	3.83	
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
trans-1,4-Dichloro-2-buten	ND	NT	NT	ND													
Trichloroethene	141.41	101.3	113.09	66.7	2.71	19.30	ND	56	18	64.8	18	64	4.7	27.2	1.87	20.7	
Trichlorofluoromethane	ND	ND	ND	3.08	ND	2.47	ND	6.5	ND								
Vinyl Acetate	NT	NT	NT	NT	0.01	ND	NT	ND									
Vinyl Chloride	23.11	22.43	27.36	22.9	1.99	23.50	ND	31	ND	15.8	7.33	12.5	4.26	11.7	2.07	8.16	
Xylene (Total)	NT	NT	NT	NT	NT	NT	ND	ND	ND	NT	NT	ND	NT	NT	NT	NT	

NT: Not Tested, NS: Not Sampled, ND: Not Detected, S: Spring, F: Fall

Note: MCL exceedances are indicated in Red. Stream monitoring locations SW015 and SW65 were dried and not sampled.

TABLE 2: Volatile Organic Compounds - Historical Results

Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F	
OB04	1,1,1,2-Tetrachloroethane	ND																
	1,1,1-Trichloroethane	ND																
	1,1,2,2-Tetrachloroethane	ND																
	1,1,2-Trichloroethane	ND																
	1,1-Dichloroethane	ND	ND	ND	ND	0.35	ND	22	ND	ND								
	1,1-Dichloroethene	ND	ND															
	1,2,3-Trichloropropane	ND	NT	ND	ND	ND	ND	ND										
	1,2-Dibromo-3-chloropropan	ND	ND	ND	ND	0.45	ND	ND										
	1,2-Dibromoethane	ND	ND															
	1,2-Dichlorobenzene	ND	ND	ND	NT	0.46	ND	ND	ND	ND	ND	ND	1.01	ND	NT	ND	ND	ND
	1,2-Dichloroethane	ND	ND															
	1,2-Dichloropropane	ND	ND	ND	ND	0.52	ND	ND	ND	ND	ND	ND	1.15	ND	ND	ND	ND	ND
	1,4-Dichlorobenzene	ND	ND	ND	6.06	5.92	2.91	ND	ND	5.9	5.7	14.7	5.2	5.82	5.31	5.97	5.85	5.85
	2-Butanone	NT	NT	NT	ND	0.41	0.65	ND	ND									
	2-Hexanone	NT	NT	NT	ND	ND												
	4-Methyl-2-Pentanone	NT	NT	NT	ND	ND												
	Acetone	NT	NT	NT	ND	0.49	11.90	6.6	ND	ND								
	Acrylonitrile	NT	NT	NT	ND	ND												
	Benzene	ND	1.21	1.68	1.62	1.6	2.04	2.2	ND	1.6	ND	3.73	1.54	1.61	1.73	1.98	1.86	1.86
	Bromochloromethane	ND	ND	ND	NT	ND	NT	ND	ND	ND								
	Bromodichloromethane	ND	ND															
	Bromoform	ND	ND															
	Bromomethane	ND	ND															
	Carbon disulfide	ND	NT	NT	ND	ND												
	Carbon Tetrachloride	ND	ND															
	Chlorobenzene	ND	ND	ND	1.09	1.18	0.90	ND	ND	1.4	ND	2.85	ND	1.38	1.39	1.56	1.53	1.53
	Chloroethane	ND	ND															
	Chloroform	ND	ND															
	Chloromethane	ND	ND	ND	ND	ND	ND	7.5	ND	ND								
	cis-1,2-Dichloroethene	6.45	15.43	18.92	17	16.8	8.32	67	ND	14	12.4	27.7	ND	12.4	12.4	13.2	13.3	13.3
	cis-1,3-Dichloropropene	ND	ND															
	Dibromochloromethane	ND	ND															
	Dibromomethane	ND	ND															
	Dichloromethane	ND	ND	1.42	1.93	1.72	1.03	7.7	ND	ND	ND	3.48	1.73	1.65	1.66	2.06	1.8	1.8
	Ethylbenzene	ND	ND															
	Methyl Iodide	NT	NT	NT	ND	ND												
	Methyl Tertiary Butyl Ether	ND	ND															
	ortho-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND	ND						
	para-Xylene & meta-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND	ND						
	Styrene	ND	ND															
	Tetrachloroethene	ND	1.34	1.99	1.25	1.69	0.70	13	ND	2	ND	3.93	1.24	1.63	1.39	1.59	1.45	1.45
	Toluene	ND	ND															
	trans-1,2-Dichloroethene	ND	ND	ND	ND	0.45	ND	5.4	ND	ND								
	trans-1,3-Dichloropropene	ND	ND															
	trans-1,4-Dichloro-2-buten	ND	NT	NT	ND	ND												
Trichloroethene	ND	1.4	1.82	1.66	1.51	1.08	17	ND	1.6	ND	3.42	1.76	1.38	1.35	1.36	1.49	1.49	
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	3.8	ND										
Vinyl Acetate	NT	NT	NT	NT	ND													
Vinyl Chloride	ND	ND	1.47	1.53	1.26	2.16	ND	ND	ND	ND	3.03	1.71	1.4	1.49	1.57	1.41	1.41	
Xylene (Total)	NT	NT	NT	NT	NT	NT	NT	ND	ND	ND	NT	NT	ND	NT	NT	NT	NT	

NT: Not Tested, NS: Not Sampled, ND: Not Detected, S: Spring, F: Fall

Note: MCL exceedances are indicated in Red. Stream monitoring locations SW015 and SW65 were dried and not sampled.

TABLE 2: Volatile Organic Compounds - Historical Results

Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F	
OB04A	1,1,1,2-Tetrachloroethane	ND																
	1,1,1-Trichloroethane	ND																
	1,1,2,2-Tetrachloroethane	ND																
	1,1,2-Trichloroethane	ND																
	1,1-Dichloroethane	ND																
	1,1-Dichloroethene	ND	ND															
	1,2,3-Trichloropropane	ND	NT	ND	ND	ND	ND	ND										
	1,2-Dibromo-3-chloropropan	ND	ND															
	1,2-Dibromoethane	ND	ND															
	1,2-Dichlorobenzene	ND	ND	ND	NT		0.47	ND	ND	ND	ND	ND	1.06	ND	NT	ND	ND	ND
	1,2-Dichloroethane	ND	ND															
	1,2-Dichloropropane	ND	ND	ND	ND		0.57	0.51	ND	ND	ND	ND	1.33	ND	ND	ND	ND	ND
	1,4-Dichlorobenzene	ND	4.46	ND	7.33	6.97	4.66	ND	ND	7.6	6.94	15.9	6.23	7.07	6.83	7.95	7.66	
	2-Butanone	NT	NT	NT	ND	ND	0.78	ND	ND									
	2-Hexanone	NT	NT	NT	ND	ND												
	4-Methyl-2-Pentanone	NT	NT	NT	ND	ND												
	Acetone	NT	NT	NT	ND	ND	18.60	ND	ND									
	Acrylonitrile	NT	NT	NT	ND	ND												
	Benzene	1.4	1.32	1.65	1.68	1.65	2.45	ND	2.1	1.6	ND	3.5	1.94	1.57	1.7	1.97	1.86	
	Bromochloromethane	ND	ND	ND	NT	ND	NT	ND	ND	ND								
	Bromodichloromethane	ND	ND															
	Bromoform	ND	ND															
	Bromomethane	ND	ND															
	Carbon disulfide	ND	NT	NT	ND	ND												
	Carbon Tetrachloride	ND	ND															
	Chlorobenzene	ND	ND	1.07	1.14	1.14	0.87	ND	ND	1.3	ND	2.56	ND	1.25	1.37	1.34	1.33	
	Chloroethane	ND	ND															
	Chloroform	ND	ND															
	Chloromethane	ND	ND															
	cis-1,2-Dichloroethene	23.78	20.7	24.4	21.8	21.7	8.54	ND	ND	20	16.4	36.8	19.4	16	15.6	17.8	17.3	
	cis-1,3-Dichloropropene	ND	ND															
	Dibromochloromethane	ND	ND															
	Dibromomethane	ND	2.44	ND	ND													
	Dichloromethane	2.45	ND	2.98	3.38	3.18	3.39	ND	4.4	ND	ND	6.57	ND	2.88	2.8	2.74	3.43	
	Ethylbenzene	ND	ND															
	Methyl Iodide	NT	NT	NT	ND	ND												
	Methyl Tertiary Butyl Ether	ND	ND															
	ortho-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND	ND						
	para-Xylene & meta-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND	ND						
	Styrene	ND	ND															
	Tetrachloroethene	1.42	1.34	1.7	1.23	1.52	0.60	ND	1.3	1.9	ND	3.36	ND	1.35	1.14	1.39	1.36	
	Toluene	ND	ND															
	trans-1,2-Dichloroethene	ND	ND	ND	ND	0.55	ND	ND	2.2	ND	ND	1.22	ND	ND	ND	ND	ND	ND
	trans-1,3-Dichloropropene	ND	ND															
	trans-1,4-Dichloro-2-buten	ND	NT	NT	ND	ND												
Trichloroethene	1.96	1.45	1.87	1.83	1.71	1.07	ND	1.3	1.9	ND	3.39	ND	1.47	1.27	1.47	1.63		
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Vinyl Acetate	NT	NT	NT	NT	0.01	ND												
Vinyl Chloride	1.37	1.39	1.65	2.12	1.83	2.78	ND	ND	ND	ND	4.37	2.26	1.78	2.35	2.06	1.98		
Xylene (Total)	NT	NT	NT	NT	NT	NT	ND	ND	ND	NT	NT	ND	NT	NT	NT	NT	NT	

NT: Not Tested, NS: Not Sampled, ND: Not Detected, S: Spring, F: Fall

Note: MCL exceedances are indicated in Red. Stream monitoring locations SW015 and SW65 were dried and not sampled.

TABLE 2: Volatile Organic Compounds - Historical Results

Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F
OB06	1,1,1,2-Tetrachloroethane	ND															
	1,1,1-Trichloroethane	ND															
	1,1,2,2-Tetrachloroethane	ND															
	1,1,2-Trichloroethane	ND															
	1,1-Dichloroethane	ND															
	1,1-Dichloroethene	ND															
	1,2,3-Trichloropropane	ND	NT	ND	ND	ND	ND										
	1,2-Dibromo-3-chloropropan	ND															
	1,2-Dibromoethane	ND															
	1,2-Dichlorobenzene	ND	ND	ND	NT	ND	NT	ND	ND								
	1,2-Dichloroethane	ND															
	1,2-Dichloropropane	ND															
	1,4-Dichlorobenzene	1.03	ND	ND	1.43	ND	0.93	ND	ND	7	ND	1.66	1.21	1.42	1.26	1.35	1.12
	2-Butanone	NT	NT	NT	ND	0.57	ND										
	2-Hexanone	NT	NT	NT	ND												
	4-Methyl-2-Pentanone	NT	NT	NT	ND												
	Acetone	NT	NT	NT	ND	0.14	ND										
	Acrylonitrile	NT	NT	NT	ND												
	Benzene	ND															
	Bromochloromethane	ND	ND	ND	NT	ND	NT	ND	ND	ND							
	Bromodichloromethane	ND															
	Bromoform	ND															
	Bromomethane	ND															
	Carbon disulfide	NT	NT	NT	ND												
	Carbon Tetrachloride	ND															
	Chlorobenzene	ND	ND	ND	ND	0.66	0.56	ND	ND	ND	ND	1.4	1.21	1.41	1.05	1.3	1.3
	Chloroethane	ND															
	Chloroform	ND															
	Chloromethane	ND	ND	ND	ND	ND	0.91	ND									
	cis-1,2-Dichloroethene	2.31	2.39	2.55	2.12	1.82	1.64	ND	ND	1.6	ND	1.65	ND	1.39	1.28	1.21	1.21
	cis-1,3-Dichloropropene	ND															
	Dibromochloromethane	ND															
	Dibromomethane	ND															
	Dichloromethane	ND															
	Ethylbenzene	ND															
	Methyl Iodide	NT	NT	NT	ND												
	Methyl Tertiary Butyl Ether	ND															
	ortho-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND						
	para-Xylene & meta-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND						
	Styrene	ND															
	Tetrachloroethene	ND	1.01	ND	ND	0.68	ND	ND	ND	ND	ND	1.16	ND	ND	ND	ND	ND
	Toluene	ND															
	trans-1,2-Dichloroethene	ND															
	trans-1,3-Dichloropropene	ND															
	trans-1,4-Dichloro-2-buten	NT	NT	NT	ND												
Trichloroethene	ND	ND	ND	ND	0.36	ND											
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Vinyl Acetate	NT	NT	NT	NT	ND												
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Xylene (Total)	NT	NT	NT	NT	NT	NT	ND	ND	ND	NT	NT	ND	NT	NT	NT	NT	

NT: Not Tested, NS: Not Sampled, ND: Not Detected, S: Spring, F: Fall

Note: MCL exceedances are indicated in Red. Stream monitoring locations SW015 and SW65 were dried and not sampled.

TABLE 2: Volatile Organic Compounds - Historical Results

Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F		
OB07	1,1,1,2-Tetrachloroethane	ND	NS	ND															
	1,1,1-Trichloroethane	ND	NS	ND															
	1,1,2,2-Tetrachloroethane	ND	NS	ND															
	1,1,2-Trichloroethane	ND	NS	ND															
	1,1-Dichloroethane	ND	NS	ND															
	1,1-Dichloroethene	ND	NS	ND	ND	ND	ND	ND		19	ND								
	1,2,3-Trichloropropane	ND	NS	ND	NT	ND	ND	ND	ND										
	1,2-Dibromo-3-chloropropan	ND	NS	ND	ND		0.54	ND											
	1,2-Dibromoethane	ND	NS	ND	ND		0.47	ND	NT	ND	ND								
	1,2-Dichloroethane	ND	NS	ND															
	1,2-Dichloropropane	ND	NS	ND	ND	ND	ND	ND		5.3	ND								
	1,4-Dichlorobenzene	ND	NS	ND	ND		0.58	ND											
	2-Butanone	NT	NT	NT	ND														
	2-Hexanone	NT	NT	NT	ND														
	4-Methyl-2-Pentanone	NT	NT	NT	ND														
	Acetone	NT	NT	NT	ND														
	Acrylonitrile	NT	NT	NT	ND														
	Benzene	ND	NS	ND	ND	ND	ND	ND		7.9	ND								
	Bromochloromethane	ND	NS	ND	NT	ND	NT	ND	ND										
	Bromodichloromethane	ND	NS	ND															
	Bromoform	ND	NS	ND															
	Bromomethane	ND	NS	ND															
	Carbon disulfide	NT	NT	NT	ND														
	Carbon Tetrachloride	ND	NS	ND															
	Chlorobenzene	ND	NS	ND															
	Chloroethane	ND	NS	ND															
	Chloroform	ND	NS	ND															
	Chloromethane	ND	NS	ND	ND	ND		1.38	ND										
	cis-1,2-Dichloroethene	ND	NS		1.45	1.63		1.3	1.48	ND		1.7		1.7	1.66	1.7	1.67	1.53	1.64
	cis-1,3-Dichloropropene	ND	NS	ND	ND														
	Dibromochloromethane	ND	NS	ND	ND														
	Dibromomethane	ND	NS	ND	ND														
	Dichloromethane	ND	NS	ND	ND														
	Ethylbenzene	ND	NS	ND	ND														
	Methyl Iodide	NT	NT	NT	ND	ND													
	Methyl Tertiary Butyl Ether	ND	NS	ND	ND														
	ortho-Xylene	ND	NS	ND	ND	ND	ND	ND	NT	NT	NT	ND	ND	ND	ND	ND	ND	ND	
	para-Xylene & meta-Xylene	ND	NS	ND	ND	ND	ND	ND	NT	NT	NT	ND	ND	ND	ND	ND	ND	ND	
	Styrene	ND	NS	ND	ND														
	Tetrachloroethene	ND	NS		1.3	ND		1.23	1.61	ND		23	ND	1.52	ND	1.19	1.2	ND	1.14
	Toluene	ND	NS	ND	ND														
	trans-1,2-Dichloroethene	ND	NS	ND	ND														
	trans-1,3-Dichloropropene	ND	NS	ND	ND														
trans-1,4-Dichloro-2-buten	NT	NT	NT	ND															
Trichloroethene	ND	NS	ND	ND		0.49	0.72	ND		23	ND								
Trichlorofluoromethane	ND	NS	ND																
Vinyl Acetate	NT	NT	NT	NT	ND														
Vinyl Chloride	ND	NS	ND																
Xylene (Total)	NT	NT	NT	NT	NT	NT	NT	ND	ND	ND	NT	NT	ND	NT	NT	NT	NT		

NT: Not Tested, NS: Not Sampled, ND: Not Detected, S: Spring, F: Fall

Note: MCL exceedances are indicated in Red. Stream monitoring locations SW015 and SW65 were dried and not sampled.

TABLE 2: Volatile Organic Compounds - Historical Results

Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F
OB07A	1,1,1,2-Tetrachloroethane	ND															
	1,1,1-Trichloroethane	ND															
	1,1,2,2-Tetrachloroethane	ND															
	1,1,2-Trichloroethane	ND															
	1,1-Dichloroethane	ND															
	1,1-Dichloroethene	ND															
	1,2,3-Trichloropropane	ND	NT	ND	ND	ND	ND										
	1,2-Dibromo-3-chloropropan	ND															
	1,2-Dibromoethane	ND															
	1,2-Dichlorobenzene	ND	ND	ND	NT	ND	NT	ND	ND								
	1,2-Dichloroethane	ND															
	1,2-Dichloropropane	ND															
	1,4-Dichlorobenzene	ND	ND	ND	ND	0.23	ND										
	2-Butanone	NT	NT	NT	ND												
	2-Hexanone	NT	NT	NT	ND												
	4-Methyl-2-Pentanone	NT	NT	NT	ND												
	Acetone	NT	NT	NT	ND												
	Acrylonitrile	NT	NT	NT	ND												
	Benzene	ND															
	Bromochloromethane	ND	ND	ND	NT	ND	NT	ND	ND								
	Bromodichloromethane	ND															
	Bromoform	ND															
	Bromomethane	ND															
	Carbon disulfide	NT	NT	NT	ND												
	Carbon Tetrachloride	ND															
	Chlorobenzene	ND															
	Chloroethane	ND															
	Chloroform	ND															
	Chloromethane	ND	ND	ND	ND	ND	1.20	ND									
	cis-1,2-Dichloroethene	2.09	1.85	3.51	3	1.66	1.80	ND	ND	ND	ND	2.18	1.58	2.17	1.55	1.74	1.73
	cis-1,3-Dichloropropene	ND															
	Dibromochloromethane	ND															
	Dibromomethane	ND															
	Dichloromethane	ND	5.8	ND													
	Ethylbenzene	ND															
	Methyl Iodide	ND	NT	NT	ND												
	Methyl Tertiary Butyl Ether	ND															
	ortho-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND						
	para-Xylene & meta-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND						
	Styrene	ND															
	Tetrachloroethene	1.91	2.12	2.66	1.81	1.94	1.82	2	23	2	ND	2.06	1.99	1.83	1.4	1.2	1.43
	Toluene	ND															
	trans-1,2-Dichloroethene	ND															
	trans-1,3-Dichloropropene	ND															
	trans-1,4-Dichloro-2-buten		NT	NT	ND												
Trichloroethene	ND	ND	ND	ND	0.64	0.88	ND	21	ND								
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Vinyl Acetate	NT	NT	NT	NT	0.01	ND											
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Xylene (Total)	NT	NT	NT	NT	NT	NT	NT	ND	ND	ND	NT	NT	ND	NT	NT	NT	

NT: Not Tested, NS: Not Sampled, ND: Not Detected, S: Spring, F: Fall

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TABLE 2: Volatile Organic Compounds - Historical Results

Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F
OB08	1,1,1,2-Tetrachloroethane	ND															
	1,1,1-Trichloroethane	ND															
	1,1,2,2-Tetrachloroethane	ND															
	1,1,2-Trichloroethane	ND															
	1,1-Dichloroethane	ND	ND	ND	1.2	0.46	0.87	ND	ND	ND	ND	ND	1.38	ND	1.49	ND	ND
	1,1-Dichloroethene	ND															
	1,2,3-Trichloropropane	ND	NT	ND	ND	ND	ND										
	1,2-Dibromo-3-chloropropan	ND	ND	ND	ND	0.54	ND										
	1,2-Dibromoethane	ND															
	1,2-Dichlorobenzene	ND	ND	ND	NT	0.59	ND	NT	ND	ND	ND						
	1,2-Dichloroethane	ND	ND	ND	ND	0.36	ND										
	1,2-Dichloropropane	ND	ND	1.24	1.16	1.19	0.78	1.2	ND	1.6	ND	ND	1.54	1.65	1.6	1.2	1.02
	1,4-Dichlorobenzene	ND	ND	ND	2.15	2.92	1.84	ND	ND	4	ND	1.01	1.59	3.66	3.52	2.4	2.39
	2-Butanone	NT	NT	NT	ND												
	2-Hexanone	NT	NT	NT	ND												
	4-Methyl-2-Pentanone	NT	NT	NT	ND												
	Acetone	NT	NT	NT	2.7	0.21	0.50	ND									
	Acrylonitrile	NT	NT	NT	ND												
	Benzene	ND	ND	ND	ND	0.63	0.66	ND									
	Bromochloromethane	ND	ND	ND	NT	ND	NT	ND	ND	ND							
	Bromodichloromethane	ND															
	Bromoform	ND															
	Bromomethane	ND	ND	ND	0.24	ND											
	Carbon disulfide	NT	NT	NT	ND												
	Carbon Tetrachloride	ND															
	Chlorobenzene	ND	ND	22.02	1.95	3.13	3.31	6.1	ND	5.7	4.41	1.52	4.26	4.87	6.88	3.75	4.01
	Chloroethane	ND	ND	ND	ND	0.41	0.55	ND									
	Chloroform	ND															
	Chloromethane	ND	ND	ND	ND	ND	ND	2.6	ND								
	cis-1,2-Dichloroethene	3.92	3.1	10.93	10.4	10.3	8.39	8.9	ND	17	14.6	8.33	18.4	15.9	20.8	10.6	10.4
	cis-1,3-Dichloropropene	ND															
	Dibromochloromethane	ND															
	Dibromomethane	ND															
	Dichloromethane	ND															
	Ethylbenzene	ND															
	Methyl Iodide	NT	NT	NT	ND	0.38	ND										
	Methyl Tertiary Butyl Ether	ND	ND	ND	ND	0.44	ND										
	ortho-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND						
	para-Xylene & meta-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND						
	Styrene	ND															
	Tetrachloroethene	ND															
	Toluene	ND															
	trans-1,2-Dichloroethene	ND	ND	ND	ND	0.87	0.66	ND	1.2	ND	ND						
	trans-1,3-Dichloropropene	ND															
	trans-1,4-Dichloro-2-buten	NT	NT	NT	ND												
Trichloroethene	ND	ND	ND	ND	0.42	ND											
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Vinyl Acetate	NT	NT	NT	NT	0.02	ND	3.2	ND									
Vinyl Chloride	ND	ND	2.04	2.35	2.91	3.18	ND	ND	4	3.68	1.78	4.41	3.53	3.83	1.8	1.55	
Xylene (Total)	NT	NT	NT	NT	NT	NT	NT	ND	ND	ND	NT	NT	ND	NT	NT	NT	

NT: Not Tested, NS: Not Sampled, ND: Not Detected, S: Spring, F: Fall

Note: MCL exceedances are indicated in Red. Stream monitoring locations SW015 and SW65 were dried and not sampled.

TABLE 2: Volatile Organic Compounds - Historical Results

Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F
OB08A	1,1,1,2-Tetrachloroethane	ND															
	1,1,1-Trichloroethane	ND															
	1,1,2,2-Tetrachloroethane	ND															
	1,1,2-Trichloroethane	ND															
	1,1-Dichloroethane	ND	ND	ND	1.47	0.44	0.97	ND	ND	ND	ND	ND	1.54	1.15	ND	ND	ND
	1,1-Dichloroethene	ND	ND	1.07	ND												
	1,2,3-Trichloropropane	ND	NT	ND	ND	ND	ND										
	1,2-Dibromo-3-chloropropan	ND															
	1,2-Dibromoethane	ND															
	1,2-Dichlorobenzene	ND	ND	ND	NT	0.32	ND	NT	ND	ND	ND						
	1,2-Dichloroethane	ND	ND	ND	ND	0.38	ND										
	1,2-Dichloropropane	1.22	ND	2.11	2.02	1.47	1.10	ND	ND	2	ND	1.08	3.09	2.11	1.8	1.86	2.06
	1,4-Dichlorobenzene	ND	ND	ND	3.97	3.34	2.83	ND	ND	4.7	4.19	1.14	1.91	4.78	4.48	4.19	3.92
	2-Butanone	NT	NT	NT	ND												
	2-Hexanone	NT	NT	NT	ND												
	4-Methyl-2-Pentanone	NT	NT	NT	ND												
	Acetone	NT	NT	NT	ND												
	Acrylonitrile	NT	NT	NT	ND												
	Benzene	ND	ND	1.09	1.03	0.89	0.99	ND	ND	1.1	ND	ND	ND	ND	1.07	1.06	1.03
	Bromochloromethane	ND	ND	ND	NT	ND	NT	ND	ND	ND							
	Bromodichloromethane	ND															
	Bromoform	ND															
	Bromomethane	ND															
	Carbon disulfide	NT	NT	NT	ND												
	Carbon Tetrachloride	ND															
	Chlorobenzene	2.27	ND	3.43	3.38	3.93	4.22	7.3	ND	6.6	5.04	1.54	5.3	5.81	7.75	7.48	7.05
	Chloroethane	ND	ND	ND	ND	0.47	0.62	1	ND								
	Chloroform	ND															
	Chloromethane	ND	ND	ND	ND	ND	0.89	4	ND								
	cis-1,2-Dichloroethene	10.07	8.42	22.57	21.2	13.4	14.10	12	ND	21	19.6	9.61	26.2	20.7	12.1	11.1	11.9
	cis-1,3-Dichloropropene	ND															
	Dibromochloromethane	ND															
	Dibromomethane	ND															
	Dichloromethane	ND															
	Ethylbenzene	ND															
	Methyl Iodide	NT	NT	NT	ND												
	Methyl Tertiary Butyl Ether	ND	ND	ND	ND	0.42	ND										
	ortho-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND						
	para-Xylene & meta-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND						
	Styrene	ND															
	Tetrachloroethene	ND															
	Toluene	ND															
	trans-1,2-Dichloroethene	ND	ND	1.48	1.37	0.99	0.89	ND	ND	ND	ND	ND	1.98	ND	ND	ND	ND
	trans-1,3-Dichloropropene	ND															
	trans-1,4-Dichloro-2-buten	NT	NT	NT	ND												
Trichloroethene	ND	ND	1.52	1.29	0.64	0.51	ND										
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Vinyl Acetate	NT	NT	NT	NT	0.01	ND	4	ND									
Vinyl Chloride	1.6	ND	5.16	6.5	4.11	4.76	ND	ND	5.4	4.99	2.31	6.38	4.86	4.99	3.39	2.6	
Xylene (Total)	NT	NT	NT	NT	NT	NT	ND	ND	ND	NT	NT	ND	NT	NT	NT	NT	

NT: Not Tested, NS: Not Sampled, ND: Not Detected, S: Spring, F: Fall

Note: MCL exceedances are indicated in Red. Stream monitoring locations SW015 and SW65 were dried and not sampled.

TABLE 2: Volatile Organic Compounds - Historical Results

Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F
OB10	1,1,1,2-Tetrachloroethane	ND															
	1,1,1-Trichloroethane	ND															
	1,1,2,2-Tetrachloroethane	ND															
	1,1,2-Trichloroethane	ND															
	1,1-Dichloroethane	1.04	1.51	ND	3.49	ND	5.60	ND	ND	ND	4.06	7.23	4.91	3.33	3.73	2.86	3.45
	1,1-Dichloroethene	ND															
	1,2,3-Trichloropropane	ND	NT	ND	ND	ND	ND	ND									
	1,2-Dibromo-3-chloropropan	ND															
	1,2-Dibromoethane	ND															
	1,2-Dichlorobenzene	ND	ND	ND	NT	ND	ND	ND	ND	ND	ND	1.02	ND	NT	ND	ND	ND
	1,2-Dichloroethane	ND	ND	ND	ND	ND	0.64	ND	ND	ND	ND	1.43	ND	ND	ND	ND	1.01
	1,2-Dichloropropane	1.55	1.84	ND	2.53	1.26	2.65	ND	ND	2.8	ND	5.86	2.36	2.69	3.25	2.86	4.26
	1,4-Dichlorobenzene	ND	ND	ND	4.84	2.1	5.54	ND	ND	5	7.09	12.9	9.31	7.07	8.74	6.93	10.4
	2-Butanone	NT	NT	NT	ND												
	2-Hexanone	NT	NT	NT	ND												
	4-Methyl-2-Pentanone	NT	NT	NT	ND												
	Acetone	NT	NT	NT	1.67	ND											
	Acrylonitrile	NT	NT	NT	ND												
	Benzene	ND	1.1	ND	1.72	0.82	2.04	ND	2.4	1.6	ND	3.49	2.16	1.76	2.26	1.89	2.43
	Bromochloromethane	ND	ND	ND	NT	ND	NT	ND	ND	ND							
	Bromodichloromethane	ND															
	Bromoform	ND															
	Bromomethane	ND	ND	ND	ND	0.22	ND										
	Carbon disulfide	NT	NT	NT	ND	ND	ND	2.3	ND								
	Carbon Tetrachloride	ND															
	Chlorobenzene	ND	ND	ND	ND	0.32	0.98	ND	ND	1.2	ND	3.16	1.2	2	2.77	2.25	3.46
	Chloroethane	ND	ND	ND	ND	0.24	0.68	ND									
	Chloroform	ND															
	Chloromethane	ND	ND	ND	ND	ND	ND	6.2	ND								
	cis-1,2-Dichloroethene	20.83	9.73	ND	17.9	11.5	24.00	9.6	ND	24	25.6	51.2	33.9	29	36.7	30.8	46.1
	cis-1,3-Dichloropropene	ND															
	Dibromochloromethane	ND															
	Dibromomethane	ND															
	Dichloromethane	ND															
	Ethylbenzene	ND															
	Methyl Iodide	NT	NT	NT	ND												
	Methyl Tertiary Butyl Ether	ND															
	ortho-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND						
	para-Xylene & meta-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND						
	Styrene	ND															
	Tetrachloroethene	ND	ND	ND	1.03	2.86	1.95	ND	2.3	1.8	ND	3.43	ND	1.75	1.88	1.26	ND
	Toluene	ND															
	trans-1,2-Dichloroethene	1.12	1.49	ND	2.39	1.18	3.94	ND	3.9	ND	ND	5.16	2.22	2.61	3.11	2.61	3.05
	trans-1,3-Dichloropropene	ND															
	trans-1,4-Dichloro-2-buten	NT	NT	NT	ND												
Trichloroethene	1.31	3.73	ND	13.3	5.27	13.40	ND	11	12	14.4	25.4	17.9	12.6	13.1	10	15.6	
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Vinyl Acetate	NT	NT	NT	NT	ND												
Vinyl Chloride	2.15	12.62	ND	6.07	2.39	11.70	ND	17	9	12.5	26.6	14.4	15.2	19.2	17.1	23.5	
Xylene (Total)	NT	NT	NT	NT	NT	NT	ND	ND	ND	NT	NT	ND	NT	NT	NT	NT	

NT: Not Tested, NS: Not Sampled, ND: Not Detected, S: Spring, F: Fall

Note: MCL exceedances are indicated in Red. Stream monitoring locations SW015 and SW65 were dried and not sampled.

TABLE 2: Volatile Organic Compounds - Historical Results

Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F
OB102	1,1,1,2-Tetrachloroethane	ND															
	1,1,1-Trichloroethane	ND															
	1,1,2,2-Tetrachloroethane	ND															
	1,1,2-Trichloroethane	ND															
	1,1-Dichloroethane	ND															
	1,1-Dichloroethene	ND															
	1,2,3-Trichloropropane	ND	NT	ND	ND	ND	ND										
	1,2-Dibromo-3-chloropropan	ND															
	1,2-Dibromoethane	ND															
	1,2-Dichlorobenzene	ND	ND	ND	NT	ND	NT	ND	ND								
	1,2-Dichloroethane	ND															
	1,2-Dichloropropane	ND															
	1,4-Dichlorobenzene	1.81	1.43	ND	ND	1.6	1.12	ND	ND	1.4	ND	ND	1.14	1.27	1.55	1.3	1.62
	2-Butanone	NT	NT	NT	ND												
	2-Hexanone	NT	NT	NT	ND												
	4-Methyl-2-Pentanone	NT	NT	NT	ND												
	Acetone	NT	NT	NT	ND	ND	0.53	ND	8	ND							
	Acrylonitrile	NT	NT	NT	ND												
	Benzene	ND															
	Bromochloromethane	ND	ND	ND	NT	ND	NT	ND	ND	ND							
	Bromodichloromethane	ND															
	Bromoform	ND															
	Bromomethane	ND	ND	ND	ND	0.25	ND										
	Carbon disulfide	NT	NT	NT	ND												
	Carbon Tetrachloride	ND															
	Chlorobenzene	1.65	1.41	3.43	2.27	1.7	1.51	ND	ND	2.6	ND	ND	2.14	2.14	2.22	2.36	2.74
	Chloroethane	ND	ND	ND	ND	0.05	ND										
	Chloroform	ND															
	Chloromethane	ND															
	cis-1,2-Dichloroethene	1.75	1.46	1.54	1.38	1.13	0.65	ND	ND	ND	ND	ND	1.26	ND	ND	ND	ND
	cis-1,3-Dichloropropene	ND															
	Dibromochloromethane	ND															
	Dibromomethane	ND															
	Dichloromethane	ND															
	Ethylbenzene	ND															
	Methyl Iodide	NT	NT	NT	ND												
	Methyl Tertiary Butyl Ether	ND	ND	ND	ND	0.47	ND										
	ortho-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND						
	para-Xylene & meta-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND						
	Styrene	ND															
	Tetrachloroethene	ND															
	Toluene	ND															
	trans-1,2-Dichloroethene	ND															
	trans-1,3-Dichloropropene	ND															
	trans-1,4-Dichloro-2-buten	NT	NT	NT	ND												
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Vinyl Acetate	NT	NT	NT	NT	ND												
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Xylene (Total)	NT	NT	NT	NT	NT	NT	ND	ND	ND	NT	NT	ND	NT	NT	NT	NT	

NT: Not Tested, NS: Not Sampled, ND: Not Detected, S: Spring, F: Fall

Note: MCL exceedances are indicated in Red. Stream monitoring locations SW015 and SW65 were dried and not sampled.

TABLE 2: Volatile Organic Compounds - Historical Results

Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F
OB12	1,1,1,2-Tetrachloroethane	ND															
	1,1,1-Trichloroethane	ND															
	1,1,2,2-Tetrachloroethane	ND															
	1,1,2-Trichloroethane	ND															
	1,1-Dichloroethane	8.14	12.72	10.97	22.7	10.6	39.20	23	ND	21	18.3	22.6	15.1	21.4	21	20.2	18.6
	1,1-Dichloroethene	ND	ND	ND	ND	ND	0.54	ND									
	1,2,3-Trichloropropane	ND															
	1,2-Dibromo-3-chloropropan	ND															
	1,2-Dibromoethane	ND															
	1,2-Dichlorobenzene	ND	ND	ND	NT	ND	NT	ND	ND	ND							
	1,2-Dichloroethane	ND	1.08	ND	ND	0.63	1.17	ND	ND	ND	ND	1.07	ND	1.07	1.55	1.07	1.78
	1,2-Dichloropropane	3.75	5.61	3.62	5.55	2.93	6.29	3.3	ND	5.8	9.71	6.48	8.07	7.09	8.23	7.65	11.6
	1,4-Dichlorobenzene	ND	2.82	ND	4.18	2.83	4.51	ND	ND	5.4	6.4	6.13	4.3	7.28	8.46	6.36	10
	2-Butanone	NT	NT	NT	ND												
	2-Hexanone	NT	NT	NT	ND												
	4-Methyl-2-Pentanone	NT	NT	NT	ND												
	Acetone	NT	NT	NT	ND	0.59	0.70	ND									
	Acrylonitrile	NT	NT	NT	ND												
	Benzene	1.89	2.66	1.82	2.63	1.89	3.46	2.2	ND	3.5	ND	3.61	3.27	3.82	3.95	3.73	4.41
	Bromochloromethane	ND	ND	ND	NT	ND	NT	ND	ND	ND							
	Bromodichloromethane	ND															
	Bromoform	ND															
	Bromomethane	ND															
	Carbon disulfide	NT	NT	NT	ND												
	Carbon Tetrachloride	ND															
	Chlorobenzene	ND	ND	ND	1.21	0.92	1.46	ND	ND	2.1	ND	2.27	1.23	2.69	2.82	2.65	3.38
	Chloroethane	ND	2.5	2.61	1.39	0.87	1.64	ND									
	Chloroform	ND															
	Chloromethane	ND	ND	ND	ND	ND	ND	2.1	ND								
	cis-1,2-Dichloroethene	25.54	26.92	26.86	21.4	12.4	26.20	14	ND	23	32.1	22.5	30.6	24.9	31.3	24.5	43.2
	cis-1,3-Dichloropropene	ND															
	Dibromochloromethane	ND															
	Dibromomethane	ND															
	Dichloromethane	9.35	6.24	4.91	8.27	11.3	8.19	10	ND	ND	5.01	7.93	ND	6.3	4.44	5.34	4.73
	Ethylbenzene	ND															
	Methyl Iodide	NT	NT	NT	ND												
	Methyl Tertiary Butyl Ether	ND	ND	ND	ND	ND	0.85	ND									
	ortho-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND						
	para-Xylene & meta-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND						
	Styrene	ND															
	Tetrachloroethene	16.57	21.49	7.95	15.4	20	17.10	12	1.8	22	26.5	22.3	14.4	20.8	18.5	15.6	26.2
	Toluene	ND															
trans-1,2-Dichloroethene	1.42	1.52	1.23	1.91	1.62	2.44	1.8	ND	2.5	ND	2.55	2.09	2.81	2.91	2.5	2.65	
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
trans-1,4-Dichloro-2-buten	NT	NT	NT	ND													
Trichloroethene	12.65	18.35	6.22	18.1	11.6	20.30	9.4	ND	17	24.9	16.7	16	16.7	18.3	15	28.9	
Trichlorofluoromethane	1.91	1.78	ND	2.42	1.8	3.80	4.5	ND	2.2	ND	2.17	1.74	1.87	2.21	1.47	2.47	
Vinyl Acetate	NT	NT	NT	NT	0.01	ND	6.6	ND									
Vinyl Chloride	6.72	3.97	6.99	6.3	7.32	6.22	ND	ND	6.4	ND	6.64	2.95	5.7	5.66	5.76	3.84	
Xylene (Total)	NT	NT	NT	NT	NT	NT	ND	ND	ND	NT	NT	ND	NT	NT	NT	NT	

NT: Not Tested, NS: Not Sampled, ND: Not Detected, S: Spring, F: Fall

Note: MCL exceedances are indicated in Red. Stream monitoring locations SW015 and SW65 were dried and not sampled.

TABLE 2: Volatile Organic Compounds - Historical Results

Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F		
OB105	1,1,1,2-Tetrachloroethane	ND																	
	1,1,1-Trichloroethane	ND																	
	1,1,2,2-Tetrachloroethane	ND																	
	1,1,2-Trichloroethane	ND																	
	1,1-Dichloroethane	ND																	
	1,1-Dichloroethene	ND	ND																
	1,2,3-Trichloropropane	ND	NT	ND	ND	ND	ND	ND											
	1,2-Dibromo-3-chloropropan	ND	ND																
	1,2-Dibromoethane	ND	ND																
	1,2-Dichlorobenzene	ND	ND	ND	NT	ND	NT	ND	ND	ND									
	1,2-Dichloroethane	ND	ND																
	1,2-Dichloropropane	ND	ND	ND	ND	ND		0.55	ND	ND									
	1,4-Dichlorobenzene	ND	1.46	ND		3.38	0.72	3.32	ND	ND		3.9	4.51	7.03	ND	3.66	4.22	1.78	2.37
	2-Butanone	NT	NT	NT	ND	ND	ND												
	2-Hexanone	NT	NT	NT	ND		0.23	ND	ND	ND									
	4-Methyl-2-Pentanone	NT	NT	NT	ND	ND	ND												
	Acetone	NT	NT	NT		1.27	ND	31.10	ND	ND	ND								
	Acrylonitrile	NT	NT	NT	ND	ND	ND												
	Benzene	ND	ND	ND	ND	ND		0.90	ND	ND	ND								
	Bromochloromethane	ND	ND	ND	NT	ND	NT	ND	ND	ND	ND								
	Bromodichloromethane	ND	ND	ND															
	Bromoform	ND	ND	ND															
	Bromomethane	ND	ND	ND															
	Carbon disulfide	NT	NT	NT	ND	ND	ND												
	Carbon Tetrachloride	ND	ND	ND															
	Chlorobenzene	ND	ND	ND	ND	ND		0.55	ND	ND	ND	ND	1.24	ND	ND	ND	ND	ND	ND
	Chloroethane	ND	ND	ND	ND	ND		0.89	ND	ND	ND								
	Chloroform	ND	ND	ND															
	Chloromethane	ND	ND	ND															
	cis-1,2-Dichloroethene	ND	7.14	ND		11.1	0.97	ND	ND	ND		14	15	24.6	ND	11.4	11.6	3.17	5.54
	cis-1,3-Dichloropropene	ND	ND	ND															
	Dibromochloromethane	ND	ND	ND															
	Dibromomethane	ND	ND	ND															
	Dichloromethane	ND	ND	ND	ND	ND		0.77	ND	ND	ND								
	Ethylbenzene	ND	ND	ND															
	Methyl Iodide	NT	NT	NT	ND	ND	ND												
	Methyl Tertiary Butyl Ether	ND	ND	ND															
	ortho-Xylene	ND	NT	NT	NT	ND	ND	ND	ND	ND	ND	ND	ND						
	para-Xylene & meta-Xylene	ND	NT	NT	NT	ND	ND	ND	ND	ND	ND	ND	ND						
	Styrene	ND	ND	ND															
	Tetrachloroethene	ND	ND	ND															
	Toluene	ND	ND	ND															
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
trans-1,4-Dichloro-2-buten	NT	NT	NT	ND	ND														
Trichloroethene	ND	ND	ND		1.25	ND	1.38	ND	2.1	1.4	ND	2.96	ND	1.47	1.46	ND	ND	ND	
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Vinyl Acetate	NT	NT	NT	NT	ND	ND													
Vinyl Chloride	ND	ND	ND		1.51	ND	3.03	ND	ND	ND	ND	1.66	ND	ND	ND	ND	ND	ND	
Xylene (Total)	NT	NT	NT	NT	NT	NT	NT	ND	ND	ND	NT	NT	ND	NT	NT	NT	NT	NT	

NT: Not Tested, NS: Not Sampled, ND: Not Detected, S: Spring, F: Fall

Note: MCL exceedances are indicated in Red. Stream monitoring locations SW015 and SW65 were dried and not sampled.

TABLE 2: Volatile Organic Compounds - Historical Results

Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F
OB11	1,1,1,2-Tetrachloroethane	ND															
	1,1,1-Trichloroethane	ND															
	1,1,2,2-Tetrachloroethane	ND															
	1,1,2-Trichloroethane	ND	1.52	ND													
	1,1-Dichloroethane	11.14	23	31.01	33.4	20.4	15.10	ND	ND	21	22.4	22.1	21.2	21.6	19.4	18.8	18.1
	1,1-Dichloroethene	ND	ND	0.89	1.03	0.45	0.93	25	30	ND							
	1,2,3-Trichloropropane	ND	NT	ND	ND	ND	ND										
	1,2-Dibromo-3-chloropropan	ND															
	1,2-Dibromoethane	ND															
	1,2-Dichlorobenzene	1.03	1.55	ND	NT	1.75	1.51	3.9	ND	3	ND	2.69	1.41	NT	3	2.86	2.89
	1,2-Dichloroethane	3.16	3.68	4.66	4.72	ND	3.94	2.8	ND	ND	ND	3.66	3.57	3.64	3.78	3.07	3.42
	1,2-Dichloropropane	4.67	6.31	8.28	8.15	4.9	6.10	5.1	7.2	6.3	ND	6.13	6.5	6.26	6.11	5.57	5.53
	1,4-Dichlorobenzene	2.46	6.43	ND	14.6	9.13	9.85	ND	ND	17	14.8	14.9	13.7	16.9	17.5	16.8	16.3
	2-Butanone	NT	NT	NT	ND	ND	0.95	ND									
	2-Hexanone	NT	NT	NT	ND												
	4-Methyl-2-Pentanone	NT	NT	NT	ND												
	Acetone	NT	NT	NT	ND	ND	24.60	ND									
	Acrylonitrile	NT	NT	NT	ND												
	Benzene	2.04	6.16	9.56	9.37	4.32	8.29	5.2	12	6.9	ND	6.02	6.17	5.72	4.88	4.78	4.32
	Bromochloromethane	ND	ND	ND	NT	ND	NT	ND	ND	ND							
	Bromodichloromethane	ND															
	Bromoform	ND															
	Bromomethane	ND															
	Carbon disulfide	NT	NT	NT	ND												
	Carbon Tetrachloride	ND															
	Chlorobenzene	11.69	35.91	52.75	50	28.3	34.30	52	ND	41	34.5	34.6	31	33.4	32.2	30.2	30.3
	Chloroethane	ND	ND	ND	ND	ND	0.57	ND	17	ND							
	Chloroform	ND															
	Chloromethane	ND	ND	ND	ND	ND	ND	2.3	ND								
	cis-1,2-Dichloroethene	92.93	137.27	190.55	184	123	73.60	ND	ND	160	94.8	64.16	135.88	131	90.5	103.4	79
	cis-1,3-Dichloropropene	ND															
	Dibromochloromethane	ND															
	Dibromomethane	ND															
	Dichloromethane	9.24	19.47	28.72	30.6	7.21	24.20	16	18	12	13	12.3	12	10.6	9.6	8.58	8.71
	Ethylbenzene	ND															
	Methyl Iodide	NT	NT	NT	ND												
	Methyl Tertiary Butyl Ether	2.2	ND	6.41	2.67	ND	1.65	5.6	ND	2.6	ND						
	ortho-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND						
	para-Xylene & meta-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND						
	Styrene	ND															
	Tetrachloroethene	32.4	52.48	67.92	43.9	35.6	19.60	26	44	47	40.1	36.9	32.2	32.3	27.1	24	21.7
	Toluene	ND	1	ND													
	trans-1,2-Dichloroethene	2.88	8.83	7.15	6.37	3.19	2.78	4.9	3.3	4.6	ND	4.31	4.94	4.41	4	3.58	3.79
	trans-1,3-Dichloropropene	ND															
	trans-1,4-Dichloro-2-buten	NT	NT	NT	ND												
Trichloroethene	28.56	42.66	53.74	51.5	31.2	33.90	28	37	39	34.2	32.6	34.6	29.6	27.6	25.5	26.3	
Trichlorofluoromethane	1.93	2.85	4.58	3.98	1.61	3.78	6.8	ND	3.3	ND	2.47	2.04	2.33	2.09	2	1.6	
Vinyl Acetate	NT	NT	NT	NT	0.25	ND											
Vinyl Chloride	4.49	8.73	15.64	20.3	7.43	20.90	14	ND	13	14.1	13.9	14	14.6	15.7	15.4	14.6	
Xylene (Total)	NT	NT	NT	NT	NT	NT	NT	ND	ND	ND	NT	NT	ND	NT	NT	NT	

NT: Not Tested, NS: Not Sampled, ND: Not Detected, S: Spring, F: Fall

Note: MCL exceedances are indicated in Red. Stream monitoring locations SW015 and SW65 were dried and not sampled.

TABLE 2: Volatile Organic Compounds - Historical Results

Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F
OB11A	1,1,1,2-Tetrachloroethane	ND															
	1,1,1-Trichloroethane	ND															
	1,1,2,2-Tetrachloroethane	ND															
	1,1,2-Trichloroethane	ND															
	1,1-Dichloroethane	28.9	24.24	23.08	27.8	16.8	16.40	ND	ND	15	15.8	15.2	16.4	13.1	15.3	15.9	15.1
	1,1-Dichloroethene	ND	ND	ND	ND	ND	1.07	ND									
	1,2,3-Trichloropropane	ND	NT	ND	ND	ND	ND										
	1,2-Dibromo-3-chloropropan	ND															
	1,2-Dibromoethane	ND	ND	ND	ND	ND	ND	1.8	ND								
	1,2-Dichlorobenzene	2.45	2.05	ND	NT	1.67	1.10	2.8	ND	2.1	ND	1.87	2.05	NT	2.21	2.19	2.05
	1,2-Dichloroethane	5.34	4.48	3.6	ND	2.7	1.88	ND	ND	ND	ND	2.48	3.56	2.09	2.41	2.5	2.68
	1,2-Dichloropropane	7.85	7.26	6.44	7.2	4.18	4.06	3.7	ND	4.6	ND	4.08	3.75	3.9	4.39	4.48	4.7
	1,4-Dichlorobenzene	11.24	12.3	ND	15.2	13.4	9.32	ND	ND	15	13.7	13.8	15	13.5	16.3	15.2	12.2
	2-Butanone	NT	NT	NT	ND												
	2-Hexanone	NT	NT	NT	ND												
	4-Methyl-2-Pentanone	NT	NT	NT	ND												
	Acetone	NT	NT	NT	ND	0.12	22.80	ND									
	Acrylonitrile	NT	NT	NT	ND												
	Benzene	7.37	7.13	6.67	7.51	4.19	3.59	3.5	ND	4.3	ND	3.73	4.13	2.94	3.07	2.93	2.47
	Bromochloromethane	ND	ND	ND	NT	ND	NT	ND	ND	ND							
	Bromodichloromethane	ND															
	Bromoform	ND															
	Bromomethane	ND															
	Carbon disulfide	NT	NT	NT	ND												
	Carbon Tetrachloride	ND															
	Chlorobenzene	42.48	39.6	33.51	36.9	21.3	20.60	29	ND	24	22.3	20.5	21.1	17.6	23	21.4	20.2
	Chloroethane	ND	ND	ND	ND	0.39	0.89	ND									
	Chloroform	ND															
	Chloromethane	ND	ND	ND	ND	ND	ND	1.4	ND								
	cis-1,2-Dichloroethene	189.43	173.52	148.44	168	113	81.60	76	ND	100	89	78.6	96.5	68.5	74	75.8	74.2
	cis-1,3-Dichloropropene	ND															
	Dibromochloromethane	ND															
	Dibromomethane	ND															
	Dichloromethane	5.59	1.73	2.72	1.77	2.4	5.45	1.8	ND	5.9	ND	1.11	ND	ND	ND	ND	ND
	Ethylbenzene	ND															
	Methyl Iodide	NT	NT	NT	ND												
	Methyl Tertiary Butyl Ether	4.33	ND	5.76	2.49	ND	2.00	3.8	ND								
	ortho-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND						
	para-Xylene & meta-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND						
	Styrene	ND															
	Tetrachloroethene	54.18	53.26	44.75	33.8	26.3	10.70	14	ND	27	22.8	19.1	19.7	12.8	13.2	10.3	6.78
	Toluene	ND															
	trans-1,2-Dichloroethene	9.82	10.82	5.07	5.45	3.07	3.18	ND	ND	3.1	ND	3.02	3.91	2.68	3.14	2.94	2.93
	trans-1,3-Dichloropropene	ND															
	trans-1,4-Dichloro-2-buten	NT	NT	NT	ND												
	Trichloroethene	50.9	45.34	39.05	42.4	26.1	21.60	17	ND	28	24.7	24	28.8	20.1	22	21.5	18.6
	Trichlorofluoromethane	2.9	2.1	2.09	2.14	1.26	2.53	2.9	ND								
	Vinyl Acetate	NT	NT	NT	NT	0.27	ND										
	Vinyl Chloride	13.71	12.75	13.43	15.4	10.2	31.60	11	ND	12	13.1	12.9	14.9	11.1	15	14.7	14
	Xylene (Total)	NT	NT	NT	NT	NT	NT	ND	ND	ND	NT	NT	ND	NT	NT	NT	NT

NT: Not Tested, NS: Not Sampled, ND: Not Detected, S: Spring, F: Fall

Note: MCL exceedances are indicated in Red. Stream monitoring locations SW015 and SW65 were dried and not sampled.

TABLE 2: Volatile Organic Compounds - Historical Results

Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F
OB25	1,1,1,2-Tetrachloroethane	ND															
	1,1,1-Trichloroethane	ND															
	1,1,2,2-Tetrachloroethane	ND															
	1,1,2-Trichloroethane	ND															
	1,1-Dichloroethane	ND	ND	ND	1.13	0.63	1.11	ND	ND	ND	ND	ND	2.16	ND	1.04	ND	ND
	1,1-Dichloroethene	ND															
	1,2,3-Trichloropropane	ND	NT	ND	ND	ND	ND										
	1,2-Dibromo-3-chloropropan	ND	ND	ND	ND	ND	ND	143	ND								
	1,2-Dibromoethane	ND															
	1,2-Dichlorobenzene	ND	ND	ND	NT	ND	NT	ND	ND	ND							
	1,2-Dichloroethane	ND															
	1,2-Dichloropropane	ND	ND	ND	ND	0.23	ND										
	1,4-Dichlorobenzene	ND	ND	ND	3.16	0.71	3.80	ND	ND	3.7	3.3	ND	6.84	ND	3.36	ND	1.15
	2-Butanone	NT	NT	NT	ND	0.45	0.87	ND									
	2-Hexanone	NT	NT	NT	ND												
	4-Methyl-2-Pentanone	NT	NT	NT	ND												
	Acetone	NT	NT	NT	ND	0.82	ND										
	Acrylonitrile	NT	NT	NT	ND												
	Benzene	ND	ND	ND	ND	ND	2.11	ND	ND	ND	ND	ND	1.43	ND	ND	ND	ND
	Bromochloromethane	ND	ND	ND	NT	ND	NT	ND	ND	ND							
	Bromodichloromethane	ND															
	Bromoform	ND															
	Bromomethane	ND															
	Carbon disulfide	NT	NT	NT	ND												
	Carbon Tetrachloride	ND															
	Chlorobenzene	ND	1.07	ND	1.93	0.47	4.50	ND	ND	ND	ND	ND	7.75	ND	3.13	ND	2.15
	Chloroethane	ND	ND	ND	ND	0.17	0.69	ND									
	Chloroform	ND															
	Chloromethane	ND															
	cis-1,2-Dichloroethene	4.38	6.23	4.12	7.5	4.52	6.82	ND	ND	4.9	9.55	ND	19.5	ND	7.38	3.14	7.14
	cis-1,3-Dichloropropene	ND															
	Dibromochloromethane	ND															
	Dibromomethane	ND															
	Dichloromethane	ND															
	Ethylbenzene	ND															
	Methyl Iodide	NT	NT	NT	ND												
	Methyl Tertiary Butyl Ether	ND															
	ortho-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND						
	para-Xylene & meta-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND						
	Styrene	ND															
	Tetrachloroethene	ND	ND	ND	ND	ND	0.86	ND	ND	3.8	ND	1.4	3.92	ND	ND	ND	ND
	Toluene	ND															
	trans-1,2-Dichloroethene	ND															
	trans-1,3-Dichloropropene	ND															
	trans-1,4-Dichloro-2-buten	NT	NT	NT	ND												
Trichloroethene	1.21	ND	ND	1.66	0.81	2.24	ND	ND	2.1	ND	ND	ND	ND	ND	ND	2.07	
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Vinyl Acetate	NT	NT	NT	NT	ND												
Vinyl Chloride	ND	4.29	ND	2.61	0.38	4.04	ND	ND	ND	ND	ND	3.47	ND	2.21	ND	2.78	
Xylene (Total)	NT	NT	NT	NT	NT	NT	NT	ND	ND	ND	NT	NT	ND	NT	NT	NT	

NT: Not Tested, NS: Not Sampled, ND: Not Detected, S: Spring, F: Fall

Note: MCL exceedances are indicated in Red. Stream monitoring locations SW015 and SW65 were dried and not sampled.

TABLE 2: Volatile Organic Compounds - Historical Results

Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F	
OB15	1,1,1,2-Tetrachloroethane	ND																
	1,1,1-Trichloroethane	ND																
	1,1,2,2-Tetrachloroethane	ND																
	1,1,2-Trichloroethane	ND																
	1,1-Dichloroethane	4.2	4.03	4.04	4.62	1.08	12.00	2.3	ND	3.1	ND	1.56	3.73	ND	1.59	ND	1	
	1,1-Dichloroethene	ND	ND															
	1,2,3-Trichloropropane	ND	NT	ND	ND	ND	ND	ND	ND									
	1,2-Dibromo-3-chloropropan	ND	ND															
	1,2-Dibromoethane	ND	ND															
	1,2-Dichlorobenzene	ND	ND	ND	NT	ND	NT	ND	ND	ND	ND							
	1,2-Dichloroethane	ND	ND															
	1,2-Dichloropropane	ND	ND															
	1,4-Dichlorobenzene	ND	ND	ND	ND	0.28	ND	ND										
	2-Butanone	NT	NT	NT	ND	ND												
	2-Hexanone	NT	NT	NT	ND	ND												
	4-Methyl-2-Pentanone	NT	NT	NT	ND	ND												
	Acetone	NT	NT	NT	ND	0.61	ND	ND										
	Acrylonitrile	NT	NT	NT	ND	ND												
	Benzene	ND	ND															
	Bromochloromethane	ND	ND	ND	NT	ND	NT	ND	ND	ND	ND							
	Bromodichloromethane	ND	ND															
	Bromoform	ND	ND															
	Bromomethane	ND	ND															
	Carbon disulfide	NT	NT	NT	ND	ND												
	Carbon Tetrachloride	ND	ND															
	Chlorobenzene	ND	3.6	ND	ND													
	Chloroethane	ND	ND	ND	ND	0.05	0.98	ND	ND									
	Chloroform	ND	ND															
	Chloromethane	ND	ND															
	cis-1,2-Dichloroethene	1.1	1.51	1.17	1.51	1.18	1.02	ND	ND									
	cis-1,3-Dichloropropene	ND	ND															
	Dibromochloromethane	ND	ND															
	Dibromomethane	ND	ND															
	Dichloromethane	ND	ND															
	Ethylbenzene	ND	ND															
	Methyl Iodide	Nt	NT	NT	ND	ND												
	Methyl Tertiary Butyl Ether	ND	ND															
	ortho-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND	ND						
	para-Xylene & meta-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND	ND						
	Styrene	ND	ND															
	Tetrachloroethene	ND	ND	ND	ND	0.48	0.54	ND	ND	1.1	ND	ND						
	Toluene	ND	ND															
trans-1,2-Dichloroethene	ND	ND	ND	ND	0.39	ND												
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
trans-1,4-Dichloro-2-buten	NT	NT	NT	ND														
Trichloroethene	ND	ND	ND	ND	2.31	1.23	1.1	ND	2.2	ND	1.18	2.11	ND	ND	ND	ND	ND	
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Vinyl Acetate	NT	NT	NT	NT	0.01	ND												
Vinyl Chloride	6.29	9.17	2.78	3.92	3.55	10.20	ND	ND	1.9	ND	ND	1.87	ND	ND	ND	ND	ND	
Xylene (Total)	NT	NT	NT	NT	NT	NT	NT	ND	ND	ND	NT	NT	ND	NT	NT	NT	NT	

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Note: MCL exceedances are indicated in Red. Stream monitoring locations SW015 and SW65 were dried and not sampled.

TABLE 2: Volatile Organic Compounds - Historical Results

Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F
ST015	1,1,1,2-Tetrachloroethane	ND	NS	ND	NS												
	1,1,1-Trichloroethane	ND	NS	ND	NS												
	1,1,2,2-Tetrachloroethane	ND	NS	ND	NS												
	1,1,2-Trichloroethane	ND	NS	ND	NS												
	1,1-Dichloroethane	ND	NS	ND	3.65	ND	ND	ND	ND	NS							
	1,1-Dichloroethene	ND	NS	ND	NS												
	1,2,3-Trichloropropane	ND	NS	ND	NT	ND	ND	ND	NS								
	1,2-Dibromo-3-chloropropan	ND	NS	ND	NS												
	1,2-Dibromoethane	ND	NS	ND	NS												
	1,2-Dichlorobenzene	ND	NS	ND	NT	ND	NT	ND	NS								
	1,2-Dichloroethane	ND	NS	ND	NS												
	1,2-Dichloropropane	ND	NS	ND	NS												
	1,4-Dichlorobenzene	ND	NS	ND	ND	0.27	ND	NS									
	2-Butanone	NT	NS	NT	ND	ND	0.56	ND	NS								
	2-Hexanone	NT	NS	NT	ND	NS											
	4-Methyl-2-Pentanone	NT	NS	NT	ND	NS											
	Acetone	NT	NS	NT	ND	0.27	ND	NS									
	Acrylonitrile	NT	NS	NT	ND	NS											
	Benzene	ND	NS	ND	NS												
	Bromochloromethane	ND	NS	ND	NT	ND	NT	ND	NS								
	Bromodichloromethane	ND	NS	ND	NS												
	Bromoform	ND	NS	ND	NS												
	Bromomethane	ND	NS	ND	NS												
	Carbon disulfide	NT	NS	NT	ND	NS											
	Carbon Tetrachloride	ND	NS	ND	NS												
	Chlorobenzene	ND	NS	ND	NS												
	Chloroethane	ND	NS	ND	NS												
	Chloroform	ND	NS	ND	NS												
	Chloromethane	ND	NS	ND	NS												
	cis-1,2-Dichloroethene	ND	NS	ND	ND	0.78	ND	NS									
	cis-1,3-Dichloropropene	ND	NS	ND	NS												
	Dibromochloromethane	ND	NS	ND	NS												
	Dibromomethane	ND	NS	ND	NS												
	Dichloromethane	ND	NS	ND	NS												
	Ethylbenzene	ND	NS	ND	NS												
	Methyl Iodide	NT	NS	NT	ND	NS											
	Methyl Tertiary Butyl Ether	ND	NS	ND	NS												
	ortho-Xylene	ND	NS	ND	ND	ND	ND	NT	NT	NT	NT	ND	ND	ND	ND	ND	NS
	para-Xylene & meta-Xylene	ND	NS	ND	ND	ND	ND	NT	NT	NT	NT	ND	ND	ND	ND	ND	NS
	Styrene	ND	NS	ND	NS												
	Tetrachloroethene	ND	NS	ND	NS												
	Toluene	ND	NS	ND	NS												
	trans-1,2-Dichloroethene	ND	NS	ND	NS												
	trans-1,3-Dichloropropene	ND	NS	ND	NS												
	trans-1,4-Dichloro-2-buten	NT	NS	NT	ND	NS											
Trichloroethene	1.1	NS	2.2	ND	1.38	ND	ND	ND	ND	ND	1.5	ND	ND	ND	ND	NS	
Trichlorofluoromethane	ND	NS	ND	NS													
Vinyl Acetate	NT	NS	NT	NT	ND	NS											
Vinyl Chloride	ND	NS	ND	NS													
Xylene (Total)	NT	NT	NT	NT	NT	NT	NT	ND	ND	ND	NT	NT	ND	NT	NT	NS	

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TABLE 2: Volatile Organic Compounds - Historical Results

Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F	
ST120	1,1,1,2-Tetrachloroethane	ND																
	1,1,1-Trichloroethane	ND																
	1,1,2,2-Tetrachloroethane	ND																
	1,1,2-Trichloroethane	ND																
	1,1-Dichloroethane	ND																
	1,1-Dichloroethene	ND	ND															
	1,2,3-Trichloropropane	ND	NT	ND	ND	ND	ND	ND										
	1,2-Dibromo-3-chloropropan	ND	ND															
	1,2-Dibromoethane	ND	ND															
	1,2-Dichlorobenzene	ND	ND	ND	NT	ND	NT	ND	ND	ND								
	1,2-Dichloroethane	ND	ND															
	1,2-Dichloropropane	ND	ND															
	1,4-Dichlorobenzene	ND	ND	ND	ND	0.22	ND	ND										
	2-Butanone	NT	NT	NT	ND	ND												
	2-Hexanone	NT	NT	NT	ND	ND												
	4-Methyl-2-Pentanone	NT	NT	NT	ND	0.21	ND	ND										
	Acetone	NT	NT	NT	ND	ND												
	Acrylonitrile	NT	NT	NT	ND	ND												
	Benzene	ND	ND															
	Bromochloromethane	ND	ND	ND	NT	ND	NT	ND	ND	ND								
	Bromodichloromethane	ND	ND															
	Bromoform	ND	ND															
	Bromomethane	ND	ND															
	Carbon disulfide	NT	NT	NT	ND	ND	ND	1.8	ND	ND								
	Carbon Tetrachloride	ND	ND															
	Chlorobenzene	ND	ND															
	Chloroethane	ND	ND															
	Chloroform	ND	ND															
	Chloromethane	ND	ND	ND	ND	ND	0.87	4.9	ND	ND								
	cis-1,2-Dichloroethene	1.22	ND	1.15	1.54	0.57	1.26	ND	ND	ND	ND	ND	1.3	2.26	ND	1.33	ND	1.13
	cis-1,3-Dichloropropene	ND	ND															
	Dibromochloromethane	ND	ND															
	Dibromomethane	ND	ND															
	Dichloromethane	ND	ND															
	Ethylbenzene	ND	ND															
	Methyl Iodide	NT	NT	NT	ND	ND												
	Methyl Tertiary Butyl Ether	ND	ND															
	ortho-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	NT	ND	ND	ND	ND	ND	ND	ND
	para-Xylene & meta-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	NT	ND	ND	ND	ND	ND	ND	ND
	Styrene	ND	ND															
	Tetrachloroethene	ND	ND	ND	ND	ND	1.10	ND	ND									
	Toluene	ND	ND															
	trans-1,2-Dichloroethene	ND	ND															
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
trans-1,4-Dichloro-2-buten	NT	NT	NT	ND														
Trichloroethene	ND	ND	ND	ND	0.27	0.90	ND	ND	ND	ND	ND	1.01	ND	ND	ND	ND	ND	
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Vinyl Acetate	NT	NT	NT	NT	ND													
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Xylene (Total)	NT	NT	NT	NT	NT	NT	NT	ND	ND	ND	NT	NT	ND	NT	NT	NT	NT	

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TABLE 2: Volatile Organic Compounds - Historical Results

Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F	
ST65	1,1,1,2-Tetrachloroethane	ND	NS															
	1,1,1-Trichloroethane	ND	NS															
	1,1,2,2-Tetrachloroethane	ND	NS															
	1,1,2-Trichloroethane	ND	NS															
	1,1-Dichloroethane	ND	ND	1.13	ND	NS												
	1,1-Dichloroethene	ND	NS															
	1,2,3-Trichloropropane	ND	NT	ND	ND	ND	ND	NS										
	1,2-Dibromo-3-chloropropan	ND	NS															
	1,2-Dibromoethane	ND	NS															
	1,2-Dichlorobenzene	ND	ND	ND	NT	ND	NT	ND	ND	NS								
	1,2-Dichloroethane	ND	NS															
	1,2-Dichloropropane	ND	ND	1.34	ND	NS												
	1,4-Dichlorobenzene	ND	ND	ND	ND	0.17	ND	NS										
	2-Butanone	NT	NT	NT	ND	NS												
	2-Hexanone	NT	NT	NT	ND	NS												
	4-Methyl-2-Pentanone	NT	NT	NT	ND	NS												
	Acetone	NT	NT	NT	1.17	ND	5.15	NS										
	Acrylonitrile	NT	NT	NT	ND	NS												
	Benzene	ND	NS															
	Bromochloromethane	ND	ND	ND	NT	ND	NT	ND	ND	NS								
	Bromodichloromethane	ND	NS															
	Bromoform	ND	NS															
	Bromomethane	ND	ND	ND	ND	0.23	ND	NS										
	Carbon disulfide	NT	NT	NT	ND	NS												
	Carbon Tetrachloride	ND	NS															
	Chlorobenzene	ND	NS															
	Chloroethane	ND	NS															
	Chloroform	ND	NS															
	Chloromethane	ND	ND	ND	ND	ND	0.81	ND	NS									
	cis-1,2-Dichloroethene	ND	ND	9.43	ND	NS												
	cis-1,3-Dichloropropene	ND	NS															
	Dibromochloromethane	ND	NS															
	Dibromomethane	ND	NS															
	Dichloromethane	ND	NS															
	Ethylbenzene	ND	NS															
	Methyl Iodide	NT	NT	NT	ND	NS												
	Methyl Tertiary Butyl Ether	ND	NS															
	ortho-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND	NS						
	para-Xylene & meta-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND	NS						
	Styrene	ND	NS															
	Tetrachloroethene	ND	NS															
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	1.6	ND	NS							
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	
trans-1,4-Dichloro-2-buten	NT	NT	NT	ND	NS													
Trichloroethene	ND	ND	7.13	ND	NS													
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NS	
Vinyl Acetate	NT	NT	NT	NT	ND	NS												
Vinyl Chloride	ND	ND	1.29	ND	NS													
Xylene (Total)	NT	NT	NT	NT	NT	NT	NT	ND	ND	3.6	NT	NT	ND	NT	NT	NT	NS	

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TABLE 2: Volatile Organic Compounds - Historical Results

Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F
ST70	1,1,1,2-Tetrachloroethane	ND															
	1,1,1-Trichloroethane	ND															
	1,1,2,2-Tetrachloroethane	ND															
	1,1,2-Trichloroethane	ND															
	1,1-Dichloroethane	ND															
	1,1-Dichloroethene	ND															
	1,2,3-Trichloropropane	ND	NT	ND	ND	ND	ND										
	1,2-Dibromo-3-chloropropan	ND															
	1,2-Dibromoethane	ND															
	1,2-Dichlorobenzene	ND	ND	ND	NT	ND	NT	ND	ND								
	1,2-Dichloroethane	ND															
	1,2-Dichloropropane	ND															
	1,4-Dichlorobenzene	ND	ND	ND	ND	0.19	ND										
	2-Butanone	NT	NT	NT	ND												
	2-Hexanone	NT	NT	NT	ND												
	4-Methyl-2-Pentanone	NT	NT	NT	ND												
	Acetone	NT	NT	NT	ND												
	Acrylonitrile	NT	NT	NT	ND												
	Benzene	ND															
	Bromochloromethane	ND	ND	ND	NT	ND	NT	ND	ND	ND							
	Bromodichloromethane	ND															
	Bromoform	ND															
	Bromomethane	ND	ND	ND	ND	0.28	ND										
	Carbon disulfide	NT	NT	NT	ND												
	Carbon Tetrachloride	ND															
	Chlorobenzene	ND															
	Chloroethane	ND															
	Chloroform	ND															
	Chloromethane	ND															
	cis-1,2-Dichloroethene	1.04	ND	1.17	ND												
	cis-1,3-Dichloropropene	ND															
	Dibromochloromethane	ND															
	Dibromomethane	ND															
	Dichloromethane	ND															
	Ethylbenzene	ND															
	Methyl Iodide	NT	NT	NT	ND												
	Methyl Tertiary Butyl Ether	3.82	ND	7.27	1.19	4.27	1.04	ND									
	ortho-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND						
	para-Xylene & meta-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	ND						
	Styrene	ND															
	Tetrachloroethene	ND															
	Toluene	ND															
	trans-1,2-Dichloroethene	ND															
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
trans-1,4-Dichloro-2-buten	NT	NT	NT	ND													
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Vinyl Acetate	NT	NT	NT	NT	ND												
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Xylene (Total)	NT	NT	NT	NT	NT	NT	NT	ND	ND	2.2	NT	NT	ND	NT	NT	NT	

NT: Not Tested, NS: Not Sampled, ND: Not Detected, S: Spring, F: Fall

Note: MCL exceedances are indicated in Red. Stream monitoring locations SW015 and SW65 were dried and not sampled.

TABLE 2: Volatile Organic Compounds - Historical Results

Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F	
ST80	1,1,1,2-Tetrachloroethane	ND																
	1,1,1-Trichloroethane	ND																
	1,1,2,2-Tetrachloroethane	ND																
	1,1,2-Trichloroethane	ND																
	1,1-Dichloroethane	ND																
	1,1-Dichloroethene	ND																
	1,2,3-Trichloropropane	ND	NT	ND	ND	ND	ND											
	1,2-Dibromo-3-chloropropan	ND	ND															
	1,2-Dibromoethane	ND	ND															
	1,2-Dichlorobenzene	ND	ND	ND	NT	ND	NT	ND	ND	ND								
	1,2-Dichloroethane	ND	ND															
	1,2-Dichloropropane	ND	ND															
	1,4-Dichlorobenzene	ND	ND															
	2-Butanone	NT	NT	NT	ND	ND												
	2-Hexanone	NT	NT	NT	ND	ND												
	4-Methyl-2-Pentanone	NT	NT	NT	ND	ND												
	Acetone	NT	NT	NT	ND	0.69	1.49	ND	ND									
	Acrylonitrile	NT	NT	NT	ND	ND												
	Benzene	ND	ND															
	Bromochloromethane	ND	ND	ND	NT	ND	NT	ND	ND	ND								
	Bromodichloromethane	ND	ND															
	Bromoform	ND	ND															
	Bromomethane	ND	ND															
	Carbon disulfide	NT	NT	NT	ND	ND												
	Carbon Tetrachloride	ND	ND															
	Chlorobenzene	ND	ND															
	Chloroethane	ND	ND															
	Chloroform	ND	ND															
	Chloromethane	ND	ND															
	cis-1,2-Dichloroethene	ND	ND															
	cis-1,3-Dichloropropene	ND	ND															
	Dibromochloromethane	ND	ND															
	Dibromomethane	ND	ND															
	Dichloromethane	ND	ND															
	Ethylbenzene	ND	ND															
	Methyl Iodide	NT	NT	NT	ND	ND												
	Methyl Tertiary Butyl Ether	ND	ND															
	ortho-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	NT	ND	ND	ND	ND	ND	ND	ND
	para-Xylene & meta-Xylene	ND	ND	ND	ND	ND	ND	NT	NT	NT	NT	ND	ND	ND	ND	ND	ND	ND
	Styrene	ND	ND															
	Tetrachloroethene	ND	ND															
	Toluene	ND	ND															
	trans-1,2-Dichloroethene	ND	ND															
	trans-1,3-Dichloropropene	ND	ND															
	trans-1,4-Dichloro-2-buten	NT	NT	NT	ND	ND												
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Vinyl Acetate	NT	NT	NT	NT	ND													
Vinyl Chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Xylene (Total)	NT	NT	NT	NT	NT	NT	NT	ND	ND	1.6	NT	NT	ND	NT	NT	NT	NT	

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TABLE 2: Volatile Organic Compounds - Historical Results

Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F	
MW1B	1,1,1,2-Tetrachloroethane						NT	ND										
	1,1,1-Trichloroethane						NT	ND										
	1,1,2,2-Tetrachloroethane						NT	ND										
	1,1,2-Trichloroethane						NT	ND										
	1,1-Dichloroethane						NT	ND										
	1,1-Dichloroethene						NT	ND										
	1,2,3-Trichloropropane						NT	ND	ND	ND	ND	ND	NT	ND	ND	ND	ND	
	1,2-Dibromo-3-chloropropan						NT	ND										
	1,2-Dibromoethane						NT	ND										
	1,2-Dichlorobenzene						NT	ND	NT	ND	ND							
	1,2-Dichloroethane						NT	ND										
	1,2-Dichloropropane						NT	ND										
	1,4-Dichlorobenzene						NT	ND										
	2-Butanone						NT	ND										
	2-Hexanone						NT	ND										
	4-Methyl-2-Pentanone						NT	ND										
	Acetone						NT	ND	10	ND								
	Acrylonitrile						NT	ND	ND									
	Benzene						NT	ND	ND									
	Bromochloromethane						NT	ND	NT	ND	ND	ND						
	Bromodichloromethane						NT	ND	ND									
	Bromoform						NT	ND	ND									
	Bromomethane						NT	ND	ND									
	Carbon disulfide						NT	ND	ND									
	Carbon Tetrachloride						NT	ND	ND									
	Chlorobenzene						NT	ND	ND									
	Chloroethane						NT	ND	ND									
	Chloroform						NT	ND	ND									
	Chloromethane						NT	ND	ND									
	cis-1,2-Dichloroethene						NT	ND	ND									
	cis-1,3-Dichloropropene						NT	ND	ND									
	Dibromochloromethane						NT	ND	ND									
	Dibromomethane						NT	ND	ND									
	Dichloromethane						NT	ND	ND									
	Ethylbenzene						NT	ND	ND									
	Methyl Iodide						NT	ND	ND									
	Methyl Tertiary Butyl Ether						NT	ND	ND									
	ortho-Xylene						NT	NT	NT	NT	NT	ND	ND	ND	ND	ND	ND	ND
	para-Xylene & meta-Xylene						NT	NT	NT	NT	NT	ND	ND	ND	ND	ND	ND	ND
	Styrene						NT	ND	ND									
Tetrachloroethene						NT	ND											
Toluene						NT	ND											
trans-1,2-Dichloroethene						NT	ND											
trans-1,3-Dichloropropene						NT	ND											
trans-1,4-Dichloro-2-buten						NT	ND											
Trichloroethene						NT	ND											
Trichlorofluoromethane						NT	ND											
Vinyl Acetate						NT	ND											
Vinyl Chloride						NT	ND											
Xylene (Total)						NT	ND	ND	ND	ND	NT	NT	ND	NT	NT	NT	NT	

New Monitoring Wells Installed in 2010

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TABLE 2: Volatile Organic Compounds - Historical Results

Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F
MW2A	1,1,1,2-Tetrachloroethane						NT	ND									
	1,1,1-Trichloroethane						NT	ND									
	1,1,2,2-Tetrachloroethane						NT	ND									
	1,1,2-Trichloroethane						NT	ND									
	1,1-Dichloroethane						NT	ND									
	1,1-Dichloroethene						NT	ND									
	1,2,3-Trichloropropane						NT	ND	ND	ND	ND	ND	NT	ND	ND	ND	ND
	1,2-Dibromo-3-chloropropan						NT	ND									
	1,2-Dibromoethane						NT	ND									
	1,2-Dichlorobenzene						NT	ND	NT	ND	ND						
	1,2-Dichloroethane						NT	ND									
	1,2-Dichloropropane						NT	ND									
	1,4-Dichlorobenzene						NT	ND									
	2-Butanone						NT	ND									
	2-Hexanone						NT	ND									
	4-Methyl-2-Pentanone						NT	ND									
	Acetone						NT	ND	ND	ND	ND	ND	40.8	ND	ND	ND	ND
	Acrylonitrile						NT	ND									
	Benzene						NT	ND									
	Bromochloromethane						NT	ND	NT	ND	ND						
	Bromodichloromethane						NT	ND									
	Bromoform						NT	ND									
	Bromomethane						NT	ND									
	Carbon disulfide						NT	ND									
	Carbon Tetrachloride						NT	ND									
	Chlorobenzene						NT	ND									
	Chloroethane						NT	ND									
	Chloroform						NT	ND									
	Chloromethane						NT	ND									
	cis-1,2-Dichloroethene						NT	ND									
	cis-1,3-Dichloropropene						NT	ND									
	Dibromochloromethane						NT	ND									
	Dibromomethane						NT	ND									
	Dichloromethane						NT	ND									
	Ethylbenzene						NT	ND									
	Methyl Iodide						NT	ND									
	Methyl Tertiary Butyl Ether						NT	ND									
	ortho-Xylene						NT	NT	NT	NT	ND						
	para-Xylene & meta-Xylene						NT	NT	NT	NT	ND						
	Styrene						NT	ND									
Tetrachloroethene						NT		4	2.5	2.2	3.3	ND	2.45	3.84	2.02	1.85	2.02
Toluene						NT	ND										
trans-1,2-Dichloroethene						NT	ND										
trans-1,3-Dichloropropene						NT	ND										
trans-1,4-Dichloro-2-buten						NT	ND										
Trichloroethene						NT	ND	ND	ND	ND	ND	ND	1.51	ND	ND	ND	
Trichlorofluoromethane						NT	ND										
Vinyl Acetate						NT	ND										
Vinyl Chloride						NT	ND										
Xylene (Total)						NT	ND	ND	ND	NT	NT	ND	NT	NT	NT	NT	

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Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F
MW2B	1,1,1,2-Tetrachloroethane						NT	ND									
	1,1,1-Trichloroethane						NT	ND									
	1,1,2,2-Tetrachloroethane						NT	ND									
	1,1,2-Trichloroethane						NT	ND									
	1,1-Dichloroethane						NT	ND									
	1,1-Dichloroethene						NT	ND									
	1,2,3-Trichloropropane						NT	ND	ND	ND	ND	ND	NT	ND	ND	ND	ND
	1,2-Dibromo-3-chloropropan						NT	ND									
	1,2-Dibromoethane						NT	ND									
	1,2-Dichlorobenzene						NT	ND	NT	ND	ND						
	1,2-Dichloroethane						NT	ND									
	1,2-Dichloropropane						NT	ND									
	1,4-Dichlorobenzene						NT	ND									
	2-Butanone						NT	ND									
	2-Hexanone						NT	ND									
	4-Methyl-2-Pentanone						NT	ND									
	Acetone						NT	ND									
	Acrylonitrile						NT	ND									
	Benzene						NT	ND									
	Bromochloromethane						NT	ND	NT	ND	ND						
	Bromodichloromethane						NT	ND									
	Bromoform						NT	ND									
	Bromomethane						NT	ND									
	Carbon disulfide						NT	ND									
	Carbon Tetrachloride						NT	ND									
	Chlorobenzene						NT	ND									
	Chloroethane						NT	ND									
	Chloroform						NT	ND									
	Chloromethane						NT	ND									
	cis-1,2-Dichloroethene						NT	ND									
	cis-1,3-Dichloropropene						NT	ND									
	Dibromochloromethane						NT	ND									
	Dibromomethane						NT	ND									
	Dichloromethane						NT	ND									
	Ethylbenzene						NT	ND									
	Methyl Iodide						NT	ND									
	Methyl Tertiary Butyl Ether						NT	ND									
	ortho-Xylene						NT	NT	NT	NT	ND						
	para-Xylene & meta-Xylene						NT	NT	NT	NT	ND						
	Styrene						NT	ND									
	Tetrachloroethene						NT		1.9	3	3.2	3.27	ND	2.57	3.93	2.32	2.18
Toluene						NT	ND										
trans-1,2-Dichloroethene						NT	ND										
trans-1,3-Dichloropropene						NT	ND										
trans-1,4-Dichloro-2-buten						NT	ND										
Trichloroethene						NT	ND										
Trichlorofluoromethane						NT	ND										
Vinyl Acetate						NT	ND										
Vinyl Chloride						NT	ND										
Xylene (Total)						NT	ND	ND	ND	ND	NT	NT	ND	NT	NT	NT	

New Monitoring Wells Installed in 2010

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TABLE 2: Volatile Organic Compounds - Historical Results

Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F	
MW3A	1,1,1,2-Tetrachloroethane						ND											
	1,1,1-Trichloroethane						ND											
	1,1,2,2-Tetrachloroethane						ND											
	1,1,2-Trichloroethane						ND											
	1,1-Dichloroethane						ND											
	1,1-Dichloroethene						ND											
	1,2,3-Trichloropropane						ND	ND	ND	ND	ND	ND	NT	ND	ND	ND	ND	
	1,2-Dibromo-3-chloropropan						ND											
	1,2-Dibromoethane						ND											
	1,2-Dichlorobenzene						ND	NT	ND	ND	ND							
	1,2-Dichloroethane						ND											
	1,2-Dichloropropane						ND											
	1,4-Dichlorobenzene						ND											
	2-Butanone						ND											
	2-Hexanone						ND											
	4-Methyl-2-Pentanone						ND											
	Acetone						ND											
	Acrylonitrile						ND											
	Benzene						ND											
	Bromochloromethane						ND	NT	ND	ND	ND							
	Bromodichloromethane						ND											
	Bromoform						ND											
	Bromomethane						ND											
	Carbon disulfide						ND											
	Carbon Tetrachloride						ND											
	Chlorobenzene						ND											
	Chloroethane						ND											
	Chloroform							1.46	1.5	1.6	1.8	ND	1.15	1.64	2.5	2.19	1.44	1.28
	Chloromethane						ND	ND										
	cis-1,2-Dichloroethene						ND	ND										
	cis-1,3-Dichloropropene						ND	ND										
	Dibromochloromethane						ND	ND										
	Dibromomethane						ND	ND										
	Dichloromethane						ND	ND										
	Ethylbenzene						ND	ND										
	Methyl Iodide						ND	ND										
	Methyl Tertiary Butyl Ether						ND	ND										
	ortho-Xylene						ND	NT	NT	NT	ND	ND						
	para-Xylene & meta-Xylene						ND	NT	NT	NT	ND	ND						
	Styrene						ND	ND										
	Tetrachloroethene						ND	ND										
	Toluene						ND	ND										
trans-1,2-Dichloroethene						ND												
trans-1,3-Dichloropropene						ND												
trans-1,4-Dichloro-2-buten						ND												
Trichloroethene						ND												
Trichlorofluoromethane						ND												
Vinyl Acetate						ND												
Vinyl Chloride						ND												
Xylene (Total)						NT	ND	ND	ND	ND	NT	NT	ND	NT	NT	NT	NT	

New Monitoring Wells Installed in 2010

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TABLE 2: Volatile Organic Compounds - Historical Results

Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F	
MW3B	1,1,1,2-Tetrachloroethane						ND											
	1,1,1-Trichloroethane						ND											
	1,1,2,2-Tetrachloroethane						ND											
	1,1,2-Trichloroethane						ND											
	1,1-Dichloroethane						ND											
	1,1-Dichloroethene						ND											
	1,2,3-Trichloropropane						ND	ND	ND	ND	ND	ND	NT	ND	ND	ND	ND	
	1,2-Dibromo-3-chloropropan						ND											
	1,2-Dibromoethane						ND											
	1,2-Dichlorobenzene						ND											
	1,2-Dichloroethane						ND											
	1,2-Dichloropropane						ND											
	1,4-Dichlorobenzene						ND											
	2-Butanone						ND											
	2-Hexanone						ND											
	4-Methyl-2-Pentanone						ND											
	Acetone						ND											
	Acrylonitrile						ND											
	Benzene						ND											
	Bromochloromethane						ND											
	Bromodichloromethane						ND											
	Bromoform						ND											
	Bromomethane						ND											
	Carbon disulfide						ND											
	Carbon Tetrachloride						ND											
	Chlorobenzene						ND											
	Chloroethane						ND											
	Chloroform						ND											
	Chloromethane						ND											
	cis-1,2-Dichloroethene							1.11	ND	1.02	ND							
	cis-1,3-Dichloropropene						ND	ND										
	Dibromochloromethane						ND	ND										
	Dibromomethane						ND	ND										
	Dichloromethane						ND	ND										
	Ethylbenzene						ND	ND										
	Methyl Iodide						ND	ND										
	Methyl Tertiary Butyl Ether						ND	ND										
	ortho-Xylene						ND	NT	NT	NT	ND	ND						
	para-Xylene & meta-Xylene						ND	NT	NT	NT	ND	ND						
	Styrene						ND	ND										
Tetrachloroethene						ND												
Toluene						ND												
trans-1,2-Dichloroethene						ND												
trans-1,3-Dichloropropene						ND												
trans-1,4-Dichloro-2-buten						ND												
Trichloroethene						ND												
Trichlorofluoromethane						ND												
Vinyl Acetate						ND												
Vinyl Chloride						ND												
Xylene (Total)						NT	ND	ND	ND	ND	NT	NT	ND	ND	NT	NT	NT	

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Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F	
MW04	1,1,1,2-Tetrachloroethane						ND											
	1,1,1-Trichloroethane						ND											
	1,1,2,2-Tetrachloroethane						ND											
	1,1,2-Trichloroethane						ND											
	1,1-Dichloroethane						ND	9.3	ND	ND								
	1,1-Dichloroethene						ND	ND										
	1,2,3-Trichloropropane						ND	ND	ND	ND	ND	ND	NT	ND	ND	ND	ND	ND
	1,2-Dibromo-3-chloropropan						ND	ND										
	1,2-Dibromoethane						ND	ND										
	1,2-Dichlorobenzene						ND	NT	ND	ND	ND							
	1,2-Dichloroethane						ND	ND										
	1,2-Dichloropropane						ND	ND										
	1,4-Dichlorobenzene						ND	ND										
	2-Butanone						ND	ND										
	2-Hexanone						ND	ND										
	4-Methyl-2-Pentanone						ND	ND										
	Acetone						ND	9.4	ND	ND								
	Acrylonitrile						ND	ND										
	Benzene						ND	1.1	2.1	ND	ND							
	Bromochloromethane						ND	NT	ND	ND	ND							
	Bromodichloromethane						ND	ND										
	Bromoform						ND	ND										
	Bromomethane						ND	ND										
	Carbon disulfide						ND	ND										
	Carbon Tetrachloride						ND	ND										
	Chlorobenzene						ND	5.6	ND	ND								
	Chloroethane						ND	ND										
	Chloroform						ND	ND										
	Chloromethane						ND	2.9	ND	ND								
	cis-1,2-Dichloroethene						ND	13	ND	ND	ND	ND	1.7	ND	ND	1.25	ND	ND
	cis-1,3-Dichloropropene						ND	ND										
	Dibromochloromethane						ND	ND										
	Dibromomethane						ND	ND										
	Dichloromethane						ND	ND	2	ND	ND							
	Ethylbenzene						ND	ND										
	Methyl Iodide						ND	ND										
	Methyl Tertiary Butyl Ether						ND	6.07										
	ortho-Xylene						ND	NT	NT	NT	ND	ND						
	para-Xylene & meta-Xylene						ND	NT	NT	NT	ND	ND						
	Styrene						ND	ND										
Tetrachloroethene						ND	ND	1.5	ND									
Toluene						ND												
trans-1,2-Dichloroethene						ND	1.7	ND										
trans-1,3-Dichloropropene						ND												
trans-1,4-Dichloro-2-buten						ND												
Trichloroethene						ND	5.6	1.4	ND									
Trichlorofluoromethane						ND	ND	14	ND									
Vinyl Acetate						ND												
Vinyl Chloride						ND	ND	3.1	ND									
Xylene (Total)						NT	ND	ND	ND	NT	NT	ND	NT	NT	NT	NT	NT	

New Monitoring Wells Installed in 2010

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TABLE 2: Volatile Organic Compounds - Historical Results

Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F
MW06	1,1,1,2-Tetrachloroethane						ND										
	1,1,1-Trichloroethane						ND										
	1,1,2,2-Tetrachloroethane						ND										
	1,1,2-Trichloroethane						ND										
	1,1-Dichloroethane						6.86	ND	ND	3.3	ND	2.79	ND	2.03	1.68	1.24	1.15
	1,1-Dichloroethene						ND										
	1,2,3-Trichloropropane						ND	ND	ND	ND	ND	NT	ND	ND	ND	ND	ND
	1,2-Dibromo-3-chloropropan						ND										
	1,2-Dibromoethane						ND										
	1,2-Dichlorobenzene						ND	NT	ND	ND	ND						
	1,2-Dichloroethane						1.84	ND									
	1,2-Dichloropropane						2.37	ND	ND	ND	ND	1.15	ND	ND	ND	ND	ND
	1,4-Dichlorobenzene						6.64	ND	ND	ND	6.24	4.53	3.99	4.99	4.42	3.27	3.92
	2-Butanone						ND										
	2-Hexanone						ND										
	4-Methyl-2-Pentanone						ND										
	Acetone						ND										
	Acrylonitrile						ND										
	Benzene						0.74	ND	ND	6.3	ND						
	Bromochloromethane						ND	NT	ND	ND	ND						
	Bromodichloromethane						ND										
	Bromoform						ND										
	Bromomethane						ND										
	Carbon disulfide						ND										
	Carbon Tetrachloride						ND										
	Chlorobenzene						5.77	7.1	6.1	ND	6.56	5.03	4.03	4.94	6.19	5.17	7.9
	Chloroethane						ND										
	Chloroform						ND										
	Chloromethane						ND										
	cis-1,2-Dichloroethene						33.20	ND	ND	23	18.1	15.3	15.6	11.2	11.4	11.2	12.9
	cis-1,3-Dichloropropene						ND										
	Dibromochloromethane						ND										
	Dibromomethane						ND										
	Dichloromethane						0.56	ND									
	Ethylbenzene						ND										
	Methyl Iodide						ND										
	Methyl Tertiary Butyl Ether						5.16	ND	ND	3.3	ND						
	ortho-Xylene						ND	NT	NT	NT	ND						
	para-Xylene & meta-Xylene						ND	NT	NT	NT	ND						
	Styrene						ND										
	Tetrachloroethene						ND										
Toluene						ND											
trans-1,2-Dichloroethene						2.63	ND	2.2	1.2	ND	1.01	ND	ND	ND	ND	ND	
trans-1,3-Dichloropropene						ND											
trans-1,4-Dichloro-2-buten						ND											
Trichloroethene						1.19	ND	ND	ND	ND	ND	1.26	ND	ND	ND	ND	
Trichlorofluoromethane						ND											
Vinyl Acetate						ND											
Vinyl Chloride						ND	ND	ND	2	ND	1.65	ND	ND	1.62	1.38	1.42	
Xylene (Total)						NT	ND	ND	ND	NT	NT	ND	NT	NT	NT	NT	

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TABLE 2: Volatile Organic Compounds - Historical Results

Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F	
MW07	1,1,1,2-Tetrachloroethane						ND											
	1,1,1-Trichloroethane						ND											
	1,1,2,2-Tetrachloroethane						ND											
	1,1,2-Trichloroethane						ND											
	1,1-Dichloroethane						ND											
	1,1-Dichloroethene						ND											
	1,2,3-Trichloropropane						ND	ND	ND	ND	ND	NT	ND	ND	ND	ND	ND	
	1,2-Dibromo-3-chloropropan						ND											
	1,2-Dibromoethane						ND											
	1,2-Dichlorobenzene						ND	NT	ND	ND	ND							
	1,2-Dichloroethane						ND											
	1,2-Dichloropropane						ND											
	1,4-Dichlorobenzene						ND	ND	ND	ND	ND	ND	1.69	ND	7.54	10.6	1.22	3.39
	2-Butanone						0.73	ND	ND									
	2-Hexanone						ND	ND										
	4-Methyl-2-Pentanone						ND	ND										
	Acetone						4.74	ND	ND									
	Acrylonitrile						ND	ND										
	Benzene						ND	1.1	ND	ND								
	Bromochloromethane						ND	NT	ND	ND	ND							
	Bromodichloromethane						ND	ND										
	Bromoform						ND	ND										
	Bromomethane						ND	ND										
	Carbon disulfide						2.00	ND	ND									
	Carbon Tetrachloride						ND	ND										
	Chlorobenzene						ND	3.35	ND	ND								
	Chloroethane						ND	ND										
	Chloroform						ND	ND										
	Chloromethane						0.58	ND	ND									
	cis-1,2-Dichloroethene						ND	ND	ND	ND	ND	5.12	3.38	3.45	6.65	5.18	2.05	1.54
	cis-1,3-Dichloropropene						ND	ND										
	Dibromochloromethane						ND	ND										
	Dibromomethane						ND	ND										
	Dichloromethane						ND	ND	1.7	ND	ND							
	Ethylbenzene						ND	ND										
	Methyl Iodide						ND	ND										
	Methyl Tertiary Butyl Ether						ND	ND										
	ortho-Xylene						ND	NT	NT	NT	ND	ND						
	para-Xylene & meta-Xylene						ND	NT	NT	NT	ND	ND						
	Styrene						ND	ND										
	Tetrachloroethene						0.54	ND	3	3.2	3.56	5.26	4.39	4.64	1.97	3.79	2.22	
Toluene						ND												
trans-1,2-Dichloroethene						ND												
trans-1,3-Dichloropropene						ND												
trans-1,4-Dichloro-2-buten						ND												
Trichloroethene						0.52	11	3	1.3	3.58	2.21	2.62	2.37	ND	1.37	ND		
Trichlorofluoromethane						ND												
Vinyl Acetate						ND												
Vinyl Chloride						ND	1.09	ND	ND									
Xylene (Total)						NT	ND	ND	ND	NT	NT	ND	NT	NT	NT	NT		

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TABLE 2: Volatile Organic Compounds - Historical Results

Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F	
MW08	1,1,1,2-Tetrachloroethane						ND											
	1,1,1-Trichloroethane						ND											
	1,1,2,2-Tetrachloroethane						ND											
	1,1,2-Trichloroethane						ND											
	1,1-Dichloroethane						ND											
	1,1-Dichloroethene						ND											
	1,2,3-Trichloropropane						ND	ND	ND	ND	ND	NT	ND	ND	ND	ND	ND	
	1,2-Dibromo-3-chloropropan						ND											
	1,2-Dibromoethane						ND											
	1,2-Dichlorobenzene						ND	NT	ND	ND	ND							
	1,2-Dichloroethane						ND											
	1,2-Dichloropropane						ND											
	1,4-Dichlorobenzene						ND	ND	ND	ND		4.03	1.45	ND	ND	ND	ND	ND
	2-Butanone						ND	ND										
	2-Hexanone						ND	ND										
	4-Methyl-2-Pentanone						ND	ND										
	Acetone						1.41	8.6	ND	10.2	ND							
	Acrylonitrile						ND	ND										
	Benzene						ND	ND										
	Bromochloromethane						ND	NT	ND	ND	ND	ND						
	Bromodichloromethane						ND	ND										
	Bromoform						ND	ND										
	Bromomethane						ND	ND										
	Carbon disulfide								1.1	ND	ND							
	Carbon Tetrachloride						ND	ND										
	Chlorobenzene						0.51	ND	ND									
	Chloroethane						ND	ND										
	Chloroform						ND	ND										
	Chloromethane						1.98	3.7	ND	ND								
	cis-1,2-Dichloroethene						ND	ND										
	cis-1,3-Dichloropropene						ND	ND										
	Dibromochloromethane						ND	ND										
	Dibromomethane						ND	ND										
	Dichloromethane						ND	ND										
	Ethylbenzene						ND	ND										
	Methyl Iodide						ND	ND										
	Methyl Tertiary Butyl Ether						ND	ND										
	ortho-Xylene						ND	NT	NT	NT	ND	ND						
	para-Xylene & meta-Xylene						ND	NT	NT	NT	ND	ND						
	Styrene						ND	ND										
	Tetrachloroethene						ND	ND										
Toluene						ND												
trans-1,2-Dichloroethene						ND												
trans-1,3-Dichloropropene						ND												
trans-1,4-Dichloro-2-buten						ND												
Trichloroethene						ND	ND	2.8	ND	5.37	1.24	ND	ND	ND	ND	ND	ND	
Trichlorofluoromethane						ND												
Vinyl Acetate						ND												
Vinyl Chloride						ND												
Xylene (Total)						NT	ND	ND	ND	NT								

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TABLE 2: Volatile Organic Compounds - Historical Results

Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F
MW09	1,1,1,2-Tetrachloroethane						ND										
	1,1,1-Trichloroethane						ND										
	1,1,2,2-Tetrachloroethane						ND										
	1,1,2-Trichloroethane						ND										
	1,1-Dichloroethane						ND										
	1,1-Dichloroethene						ND										
	1,2,3-Trichloropropane						ND	ND	ND	ND	ND	ND	NT	ND	ND	ND	ND
	1,2-Dibromo-3-chloropropan						ND										
	1,2-Dibromoethane						ND										
	1,2-Dichlorobenzene						ND	NT	ND	ND	ND						
	1,2-Dichloroethane						ND										
	1,2-Dichloropropane						ND										
	1,4-Dichlorobenzene						ND										
	2-Butanone						ND										
	2-Hexanone						ND										
	4-Methyl-2-Pentanone						ND										
	Acetone						ND		22	ND							
	Acrylonitrile						ND										
	Benzene						ND		1	ND							
	Bromochloromethane						ND	NT	ND	ND	ND						
	Bromodichloromethane						ND										
	Bromoform						ND										
	Bromomethane						ND										
	Carbon disulfide						ND										
	Carbon Tetrachloride						ND										
	Chlorobenzene						ND										
	Chloroethane						ND										
	Chloroform						ND										
	Chloromethane						ND										
	cis-1,2-Dichloroethene						ND										
	cis-1,3-Dichloropropene						ND										
	Dibromochloromethane						ND										
	Dibromomethane						ND										
	Dichloromethane						ND										
	Ethylbenzene						ND										
	Methyl Iodide						ND										
	Methyl Tertiary Butyl Ether						ND										
	ortho-Xylene						ND	NT	NT	NT	NT	ND	ND	ND	ND	ND	ND
	para-Xylene & meta-Xylene						ND	NT	NT	NT	NT	ND	ND	ND	ND	ND	ND
	Styrene						ND										
Tetrachloroethene							8.72	5	16	14	13.6	16.4	12.9	16.5	16.9	5.1	17.1
Toluene							ND	3	ND								
trans-1,2-Dichloroethene							ND										
trans-1,3-Dichloropropene							ND										
trans-1,4-Dichloro-2-buten							ND										
Trichloroethene							0.73	ND	ND	ND	ND	1.11	ND	ND	1.78	ND	2.03
Trichlorofluoromethane							ND										
Vinyl Acetate							ND										
Vinyl Chloride							ND										
Xylene (Total)							NT	1.3	ND	ND	NT	NT	ND	NT	NT	NT	

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Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F	
MW10	1,1,1,2-Tetrachloroethane						ND											
	1,1,1-Trichloroethane						ND											
	1,1,2,2-Tetrachloroethane						ND											
	1,1,2-Trichloroethane						ND											
	1,1-Dichloroethane						ND											
	1,1-Dichloroethene						ND											
	1,2,3-Trichloropropane						ND	ND	ND	ND	ND	ND	NT	ND	ND	ND	ND	
	1,2-Dibromo-3-chloropropan						ND											
	1,2-Dibromoethane						ND											
	1,2-Dichlorobenzene						ND	NT	ND	ND	ND							
	1,2-Dichloroethane						ND	ND										
	1,2-Dichloropropane						ND	ND										
	1,4-Dichlorobenzene						ND	ND										
	2-Butanone						ND	ND										
	2-Hexanone						ND	ND										
	4-Methyl-2-Pentanone						ND	ND										
	Acetone						ND		24	ND	ND							
	Acrylonitrile						ND	ND										
	Benzene						ND	ND										
	Bromochloromethane						ND	NT	ND	ND	ND							
	Bromodichloromethane						ND	ND										
	Bromoform						ND	ND										
	Bromomethane						ND	ND										
	Carbon disulfide						ND	ND										
	Carbon Tetrachloride						ND	ND										
	Chlorobenzene						ND	ND										
	Chloroethane						ND	ND										
	Chloroform						ND	ND										
	Chloromethane						ND		5.2	ND	ND							
	cis-1,2-Dichloroethene						ND	ND										
	cis-1,3-Dichloropropene						ND	ND										
	Dibromochloromethane						ND	ND										
	Dibromomethane						ND	ND										
	Dichloromethane						ND	ND										
	Ethylbenzene						ND	ND										
	Methyl Iodide						ND	ND										
	Methyl Tertiary Butyl Ether						ND	ND										
	ortho-Xylene						ND	NT	NT	NT	ND	ND						
	para-Xylene & meta-Xylene						ND	NT	NT	NT	ND	ND						
	Styrene						ND	ND										
	Tetrachloroethene						ND	ND										
Toluene						ND												
trans-1,2-Dichloroethene						ND												
trans-1,3-Dichloropropene						ND												
trans-1,4-Dichloro-2-buten						ND												
Trichloroethene						ND												
Trichlorofluoromethane						ND												
Vinyl Acetate						ND												
Vinyl Chloride						ND												
Xylene (Total)						NT	ND	ND	ND	ND	NT	NT	ND	NT	NT	NT	NT	

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TABLE 2: Volatile Organic Compounds - Historical Results

Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F	
MW11A	1,1,1,2-Tetrachloroethane						ND											
	1,1,1-Trichloroethane						ND											
	1,1,2,2-Tetrachloroethane						ND											
	1,1,2-Trichloroethane						ND											
	1,1-Dichloroethane						ND											
	1,1-Dichloroethene						ND											
	1,2,3-Trichloropropane						ND	ND	ND	ND	ND	ND	NT	ND	ND	ND	ND	
	1,2-Dibromo-3-chloropropan						ND											
	1,2-Dibromoethane						ND											
	1,2-Dichlorobenzene						ND	NT	ND	ND	ND							
	1,2-Dichloroethane						ND	ND										
	1,2-Dichloropropane						ND	ND										
	1,4-Dichlorobenzene						ND	1.01	ND	ND								
	2-Butanone						ND	ND										
	2-Hexanone						ND	ND										
	4-Methyl-2-Pentanone						ND	ND										
	Acetone						ND	ND										
	Acrylonitrile						ND	ND										
	Benzene						ND	ND										
	Bromochloromethane						ND	NT	ND	ND	ND							
	Bromodichloromethane						ND	ND										
	Bromoform						ND	ND										
	Bromomethane						ND	ND										
	Carbon disulfide						ND	ND										
	Carbon Tetrachloride						ND	ND										
	Chlorobenzene						ND	ND										
	Chloroethane						ND	ND										
	Chloroform						ND	ND										
	Chloromethane						ND	ND										
	cis-1,2-Dichloroethene						ND	ND										
	cis-1,3-Dichloropropene						ND	ND										
	Dibromochloromethane						ND	ND										
	Dibromomethane						ND	ND										
	Dichloromethane						ND	ND										
	Ethylbenzene						ND	ND										
	Methyl Iodide						ND	ND										
	Methyl Tertiary Butyl Ether						ND	ND										
	ortho-Xylene						ND	NT	NT	NT	ND	ND						
	para-Xylene & meta-Xylene						ND	NT	NT	NT	ND	ND						
	Styrene						ND	ND										
	Tetrachloroethene						ND	1.36	ND	ND								
Toluene						ND												
trans-1,2-Dichloroethene						ND												
trans-1,3-Dichloropropene						ND												
trans-1,4-Dichloro-2-buten						ND												
Trichloroethene						ND												
Trichlorofluoromethane						ND												
Vinyl Acetate						ND												
Vinyl Chloride						ND												
Xylene (Total)						NT	ND	ND	ND	NT	NT	ND	NT	NT	NT	NT	NT	

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Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F	
MW11B	1,1,1,2-Tetrachloroethane						ND											
	1,1,1-Trichloroethane						ND											
	1,1,2,2-Tetrachloroethane						ND											
	1,1,2-Trichloroethane						ND											
	1,1-Dichloroethane						ND											
	1,1-Dichloroethene						ND											
	1,2,3-Trichloropropane						ND	ND	ND	ND	ND	ND	NT	ND	ND	ND	ND	
	1,2-Dibromo-3-chloropropan						ND											
	1,2-Dibromoethane						ND											
	1,2-Dichlorobenzene						ND	NT	ND	ND	ND							
	1,2-Dichloroethane						ND	ND										
	1,2-Dichloropropane						ND	ND										
	1,4-Dichlorobenzene						ND	ND										
	2-Butanone						ND	ND										
	2-Hexanone						ND	ND										
	4-Methyl-2-Pentanone						ND	ND										
	Acetone						ND	ND										
	Acrylonitrile						ND	ND										
	Benzene						ND	ND										
	Bromochloromethane						ND	NT	ND	ND	ND							
	Bromodichloromethane						ND	ND										
	Bromoform						ND	ND										
	Bromomethane						ND	ND										
	Carbon disulfide						ND	ND										
	Carbon Tetrachloride						ND	ND										
	Chlorobenzene						ND	ND										
	Chloroethane						ND	ND										
	Chloroform						ND	ND										
	Chloromethane						ND	ND										
	cis-1,2-Dichloroethene						ND	1.15										
	cis-1,3-Dichloropropene						ND	ND										
	Dibromochloromethane						ND	ND										
	Dibromomethane						ND	ND										
	Dichloromethane						ND	ND										
	Ethylbenzene						ND	ND										
	Methyl Iodide						ND	ND										
	Methyl Tertiary Butyl Ether						ND	ND										
	ortho-Xylene						ND	NT	NT	NT	ND	ND						
	para-Xylene & meta-Xylene						ND	NT	NT	NT	ND	ND						
	Styrene						ND	ND										
	Tetrachloroethene							0.97	ND	ND		2.1	ND	2.74	2.42	3.01	3.83	3.05
Toluene						ND												
trans-1,2-Dichloroethene						ND												
trans-1,3-Dichloropropene						ND												
trans-1,4-Dichloro-2-buten						ND												
Trichloroethene						ND	1.17											
Trichlorofluoromethane						ND												
Vinyl Acetate						ND												
Vinyl Chloride						ND												
Xylene (Total)						NT	ND	ND	ND	ND	NT	NT	ND	NT	NT	NT	NT	

New Monitoring Wells Installed in 2010

NT: Not Tested, NS: Not Sampled, ND: Not Detected, S: Spring, F: Fall

Note: MCL exceedances are indicated in Red. Stream monitoring locations SW015 and SW65 were dried and not sampled.

TABLE 2: Volatile Organic Compounds - Historical Results

Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F
MW12	1,1,1,2-Tetrachloroethane						ND										
	1,1,1-Trichloroethane						ND										
	1,1,2,2-Tetrachloroethane						ND										
	1,1,2-Trichloroethane						ND										
	1,1-Dichloroethane						ND										
	1,1-Dichloroethene						ND										
	1,2,3-Trichloropropane						ND	ND	ND	ND	ND	NT	ND	ND	ND	ND	ND
	1,2-Dibromo-3-chloropropan						ND										
	1,2-Dibromoethane						ND										
	1,2-Dichlorobenzene						ND	NT	ND	ND	ND						
	1,2-Dichloroethane						ND										
	1,2-Dichloropropane						ND										
	1,4-Dichlorobenzene						ND										
	2-Butanone						ND										
	2-Hexanone						ND										
	4-Methyl-2-Pentanone						ND										
	Acetone						ND										
	Acrylonitrile						ND										
	Benzene						ND										
	Bromochloromethane						ND	NT	ND	ND	ND						
	Bromodichloromethane						ND										
	Bromoform						ND										
	Bromomethane						ND										
	Carbon disulfide						ND										
	Carbon Tetrachloride						ND										
	Chlorobenzene						ND										
	Chloroethane						ND										
	Chloroform						ND										
	Chloromethane						ND		4.1	ND							
	cis-1,2-Dichloroethene						ND										
	cis-1,3-Dichloropropene						ND										
	Dibromochloromethane						ND										
	Dibromomethane						ND										
	Dichloromethane						ND										
	Ethylbenzene						ND										
	Methyl Iodide						ND										
	Methyl Tertiary Butyl Ether						ND										
	ortho-Xylene						ND	NT	NT	NT	ND						
	para-Xylene & meta-Xylene						ND	NT	NT	NT	ND						
	Styrene						ND										
Tetrachloroethene						ND											
Toluene						ND											
trans-1,2-Dichloroethene						ND											
trans-1,3-Dichloropropene						ND											
trans-1,4-Dichloro-2-buten						ND											
Trichloroethene						ND											
Trichlorofluoromethane						ND											
Vinyl Acetate						ND											
Vinyl Chloride						ND											
Xylene (Total)						NT	ND	ND	ND	NT	NT	ND	NT	NT	NT	NT	

New Monitoring Wells Installed in 2010

NT: Not Tested, NS: Not Sampled, ND: Not Detected, S: Spring, F: Fall

Note: MCL exceedances are indicated in Red. Stream monitoring locations SW015 and SW65 were dried and not sampled.

TABLE 2: Volatile Organic Compounds - Historical Results

Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F		
MW13A	1,1,1,2-Tetrachloroethane						ND												
	1,1,1-Trichloroethane						ND												
	1,1,2,2-Tetrachloroethane						ND												
	1,1,2-Trichloroethane						ND												
	1,1-Dichloroethane						17.90	25	ND		16	15.6	19	19.9	15.8	13.7	16.3	13	
	1,1-Dichloroethene						ND	ND											
	1,2,3-Trichloropropane						ND	ND	ND	ND	ND	NT	ND	ND	ND	ND	ND	ND	
	1,2-Dibromo-3-chloropropan						ND	ND											
	1,2-Dibromoethane						ND	ND											
	1,2-Dichlorobenzene						ND	NT	ND	ND	ND								
	1,2-Dichloroethane						1.86	ND	ND	ND	ND		2.35	1.74	2.06	ND	2.23	2.06	
	1,2-Dichloropropane						4.80	6.6	4.4		5.4	5.64	6.94	3.08	6	6.22	6.06	5.41	
	1,4-Dichlorobenzene						3.54	ND	ND		5.9	5.12	5.77	6.46	6.13	5.2	5.25	3.68	
	2-Butanone							ND	ND										
	2-Hexanone							ND	ND										
	4-Methyl-2-Pentanone							ND	ND										
	Acetone						0.72	ND	ND										
	Acrylonitrile							ND	ND										
	Benzene						3.31	4.4	3.7		2.9	ND	3.24	3.57	2.64	2.28	2.27	1.71	
	Bromochloromethane							ND	NT	ND	ND	ND							
	Bromodichloromethane							ND	ND										
	Bromoform							ND	ND										
	Bromomethane							ND	ND										
	Carbon disulfide							ND	ND										
	Carbon Tetrachloride							ND	ND										
	Chlorobenzene							1.01	ND	ND	ND	ND	1.64	1	1.81	1.66	1.57	1.28	
	Chloroethane							0.97	ND	ND									
	Chloroform							ND	1.17										
	Chloromethane							0.96	6.4	3.7	ND	ND							
	cis-1,2-Dichloroethene							76.70	96	ND		97	79.8	105	120	94.2	81.6	95.9	81.5
	cis-1,3-Dichloropropene							ND	ND	ND									
	Dibromochloromethane							ND	ND	ND									
	Dibromomethane							ND	ND	ND									
	Dichloromethane							8.07	10	9.2		3.2	6.02	6.49	4.04	4.88	3.59	4.36	3.63
	Ethylbenzene							ND	ND	ND									
	Methyl Iodide							ND	ND	ND									
	Methyl Tertiary Butyl Ether							0.61	3.1	ND	ND	ND							
	ortho-Xylene							ND	NT	NT	NT	ND	ND	ND	ND	ND	ND	ND	ND
	para-Xylene & meta-Xylene							ND	NT	NT	NT	ND	ND	ND	ND	ND	ND	ND	ND
	Styrene							ND	ND	ND									
	Tetrachloroethene							22.20	17	25		28	25.7	27.8	24.2	21.7	18	17.2	11.9
Toluene							ND	ND											
trans-1,2-Dichloroethene							3.26	7.3	6.2		3.5	ND	4	4.76	3.31	3.14	3.63	2.57	
trans-1,3-Dichloropropene							ND	ND											
trans-1,4-Dichloro-2-buten							ND	ND											
Trichloroethene							26.90	23	28		32	30.2	33.9	37.1	28.3	28.9	25.1	21.8	
Trichlorofluoromethane							1.50	3.8	4.6	ND	ND								
Vinyl Acetate							ND	ND											
Vinyl Chloride							11.10	14	18		8.6	8.58	10.1	9.83	8.14	6.74	7.91	6	
Xylene (Total)							NT	ND	ND	ND	NT	NT	ND	NT	NT	NT	NT	NT	

New Monitoring Wells Installed in 2010

NT: Not Tested, NS: Not Sampled, ND: Not Detected, S: Spring, F: Fall

Note: MCL exceedances are indicated in Red. Stream monitoring locations SW015 and SW65 were dried and not sampled.

TABLE 2: Volatile Organic Compounds - Historical Results

Location	Parameter	2008-S	2008-F	2009-S	2009-F	2010-S	2010-F	2011-S	2011-F	2012-S	2012-F	2013-S	2013-F	2014-S	2014-F	2015-S	2015-F		
MW13B	1,1,1,2-Tetrachloroethane						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	1,1,1-Trichloroethane						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	1,1,2,2-Tetrachloroethane						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	1,1,2-Trichloroethane						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
	1,1-Dichloroethane						17.80	ND	ND		15	13.9	17.2	16.6	13.8	14	12.8	12	
	1,1-Dichloroethene						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	1,2,3-Trichloropropane						ND	ND	ND	ND	ND	ND	NT	ND	ND	ND	ND	ND	
	1,2-Dibromo-3-chloropropan						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	1,2-Dibromoethane						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	1,2-Dichlorobenzene						0.54	ND	ND	ND	ND	ND		1.09	NT	ND	ND	ND	
	1,2-Dichloroethane						3.11	ND		4.6	ND	ND	2.87	2.52	2.5	2.64	2.35	2.19	
	1,2-Dichloropropane						6.54	ND		7.4	7.5	7.73	8.01	7.87	6.96	5.44	6.23	6.03	
	1,4-Dichlorobenzene						8.86	ND	ND		11	9.67	10.2	11.5	9.56	8.49	8.23	7.91	
	2-Butanone						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	2-Hexanone						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	4-Methyl-2-Pentanone						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	Acetone						0.87		35	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	Acrylonitrile						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	Benzene						5.56	ND		6.3	4.6	ND	4.56	4.17	3.61	3.28	3.18	2.96	
	Bromochloromethane						ND	ND	ND	ND	ND	ND	ND	ND	NT	ND	ND	ND	
	Bromodichloromethane						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	Bromoform						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	Bromomethane						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	Carbon disulfide						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	Carbon Tetrachloride						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	Chlorobenzene						1.63	ND	ND	ND	ND	ND	2.03	2.29	1.98	1.67	1.81	1.75	
	Chloroethane						1.14	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	Chloroform						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	Chloromethane						0.76		4.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	cis-1,2-Dichloroethene						101.00		3.9	ND		110	82	102	109	83.5	79.5	79.6	73.5
	cis-1,3-Dichloropropene						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	Dibromochloromethane						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	Dibromomethane						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	Dichloromethane						8.50	ND		11	4.2	5.95	7.2	6.55	5.62	5.53	4.84	4.71	
	Ethylbenzene						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	Methyl Iodide						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	Methyl Tertiary Butyl Ether						0.96	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	ortho-Xylene						ND	NT	NT	NT	ND								
	para-Xylene & meta-Xylene						ND	NT	NT	NT	ND								
	Styrene						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Tetrachloroethene						22.70	ND		27	30	26.5	27	24.2	21.1	16.8	15.8	15.2		
Toluene						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
trans-1,2-Dichloroethene						4.45	ND		7.3	4.3	ND	4.22	4.18	3.31	3.6	3.03	2.89		
trans-1,3-Dichloropropene						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
trans-1,4-Dichloro-2-buten						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Trichloroethene						32.00	ND		28	32	27.6	29.5	34.5	22.9	20.2	19	20.7		
Trichlorofluoromethane						1.71	ND		4.7	1.3	ND	1.27	ND	ND	1.09	ND	ND		
Vinyl Acetate						ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Vinyl Chloride						17.20	ND		25	12	9.83	11.4	9.96	8.49	10.8	8.03	7.37		
Xylene (Total)						NT	ND	ND	ND	ND	NT	NT	ND	NT	NT	NT	NT		

New Monitoring Wells Installed in 2010

NT: Not Tested, NS: Not Sampled, ND: Not Detected, S: Spring, F: Fall

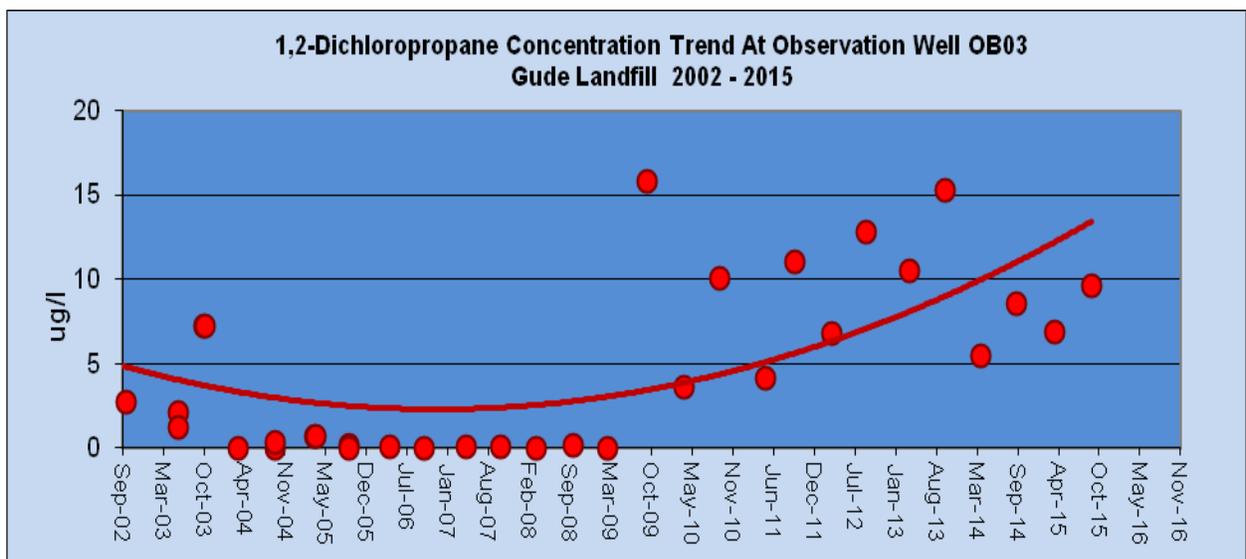
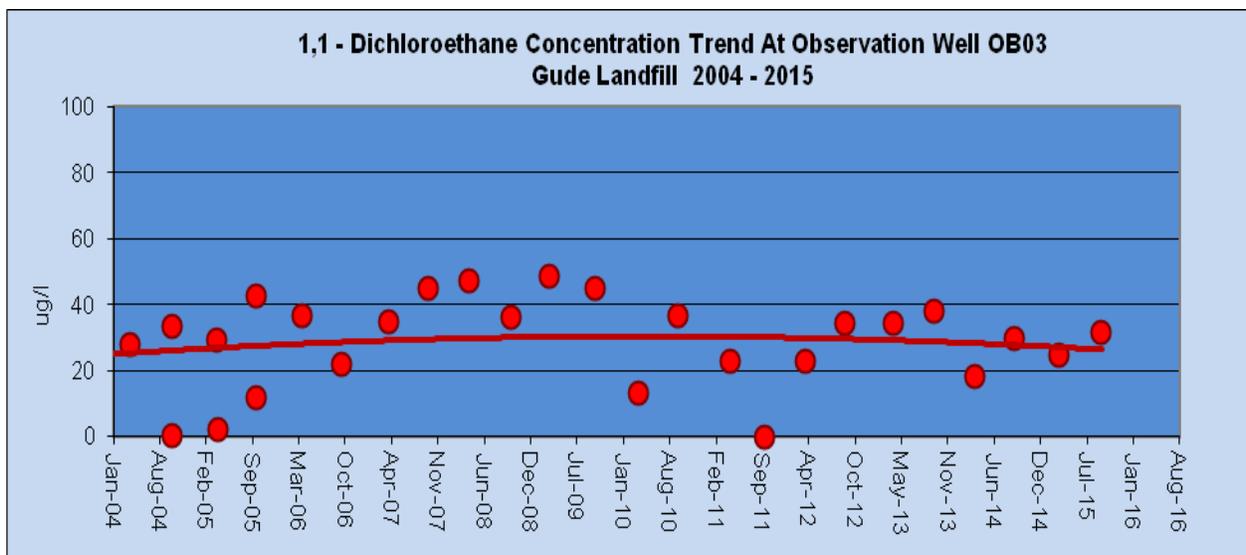
Note: MCL exceedances are indicated in Red. Stream monitoring locations SW015 and SW65 were dried and not sampled.

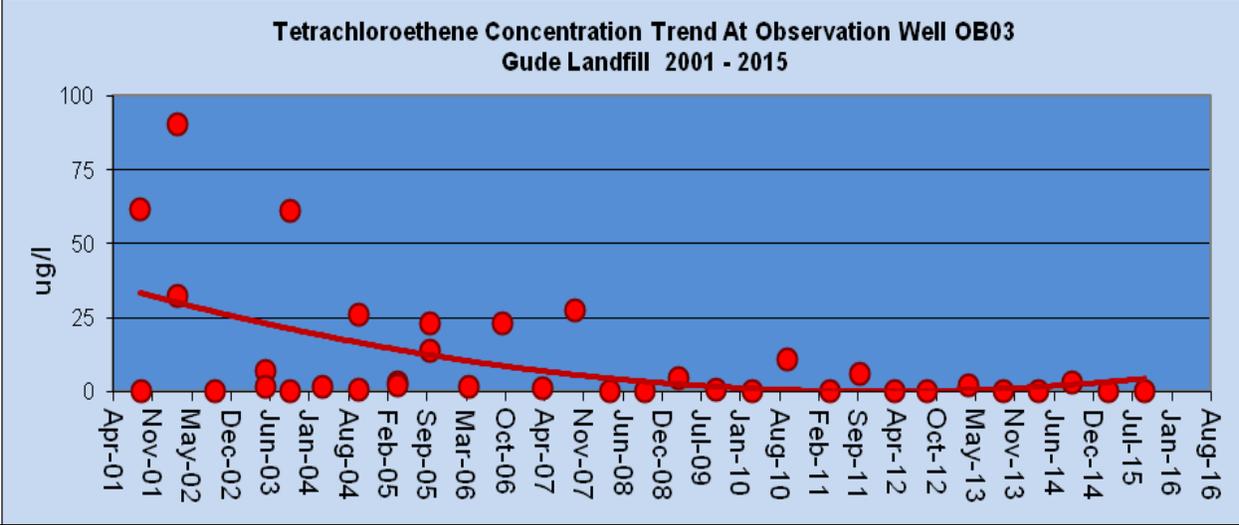
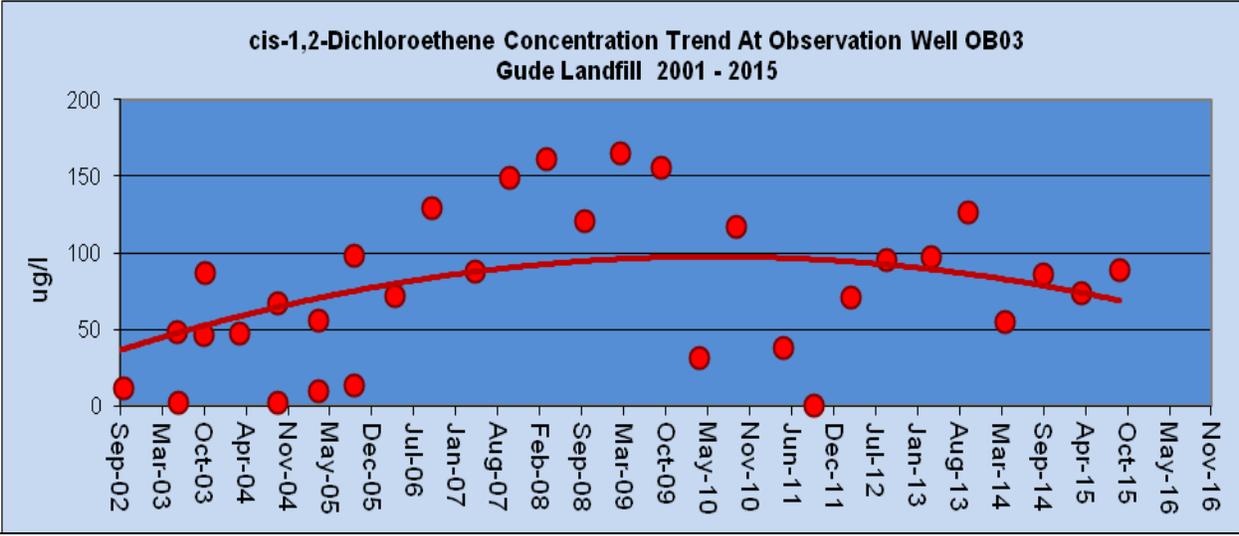
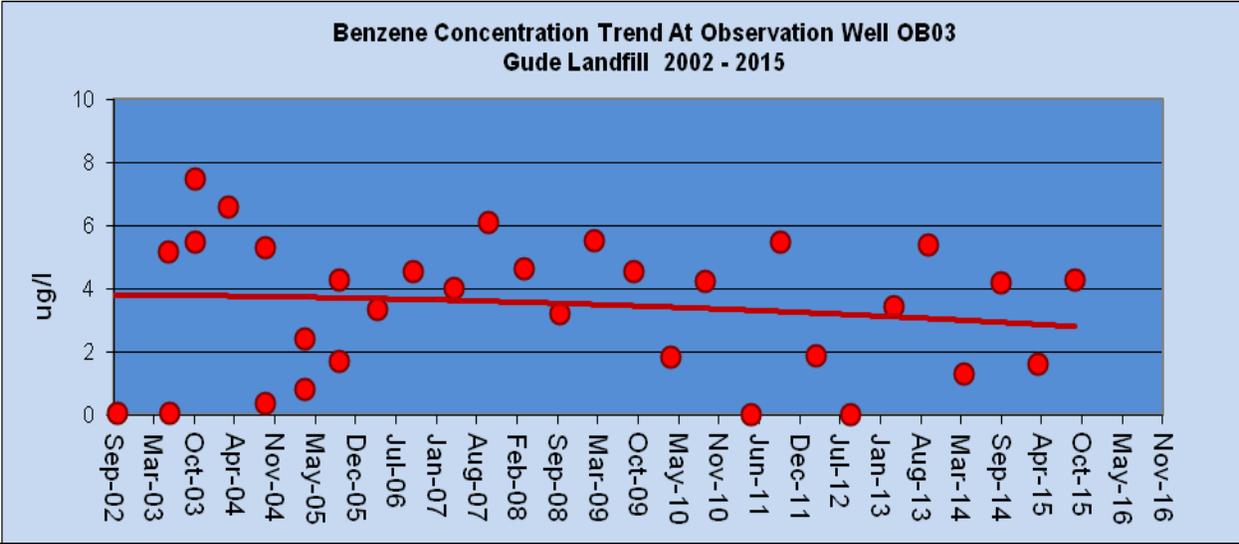
Appendix C

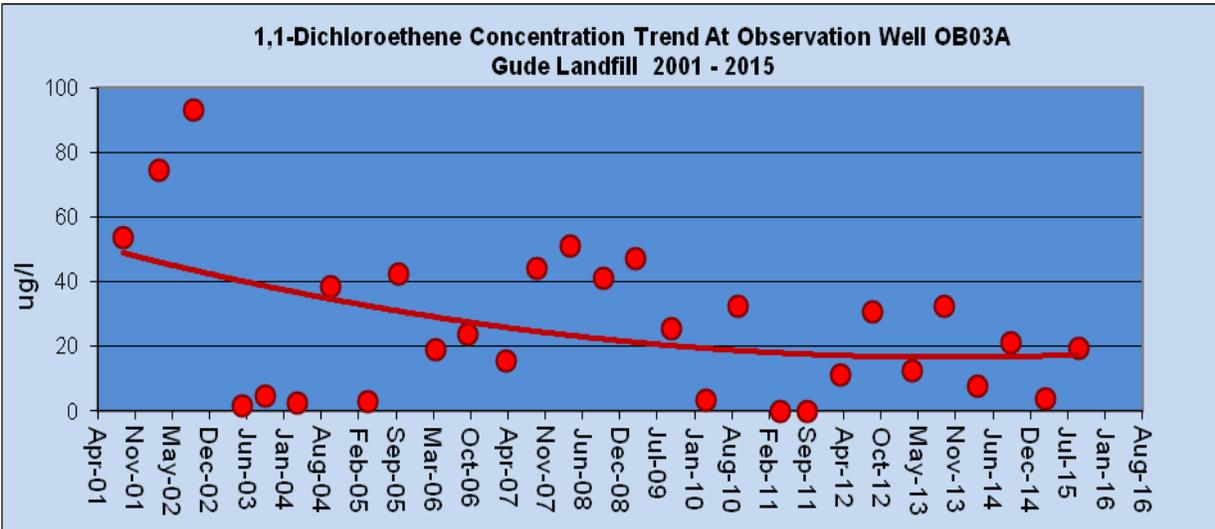
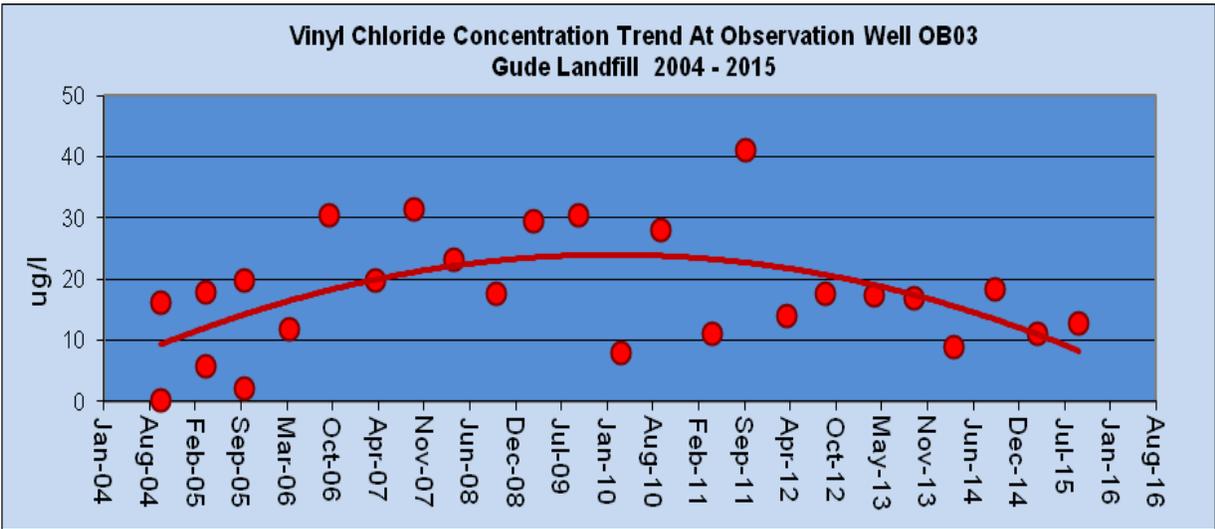
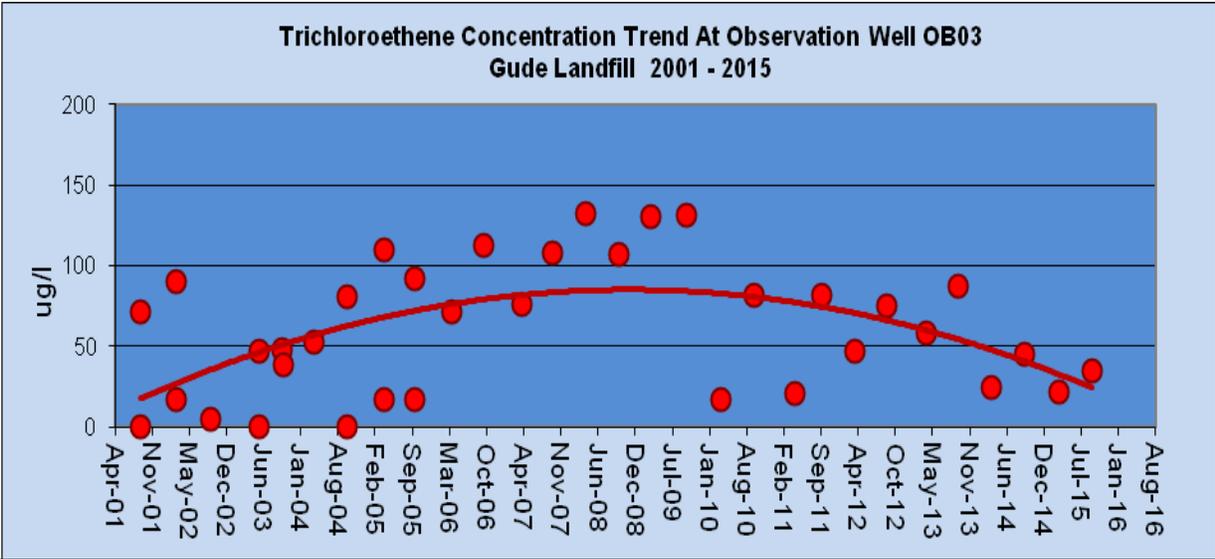
Volatile Organic Compounds

Trend Analysis

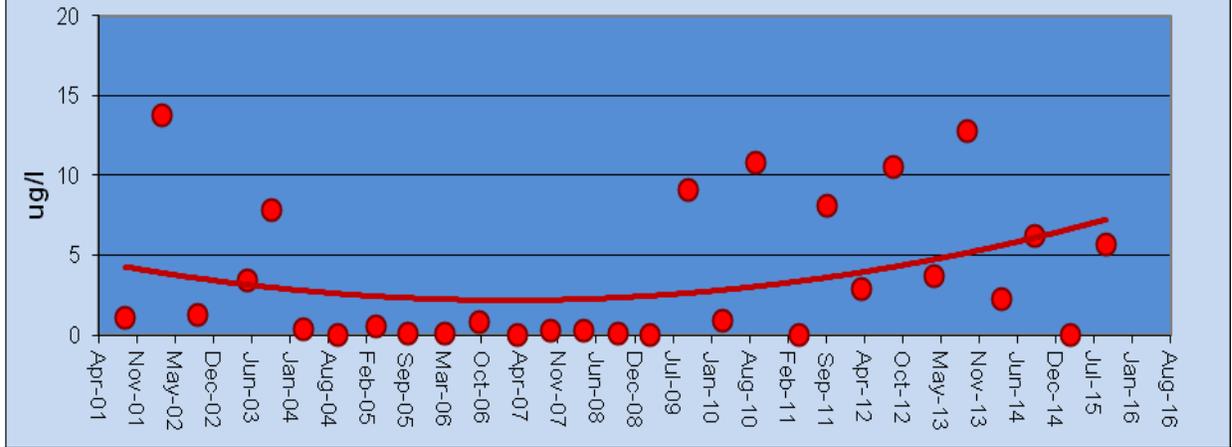
The following graphs provide Historical Trend Analysis for those VOC compounds that are consistently detected at specific monitoring locations. These historical trend analyses do not include the monitoring locations installed in 2010. (Please refer to Tables 1 and 2 for additional information.)



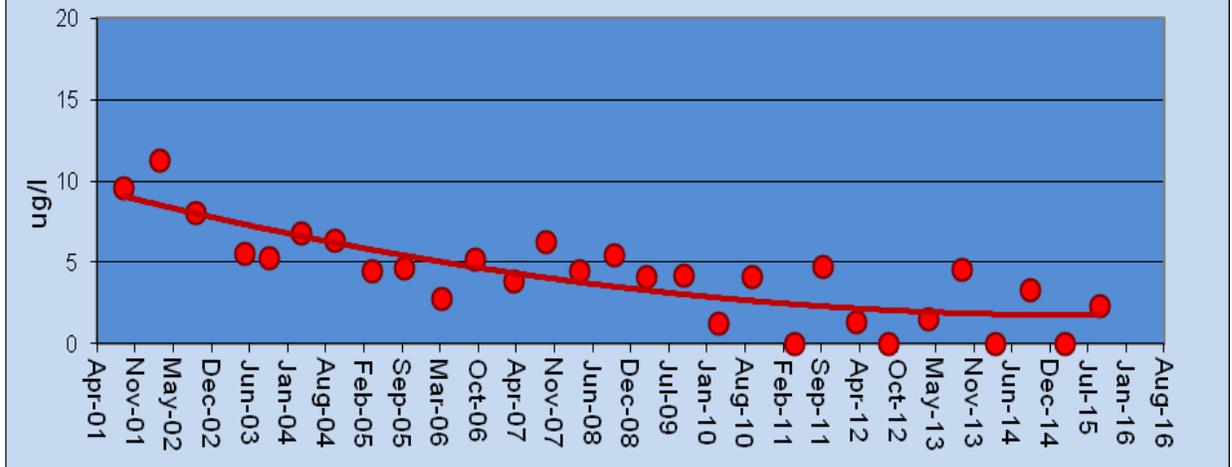




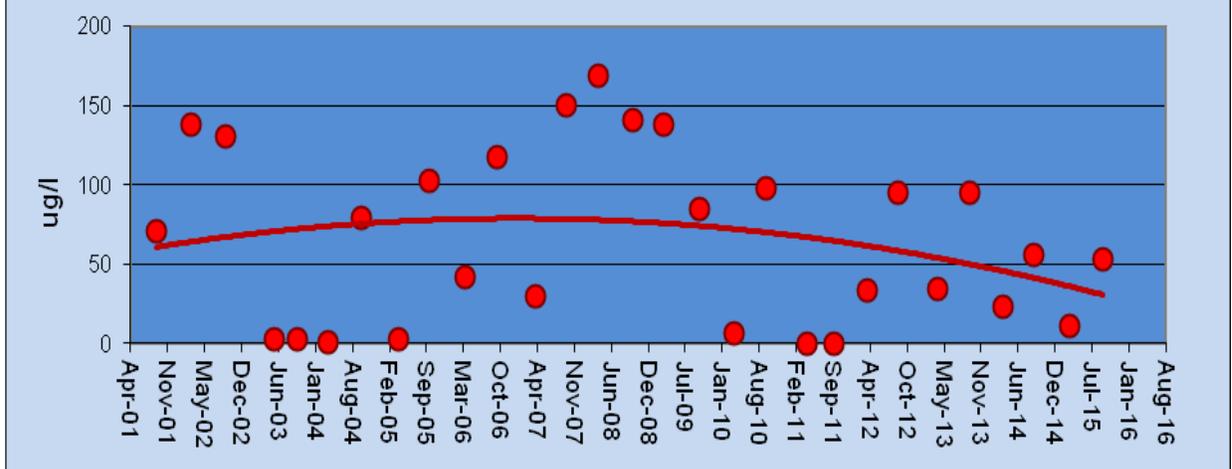
**1,2-Dichloropropane Concentration Trend At Observation Well OB03A
Gude Landfill 2001 - 2015**

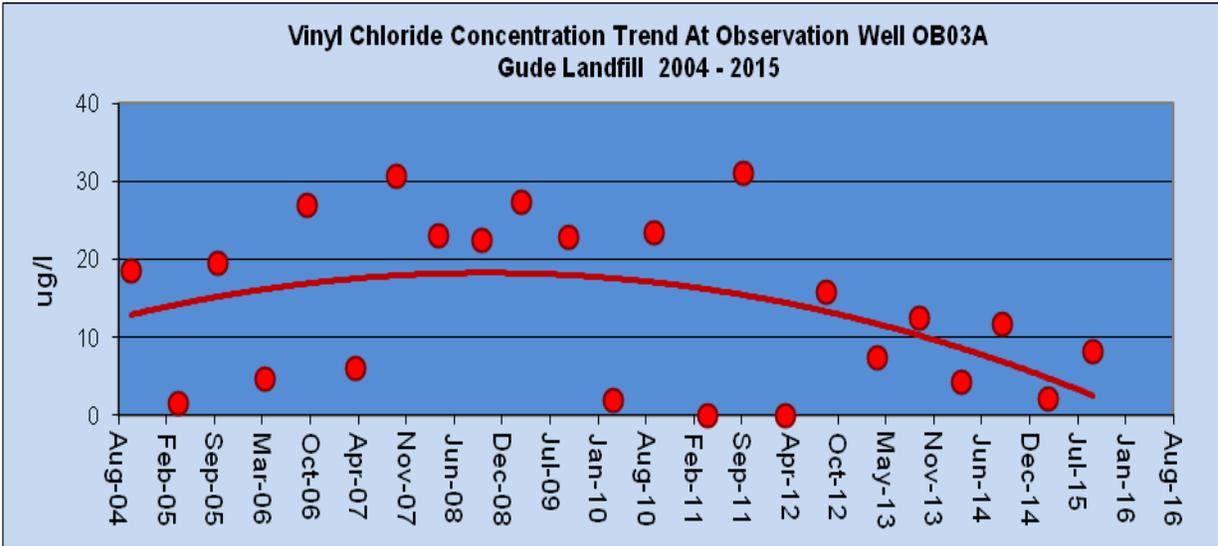
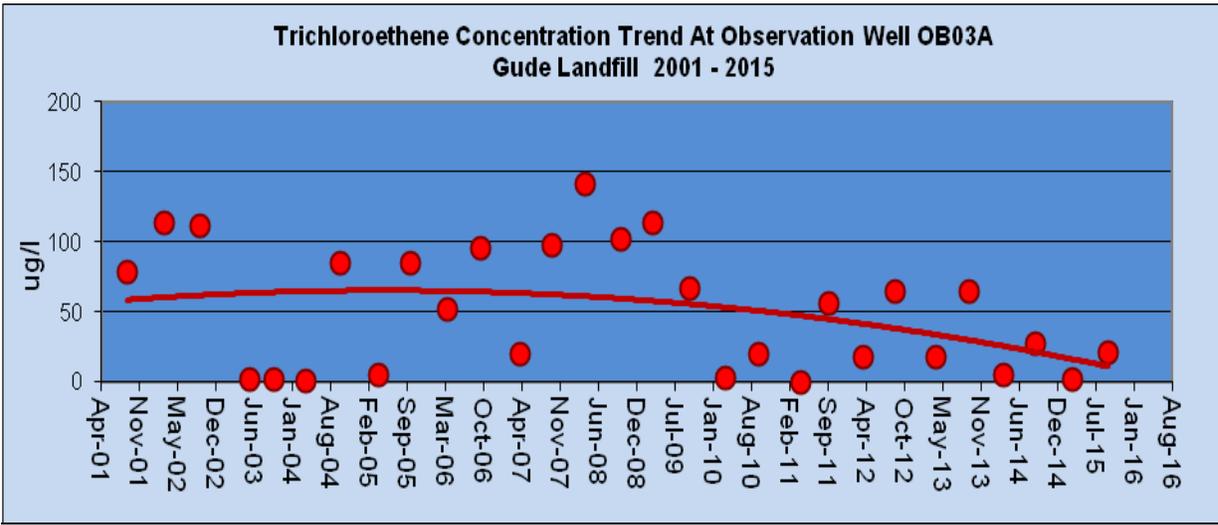
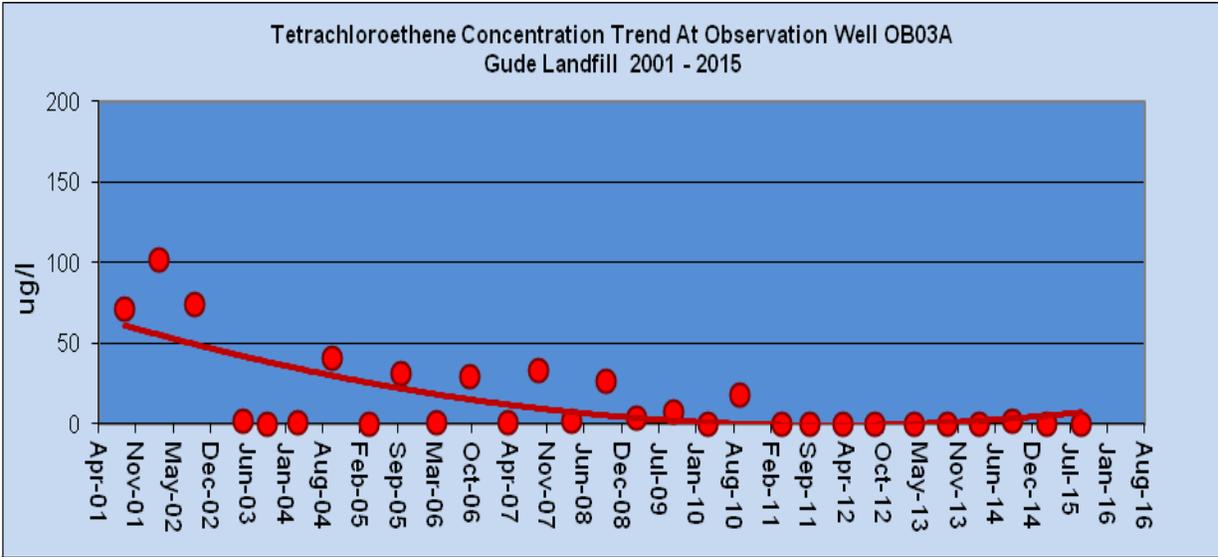


**Benzene Concentration Trend At Observation Well OB03A
Gude Landfill 2001 - 2015**

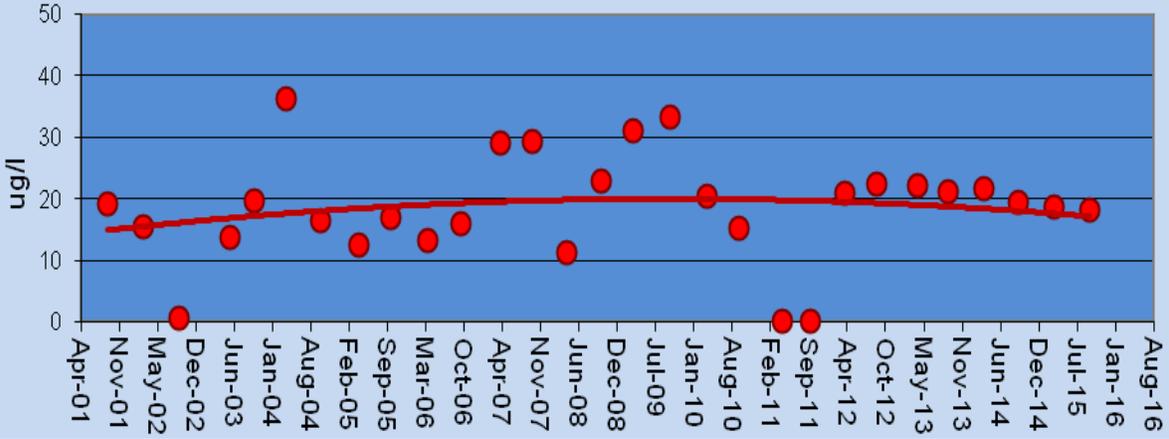


**cis-1,2-Dichloroethene Concentration Trend At Observation Well OB03A
Gude Landfill 2001 - 2015**

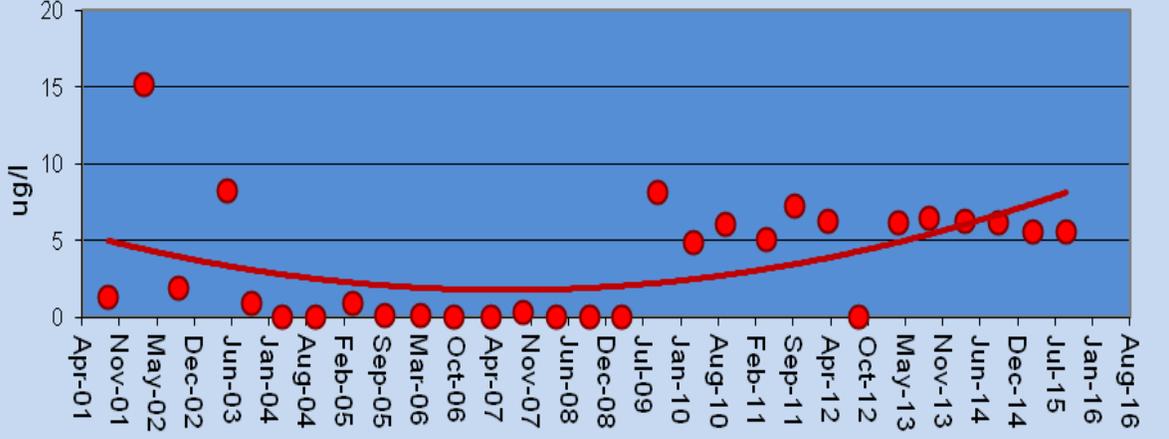




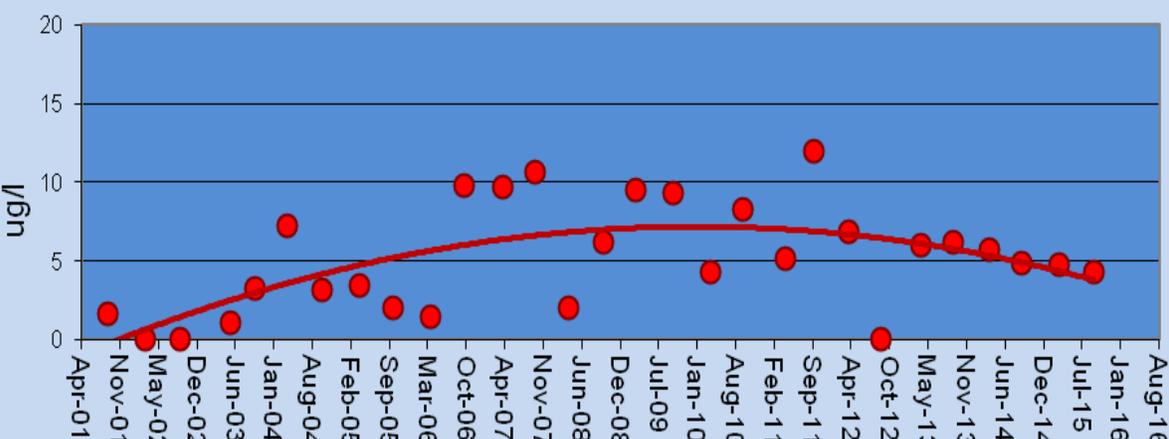
**1,1- Dichloroethane Concentration Trend At Observation Well OB11
Gude Landfill 2001 - 2015**

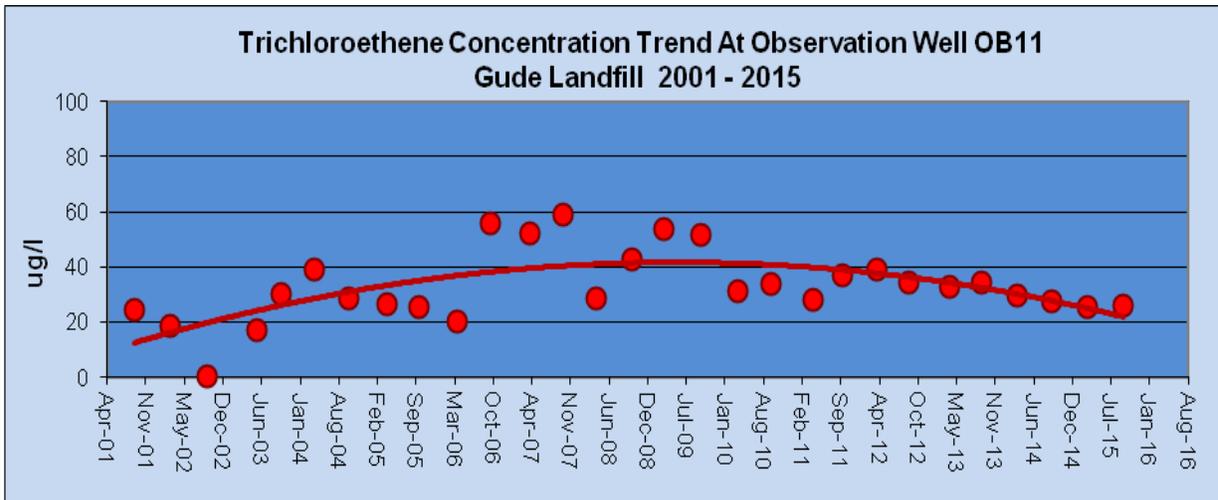
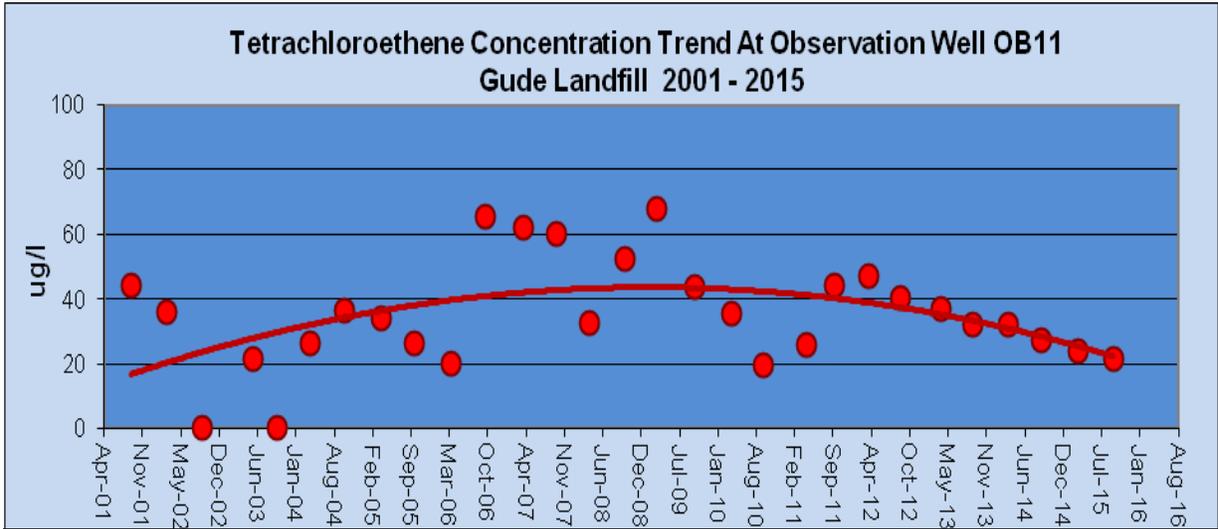
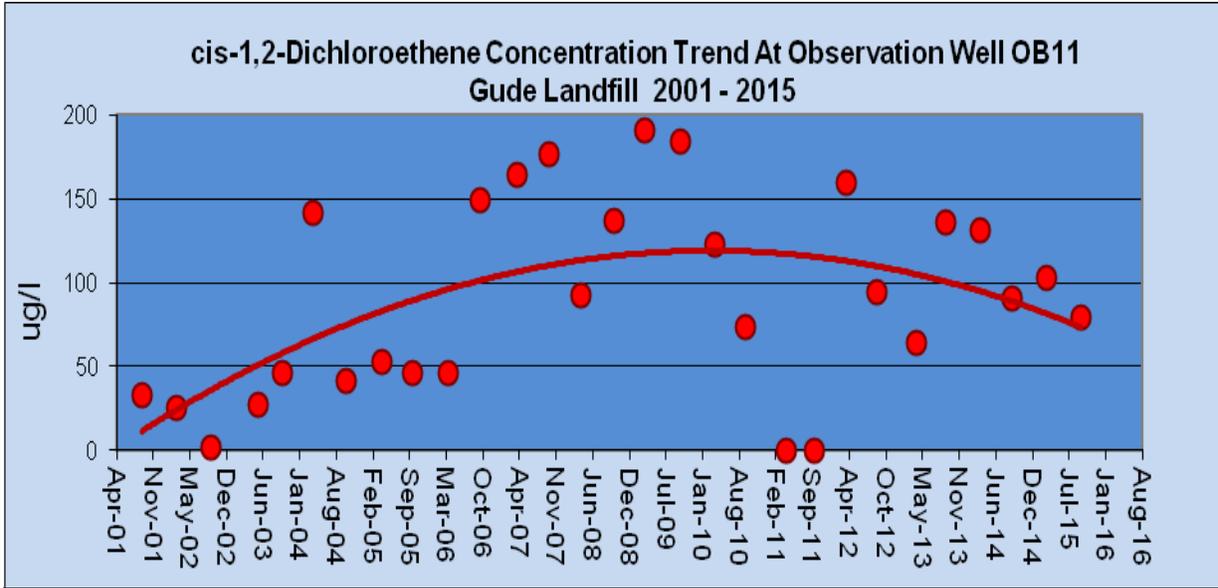


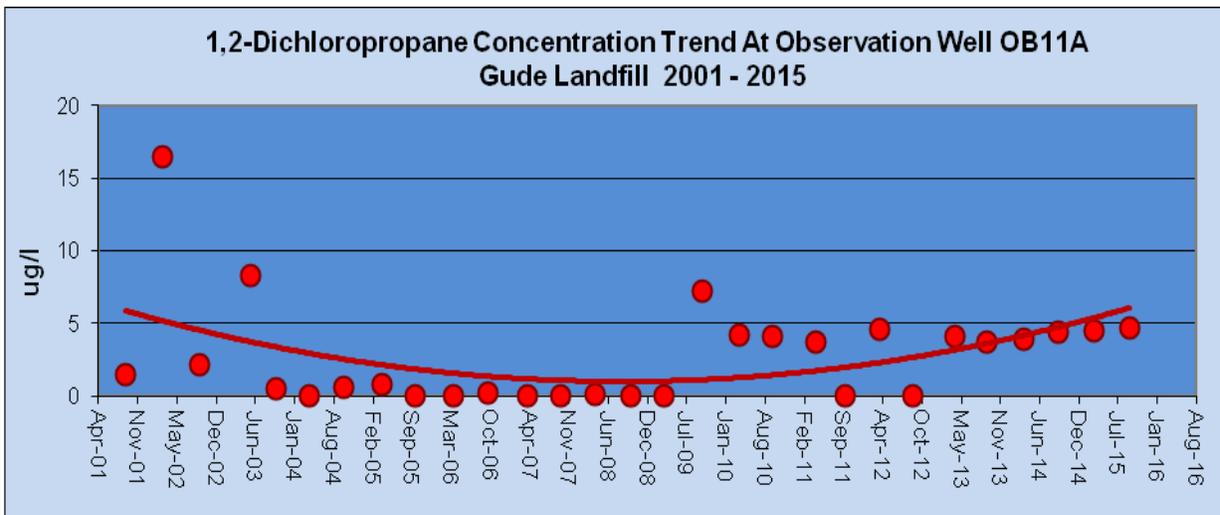
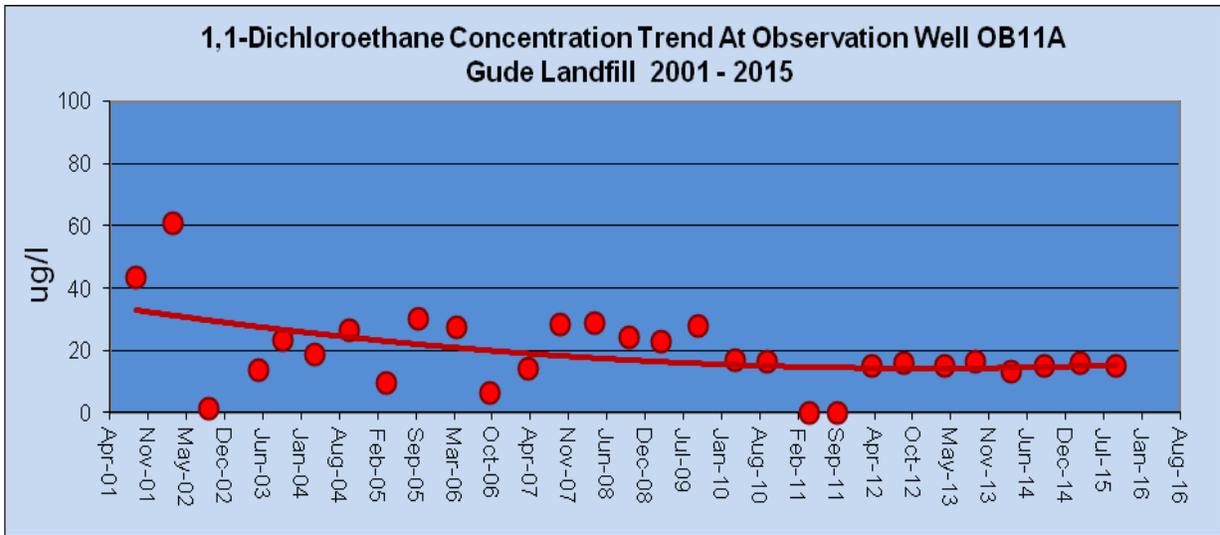
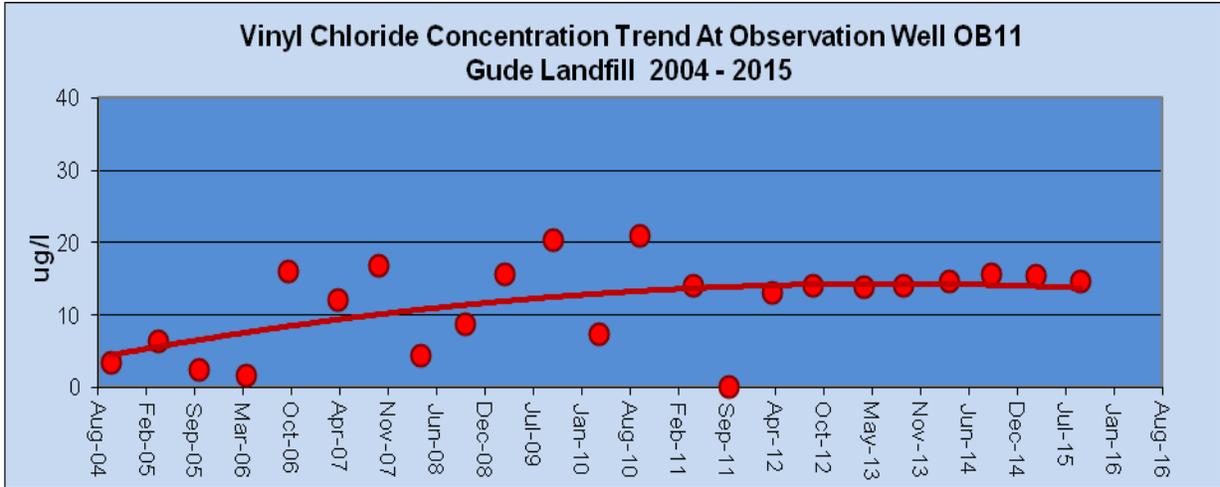
**1,2-Dichloropropane Concentration Trend At Observation Well OB11
Gude Landfill 2001 - 2015**



**Benzene Concentration Trend At Observation Well OB11
Gude Landfill 2001 - 2015**



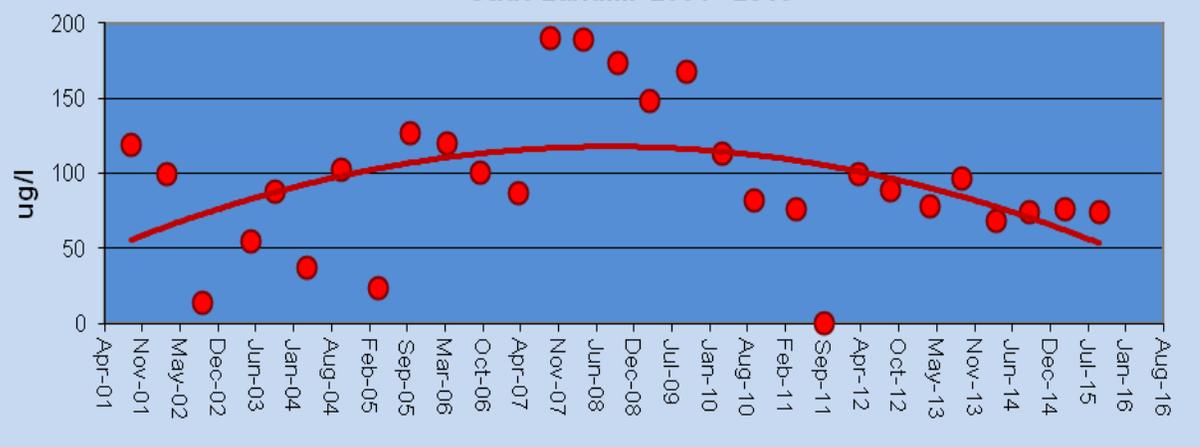




**Benzene Concentration Trend At Observation Well OB11A
Gude Landfill 2001 - 2015**



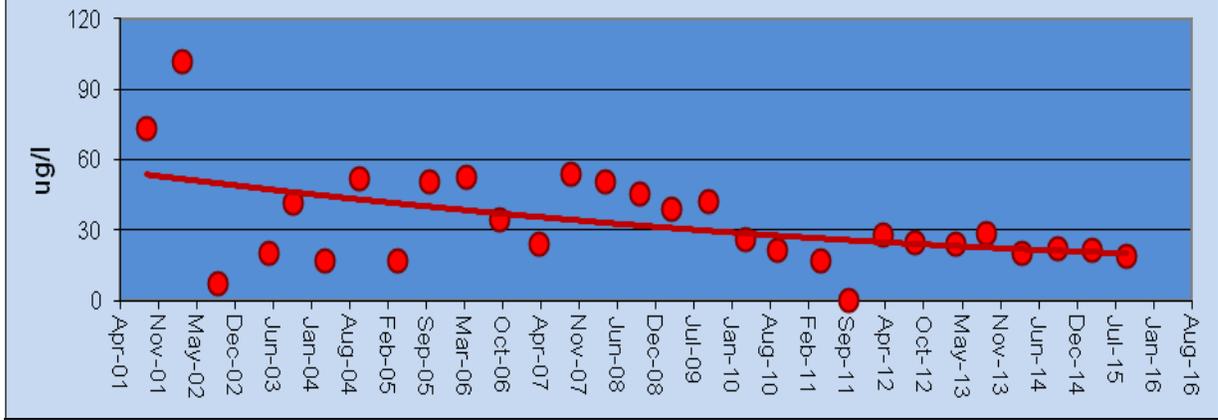
**cis-1,2-Dichloroethene Concentration Trend At Observation Well OB11A
Gude Landfill 2001 - 2015**



**Tetrachloroethene Concentration Trend At Observation Well OB11A
Gude Landfill 2001 - 2015**



**Trichloroethene Concentration Trend At Observation Well OB11A
Gude Landfill 2001 - 2015**

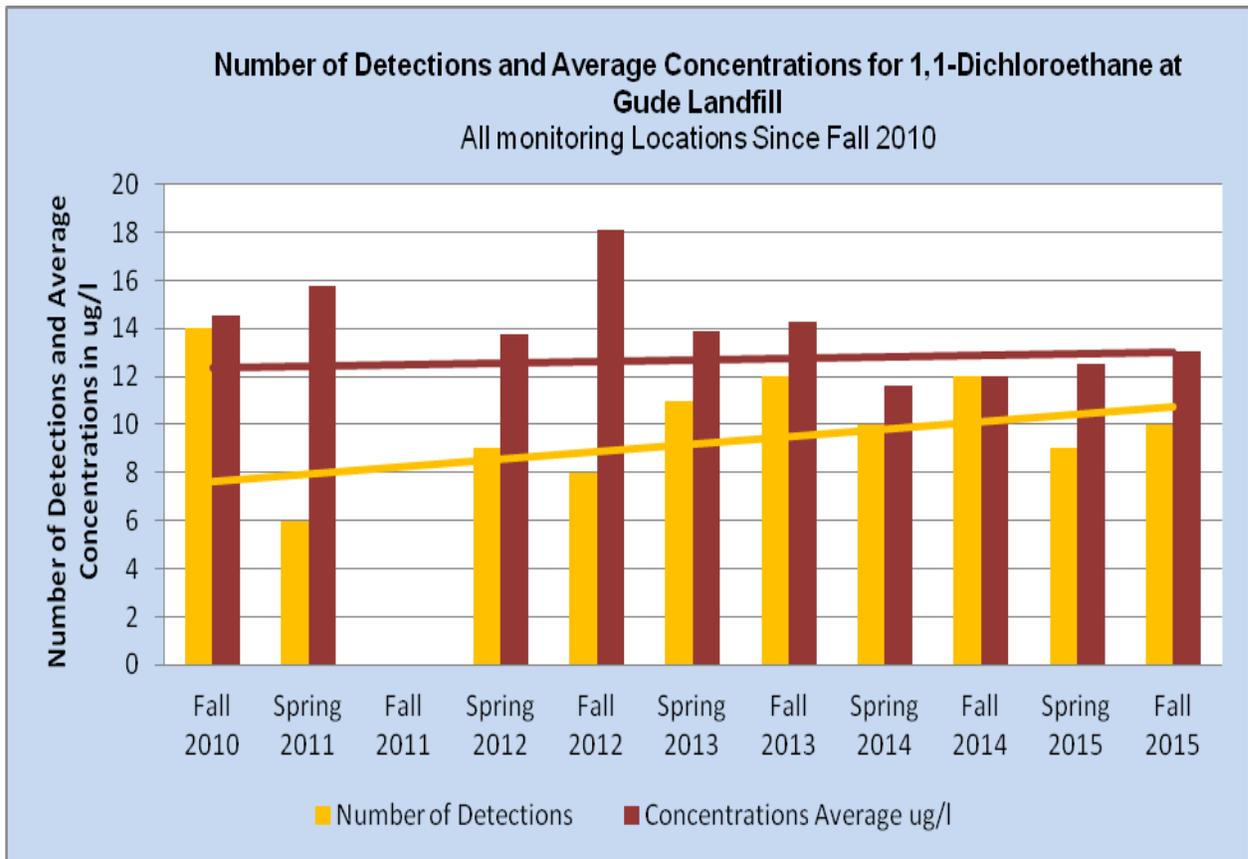


**Trichloroethene Concentration Trend At Observation Well OB11A
Gude Landfill 2001 - 2015**

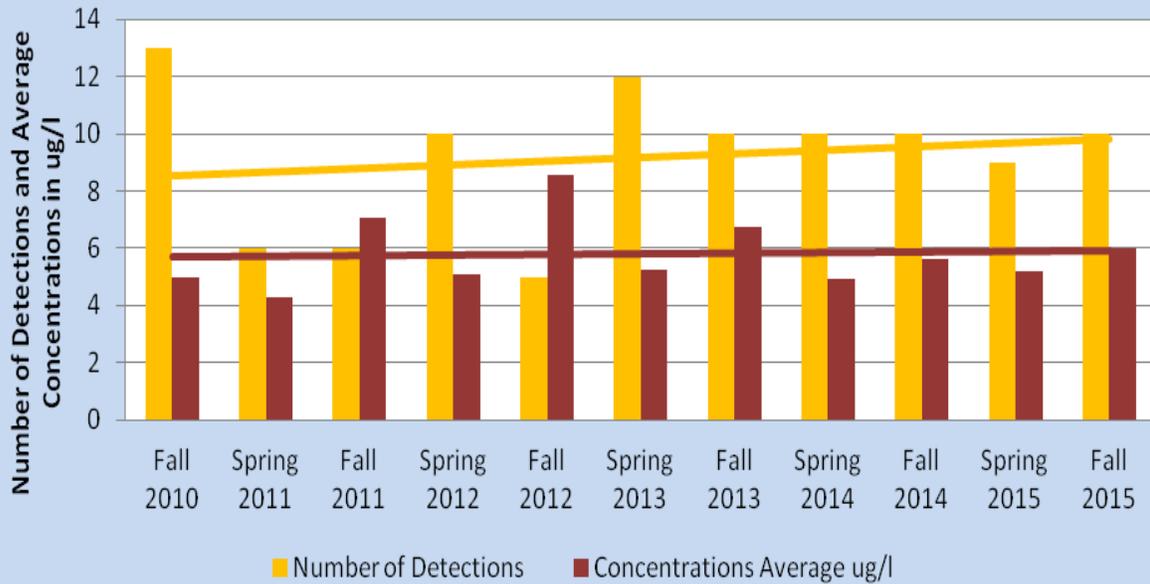


The following graphs provide Historical Trend Analysis for particular VOC compounds that are detected on regular basis at the Landfill since 2010.

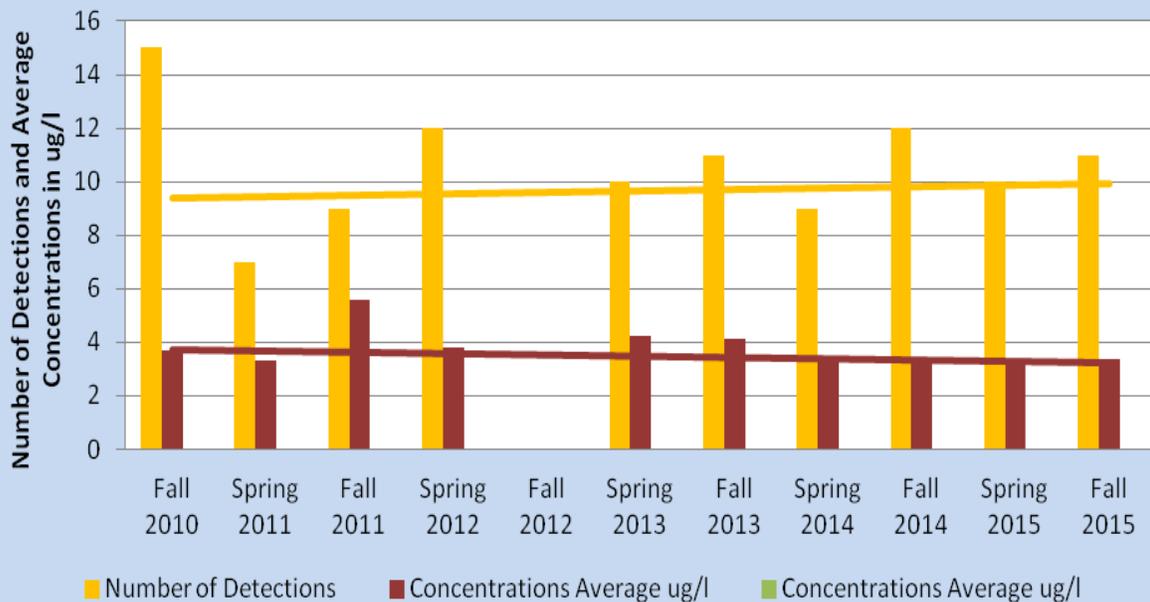
(These trend analyses are for all the monitoring wells including those installed in 2010. Please refer to Tables 1 and 2 for additional information.)



**Number of Detections and Average Concentrations for 1,2-Dichloropropane
at Gude Landfill**
All monitoring Locations Since Fall 2010

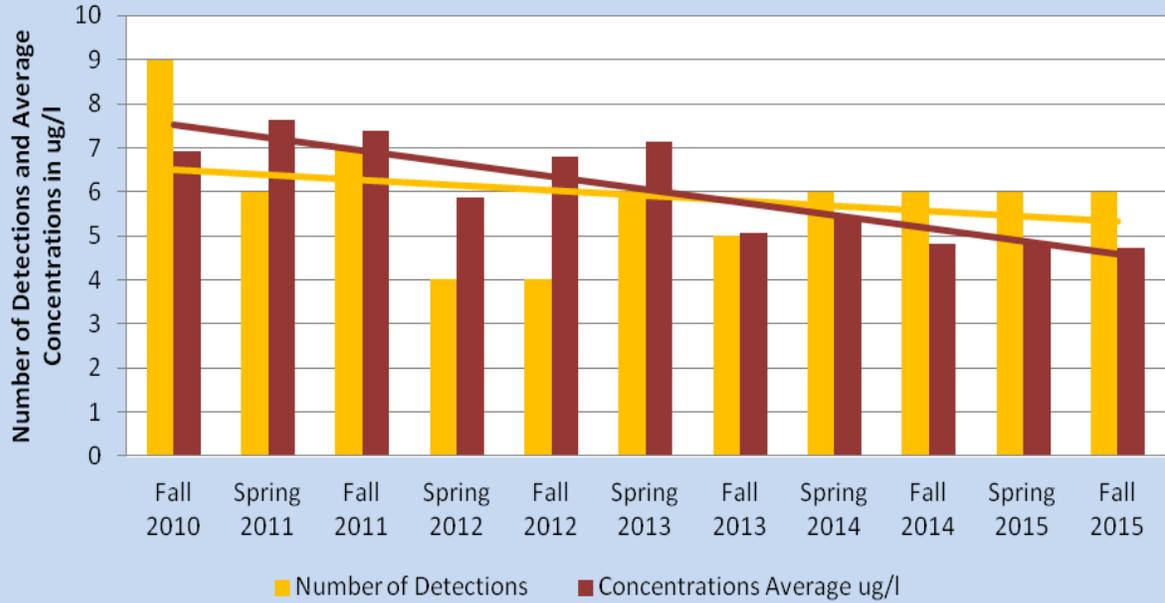


**Number of Detections and Average Concentrations for Benzene at
Gude Landfill**
All monitoring Locations Since Fall 2010



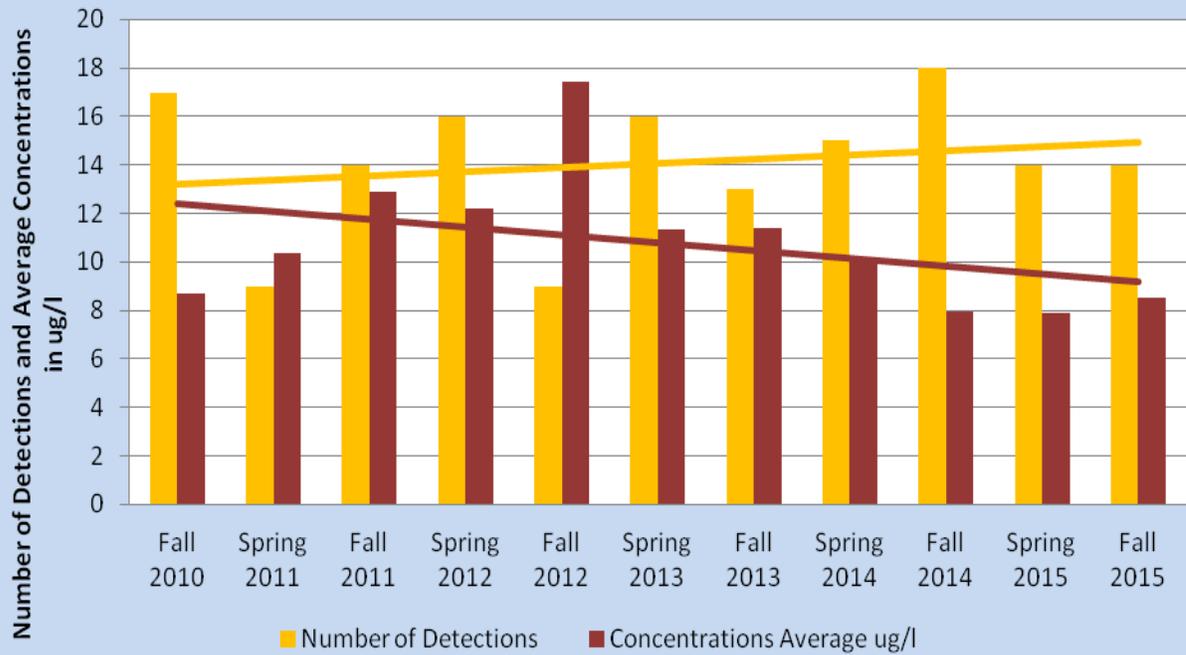
Number of Detections and Average Concentrations for Dichloromethane at Gude Landfill

All monitoring Locations Since Fall 2010



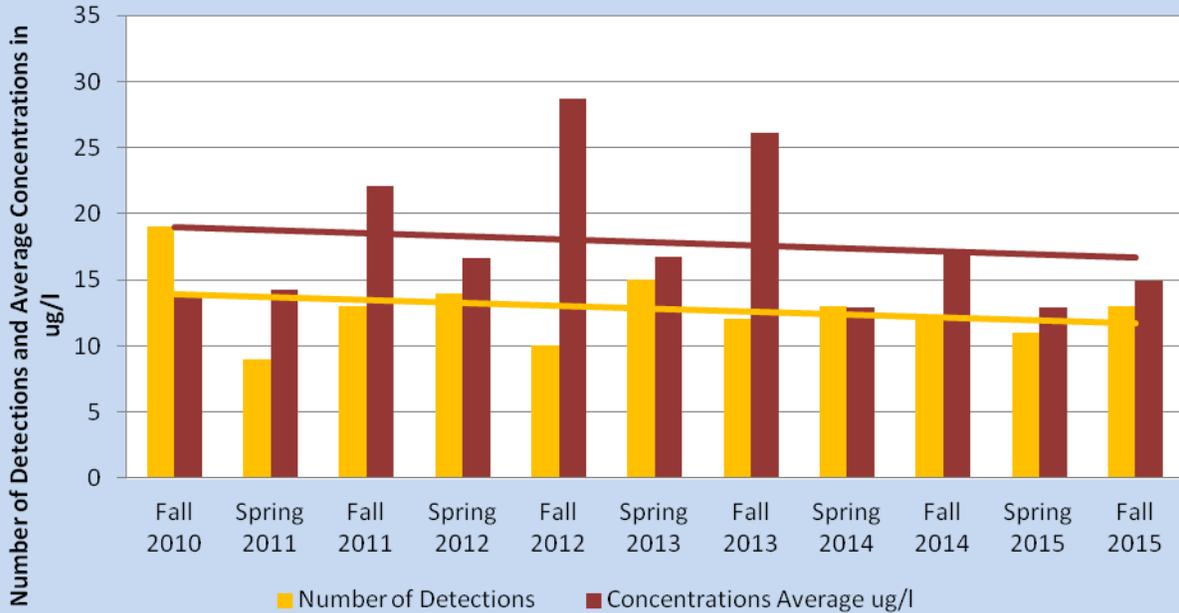
Number of Detections and Average Concentrations for Tetrachloroethane at Gude Landfill

All monitoring Locations Since Fall 2010



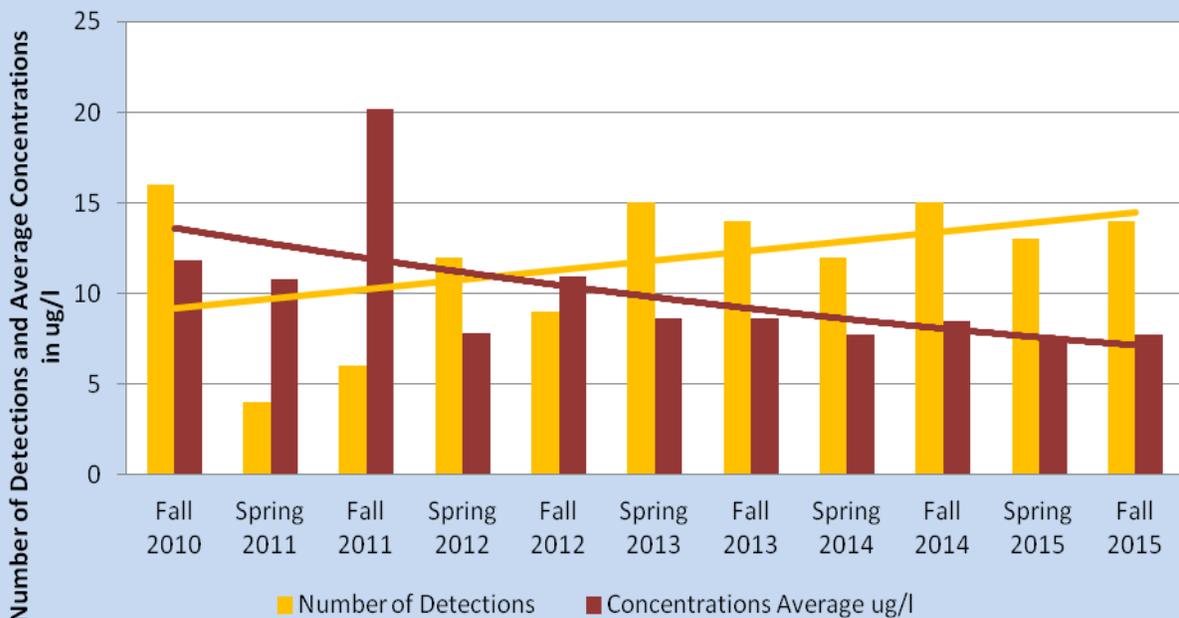
Number of Detections and Average Concentrations for Trichloroethene at Gude Landfill

All monitoring Locations Since Fall 2010



Number of Detections and Average Concentrations for Vinyl Chloride at Gude Landfill

All monitoring Locations Since Fall 2010



Appendix D

Tables of Metals

Results in (mg/l)

Table 3 Metals and Other Water Quality Parameters

Monitoring Location	Parameter	OB01	OB02	OB02A	OB03	OB03A	OB04	OB04A	OB06	OB07	OB07A	OB08	OB08A	OB10	OB102	OB105	OB11	OB11A	OB12	OB15	OB25	ST015	
Gude Landfill - SPRING 2015 Results	Alkalinity	81	72	32	213	292	250	1250	197	184	119	215	221	116	1040	1250	202	285	125	33	316	154	
	Ammonia	ND	ND	ND	2.77	4.64	0.826	0.368	ND	ND	ND	ND	ND	ND	14.6	42.5	ND	0.356	ND	ND	ND	0.233	
	Antimony	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
	Arsenic	ND	ND	ND	0.003	0.004	0.008	0.008	0.005	0.002	0.003	ND	0.003	ND	0.008	0.007	0.002	0.002	ND	ND	ND	ND	ND
	Barium	0.24	0.12	0.3	0.52	0.25	0.28	0.059	0.17	0.038	0.043	0.13	0.047	0.047	0.35	0.39	0.023	0.18	0.014	0.051	0.071	0.063	
	Beryllium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
	Cadmium	ND	ND	ND	ND	ND	ND	ND	7E-04	ND	0.012	0.003	ND	ND	ND	ND	ND						
	Calcium	95	35	80	70	78	180	130	140	130	87	64	49	62	120	140	130	100	39	9.5	81	70	
	Chloride	430	101	299	202	180	503	544	372	206	254	37.5	60.8	147	563	339	394	325	80.7	5.96	147	806	
	Chromium	ND	0.007	0.003	ND	ND	ND	0.15	ND	ND	0.003	ND	0.005	ND	ND	0.009	0.005	0.021	ND	ND	0.008	ND	
	Cobalt	0.013	ND	ND	0.056	0.034	ND	ND	ND	ND	ND	ND	0.017	0.005	0.074	0.019	ND	0.025	ND	ND	0.009	ND	
	COD	ND	ND	ND	18.3	18.4	33.1	35.6	43.2	11.3	16.6	ND	ND	ND	87	135	29.3	31.3	ND	ND	20	35.5	
	Copper	0.004	0.004	0.004	0.002	0.001	0.036	0.03	0.005	0.005	0.002	ND	0.002	ND	0.041	0.021	0.004	0.005	ND	0.002	0.004	0.006	
	Iron	ND	1.4	0.62	21	13	ND	0.5	0.64	0.78	ND	0.031	4.4	0.4	0.35	27	ND	0.91	ND	1.9	0.79	0.44	
	Lead	ND	ND	0.001	ND	ND	ND	ND	ND	0.004	ND	ND	ND	ND	ND	ND							
	Magnesium	61	17	42	40	46	89	89	55	36	50	14	21	34	96	150	76	76	25	15	59	19	
	Manganese	5.3	0.84	0.031	19	6.6	2.6	1.6	0.47	0.15	0.094	5.2	6.8	3.7	19	3.1	0.86	7.8	0.1	0.028	14	0.25	
	Mercury	2E-04	ND	ND	ND	ND	ND	ND	ND	3E-04	0.001	ND	ND	ND	ND	3E-04	0.003	3E-04	ND	ND	ND	ND	
	Nickel	0.04	ND	ND	ND	ND	ND	ND	0.014	0.005	0.009	0.008	0.011	0.011	0.1	0.004	0.04	0.04	0.009	0.006	0.022	0.013	
	Nitrate	2.47	ND	0.625	ND	1.49	ND	ND	0.59	0.846	1.01	ND	ND	ND	ND	ND	ND	ND	0.74	1.78	2.22	1.14	
	pH	5.77	6.66	5.49	5.81	7.1	6.07	6.41	6.31	6.63	6.34	7.07	6.61	6.09	7.07	7	6.16	6.42	5.81	6.26	6.83	8.01	
	Potassium	5.1	4.1	3.5	7	15	7.4	5.3	4.4	3.7	2.4	2.8	2.8	3.4	51	89	5.3	5.9	3.1	1.7	14	7.7	
	Selenium	ND	ND	ND	ND	ND	0.027	0.028	0.014	0.009	0.011	ND	ND	ND	0.021	0.013	0.005	ND	ND	ND	ND	ND	
	Silver	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND							
	Sodium	120	13	26	47	96	65	94	100	21	24	25	32	21	490	320	77	95	27	20	66	450	
	Spec. Cond.	1391	388.5	851.1	824.4	1021	1685	1577	313.4	874	856.8	406.8	468.1	589.7	1902	2920	1352	1276	444.7	202.3	959.8	2406	
Sulfate	26.5	7.29	17.5	32.2	92.4	20.2	11	89.9	26.9	29.7	7.65	ND	ND	65.3	137	10.7	12.5	16	79	47.5	20.9		
TDS	960	286	644	584	706	1112	1088	970	636	606	352	326	424	2066	1792	920	908	338	192	666	1468		
Thallium	ND	ND	ND	0.001	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Total Hardness	520	170	432	404	440	764	694	586	450	434	220	264	276	724	424	650	300	202	112	440	246		
Turbidity	0	23.9	5.4	0	10	0.6	0	35.5	24.1	0	0	1.5	0	15.4	258.3	0	0	0	22.1	14.4	15.9		
Vanadium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.016	ND	ND	ND	ND	ND	ND		
Zinc	0.013	ND	0.013	0.013	0.005	0.006	0.024	0.019	0.009	ND	0.006	0.008	ND	0.011	0.076	0.044	0.022	ND	0.034	0.009	0.019		

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Table 3 Metals and Other Water Quality Parameters

Monitoring Location	Parameter	ST120	ST65	ST70	ST80	MW1B	MW2A	MW2B	MW3A	MW3B	MW04	MW06	MW07	MW08	MW09	MW10	MW11A	MW11B	MW12	MW13A	MW13B	
Gude Landfill - SPRING 2015 Results	Alkalinity	56	65	121	33	45	30	31	17	94	50	201	62	266	28	61	23	72	7.5	32	212	
	Ammonia	ND	ND	0.393	ND																	
	Antimony	ND																				
	Arsenic	ND																				
	Barium	0.047	0.039	0.061	0.043	ND	0.012	0.012	ND	ND	0.034	0.31	0.058	0.089	0.069	0.064	0.032	0.021	0.44	0.18	0.07	
	Beryllium	ND																				
	Cadmium	ND																				
	Calcium	28	23	46	14	6	4.6	5.7	3.1	26	40	83	40	88	4.6	15	7.7	16	47	23	86	
	Chloride	332	273	229	177	3.66	2.69	3.18	ND	ND	143	372	124	134	70.3	6.22	4.87	6.77	267	90.8	99.8	
	Chromium	ND	0.57	ND	0.014	0.004	0.004	0.01	ND	0.01	0.005	ND										
	Cobalt	ND	0.59	ND	0.009	ND																
	COD	ND	10	ND	12.9	ND	12.5	ND														
	Copper	0.003	0.004	0.003	0.003	0.003	ND	ND	0.003	ND	ND	0.017	0.007	0.003	0.004	0.005	0.005	0.002	0.011	0.005	0.001	
	Iron	0.47	0.57	0.39	1	0.85	0.059	0.017	2.2	0.24	0.7	8.3	ND	ND	3	2	4.7	1.8	3.8	2	ND	
	Lead	ND	0.002	ND	0.002	ND	0.002	ND	ND													
	Magnesium	13	12	21	7.3	4.1	2.8	3	1.8	3.6	25	60	23	48	4.5	7.1	3.6	8.8	24	17	29	
	Manganese	0.14	0.12	0.32	0.13	0.022	0.17	0.052	0.059	0.011	0.091	48	0.95	ND	0.088	0.036	0.057	0.031	0.11	0.27	0.026	
	Mercury	ND	2E-04																			
	Nickel	ND	0.009	0.011	0.006	ND	ND	ND	ND	ND	ND	0.57	ND	ND	0.005	0.006	0.01	ND	0.014	ND	ND	
	Nitrate	1.61	1.15	1.35	1.27	ND	ND	ND	ND	ND	0.621	ND	4.2	11.59	0.839	ND	1.22	3.02	3.94	1.55	3.31	
	pH	7.64	7.53	7.72	7.62	6.52	5.72	5.7	5.98	7.49	5.96	6.55	5.81	7.83	5.7	5.95	5.7	6.77	5.2	5.12	6.7	
	Potassium	2.8	3.3	5.5	3	1	1.4	1.4	1.3	1.5	3	3.5	2.8	11	1.8	1.3	1.1	1.1	4.1	2.3	3.4	
	Selenium	ND																				
	Silver	ND																				
	Sodium	210	150	130	92	7.2	4.2	4.8	3.3	12	30	76	28	71	50	8.8	3.7	9.6	88	13	17	
	Spec. Cond.	1092	813.1	862.9	541.2	70.9	54.2	29.4	33.4	184.6	487.3	1320	174.4	951.2	269.8	132.3	57.4	74.1	783.6	319.4	615.2	
	Sulfate	14	13.5	20.4	8.62	ND	ND	ND	ND	11.6	5.37	77.2	21.4	120	ND	11.3	6.75	ND	18.8	ND	11.4	
	TDS	740	470	574	362	98	72	80	74	142	442	926	398	656	188	68	50	106	620	228	472	
Thallium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Total Hardness	138	120	200	82	40	34	34	30	100	212	104	210	444	36	76	44	86	204	220	368		
Turbidity	5.8	7.5	1.8	24	1.2	2.7	0.4	38	4.4	13.3	11.2	0	7.5	154.3	115.5	46	34.2	94.3	42.7	0.7		
Vanadium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.006	0.009	0.007	ND	0.005	ND		
Zinc	0.008	0.01	0.014	0.007	0.007	ND	ND	0.008	ND	0.006	0.048	ND	ND	0.022	0.035	0.011	0.005	0.041	0.017	ND		

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Table 4
Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015	
Monitoring Location OB01	Alkalinity	NT	NT	NT	NT	NT	104	95	103	93	112	100	73	80	66	86	77	81	
	Ammonia	NT	NT	NT	NT	NT	ND	ND											
	Antimony	ND	ND	ND	NT	ND	ND	ND											
	Arsenic	ND	ND	ND	NT	ND	ND	ND											
	Barium	0.1381	0.1348	0.1286	NT	0.1465	0.164	0.162	0.169	0.182	0.191	0.214	0.171	0.185	0.184	0.231	0.276	0.24	
	Beryllium	ND	ND	ND	NT	ND	ND	ND	ND										
	Cadmium	NT	NT	NT	NT	NT	ND	ND	ND										
	Calcium	NT	NT	NT	NT	NT	64.9	67.6	68.2	76.2	73.8	81.24	69.1	73.3	73.4	86.6	89.2	95	
	Chloride	NT	NT	NT	NT	NT	196	204	241	262	291	322	284	291	303	379	411	430	
	Chromium	ND	ND	ND	NT	ND	ND	ND	ND										
	Cobalt	0.0094	0.0039	0.0071	NT	ND	0.009	0.0084	0.0101	0.0147	0.0289	0.0219	0.00903	0.0111	0.00681	0.012	0.0148	0.013	
	COD	NT	NT	NT	NT	NT	ND	ND	5.1	6.9	ND	5.4	ND	ND	ND	ND	ND	ND	
	Copper	0.0104	0.0071	0.0072	NT	ND	0.007	0.0096	0.0094	0.0063	0.00645	0.0119	0.00575	0.0148	0.00605	0.00623	0.00868	0.0042	
	Hardness	NT	NT	NT	NT	NT	330	320	350	364	390	420	342	346	356	440	472	520	
	Iron	NT	NT	NT	NT	NT	ND	ND	0.469	0.837	0.515	1.6	0.386	0.458	0.541	0.55	0.675	ND	
	Lead	ND	ND	ND	NT	ND	ND	ND	ND	ND	0.0054	ND	ND	ND	ND	ND	ND	ND	
	Magnesium	NT	NT	NT	NT	NT	36	40.3	38.9	45.3	46.3	48.58	38.6	45	44	52.1	53	61	
	Manganese	NT	NT	NT	NT	NT	2.77	3.17	3.95	5.07	7.98	6.33	3.74	3.8	3.59	4.99	5.72	5.3	
	Mercury	0.0004	ND	ND	NT	ND	ND	ND	ND	ND	ND	0.00036	ND	ND	ND	ND	ND	ND	
	Nickel	0.0194	0.0182	0.0152	NT	0.0182	0.026	0.0264	0.0304	0.0307	0.0381	0.0406	0.0319	0.0324	0.0258	0.0313	0.0387	0.04	
	Nitrate	NT	NT	NT	NT	NT	1.67	1.94	1.907	1.79	1.34	1.56	2.13	2.21	2.28	2.28	2.11	2.47	
	pH	NT	NT	NT	NT	NT	5.82	5.08			5.51	5.62	5.14	5.87	5.46	5.67	5.65	5.77	
	Potassium	NT	NT	NT	NT	NT	3.52	3.64	3.36	3.81	3.78	4.57	3.85	4.55	3.95	4.35	4.43	5.1	
	Selenium	ND	ND	ND	NT	ND	ND	ND											
	Silver	ND	ND	ND	ND	NT	ND	ND											
	Sodium	NT	NT	NT	NT	NT	47.4	54.5	51.8	58.2	66.3	77.79	57.2	73.6	63.5	94.1	95.4	120	
	Spec. Cond.	NT	NT	NT	NT	NT	855.9	920.7			980.9	1218	1060	1223	1052	1293	1379	1391	
	Sulfate	NT	NT	NT	NT	NT	26.4	24.9	26.6	26.8	28.8	26.1	24.2	22.3	25.7	26.5	28	26.5	
	TDS	NT	NT	NT	NT	NT	776	912	1176	856	1116	876	856	980	840	758	940	960	
	Thallium	ND	ND	ND	NT	ND	ND	ND											
Turbidity	NT	NT	NT	NT	NT	0.186	0.18	0.98	1.96	NT	NT	NS	1.4	3.6	0	3.1	0		
Vanadium	ND	ND	ND	NT	ND	ND	ND												
Zinc	0.0157	0.0084	0.0161	NT	0.012	ND	0.013	0.0107	0.0116	0.0128	0.0163	0.0112	0.0118	0.012	0.0133	0.0174	0.013		

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Table 4
Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015	
Monitoring Location OB02	Alkalinity	NT	NT	NT	NT	NT	67	57	72	70	72	68	68	67	65	67	66	72	
	Ammonia	NT	NT	NT	NT	NT	ND	ND											
	Antimony	ND	ND	ND	NT	ND	ND	ND	ND										
	Arsenic	ND	ND	ND	NT	ND	ND	ND	ND										
	Barium	0.2817	0.2464	0.1635	0.1338	0.1568	0.296	0.344	0.126	0.531	0.0771	0.0702	0.427	0.05	0.0524	0.0575	0.0636	0.12	
	Beryllium	ND	ND	ND	NT	ND	ND	ND	ND										
	Cadmium	NT	NT	NT	NT	NT	ND	ND	ND										
	Calcium	NT	NT	NT	NT	NT	60.6	73.9	39.1	72.2	28.2	28.37	103	20.9	23.6	23.3	23.6	35	
	Chloride	NT	NT	NT	NT	NT	212	264	90	47.3	51.1	49.9	404	27.8	32.2	24.3	44.8	101	
	Chromium	ND	ND	ND	0.0072														
	Cobalt	0.0065	ND	ND	ND	ND	0.0057	0.0071	ND	0.0587	ND	ND	ND	ND	ND	ND	ND	ND	ND
	COD	NT	NT	NT	NT	NT	ND	ND	ND	ND	ND	ND	ND	34.6	ND	ND	ND	ND	ND
	Copper	0.008	0.0192	0.0052	0.0074	0.0055	0.006	0.0103	0.0069	ND	ND	0.00631	ND	0.0106	ND	0.00863	ND	0.0044	
	Hardness	NT	NT	NT	NT	NT	350	376	169	130	125	116	500	86	98	106	118	170	
	Iron	NT	NT	NT	NT	NT	2.66	2.59	0.818	25.2	0.768	1.18	0.586	0.725	1.01	3.27	0.922	1.4	
	Lead	ND	ND	ND	ND														
	Magnesium	NT	NT	NT	NT	NT	32.2	43.3	17.7	59.3	12.1	11.97	59	9.45	9.94	9.4	10.6	17	
	Manganese	NT	NT	NT	NT	NT	1.21	1.34	1.24	10.1	0.876	0.919	0.0582	0.6	0.623	0.686	0.699	0.84	
	Mercury	ND	ND	ND	ND														
	Nickel	0.0088	0.0062	0.0028	ND	0.0021	0.0082	0.011	ND	0.0168	ND	ND	0.0141	ND	ND	0.00559	ND	ND	
	Nitrate	NT	NT	NT	NT	NT	ND	ND	ND	ND	ND	ND	0.575	ND	ND	ND	ND	ND	
	pH	NT	NT	NT	NT	NT	8.27	5.35			6.71	6.94	6.6	7.16	6.74	6.85	7.1	6.66	
	Potassium	NT	NT	NT	NT	NT	5.91	7.07	4.43	13.7	3.99	3.76	5.69	3.33	3.25	3.48	3.27	4.1	
	Selenium	ND	ND	ND	ND														
	Silver	ND	ND	ND	ND														
	Sodium	NT	NT	NT	NT	NT	22.6	30.6	17.8	111	11	15.64	34.5	14.8	10.2	10	10.3	13	
	Spec. Cond.	NT	NT	NT	NT	NT	665	910.3			318.1	302.2	261.2	252.9	229.3	199	268	388.5	
	Sulfate	NT	NT	NT	NT	NT	13.5	14.9	7.38	4.24	5.87	4.51	20.2	5.14	4.79	4.96	5.54	7.29	
	TDS	NT	NT	NT	NT	NT	780	1008	388	336	1264	252	1124	152	174	178	166	286	
	Thallium	ND	ND	ND	ND														
Turbidity	NT	NT	NT	NT	NT	10.3	6.4	2.6	33.3	NT	NT	NS	7.5	35.3	83.2	10.5	23.9		
Vanadium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Zinc	0.017	0.0176	0.0049	0.0074	0.0091	ND	0.0187	0.00533	0.00773	0.00643	0.00627	0.0086	ND	0.00616	0.0162	0.00818	ND		

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Table 4
Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015	
Monitoring Location OB02A	Alkalinity	NT	NT	NT	NT	NT	38	36	40	35	36	36	33	33	34	33	37	32	
	Ammonia	NT	NT	NT	NT	NT	ND	ND											
	Antimony	ND	ND	ND	NT	0.0033	ND	ND											
	Arsenic	ND	ND	ND	NT	ND	ND	ND											
	Barium	0.2861	0.1479	0.2413	0.1676	0.2743	0.354	0.297	0.345	0.349	0.397	0.356	0.0568	0.385	0.439	0.399	0.436	0.3	
	Beryllium	ND	ND	ND	ND														
	Cadmium	NT	NT	NT	NT	NT	ND	ND	ND										
	Calcium	NT	NT	NT	NT	NT	77.5	76.4	87.1	82.9	96.3	94	24.7	90.3	112	88.9	91.2	80	
	Chloride	NT	NT	NT	NT	NT	280	286	310	302	350	334	36	335	419	359	383	299	
	Chromium	ND	ND	ND	0.0033														
	Cobalt	ND	ND	ND	ND														
	COD	NT	NT	NT	NT	NT	ND	ND	ND										
	Copper	0.0062	0.0103	0.0045	0.0061	0.0064	0.0054	0.0075	0.0077	0.0053	ND	0.00507	ND	0.0112	ND	ND	ND	ND	0.0035
	Hardness	NT	NT	NT	NT	NT	390	353	420	391	463	414	112	426	520	444	498	432	
	Iron	NT	NT	NT	NT	NT	0.414	0.6	0.682	ND	0.58	0.396	0.793	0.486	0.521	0.574	0.567	0.62	
	Lead	ND	ND	ND	ND														
	Magnesium	NT	NT	NT	NT	NT	46.4	44.4	52.3	53.4	59.1	53.1	10.6	52.4	66.7	49.2	54.3	42	
	Manganese	NT	NT	NT	NT	NT	0.0381	0.0382	0.0449	0.0513	0.0465	0.0449	0.718	0.0418	0.0548	0.0469	0.0503	0.031	
	Mercury	ND	ND	ND	ND														
	Nickel	0.0082	0.0092	0.0059	0.0077	0.0073	0.0122	0.0099	0.012	0.011	0.0114	0.0135	ND	0.0116	0.0129	0.0148	0.0125	ND	
	Nitrate	NT	NT	NT	NT	NT	0.5894	0.582	0.589	0.543	0.576	0.582	ND	0.623	0.616	0.651	0.614	0.625	
	pH	NT	NT	NT	NT	NT	5.75	4.77			5.09	5.41	5.25	5.7	5.34	5.33	5.77	5.49	
	Potassium	NT	NT	NT	NT	NT	4.73	4.1	4.69	5.2	5.78	4.82	3.56	5.24	5.51	5.01	4.95	3.5	
	Selenium	ND	ND	ND	ND														
	Silver	ND	ND	ND	ND														
	Sodium	NT	NT	NT	NT	NT	31.2	32.5	35	31.6	34.9	37.5	10.9	35.9	39.8	30.9	36.8	26	
	Spec. Cond.	NT	NT	NT	NT	NT	636.7	925.5			1263	1120	1386	1286	1327	1125	1249	851.1	
	Sulfate	NT	NT	NT	NT	NT	22.4	16.2	25.4	17.8	21.5	18.4	4.91	19.3	22.2	22.5	22.9	17.5	
	TDS	NT	NT	NT	NT	NT	1088	1072	1192	288	68	824	176	796	1072	944	826	644	
	Thallium	ND	ND	ND	ND														
Turbidity	NT	NT	NT	NT	NT	3.83	1.16	0.891	0.416	NT	NT	NS	0	0	1.62	1.4	5.4		
Vanadium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Zinc	0.0068	0.0156	ND	ND	0.0131	ND	0.00713	0.0081	0.00823	0.00783	0.00652	0.00607	0.00696	0.00883	0.00758	0.00972	0.013		

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Note: MCL exceedances are indicated in Red

Table 4
Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015	
Monitoring Location OB03	Alkalinity	NT	NT	NT	NT	NT	265	321	242	267	216	187	241	221	233	212	227	213	
	Ammonia	NT	NT	NT	NT	NT	2.39	6.46	2.9	4.97	2.56	3.48	2.43	2.7	2.29	3.45	3.15	2.77	
	Antimony	ND	ND	ND	NT	ND	ND	ND	ND										
	Arsenic	0.0023	0.0046	0.004	ND	ND	0.0024	ND	ND	ND	0.0031								
	Barium	0.7963	0.9091	0.7536	0.5928	0.5995	0.588	0.856	0.592	0.736	0.58	0.697	0.571	0.573	0.598	0.554	0.536	0.52	
	Beryllium	ND	ND	ND	NT	ND	ND	ND	ND										
	Cadmium	NT	NT	NT	NT	NT	ND	ND	ND										
	Calcium	NT	NT	NT	NT	NT	59.9	80.3	62.3	69	65.3	74.4	64.3	67.4	64.4	65.6	60.2	70	
	Chloride	NT	NT	NT	NT	NT	134	193	155	220	163	222	169	192	157	201	194	202	
	Chromium	ND	ND	ND	NT	ND	ND	ND	ND										
	Cobalt	0.0674	0.0581	0.0556	0.053	0.0569	0.0643	0.0662	0.0659	0.0629	0.0554	0.0634	0.067	0.0531	0.0566	0.0526	0.0522	0.056	
	COD	NT	NT	NT	NT	NT	13.6	34.9	10.1	28.8	16.8	24.3	18	17.8	13.2	15.6	19.7	18.3	
	Copper	0.0064	0.0113	0.0066	0.0077	0.0978	0.0063	0.0084	0.0124	0.0076	ND	0.0082	ND	0.0113	ND	ND	ND	ND	0.0019
	Hardness	NT	NT	NT	NT	NT	690	700	400	3600	410	400	360	348	330	420	370	404	
	Iron	NT	NT	NT	NT	NT	28.8	34.6	25	23.6	22.19	23.68	21.7	21.8	20.6	19	17.6	21	
	Lead	ND	ND	ND	ND														
	Magnesium	NT	NT	NT	NT	NT	33.2	52.8	35.6	47.1	41.1	42.7	37	35.2	38.6	37.4	35.3	40	
	Manganese	NT	NT	NT	NT	NT	18.5	18.8	21.3	18.5	19	19.6	18.8	19.5	19.4	17.3	20.6	19	
	Mercury	ND	ND	0.00025	ND	ND	0.00047	ND	ND	ND									
	Nickel	0.019	0.0175	0.0168	0.0142	0.09	0.0183	0.0167	0.0197	0.0176	0.0164	0.0215	0.0217	0.0174	0.0188	0.0176	0.0165	ND	
	Nitrate	NT	NT	NT	NT	NT	ND	ND	ND										
	pH	NT	NT	NT	NT	NT	6.19	4.74		5.97	5.78	5.15	5.93	5.84	5.73	6.01	5.81		
	Potassium	NT	NT	NT	NT	NT	10.2	10.9	6.94	10.1	7	7.95	6.77	9.31	5.77	8.52	7.12	7	
	Selenium	NT	NT	NT	NT	NT	ND	ND	ND	ND	ND	0.00545	ND	ND	ND	ND	ND	ND	
	Silver	ND	ND	ND	ND	0.0154	ND	ND											
	Sodium	ND	ND	ND	NT	ND	35.9	92.8	41.6	74.2	44.2	58.9	35.7	43.8	35.7	53.8	43.6	47	
	Spec. Cond.	NT	NT	NT	NT	NT	902	1405		814.1	1140	960.6	1138	887.2	1025	980.6	824.4		
	Sulfate	NT	NT	NT	NT	NT	8.84	31.4	16.7	41.4	22	28.5	13.1	18.6	16.8	36.2	23.4	32.2	
	TDS	NT	NT	NT	NT	NT	564	984	676	784	804	888	604	572	568	602	540	584	
	Thallium	ND	ND	0.0015	ND	ND	0.0011												
Turbidity	NT	NT	NT	NT	NT	11	24.4	22.9	2.81	NT	NT	NS	0	0	1.18	0	0		
Vanadium	ND	0.0023	ND	ND	ND														
Zinc	0.0126	0.0253	0.0208	ND	0.0336	ND	0.0118	0.0165	0.0148	0.0141	0.0175	0.0148	0.0142	0.0154	0.0137	0.0166	0.013		

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Table 4
Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015	
Monitoring Location OB03A	Alkalinity	NT	NT	NT	NT	NT	317	461	270	340	226	266	268	338	260	278	257	292	
	Ammonia	NT	NT	NT	NT	NT	6.47	8.93	4.35	7.91	5.09	6.15	4.51	6.67	4.18	6.76	4.96	4.64	
	Antimony	ND	ND	ND	ND														
	Arsenic	0.0046	0.008	0.0032	0.0106	ND	0.0036	ND	ND	ND	0.0035								
	Barium	0.9942	0.658	0.5139	0.5699	0.593	0.568	0.421	0.581	0.0796	0.529	0.51	0.495	0.435	0.543	0.376	0.419	0.25	
	Beryllium	ND	ND	ND	ND														
	Cadmium	NT	NT	NT	NT	NT	ND	ND	ND										
	Calcium	NT	NT	NT	NT	NT	69.4	91.6	66	24.8	68.5	76	62.3	70.9	67.2	62.8	58.6	78	
	Chloride	NT	NT	NT	NT	NT	194	164	176	239	193	245	185	229	177	217	213	180	
	Chromium	ND	ND	ND	ND														
	Cobalt	0.084	0.0608	0.0609	0.0617	0.063	0.0698	0.0458	0.0684	ND	0.0563	0.057	0.0672	0.0441	0.0561	0.047	0.0496	0.034	
	COD	NT	NT	NT	NT	NT	19.1	38.5	12.1	35	22.5	31.1	19.5	52.1	17.5	19	21.1	18.4	
	Copper	0.0101	0.0079	0.0056	0.0083	ND	0.0064	0.0084	0.008	0.0108	ND	0.00958	ND	0.011	ND	ND	ND	ND	0.0013
	Hardness	NT	NT	NT	NT	NT	700	670	360	580	375	420	350	400	360	560	190	440	
	Iron	NT	NT	NT	NT	NT	39.4	49.3	31	2.71	29.71	29.85	26.5	29.6	25.6	20.7	20.6	13	
	Lead	ND	ND	ND	ND														
	Magnesium	NT	NT	NT	NT	NT	44.4	66.8	41.6	15.8	48.7	52.7	39.3	51.4	43	44.4	37.6	46	
	Manganese	NT	NT	NT	NT	NT	13.3	6.35	16.4	0.982	14.2	13.7	15.4	11.2	16	8.71	15	6.6	
	Mercury	ND	ND	ND	ND														
	Nickel	0.0219	0.0166	0.0164	0.0166	0.016	0.02	0.0157	0.0194	ND	0.0158	0.0185	0.021	0.0142	0.0181	0.0162	0.015	ND	
	Nitrate	NT	NT	NT	NT	NT	ND	ND	1.49										
	pH	NT	NT	NT	NT	NT	5.76	4.98			6.03	6.04	5.2	6.29	5.34	6.03	6.16	7.1	
	Potassium	NT	NT	NT	NT	NT	12.4	19.2	9.18	4.68	9.64	13.1	9.64	16.6	8.17	15	10	15	
	Selenium	0.003	ND	ND	ND	ND	0.0024	ND	ND	ND	ND	0.00586	ND	ND	ND	ND	ND	ND	
	Silver	ND	ND	ND															
	Sodium	NT	NT	NT	NT	NT	70.3	132	58.5	14.4	70.5	91	52.2	97.8	55.7	83.7	60.1	96	
	Spec. Cond.	NT	NT	NT	NT	NT	1023	1661			975.1	1379	1082	1517	998.1	1220	1117	1021	
	Sulfate	NT	NT	NT	NT	NT	33.5	75.4	26.9	58.4	31.5	41.8	21.2	36	29.7	59.7	34.3	92.4	
	TDS	NT	NT	NT	NT	NT	780	1112	704	980	888	952	632	796	578	724	560	706	
	Thallium	ND	ND	ND	0.0019														
Turbidity	NT	NT	NT	NT	NT	39.4	271	13.3	13.6	NT	NT	NS	1.8	3.8	2.86	6.2	10		
Vanadium	0.0003	0.0113	0.0021	0.0036	0.0005	ND	ND												
Zinc	0.0134	0.0272	0.0272	0.0182	0.0182	0.011	0.00872	0.0131	0.0147	0.0089	0.0142	0.00986	0.00638	0.0117	0.00736	0.0129	0.0053		

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Table 4
Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015	
Monitoring Location OB04	Alkalinity	NT	NT	NT	NT	NT	221	242	255	238	242	261	248	244	249	248	265	250	
	Ammonia	NT	NT	NT	NT	NT	0.328	0.542	0.514	0.695	0.673	0.667	0.771	0.733	0.666	0.782	0.939	0.826	
	Antimony	ND	ND	ND															
	Arsenic	ND	ND	ND	ND	ND	0.0034	ND	0.0055	ND	ND	0.00907	0.00857	0.00926	ND	0.00882	ND	0.0079	
	Barium	0.2276	0.222	0.1991	0.2255	0.2468	0.261	0.254	0.255	0.264	0.255	0.281	0.247	0.274	0.265	0.294	0.291	0.28	
	Beryllium	ND	ND	ND	ND														
	Cadmium	NT	NT	NT	NT	NT	ND	ND	ND										
	Calcium	NT	NT	NT	NT	NT	154	160	159	154	157	173	157	151	164	175	169	180	
	Chloride	NT	NT	NT	NT	NT	412	193	424	433	416	473	448	449	455	453	462	503	
	Chromium	ND	ND	ND	ND														
	Cobalt	ND	ND	ND	ND														
	COD	NT	NT	NT	NT	NT	26.3	25.2	29.8	30.7	29.2	34.1	26.7	31.3	23.7	34.8	38	33.1	
	Copper	0.0323	0.029	0.0088	0.0087	0.0311	0.0344	0.0388	0.0418	0.0367	0.0314	0.0377	0.0353	0.0475	0.0354	0.0382	0.0393	0.036	
	Hardness	NT	NT	NT	NT	NT	670	610	680	717	705	714	712	730	740	742	762	764	
	Iron	NT	NT	NT	NT	NT	0.343	1.13	1.2	ND	0.92	0.804	0.824	0.751	0.729	0.921	0.993	ND	
	Lead	ND	ND	ND	ND														
	Magnesium	NT	NT	NT	NT	NT	75.1	83.7	81	88.1	89.1	88.9	76.6	78.1	82	88.3	86.1	89	
	Manganese	NT	NT	NT	NT	NT	1.32	1.81	1.84	1.94	2.03	2.07	2.28	2.55	2.59	2.63	2.95	2.6	
	Mercury	ND	ND	ND	ND														
	Nickel	0.0105	0.0102	0.0106	0.0118	ND	0.0137	0.0124	0.0145	0.0132	0.0115	0.0178	0.0179	0.0204	0.0139	0.0174	0.0149	ND	
	Nitrate	NT	NT	NT	NT	NT	ND	ND	ND										
	pH	NT	NT	NT	NT	NT	6.71	5.3			5.88	5.65	5.67	6.22	6.12	6.17	6.32	6.07	
	Potassium	NT	NT	NT	NT	NT	6.32	6.52	6.45	7.29	7.18	7.03	7.72	8.21	7.21	7.74	7.71	7.4	
	Selenium	0.0072	0.007	0.005	0.0058	ND	0.0167	0.0066	0.0219	0.0193	0.0144	0.032	0.0321	0.037	0.0212	0.0303	0.0208	0.027	
	Silver	ND	ND	ND	ND														
	Sodium	NT	NT	NT	NT	NT	71	77.6	73.8	74.4	74.3	73.3	63.2	66.6	64.8	71.4	73.1	65	
	Spec. Cond.	NT	NT	NT	NT	NT	1673	1758			1503	1817	1828	2022	1737	1742	1840	1685	
	Sulfate	NT	NT	NT	NT	NT	18.8	21.1	28.4	19.6	22.3	19.5	18.3	16.1	21	22.8	27.9	20.2	
	TDS	NT	NT	NT	NT	NT	1348	1772	1760	1428	1736	1632	1432	1600	1304	1256	1168	1112	
	Thallium	ND	ND	ND	ND														
Turbidity	NT	NT	NT	NT	NT	1.07	0.24	0.632	0.421	NT	NT	NS	0	0	1.02	0	0.6		
Vanadium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Zinc	0.007	0.0058	0.0167	ND	0.0138	ND	0.00761	0.00779	0.00828	0.00744	0.00692	0.00885	0.00793	0.00797	0.00999	0.0109	0.0064		

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Table 4
Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015	
Monitoring Location OB04A	Alkalinity	NT	NT	NT	NT	NT	125	142	135	133	127	129	123	129	127	133	144	1250	
	Ammonia	NT	NT	NT	NT	NT	0.301	0.366	0.281	0.379	0.316	0.218	0.299	0.285	0.229	0.309	0.478	0.368	
	Antimony	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND								
	Arsenic	ND	ND	ND	ND	ND	0.0036	ND	0.0061	0.0053	ND	0.0105	0.0107	0.0105	0.00555	0.0106	0.00509	0.0082	
	Barium	0.0432	0.0445	0.0453	0.049	0.0512	0.0542	0.0555	0.0539	0.0579	0.0555	0.0614	0.0553	0.0622	0.0612	0.0681	0.0681	0.059	
	Beryllium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND								
	Cadmium	NT	NT	NT	NT	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Calcium	NT	NT	NT	NT	NT	109	116	113	117	118	124	118	126	123	142	121	130	
	Chloride	NT	NT	NT	NT	NT	438	311	468	473	460	531	501	498	501	512	530	544	
	Chromium	ND	0.0026	ND	ND	ND	0.0021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.15
	Cobalt	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND								
	COD	NT	NT	NT	NT	NT	31.3	26.4	29.5	39.3	27.5	33	33.3	28.8	65.6	27.6	34.6	35.6	
	Copper	0.0227	0.0261	0.03	0.027	0.0288	0.0328	0.0321	0.0324	0.0283	0.0236	0.0295	0.0256	0.0364	0.0284	0.0281	0.0291	0.03	
	Hardness	NT	NT	NT	NT	NT	570	550	600	592	602	622	598	604	616	640	684	694	
	Iron	NT	NT	NT	NT	NT	0.998	1.57	1.24	0.636	0.712	1.12	0.615	0.806	0.932	1.05	0.998	0.5	
	Lead	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND								
	Magnesium	NT	NT	NT	NT	NT	71.9	86.1	80.3	94.8	85.5	88.8	81	89.6	85.5	98.8	85.2	89	
	Manganese	NT	NT	NT	NT	NT	0.969	1.07	1.13	1.12	1.1	1.01	1.12	1.23	1.48	1.32	1.58	1.6	
	Mercury	ND	ND	0.0004	ND	ND	0.0003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Nickel	0.0152	0.0157	0.0164	0.0172	0.0159	0.021	0.0194	0.0207	0.0193	0.017	0.0234	0.0239	0.0255	0.021	0.0238	0.0219	ND	
	Nitrate	NT	NT	NT	NT	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	pH	NT	NT	NT	NT	NT	5.82	4.84			5.43	5.57	5.29	5.85	5.69	5.77	5.92	6.41	
	Potassium	NT	NT	NT	NT	NT	4.93	5.25	4.92	5.92	4.99	5.73	5.42	5.96	5.15	5.38	5.51	5.3	
	Selenium	0.0074	0.0085	0.0077	0.0064	ND	0.0174	0.0071	0.0243	0.0223	0.0161	0.0373	0.0391	0.0434	0.0239	0.0358	0.0233	0.028	
	Silver	ND	ND	0.0026	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	Sodium	NT	NT	NT	NT	NT	89.1	101	91.9	100	91.1	95	89	100	90.4	106	89.6	94	
	Spec. Cond.	NT	NT	NT	NT	NT	1943	1678			1438	1752	1785	1985	1697	1720	1818	1577	
	Sulfate	NT	NT	NT	NT	NT	12.1	12.9	12.8	11.5	11	11.1	11.5	9	11.7	12	14	11	
	TDS	NT	NT	NT	NT	NT	1200	1764	1672	1356	1636	1508	1476	1596	1262	1242	1138	1088	
	Thallium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND								
Turbidity	NT	NT	NT	NT	NT	10.3	16.8	16.3	5.83	NT	NT	NS	12.3	18.2	14.1	7.2	0		
Vanadium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Zinc	0.0166	0.017	0.0201	0.0273	0.0321	0.024	0.0227	0.0214	0.021	0.0204	0.0227	0.0222	0.0228	0.0227	0.0239	0.026	0.024		

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Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015	
Monitoring Location OB06	Alkalinity	NT	NT	NT	NT	NT	150	170	220	145	156	175	161	178	188	203	182	197	
	Ammonia	NT	NT	NT	NT	NT	ND	ND	ND	0.389	ND	ND	ND	ND	ND	ND	ND	ND	
	Antimony	0.0034	ND	ND															
	Arsenic	0.0027	ND	0.0027	ND	ND	0.0032	ND	0.0067	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0047
	Barium	0.195	0.4262	0.1607	0.17	0.1941	0.196	0.267	0.507	0.536	0.195	0.221	0.19	0.196	0.18	0.205	0.193	0.17	
	Beryllium	ND	ND	ND	ND														
	Cadmium	NT	NT	NT	NT	NT	ND	ND	ND										
	Calcium	NT	NT	NT	NT	NT	148	147	126	145	137.5	142	148	135	136	146	130	140	
	Chloride	NT	NT	NT	NT	NT	356	222	360	356	350	383	374	382	376	373	365	372	
	Chromium	ND	0.0768	ND	ND	0.0127	0.0021	0.021	0.127	0.0199	ND	0.0133	0.00631	ND	ND	0.00725	ND	ND	
	Cobalt	0.0049	0.0251	0.0052	0.0052	ND	0.0059	0.0111	0.0326	0.0101	ND	0.00694	0.00655	ND	ND	0.00565	ND	ND	
	COD	NT	NT	NT	NT	NT	68	55.1	31.5	38.9	32.9	44	38.1	43	36.2	44.6	41.5	43.2	
	Copper	0.0083	0.1077	0.0096	0.0101	0.0117	0.0116	0.0327	0.207	0.0444	0.00681	0.0309	0.015	0.0158	0.00908	0.0164	0.0106	0.0051	
	Hardness	NT	NT	NT	NT	NT	580	560	550	553	552	582	566	582	584	632	584	586	
	Iron	NT	NT	NT	NT	NT	1.7	29.2	111	15.5	1.05	12.2	5.07	1.17	1.4	7.3	2.69	0.64	
	Lead	ND	0.0491	ND	ND	ND	ND	0.0126	0.0503	0.0474	ND	0.0081	ND	ND	ND	ND	ND	ND	
	Magnesium	NT	NT	NT	NT	NT	56.6	64.4	78.8	63	55.9	61.3	61.1	55.3	54.7	61.9	55.5	55	
	Manganese	NT	NT	NT	NT	NT	0.482	0.668	1.57	0.862	0.487	0.592	0.589	0.496	0.481	0.557	0.494	0.47	
	Mercury	ND	0.0005	0.0003	ND	ND	ND	0.00286	0.00149	0.00852	0.00087	0.00054	0.00041	ND	ND	0.00051	ND	ND	
	Nickel	0.0139	0.0805	0.0129	0.0129	0.02	0.0166	0.0349	0.131	0.0245	0.0112	0.0207	0.0184	0.0126	0.0114	0.0151	0.0129	0.014	
	Nitrate	NT	NT	NT	NT	NT	0.6869	0.6679	0.87	0.758	0.786	0.708	0.674	0.554	0.559	0.486	0.609	0.59	
	pH	NT	NT	NT	NT	NT	5.62	5.69			5.51	5.76	5.42	6.03	5.7	5.96	5.94	6.31	
	Potassium	NT	NT	NT	NT	NT	4.82	6.71	28.8	6.2	4.72	7.39	5.52	6.2	4.75	5.57	4.68	4.4	
	Selenium	0.0094	ND	0.0095	0.0088	ND	0.0147	0.008	0.023	0.0201	0.0122	0.0121	0.0151	0.0169	0.0124	0.0117	0.0134	0.014	
	Silver	ND	ND	ND	ND	ND	ND	0.0088	ND	ND									
	Sodium	NT	NT	NT	NT	NT	83.3	92	70.4	80.3	81	94.3	88.7	92.2	87.3	105	91	100	
	Spec. Cond.	NT	NT	NT	NT	NT	1564	1571			1289	1600	1618	1247	1537	1567	1490	313.4	
	Sulfate	NT	NT	NT	NT	NT	82.9	85.1	81.7	85.7	93.7	76.8	89.6	86.5	101	89.8	92.6	89.9	
	TDS	NT	NT	NT	NT	NT	1116	1388	1784	1192	960	1156	1224	1124	1150	982	1034	970	
	Thallium	ND	0.0031	ND	ND	ND													
Turbidity	NT	NT	NT	NT	NT	21.7	533	3329	3800	NT	NT	NS	44.6	38.5	206	58.9	35.5		
Vanadium	ND	0.0724	ND	ND	ND	ND	0.0204	0.133	0.0213	ND	0.0148	ND	ND	ND	0.00736	ND	ND		
Zinc	0.2789	0.031	0.0321	0.0414	0.0414	0.0321	0.116	0.372	0.0997	0.0213	0.0545	0.0385	0.021	0.0208	0.0357	0.0283	0.019		

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Table 4
Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015	
Monitoring Location OB07	Alkalinity	NT	NT	NT	NT	NT	163	161	184	175	169	176	172	178	181	191	196	184	
	Ammonia	NT	NT	NT	NT	NT	ND	ND											
	Antimony	ND	ND	ND															
	Arsenic	ND	ND	ND	0.0021														
	Barium	0.0928	0.0903	0.0511	0.0406	0.0252	0.025	0.0414	0.0333	0.0256	0.0257	0.0261	0.0265	0.0338	0.0287	0.029	0.0325	0.038	
	Beryllium	ND	ND	ND	ND														
	Cadmium	NT	NT	NT	NT	NT	ND	ND	ND										
	Calcium	NT	NT	NT	NT	NT	99.5	105	102	114	112.5	108	113	115	123	127	124	130	
	Chloride	NT	NT	NT	NT	NT	150	48.8	171	193	194	199	202	222	223	226	243	206	
	Chromium	ND	0.0034	ND	ND	ND	ND												
	Cobalt	ND	ND	ND	ND														
	COD	NT	NT	NT	NT	NT	ND	13.6	ND	14	5.2	11.7	ND	11.2	ND	14.3	15.9	11.3	
	Copper	0.0053	0.0137	0.0033	0.008	ND	0.0062	0.0126	0.0132	ND	ND	0.00909	0.00561	0.0135	ND	ND	ND	0.0052	
	Hardness	NT	NT	NT	NT	NT	331	350	360	407	409	412	434	452	494	508	450		
	Iron	NT	NT	NT	NT	NT	0.262	1.07	2.14	1.08	0.659	0.957	0.837	1.78	0.564	0.699	0.742	0.78	
	Lead	ND	0.0031	ND	ND	ND	0.0013												
	Magnesium	NT	NT	NT	NT	NT	26.1	29.7	28.5	35.2	34.8	33.6	33.3	33.9	37.7	40.3	39.9	36	
	Manganese	NT	NT	NT	NT	NT	0.0317	0.281	0.221	0.0338	0.0369	0.113	0.0724	0.0827	0.0415	0.0394	0.039	0.15	
	Mercury	ND	ND	ND	ND	ND	ND	ND	0.00028	0.00049	0.00031	0.00029	0.00053	0.00038	0.00039	0.00051	0.00048	0.00029	
	Nickel	0.0024	0.0056	0.0022	ND	ND	0.0047	0.0057	ND	ND	ND	ND	ND	ND	0.00568	ND	ND	0.0054	
	Nitrate	NT	NT	NT	NT	NT	0.5482	0.5966	0.658	0.861	0.819	0.8232	0.8309	0.8996	0.96	0.9667	1	0.846	
	pH	NT	NT	NT	NT	NT	7.04	5.95			6.34	6.55	6.17	6.74	6.41	6.58	6.65	6.63	
	Potassium	NT	NT	NT	NT	NT	3.07	3.23	3.13	3.24	3.42	3.4	3.54	4.66	3.47	3.3	3.45	3.7	
	Selenium	0.0029	0.0054	0.0028	ND	ND	0.0044	ND	0.0058	0.0071	0.00658	0.00506	0.00714	0.00865	0.0064	0.00629	0.00837	0.0085	
	Silver	ND	ND	ND															
	Sodium	NT	NT	NT	NT	NT	21.4	23.3	21.9	21.3	20.8	24.5	19.5	22.9	20.8	22.1	22.6	21	
	Spec. Cond.	NT	NT	NT	NT	NT	760	828.1			806.2	937.2	973.5	1115	992.5	1025	1057	874	
	Sulfate	NT	NT	NT	NT	NT	13.4	15.2	19.2	20.4	21	20.2	23	24.1	24.6	27.9	32.5	26.9	
	TDS	NT	NT	NT	NT	NT	644	764	1068	800	984	708	828	666	724	624	824	636	
	Thallium	ND	ND	ND															
Turbidity	NT	NT	NT	NT	NT	0.283	14.3	40.7	0.939	NT	NT	NS	42.5	0	1.23	0.3	24.1		
Vanadium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Zinc	0.023	ND	ND	ND	ND	ND	0.0126	0.0112	ND	0.00576	0.00575	0.00624	0.00752	0.00539	ND	0.00858	0.0087		

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Table 4
Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015	
Monitoring Location OB07A	Alkalinity	NT	NT	NT	NT	NT	124	92	115	112	115	122	119	112	120	118	114	119	
	Ammonia	NT	NT	NT	NT	NT	ND	ND											
	Antimony	ND	ND	ND															
	Arsenic	ND	ND	ND	0.0028														
	Barium	0.0313	0.0506	0.0643	0.0864	0.0419	0.0431	0.0693	0.037	0.0401	0.0432	0.0405	0.0485	0.045	0.0455	0.0458	0.0463	0.043	
	Beryllium	ND	ND	ND	ND														
	Cadmium	NT	NT	NT	NT	NT	ND	ND	ND										
	Calcium	NT	NT	NT	NT	NT	91.8	55.8	72	86.5	90	82.9	94.3	87.3	93.6	93.5	80.2	87	
	Chloride	NT	NT	NT	NT	NT	235	74.5	205	216	246	244	265	255	268	260	240	254	
	Chromium	ND	ND	ND	0.0033														
	Cobalt	ND	0.0025	0.0027	ND	ND	ND	0.0059	ND	ND	ND								
	COD	NT	NT	NT	NT	NT	17.8	6.1	9.7	16.5	10	16.9	15	17.3	12.8	18.2	21.3	16.6	
	Copper	0.0055	0.0113	0.0092	0.0116	ND	0.0058	0.0128	0.0078	ND	ND	0.00594	ND	0.0116	0.0055	ND	ND	ND	0.002
	Hardness	NT	NT	NT	NT	NT	420	205	350	390	424	408	436	420	448	450	416	434	
	Iron	NT	NT	NT	NT	NT	0.239	ND	0.5	0.819	0.538	0.458	0.576	0.615	0.43	0.533	0.52	ND	
	Lead	ND	ND	ND	ND														
	Magnesium	NT	NT	NT	NT	NT	51.2	21.7	41.6	49.3	52.5	48.3	50.2	48.9	51.9	52.9	46	50	
	Manganese	NT	NT	NT	NT	NT	0.0592	0.753	0.0954	0.07	0.0716	0.0676	0.0891	0.0753	0.0704	0.0665	0.0762	0.094	
	Mercury	0.0007	0.0005	0.0005	0.0004	0.0009	0.001	0.00026	0.00047	0.00075	0.00056	0.00107	0.00116	0.00068	0.00071	0.00085	0.00072	0.001	
	Nickel	0.0039	0.0059	0.0043	0.0041	ND	0.006	0.0099	ND	ND	ND	ND	0.00528	ND	0.00656	ND	ND	0.009	
	Nitrate	NT	NT	NT	NT	NT	0.8907	ND	0.9	0.902	0.891	0.97	0.97	1	1	0.97	0.942	1.01	
	pH	NT	NT	NT	NT	NT	6.51	5.94		5.6	5.86	5.81	6.05	5.7	5.94	6.05	6.34		
	Potassium	NT	NT	NT	NT	NT	2.66	7.32	2.56	2.3	2.44	2.45	2.8	3.12	2.55	2.45	2.25	2.4	
	Selenium	0.0034	0.0044	0.0032	ND	ND	0.0083	ND	0.0064	0.0095	0.00935	0.00589	0.00838	0.00869	0.00894	0.00692	0.00927	0.011	
	Silver	ND	ND	ND															
	Sodium	NT	NT	NT	NT	NT	30.2	23.8	26.1	25.6	26.3	28.6	24.8	27.1	24.9	26.1	24.2	24	
	Spec. Cond.	NT	NT	NT	NT	NT	706.7	565.4		860.9	994.7	1082	1157	1016	996.9	909	856.8		
	Sulfate	NT	NT	NT	NT	NT	22.4	3.38	21.6	22.6	28	24.3	24.6	27.5	31	30.6	28.4	29.7	
	TDS	NT	NT	NT	NT	NT	784	492	1176	796	872	748	856	718	774	590	752	606	
	Thallium	ND	ND	ND															
Turbidity	NT	NT	NT	NT	NT	0.317	6.85	1.55	0.579	NT	NT	NS	0	0.75	0.99	0	0		
Vanadium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Zinc	0.0065	0.0086	ND	ND	ND	ND	0.0136	0.0079	0.00516	ND	ND	0.0057	ND	0.0066	ND	0.00834	ND		

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Table 4
Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015	
Monitoring Location OB08	Alkalinity	NT	NT	NT	NT	NT	229	245	248	230	230	239	223	224	219	219	227	215	
	Ammonia	NT	NT	NT	NT	NT	ND	ND											
	Antimony	ND	ND	ND															
	Arsenic	ND	ND	ND															
	Barium	0.1163	0.1146	0.0822	0.0288	0.1309	0.137	0.126	0.118	0.116	0.128	0.129	0.129	0.132	0.126	0.125	0.132	0.13	
	Beryllium	ND	ND	ND	ND														
	Cadmium	NT	NT	NT	NT	NT	ND	ND	ND										
	Calcium	NT	NT	NT	NT	NT	63.5	71.1	65.9	62.7	67.1	70.8	68.2	66.6	65.3	54.3	57.1	64	
	Chloride	NT	NT	NT	NT	NT	34.7	31.2	32.8	34.2	46.1	42.8	47.4	45.5	47.7	44.7	39.5	37.5	
	Chromium	ND	ND	ND	ND														
	Cobalt	0.0078	0.0069	0.0034	ND	ND	0.0052	0.0064	0.0064	0.007	0.00803	0.00789	0.00841	0.00798	0.00648	0.00647	0.00692	ND	
	COD	NT	NT	NT	NT	NT	ND	4.9	ND	ND	ND	9.9	ND	ND	ND	ND	ND	ND	
	Copper	0.006	0.0061	0.0045	0.008	ND	0.0043	0.0073	0.006	0.006	ND	ND	ND	ND	ND	ND	ND	ND	
	Hardness	NT	NT	NT	NT	NT	228	250	300	265	144	236	234	232	230	232	236	220	
	Iron	NT	NT	NT	NT	NT	0.301	0.675	0.647	0.718	0.797	0.74	0.774	0.575	0.676	0.692	0.739	0.031	
	Lead	ND	ND	ND	ND														
	Magnesium	5.08	5.08	5.08	5.08	5.08	12.9	16.6	14.9	17	16.8	17.7	17	15.9	16.5	17.6	15.1	14	
	Manganese	NT	NT	NT	NT	NT	6.29	7.07	7.18	6.56	7.228	6.84	7.26	6.89	6	5.84	6.26	5.2	
	Mercury	ND	ND	ND	ND														
	Nickel	0.0089	0.0082	0.0039	ND	ND	0.0083	0.0081	0.0083	0.0077	0.0085	0.00877	0.0107	0.0111	0.00755	0.00699	0.00892	0.0075	
	Nitrate	NT	NT	NT	NT	NT	ND	ND	ND										
	pH	NT	NT	NT	NT	NT	7.04	5.41			5.85	6.22	6.04	6.54	6.18	6.18	6.62	7.07	
	Potassium	NT	NT	NT	NT	NT	2.81	2.87	2.63	2.91	2.86	2.85	2.95	2.48	2.71	2.61	2.7	2.8	
	Selenium	ND	ND	ND	ND														
	Silver	ND	ND	ND	ND														
	Sodium	NT	NT	NT	NT	NT	27.2	31.6	28	28.7	27.4	28	25.4	26.3	26.4	20.1	24	25	
	Spec. Cond.	NT	NT	NT	NT	NT	523.1	528.2		476.3	559.9	566.8	603.6	516.5	499.8	491.3	406.8		
	Sulfate	NT	NT	NT	NT	NT	7.54	4.91	4.83	ND	ND	4.76	4.11	5.27	5.68	5.8	4.32	7.65	
	TDS	NT	NT	NT	NT	NT	284	340	384	280	344	348	352	270	392	322	322	352	
	Thallium	ND	ND	ND	ND														
Turbidity	NT	NT	NT	NT	NT	0.266	0.77	0.485	0.735	NT	NT	NS	0	0	1.08	2.1	0		
Vanadium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Zinc	0.0039	0.0048	ND	ND	ND	ND	ND	ND	ND	0.00765	0.00658	0.00607	0.00624	0.00571	0.00571	0.00666	0.0106	0.0059	

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Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015	
Monitoring Location OB08A	Alkalinity	NT	NT	NT	NT	NT	228	233	226	220	218	221	216	219	214	218	219	221	
	Ammonia	NT	NT	NT	NT	NT	ND	0.299	ND	ND	ND	ND	ND	ND	ND	0.222	0.247	ND	
	Antimony	ND	ND	ND	ND														
	Arsenic	0.003	0.0022	ND	ND	ND	0.0023	ND	ND	ND	0.0029								
	Barium	0.1007	0.082	0.0894	ND	0.0669	0.0815	0.0919	0.0779	0.099	0.0689	0.0735	0.068	0.0674	0.0648	0.0677	0.077	0.077	0.047
	Beryllium	ND	ND	ND	ND														
	Cadmium	NT	NT	NT	NT	NT	ND	ND	ND										
	Calcium	NT	NT	NT	NT	NT	59.4	52.6	52.9	58.1	54.4	53.3	54.7	54.9	52.4	47.1	47.6	49	
	Chloride	NT	NT	NT	NT	NT	67.4	39.9	58.2	45.4	63.3	55.5	65.4	63.8	68	59.9	50.4	60.8	
	Chromium	ND	ND	ND	0.0047														
	Cobalt	0.0171	0.0177	0.0094	ND	0.0167	0.0186	0.0135	0.0175	0.0146	0.0173	0.0171	0.0189	0.0189	0.0161	0.0153	0.0149	0.017	
	COD	NT	NT	NT	NT	NT	ND	39.2	5.3	10.2	ND	8.6	ND	ND	ND	ND	ND	ND	ND
	Copper	0.0059	0.0058	0.0041	0.0061	ND	0.0051	0.0067	0.0061	0.006	ND	0.00802	ND	ND	ND	ND	ND	ND	0.0017
	Hardness	NT	NT	NT	NT	NT	570	330	300	370	190	252	240	230	240	236	218	264	
	Iron	NT	NT	NT	NT	NT	3.85	3.33	3.35	3.69	3.05	3.44	3.93	3.38	3.94	3.06	3.31	4.4	
	Lead	ND	ND	ND	ND														
	Magnesium	NT	NT	NT	NT	NT	23.2	19.2	19.3	20.3	22	21.8	21.8	21.8	21.6	17.9	18.7	21	
	Manganese	NT	NT	NT	NT	NT	8.16	7.9	8.23	8.57	7.484	7.53	8.27	8.12	7.16	6.94	7.33	6.8	
	Mercury	ND	ND	ND	ND														
	Nickel	0.0088	0.0083	0.0054	0.0095	ND	0.0095	0.0068	0.0079	0.0071	0.00745	0.00751	0.01	0.00968	0.00718	0.0066	0.00738	0.011	
	Nitrate	NT	NT	NT	NT	NT	ND	ND	ND										
	pH	NT	NT	NT	NT	NT	6.65	5.49		5.96	6.07	5.87	6.39	6.01	6.11	6.47	6.61		
	Potassium	NT	NT	NT	NT	NT	2.82	2.73	2.52	2.77	2.8	2.79	2.99	2.85	2.91	2.72	2.6	2.8	
	Selenium	ND	ND	ND	ND														
	Silver	ND	ND	ND	ND														
	Sodium	NT	NT	NT	NT	NT	37	34.7	31.7	30.8	31.8	32.9	30.7	30.7	30.1	24.7	29.4	32	
	Spec. Cond.	NT	NT	NT	NT	NT	579.9	541.9		502.5	579.1	600.1	649.1	547.9	536.7	503.4	468.1		
	Sulfate	NT	NT	NT	NT	NT	3.85	3.04	5.74	ND	ND	ND	ND	4.39	5.07	ND	ND		
	TDS	NT	NT	NT	NT	NT	352	336	384	340	1240	364	364	288	388	316	306	326	
	Thallium	ND	ND	ND	ND														
Turbidity	NT	NT	NT	NT	NT	1.69	3.8	0.528	1.36	NT	NT	NS	0	0	1.39	0.9	1.5		
Vanadium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Zinc	0.0051	0.0045	ND	ND	ND	ND	ND	ND	ND	0.0078	0.00676	0.0101	0.00749	0.00596	0.00704	0.00625	0.00911	0.0084	

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Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015	
Monitoring Location OB10	Alkalinity	NT	NT	NT	NT	NT	110	83	134	116	122	119	133	116	139	116	132	116	
	Ammonia	NT	NT	NT	NT	NT	ND	ND											
	Antimony	ND	ND	ND															
	Arsenic	ND	ND	ND															
	Barium	0.0366	0.0491	0.0321	0.0416	0.0401	0.0468	0.049	0.0553	0.0531	0.0534	0.0569	0.0573	0.0562	0.0763	0.0622	0.0699	0.047	
	Beryllium	ND	ND	ND	ND														
	Cadmium	NT	NT	NT	NT	NT	ND	ND	ND										
	Calcium	NT	NT	NT	NT	NT	38.6	37.7	43.4	39.8	45.8	48.1	50.1	45	55.8	53.3	56.6	62	
	Chloride	NT	NT	NT	NT	NT	82.4	53.3	83.6	89	94.1	100	121	120	136	144	159	147	
	Chromium	ND	ND	ND	ND														
	Cobalt	ND	0.0041	0.0022	ND	ND	0.0029	ND	0.0059	ND	ND	0.00519	0.00809	0.00674	0.00837	0.0062	0.00784	0.0053	
	COD	NT	NT	NT	NT	NT	ND	7.5	10.3	ND	ND	7.5	ND	ND	ND	ND	10.7	ND	
	Copper	0.0079	0.0082	0.0041	0.0066	0.0063	0.006	0.0179	0.0057	ND	ND	ND	ND	0.0109	ND	ND	ND	ND	
	Hardness	NT	NT	NT	NT	NT	160	161	230	230	226	210	244	234	278	256	292	276	
	Iron	NT	NT	NT	NT	NT	0.598	1.9	1.28	0.783	1.12	0.975	1.63	1.14	1.75	1.14	1.58	0.4	
	Lead	ND	0.0031	ND	ND	ND	ND	0.0085	ND	ND									
	Magnesium	NT	NT	NT	NT	NT	19.4	18.1	24	24.9	27.8	25.8	28.1	25.1	34.4	30.3	32.5	34	
	Manganese	NT	NT	NT	NT	NT	2.63	1.31	3.47	2.68	3.03	3.15	4.31	3.66	5.2	3.96	5.01	3.7	
	Mercury	ND	ND	ND															
	Nickel	0.0057	0.0066	0.0049	0.0061	0.0049	0.0079	0.0104	0.0079	0.0063	0.00682	0.00887	0.0115	0.0107	0.0113	0.00829	0.0101	0.011	
	Nitrate	NT	NT	NT	NT	NT	ND	ND	0.008	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	pH	NT	NT	NT	NT	NT	6.3	5.98			5.8	6.05	5.49	6.2	6.12	6.03	6.32	6.09	
	Potassium	NT	NT	NT	NT	NT	2.81	2.94	2.65	3.28	3	3.02	3.32	3.44	2.98	3.09	3.29	3.4	
	Selenium	ND	ND	ND															
	Silver	ND	ND	ND															
	Sodium	NT	NT	NT	NT	NT	19	20.3	20.3	18.4	19.6	18.2	18.3	19.8	20.8	19.6	21	21	
	Spec. Cond.	NT	NT	NT	NT	NT	413.6	423.9			446.8	544.8	623.9	654	636.8	596.2	663.6	589.7	
	Sulfate	NT	NT	NT	NT	NT	1.7	ND	ND	ND									
	TDS	NT	NT	NT	NT	NT	368	364	552	456	492	480	396	440	434	340	466	424	
	Thallium	ND	ND	ND															
Turbidity	NT	NT	NT	NT	NT	2.09	21.1	1.16	0.443	NT	NT	NS	0	0	0	0.3	0		
Vanadium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Zinc	0.023	0.0198	0.0087	ND	0.0107	ND	0.0226	0.00595	0.00573	0.00698	0.00662	0.00705	0.00562	0.00811	0.00671	0.00864	ND		

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Table 4 Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015	
Monitoring Location OB102	Alkalinity	NT	NT	NT	NT	NT	1140	960	1100	1008	1000	1056	1060	1110	1080	980	1000	1040	
	Ammonia	NT	NT	NT	NT	NT	11.2	12.4	8.98	11.1	11.1	11.6	12	14	13.3	13.5	12.3	14.6	
	Antimony	ND	ND	ND	ND														
	Arsenic	0.0057	0.0196	0.0063	0.0061	ND	0.0065	ND	0.0068	0.0061	0.00581	ND	ND	0.0112	0.00523	ND	0.00502	0.0083	
	Barium	0.3338	0.7682	0.3156	0.3331	0.4215	0.385	0.374	0.342	0.349	0.344	0.355	0.349	0.404	0.347	0.367	0.366	0.35	
	Beryllium	ND	0.008	ND	ND	ND	ND												
	Cadmium	NT	NT	NT	NT	NT	0.0021	ND	ND	ND	0.00071								
	Calcium	NT	NT	NT	NT	NT	116	113	114	124	119.7	115	120	118	116	116	109	120	
	Chloride	NT	NT	NT	NT	NT	560	128	577	578	564	602	588	558	543	519	520	563	
	Chromium	0.0035	0.1373	0.0033	0.0088	ND	0.0105	0.0102	ND	ND	ND	ND	0.00622	0.014	ND	ND	ND	ND	
	Cobalt	0.0873	0.2586	0.0821	0.0876	0.085	0.0925	0.089	0.0842	0.0764	0.0724	0.0734	0.0729	0.0852	0.0704	0.0695	0.0686	0.074	
	COD	NT	NT	NT	NT	NT	262	250	252	235	237	227	242	235	126	176	147	87	
	Copper	0.0557	1.8022	0.0638	0.088	0.1301	0.136	0.0793	0.0908	0.0483	0.0449	0.0505	0.0485	0.071	0.0709	0.0616	0.05	0.041	
	Hardness	NT	NT	NT	NT	NT	810	158	900	775	701	640	700	686	696	710	684	724	
	Iron	NT	NT	NT	NT	NT	8.95	9.66	3.55	1.69	0.798	0.945	1.01	1.93	2.03	3.64	1.99	0.35	
	Lead	ND	0.0806	ND	0.0055	ND	0.0043	ND	ND	ND									
	Magnesium	NT	NT	NT	NT	NT	94.8	98.7	94.3	102	98.4	97.4	97.4	104	96.9	99.2	89.73	96	
	Manganese	NT	NT	NT	NT	NT	22.2	20.7	21.8	23.5	20.9	21.2	21.7	20.2	20.1	18.8	18	19	
	Mercury	ND	0.0006	ND	ND	ND													
	Nickel	0.0942	0.2651	0.0908	0.0871	0.1029	0.118	0.0966	0.101	0.092	0.0909	0.0925	0.0962	0.113	0.0907	0.0903	0.0884	0.1	
	Nitrate	NT	NT	NT	NT	NT	ND	ND											
	pH	NT	NT	NT	NT	NT	6.26	5.95			6.42	6.64	6.29	6.86	6.41	6.8	6.74	7.07	
	Potassium	NT	NT	NT	NT	NT	37.2	41.7	37.8	39.8	40.4	39.9	41.4	47.4	46.7	44.9	43	51	
	Selenium	0.0179	0.036	0.0186	0.0152	0.0167	0.0256	0.0134	0.0256	0.0237	0.0224	0.017	0.0176	0.0411	0.0188	0.0162	0.0197	0.021	
	Silver	ND	ND	ND															
	Sodium	NT	NT	NT	NT	NT	613	549	500	561	550	532	586	558	483	523	504	490	
	Spec. Cond.	NT	NT	NT	NT	NT	3522	3493			3010	3558	3612	3298	3303	3270	3129	1902	
	Sulfate	NT	NT	NT	NT	NT	71.9	71.5	57.4	74.3	74.4	55.4	55.2	48.1	44.7	45	69.4	65.3	
	TDS	NT	NT	NT	NT	NT	2120	2172	2252	2308	2244	2268	2236	2146	2158	2122	2098	2066	
	Thallium	ND	0.0087	ND	ND	ND													
Turbidity	NT	NT	NT	NT	NT	191	202	71.4	23.7	NT	NT	NS	58.9	84.5	79.5	19.9	15.4		
Vanadium	0.003	0.1443	ND	0.0105	ND	0.0104	0.0124	ND	ND										
Zinc	0.021	1.254	0.0248	0.0424	0.0776	0.0464	0.0402	0.0224	0.0135	0.0127	0.013	0.0129	0.0206	0.0196	0.0231	0.0194	0.011		

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Table 4 Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015	
Monitoring Location OB105	Alkalinity	NT	NT	NT	NT	NT	810	1710	600	728	494	51	522	770	50	774	645	1250	
	Ammonia	NT	NT	NT	NT	NT	12.4	61.8	5.02	25.1	4.4	16.3	3.48	13.1	4.61	19.3	6.8	42.5	
	Antimony	ND	ND	ND	ND														
	Arsenic	0.0041	0.0057	0.0064	0.0044	ND	0.012	0.005	0.0109	ND	ND	0.0147	0.009	0.00942	0.00577	ND	ND	ND	0.007
	Barium	0.2161	0.166	0.256	0.1682	0.466	0.304	0.408	0.258	0.218	0.157	0.601	0.138	0.233	0.144	0.277	0.337	0.39	
	Beryllium	ND	ND	ND	ND	ND	0.0026	ND	ND	ND	ND	0.0112	ND	ND	ND	ND	ND	ND	ND
	Cadmium	NT	NT	NT	NT	NT	0.0047	ND	ND	ND	ND	0.0109	ND	ND	ND	ND	ND	ND	ND
	Calcium	NT	NT	NT	NT	NT	156	124	165	92.2	170	160	167	168	169	147	166	140	
	Chloride	NT	NT	NT	NT	NT	328	265	334	219	309	356	337	334	318	307	336	339	
	Chromium	ND	0.0057	0.0044	ND	ND	0.0717	0.0075	0.0808	0.0106	0.0184	0.166	0.0236	0.0434	0.0235	0.0213	0.0574	0.0087	
	Cobalt	0.0073	0.0116	0.012	0.0077	0.0108	0.101	0.0129	0.196	0.0202	0.0345	0.2	0.0316	0.054	0.0306	0.0214	0.0436	0.019	
	COD	NT	NT	NT	NT	NT	173	258	207	92.4	83.4	140	61.5	93.4	56.2	102	75.3	135	
	Copper	0.0094	0.0217	0.0184	0.012	0.0134	0.112	0.0218	0.173	0.0277	0.0237	0.293	0.0417	0.0906	0.0415	0.0321	0.0958	0.021	
	Hardness	NT	NT	NT	NT	NT	900	870	950	576	866	960	908	924	940	900	924	424	
	Iron	NT	NT	NT	NT	NT	85.3	31.2	110	17.1	19.96	253	26.7	50.7	24.7	27.2	75.4	27	
	Lead	ND	0.0033	0.0021	ND	ND	0.0268	ND	0.0332	ND	0.015	0.0726	0.0155	0.0164	0.0104	0.00748	0.028	0.0037	
	Magnesium	NT	NT	NT	NT	NT	129	152	132	96.5	132	168	116	139	127	128	137	150	
	Manganese	NT	NT	NT	NT	NT	3.58	1.97	3.76	1.68	2.66	6.03	3.07	4.65	3.53	1.91	5.17	3.1	
	Mercury	ND	0.0004	ND	ND	ND	0.0038	ND	0.003	0.00026	0.00101	0.00645	0.00173	0.00084	0.00096	0.00061	0.00437	0.00032	
	Nickel	0.0091	0.02	0.0142	0.0143	0.0116	0.174	0.0164	0.228	0.0258	0.053	0.283	0.0691	0.0994	0.0734	0.0508	0.0915	0.0037	
	Nitrate	NT	NT	NT	NT	NT	ND	ND	ND	0.99	ND	ND	ND	ND	ND	ND	ND	ND	
	pH	NT	NT	NT	NT	NT	6.81	6.33			6.18	6.55	5.75	6.61	6.34	6.69	6.83	7	
	Potassium	NT	NT	NT	NT	NT	35.7	136	19.3	61.3	15	58.6	12.9	33.3	15.4	51.5	23.4	89	
	Selenium	0.0087	0.012	0.0119	0.01	0.013	0.0193	0.0091	0.0214	0.0102	0.00977	0.0198	0.0225	0.0276	0.0157	0.0169	0.0144	0.013	
	Silver	ND	ND	ND															
	Sodium	NT	NT	NT	NT	NT	286	468	174	202	183.57	226	167	279	184	224		320	
	Spec. Cond.	NT	NT	NT	NT	NT	3384	3886			1963	3025	2414	2960	2224	2477	2473	2920	
	Sulfate	NT	NT	NT	NT	NT	346	105	309	139	314	312	289	240	299	267	287	137	
	TDS	NT	NT	NT	NT	NT	1736	2400	1876	1320	1872	1776	1628	1784	1606	1600	1608	1792	
	Thallium	ND	ND	65	ND	ND													
Turbidity	NT	NT	NT	NT	NT	1215	338	3430	240	NT	NT	NS	1721	728	ND	1070	258.3		
Vanadium	ND	0.0077	0.0042	ND	ND	0.0789	0.0096	0.136	0.0194	0.0331	0.363	0.0492	0.0811	0.0362	ND	0.0896	0.016		
Zinc	0.0175	0.0799	0.1131	0.0352	0.0501	0.556	0.031	0.765	0.153	0.15	0.975	0.252	0.263	0.157	ND	0.391	0.076		

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Table 4
Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015	
Monitoring Location OB11	Alkalinity	NT	NT	NT	NT	NT	201	165	200	211	215	217	219	221	228	0.0483	283	202	
	Ammonia	NT	NT	NT	NT	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	Antimony	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Arsenic	0.0021	ND	0.0024	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	45.6	ND	0.002
	Barium	0.0258	0.032	0.0267	0.0331	0.0286	0.0272	0.0515	0.0261	0.0301	0.0292	0.0295	0.0282	0.0299	0.0289	147	0.0323	0.023	
	Beryllium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Cadmium	NT	NT	NT	NT	NT	0.0088	0.0058	0.009	0.01	0.0101	0.0104	0.0104	0.011	0.0103	ND	0.011	0.012	
	Calcium	NT	NT	NT	NT	NT	126	108	133	134	132.3	132	133	132	135	ND	138	130	
	Chloride	NT	NT	NT	NT	NT	330	393	358	259	371	407	398	397	392	ND	417	394	
	Chromium	ND	0.0037	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	206	ND	0.0051	
	Cobalt	ND	0.0036	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.92	ND	ND	
	COD	NT	NT	NT	NT	NT	27.5	28.2	29	32.5	22.4	32.8	24	37.8	22.5	ND	37.5	29.3	
	Copper	0.0083	0.0069	0.0063	0.0062	ND	0.0083	0.0072	0.0112	0.0078	0.0064	0.00894	0.00814	0.0153	0.00834	25	0.00739	0.0036	
	Hardness	NT	NT	NT	NT	NT	550	510	600	563	581	596	592	576	606	0.257	606	650	
	Iron	NT	NT	NT	NT	NT	0.454	0.84	1.22	1.27	0.738	0.726	0.656	0.674	0.638	ND	0.741	ND	
	Lead	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.013	ND	ND
	Magnesium	NT	NT	NT	NT	NT	60.1	59.1	67.9	66.6	66.6	67.4	64.4	68.9	67	0.463	70.2	76	
	Manganese	NT	NT	NT	NT	NT	0.862	0.7	0.884	0.869	0.768	0.758	0.858	0.793	0.76	6.03	0.858	0.86	
	Mercury	0.0031	0.0007	0.0022	0.0005	0.0019	0.0022	0.00191	0.00254	0.00165	0.00102	0.00098	0.00118	0.00136	0.00106	3.03	0.00141	0.0028	
	Nickel	0.0279	0.0276	0.0249	0.0207	0.0275	0.0361	0.0216	0.0375	0.0331	0.0333	0.0339	0.0411	0.0354	0.033	ND	0.0356	0.04	
	Nitrate	NT	NT	NT	NT	NT	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	pH	NT	NT	NT	NT	NT	5.69	5.03			5.35	5.41	5.31	5.81	5.41	30.3	5.77	6.16	
	Potassium	NT	NT	NT	NT	NT	4.56	8.25	4.9	4.82	4.7	5.13	5.19	5.45	5.17	548.7	4.71	5.3	
	Selenium	0.0036	0.0043	0.0029	ND	ND	0.0049	ND	0.0078	0.0061	0.00568	ND	0.011	0.00674	0.00545	4.73	0.0068	0.0054	
	Silver	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	320	ND	ND	
	Sodium	NT	NT	NT	NT	NT	56.7	59.9	68.8	67.9	68.5	68	68	75.8	71.3	ND	77.7	77	
	Spec. Cond.	NT	NT	NT	NT	NT	1339	1340			1302	1559	1601	1774	1539	132.6	1627	1352	
	Sulfate	NT	NT	NT	NT	NT	8.96	8.47	9.53	9.48	10.2	11.2	10.3	10.5	12.2	ND	11.7	10.7	
TDS	NT	NT	NT	NT	NT	1208	1152	1416	1116	1036	1404	1212	1018	1122	0.0103	1074	920		
Thallium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Turbidity	Nt	Nt	Nt	Nt	Nt	1.16	3.65	5.75	0.733	NT	NT	NS	0	0	1.51	0.3	0		
Vanadium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Zinc	0.04	0.0427	0.038	0.0508	0.0508	0.0432	0.0309	0.0426	0.043	0.042	0.0453	0.0462	0.0442	0.0413	0.0441	0.0418	0.044		

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Table 4
Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015	
Monitoring Location OB11A	Alkalinity	NT	NT	NT	NT	NT	270	282	280	292	285	279	288	298	302	295	49	285	
	Ammonia	NT	NT	NT	NT	NT	0.222	0.817	1.7	2.11	1.59	1.11	1.25	1.79	1.18	1.99	1	0.356	
	Antimony	ND	ND	ND	ND														
	Arsenic	ND	0.0072	0.0031	ND	ND	0.0022												
	Barium	0.1767	0.1365	0.1441	0.1335	0.1616	0.151	0.174	0.182	0.957	0.166	0.183	0.165	0.191	0.165	0.206	0.185	0.185	0.18
	Beryllium	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0102	ND	ND	ND	ND	ND	ND	ND	ND
	Cadmium	NT	NT	NT	NT	NT	0.0025	0.0101	ND	0.0059	ND	ND	ND	ND	ND	ND	ND	ND	0.0026
	Calcium	NT	NT	NT	NT	NT	99	92.5	89.8	84.7	93.5	93.4	91.4	85.3	99.6	79.6	97.3	100	
	Chloride	NT	NT	NT	NT	NT	310	262	290	211	297	300	312	282	327	266	329	325	
	Chromium	ND	0.0024	ND	ND	0.0102	ND	ND	ND	0.0321	ND	ND	ND	ND	ND	ND	ND	ND	0.021
	Cobalt	0.0664	0.0239	0.0361	0.0332	0.0204	0.036	0.0777	0.0337	0.144	0.025	0.025	0.0271	0.024	0.0256	0.0235	0.0246	0.025	
	COD	NT	NT	NT	NT	NT	30.8	32.3	30	33.7	21.6	30.4	17.8	26.5	23.1	20.6	29.4	31.3	
	Copper	0.0092	0.0108	0.0088	0.0109	0.0119	0.0103	0.0209	0.0102	0.17	0.00569	0.00569	0.00646	0.0143	0.00649	0.00578	0.00671	0.0048	
	Hardness	NT	NT	NT	NT	NT	540	500	660	524	598	500	508	466	516	456	544	300	
	Iron	NT	NT	NT	NT	NT	1.61	4.65	1.33	48.4	1.01	1.05	1.07	1.08	1.19	0.929	1.13	0.91	
	Lead	ND	0.0079	ND	ND	ND	ND	0.0059	ND	0.0723	ND	ND	ND	ND	ND	ND	ND	ND	
	Magnesium	NT	NT	NT	NT	NT	69.2	64.2	67	55	68.6	69.9	64.8	65.7	70.6	57.4	69.1	76	
	Manganese	NT	NT	NT	NT	NT	5.23	7.39	6.38	13.1	5.83	6.29	6.14	6.82	7.21	6.8	7.37	7.8	
	Mercury	0.0005	0.0014	0.0008	0.0005	0.0009	ND	0.00232	ND	ND	0.00028								
	Nickel	0.0228	0.0306	0.0285	0.0269	0.0376	0.0299	0.0306	0.0232	0.0701	0.0222	0.0192	0.0266	0.0203	0.0236	0.0179	0.0225	0.04	
	Nitrate	NT	NT	NT	NT	NT	ND	ND	ND										
	pH	NT	NT	NT	NT	NT	6.01	5.28			5.49	5.59	5.36	6	5.61	5.71	5.94	6.42	
	Potassium	NT	NT	NT	NT	NT	5.71	7.17	6.81	13.7	6.83	6.41	6.84	7.39	6.78	6.79	5.83	5.9	
	Selenium	0.0029	0.0067	0.0022	ND	ND	0.0048	ND	0.0062	0.0185	ND	ND	0.00713	ND	ND	ND	0.00542	ND	
	Silver	ND	ND	ND															
	Sodium	NT	NT	NT	NT	NT	107	97.5	101	38.5	99.8	99.4	95.1	99.5	102	83	99.7	95	
	Spec. Cond.	NT	NT	NT	NT	NT	1444	1363			1227	1405	1499	1552	1481	1274	1510	1276	
	Sulfate	NT	NT	NT	NT	NT	12.6	14.9	18.4	17	15	15.8	15.7	16.6	15.7	20	15.4	12.5	
	TDS	NT	NT	NT	NT	NT	1192	1032	1068	908	304	1048	904	830	936	1016	854	908	
	Thallium	ND	ND	ND															
Turbidity	Nt	Nt	Nt	Nt	Nt	1.97	19.4	3.31	0.83	NT	NT	NS	0	0	4.13	0	0		
Vanadium	ND	ND	ND	ND	ND	ND	ND	ND	0.0919	ND	ND	ND	ND	ND	ND	ND	ND		
Zinc	0.0229	0.0219	0.025	0.0305	0.0305	0.0249	0.025	0.0218	0.267	0.021	0.0211	0.0223	0.0206	0.0192	0.0222	0.0189	0.022		

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Table 4
Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015	
Monitoring Location OB12	Alkalinity	NT	NT	NT	NT	NT	110	100	108	44	106	116	113	119	126	123	138	125	
	Ammonia	NT	NT	NT	NT	NT	ND	ND											
	Antimony	ND	ND	ND	ND														
	Arsenic	ND	ND	ND	ND														
	Barium	0.0565	0.0146	0.0228	ND	0.0298	0.0186	0.0211	0.0153	0.0211	0.0173	0.0174	0.018	0.0194	0.0178	0.0206	0.0215	0.014	
	Beryllium	ND	ND	ND	ND														
	Cadmium	NT	NT	NT	NT	NT	ND	ND	ND										
	Calcium	NT	NT	NT	NT	NT	33.3	39	32.3	34.1	33	38.3	26.5	36.7	33.8	35	36.5	39	
	Chloride	NT	NT	NT	NT	NT	69.9	83.9	65.8	80.1	62.7	76.9	66.4	79	70.5	77.9	77.4	80.7	
	Chromium	ND	ND	ND	ND														
	Cobalt	ND	ND	ND	ND														
	COD	NT	NT	NT	NT	NT	ND	12.1	7.4	6.9	ND	8.1	ND	21	ND	ND	ND	ND	
	Copper	0.0048	0.009	0.0055	0.007	ND	0.0061	0.0062	0.0068	ND	ND	0.00512	ND	0.0102	ND	ND	ND	ND	
	Hardness	NT	NT	NT	NT	NT	165	189	162	182	153	194	160	178	178	200	208	202	
	Iron	NT	NT	NT	NT	NT	0.368	ND	0.228	ND	ND	ND	ND	0.2	ND	0.208	0.234	ND	
	Lead	ND	ND	ND															
	Magnesium	NT	NT	NT	NT	NT	19.7	23.4	19.8	27	20.6	24.5	16.1	23.4	20.2	21.4	22.5	25	
	Manganese	NT	NT	NT	NT	NT	0.102	0.131	0.107	0.106	0.108	0.114	0.119	0.105	0.118	0.115	0.129	0.1	
	Mercury	ND	0.0015	0.0007	ND	ND	0.0003	ND	ND	ND									
	Nickel	0.0035	0.0062	0.0064	0.0066	ND	0.0089	0.0101	0.0102	0.0084	0.00652	0.00911	0.00856	0.00787	0.00692	0.00761	0.00919	0.0088	
	Nitrate	NT	NT	NT	NT	NT	1.622	2.25	1.377	1.59	1.14	1.26	0.99	1.02	0.87	0.83	0.695	0.74	
	pH	NT	NT	NT	NT	NT	5.84	6.14		5.46	5.51	5.29	5.81	5.53	5.56	5.92	5.81		
	Potassium	NT	NT	NT	NT	NT	3	3.04	2.32	3.24	2.69	3.26	2.97	3.33	2.88	2.89	2.51	3.1	
	Selenium	ND	ND	ND															
	Silver	ND	ND	ND															
	Sodium	NT	NT	NT	NT	NT	24.5	27.8	25.4	27.9	22.8	30	18.2	28.4	21.2	22	25.1	27	
	Spec. Cond.	NT	NT	NT	NT	NT	481.7	511.8		421.1	497.1	417.9	545.7	436.3	469.9	481.6	444.7		
	Sulfate	NT	NT	NT	NT	NT	7.14	14.9	7.13	4.78	5.57	12	4.58	13.4	5.79	14.4	11.6	16	
	TDS	NT	NT	NT	NT	NT	308	400	408	120	296	340	312	236	364	308	292	338	
	Thallium	ND	ND	ND															
Turbidity	NT	NT	NT	NT	NT	2.49	5.15	0.328	0.167	NT	NT	NS	0	1.26	1.36	0.9	0		
Vanadium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Zinc	0.013	0.0478	0.0222	0.0236	0.0125	ND	0.0134	0.00773	0.00765	0.00631	0.00533	0.0082	0.00511	0.00586	0.00842	0.00958	ND		

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Table 4
Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015	
Monitoring Location OB15	Alkalinity	NT	NT	NT	NT	NT	242	93	230	74	228	51	226	33	151	29	91	33	
	Ammonia	NT	NT	NT	NT	NT	0.646	0.228	0.29	ND	0.307	ND	0.274	ND	ND	ND	ND	ND	
	Antimony	ND	ND	ND	ND														
	Arsenic	ND	ND	ND	ND	ND	0.0069	ND	ND	ND	ND	ND	0.007	ND	ND	ND	ND	ND	ND
	Barium	0.0364	0.2282	0.0856	0.1015	0.0881	0.119	0.0902	0.0785	0.0857	0.0919	0.0722	0.0923	0.0709	0.0624	0.0635	0.0944	0.051	
	Beryllium	ND	ND	ND	ND														
	Cadmium	NT	NT	NT	NT	NT	0.0042	ND	ND	ND	ND								
	Calcium	NT	NT	NT	NT	NT	29.5	20.3	18	14.8	21.6	16.5	18.3	12.9	16.8	12	11.6	9.5	
	Chloride	NT	NT	NT	NT	NT	3.16	3.48	7.73	4.61	10	3.95	11.9	4.73	10.8	4.04	10.3	5.96	
	Chromium	ND	0.0521	ND	ND	ND	0.019	ND	ND	0.0053	ND	ND	0.0114	ND	ND	ND	0.00956	ND	
	Cobalt	ND	0.0599	0.0095	ND	0.0134	0.0273	0.0099	ND	0.0072	0.00621	ND	0.0165	ND	0.0116	ND	0.0174	ND	
	COD	NT	NT	NT	NT	NT	49.3	11.1	11.2	ND	27.3	ND	17.8	ND	ND	ND	11.4	ND	
	Copper	0.0061	0.1171	0.0067	0.0059	ND	0.0475	0.0103	0.0083	0.0119	0.0094	0.00664	0.0408	0.01	0.00585	0.00693	0.0281	0.0018	
	Hardness	NT	NT	NT	NT	NT	600	270	165	114	156	140	120	94	120	96	102	112	
	Iron	NT	NT	NT	NT	NT	54.9	16	27.3	9.24	39.4	6.6	47.8	2.85	17.3	1.98	52.5	1.9	
	Lead	ND	0.0409	ND	ND	ND	0.017	ND	ND	ND	ND	ND	0.00794	ND	ND	ND	0.00818	ND	
	Magnesium	NT	NT	NT	NT	NT	23.2	24.5	17.4	22	21.6	21.3	17.4	16	17.3	14.5	14.5	15	
	Manganese	NT	NT	NT	NT	NT	5.73	4.5	3.87	1.78	3.27	1.28	2.5	0.163	1.1	0.13	0.639	0.028	
	Mercury	ND	ND	ND															
	Nickel	0.0086	0.112	0.0084	0.0072	0.0157	0.0473	0.0178	0.0098	0.0149	0.00599	0.015	0.0235	0.0141	0.00799	0.0115	0.0214	0.0061	
	Nitrate	NT	NT	NT	NT	NT	ND	ND	0.008	ND	ND	ND	ND	0.292	ND	0.678	ND	1.78	
	pH	NT	NT	NT	NT	NT	6.01	6.62			6.15	5.5	5.7	5.78	NM	5.4	6.03	6.26	
	Potassium	NT	NT	NT	NT	NT	3.15	2.3	2.18	2.29	2.46	2.12	2.32	2.04	2.07	1.84	1.8	1.7	
	Selenium	ND	ND	ND															
	Silver	ND	ND	ND															
	Sodium	NT	NT	NT	NT	NT	35	14.5	53.3	36.1	59.1	29.2	62.5	26.1	50.6	17.3	30.6	20	
	Spec. Cond.	NT	NT	NT	NT	NT	576.4	368.7			535.4	323.1	521.8	329	NM	236.8	248.6	202.3	
	Sulfate	NT	NT	NT	NT	NT	78.6	78.1	56.5	78.9	49.2	93.2	37.9	92.8	63.3	91.8	69.1	79	
	TDS	NT	NT	NT	NT	NT	328	252	324	420	528	272	308	184	244	164	198	192	
	Thallium	ND	0.0024	ND	ND	ND													
Turbidity	NT	NT	NT	NT	NT	125	53.8	25.4	96.8	NT	NT	NS	46.8	NM	33	48.1	22.1		
Vanadium	ND	0.0282	ND	ND	ND	0.0052	ND	ND	ND										
Zinc	1.2155	0.022	0.021	0.0955	0.0955	0.698	0.0329	0.0212	0.0544	0.0668	0.0966	0.397	0.136	0.0516	0.0723	0.183	0.034		

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Table 4
Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015	
Monitoring Location OB25	Alkalinity	NT	NT	NT	NT	NT	423	416	472	282	267	249	374	268	387	194	287	316	
	Ammonia	NT	NT	NT	NT	NT	1.57	0.771	3.69	0.629	1.91	0.731	2.31	ND	2.94	ND	0.95	ND	
	Antimony	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0212	ND
	Arsenic	ND	ND	0.0024	ND	ND	0.0037	0.012	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0263	ND
	Barium	0.0832	0.1065	0.1388	0.1179	0.1126	1.31	0.445	0.192	0.195	0.163	0.146	0.631	0.0769	0.175	0.0539	0.624	0.071	
	Beryllium	ND	ND	ND	ND	ND	0.0137	0.0057	ND	ND	ND	ND	0.00617	ND	ND	ND	ND	0.116	ND
	Cadmium	NT	NT	NT	NT	NT	0.0174	0.0072	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.115	ND
	Calcium	NT	NT	NT	NT	NT	111	89.9	90.2	92.7	65.1	73.3	89.5	56.2	91.2	39.6	61.9	81	
	Chloride	NT	NT	NT	NT	NT	156	183	173	62.3	86.6	73.5	158	59.5	175	34.8	80.2	147	
	Chromium	ND	0.0046	0.0089	ND	ND	0.105	0.141	0.0193	ND	ND	0.0297	0.0174	0.00811	0.0117	0.00604	0.305	0.0082	
	Cobalt	0.0187	0.0229	0.0329	0.027	0.0241	0.418	0.272	0.0532	0.0244	0.0285	0.0393	0.122	0.00673	0.0373	ND	0.336	0.009	
	COD	NT	NT	NT	NT	NT	1080	79.4	90	107	19.6	18.6	23.5	21.6	17.2	ND	28.6	20	
	Copper	0.0065	0.0083	0.0146	0.0065	ND	0.364	0.188	0.0302	0.0062	0.0168	0.0374	0.143	0.0194	0.0153	0.00796	0.337	0.0042	
	Hardness	NT	NT	NT	NT	NT	740	520	750	450	292	356	500	316	490	238	354	440	
	Iron	NT	NT	NT	NT	NT	239	210	29.9	1.32	5.73	31.7	25.9	4.68	17	3.1	163	0.79	
	Lead	ND	ND	0.0026	ND	ND	0.148	0.0358	ND	ND	0.0137	0.00771	0.0269	ND	ND	ND	0.122	ND	
	Magnesium	NT	NT	NT	NT	NT	82.8	109	71.6	70.2	44.2	57.7	62.4	41.5	69	27	90.3	59	
	Manganese	NT	NT	NT	NT	NT	55.8	33.5	24.2	6.86	10.52	7.21	20.7	0.818	18.2	0.21	12.8	14	
	Mercury	ND	ND	ND	ND	ND	0.0003	ND	ND	0.00142	ND	0.00129	0.00052	ND	0.00022	ND	0.00023	ND	
	Nickel	0.0113	0.0161	0.0215	0.0128	0.0127	0.226	0.281	0.0506	0.0183	0.0128	0.0467	0.062	0.0129	0.0256	0.00887	0.4	0.022	
	Nitrate	NT	NT	NT	NT	NT	0.6782	2.31	ND	1.33	ND	ND	ND	0.606	ND	2.13	0.756	2.22	
	pH	NT	NT	NT	NT	NT	6.19	5.51		8.7	7	5.98	7.16	6.12	6.86	6.89	6.83		
	Potassium	NT	NT	NT	NT	NT	17.6	15.9	16.6	7.24	14.3	10.7	16.8	9.22	16.4	6.49	13.2	14	
	Selenium	ND	0.0023	ND	ND	ND	0.0364	0.0172	0.0059	ND	ND	0.00523	0.00877	ND	ND	ND	0.0411	ND	
	Silver	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0991	ND	
	Sodium	NT	NT	NT	NT	NT	84	76.6	88.9	100	54.3	43.9	69	39	83.5	20.4	38.4	66	
	Spec. Cond.	NT	NT	NT	NT	NT	1301	1340		NT	627.7	931.1	394.5	807.1	491.2	544	959.8		
	Sulfate	NT	NT	NT	NT	NT	71.8	75.3	67	32.1	39.7	44.1	61.8	39.6	65	32.6	37.2	47.5	
	TDS	NT	NT	NT	NT	NT	888	916	916	532	252	568	756	454	838	324	516	666	
	Thallium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0778	ND	
Turbidity	NT	NT	NT	NT	NT	10100	3870	357	15050	NT	NT	NS	51	153	65	37.6	14.4		
Vanadium	ND	ND	0.0087	ND	ND	0.156	0.129	0.0141	ND	0.00768	0.0236	0.0452	0.00766	0.00998	ND	0.261	ND		
Zinc	NT	NT	NT	NT	NT	3.95	1.09	0.109	0.0216	0.0256	0.112	0.13	0.0196	0.04	0.015	0.962	0.0085		

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Table 4
Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015	
Monitoring Location ST15	Alkalinity	NT	NT	NT	NT	NT	80	115	79	98	31	99	38	68	29	180	52	154	
	Ammonia	NT	NT	NT	NT	NT	ND	0.239	ND	ND	ND	ND	ND	ND	ND	0.895	ND	0.233	
	Antimony	ND	ND	ND	NT	ND	ND	ND	ND										
	Arsenic	ND	ND	ND	NT	ND	ND	ND	ND										
	Barium	0.0481	0.0545	0.0454	NT	0.0786	0.0588	0.0596	0.0681	0.029	0.0197	0.0367	0.0197	0.063	0.0165	0.0888	0.0288	0.063	
	Beryllium	ND	ND	ND	NT	ND	ND	ND	ND										
	Cadmium	NT	NT	NT	NT	NT	ND	ND	ND										
	Calcium	NT	NT	NT	NT	NT	33.4	36.7	32.5	27.4	10.3	31.2	14.4	31.1	11.4	61.7	20.1	70	
	Chloride	NT	NT	NT	NT	NT	58.2	102	67.7	38.1	5.32	157	13.1	75.3	10.2	1090	30.7	806	
	Chromium	ND	ND	ND	NT	0.0041	ND	ND	ND										
	Cobalt	ND	ND	ND	NT	0.0027	ND	ND	ND										
	COD	NT	NT	NT	NT	NT	ND	7.2	6.7	24.8	14.1	22.8	14.5	ND	ND	36.2	ND	35.5	
	Copper	0.0059	0.0076	0.005	NT	0.0139	0.0058	0.0085	0.0077	0.0062	ND	0.00811	ND	0.00576	ND	0.00886	ND	0.0062	
	Hardness	NT	NT	NT	NT	NT	160	180	160	95	29	122	48	124	36	252	74	246	
	Iron	NT	NT	NT	NT	NT	0.372	0.814	0.701	0.863	ND	0.846	0.68	0.454	0.345	ND	0.62	0.44	
	Lead	ND	ND	ND	NT	0.0032	ND	ND	ND										
	Magnesium	NT	NT	NT	NT	NT	13.7	17.6	15	8.5	2.23	12	3.73	16	3.01	20.3	5.93	19	
	Manganese	NT	NT	NT	NT	NT	0.101	0.294	0.19	0.109	0.0434	0.245	0.0766	0.155	0.0382	0.329	0.201	0.25	
	Mercury	ND	ND	ND	NT	ND	ND	ND	ND										
	Nickel	0.0087	0.0069	0.0097	NT	0.0172	0.0083	0.0104	0.0078	0.0052	ND	0.00661	ND	0.00894	ND	0.0119	ND	0.013	
	Nitrate	NT	NT	NT	NT	NT	1.465	1.3279	1.3876	0.401	ND	0.799	ND	1.66	ND	1.6949	ND	1.14	
	pH	NT	NT	NT	NT	NT	7.39	7.19			7.34	7.55	6.19	6.46	6.83	6.64	6.61	8.01	
	Potassium	NT	NT	NT	NT	NT	2.59	3.08	2.58	3.48	2.15	4.16	1.48	2.11	1.14	6.83	1.63	7.7	
	Selenium	ND	ND	ND	NT	ND	ND	ND	ND										
	Silver	ND	ND	ND	NT	ND	ND	ND	ND										
	Sodium	NT	NT	NT	NT	NT	24.5	59	24.8	28	4.33	108	7.36	29.1	7.17	607	12.3	450	
	Spec. Cond.	NT	NT	NT	NT	NT	386.7	538.8			82.1	703.9	118.1	526.3	93.3	3441	200	2406	
	Sulfate	NT	NT	NT	NT	NT	20.7	15.6	25.5	7.19	4.42	8.46	ND	12.6	ND	25.3	4.59	20.9	
	TDS	NT	NT	NT	NT	NT	280	368	404	204	1276	392	100	222	6	2028	134	1468	
	Thallium	ND	ND	ND	NT	ND	ND	ND	ND										
Turbidity	NT	NT	NT	NT	NT	3.04	5.24	6.06	25.6	NT	NT	NS	NS	6.2	16.4	NT	15.9		
Vanadium	ND	ND	ND	NT	0.0027	ND	ND	ND											
Zinc	0.0246	0.0187	0.0296	NT	0.0536	0.0202	0.0243	0.0174	0.0131	0.0103	0.0155	0.0065	0.0207	0.00503	0.0167	0.00583	0.019		

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Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015	
Monitoring Location ST120	Alkalinity	NT	NT	NT	NT	NT	64	74	70	60	49	52	72	56	57	64	60	56	
	Ammonia	NT	NT	NT	NT	NT	ND	ND											
	Antimony	ND	ND	ND	ND														
	Arsenic	ND	ND	ND	ND														
	Barium	0.0288	0.0431	0.0433	0.0373	0.1051	0.0392	0.0544	0.0482	0.046	0.0357	0.0397	0.0423	0.0559	0.044	0.0927	0.0514	0.047	
	Beryllium	ND	ND	ND	ND														
	Cadmium	NT	NT	NT	NT	NT	ND	ND	ND										
	Calcium	NT	NT	NT	NT	NT	25.7	34	31.6	23.1	33.4	23.3	24.9	29.6	27.4	46.1	27.6	28	
	Chloride	NT	NT	NT	NT	NT	197	93.2	102	50.1	110	47	335	67.8	928	77.4	332		
	Chromium	0.0027	ND	ND	ND														
	Cobalt	ND	ND	ND	ND														
	COD	NT	NT	NT	NT	NT	ND	7	11.1	15.1	11.9	9.7	ND	25.8	ND	14.3	22.8	ND	
	Copper	0.0104	0.0066	0.0094	0.0089	0.0152	0.0056	0.0105	0.0068	0.0052	0.00623	0.00914	ND	0.0151	ND	0.00839	ND	0.0031	
	Hardness	NT	NT	NT	NT	NT	340	150	180	113	73	98	100	130	120	208	130	138	
	Iron	NT	NT	NT	NT	NT	0.525	1	0.705	0.661	0.75	0.474	0.704	0.639	0.579	0.876	1.03	0.47	
	Lead	0.0021	ND	ND	ND	ND	ND	ND	ND	ND	0.00528	ND	ND	ND	ND	ND	ND	ND	
	Magnesium	NT	NT	NT	NT	NT	12.3	19.1	16.3	14.2	12.6	11.5	14.2	14.8	12.9	22.5	13.2	13	
	Manganese	NT	NT	NT	NT	NT	0.0634	0.238	0.0817	0.126	0.051	0.0853	0.117	0.0907	0.0795	0.128	0.155	0.14	
	Mercury	ND	ND	ND	ND														
	Nickel	0.0116	0.0077	0.0078	0.006	0.0113	0.0066	0.0155	0.0066	0.0098	0.00741	0.00818	0.00593	0.00848	0.0065	0.0146	0.00553	ND	
	Nitrate	NT	NT	NT	NT	NT	1.029	1.2126	0.792	0.787	0.581	1.33	1.3	1.2	0.812	1.38	0.539	1.61	
	pH	NT	NT	NT	NT	NT	7.41	5.96		6.98	7.38	6.68	7.35	7.4	7.34	6.62	7.64		
	Potassium	NT	NT	NT	NT	NT	1.88	3	3.02	2.51	3.08	2.25	2.2	3.01	2.67	6.08	2.77	2.8	
	Selenium	ND	ND	ND															
	Silver	ND	ND	ND															
	Sodium	NT	NT	NT	NT	NT	27.5	170	34	53.7	34.5	65.1	15.3	181	19.8	561	24.5	210	
	Spec. Cond.	NT	NT	NT	NT	NT	370.8	1116		236.6	489.4	303.4	1297	340	2780	377.9	1092		
	Sulfate	NT	NT	NT	NT	NT	7.6	17.2	13.5	7.5	6.45	7.76	5.56	7.85	8.37	24.8	8.87	14	
	TDS	NT	NT	NT	NT	NT	244	720	376	372	208	284	228	660	272	1676	268	740	
	Thallium	ND	ND	ND															
Turbidity	NT	NT	NT	NT	NT	2.12	8.2	2.4	3.86	NT	NT	NS	5	ND	9.8	NT	5.8		
Vanadium	0.0028	ND	ND																
Zinc	NT	NT	NT	NT	NT	ND	0.0124	ND	0.00891	0.00844	0.0106	ND	0.00746	0.00635	0.0157	0.00582	0.0084		

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Table 4
Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015	
Monitoring Location ST65	Alkalinity	NT	NT	NT	NT	NT	70	235	88	243	203	237	98	253	112	74	174	65	
	Ammonia	NT	NT	NT	NT	NT	ND	ND											
	Antimony	ND	ND	ND	ND														
	Arsenic	ND	ND	ND	ND														
	Barium	0.1	0.0404	0.038	0.0314	0.0447	0.0912	0.0566	0.0431	0.0556	0.079	0.0484	0.045	0.0644	0.044	0.0685	0.227	0.039	
	Beryllium	ND	ND	ND	ND														
	Cadmium	NT	NT	NT	NT	NT	ND	ND	ND										
	Calcium	NT	NT	NT	NT	NT	18.1	40	34.3	33.9	34.2	30.6	34.3	34.6	40	37.6	23.5	23	
	Chloride	NT	NT	NT	NT	NT	51.7	85.7	98.4	99.6	154	136	91.5	171	68.4	586	89.2	273	
	Chromium	ND	ND	ND	0.0226	ND													
	Cobalt	0.0134	ND	ND	ND	ND	0.0137	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0387	ND	
	COD	NT	NT	NT	NT	NT	34.8	34.7	7.7	35.1	39.2	32.6	10.5	60.7	ND	18.6	110	10	
	Copper	0.0063	0.0069	0.0075	0.0069	0.0058	0.008	0.0097	0.0066	0.0067	0.00767	0.00768	ND	0.0168	ND	0.00551	0.0267	0.0035	
	Hardness	NT	NT	NT	NT	NT	100	222	170	180	174	178	150	196	170	174	158	120	
	Iron	NT	NT	NT	NT	NT	10.1	0.529	0.286	0.657	0.613	0.507	0.548	0.39	0.294	0.491	17.8	0.57	
	Lead	ND	ND	ND	ND	ND	0.0036	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0244	ND	
	Magnesium	NT	NT	NT	NT	NT	10.6	30.7	18.4	26.9	23.7	29	17.4	28.3	19	20.1	19.5	12	
	Manganese	NT	NT	NT	NT	NT	2.37	0.0486	0.0179	0.143	0.25	0.0864	0.0182	0.0287	0.0705	0.154	5.11	0.12	
	Mercury	ND	ND	ND															
	Nickel	0.0058	0.0037	0.0058	ND	0.0028	0.008	0.0102	ND	0.0095	0.0103	0.00895	ND	0.00913	ND	0.00902	0.0307	0.0085	
	Nitrate	NT	NT	NT	NT	NT	ND	0.7773	1.117	0.392	ND	0.621	0.654	ND	1.16	1.37	1.0775	1.15	
	pH	NT	NT	NT	NT	NT	6.7	6.31		7.07	7.56	6.96	6.42	7.48	7.88	8.07	7.53		
	Potassium	NT	NT	NT	NT	NT	2.92	14.3	4	14.8	14.9	13.8	4.68	17	4.53	5.1	15.2	3.3	
	Selenium	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0082	ND	ND	ND	ND	ND	ND	ND	
	Silver	ND	ND	ND															
	Sodium	NT	NT	NT	NT	NT	25.7	110	37	121	115	136	26.3	136	27.5	345	75.9	150	
	Spec. Cond.	NT	NT	NT	NT	NT	302.3	884.2		795.9	872.7	471.5	1037	466.9	1916	563	813.1		
	Sulfate	NT	NT	NT	NT	NT	5.32	42.1	10.8	26.6	32.8	25.4	10.4	26.3	29.2	19.8	10.7	13.5	
	TDS	NT	NT	NT	NT	NT	196	500	500	524	588	532	360	562	352	1038	370	470	
	Thallium	ND	ND	ND															
Turbidity	NT	NT	NT	NT	NT	90.3	5.03	0.696	8.26	NT	NT	NS	NS	0	NR	NT	7.5		
Vanadium	ND	ND	ND	ND	ND	0.0036	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0281	ND		
Zinc	0.0185	0.0032	ND	ND	0.0058	0.0165	0.0053	ND	0.00604	0.00665	0.00539	ND	0.00538	ND	0.00897	0.0863	0.0098		

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Table 4
Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015	
Monitoring Location ST70	Alkalinity	NT	NT	NT	NT	NT	109	106	115	105	81	128	79	108	92	105	82	121	
	Ammonia	NT	NT	NT	NT	NT	ND	0.497	ND	0.477	ND	0.383	ND	0.555	ND	0.612	ND	0.393	
	Antimony	ND	ND	ND	ND														
	Arsenic	ND	ND	ND	ND														
	Barium	0.0509	0.0699	0.0508	0.0549	0.1404	0.0624	0.0596	0.0632	0.0498	0.0488	0.0706	0.0544	0.0732	0.0606	0.0934	0.082	0.061	
	Beryllium	ND	ND	ND	ND														
	Cadmium	NT	NT	NT	NT	NT	ND	ND	ND										
	Calcium	NT	NT	NT	NT	NT	38.2	37.9	42.8	32.5	27.4	56.8	31.7	49.3	39.8	44.1	37.7	46	
	Chloride	NT	NT	NT	NT	NT	85.8	68.8	97.6	79.8	50.6	122	49.5	145	62.6	674	76	229	
	Chromium	0.0034	0.0194	0.0033	ND	0.0422	ND	ND	ND	ND	ND	ND	0.0234	ND	0.0253	0.0229	ND	0.0113	ND
	Cobalt	ND	ND	ND	ND														
	COD	NT	NT	NT	NT	NT	ND	14.1	10	18.5	15.3	17.2	19.5	ND	22.4	15.3	14.5	ND	
	Copper	0.0072	0.0109	0.007	0.0076	0.0127	0.0067	0.009	0.0076	0.0066	0.00714	0.00996	0.00663	0.00699	0.00922	0.00726	0.00569	0.0033	
	Hardness	NT	NT	NT	NT	NT	170	150	170	128	110	188	124	180	140	192	148	200	
	Iron	NT	NT	NT	NT	NT	0.421	0.98	0.357	1.04	0.555	1.36	0.466	0.77	0.486	0.706	0.498	0.39	
	Lead	ND	0.0039	ND	ND	0.0027	ND	ND	ND										
	Magnesium	NT	NT	NT	NT	NT	16.3	15.9	17.8	13.6	8.98	16.5	11.7	18.9	11.8	19	10.9	21	
	Manganese	NT	NT	NT	NT	NT	0.154	0.274	0.147	0.185	0.0928	0.436	0.0764	0.276	0.0973	0.344	0.0795	0.32	
	Mercury	ND	ND	ND	ND														
	Nickel	0.0074	0.007	0.0085	0.0052	0.0095	0.0086	0.0136	0.0077	0.0086	0.00908	0.00831	0.00762	0.00775	0.00737	0.0103	ND	0.011	
	Nitrate	NT	NT	NT	NT	NT	1.8591	1.124	1.4818	0.831	0.774	1.489	0.878	2.071	0.523	1.481	0.869	1.35	
	pH	NT	NT	NT	NT	NT	7.54	6.61		7.05	8.51	6.53	6.52	7.45	7.41	9.41	7.72		
	Potassium	NT	NT	NT	NT	NT	4.3	4.4	6.84	4.15	4.52	13.1	5.33	14.3	13.5	14.3	12.3	5.5	
	Selenium	ND	ND	ND	ND														
	Silver	ND	ND	ND	ND														
	Sodium	NT	NT	NT	NT	NT	34.2	69.8	40.1	45.6	20.4	77.1	22.1	70.3	25.9	384	30.7	130	
	Spec. Cond.	NT	NT	NT	NT	NT	520.6	625.1		291.6	691	315.7	739	424.7	2485	447.1	862.9		
	Sulfate	NT	NT	NT	NT	NT	20.8	18.4	25.2	12.8	11.6	41.4	27.4	29.7	28.7	24.1	28.1	20.4	
	TDS	NT	NT	NT	NT	NT	352	392	524	312	256	448	256	380	308	1286	276	574	
	Thallium	ND	ND	ND	ND														
Turbidity	NT	NT	NT	NT	NT	1.96	9.24	0.753	10.7	NT	NT	NS	155	0.6	3	NT	1.8		
Vanadium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Zinc	0.0167	0.0187	0.016	ND	0.0342	ND	0.0166	0.00661	0.0145	0.0121	0.0143	0.0111	0.0136	0.0215	0.0257	0.0101	0.014		

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Table 4
Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015	
Monitoring Location ST80	Alkalinity	NT	NT	NT	NT	NT	48	110	44	32	42	34	54	34	569	31	41	33	
	Ammonia	NT	NT	NT	NT	NT	ND	0.456	ND	ND									
	Antimony	ND	ND	ND															
	Arsenic	ND	ND	ND															
	Barium	0.0297	0.049	0.0305	0.0405	0.0513	0.0365	0.0532	0.0311	0.0387	0.0315	0.0346	0.044	0.0408	0.0391	0.0505	0.037	0.043	
	Beryllium	ND	ND	ND	ND														
	Cadmium	NT	NT	NT	NT	NT	ND	ND	ND										
	Calcium	NT	NT	NT	NT	NT	16.2	37.9	12.5	11.8	11.9	14.2	18.6	16.5	17.5	16.4	15.8	14	
	Chloride	NT	NT	NT	NT	NT	32.6	92.3	28.6	27.1	29.4	45.8	38.1	107	43	207	40.9	177	
	Chromium	0.0026	0.0021	ND	ND	ND	ND												
	Cobalt	ND	ND	ND	ND														
	COD	NT	NT	NT	NT	NT	ND	12.5	17	14.6	12.5	10.3	10.8	ND	14.4	ND	20.5	12.9	
	Copper	0.0072	0.007	0.0061	0.0056	0.0064	0.0056	0.008	0.0066	0.0068	0.005	0.00578	ND	0.00609	0.00841	ND	ND	0.0026	
	Hardness	NT	NT	NT	NT	NT	70	152	68	46	55	58	86	66	76	84	76	82	
	Iron	NT	NT	NT	NT	NT	0.32	0.821	0.863	1.44	0.52	0.741	1.17	0.759	0.55	0.464	0.852	1	
	Lead	ND	ND	ND	ND														
	Magnesium	NT	NT	NT	NT	NT	7.41	15.4	6.23	5.73	5.47	7.92	11.2	8.71	10.5	9.32	7.83	7.3	
	Manganese	NT	NT	NT	NT	NT	0.126	0.174	0.155	0.149	0.0565	0.0786	0.184	0.115	0.0977	0.107	0.149	0.13	
	Mercury	ND	ND	ND	ND														
	Nickel	0.0056	0.0043	0.0036	ND	0.0035	0.0042	0.0108	ND	0.0055	ND	ND	ND	ND	0.00542	0.00506	ND	0.0058	
	Nitrate	NT	NT	NT	NT	NT	0.8957	1.1925	0.35	0.856	0.423	1.68	0.679	1.52	0.309	1.79	0.534	1.27	
	pH	NT	NT	NT	NT	NT	7.65	7.37		7	8.08	6.94	7.11	7.65	7.64	7.6	7.62		
	Potassium	NT	NT	NT	NT	NT	3.08	4.64	2.68	2.16	3.82	2.57	3.8	2.69	3.86	2.53	2.6	3	
	Selenium	ND	ND	ND															
	Silver	ND	ND	ND															
	Sodium	NT	NT	NT	NT	NT	17.4	69	14	14.6	12.1	28.2	16.4	64.6	17.2	110	14.9	92	
	Spec. Cond.	NT	NT	NT	NT	NT	216.2	616.7		162.9	234.2	255	466.6	231.3	685.1	211.2	541.2		
	Sulfate	NT	NT	NT	NT	NT	8.16	17.3	5.53	6.57	6.04	5.77	5.55	8.53	6.35	10	5.89	8.62	
	TDS	NT	NT	NT	NT	NT	144	380	168	144	160	168	160	246	180	396	168	362	
	Thallium	ND	ND	ND															
Turbidity	NT	NT	NT	NT	NT	1.85	7.23	7.86	91.8	NT	NT	NS	1000+	4	8.8	NT	24		
Vanadium	0.0028	ND	ND																
Zinc	0.0091	0.0085	0.0066	ND	0.0078	ND	0.0119	ND	0.00952	0.00561	0.00612	ND	0.00635	0.0128	0.00834	0.00786	0.0073		

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Table 4
Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015
Monitoring Location MW1B	Alkalinity								48	49	49	58	52	49	49	47	43	45
	Ammonia								ND	ND								
	Antimony								ND	ND								
	Arsenic								ND	ND								
	Barium								0.0057	0.0081	0.0089	0.00843	0.0338	0.00611	0.00851	0.00701	0.00849	ND
	Beryllium								ND	ND								
	Cadmium								ND	ND								
	Calcium								6.83	8.18	6.92	8.77	10.4	9.07	8.27	7.81	7.68	6
	Chloride								ND	ND	ND	2.75	3.33	3.24	3.27	3.96	2.6	3.66
	Chromium								0.0055	ND	0.00501	0.00854	0.233	0.00515	0.00711	ND	ND	ND
	Cobalt								ND	ND	ND	ND	0.0205	ND	ND	ND	ND	ND
	COD								ND	6.5	ND	ND	ND	ND	ND	ND	ND	ND
	Copper								0.0086	ND	0.00799	0.0104	0.0802	0.0159	0.00568	ND	0.00531	0.0025
	Hardness								30	36	33	60	80	36	40	50	42	40
	Iron								1.22	0.651	1.56	2.22	17.6	1.34	0.623	0.289	0.992	0.85
	Lead								ND	ND	0.00552	ND	0.0117	ND	ND	ND	ND	ND
	Magnesium								3.72	4.58	4.34	5.74	11.6	5.42	4.56	4.63	4.36	4.1
	Manganese								0.038	0.0495	0.0441	0.0541	0.516	0.0436	0.0189	0.0186	0.0279	0.022
	Mercury								ND	ND								
	Nickel								0.0055	ND	0.00538	0.00801	0.271	0.00529	0.00698	ND	0.00505	ND
	Nitrate								ND	ND								
	pH										5.73	6.12	5.6	6.21	6.1	6.12	6.35	6.52
	Potassium								1.25	1.15	1.47	1.36	3.47	1.53	1.06	1.06	1.14	1
	Selenium								ND	ND								
	Silver								ND	ND								
	Sodium								10.2	8.37	6.78	8.88	8.62	12.8	7.4	8.04	7.31	7.2
	Spec. Cond.										76.3	97.9	96.9	113.1	95.5	86	78.3	70.9
	Sulfate								ND	ND								
	TDS								440	92	80	92	92	92	136	90	67	70
	Thallium								ND	ND								
Turbidity								28.2	39.4	NT	NT	NS	47.7	33.9	12.3	37.5	1.2	
Vanadium								ND	ND	ND	ND	0.022	ND	ND	ND	ND	ND	
Zinc								0.0102	0.00685	0.0145	0.0179	0.109	0.012	0.00722	0.00628	0.0143	0.0068	

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Table 4
Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015	
Monitoring Location MW2A	Alkalinity								30	40	35	46	54	NS	56	49	28	30	
	Ammonia								ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	
	Antimony								ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
	Arsenic								ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
	Barium								0.0155	0.0299	0.0206	0.0209	0.0181	NS	0.0172	0.0247	0.142	0.012	
	Beryllium								ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
	Cadmium								ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
	Calcium								4.89	7.78	8.86	10.5	11.1	NS	13.2	10.2	6.29	4.6	
	Chloride								ND	2.74	2.69	2.65	2.63	NS	5.76	3.39	3.73	2.69	
	Chromium								0.0084	0.0085	ND	0.0404	0.022	NS	ND	0.0184	0.0355	ND	
	Cobalt								ND	ND	ND	0.014	ND	NS	0.00517	ND	0.0174	ND	
	COD								ND	7.5	ND	ND	ND	NS	ND	ND	ND	ND	
	Copper								0.008	0.0118	0.00689	0.028	0.0163	NS	0.0106	0.0543	0.0411	ND	
	Hardness								19	25	22	32	32	NS	48	46	30	34	
	Iron								1.38	3.14	0.68	1.27	0.725	NS	1.46	2.2	17.3	0.059	
	Lead								ND	0.0055	ND	ND	ND	NS	ND	ND	0.0221	ND	
	Magnesium								2.15	3.75	3.25	3.59	4.81	NS	5.72	4.58	6.91	2.8	
	Manganese								0.12	0.173	0.204	0.148	0.151	NS	0.602	0.42	0.595	0.17	
	Mercury								ND	ND	ND	0.00059	0.00076	NS	0.00029	0.001	0.00072	ND	
	Nickel								0.0102	0.0092	0.00547	0.032	0.0301	NS	0.0278	0.0165	0.0244	ND	
	Nitrate								ND	ND	ND	ND	ND	NS	ND	ND	0.2	ND	
	pH										5.14	6.08	5.96	NS	5.31	NT	6.56	5.72	
	Potassium								1.94	2.32	1.8	2.12	2.14	NS	2.27	2.12	5.83	1.4	
	Selenium								ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	
	Silver								ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	
	Sodium								7.15	7.07	6.09	10.4	8.38	NS	9.54	7.47	5.02	4.2	
	Spec. Cond.										73.1	118.1	89.6	NS	104.3	NT	55.7	54.2	
	Sulfate								ND	ND	ND	ND	ND	NS	ND	ND	ND	ND	
TDS								465	112	108	84	100	NS	4	70	84	72		
Thallium								ND	ND	ND	ND	ND	NS	ND	ND	ND	ND		
Turbidity								58.9	117.6	NT	NT	NS	NS	11.3	NT		2.7		
Vanadium								ND	ND	ND	ND	ND	NS	ND	ND	0.0192	ND		
Zinc								0.0114	0.0229	0.0187	0.0369	0.0247	NS	0.0322	NT	0.0856	ND		

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Table 4
Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015	
Monitoring Location MW2B	Alkalinity								29	37	33	40	36	41	34	37	23	31	
	Ammonia								ND	ND									
	Antimony								ND	ND									
	Arsenic								ND	ND									
	Barium								0.0113	0.0095	0.0123	0.00636	0.00799	0.00706	0.00696	0.00712	0.0192	0.012	
	Beryllium								ND	ND									
	Cadmium								ND	ND									
	Calcium								4.92	8.72	7.2	9.89	11.7	10.7	10.1	11	5.48	5.7	
	Chloride								ND	ND	ND	ND	2.55	ND	ND	2.58	4.06	3.18	
	Chromium								ND	ND									
	Cobalt								ND	ND									
	COD								ND	ND	ND	ND	ND	12.6	ND	ND	ND	ND	
	Copper								0.0054	ND	ND	0.00608	ND	ND	ND	ND	ND	ND	
	Hardness								18	24	35	30	34	34	30	56	28	34	
	Iron								ND	ND	0.017								
	Lead								ND	ND									
	Magnesium								1.94	2.84	2.85	2.44	3.04	2.58	2.56	2.74	3.14	3	
	Manganese								0.0868	0.063	0.044	0.0393	0.0302	0.0342	0.023	0.0211	0.0629	0.052	
	Mercury								ND	ND	ND	ND	0.00058	ND	ND	ND	ND	ND	
	Nickel								ND	ND	ND	0.00523	0.00624	ND	ND	ND	ND	ND	
	Nitrate								ND	ND									
	pH										5	5.39	5.49	5.61	5.13	5.31	5.22	5.7	
	Potassium								1.36	1.58	1.39	1.66	1.74	1.83	1.47	1.59	1.47	1.4	
	Selenium								ND	ND									
	Silver								ND	ND									
	Sodium								6.99	5.22	4.88	8.64	4.89	4.66	4.17	4.62	4.25	4.8	
	Spec. Cond.										54.9	76	78.6	94.8	74	78.2	55.1	29.4	
	Sulfate								ND	ND									
TDS								648	56	44	92	84	4	72	66	1164	80		
Thallium								ND	ND										
Turbidity								2.43	1.29	NT	NT	NS	0.57	0	0.9	0.7	0.4		
Vanadium								ND	ND										
Zinc								0.00606	0.008	0.00794	0.00753	0.00694	0.00721	0.00981	0.00716	0.0113	ND		

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Table 4
Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015
Monitoring Location MW3A	Alkalinity								40	24	21	24	21	17.2	16	17	13.5	17
	Ammonia								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Antimony								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Arsenic								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Barium								0.144	0.0519	0.111	0.223	0.113	0.0487	0.0332	0.0367	0.058	ND
	Beryllium								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Cadmium								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Calcium								6.89	6.1	11.1	17.2	10.1	7.11	5.41	4.52	5.5	3.1
	Chloride								ND	2.94	2.89	5.28	2.76	2.6	ND	2.91	3.1	ND
	Chromium								0.053	0.0067	0.00753	0.0815	0.05	0.0277	0.0133	0.0121	0.0206	ND
	Cobalt								0.041	0.0108	0.0188	0.0397	0.0267	0.00937	0.00514	0.00563	0.0108	ND
	COD								ND	ND	ND	6.3	ND	ND	ND	ND	ND	ND
	Copper								0.118	0.018	0.0273	0.122	0.0773	0.0332	0.0196	0.0288	0.028	0.0028
	Hardness								130	14	22	50	44	34	16	78	38	30
	Iron								61.7	5.99	6.67	86.1	44.4	17	11.7	10.1	15.8	2.2
	Lead								0.0259	0.0089	0.023	0.0435	0.02	0.0088	ND	0.0052	0.00963	ND
	Magnesium								20.9	3.68	7.04	28.1	15.6	6.68	5.37	5.74	6.12	1.8
	Manganese								1.08	0.343	0.629	1.17	0.715	0.24	0.141	0.172	0.416	0.059
	Mercury								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Nickel								0.0816	0.0067	0.00978	0.0752	0.0544	0.0224	0.0128	0.0126	0.0202	ND
	Nitrate								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	pH										5.55	5.85	5.86	5.99	5.49	5.4	6.13	5.98
	Potassium								13	1.98	2.86	15	9.8	3.99	3.03	2.77	3.56	1.3
	Selenium								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Silver								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Sodium								7.66	4.12	4.19	4.33	3.88	4.1	3.81	4.24	3.28	3.3
	Spec. Cond.										36.1	41.4	39	43.7	37.1	30.3	33.1	33.4
	Sulfate								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
TDS								100	60	144	112	60	16	126	10	74	74	
Thallium								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Turbidity								1535	151.5	NT	NT	NS	982	982	1000+	1.8	38	
Vanadium								0.0529	0.01	0.0124	0.1	0.058	0.022	0.0134	0.0132	0.0212	ND	
Zinc								0.227	0.0275	0.0459	0.235	0.159	0.06	0.0372	0.041	0.0639	0.0078	

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2010**

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Table 4
Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015
Monitoring Location MW3B	Alkalinity								160	110	80	111	137	118	123	112	105	94
	Ammonia								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Antimony								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Arsenic								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Barium								0.0943	0.237	0.175	0.0994	0.13	0.0643	0.12	0.0491	0.0808	ND
	Beryllium								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Cadmium								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Calcium								10.7	63	57.4	42.3	61.8	44.4	54.5	34.3	33.3	26
	Chloride								ND	4.59	2.57	3.49	3.46	2.76	3.05	2.63	ND	ND
	Chromium								0.0246	0.018	0.0129	0.0409	0.184	0.0478	0.124	0.053	0.0655	ND
	Cobalt								ND	0.027	0.00643	0.012	0.0243	0.00927	0.0157	0.00581	0.0113	ND
	COD								ND	22.4	7.6	6.7	ND	ND	ND	ND	ND	ND
	Copper								0.0125	0.0533	0.0184	0.0403	0.105	0.0308	0.054	0.0258	0.0467	ND
	Hardness								100	66	45	114	188	132	162	130	118	100
	Iron								1.33	9.62	3.89	19.4	19.15	8.89	24.9	5.68	11.4	0.24
	Lead								ND	0.041	0.011	0.0138	0.0163	0.00869	0.0171	0.00773	0.0134	ND
	Magnesium								0.715	10.6	5.36	11.7	11.3	7.41	12	6.81	7.09	3.6
	Manganese								0.0395	1.26	0.276	0.371	0.584	0.33	0.465	0.221	0.385	0.011
	Mercury								ND	ND	ND	ND	ND	ND	0.00031	ND	ND	ND
	Nickel								0.0266	0.031	0.0103	0.0363	0.278	0.0425	0.114	0.0605	0.0648	ND
	Nitrate								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	pH										10.2	8.47	7.33	8.03	7.59	7.11	7.32	7.49
	Potassium								26	9.54	9.11	7.83	7.26	4.18	6.49	3.19	3.55	1.5
	Selenium								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Silver								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Sodium								56.7	107	41	48.6	51.1	36	30.1	19.4	17	12
	Spec. Cond.										279.6	223.9	329.1	161.1	221.9	214	146.9	184.6
	Sulfate								13.5	165	36.9	65.7	94.4	52.6	43.2	29.4	23.6	11.6
	TDS								332	472	188	268	292	158	242	228	256	142
	Thallium								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Turbidity								42	2130	NT	NT	NS	11.3	22.7	27.8	30.1	4.4	
Vanadium								0.0047	0.0279	0.0098	0.022	0.0216	0.0112	0.0233	0.00683	0.0136	ND	
Zinc								0.0123	0.108	0.0359	0.0724	0.0988	0.0429	0.0801	0.03	0.0612	ND	

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Table 4
Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015
Monitoring Location MW04	Alkalinity								70	60	52	56	51	55	55	55	51	50
	Ammonia								ND	ND								
	Antimony								ND	ND								
	Arsenic								ND	ND								
	Barium								0.228	0.0431	0.0409	0.0721	0.0383	0.0383	0.0417	0.0417	0.042	0.034
	Beryllium								ND	ND								
	Cadmium								ND	ND								
	Calcium								34.4	35.5	34.5	40.4	33.4	39.6	35.1	35.1	35	40
	Chloride								106	138	120	145	125	141	128	128	139	143
	Chromium								0.0261	ND	ND	0.00761	ND	ND	ND	ND	ND	ND
	Cobalt								0.0264	ND	ND	ND	ND	ND	ND	ND	ND	ND
	COD								ND	ND	ND	3.1	ND	ND	ND	ND	ND	ND
	Copper								0.037	ND	ND	0.0145	ND	0.0133	ND	ND	ND	ND
	Hardness								183	200	163	188	162	186	170	170	194	212
	Iron								37.6	1.21	1.06	7.69	0.889	0.97	0.786	0.786	1.02	0.7
	Lead								0.022	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Magnesium								30.9	25.8	22.9	25.5	19.6	22.6	23.2	23.2	21.1	25
	Manganese								2.87	0.138	0.104	0.549	0.115	0.175	0.142	0.142	0.123	0.091
	Mercury								ND	ND								
	Nickel								0.0758	0.0108	0.00554	0.0157	0.00948	0.0108	0.00928	0.00928	0.00764	ND
	Nitrate								0.3756	0.378	0.406	0.47	0.444	0.465	0.489	0.489	0.566	0.621
	pH									5.7	5.96	5.5	6.11	6.05	6.05	6.24	5.96	
	Potassium								12.2	3.56	2.76	4.51	3.01	3.47	2.53	2.53	2.79	3
	Selenium								ND	ND								
	Silver								ND	ND								
	Sodium								29.4	30.2	29.4	29.7	24.9	30.9	29.6	29.6	28.3	30
	Spec. Cond.										421.5	587.4	501.7	620.9	485.6	485.6	498.8	487.3
	Sulfate								ND	ND	ND	ND	ND	4.26	4.01	4.01	4.73	5.37
	TDS								552	552	520	528	428	310	442	442	370	442
	Thallium								ND	ND								
Turbidity								880	13.2	NT	NT	NS	59.7	45.2	45.2	87	13.3	
Vanadium								0.0213	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Zinc								0.138	0.00782	0.00755	0.0313	0.00689	0.00903	0.00733	0.00733	0.0108	0.0056	

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Table 4
Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015
Monitoring Location MW06	Alkalinity								260	264	214	238	197	216	183	208	201	201
	Ammonia								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Antimony								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Arsenic								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Barium								0.675	0.303	0.319	0.365	0.433	0.259	0.301	0.3	0.393	0.31
	Beryllium								0.007	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Cadmium								0.0082	ND	0.00656	0.00618	0.00888	ND	ND	ND	ND	ND
	Calcium								62.6	73.9	70.3	78.7	72.8	76.3	79.8	80.1	90.2	83
	Chloride								222	200	226	243	255	258	304	282	411	372
	Chromium								0.0533	ND	ND	0.00728	0.0229	0.00506	0.00639	0.0118	ND	0.57
	Cobalt								0.33	0.322	0.216	0.374	0.343	0.388	0.263	0.281	0.466	0.59
	COD								ND	17.3	ND	ND	ND	ND	ND	ND	ND	ND
	Copper								0.143	0.0157	0.0106	0.0243	0.0414	0.0133	0.0149	0.0157	0.00913	0.017
	Hardness								430	1720	430	470	452	472	500	500	632	104
	Iron								69.4	2.9	0.897	4.76	17.9	3.47	7.65	8.65	2.39	8.3
	Lead								0.0519	0.0101	0.011	0.0137	0.00953	ND	0.00541	0.00552	ND	ND
	Magnesium								57.9	54.9	53.5	56.3	53.1	54.9	56.7	56.3	65	60
	Manganese								38.9	54	37.63	44.4	37.6	48	40	44.7	54.3	48
	Mercury								ND	0.00035	ND	ND	ND	ND	ND	ND	ND	ND
	Nickel								0.154	0.0339	0.032	0.0429	0.0634	0.0463	0.0379	0.0409	0.0532	0.57
	Nitrate								0.0757	ND	ND	ND	ND	ND	ND	ND	ND	ND
	pH										5.58	5.86	5.44	6.17	5.62	6.09	5.85	6.55
	Potassium								4.92	2.94	3.71	3.63	4.19	3.77	4	3.35	3.97	3.5
	Selenium								0.0429	0.0113	0.00983	0.00963	0.0151	0.00839	0.0133	0.00843	0.00837	ND
	Silver								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Sodium								56.2	63.1	61.2	70.9	59.6	65.3	66	64.3	89.8	76
	Spec. Cond.										984.9	1228	1211	1352	1248	1214	1557	1320
	Sulfate								54.1	58.7	45.2	43.4	47.4	48	50	62.1	70.6	77.2
	TDS								1080	868	1036	976	776	644	878	718	96	926
	Thallium								ND	ND	0.0001	ND	ND	ND	ND	ND	ND	ND
Turbidity								5300	1540	NT	NT	NS	270	2651	589	129.6	11.2	
Vanadium								0.0531	ND	ND	0.0054	0.0149	ND	ND	0.00508	ND	ND	
Zinc								0.5	0.0516	0.0487	0.0616	0.136	0.0515	0.0561	0.0627	0.0456	0.048	

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Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015
Monitoring Location MW07	Alkalinity								90	42	69	42	31	68	48	139	259	62
	Ammonia								ND	ND	ND	ND	ND	ND	ND	0.265	0.377	ND
	Antimony								ND	ND								
	Arsenic								ND	ND								
	Barium								0.0666	0.0674	0.0636	0.058	0.0631	0.0635	0.0732	0.0659	0.102	0.058
	Beryllium								ND	ND								
	Cadmium								ND	ND								
	Calcium								46.7	46.5	55.2	41.7	44.5	48.9	45.4	55.6	81.6	40
	Chloride								131	119	117	70.3	108	118	117	123	166	124
	Chromium								ND	ND								
	Cobalt								0.0066	ND	ND	0.0065	0.00727	ND	ND	0.01	0.0103	ND
	COD								12.6	15	15.1	14.6	ND	21.2	ND	23.7	35.8	ND
	Copper								0.016	0.01	0.0084	0.0115	0.013	0.0172	0.011	0.0111	0.0148	0.0068
	Hardness								650	219	241	198	216	238	212	294	418	210
	Iron								0.69	0.517	ND	0.478	0.413	0.391	0.29	3.31	2.23	ND
	Lead								ND	ND								
	Magnesium								23.2	28.1	31.5	25.7	24.7	27.6	27.7	28.7	44.1	23
	Manganese								2.01	0.761	0.562	0.681	0.34	1.3	1.22	1.88	5.81	0.95
	Mercury								ND	ND								
	Nickel								0.0157	0.0064	0.00506	0.00667	0.00779	0.00689	0.00694	0.00771	0.00894	ND
	Nitrate								10.35	14.59	18.45	29.09	22.65	15.0122	15.75	6.206	2.17	4.2
	pH										5.55	5.62	5.04	5.79	5.57	5.55	6.27	5.81
	Potassium								3.16	3.81	3.36	3.09	3.8	4.23	2.82	3.81	4.17	2.8
	Selenium								ND	ND								
	Silver								ND	ND								
	Sodium								33.4	32.6	31.7	22.7	23.1	24.1	24.7	25.7	48.2	28
	Spec. Cond.										568.3	601.2	614.9	693.4	580.1	667.6	1005	174.4
	Sulfate								13.1	12.4	11.7	5.6	11	5.66	7.76	10.5	21	21.4
	TDS								648	552	788	528	560	420	524	442	650	398
	Thallium								ND	ND								
Turbidity								11.1	6.06	NT	NT	NS	0.8	3.7	6.09	10.1	0	
Vanadium								ND	ND									
Zinc								0.0246	0.0119	0.0106	0.0148	0.014	0.00977	0.00991	0.00955	0.0118	ND	

NT: Not Tested

NS: Not Sampled

ND: Not Detected

Note: MCL exceedances are indicated in Red

Table 4
Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015
Monitoring Location MW08	Alkalinity								190	480	209	166	178	175	89	233	187	266
	Ammonia								0.726	1.94	ND	ND	ND	ND	ND	ND	ND	ND
	Antimony								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Arsenic								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Barium								0.273	0.177	0.109	0.12	0.419	0.12	0.156	0.111	0.12	0.089
	Beryllium								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Cadmium								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Calcium								59	114	76.2	70.1	67.4	67.5	46.9	87.3	64	88
	Chloride								190	207	210	198	223	172	197	142	160	134
	Chromium								0.0215	ND	ND	ND	0.0654	ND	0.0221	ND	ND	0.014
	Cobalt								0.0816	ND	ND	ND	0.0838	ND	ND	ND	ND	ND
	COD								ND	26.3	6.2	11.5	ND	ND	ND	16	11.8	12.5
	Copper								0.054	0.0145	0.0067	0.00811	0.131	0.0134	0.0107	0.00694	0.0061	0.0029
	Hardness								270	600	99	332	344	302	218	412	316	444
	Iron								15.1	1.69	0.69	1.15	46.3	0.498	1.64	1.25	0.485	ND
	Lead								0.01	ND	ND	ND	0.027	ND	ND	ND	ND	ND
	Magnesium								36.9	90.9	50.2	40.5	39.6	33.9	27.1	46	37.7	48
	Manganese								3.46	0.144	0.0902	0.0101	2.36	0.0338	0.182	0.0111	0.0108	ND
	Mercury								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Nickel								0.0534	0.0082	0.00713	0.0065	0.0821	ND	0.0241	0.00754	ND	ND
	Nitrate								7.63	13.85	5.65	14.79	9.61	4.75	5.21	14.55	9.43	11.59
	pH										6.65	6.59	5.76	6.57	6.39	6.61	6.81	7.83
	Potassium								10.4	19.1	14	11.8	12.9	13.6	8	12.7	10.8	11
	Selenium								ND	ND	ND	ND	0.0076	ND	ND	ND	ND	ND
	Silver								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Sodium								104	139	124	106	102	95.7	100	78.8	91.5	71
	Spec. Cond.										1040	1154	1199	1157	907.6	1121	964.7	951.2
	Sulfate								55	68.5	72.6	67.4	69	95.1	57.6	136	92.7	120
	TDS								696	1136	1016	776	712	642	520	740	624	656
	Thallium								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Turbidity								1227	22.7	NT	NT	NS	8.7	NM	35.2	11.6	7.5	
Vanadium								0.0366	ND	ND	ND	0.0874	ND	ND	ND	ND	ND	
Zinc								0.16	0.0143	0.0109	0.0104	0.22	0.00708	0.0311	0.00846	0.00925	ND	

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Note: MCL exceedances are indicated in Red

Table 4
Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015	
Monitoring Location MW09	Alkalinity								64	110	44	34	37	33	28	35	30	28	
	Ammonia								ND	ND									
	Antimony								ND	ND									
	Arsenic								ND	ND									
	Barium								0.334	0.156	0.172	0.0682	1.33	0.0722	0.115	0.338	0.688	0.069	
	Beryllium								ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00551	ND
	Cadmium								ND	ND	ND								
	Calcium								15.8	14.9	12.4	10.48	17.5	12	11	14.8	10.1	4.6	
	Chloride								11.9	10.9	12.3	12.1	13.6	12.9	13.9	152	15.7	70.3	
	Chromium								0.0588	0.032	ND	0.00903	0.0384	0.027	0.0263	0.0363	0.128	0.0044	
	Cobalt								0.0341	0.016	ND	ND	0.0603	0.00569	0.00872	0.0138	0.0684	ND	
	COD								ND	ND	ND								
	Copper								0.0339	0.0174	ND	0.0083	0.0369	0.0196	0.017	0.0177	0.0508	0.0043	
	Hardness								80	48	140	50	84	46	48	68	46	36	
	Iron								48.6	16.7	ND	3.05	26.2	6.41	14.7	22.2	86.7	3	
	Lead								0.0373	0.0132	0.0124	ND	0.0544	ND	0.0109	0.0137	0.0648	0.0018	
	Magnesium								24.4	13.2	6.9	7.22	15.9	8.44	11.8	15.7	38.2	4.5	
	Manganese								1.8	0.689	0.196	0.242	3.19	0.273	0.415	0.626	2.56	0.088	
	Mercury								ND	ND	0.00035	ND	0.00045	ND	ND	ND	ND	ND	
	Nickel								0.0553	0.0274	ND	0.00936	0.034	0.0217	0.0249	0.0318	0.109	0.0052	
	Nitrate								1.25	1.25	1.14	1.47	1.18	1.45	1.49	1.36	1.26	0.839	
	pH										5.25	5.08	5.23	5.42	5.05	5.07	5.5	5.7	
	Potassium								17.8	7.41	1.54	2.09	9.63	3.45	5.4	8.61	30.3	1.8	
	Selenium								ND	ND	ND	ND	0.00879	ND	ND	ND	0.00778	ND	
	Silver								ND	ND									
	Sodium								7.23	3.75	3.91	4.26	3.77	7.95	4.13	87.1	9.44	50	
	Spec. Cond.										105.3	105.1	122.5	120.2	70.2	579.6	108.1	269.8	
	Sulfate								ND	ND									
TDS								168	172	116	80	112	196	96	370	72	188		
Thallium								ND	ND										
Turbidity								1160	398	NT	NT	NS	446	1235	644	500	154.3		
Vanadium								0.0541	0.0285	ND	ND	0.0306	0.00762	0.0167	0.0258	0.117	ND		
Zinc								0.189	0.0777	0.0166	0.0242	0.157	0.0363	0.0871	0.0867	0.398	0.022		

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Table 4
Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015	
Monitoring Location MW10	Alkalinity								100	75	78	65	79	59	86	68	4.6	61	
	Ammonia								ND	ND									
	Antimony								ND	ND									
	Arsenic								ND	ND									
	Barium								1.49	0.124	0.414	0.116	0.157	0.0878	0.448	0.104	0.682	0.064	
	Beryllium								ND	ND	ND								
	Cadmium								ND	ND	ND								
	Calcium								29.1	14.2	21.2	16.1	21.1	17.2	23.3	18.3	50.6	15	
	Chloride								6.75	19.4	8.02	8.31	9.6	6.76	7.95	6.97	283	6.22	
	Chromium								0.125	ND	0.00566	0.0102	0.0174	0.00814	0.0677	ND	0.0251	0.0036	
	Cobalt								0.0659	ND	0.0103	0.00519	0.00667	ND	0.0308	ND	0.0139	ND	
	COD								ND	36.6	ND	4.4	ND	ND	ND	ND	ND	ND	
	Copper								0.197	0.0123	0.0292	0.027	0.0283	0.0254	0.108	0.0139	0.0313	0.0051	
	Hardness								110	70	72	68	82	60	90	82	236	76	
	Iron								201	ND	5.7	9	12.6	5.5	55.7	4.31	22.1	2	
	Lead								0.0611	ND	0.0153	ND	0.00502	ND	0.0181	ND	0.0185	ND	
	Magnesium								78.3	9.1112	10.7	9.78	11.2	8.42	26.4	9.06	30.6	7.1	
	Manganese								3.59	0.044	0.38	0.158	0.212	0.0983	0.931	0.0692	0.58	0.036	
	Mercury								ND	ND									
	Nickel								0.111	ND	0.013	0.0112	0.0172	0.00985	0.0607	0.00743	0.0254	0.0062	
	Nitrate								ND	ND	ND	ND	ND	ND	ND	ND	3.91	ND	
	pH										5.35	5.8	5.53	5.95	5.9	5.62	5.16	5.95	
	Potassium								43.5	1.26	2.12	2.78	3.27	2.29	11.3	1.81	6.43	1.3	
	Selenium								0.0085	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	Silver								ND	ND									
	Sodium								12.4	10.1	8.3	8.54	9.1	12.4	9.52	9.11	90.2	8.8	
	Spec. Cond.										132.5	144.6	184	164.9	183	148.4	983.8	132.3	
	Sulfate								7.56	8.3	7.83	8.02	7.4	8.41	6.47	8.64	18.8	11.3	
TDS								148	140	140	116	160	162	142	144	680	68		
Thallium								ND	ND										
Turbidity								4340	3140	NT	NT	NS	203	1583	114	401	115.5		
Vanadium								0.189	ND	0.00943	0.0242	0.0319	0.0143	0.124	0.0107	0.0273	0.0055		
Zinc								0.337	0.132	0.0575	0.0335	0.0444	0.0272	0.19	0.0606	0.0898	0.035		

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Table 4
Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015	
Monitoring Location MW11A	Alkalinity								50	27	40	33	37	29	33	16.2	31	23	
	Ammonia								ND	ND									
	Antimony								ND	ND	ND								
	Arsenic								ND	ND	ND								
	Barium								0.749	0.274	0.148	0.138	0.183	0.111	0.185	0.158	0.083	0.032	
	Beryllium								ND	ND	ND								
	Cadmium								ND	ND	ND								
	Calcium								23.4	14.8	15.1	11.4	15.8	12.5	17.3	10.9	12.9	7.7	
	Chloride								4.22	10.9	4.52	4.17	5.1	4.99	5.14	4.21	4.97	4.87	
	Chromium								0.144	0.0273	0.00963	0.0354	0.0514	0.032	0.0518	0.0384	0.0143	0.0095	
	Cobalt								0.0695	0.0181	0.0103	0.014	0.0213	0.0119	0.0212	0.0155	0.00554	ND	
	COD								ND	ND	ND								
	Copper								0.0825	0.026	0.0135	0.0452	0.0409	0.0321	0.046	0.0413	0.0156	0.0051	
	Hardness								90	36	54	52	80	46	60	200	58	44	
	Iron								149	12.1	7.54	22.56	30.8	18.4	30.7	27.8	9.84	4.7	
	Lead								0.0499	0.0156	0.0122	0.00689	0.0136	0.00611	0.0117	0.00791	ND	0.0015	
	Magnesium								66.6	11.2	8.63	11.7	13.9	9.74	16.4	12.7	7.8	3.6	
	Manganese								3.47	0.738	0.319	0.451	0.693	0.326	0.633	0.464	0.169	0.057	
	Mercury								ND	ND	ND								
	Nickel								0.145	0.0277	0.0171	0.0312	0.0486	0.0297	0.0489	0.036	0.0134	0.0099	
	Nitrate								1.4774	1.1	1.94	1.29	2.25	1.87	2.57	1.09	2.34	1.22	
	pH										5.14	5.51	5.49	5.78	5.72	5.54	5.76	5.7	
	Potassium								27.7	1.87	1.3	4.85	4.82	3.64	6.81	5.26	2.34	1.1	
	Selenium								0.0056	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Silver								ND	ND	ND								
	Sodium								8.49	4.21	5.15	4.66	4.57	8.24	5.31	3.89	4.7	3.7	
	Spec. Cond.										92	93.3	114.8	111.2	111.7	76.9	101	57.4	
	Sulfate								7.07	6.28	5.94	5.83	5.76	6.22	5.93	6.78	6.37	6.75	
TDS								108	72	96	64	108	176	116	87	78	50		
Thallium								ND	ND	ND									
Turbidity								4880	1600	NT	NT	NS	766	1272	607	630	46		
Vanadium								0.124	0.0093	0.00545	0.0425	0.057	0.0328	0.0555	0.0424	0.0171	0.0091		
Zinc								0.334	0.0938	0.0493	0.0788	0.109	0.069	0.124	0.0925	0.034	0.011		

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Table 4
Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015	
Monitoring Location MW11B	Alkalinity								100	69	65	68	61	61	62	68	73	72	
	Ammonia								ND	ND									
	Antimony								ND	ND	ND								
	Arsenic								ND	ND	ND								
	Barium								0.0744	0.0194	0.0188	0.0252	0.021	0.021	0.0261	0.0348	0.0256	0.021	
	Beryllium								ND	ND	ND								
	Cadmium								ND	ND	ND								
	Calcium								34.4	15.4	14.9	14.3	15.9	15.9	16.9	17.5	17.6	16	
	Chloride								4.18	4.79	4.38	4.9	5.06	5.06	6.57	6.14	6.38	6.77	
	Chromium								0.0082	ND	ND	ND	ND	ND	ND	0.00518	ND	ND	
	Cobalt								0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	COD								ND	ND	ND								
	Copper								0.0131	ND	ND	0.00742	ND	ND	0.00552	0.00699	ND	0.0021	
	Hardness								94	66	58	62	62	62	62	72	86	86	
	Iron								6.97	ND	ND	1.37	0.567	0.567	0.948	2.73	0.705	1.8	
	Lead								ND	ND	ND								
	Magnesium								8.36	6.63	6.3	7.72	6.62	6.62	8.18	9.36	8.63	8.8	
	Manganese								0.167	0.012	0.0107	0.0345	0.0178	0.0178	0.021	0.0516	0.0142	0.031	
	Mercury								ND	ND	ND								
	Nickel								0.009	ND	ND	ND	ND	ND	ND	0.00535	ND	ND	
	Nitrate								2.307	2.33	2.19	2.56	2.37	2.37	2.38	2.74	2.82	3.02	
	pH										6.13	6.36	6.17	6.17	6.46	6.19	6.56	6.77	
	Potassium								2.5	0.888	0.93	1.12	0.941	0.941	1.17	1.46	0.946	1.1	
	Selenium								ND	ND	ND								
	Silver								ND	ND	ND								
	Sodium								12.6	9.1	8.49	9.38	8.14	8.14	9.42	9.7	9.22	9.6	
	Spec. Cond.										123	156	147.8	147.8	144.9	160	171.5	74.1	
	Sulfate								ND	ND	ND								
TDS								156	132	116	132	136	136	134	156	108	106		
Thallium								ND	ND	ND									
Turbidity								72.4	4.99	NT	NT	NS	NS	15.8	40.5	7.4	34.2		
Vanadium								0.0229	ND	ND	0.00615	ND	ND	0.0058	0.0088	ND	0.007		
Zinc								0.0209	ND	ND	0.0106	0.00657	0.00657	0.00743	0.0122	ND	0.0053		

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Table 4
Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015
Monitoring Location MW12	Alkalinity								15	16	22	12	10	7	7.9	6	75	7.5
	Ammonia								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Antimony								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Arsenic								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Barium								1.32	0.749	0.615	0.635	0.472	0.473	0.392	0.471	0.354	0.44
	Beryllium								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Cadmium								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Calcium								82	78.8	65.6	65.2	47.4	44.5	45.5	46.4	19.7	47
	Chloride								374	371	286	348	211	246	197	251	7.3	267
	Chromium								0.1	ND	ND	0.0181	0.0261	ND	0.0115	ND	0.0436	0.01
	Cobalt								0.0492	ND	ND	ND	0.012	ND	ND	ND	0.0213	ND
	COD								ND	ND	ND	6.1	ND	ND	ND	ND	ND	ND
	Copper								0.109	0.0111	0.00629	0.0168	0.0339	0.0159	0.0167	0.00787	0.078	0.011
	Hardness								360	356	280	276	188	196	170	206	88	204
	Iron								100	2.59	1.22	4.09	17	1.27	7.12	1.17	36.8	3.8
	Lead								0.0616	ND	0.0106	ND	0.0168	ND	0.00655	ND	0.0112	0.0022
	Magnesium								69.5	43.1	29.1	32.7	23	21.1	21.6	22.9	19.5	24
	Manganese								3.02	0.138	0.103	0.155	0.532	0.0835	0.177	0.0658	0.596	0.11
	Mercury								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Nickel								0.0938	0.0113	0.00795	0.0205	0.0257	0.00961	0.0136	0.00786	0.0388	0.014
	Nitrate								5.0188	4.38	4.87	4.43	4.9	4.49	5.02	4.33	ND	3.94
	pH										4.66	4.8	5.01	5.19	4.82	4.85	5.96	5.2
	Potassium								23.1	5.14	4.12	4.49	5.42	4.06	4.3	3.27	8.02	4.1
	Selenium								0.0062	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Silver								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Sodium								81.5	104	73.7	96.2	57.8	76.9	61.4	88.4	8.05	88
	Spec. Cond.										836.7	1142	757	976.6	668	835.9	159.4	783.6
	Sulfate								14.7	14.3	15.5	13.9	15.7	15	17.3	18.2	8.23	18.8
	TDS								1520	1184	1020	1012	720	600	646	624	134	620
	Thallium								ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Turbidity								3920	57.4	NT	NT	NS	84.3	160	50.1	358.3	94.3	
Vanadium								0.085	ND	ND	ND	0.0246	ND	0.00879	ND	0.0893	ND	
Zinc								0.269	0.0352	0.0306	0.039	0.0754	0.0238	0.0443	0.0241	0.132	0.041	

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Table 4
Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015
Monitoring Location MW13A	Alkalinity								50	224	34	227	32	34	32	34	36	32
	Ammonia								ND	ND								
	Antimony								ND	ND								
	Arsenic								ND	ND								
	Barium								0.332	0.199	0.273	0.687	0.249	0.213	0.397	0.44	0.476	0.18
	Beryllium								ND	ND								
	Cadmium								ND	ND								
	Calcium								26.5	23.8	24.5	29.1	26.3	25	26.9	29	26.8	23
	Chloride								84.3	83.5	85.1	86.1	90.7	88.2	87.9	86.8	85.8	90.8
	Chromium								0.024	ND	ND	0.0853	0.0224	0.00838	0.0409	0.0436	0.0342	0.005
	Cobalt								0.029	0.0079	0.0114	0.0683	0.017	0.0109	0.0351	0.0378	0.0335	0.0085
	COD								34.6	ND	ND	10.1	ND	17.2	ND	10.9	18.6	ND
	Copper								0.071	0.0121	0.0137	0.197	0.0421	0.0271	0.09	0.095	0.0753	0.005
	Hardness								160	128	125	164	148	132	136	270	148	220
	Iron								28.3	3.32	2.96	108	17.3	10.3	45.7	45.9	44	2
	Lead								0.0112	ND	0.00686	0.0327	0.0069	ND	0.0146	0.0172	0.0215	ND
	Magnesium								23.5	20.7	19.7	47	19.7	18.2	30.5	31.9	28.6	17
	Manganese								0.876	0.302	0.376	1.88	0.54	0.333	1.03	0.954	1.3	0.27
	Mercury								0.00032	0.00026	0.00062	0.00257	0.00039	0.00033	0.00075	0.00142	0.00198	ND
	Nickel								0.0345	0.01	0.00966	0.0773	0.0249	0.0135	0.0427	0.0462	0.0359	ND
	Nitrate								2.48	2.29	2.17	1.97	2.08	1.88	1.67	1.52	1.2861	1.55
	pH										4.79	4.93	4.91	5.32	5.12	5.31	5.34	5.12
	Potassium								8.65	3.03	2.72	22.6	6.15	4.75	11.3	12.2	11.6	2.3
	Selenium								ND	ND								
	Silver								ND	ND								
	Sodium								17.6	16.1	15.5	15.1	14.9	16.5	12.5	14.3	13.3	13
	Spec. Cond.										303	362.1	362.5	406.3	290.5	214.5	83.3	319.4
	Sulfate								ND	ND								
TDS								380	324	456	392	336	174	348	312	288	228	
Thallium								ND	ND									
Turbidity								1048	56.8	NT	NT	NS	1082	1220	934	1349	42.7	
Vanadium								0.0626	0.0099	0.00944	0.238	0.0461	0.0197	0.113	0.0979	0.0903	0.005	
Zinc								0.0902	0.0194	0.0224	0.231	0.0585	0.033	0.126	0.134	0.108	0.017	

NT: Not Tested

NS: Not Sampled

ND: Not Detected

Note: MCL exceedances are indicated in Red

Table 4
Metals and Other Water Quality Parameters - Long Term Summary

Sample Site	Parameter	Spring 2007	Fall 2007	Spring 2008	Fall 2008	Spring 2009	Fall 2009	Spring 2010	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015
Monitoring Location MW13B	Alkalinity								230	720	226	742	226	224	221	218	221	212
	Ammonia								ND	ND								
	Antimony								ND	ND								
	Arsenic								ND	ND								
	Barium								0.0676	0.073	0.0706	0.0746	0.0676	0.0748	0.0754	0.0794	0.0814	0.07
	Beryllium								ND	ND								
	Cadmium								ND	ND								
	Calcium								82.7	80.5	83.4	91.2	81.4	83	86.2	90	85.2	86
	Chloride								84.6	84.7	85.5	89.5	86.4	91	89.4	92.4	97.1	99.8
	Chromium								ND	ND								
	Cobalt								ND	ND								
	COD								6.2	9.6	3.4	12.1	ND	ND	ND	ND	ND	ND
	Copper								0.0063	ND	ND	ND	ND	0.01	ND	ND	ND	0.0012
	Hardness								360	313	67	334	316	328	340	342	368	
	Iron								0.571	ND	ND	0.498	0.447	0.537	0.411	0.458	0.498	ND
	Lead								ND	ND								
	Magnesium								27.6	31.4	31.2	32.2	26.9	28.1	30.4	30.2	28.7	29
	Manganese								0.0306	0.0323	0.0324	0.0382	0.0403	0.0331	0.0371	0.0342	0.0361	0.026
	Mercury								0.0002	ND	ND	ND	0.00029	0.0002	0.00027	0.00022	0.00024	0.00021
	Nickel								ND	ND	ND	0.00581	0.00683	ND	0.00565	0.00514	ND	ND
	Nitrate								1.467	1.62	1.6	1.88	2.08	2.27	2.44	2.7	2.91	3.31
	pH										5.85	5.88	5.64	6.2	6.07	6.15	6.28	6.7
	Potassium								3.3	4.07	3.53	3.5	3.67	4.71	3.35	3.66	3.45	3.4
	Selenium								ND	ND								
	Silver								ND	ND								
	Sodium								19.9	18.2	17.9	18.9	15.9	19.9	16.4	17.7	17.7	17
	Spec. Cond.										586.8	713.4	706.1	781	673.7	676.3	716.8	615.2
	Sulfate								6.18	ND	6.71	7.55	7.58	7.33	8.33	9.35	10.5	11.4
	TDS								540	572	640	560	480	474	502	458	454	472
	Thallium								ND	ND								
Turbidity								0.232	0.364	NT	NT	NS	0	0	0.69	0	0.7	
Vanadium								ND	ND									
Zinc								ND	ND	ND	0.00501	0.00618	ND	0.00659	0.00636	0.00537	ND	

NT: Not Tested

NS: Not Sampled

ND: Not Detected

Note: MCL exceedances are indicated in Red

TABLE A - Filtered and Unfiltered Sampling Results for Metals

		Monitoring Well											
		OB01	OB02	OB02A	OB03	OB03A	OB04	OB04A	OB06	OB07	OB07A	OB08	
Parameter	FILTERED	Antimony	ND	ND	ND	ND	ND						
		Arsenic	ND	ND	ND	0.0031	0.0024	0.0061	0.0078	0.0049	0.0025	0.0029	ND
		Barium	0.26	0.059	0.31	0.51	0.25	0.28	0.059	0.17	0.035	0.039	0.14
		Beryllium	ND	ND	ND	ND	ND						
		Cadmium	ND	ND	ND	ND	ND						
		Calcium	100	18	85	71	77	180	130	150	130	86	64
		Chromium	ND	ND	ND	ND	ND	ND	0.11	ND	ND	ND	ND
		Cobalt	0.012	ND	ND	0.058	0.035	ND	ND	ND	ND	ND	ND
		Copper	0.0037	0.0021	0.0029	ND	0.001	0.034	0.03	0.0038	0.0025	0.0014	ND
		Iron	ND	0.28	ND	21	12	ND	0.32	ND	ND	ND	ND
		Lead	ND	ND	ND	ND	ND						
		Magnesium	61	8.7	45	40	45	88	89	57	36	51	14
		Manganese	5.3	0.39	0.025	20	6.6	2.5	1.6	0.47	0.11	0.031	5.2
	Mercury	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00065	ND	
	Nickel	0.035	ND	0.012	0.02	0.017	0.018	0.12	0.014	ND	0.0057	0.0074	
	Potassium	5.3	2.1	3.7	7.2	15	7.3	5.3	4.3	3.5	2.3	2.8	
	Selenium	ND	ND	ND	ND	ND	0.022	0.026	0.015	0.01	0.011	ND	
	Silver	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	Sodium	120	7.3	28	48	96	64	95	100	21	24	25	
	Thallium	ND	ND	ND	0.0011	0.0013	ND	ND	ND	ND	ND	ND	
	Vanadium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	Zinc	0.017	0.021	0.0079	0.013	0.006	0.0059	0.024	0.016	ND	ND	0.0052	
	UNFILTERED	Antimony	ND	ND	ND	ND	ND						
		Arsenic	ND	ND	ND	0.0031	0.0035	0.0079	0.0082	0.0047	0.0021	0.0028	ND
		Barium	0.24	0.12	0.3	0.52	0.25	0.28	0.059	0.17	0.038	0.043	0.13
		Beryllium	ND	ND	ND	ND	ND						
Cadmium		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Calcium		95	35	80	70	78	180	130	140	130	87	64	
Chromium		ND	0.0072	0.0033	ND	ND	ND	0.15	ND	ND	0.0033	ND	
Cobalt		0.013	ND	ND	0.056	0.034	ND	ND	ND	ND	ND	ND	
Copper		0.0042	0.0044	0.0035	0.0019	0.0013	0.036	0.03	0.0051	0.0052	0.002	ND	
Iron		ND	1.4	0.62	21	13	ND	0.5	0.64	0.78	ND	0.031	
Lead		ND	ND	ND	ND	ND	ND	ND	ND	0.0013	ND	ND	
Magnesium		61	17	42	40	46	89	89	55	36	50	14	
Manganese		5.3	0.84	0.031	19	6.6	2.6	1.6	0.47	0.15	0.094	5.2	
Mercury	0.00021	ND	ND	ND	ND	ND	ND	ND	0.00029	0.001	ND		
Nickel	0.04	ND	ND	ND	ND	ND	ND	0.014	0.0054	0.009	0.0075		
Potassium	5.1	4.1	3.5	7	15	7.4	5.3	4.4	3.7	2.4	2.8		
Selenium	ND	ND	ND	ND	ND	0.027	0.028	0.014	0.0085	0.011	ND		
Silver	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Sodium	120	13	26	47	96	65	94	100	21	24	25		
Thallium	ND	ND	ND	0.0011	0.0019	ND	ND	ND	ND	ND	ND		
Vanadium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Zinc	0.013	ND	0.013	0.013	0.0053	0.0064	0.024	0.019	0.0087	ND	0.0059		

ND: Not Detected
NS: Not Sampled

TABLE A - Filtered and Unfiltered Sampling Results for Metals

		Monitoring Well												
		OB08A	OB10	OB102	OB105	OB11	OB11A	OB12	OB15	OB25	MW1B	MW2A		
Parameter	FILTERED	Antimony	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Arsenic	0.0032	ND	0.0082	0.0063	ND	0.0021	ND	ND	ND	ND	ND	ND
		Barium	0.059	0.049	0.36	0.36	0.022	0.18	0.015	0.053	0.069	ND	0.011	
		Beryllium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Cadmium	ND	ND	0.00069	ND	0.012	0.0022	ND	ND	ND	ND	ND	ND
		Calcium	53	60	120	150	130	99	40	9.3	79	5.9	5	
		Chromium	ND	ND	ND	ND	0.0043	0.016	ND	ND	ND	ND	ND	ND
		Cobalt	0.016	ND	0.072	0.014	ND	0.024	ND	ND	0.0078	ND	ND	
		Copper	ND	ND	0.032	0.0027	0.0029	0.0025	ND	ND	0.0026	ND	ND	
		Iron	3.8	0.38	ND	15	ND	0.5	ND	ND	ND	ND	ND	ND
		Lead	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Magnesium	21	33	97	150	73	73	26	14	57	3.7	2.9	
		Manganese	7.2	3.8	19	3.2	0.83	7.6	0.11	0.027	14	ND	0.18	
	Mercury	ND	ND	ND	ND	0.001	ND	ND	ND	ND	ND	ND	ND	
	Nickel	0.0071	0.0091	0.098	0.025	0.041	0.04	0.0088	0.0061	0.019	ND	ND		
	Potassium	2.9	3.5	51	88	5.5	6	3.9	1.7	14	0.9	1.6		
	Selenium	ND	ND	0.022	0.017	0.0056	ND	ND	ND	ND	ND	ND	ND	
	Silver	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	Sodium	33	21	490	330	85	96	28	20	68	7.1	4.7		
	Thallium	ND	ND	ND	ND	ND	ND	ND	ND	0.0011	ND	ND		
	Vanadium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	Zinc	ND	ND	0.0094	0.016	0.043	0.021	ND	0.036	0.005	ND	0.006		
	UNFILTERED	Antimony	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
		Arsenic	0.0029	ND	0.0083	0.007	0.002	0.0022	ND	ND	ND	ND	ND	
		Barium	0.047	0.047	0.35	0.39	0.023	0.18	0.014	0.051	0.071	ND	0.012	
		Beryllium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Cadmium		ND	ND	0.00071	ND	0.012	0.0026	ND	ND	ND	ND	ND		
Calcium		49	62	120	140	130	100	39	9.5	81	6	4.6		
Chromium		0.0047	ND	ND	0.0087	0.0051	0.021	ND	ND	0.0082	ND	ND		
Cobalt		0.017	0.0053	0.074	0.019	ND	0.025	ND	ND	0.009	ND	ND		
Copper		0.0017	ND	0.041	0.021	0.0036	0.0048	ND	0.0018	0.0042	0.0025	ND		
Iron		4.4	0.4	0.35	27	ND	0.91	ND	1.9	0.79	0.85	0.059		
Lead		ND	ND	ND	0.0037	ND	ND	ND	ND	ND	ND	ND		
Magnesium		21	34	96	150	76	76	25	15	59	4.1	2.8		
Manganese		6.8	3.7	19	3.1	0.86	7.8	0.1	0.028	14	0.022	0.17		
Mercury	ND	ND	ND	0.00032	0.0028	0.00028	ND	ND	ND	ND	ND	ND		
Nickel	0.011	0.011	0.1	0.0037	0.04	0.04	0.0088	0.0061	0.022	ND	ND			
Potassium	2.8	3.4	51	89	5.3	5.9	3.1	1.7	14	1	1.4			
Selenium	ND	ND	0.021	0.013	0.0054	ND	ND	ND	ND	ND	ND	ND		
Silver	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Sodium	32	21	490	320	77	95	27	20	66	7.2	4.2			
Thallium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Vanadium	ND	ND	ND	0.016	ND	ND	ND	ND	ND	ND	ND	ND		
Zinc	0.0084	ND	0.011	0.076	0.044	0.022	ND	0.034	0.0085	0.0068	ND			

ND: Not Detected
NS: Not Sampled

TABLE A - Filtered and Unfiltered Sampling Results for Metals

		Monitoring Well											
		MW2B	MW3A	MW3B	MW04	MW06	MW07	MW08	MW09	MW10	MW11A	MW11B	
Parameter	FILTERED	Antimony	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Arsenic	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Barium	0.012	ND	0.01	0.031	0.31	0.057	0.089	0.046	0.052	0.016	0.016
		Beryllium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Cadmium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Calcium	5.8	2.8	26	40	85	41	88	2.3	14	5.9	17
		Chromium	ND	ND	ND	ND	0.25	ND	0.0053	ND	ND	ND	ND
		Cobalt	ND	ND	ND	ND	0.59	ND	ND	ND	ND	ND	ND
		Copper	ND	0.011	ND	ND	0.0089	0.0068	0.0024	ND	0.001	ND	ND
		Iron	0.031	0.067	ND	ND	6.5	ND	ND	ND	ND	ND	ND
		Lead	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Magnesium	3.2	1.3	3.6	24	60	23	48	2.6	6.5	2.2	8.5
		Manganese	0.052	ND	ND	0.055	50	0.93	ND	0.027	0.013	0.0071	ND
		Mercury	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Nickel	ND	ND	ND	ND	0.49	ND	0.0082	ND	ND	ND	ND
		Potassium	1.5	0.89	1.3	2.9	3.7	2.9	11	1.1	1	0.47	0.87
		Selenium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Silver	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	Sodium	5.1	3.3	10	31	97	29	72	56	8.7	3.1	9.9	
	Thallium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	Vanadium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	Zinc	ND	0.0081	ND	ND	0.044	ND	ND	0.0071	0.028	ND	ND	
	UNFILTERED	Antimony	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Arsenic	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
		Barium	0.012	ND	ND	0.034	0.31	0.058	0.089	0.069	0.064	0.032	0.021
		Beryllium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Calcium		5.7	3.1	26	40	83	40	88	4.6	15	7.7	16	
Chromium		ND	ND	ND	ND	0.57	ND	0.014	0.0044	0.0036	0.0095	ND	
Cobalt		ND	ND	ND	ND	0.59	ND	ND	ND	ND	ND	ND	
Copper		ND	0.0028	ND	ND	0.017	0.0068	0.0029	0.0043	0.0051	0.0051	0.0021	
Iron		0.017	2.2	0.24	0.7	8.3	ND	ND	3	2	4.7	1.8	
Lead		ND	ND	ND	ND	ND	ND	ND	0.0018	ND	0.0015	ND	
Magnesium		3	1.8	3.6	25	60	23	48	4.5	7.1	3.6	8.8	
Manganese		0.052	0.059	0.011	0.091	48	0.95	ND	0.088	0.036	0.057	0.031	
Mercury		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Nickel		ND	ND	ND	ND	0.57	ND	ND	0.0052	0.0062	0.0099	ND	
Potassium		1.4	1.3	1.5	3	3.5	2.8	11	1.8	1.3	1.1	1.1	
Selenium		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Silver		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Sodium	4.8	3.3	12	30	76	28	71	50	8.8	3.7	9.6		
Thallium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
Vanadium	ND	ND	ND	ND	ND	ND	ND	ND	0.0055	0.0091	0.007		
Zinc	ND	0.0078	ND	0.0056	0.048	ND	ND	0.022	0.035	0.011	0.0053		

ND: Not Detected
NS: Not Sampled

TABLE A - Filtered and Unfiltered Sampling Results for Metals

		Monitoring Well						
		MW12	MW13A	MW13B	Minimum	Maximum	Average	
Parameter	FILTERED	Antimony	ND	ND	ND	0	0	0
		Arsenic	ND	ND	ND	0.00504	0.00519	0.005115
		Barium	0.43	0.16	0.07	0.00628	0.548	0.1457158
		Beryllium	ND	ND	ND	0	0	0
		Cadmium	ND	ND	ND	0.0109	0.0109	0.0109
		Calcium	48	23	87	3.82	160	63.742769
		Chromium	ND	ND	ND	0	0	0
		Cobalt	ND	0.0071	ND	0.00582	0.513	0.0549687
		Copper	0.0037	ND	ND	0.00542	0.0457	0.0135731
		Iron	ND	0.063	ND	0.218	22.8	2.9330423
		Lead	ND	ND	ND	0	0	0
		Magnesium	24	17	29	1.55	119	36.04145
		Manganese	0.036	0.25	0.025	0.00781	52.7	5.2226455
		Mercury	ND	ND	ND	0.000339	0.000807	0.0005347
		Nickel	0.0069	0.0086	ND	0.00572	0.0902	0.0203255
		Potassium	3.3	2	3.4	0.65	43.6	5.3211139
		Selenium	ND	ND	ND	0.00619	0.0229	0.012987
		Silver	ND	ND	ND	3.28	3.28	0
		Sodium	91	13	17	4.2	529	59.993686
		Thallium	ND	ND	ND	0.0212	0.0212	0
		Vanadium	ND	ND	ND	0.0639	0.0639	0
Zinc	0.023	0.016	ND	0.00514	0.0702	0.017283		
UNFILTERED	Antimony	ND	ND	ND	0	0	0	
	Arsenic	ND	ND	ND	0.002	0.0083	0.0045583	
	Barium	0.44	0.18	0.07	0.012	0.52	0.1428485	
	Beryllium	ND	ND	ND	0	0	0	
	Cadmium	ND	ND	ND	0.00071	0.012	0.0051033	
	Calcium	47	23	86	3.1	180	64.311111	
	Chromium	0.01	0.005	ND	0.0033	0.57	0.05175	
	Cobalt	ND	0.0085	ND	0.0053	0.59	0.0773455	
	Copper	0.011	0.005	0.0012	0.0012	0.041	0.0081897	
	Iron	3.8	2	ND	0.017	27	3.6923929	
	Lead	0.0022	ND	ND	0.0013	0.0037	0.0021	
	Magnesium	24	17	29	1.8	150	37.675	
	Manganese	0.11	0.27	0.026	0.011	48	4.2070286	
	Mercury	ND	ND	0.00021	0.00021	0.0028	0.00073	
	Nickel	0.014	ND	ND	0.0037	0.57	0.0486211	
	Potassium	4.1	2.3	3.4	1	89	7.7472222	
	Selenium	ND	ND	ND	0.0054	0.028	0.0159875	
	Silver	ND	ND	ND	0	0	0	
	Sodium	88	13	17	3.3	490	61.266667	
	Thallium	ND	ND	ND	0.0011	0.0019	0	
	Vanadium	ND	0.005	ND	0.005	0.016	0.00852	
Zinc	0.041	0.017	ND	0.0053	0.076	0.0196808		

ND: Not Detected
 NS: Not Sampled

TABLE B - Low Flow VS Three Well Volumes Sampling Methodology

Turbidity Levels At The Gude Landfill

Sampling Date and Methodology

Monitoring Well	Fall 2014 Three Well Volume		Spring 2015 Low Flow		Fall 2015 Low Flow	
	Turbidity (NTU)	MCL Exceedance	Turbidity (NTU)	MCL Exceedance	Turbidity (NTU)	MCL Exceedance
OB01	3.1	0	0	0	1.21	0
OB02	10.5	0	23.9	0	14.9	0
OB02A	1.4	0	5.4	0	2.61	0
OB03	0	0	0	0	9.8	0
OB03A	6.2	0	10	0	62.7	0
OB04	0	0	0.6	0	0	0
OB04A	7.2	0	0	1	0.81	0
OB06	58.9	0	35.5	0	36.4	0
OB07	0.3	0	24.1	0	5	0
OB07A	0	0	0	0	0	0
OB08	2.1	0	0	0	0.1	0
OB08A	0.9	0	1.5	0	0	0
OB10	0.3	0	0	0	0	0
OB102	19.9	0	15.4	0	8.5	1
OB105	1070	2	258.3	0	39.8	0
OB11	0.3	1	0	2	1.91	1
OB11A	0	0	0	0	0	0
OB12	0.9	0	0	0	0.23	0
OB15	48.1	0	22.1	0	31.6	0
OB25	37.6	6	14.4	0	14	0
MW1B	37.5	0	1.2	0	2.9	0
MW2A	NT	1	2.7	0	65.5	1
MW2B	0.7	0	0.4	0	0.69	0
MW3A	1.8	0	38	0	11.1	0
MW3B	30.1	0	4.4	0	3.44	0
MW04	87	0	13.3	0	0	0
MW06	129.6	0	11.2	1	6.4	1
MW07	10.1	0	0	0	0	0
MW08	11.6	0	7.5	0	2.87	0
MW09	500	3	154.3	0	18.8	0
MW10	401	1	115.5	0	37.8	0
MW11A	630	0	46	0	86.3	0
MW11B	7.4	0	34.2	0	36.9	0
MW12	358.3	0	94.3	0	6.9	0
MW13A	1349	1	42.7	0	73.2	1
MW13B	0	0	0.7	0	0.47	0

Note: Results are for Unfiltered samples only.

Appendix E

Table of Groundwater Elevations and Groundwater Elevation Contour Map

Results in (ft. AMSL)

TABLE 5 - Water Table Elevations Gude Landfill

Monitoring Well	Well Elevation (ft)	Spring 2014 Water Elevation (ft)	Fall 2014 Water Elevation (ft)	Spring 2015 Water Elevation (ft)	Fall 2015 Water Elevation (ft)	Elevation Change From Spring 2015	FALL 2015 Measured Water Elevation From Ground Level (ft)
OB01	415.90	402.14	400.82	402.59	399.40	-3.2	16.5
OB02	418.48	403.70	401.91	404.14	400.31	-3.8	18.17
OB02A	418.61	403.93	401.95	404.52	400.22	-4.3	18.39
OB03	409.86	388.63	386.24	389.42	384.25	-5.2	25.61
OB03A	410.06	388.68	386.23	388.46	384.24	-4.2	25.82
OB04	364.21	359.70	359.37	359.95	358.57	-1.4	5.64
OB04A	365.37	360.72	359.94	360.63	359.19	-1.4	6.18
OB06	339.78	331.55	330.94	332.99	328.63	-4.4	11.15
OB07	329.49	323.25	322.70	324.22	319.60	-4.6	9.89
OB7A	328.44	322.65	321.97	323.50	319.00	-4.5	9.44
OB08	325.11	318.41	319.06	319.23	318.00	-1.2	7.11
OB08A	325.31	318.06	318.73	318.91	317.65	-1.3	7.66
OB10	325.77	319.06	318.68	319.18	318.27	-0.9	7.5
OB102	363.17	351.92	352.51	352.86	350.96	-1.9	12.21
OB105	363.45	361.18	360.32	361.13	359.66	-1.5	3.79
OB11	362.56	354.37	353.58	354.71	352.79	-1.9	9.77
OB11A	361.90	353.71	352.99	353.91	352.44	-1.5	9.46
OB12	405.01	389.20	386.75	389.49	385.26	-4.2	19.75
OB015	410.01	391.26	387.69	391.47	386.07	-5.4	23.94
OB025	361.89	355.47	352.94	354.67	352.10	-2.6	9.79
MW1B	434.00	383.62	391.76	387.14	387.58	0.4	46.42
MW2A	445.53	372.39	388.79	378.42	381.99	3.6	63.54
MW2B	444.45	372.77	388.74	378.42	382.01	3.6	62.44
MW3A	324.54	315.57	317.61	316.13	314.89	-1.2	9.65
MW3B	324.73	317.51	316.15	318.24	315.28	-3.0	9.45
MW04	324.75	318.58	318.17	318.59	317.93	-0.7	6.82
MW06	417.29	402.88	401.58	403.40	400.31	-3.1	16.98
MW07	433.81	390.50	389.88	391.09	387.91	-3.2	45.9
MW08	412.66	393.18	389.40	394.17	387.40	-6.8	25.26
MW09	417.69	400.36	399.12	400.95	397.09	-3.9	20.6
MW10	394.03	388.17	379.96	390.48	383.56	-6.9	10.47
MW11A	393.45	380.31	376.37	381.79	374.79	-7.0	18.66
MW11B	393.40	378.10	376.06	378.93	374.22	-4.7	19.18
MW12	397.55	384.11	390.12	384.58	380.85	-3.7	16.7
MW13A	373.37	367.75	364.93	368.00	365.60	-2.4	7.77
MW13B	373.35	368.49	367.77	368.72	366.49	-2.2	6.86
AVERAGE						-2.8	

NOTES:

- Elevations are from Sea Level

Appendix F
Statistical Analysis

Topic: Statistical Analysis Summary: Fall 2015 Semi-Annual Water Sampling
Gude Landfill, Montgomery County

Date: 30 November 2015

INTRODUCTION

EA Engineering, Science, and Technology, Inc., PBC (EA) performed statistical analysis for Gude Landfill as a supplement to the Fall 2015 Semi-Annual Groundwater Monitoring Report. The purpose of this Technical Memorandum is to present the statistical trends in concentrations observed following the August 2015 sampling event. Statistical analysis was performed for all wells within the Gude Landfill groundwater monitoring network using data collected from 2001 through August 2015, when available. Groundwater monitoring wells OB01, OB02, OB02A, OB03, OB03A, OB04, OB04A, OB06, OB07, OB07A, OB08, OB08A, OB10, OB11, OB11A, OB12, OB015, OB025, OB102, and OB105 were installed between 1984 and 1988. The statistical trend analysis for these wells used monitoring data since 2001. Groundwater monitoring wells MW-1B, MW-2A, MW-2B, MW-3A, MW-3B, MW-4, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11A, MW-11B, MW-12, MW-13A, and MW-13B were installed in 2010 and first sampled in July 2010. All available data were used in the statistical analysis for these wells.

Groundwater monitoring wells MW-14A, MW-14B, and MW-15 were installed in 2011 and only sampled once, in September 2011. Statistical analysis was not performed on these wells due to insufficient data for the analysis.

Low-flow groundwater sampling methods were employed beginning with the Spring 2015 event and will continue to be utilized by Montgomery County (the County) during future monitoring events. Previously, three (3) volume well purge methods, which use higher flow rates, had been used. Higher flow rates can be associated with higher turbidity and can impact concentrations of constituents in groundwater samples. As a result, this change in methodologies may require further evaluation and potential modification of the statistical methods used as part of the semi-annual groundwater evaluation.

Intrawell statistical analysis was performed. Interwell statistical analysis was not performed due to insufficient data from an offsite/background well. If interwell analysis is required in the future, background data will need to be collected from an offsite/background well, such as MW-14A/B.

The methodologies and results of the statistical analysis are provided below.

STATISTICAL ANALYSIS METHODOLOGY

Gude Landfill ceased accepting waste in 1982 and is therefore only governed by the state of Maryland under the Code of Maryland Regulations (COMAR) and as directed by the Maryland Department of the Environment. Since 1982, the County has voluntarily, or through regulatory mandates, implemented and maintained Best Management

Practices (BMPs) for pre-regulatory era landfills to ensure compliance with COMAR requirements, including routine monitoring of groundwater and surface water. Part of routine water monitoring includes statistical analysis of groundwater data.

Interwell statistical analysis, if performed, would measure the statistical difference between constituent concentrations in off-site/background monitoring well(s) and down-gradient monitoring wells, whereas intrawell statistical analysis measures the statistical change in constituent concentrations in each individual well over time. Due to the lack of data for an off-site/background well, the intrawell Mann-Kendall test for trend, which is consistent with the United States Environmental Protection Agency (EPA) Unified Guidance (EPA 2009), was used to evaluate potential trends in the data.

The Mann-Kendall test for monotonic trend (Gilbert 1987) was used to identify constituents with concentrations that display an increasing or decreasing trend over time, at the ninety-five (95) percent significance level. The basic principle of the Mann-Kendall test is to examine the sign of all pairwise differences of observed values. The test does not have any distributional assumptions, i.e., it does not require the data to be normally distributed or follow any other distribution, and the test also can handle non-detects and irregular sampling intervals. The data are ordered by sampling date for each well/parameter pair and each concentration is compared to previous/historical concentrations. The test statistics are calculated based on the number of increases and decreases from one sampling event to another. The significance probability of an increasing or decreasing trend is then calculated from the test statistic and the number of sampling events for each well/parameter pair. Concentrations reported below the detection were treated as zero (0). Exact two-sided probabilities for the null distribution of the Mann-Kendall test were obtained from Hollander and Wolfe (1973). The null hypothesis of no trend was evaluated against the two-sided alternative hypothesis. Rejection of the null hypothesis at the ninety-five (95) percent significance level (i.e., two-sided $p < 0.05$) led to the conclusion that the monitoring data contain a statistically significant trend. Statistically significant trends were characterized as increasing ($S > 0$) or decreasing ($S < 0$).

The statistical test does not evaluate the magnitude of the increase or decrease associated with the results of the analysis.

A trend analysis was performed for each chemical constituent at every monitoring well if:

1. The monitoring well had been sampled on at least 4 independent time periods.
2. At least four (4) sample results were above the analytical detection limit.

Statistical analysis was not performed for groundwater monitoring wells MW-14A, MW-14B, and MW-15 since they have only been sampled once.

GROUNDWATER TREND RESULTS

Trend analysis results for volatile organic compounds (VOCs), metals, and general indicator parameters in groundwater are discussed in this section. Table 1 identifies parameters with statistically increasing trends, and Table 2 identifies parameters with statistically decreasing trends.

Volatile Organic Compounds

Ten (10) VOCs were identified as having increasing statistical trends, and sixteen (16) of the monitoring wells had one (1) or more VOCs with increasing statistical trends (Table 1). Twelve (12) VOCs were identified as having decreasing trends, and thirteen (13) of the monitoring wells had one (1) or more VOCs with decreasing statistical trends (Table 2). Seven (7) VOCs (benzene; chlorobenzene; 1,1-dichloroethane; cis-1,2-dichloroethene; 1,2-dichloropropane; tetrachloroethene; vinyl chloride) had both decreasing and increasing trends. Three (3) VOCs had only increasing trends: 1,2-dichlorobenzene (OB03, OB11); 1,4-dichlorobenzene (OB03, OB03A, OB04, OB04A, OB08, OB08A, OB10, OB11, OB11A, OB12, OB105); and trans-1,2-dichloroethene (OB12). Five (5) VOCs had only decreasing trends: chloroethane (OB03, OB03A, OB12), dichlorodifluoromethane (MW-13A, MW-13B, OB03, OB03A, OB10, OB11A), methylene chloride (MW-13A, OB11A), trichloroethene (OB01, OBO2A, OB08A, OB11A), and trichlorofluoromethane (OB11A).

Metals

Twenty-four (24) metals (total and dissolved) were identified as having increasing statistical trends, and nineteen (19) of the monitoring wells had one (1) or more metals with increasing statistical trends (Table 1). Twenty-seven (27) metals (total and dissolved) were identified as having decreasing statistical trends, and twenty-eight (28) of the monitoring wells had one (1) or more metals with decreasing statistical trends (Table 2). The trend analysis does not indicate an overall trend of improvement or degradation in the groundwater quality with respect to metals concentrations. Beginning with the Spring 2015 sampling event, low-flow groundwater sampling methods were employed due to issues with high metal concentrations potentially related to high turbidity. Future data will be assessed to determine whether the reported concentrations of metals in samples collected using low-flow sampling methods are consistently lower than the concentrations reported using the old methodology. If such a difference is observed, the changed sampling methodology could result in artificial decreasing trends in total metals, which do not reflect changes in groundwater chemistry. If needed, the statistical methods used as part of the semi-annual groundwater evaluation could be modified to address such artificial trends. In order to conduct meaningful comparisons, it is recommended that a minimum of 4 years of low-flow sampling (8 events) be collected before conducting hypothesis testing to compare the low-flow methodology to those obtained using three (3) well volume purge methods.

General Indicator Parameters

Twenty-three (23) monitoring well locations were determined to have statistically increasing trends for one (1) or more general indicator parameters (Table 1), and twenty-three (23) monitoring well locations were determined to

have statistically decreasing trends for general indicator parameters (Table 2). Wells that did not exhibit statistically increasing general indicator parameters include MW-1B, MW-2B, MW-3A, MW-3B, MW-7, MW-8, MW-10, MW-11A, OB02, OB03A, OB08, OB015, OB025, and OB105.

REFERENCES

Gilbert, R.O. 1987. *Statistical methods for environmental pollution monitoring*. Van Nostrand Reinhold, New York.

Hollander, M. and D. A. Wolfe. 1973. *Nonparametric Statistical Methods*. Wiley, New York.

United States Environmental Protection Agency (EPA). 2009. *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities Unified Guidance*. EPA/530/R-09-007. March.

Attachments:

Tables

Tables

Table 1
Chemical Constituents with Statistically Significant Increasing Trends
(2001 through August 2015)

GROUNDWATER MONITORING WELL LOCATIONS																											
Parameter	MW-2A	MW-4	MW-6	MW-9	MW-10	MW-11B	MW-12	MW-13A	MW-13B	OB01	OB02A	OB03	OB03A	OB04	OB04A	OB06	OB07	OB07A	OB08	OB08A	OB10	OB11	OB11A	OB12	OB025	OB102	OB105
1,1 Dichloroethane																											
1,2-Dichlorobenzene												X										X					
1,2-Dichloropropane																						X		X			
1,4-Dichlorobenzene												X	X	X	X					X	X	X	X	X	X		X
Benzene														X	X					X	X	X		X			
Chlorobenzene														X	X	X			X	X	X			X		X	
cis-1,2-Dichloroethene																	X		X					X	X		X
Tetrachloroethene						X																					
trans-1,2-Dichloroethene																								X			
Vinyl Chloride																				X		X					
Arsenic, total															X												X
Barium, dissolved			X														X										
Barium, total										X	X			X	X					X		X				X	X
Cadmium, dissolved																							X				
Cadmium, total																							X				
Calcium, dissolved			X			X				X							X					X		X			
Calcium, total			X							X				X	X		X					X			X		
Cobalt, dissolved								X																			
Cobalt, total			X							X										X	X	X					X
Copper, total														X													
Magnesium, dissolved			X			X				X												X	X	X			
Magnesium, total										X							X					X					
Manganese, dissolved								X						X	X									X	X		
Manganese, total										X	X	X		X	X	X	X					X	X	X			X
Mercury, total																	X						X				X
Nickel, dissolved			X																								
Nickel, total			X							X	X				X								X	X			X
Potassium, dissolved										X																	X
Potassium, total										X				X			X					X	X				X
Selenium, total														X	X	X	X	X					X				X
Sodium, dissolved			X							X					X								X				X
Sodium, total			X							X					X							X	X				
Vandium, total																											X
Zinc, total																					X						
Alkalinity														X		X	X					X		X			
Ammonia Nitrogen														X													X
Chemical Oxygen Demand														X													
Chloride		X	X	X		X		X	X	X	X	X		X	X	X	X	X				X	X	X			
Hardness	X									X	X			X	X	X	X	X				X	X		X		
Nitrate		X				X		X	X	X							X	X									
Nitrate+Nitrite		X				X		X	X	X							X	X									
Phosphate																	X	X		X							
Specific Conductivity, Field										X				X													
Sulfate, total		X	X		X		X		X							X	X	X					X				
Temperature, Field																X											

1. Monitoring wells MW-1B, MW-2B, MW-3A, MW-3B, MW-7, MW-8, MW-11A, OB02, and OB15 had no parameters with increasing trends

2. Existing monitoring wells MW-1B, MW-2A, MW- 2B, MW-3A, MW-3B, MW-4, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11A, MW-11B, MW-12, MW-13A and MW-13B were first sampled in 2010.

Table 2
Chemical Constituents with Statistically Significant Decreasing Trends
(2001 through August 2015)

GROUNDWATER MONITORING WELL LOCATIONS																																				
Parameter	MW-1B	MW-2A	MW-2B	MW-3A	MW-3B	MW-4	MW-6	MW-7	MW-8	MW-9	MW-11A	MW-12	MW-13A	MW-13B	OB01	OB02	OB02A	OB03	OB03A	OB04	OB04A	OB06	OB07A	OB08	OB08A	OB10	OB11	OB11A	OB12	OB015	OB025	OB102	OB105			
1,1-Dichloroethane															X																					
1,2-Dichloropropane															X																					
Benzene													X					X	X										X							
Chlorobenzene																		X	X									X								
Chloroethane																		X	X																	
cis-1,2-Dichloroethene															X	X	X						X													
Dichlorodifluoromethane													X	X				X	X								X		X							
Methylene Chloride													X																							
Tetrachloroethene													X	X				X	X																	
Trichloroethene															X		X									X										
Trichlorofluoromethane																										X										
Vinyl Chloride														X		X																		X		
Arsenic, total																			X	X																
Barium, dissolved				X					X			X						X	X																	
Barium, total			X	X							X	X						X	X																	
Cadmium, total																													X							
Calcium, dissolved	X		X									X																						X		
Calcium, total			X							X		X														X									X	
Cobalt, total			X	X							X									X									X					X		
Copper, dissolved																																			X	
Copper, total									X						X	X	X	X	X					X	X	X	X	X	X							
Iron, dissolved												X					X		X	X															X	
Iron, total						X			X									X	X										X							
Lead, total					X		X				X																									
Magnesium, dissolved																																			X	
Magnesium, total			X									X																							X	
Manganese, dissolved											X														X										X	
Manganese, total	X		X						X		X													X												
Mercury, total																									X											
Nickel, dissolved																																				
Nickel, total						X			X															X											X	
Potassium, dissolved					X							X																								
Potassium, total					X																														X	
Selenium, total							X																													
Sodium, dissolved				X	X				X				X												X											
Sodium, total			X	X	X				X				X												X											
Vanadium, total					X																															
Zinc, dissolved																					X															
Zinc, total	X				X			X	X		X											X					X								X	
Alkalinity				X			X			X				X	X										X										X	
Ammonia Nitrogen																																			X	
Chemical Oxygen Demand																																		X	X	
Chloride									X			X																								
Hardness										X		X																								
Nitrate														X										X									X			
Nitrate+Nitrite														X										X									X			
ORP, Field						X							X																						X	
Sulfate, total					X																														X	
Total Dissolved Solids (TDS)	X			X	X		X	X				X	X	X							X	X	X	X				X					X	X		

- Notes:
- Monitoring wells MW-10, MW-11B, and OB07 had no parameters with decreasing trends
 - Existing monitoring wells MW-1B, MW-2A, MW- 2B, MW-3A, MW-3B, MW-4, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11A, MW-11B, MW-12, MW-13A and MW-13B were first sampled in 2010.