FINAL

BYRON BARREL & DRUM SITE

QUARTERLY REPORT

FIRST QUARTER 2012

Byron Barrel & Drum Site
Area 2
Byron, New York

August 1, 2012

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1.0 INTRODUCTION

This report of remedial activities at the Byron Barrel & Drum, Area 2 Site (Site) presents data obtained through the First Quarter 2012. The purpose of this report is to summarize and document ongoing remedial and monitoring activities at the Site conducted by Sustainable Resources Group, Inc (SRG), formerly ECOR Solutions, Inc (ECOR). The report also includes an ongoing evaluation of the In-Situ Remediation Technology (ISRT) bio-injection (Injection) performed in September 2007 and again in November 2009. The evaluation is based on the analytical results of samples collected through March 2012. A brief description of the background of the Site is included, as well as, information regarding remedial and monitoring activities.

1.1 SITE BACKGROUND

The Byron Barrel and Drum Area 2 Site is located at 6065 Transit Road, in Byron Township, Genesee County, NY. The Site is set back approximately 1,000 feet from the east side of Transit Road. In 1982, two drum disposal locations were discovered at the Site. New York State Department of Environmental Conservation's (NYSDEC) subsequent investigation led to the Site's inclusion on the Superfund National Priorities List (April 1984). A Site plan is provided as **Figure 1**.

A remedial investigation and feasibility study (RI/FS) was conducted, which identified three areas of concern at the Site. Based on the findings of the RI, it was concluded that further action in two of the areas, Area 1 and Area 3, was not warranted. However, the RI detected volatile organic compounds (VOCs); including trichloroethene (TCE) and 1,1,1-trichloroethane (TCA) in groundwater samples collected from locations in Area 2.

The remedial activities discussed in this report include only activities for Area 2. The selected remedy for Area 2 was in-situ soil flushing and groundwater pumping, treatment, and discharge. The remedial action construction was performed during the summer of 2001. The implementation of the remedial design included excavation and characterization of potentially impacted soil, and installation of additional two groundwater pumping wells (PWs) to supplement the one previously installed (PW-1), a groundwater treatment system, and an infiltration gallery.

To enhance the remediation of the VOC impacted soil in Area 2, instead of discharging the treated water to a recharge basin, as was originally planned, an infiltration gallery (IG), consisting of perforated pipe and gravel, was installed after the excavation of several feet of soil (**Figure 5**). These modifications to

the remedy were documented in an August 2000 Explanation of Significant Differences (ESD). The ESD was published to explain the differences in the RD, if any, from the ROD.

1.2 CHRONOLOGY OF EVENTS

The chronology of events regarding the investigation and remediation of the Site are summarized below:

Event or Document	Date	Notes
Record of Decision (ROD)	Sept. 29, 1989	EPA/ROD/R02-89-089
Consent Decree	January 5, 1995	89-CV-748A Unisys Corp. and Garlock, Inc., settling defendants
Draft Explanation of Significant Differences	February, 1999	
Pre-Remedial Design Investigation and Remedial Design Report	December, 1999	
100 Percent Remedial Design Submittal	December, 1999	
Remedial Action Work Plan	September, 2001	
Construction Health and Safety Plan	December, 2001	
Quality Assurance Project Plan	June, 2001	
RA Construction Mobilization	June 11, 2001	
RA Construction	June 11 - July 15, 2001	
Initial UZ Soil Sampling Event	June 27,2001	
EPA RA Pre-Final Inspection	July 19, 2001	
GWTS Performance Testing	July 29, 2001	
GWTS Startup Testing	August, 2001	Extended Startup & Testing
GWTS Continuous O & M	October 1, 2001	Continuous Operation
EPA Interim Inspection	July 17, 2002	
Second UZ Soil Sampling Event	August 14, 2002	
RA Report	September, 2002	Final RA for Site Soils Interim RA for Site GW
EPA RA Approval	September, 2002	
Effluent Sampling reduced to Quarterly	September, 2002	
Discontinuation of SVOC Sampling	May 23, 2003	
EPA Site Inspection	May 2, 2007	5 year review
GWTS Shutdown for In-situ Bioremediation	September 12, 2007	
In-Situ Bioremediation Injection Event	September 18-20, 2007	
Preliminary Injection monitoring samples collected in addition to GW VOC samples	December 19-21, 2007	

Injection monitoring samples collected in addition to groundwater VOC samples	March 26, 2008	
Injection monitoring samples collected in addition to groundwater VOC samples	June 18, 2008	
Injection monitoring samples collected in addition to groundwater VOC samples	September 25, 2008	
Injection monitoring samples collected in addition to groundwater VOC samples	December 11, 2008	
Phase II In-Situ Bioremediation Workplan submitted to NYSDEC for approval	December 23, 2008	
Injection monitoring samples collected in addition to groundwater VOC samples	March 30, 2009	
Injection monitoring samples collected in addition to groundwater VOC samples	June 23, 2009	
EPA/NYSDEC concurrence with second injection	September 15, 2009	
Injection monitoring samples collected in addition to groundwater VOC samples	September 25, 2009	
In-Situ Bioremediation amendment Injection Event	October 26 – November 3, 2009	
Injection monitoring samples collected in addition to groundwater VOC samples	December 11, 2009	
Injection monitoring samples collected in addition to groundwater VOC samples	March 11, 2010	
Injection monitoring samples collected in addition to groundwater VOC samples	June 17, 2010	
Injection monitoring samples collected in addition to groundwater VOC samples	September 23, 2010	
Injection monitoring samples collected in addition to groundwater VOC samples	December 20, 2010	
Groundwater VOC and TOC samples collected.	March 28, 2011	Injection monitoring reduced to annually in June 2011 and June 2012
Injection monitoring samples collected in addition to groundwater VOC samples	June 24, 2011	
Groundwater VOC and TOC samples collected.	September 20, 2011	
Groundwater VOC and TOC samples collected.	December 16, 2011	
Groundwater VOC and TOC samples collected.	March 21, 2012	
EPA Site Inspection	May 8, 2012	5 year review

2.0 CONSTRUCTION OF REMEDIAL DESIGN

Remediation system installation and activation was completed in July 2001. A Pre-Final inspection was performed on July 19, 2001. A few action items were itemized during the Pre-Final inspection as summarized in the First Quarter 2002 Quarterly Report (ECOR, May 2001) and the Remedial Action Report (ECOR, September 2002). The action items were completed during late 2001 and early 2002. An Interim Inspection was completed by the Environmental Protection Agency (EPA) on July 17, 2002. No major problems were discovered during the inspection.

The system operated intermittently until September 2001 due to initial system debugging during the start up phase. Since September 2001, the system has operated almost continuously. Use of the infiltration gallery was discontinued in August 2002 upon regulatory approval. During this reporting period (First Quarter 2012), no significant activities occurred relative to the remedial design.

3.0 OPERATION OF GROUNDWATER TREATMENT SYSTEM

During routine operation, groundwater recovered from the three pumping wells (PW-1, PW-2, and PW-3) is treated through one bag filter and an air stripper prior to discharge. The bag filter removes suspended solids greater than 50 microns in diameter. The low-profile air stripper removes the VOCs from the groundwater. Following air stripping, the groundwater is discharged to surface water. **Figure 1** illustrates the PW locations and the Groundwater Treatment System (GWTS). A Flow Diagram of the GWTS equipment and process piping is presented in **Figure 2**.

3.1 CURRENT SYSTEM STATUS

The GWTS was temporarily shut down on September 12, 2007 to allow for the In-Situ Remediation Technology (ISRT injection) to be carried out. The system remained off through a second amendment injection that was completed on November 3, 2009 and will remain off awaiting the results and evaluation of the injections. An evaluation is presented in Section 4.0.

3.2 SYSTEM OPERATIONS HISTORY THROUGH FIRST QUARTER 2012

A total of 20.5 million gallons of groundwater and approximately 38.0 pounds of dissolved-phase VOCs were recovered via the pumping well network since system activation. All of this groundwater was treated in the GWTS. Of that total, 19.7 million gallons, or 96.0% of the total flow, was discharged to the surface water, into the drainage ditch that flows adjacent to the Site. The remaining 824,000 gallons,

or 4.0 % of the total, was directed to the Infiltration Gallery. Soil flushing through the Infiltration Gallery ceased in August of 2002. In September of 2002, EPA concurred with the conclusion presented in the Final RA Report stating that Site soil has been effectively remediated. Therefore, there are no plans to re-initiate operation of the Infiltration Gallery.

3.3 VOC MONITORING HISTORY THROUGH FIRST QUARTER 2012

Tables 1 and **2** summarize influent and effluent analytical data for the system since startup. **Figure 3** presents a graph of the influent VOC concentrations over time. Cumulative dissolved-phase mass recovered is depicted on **Figure 4**. This data indicates that the influent VOC concentration has reached asymptotic levels. Quarterly effluent compliance sampling events coincide with the quarterly groundwater monitoring events.

3.4 ERD MONITORING HISTORY THROUGH FIRST QUARTER 2012

The enhanced reductive dechlorination (ERD) pilot test program to-date consists of the September 2007 Phase I injection followed by sixteen (16) groundwater monitoring events, and the October\November 2009 Phase II injection followed by eight (10) groundwater monitoring events. The Phase I injection program introduced emulsified vegetable oil (EVO) into well MW-10B, and PW-1 and PW-2, with the Phase II program injecting EVO and zero valent iron (ZVI) into various temporary borings and wells across the Site. During the reporting period, there were no additional injections of EVO or ERD amendments.

4.0 QUARTERLY MONITORING WELL SAMPLING EVENT

This quarterly sampling event occurred on March 21, 2011 and was conducted in accordance with the agreed upon modifications to the QAPP (May 23, 2003). Groundwater samples were collected from monitoring wells MW-1, MW-4, MW-10B, MW-21, MW-Residential and former pumping wells PW-1, PW-2 and PW-3 using EPA's low-flow sampling procedures, in accordance with the QAPP. Samples were collected for VOCs under U.S. EPA SW-846 Method 8260B (results summarized in **Table 5**), Total Organic Carbon (EPA 9060), and field monitoring parameters including temperature (^{o}C), pH (SU), Specific Conductivity (umhos/cm), ORP (mV), and DO (mg/L). A summary of the field parameter measurements is presented in **Table 3**. Copies of field notes collected during the sampling events are included in **Appendix A**. The preserved groundwater samples were collected and analyzed

by TestAmerica Laboratories (TAL), Buffalo, New York. A summary of Site groundwater elevations is provided in **Table 4**.

4.1 GROUNDWATER LEVELS

Groundwater levels for the reporting period were collected March 21, 2012. The groundwater data and flow patterns for the First Quarter 2012 indicates flow from the southeast toward the northwest, with a low hydraulic gradient. An anomalous groundwater mound is centered at PW-3, with disconformable flow conditions at this well in relation to the sitewide conditions. The sitewide average horizontal hydraulic gradient is low at 0.00278. The gradient measured during the reporting period between MW-10B and MW-1 was 0.00186, and between PW-2 and MW-1 was 0.00567. The gradient between PW-3 and MW-4 was 0.00656, and from PW-1 to MW-1 the gradient was measured at 0.00118. In general, all monitoring wells, except PW-3, depicted a decrease in potentiometric elevations over the previous monitoring period. This flow pattern is similar with historical trends. The potentiometric elevations measured in March 2012, are shown on **Figure 5**, and asummary of the 2012 water levels are provided in the table below.

Summary Table of 2012 Potentiometric Levels

	MW-1	MW-4	MW-10B	MW-21	Residential	PW-1	PW-2	PW-3
3/21/12	634.81	634.91	635.08	634.34	634.81	634.89	634.98	635.12

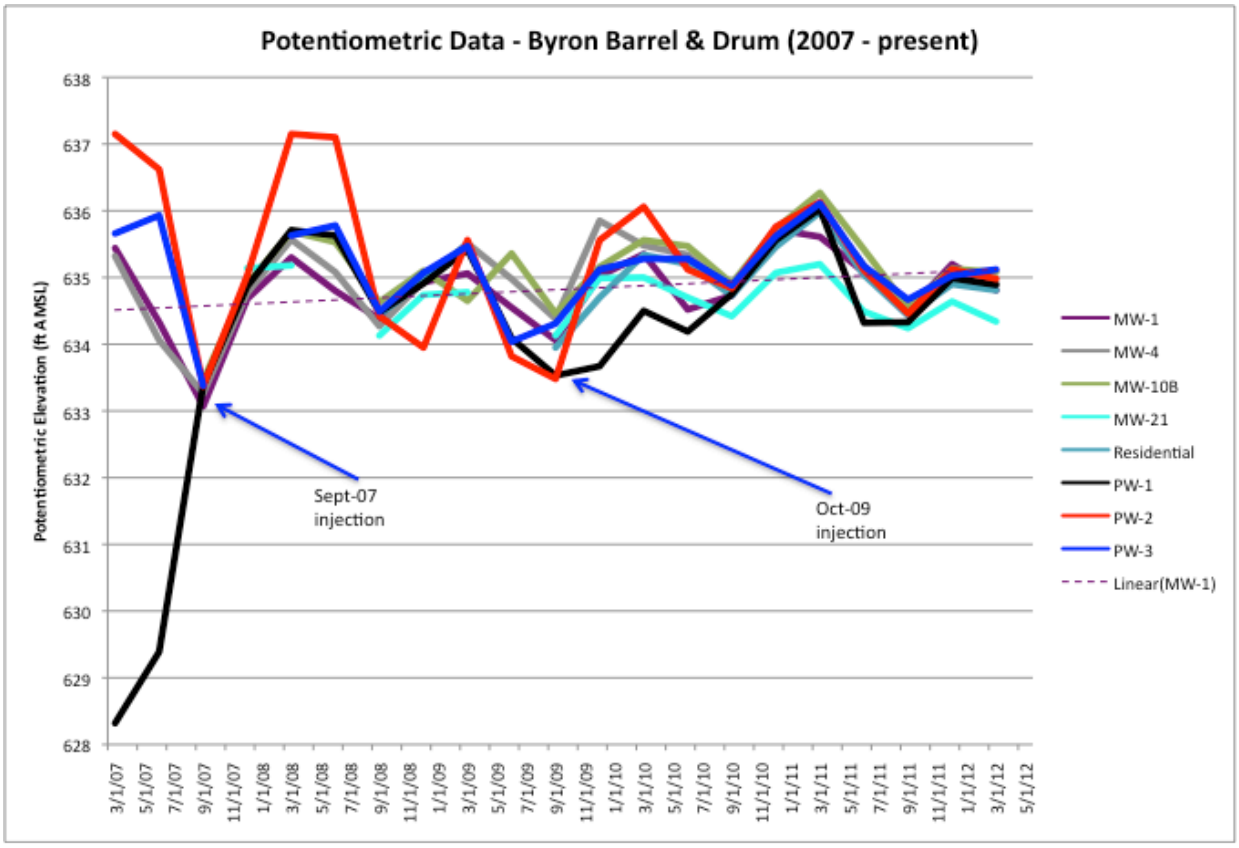
Potentiometric elevations in ft AMSL

Precipitation in the First Quarter 2012 was approximately 4.8-inches, which was similar to that experienced in the First Quarter 2011, with rainfall data collected from a gauging station in Batavia, NY, approximately 9.1-miles from the Site.

First Quarter 2012 Precipitation Summary

2012	Precipitation (inches)
Jan	2.37
Feb	1.42
Mar	1.03
Total	**4.82**

In general, since the groundwater treatment plant was shut-down in the fall-2007, the potentiometric levels have increased, approximately by 0.75 feet over that time, as presented in the sitewide hydrograph below.



4.2 LABORATORY ANALYSIS / GROUNDWATER SAMPLING RESULTS

4.2.1 VOC SUMMARY

This sampling event is the 10th sampling event completed after the October 2009 Phase II ERD injection. Samples were collected for VOCs contained in U.S. EPA SW-846 Method 8260B, and Total Organic Carbon (EPA 9060), and field monitoring parameters including temperature (°C), pH (SU), Specific Conductivity (umhos/cm), ORP (mV), and DO (mg/L).

Water quality data from the reporting period continues to document the shift in the primary chlorinated VOCs detected in groundwater from 1,1,1-Trichloroethane (111TCA) to 1,1-Dichloroethane (11DCA), the primary breakdown product of 111TCA biodegradation. During the quarter, the total VOC concentrations increased at wells MW-4, MW-10B, and PW-2, primarily related to 11DCA generation. Total VOCs decreased at MW-1, PW-1, and PW-3, and remained unchanged at MW-21 and the Residential Well.

As depicted on **Figure 6,** the zone of groundwater impacted with VOCs has progressively reduced in size, with no wells exceeding the EPA ROD Groundwater Cleanup Level of 200 µg/L 111TCA water quality threshold, and only MW-1 exceeding the 5 µg/L NYSDEC groundwater standard for 111TCA.

Summary Table of ROD Groundwater Cleanup Levels (in µg/L)

Site VOC Detected in Groundwater	ROD Groundwater Cleanup Level	Federal MCL[1]	NYSDEC Groundwater Cleanup Standard[2]
1,1,1-trichloroethane	200	200	5
1,2-dichloroethane	5	5	0.6
1,1-dichloroethane	5	--	5
1,1-dichloroethene	7	7	5
2-butanone (MEK)	172	--	50
trichloroethene	5	5	5
methylene chloride	100	5	5
vinyl chloride	2	2	2
Toluene	2,000	1,000	5

[1] - *Maximum Contaminant Level Goal (MCL) - http://water.epa.gov/drink/contaminants/index.cfm#1*

[2] - *§703.6 Groundwater effluent limitations for discharges to Class GA waters*

During the reporting period, 11DCA was detected at monitoring well MW-1 at a concentration of 32 µg/L, MW-4 at 14 µg/L, at MW-10B at a concentration of 33 µg/L, at PW-1 at a concentration of 10 µg/L, and at PW-2 at a concentration of 5.9 µg/L. 1,1-Dichloroethene (11DCE) was detected at MW-1 at a concentration of 2.3 J µg/L, at MW-4 at a concentration of 3.2 J µg/L, and at MW-10B at a concentration of 0.55 J µg/L. 111TCA was detected at MW-1 at a concentration of 11 J µg/L, and at MW-10B at a concentration of 1.1 J µg/L. Trichloroethene (TCE) was detected above the laboratory method detection limit (MDL) at MW-1 at a concentration of 0.67 J µg/L, at MW-4 at a concentration of 1.2 J µg/L, and at MW-10B at a concentration of 0.5 J µg/L. Toluene was detected in the groundwater monitoring network at recovery well PW-1 at 2.5 J µg/L, and at PW-2 at a concentration of 1.8 J µg/L. Compounds detected above the NYSDEC groundwater cleanup level of 5 µg/L occurred at MW-1 for

11DCA, and 111TCA, and at MW-4, MW-10B, PW-1 and PW-2 for 11DCA. There were no VOCs were detected at or above the laboratory MDLs at PW-3, MW-21 or the Residential Well.

Continuing a trend observed since the ERD program was implemented is the generation of methyl ethyl ketone (MEK) and acetone in various wells, and during the First Quarter at MW-4 at a concentration of 3.3 μg/L, and at MW-10B at a concentration of 6.7 μg/L. This occurrence is a temporary condition that is caused when an impacted aquifer is amended with carbon, a small portion of the fermentable organic matter can be converted to ketone compounds, such as acetone or MEK. Thus the generation of MEK during the remediation processes provides another biodegradable food source which facilitates a polishing effect on residual chlorinated compounds. This transient production of acetone and MEK can occur when alkanes are present along with high-organic carbon levels, in sub-oxic, especially methanogenic environments (Mueller, June 2011). It therefore is assumed that MEK and acetone production occurs just before the system goes fully anaerobic, or soon after injection of the carbon source. Continued detection of MEK in the groundwater monitoring network suggests continued methanogenesis in the MW-10B and MW-4 areas, which are positive ERD indicators. Acetone and MEK are readily biodegradable by indigenous soil microbes that are involved in reductive dechlorination reactions. Typical half-lives for acetone in groundwater range from 19 to 197 days, and MEK environmental half-lives range from 13 to 128 days (Mueller, June 2011). These compounds have limited downgradient transport, and rapidly biodegrade when reaching aerobic conditions.

4.2.2 FIELD PARAMETER AND OTHER PARAMETER SUMMARY

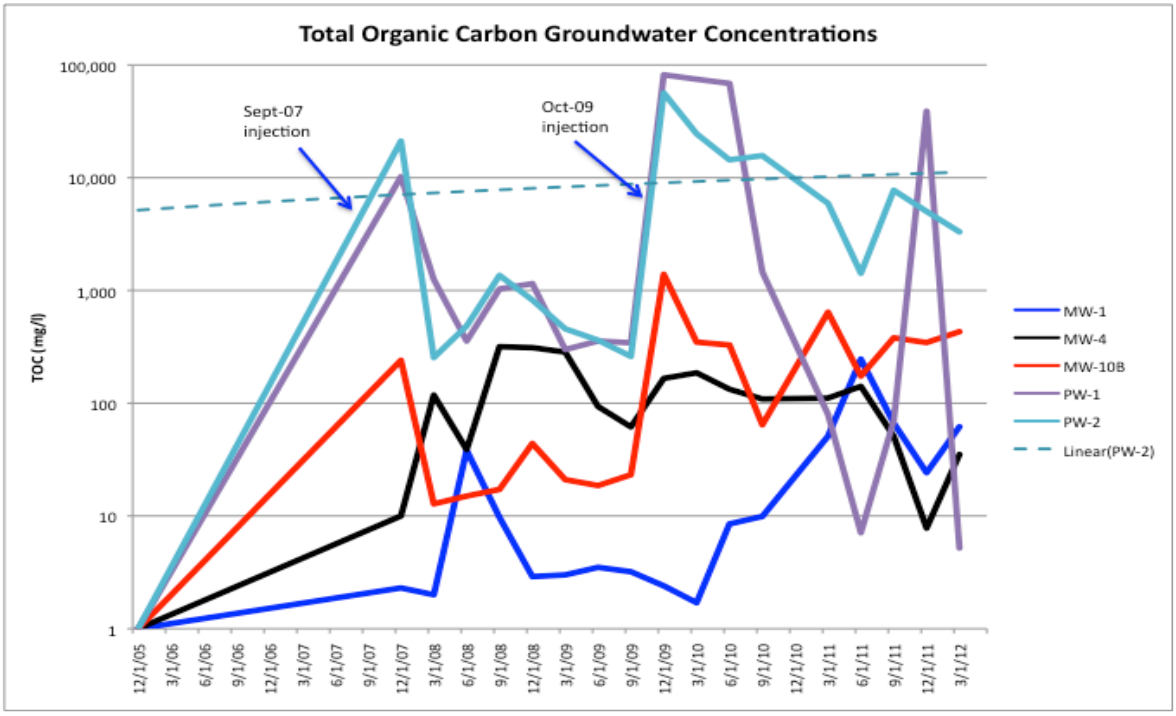
Several parameters are sampled as part of the ERD program to monitor progress of the pilot test, for example - TOC, dissolved gasses, VOCs, metals, nitrite, sulfide, pH, alkalinity, biological populations, among others. TOC is monitored in the groundwater environment to determine if anaerobic metabolism of VOCs is possible through the addition of a hydrocarbon substrate. ORP is monitored to confirm the prevailing groundwater environment (aerobic and oxidizing vs. anaerobic and reducing). Alkalinity is analyzed as an indicator of the aquifers ability to buffer against variations in pH, and as an additional indicator of enhanced microbial activity. The pH is monitored to keep the groundwater in optimal range for reductive dechlorination as some bacterial populations are sensitive to low pH conditions (e.g., *Dehalococcoides*). The presence of reduced electron acceptors provides another measure of the primary microbial respiration processes controlling the groundwater environment. The presence and relative concentrations of VOC degradation end-products provides confirmation that the ERD process is being driven to completion. Dissolved gasses (methane\ethane\ethene) are monitored as they measure breakdown of the VOCs in a strongly reducing (methanogenic) environment, particularly around the

injection wells. Chloride is monitored as a relative indicator that VOCs have been destroyed, leaving innocuous end-products. This performance monitoring is a critical portion of the in-situ ERD pilot test program, and most of these analyses are now conducted on an annual basis. Performance monitoring during the reporting period for field measurement of selected indicator parameters in groundwater are presented in the table below.

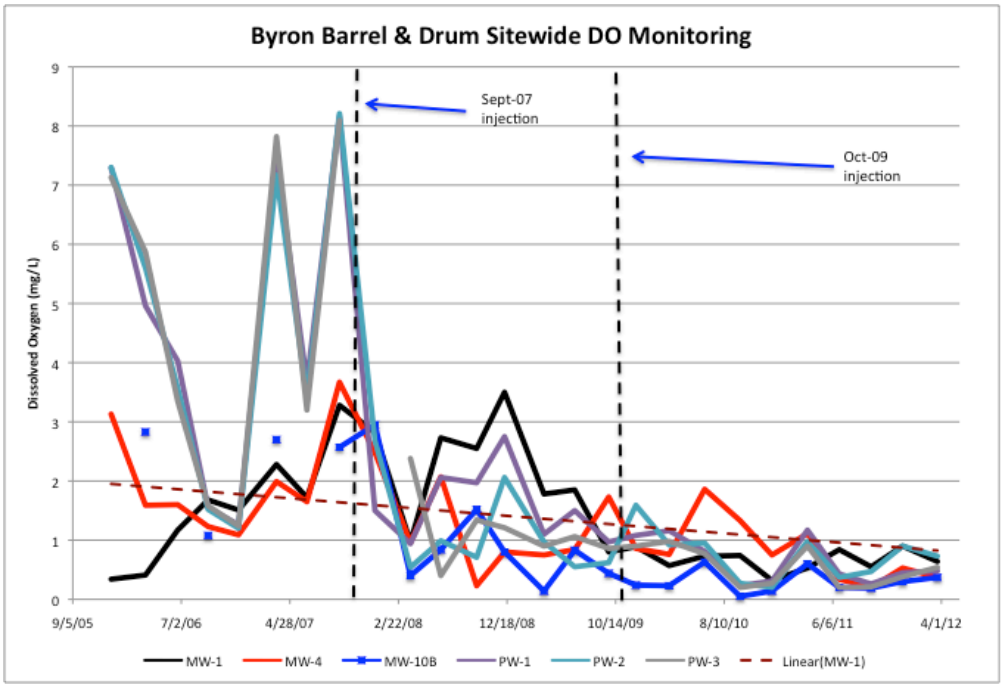
First Quarter 2012ERD Monitoring Parameter Summary Table

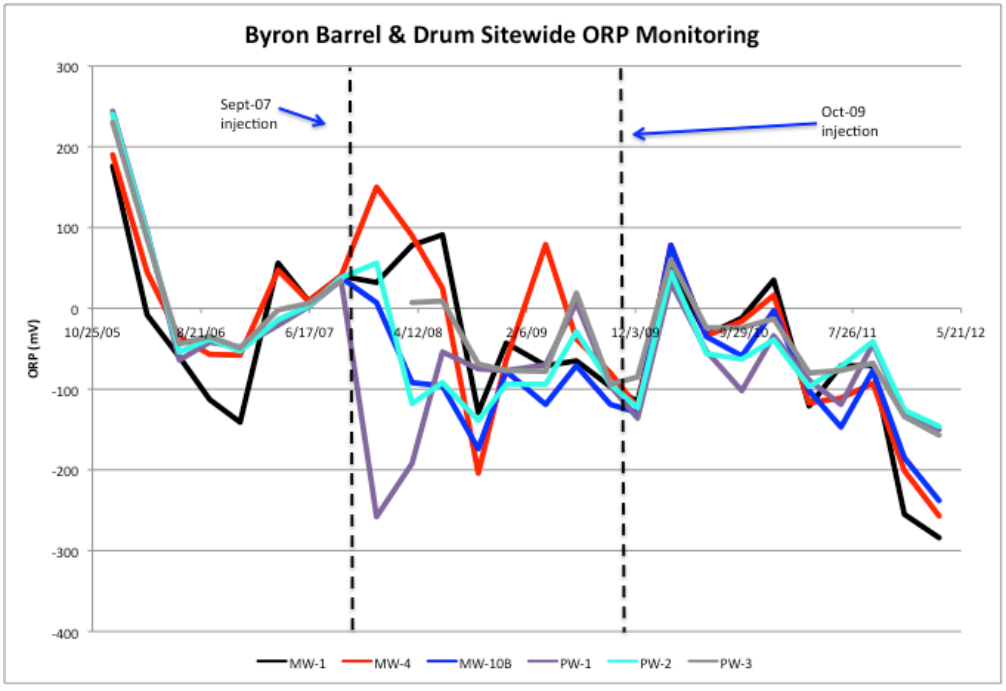
	MW-1	MW-4	MW-10B	MW-21	PW-1	PW-2	PW-3	
	3/21/12	3/21/12	3/21/12	3/21/12	3/21/12	3/21/12	3/21/12	Units
TOC	61.8	35.1	431	11.8	5.2	3,310	122	mg/L
Temp	9.2	10.8	10.3	11.6	11.1	10.7	10.6	°C
pH	7.45	7.28	6.99	7.57	7.3	6.85	7.25	SU
Specific Cond.	925	956	1,980	1,210	3,600	4,670	1,530	umhos/cm
ORP	-284	-257	-238	-189	-150	-146	-157	mV
DO	0.64	0.37	0.37	0.8	0.48	0.73	0.54	mg/L

The March 2012 sampling event shows diminution in the size of the ERD zone as evident in the decreased size and concentration of TOC in the west-central portion of the Site, particularly in the PW-3 to PW-1 area, with a decrease in TOC from 38,900 mg/L in December 2011 to 5.2 mg/L in March 2012. The TOC distribution in March 2012 is shown on **Figure 7**, which indicates the trend in TOC continues to increase in the MW-10B, PW-2, and MW-1area. Groundwater sampling in following quarters would be expected to show a decrease in TOC concentrations at all wells. A comparison of this data is summarized in the TOC chart below.



Another measure of the ERD zone is monitoring the dissolved oxygen (DO) andoxidation reduction potential (ORP) in and downgradient of the injection zone. Monitoring during the monitoring period the DO levels in groundwater continued to trend downward, with all monitoring locations within the desired level of < 1 mg/L, as noted below. As the data denotes, since the Phase II injection program the DO levels trend downward sitewide. These levels are within the desired DO concentrations to sustain the ERD zone in the upcoming quarter.





The ORP measurements collected during the quarter depicts a continued downward trend sitewide since the Phase II injection in October 2009. The range in -146 mV at PW-2 to -284 mV at MW-1, as noted above. The DO & ORP well graphs are included in **Appendix E.**

At the Site the 111TCA has be reductively dechlorinated to 11DCA under anaerobic conditions by *Desulfobacterium autotrophicum* (Sands, et. Al, 2009) and *Clostridium* sp. (Galli & McCarty, Jan. 1989), and *Dehalobacter*. Reductive dechlorination of 111TCA to 11DCA to chloroethane has been documented under methanogenic conditions in the presence of *Dehalobacter* sp., and complete dehalogenation of 111TCA, 11DCA, and chloroethane to ethane has been demonstrated in anaerobic environments (Vogel & McCarty, Feb. 1985). Chlorinated alkanes can be degraded by abiotic processes through hydrolysis or dehydrohalogenation, or by biotic processes through reductive dechlorination or dichloroelimination. These degradation processes can proceed under either aerobic or anaerobic conditions (Vogel and McCarty, 1987a; Vogel, 1994). As the ERD injection program has driven the groundwater environment anaerobically, the primary reduction processes are anaerobic, according to the following pathway.

Anaerobic Pathway

1,1,1-trichloroethane

↓ (*Clostridium* spp., *Dehalobacter*)

1,1-dichloroethane

↓

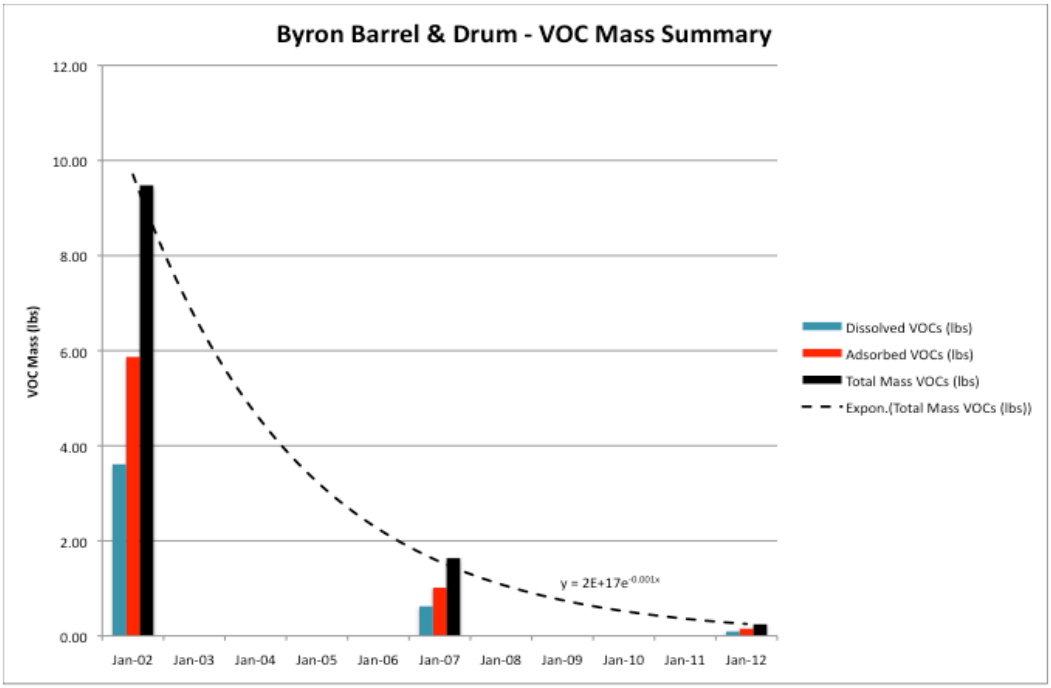
chloroethane

↓

acetaldehyde

(Source Description, Properties, and Degradation of Selected Volatile Organic Compounds Detected in Ground Water — A Review of Selected Literature. Open-File Report 2006-1338, USGS, U.S. Department of the Interior)

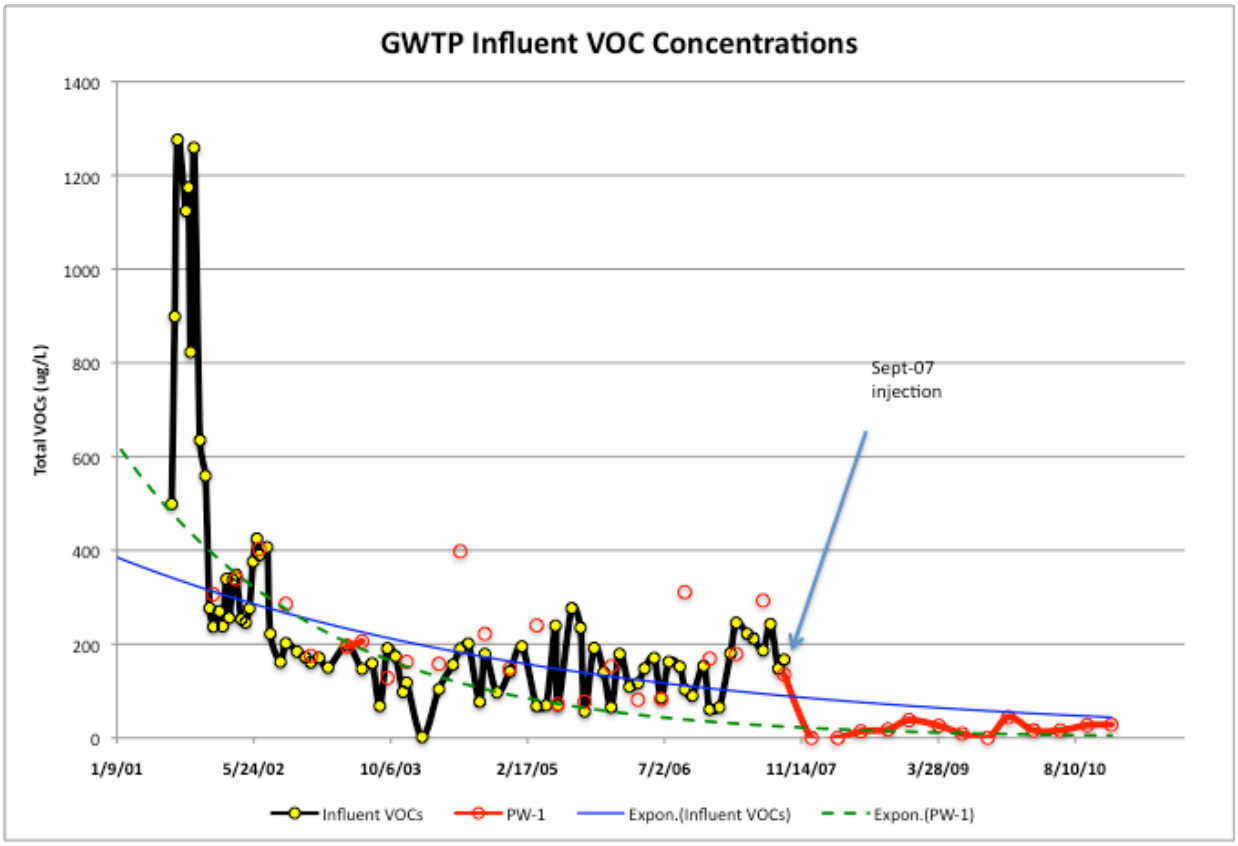
The dataset continues to show ERD as an ongoing process in the groundwater environment at the Site. This trend is expected to continue into the upcoming quarters as the data suggests the TOC remains sufficient in the MW-10B, PW-2 and MW-1 area. The ERD performance monitoring graphs are included in **Appendix F**.



For comparative purposes, **Figure 8** provides the depiction of the VOC impacted groundwater in the First Quarter 2002, and **Figure 9** provides the change in VOCs from the First Quarter 2002 to the First Quarter 2012. This reduction of VOCs in the subsurface environment over the past 10-years of groundwater monitoring indicates a significant reduction in impacted groundwater and sorbed to the aquifer matrix, as shown in the table below.

Sampling Event	Weighted Average TVOCs Conc. (ug/L)	Total Volume of TVOCs Impacted Groundwater (gallons)	Mass Dissolved VOCs in Groundwater (lbs)	Mass Adsorbed VOCs (lbs)	Total Mass VOCs (lbs)
Mar-02	380	1,138,996	3.61	5.87	9.48
Dec-07	97	771,200	0.62	1.01	1.64
Mar-12	15	734,152	0.09	0.15	0.25

The operation of the GWTP extracted approximately 20.5 million gallons of groundwater, and removed approximately 38.0 pounds of dissolved-phase VOCs from groundwater. Over the past 10-years ERD has removed an additional 9.23 pounds of VOCs. As the chart above depicts, the removal of VOCs in groundwater from ERD depicts a similar decay curve as the GWTP influent, which reached asymptotic conditions in less than 7-years, as noted in the GWTP VOC chart below.



4.3 STATISTICAL ANALYSIS OF GROUNDWATER VOC TRENDS

A statistical evaluation of groundwater trends was completed through a Mann-Kendall test, a non-parametric test that can be used to assess concentrations exhibiting either increasing or decreasing trends over time to a specified level of confidence (**Appendix C**). As a non-parametric test, this evaluation is not dependent upon the magnitude of data, assumptions of distribution, missing data or irregularly spaced monitoring periods. Mann-Kendall assesses whether a time-ordered data set exhibits an increasing or decreasing trend, within a predetermined level of significance. While it is expected that stable water quality conditions will pass the no-trend null hypothesis of the Mann-Kendall test, this alone does not necessarily mean groundwater concentrations are stable. This is because the Mann-Kendall test does not take into account magnitude or variation of the data, therefore, data sets that exhibit no trend in the Mann-Kendall analysis should also test for data variability by assessing the coefficient of variation, or a similar assessment tool.

The Mann-Kendall, non-parametric statistical test is used to assess trends in groundwater concentration data. Selecting appropriate tests selection statistical tests requires consideration of the data available and

the limitations of the test. The Mann-Kendall test procedure starts by comparing the most recent round of water-quality data with the results of all earlier rounds. A score of +1 is awarded if the most recent concentration is larger, or a score of -1 is awarded if it is smaller. The total score for the time-series data is the Mann-Kendall statistic, which is then compared to a data qualified critical value, which tests whether the trend in concentration is increasing, decreasing or if no trend in concentration can be determined.

In this analysis, the Mann-Kendall test was performed using a modified spreadsheet developed by the State of Wisconsin. The test requires a minimum of four (4) and a maximum of ten (10) sampling events. This analysis used the data for the most recent 10 sampling events. Values below the detection limits are entered as the detection limit; however, in order to prevent "trending of detection limits", all detection limits for a given trend series are entered as a single value depending generally on the lowest MDL for that compound. This test was not performed for wells or compounds for which the majority of results were reported below the detection limit. The results are provided as "Increasing", "Decreasing", or "No Trend" at an 80% confidence level. The wells evaluated include MW-1, MW-4, MW-10B, PW-1, PW-2, and PW-3. This data indicates:

MW-1 depicts a stable or decreasing trend at the 80% confidence interval for 11DCA, 11DCE, 111TCA and TCE, and an undetermined non-stable trend (coefficient of variation >1) for MEK.

MW-4 depicts a stable or decreasing trend at the 80% confidence interval for 11DCA, 111TCA and TCE, and an increasing trend at the 80% confidence interval for 11DCE and MEK.

MW-10B depicts a stable or decreasing trend at the 80% confidence interval for 11DCE and TCE, and an undetermined non-stable trend (coefficient of variation >1) for 11DCA, MEK and 111TCA.

PW-1 depicts a stable or decreasing trend at the 80% confidence interval for 11DCE, toluene, 111TCA, and TCE, and an increasing trend at the 80% confidence interval for 11DCA.

PW-2 depicts a stable or decreasing trend at the 80% confidence interval for 11DCE, toluene, 111TCA, and TCE, and an increasing trend at the 80% confidence interval for 11DCA.

PW-3 depicts a stable or decreasing trend at the 80% confidence interval for 11DCE, MEC, 111TCA, and TCE, and an undetermined non-stable trend (coefficient of variation >1) for 11DCA.

The spreadsheets for select wells are included in **Appendix C**, and summarized in the table below.

Decreasing Trend (80% CI), all compounds		Stable or Decreasing Trend (80% CI)	Undetermined non-stable trend	Increasing Trend (80% CI)
MW-1	--	11DCA, 11DCE, 111TCA TCE	MEK	--
MW-4	--	11DCA, 111TCA, TCE	--	11DCE, MEK
MW-10B	--	11DCE, TCE	11DCA, MEK, 111TCA	--
PW-1	--	11DCE, Toluene, 111TCA, TCE	--	11DCA
PW-2	--	11DCE, Toluene, 111TCA,TCE	--	11DCA
PW-3	--	11DCE, 111TCA, MEC, TCE	11DCA	--

The historical groundwater monitoring program indicates 111TCA was the primary recalcitrant VOC in the groundwater monitoring network into 2011 with MW-1 as the primary area exceeding the EPA ROD Groundwater Cleanup Level of 200 mg/L. As the ERD program progressed, 111TCA is now primarily a stable or decreasing compound at each well, as noted in the table above. The monitoring program indicates ERD daughter products 11DCA, 11DCE and MEK show an increasing trend at some wells.

The PRP Group has expended considerable funds and significant efforts to demonstrate biological activity and populations in the groundwater environment on-Site. Several independent lines-of-evidence support this premise. In the groundwater environment, the microorganism and microbes synthesize VOCs, then excrete bio-surfactants and bio-emulsifiers. This subsurface fermentation process produces alcohols and ketones (e.g., acetone, MEK) which increases the solubilization of 111TCA in groundwater by co-solvency effects (Suthersan, 2005). This process has likely played itself out at both MW-10B and MW-1, however, peaks of higher 111TCA levels are possible with continued groundwater recharge, but these cycles should be short-lived and will undergo the same biological and chemical degradation. It is expected that the remaining 111TCA and 111TCA daughter products will continue to decrease as illustrated in the Mann-Kendall analysis (**Appendix C**) and in the well isoconcentration charts (**Appendix D**).

4.4 DATA VALIDATION

As per Section 4.0 of the QAPP, the data have been validated according to the protocols and quality control (QC) requirements of the analytical methods, the SAP, the USEPA Contract Laboratory Program (CLP) National Functional Guidelines for Organic Data Review (October 1999), the USEPA Region II Data Review Standard Operating Procedure (SOP) Number HW-24, Revision 1, September 1999: Validating Volatile Organic Compounds by SW-846 Method 8260B, and the reviewer's professional judgment. The Data Validation Report is included in **Appendix B**.

5.0 SECOND FIVE-YEAR REVIEW

In preparation for the second, 5-Year Review, the PRP Group met on-site with EPA management and NYSDEC staff, and conducted an off-site post inspection meeting. As a result of the May 8, 2012 EPA site visit several issues were brought up which required additional attention:

1. Site Security
2. Well Security
3. Well Identification
4. Data
5. Report Certification
6. Closure Status

Site Security - On May 16, 2012 a new lock was installed on the security gate leading into the Site. **Appendix G** provides photographs of the site security activities undertaken since the May 8, 2012 site inspection.

Well Security - On May 16, 2012 new locks were installed on all monitoring wells. **Appendix G** provides photographs of the site security activities undertaken since the May 8, 2012 site inspection.

Well Identification - On May 16, 2012 the wells MW-1, MW-4, MW-10B, MW-21, PW-1, PW-2, PW-3, PZ-1 and PZ-2 were stenciled with their proper labels on them.

Data - On May 15 at the request of the EPA, a disc containing complete data packages for samples collected during the last two years of sampling events was submitted via US mail.

Report Certification – On May 17, at the request of the EPA, change pages to the Fourth Quarter/Annual 2011 Report including a new table of contents and report certification page where submitted via email.

Closure Status - During the on-site meeting EPA expressed terms for site closure including achieving the NYSDEC groundwater protection standards, which are more restrictive than the Federal MCLs (Maximum Contaminant Level) and ROD Cleanup goals. The terms for site closure were discussed as all VOCs below Federal MCL's for 2 consecutive groundwater sampling events at least 90 days apart. The most recent groundwater sampling results from March 21, 2012 detected VOCs exceeding the NYSDEC standards for 11DCA at five (5) wells, and 111TCA at one (1) well, as noted in the table below.

Site-Related VOC Detected in Groundwater	Pre-Injection Sampling June 2007 Locations Exceeding ROD Groundwater Cleanup Level	NYSDEC Groundwater Standard[2] (ug/L)	Compound Exceeded NYSDEC Standard in March 2012
11TCA	MW-1, PW-1, PW-2, PW-3	5	MW-1
11DCA	MW-1, PW-1, and PW-2	5	MW-1, MW-4, MW-10B, PW-1, PW-2
11DCE	- -	5	none
TCE	- -	5	none
MEC	PW-3	5	none
2-butanone	- -	50	none
vinyl chloride	- -	2	none
toluene	- -	5	none

2 - §703.5 Groundwater quality standards for taste-, color- and odor-producing, toxic and other deleterious substances

As outlined in the Quarterly and Annual Reports, there have been two (2) injections to stimulate the ERD for VOC impacted groundwater. The Phase I Injection Program was completed September 18 - 20, 2007, consisting of mixing and injecting approximately 654 gallons of Newman's Zone diluted to a 6,082 gallon emulsified vegetable oil (EVO) amendment consisting of uniform, sub-micron oil droplet size, with lactic acid to provide immediate and long-term biostimulation, which was injected into MW-10B, PW-2, and PW-1.

The Phase II Injection Program was completed October 26 - November 3, 2009, and in accordance with the Phase II In-Situ Bioremediation Workplan (ECOR, December 23, 2008) the Phase II injection program introduced nano-scale structured zero-valent iron (nZVI) and EVO in a series of geoprobe

injection points (GIP 1 through GIP-4), as wells as monitoring well MW-10B, PZ-1, PZ-2, and former pumping wells PW-1, PW-2 and PW-3. The Phase II injection program injected 1,056 gallons of EVO (8,532 gallons of diluted amendment) at a 4.6 - 9.3% solution, and 180 gallons of nZVI at an 8.3% solution into PW-1 and PW-2.

The implementation of the ERD program has resulted in a significant reduction in the VOC mass in soil and groundwater, and based on a porosity value of 0.25, a bulk soil density of 2.5 g/cm^3, the fraction of organic carbon in the soil at 0.001, and a soil sorption coefficient of 130, the IRM has accomplished the following reduction in TVOCs in groundwater.

	VOC Mass 4thQ-07	**VOC Mass 1stQ-12**	**Percent Reduction**
Total Volume of TVOC Impacted Groundwater (gallons)	771,200	734,152	4.8%
Total Weight of TVOC Impacted Saturated Soil (lbs)	36,500,000	34,700,000	4.9%
Weighted Average TVOC Concentration (ug/L)	97	15	84.5%
Total Dissolved Mass VOCs in Groundwater (lbs)	0.62	0.09	85.5%
Total Saturated Adsorbed Mass of TVOCs (lbs)	1.01	0.15	85.1%
Total Mass of VOCs in Saturated Zone (lbs)	1.64	0.25	84.8%

During the on-site meeting, EPA suggested that to take the project to closure, the Site would need to achieve groundwater sampling results below NYSDEC groundwater standards for two (2) consecutive quarters, sampled at least 90-days apart. To accomplish this goal, an option considered would be to provide a 'polish' on the groundwater monitoring wells through a Phase III ERD amendment addition, or to allow the ERD process to achieve these standards, albeit at a much longer timeframe. An initial analysis of active options included three (3) separate options to accomplish this goal:

- Option #1 – Well Injection with ERD Amendments
- Option #2 – Geoprobe Injection adjacent to Wells with ERD Amendments
- Option #3 – Employ ERD Amendments in Wells through 'socks'

A decision on which option listed above, or no further action, will be presented shortly with the expectation that the EPA and NYSDEC agree to the proposed polishing step and terms for site closure expressed in the May 2012 meeting.

6.0 CERTIFICATION

I, Keith B. Rapp, certify that I am currently a NYS Qualified Environmental Professional [as defined in 6 NYCRR Part 375] and that this *Byron Barrel & Drum Site, Quarterly/Annual Report - First Quarter 2012*, was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in full accordance with the U.S. EPA\DER-approved work plan and any approved modifications.

Date: July 24, 2012

Keith B. Rapp
SUSTAINABLE RESOURCES GROUP, INC.
Senior Hydrogeologist\Senior Project Manager

7.0 REFERENCES

Galli, R, and McCarty, P.L., *Biotransformation of 1,1,1-Trichloroethane, Trichloromethane, and Tetrachloromethane by a Clostridium sp.*. Applied and Environmental Microbiology Vol. 55(4):837-44. January 1989.

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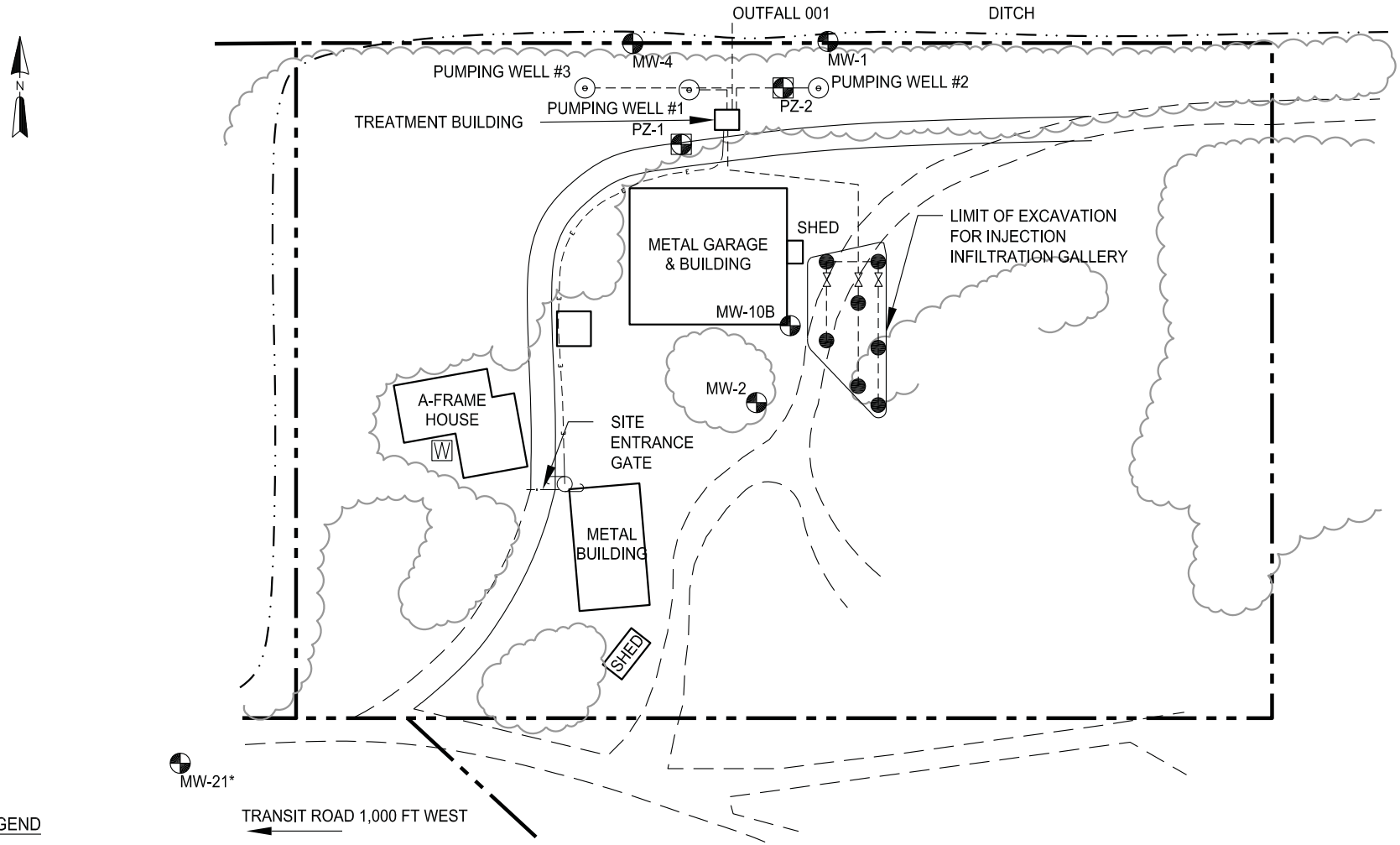
FIGURES



LEGEND

- MONITORING WELL
- FORMER RESIDENTIAL WELL
- PIEZOMETER WELL
- INJECTION GALLERY PIEZOMETER WELL
- INJECTION GALLERY VALVE
- PUMPING WELL
- UTILITY POLE
- PROPERTY LINE
- FENCE
- TREELINE
- NEW GRAVEL ROAD
- PRE-EXISTING GRAVEL ROAD
- DITCH
- ELECTRIC & PHONE LINE
- REINJECTION PIPIING

*NOTE: MW-21 IS 200 FEET WEST OF PROPERTY LINE

SOURCE: ERM C&O SERVICES

SITE PLAN

BYRON BARREL AND DRUM
AREA 2 SITE
BYRON, NY

Sustainable Resources Group, Inc.
440 Creamery Way, Suite 150, Exton, PA 19341

SCALE IN FEET	DATE	FIGURE
0 — 80	07-25-06	1

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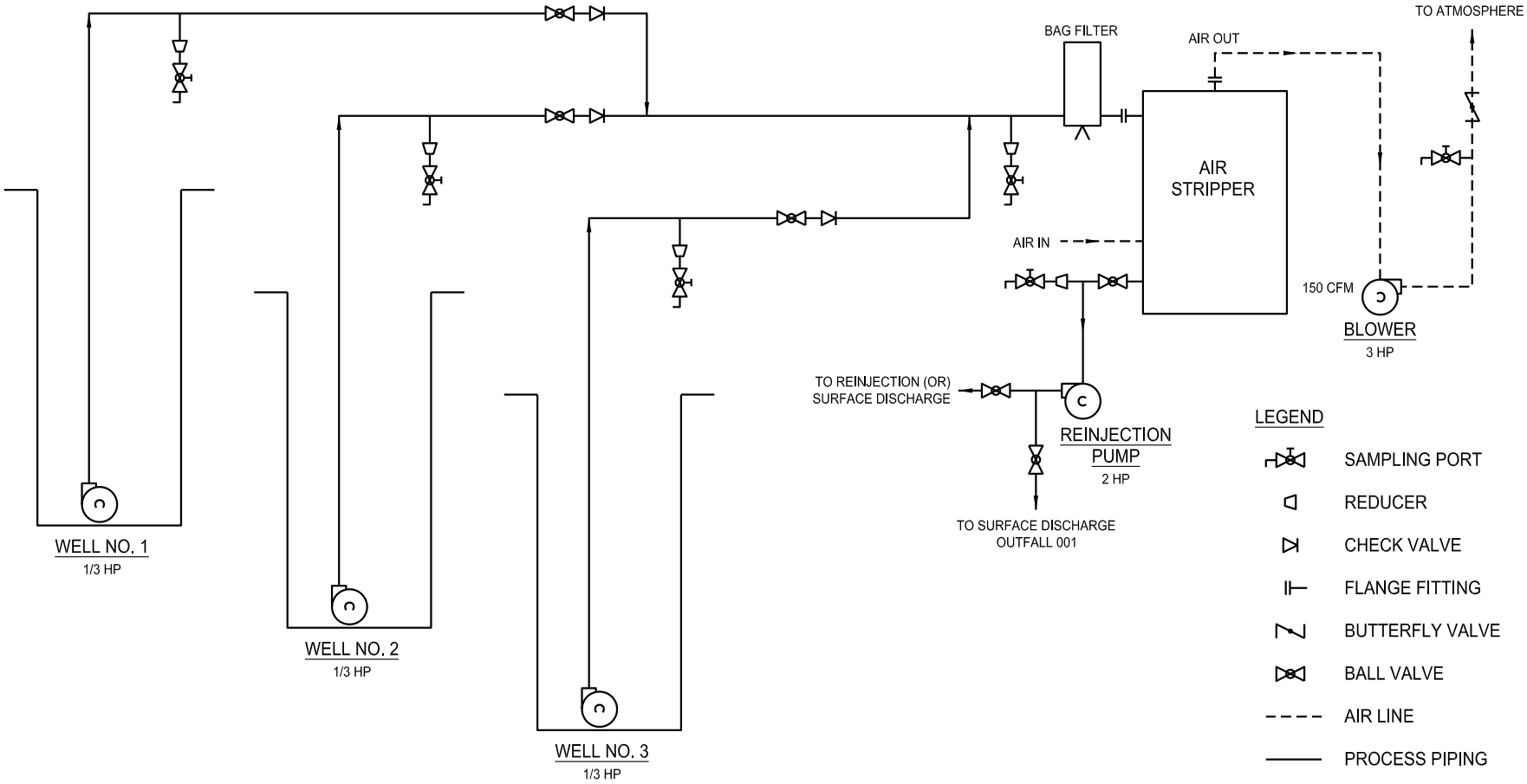

SOURCE: ERM C&D SERVICES

GROUND WATER TREATMENT SYSTEM FLOW DIAGRAM

BYRON BARREL AND DRUM
AREA 2 SITE
BYRON, NY

Sustainable Resources Group, Inc.
440 Creamery Way, Suite 150, Exton, PA 19341

SCALE IN FEET	DATE	FIGURE
0 80	09-02-05	2

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Figure 3
Influent VOC Concentration vs. Time
July 2001 to Present
Byron Barrel and Drum Site
Byron, NY

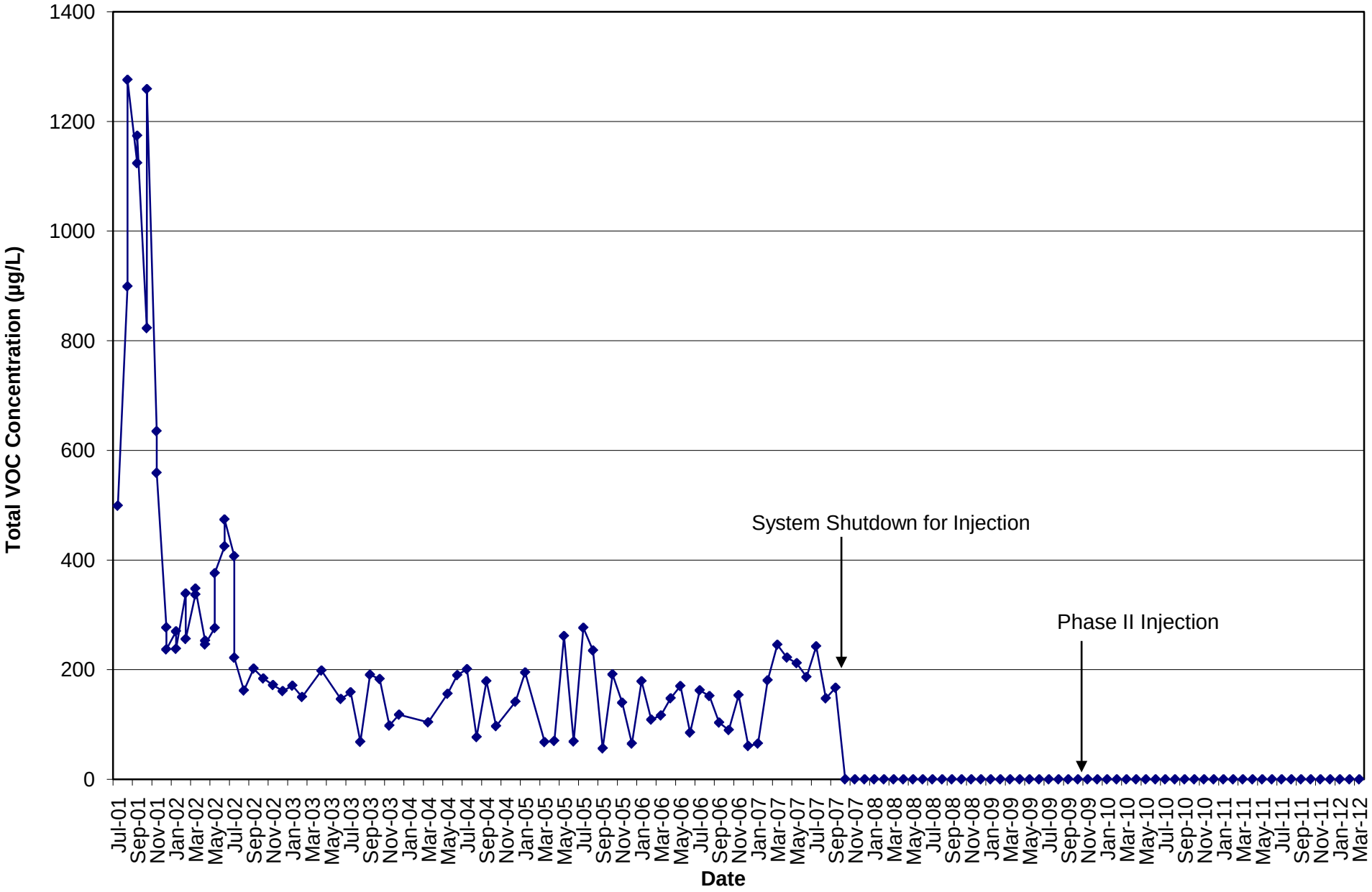
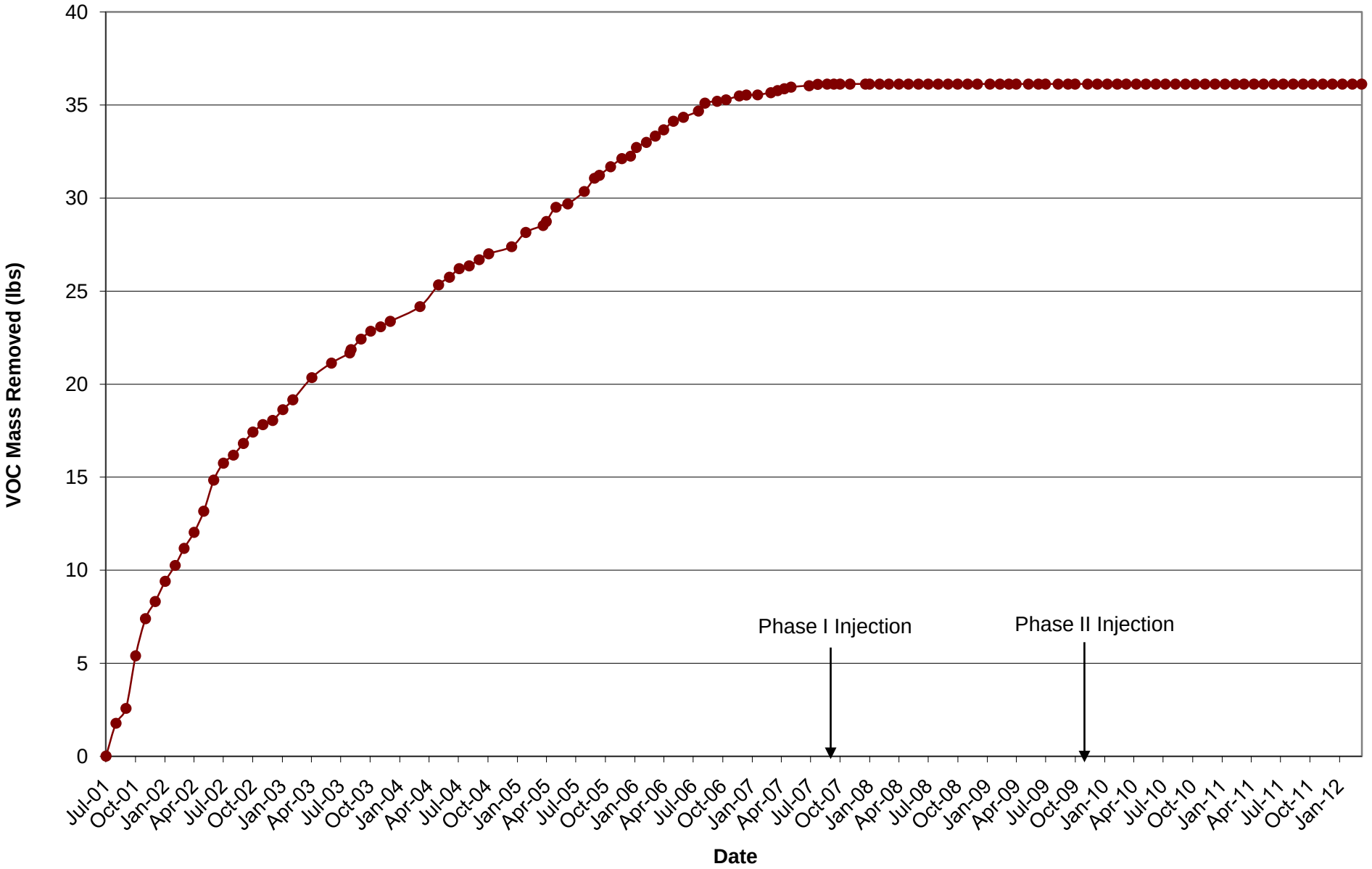
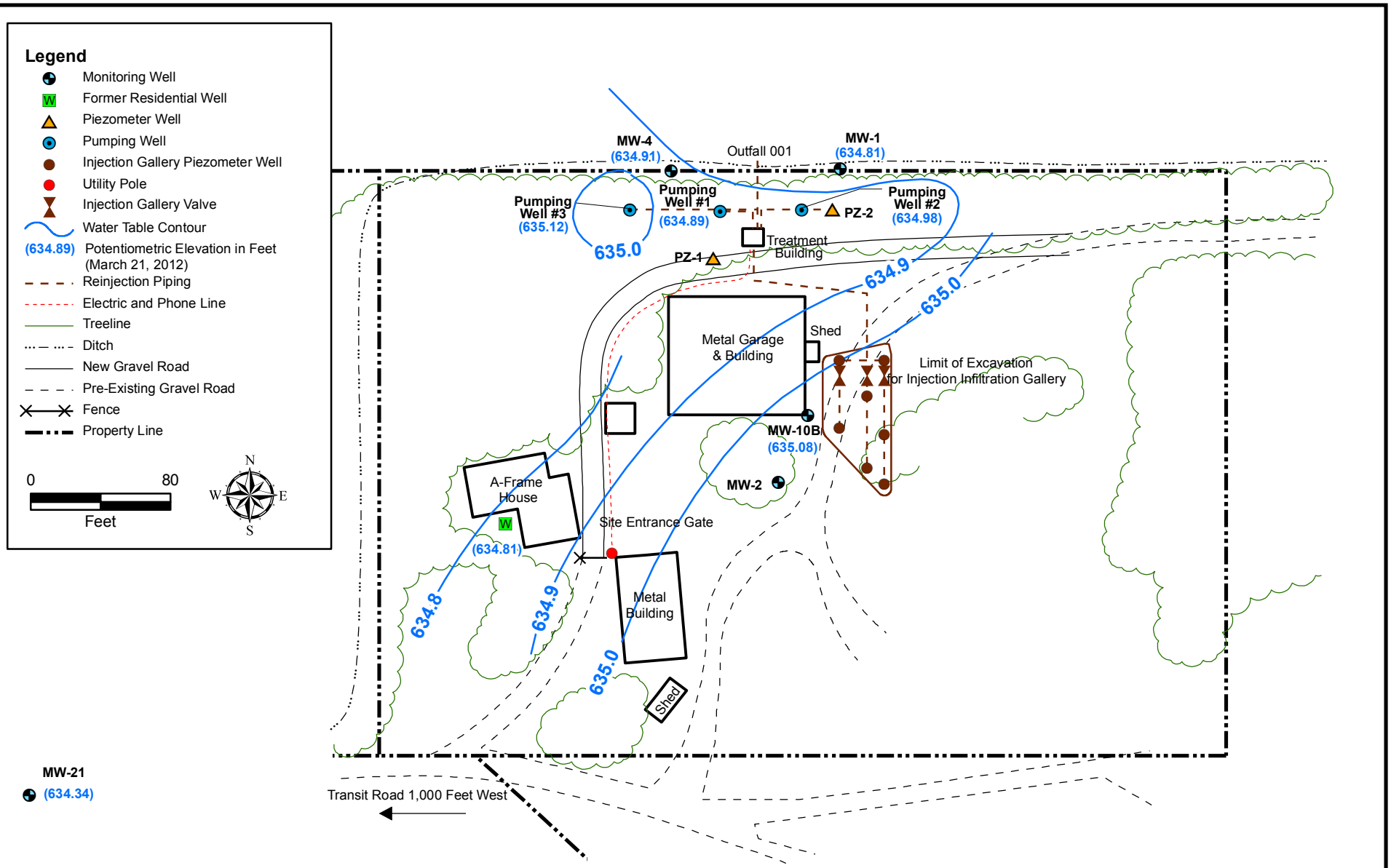


Figure 4
Cumulative VOC Mass Removed
July 2001 to Present
Byron Barrel and Drum Site
Byron, NY





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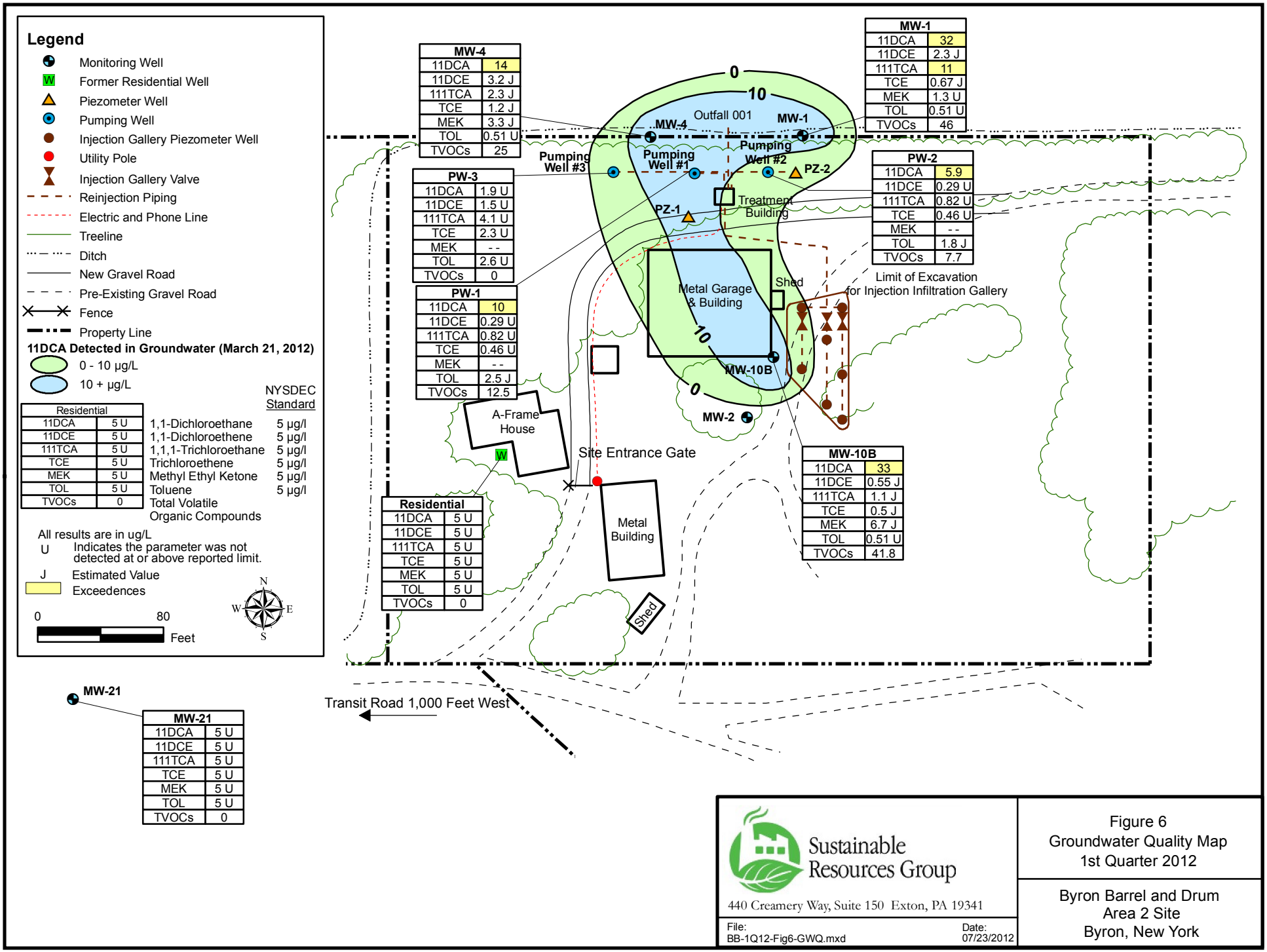
Date: 04/25/2012

Figure 5
Potentiometric Elevations
1st Quarter 2012

Byron Barrel and Drum
Area 2 Site
Byron, New York



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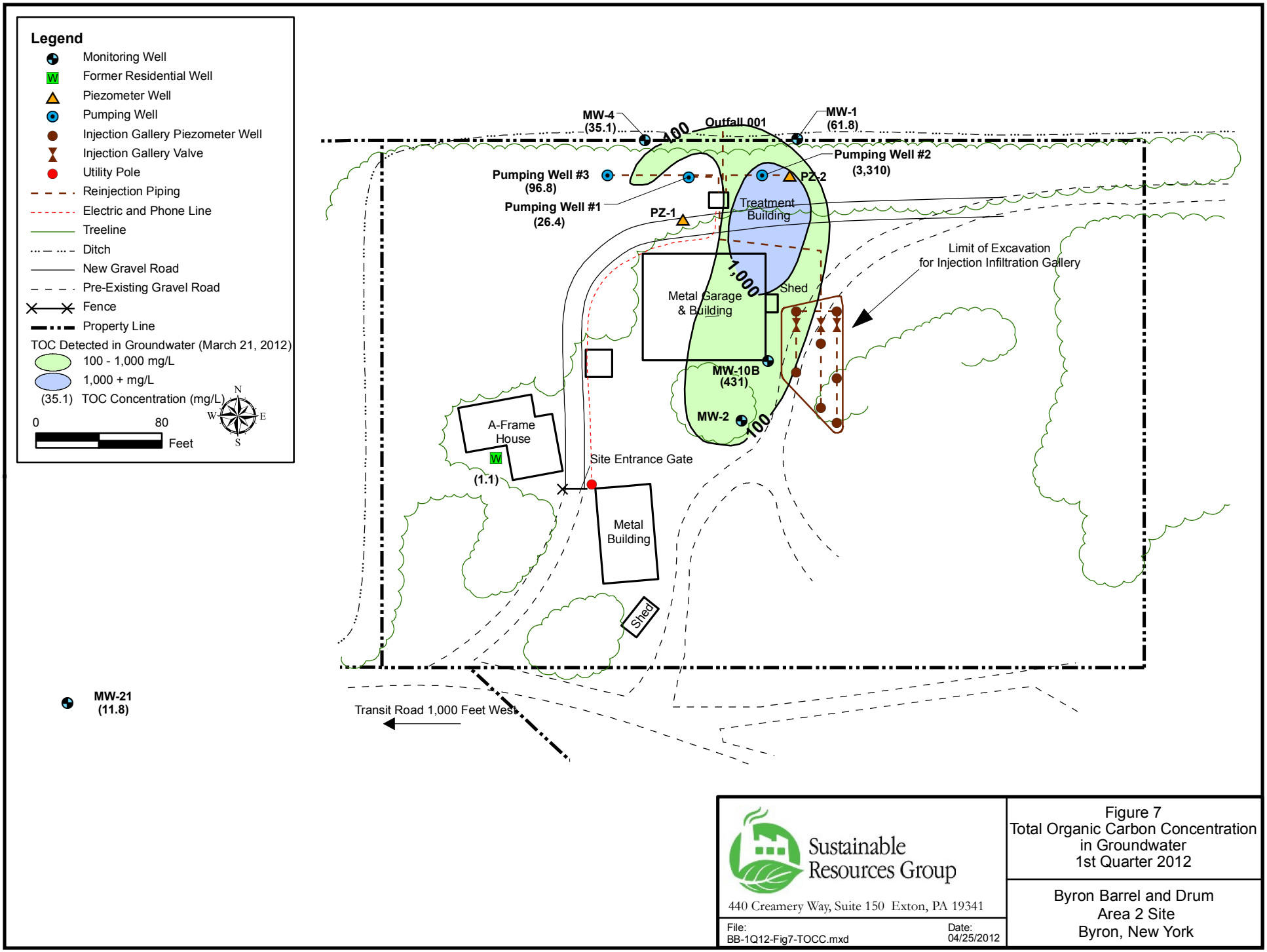
File: BB-1Q12-Fig6-GWQ.mxd
Date: 07/23/2012

Figure 6
Groundwater Quality Map
1st Quarter 2012

Byron Barrel and Drum
Area 2 Site
Byron, New York



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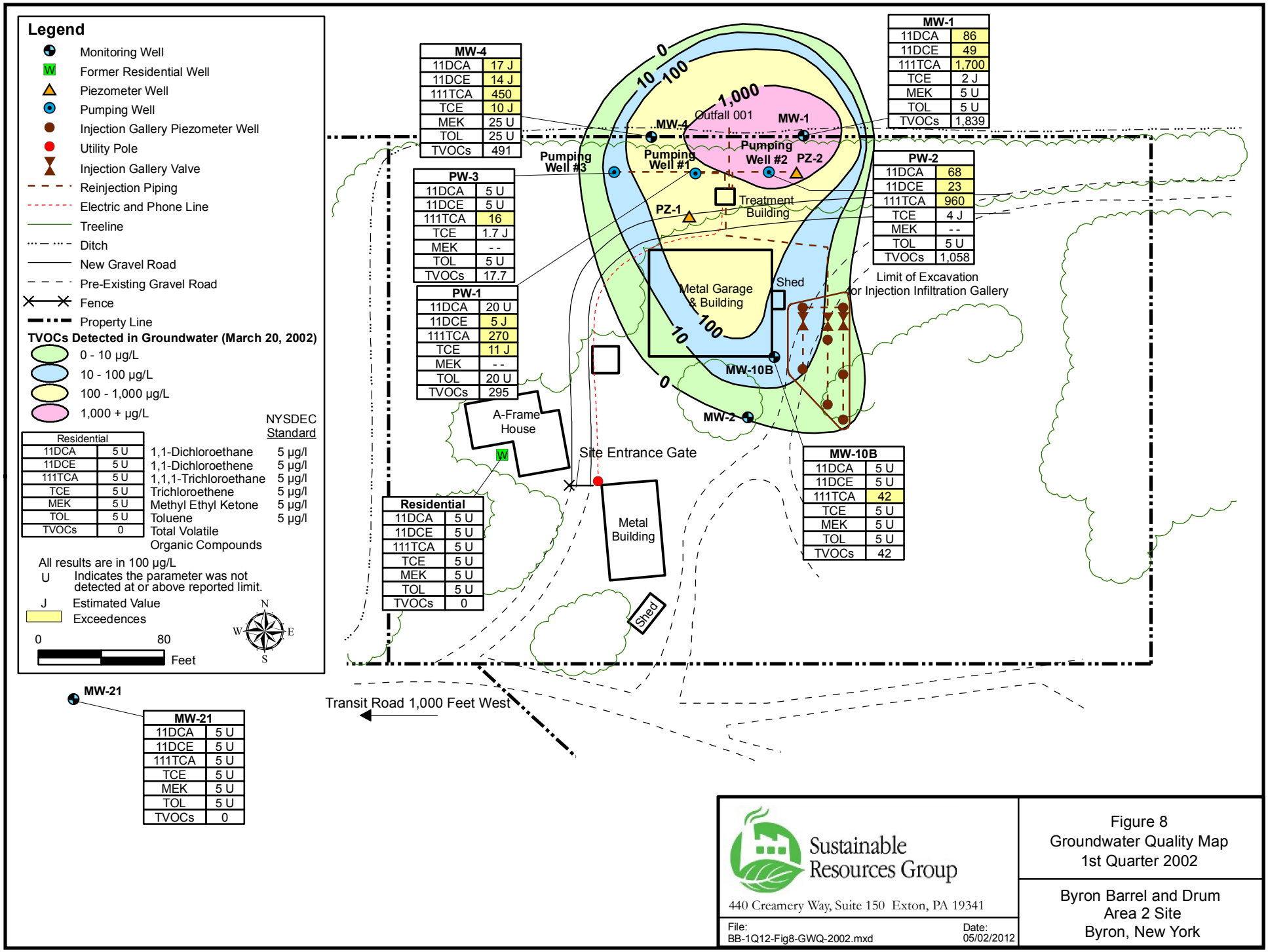
Date: 04/25/2012

Figure 7
Total Organic Carbon Concentration in Groundwater
1st Quarter 2012

Byron Barrel and Drum
Area 2 Site
Byron, New York



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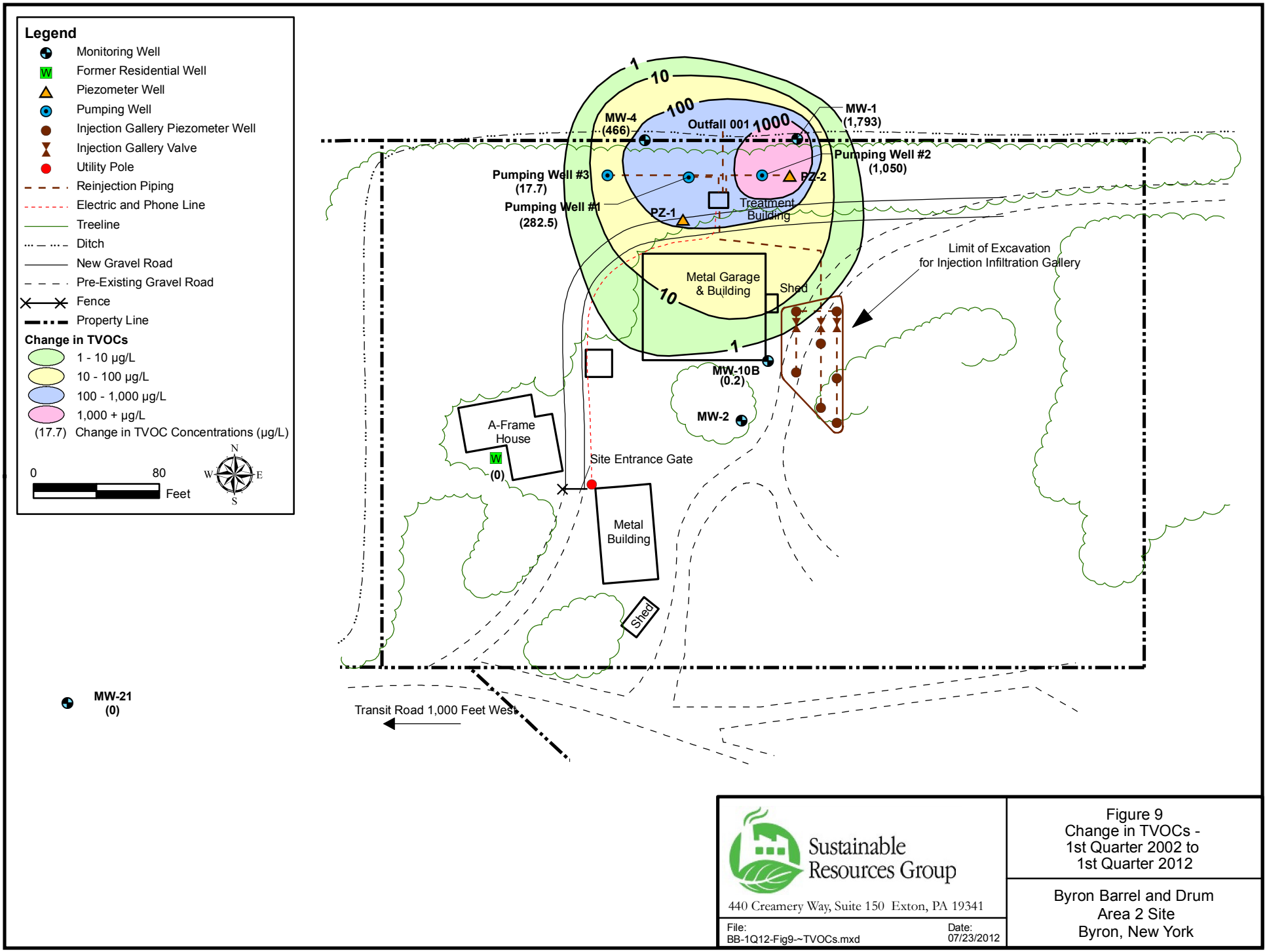
Date: 05/02/2012

Figure 8
Groundwater Quality Map
1st Quarter 2002

Byron Barrel and Drum
Area 2 Site
Byron, New York



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Date: 07/23/2012

Figure 9
Change in TVOCs -
1st Quarter 2002 to
1st Quarter 2012

Byron Barrel and Drum
Area 2 Site
Byron, New York

TABLES

Table 1
Influent Analytical Results
Groundwater Treatment System
Byron Barrel and Drum Site
Byron, NY

Sampling Event	01/GW	02/GW	03/GW	04/GW	05/GW	06/GW
Date	7/28/2001	8/8/2001	8/18/2001	9/18/2001	9/27/2001	10/5/2001
Field Influent pH, std pH units			7.87	7.57	7.55	7.5
Total Suspended Solids, mg/L	6.5	4.0 U	4.0 U	4.0 U	4.0 U	4
1,1-Dichloroethane, µg/L	23	47	60	19 J	58 D	43 J
1,1-Dichloroethene, µg/L	5.1	12	16	12 J	16 DJ	50 U
Cis - 1,2 - Dichloroethene, µg/L	1.0 J	1.4 J	1.0 J	50 U	50 U	50 U
Methylene Chloride, µg/L	5.0 U	5.0 U	5.0 U	50 U	50 U	50 U
1,1,1 - Trichloroethane, µg/L	460 E	840 E	1200 E	1100	1100 D	780
Trichloroethene, µg/L	1.9 J	3.0 J	4.7 J	50 U	50 U	50 U
Toluene, µg/L	5.0 U	5.0 U	5.0 U	50 U	50 U	50 U
Vinyl Chloride, µg/L	5.0 U	5.0 U	5.0 U	50 U	50 U	50 U
Total Confident VOCs, µg/L	499	899	1276	1124	1174	823

Sampling Event	07/GW	08/GW	09/GW	10/GW	11/GW	12/GW
Date	10/17/2001	11/8/2001	11/28/2001	12/13/2001	12/27/2001	1/18/2002
Field Influent pH, std pH units	7.39	7.57	7.42	7.43	7.54	7.64
Total Suspended Solids, mg/L	4.0 U	7	15	4.0 U		4.0 U
1,1-Dichloroethane, µg/L	46 J	32 J	20 J	13	9.3	11
1,1-Dichloroethene, µg/L	13 J	13 J	9.4 J	4.2 J	4.6 J	4.3 J
Cis - 1,2 - Dichloroethene, µg/L	50 U	50 U	25 U	10 U	5.0 U	5.0 U
Methylene Chloride, µg/L	50 U	50 U	25 U	10 U	5.0 U	5.0 U
1,1,1 - Trichloroethane, µg/L	1200	580	530	260	220 E	250 E
Trichloroethene, µg/L	50 U	50 U	25 U	3.3 J	4.2 J	4.9 J
Toluene, µg/L	50 U	50 U	25 U	10 U	5.0 U	5.0 U
Vinyl Chloride, µg/L	50 U	50 U	25 U	10 U	5.0 U	5.0 U
Total Confident VOCs, µg/L	1259	635	559	277	237	270

Sampling Event	13/GW	14/GW	15/GW	16/GW	17/GW	18/GW
Date	1/30/2002	2/13/2002	2/23/2002	3/8/2002	3/20/2002	4/8/2002
Field Influent pH, std pH units	7.71	7.84	7.48	7.79	7.72	7.09
Total Suspended Solids, mg/L	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
1,1-Dichloroethane, µg/L	10	16	10	11	11	10
1,1-Dichloroethene, µg/L	4.0 J	5.2 J	3.5 J	3.7 J	4.1 J	2.5 J
Cis - 1,2 - Dichloroethene, µg/L	10 U	10 U	5.0 U	5.0 U	5.0 U	10 U
Methylene Chloride, µg/L	10 U	10 U	5.0 U	5.0 U	1.8 BJ	10 U
1,1,1 - Trichloroethane, µg/L	220	320	240 E	320 E	330 E	240
Trichloroethene, µg/L	4.3 J	3.2 J	3.3 J	3.4 J	3.4 J	3.3 J
Toluene, µg/L	10 U	10 U	3.3 J	5.0 U	5.0 U	10 U
Vinyl Chloride, µg/L	10 U	10 U	5.0 U	5.0 U	5.0 U	10 U
Total Confident VOCs, µg/L	238	339	256	337	348	253

Table 1
Influent Analytical Results
Groundwater Treatment System
Byron Barrel and Drum Site
Byron, NY

Sampling Event	19/GW	20/GW	21/GW	22/GW	23/GW	24/GW
Date	4/24/2002	5/8/2002	5/21/2002	6/4/2002	6/13/2002	7/11/2002
Field Influent pH, std pH units	6.99	7.07	7.41	7.11	7.34	7.19
Total Suspended Solids, mg/L	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
1,1-Dichloroethane, µg/L	10	12	20	19 J	18 D,J	20
1,1-Dichloroethene, µg/L	2.5 J	2.4 J	3.5 J	25 U	20 U	3.4 J
Cis - 1,2 - Dichloroethene, µg/L	10 U	10 U	10 U	25 U	20 U	10 U
Methylene Chloride, µg/L	15 B	10 U	3.1 BJ	16 J	12 B,D,J	8.5 B,J
1,1,1 - Trichloroethane, µg/L	230	260	350	390	360 D	380
Trichloroethene, µg/L	2.8 J	2.7 J	3.3 J	25 U	20 U	3.7 J
Toluene, µg/L	2.6 J	10 U	10 U	25 U	20 U	10 U
Vinyl Chloride, µg/L	10 U	10 U	10 U	25 U	20 U	10 U
Total Confident VOCs, µg/L	246	276	376	425	390	407

Sampling Event	25/GW	26/GW	27/GW	28/GW	29/GW	30/GW
Date	7/23/2002	8/29/2002	9/18/2002	10/29/2002	11/25/2002	12/18/2002
Field Influent pH, std pH units	6.45	6.97	7.74	7.91	6.8	7.25
Total Suspended Solids, mg/L	4.0 U	4.0 U	4.0 U	NA	NA	4.0 U
1,1-Dichloroethane, µg/L	9.0 J	8.8	7.7	8.6	9.1 DJ	6.6
1,1-Dichloroethene, µg/L	2.6 J	1.3 J	1.8 J	3.0 J	2.4 DJ	2.8 J
Cis - 1,2 - Dichloroethene, µg/L	10 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U
Methylene Chloride, µg/L	10 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U
1,1,1 - Trichloroethane, µg/L	210	150	190	170	160 D	150
Trichloroethene, µg/L	10 U	1.9 J	1.9 J	2.5 J	10 U	1.9 J
Toluene, µg/L	10 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U
Vinyl Chloride, µg/L	10 U	5.0 U	5.0 U	5.0 U	10 U	5.0 U
Total Confident VOCs, µg/L	222	162	202	184	172	161

Sampling Event	31/GW	32/GW	33/GW	34/GW	35/GW	36/GW
Date	1/17/2003	2/19/2003	4/30/2003	6/23/2003	7/30/2003	8/27/2003
Field Influent pH, std pH units	7.6	6.93	7.06	7.03	7.12	NA
Total Suspended Solids, mg/L	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane, µg/L	8.4	6.2	8.4 DJ	6.6 DJ	7.6	2.4 J
1,1-Dichloroethene, µg/L	5.0 U	2.4 J	10 U	10 U	5.0 U	5.0 U
Cis - 1,2 - Dichloroethene, µg/L	5.0 U	5.0 U	10 U	10 U	5.0 U	5.0 U
Methylene Chloride, µg/L	5.0 U	5.0 U	10 U	10 U	5.0 U	5.0 U
1,1,1 - Trichloroethane, µg/L	160	140	190 D	140 D	150	66
Trichloroethene, µg/L	2.4 J	1.6 J	10 U	10 U	1.2 J	5.0 U
Toluene, µg/L	5.0 U	5.0 U	10 U	10 U	5.0 U	5.0 U
Vinyl Chloride, µg/L	5.0 U	5.0 U	10 U	10 U	5.0 U	5.0 U
Total Confident VOCs, µg/L	171	150	198	147	159	68

Table 1
Influent Analytical Results
Groundwater Treatment System
Byron Barrel and Drum Site
Byron, NY

Sampling Event	37/GW	38/GW	39/GW	40/GW	41/GW	42/GW
Date	9/24/2003	10/23/2003	11/20/2003	12/3/2003	1/29/2004	3/30/2004
Field Influent pH, std pH units	NA	NA	NA	7.18	NA	6.84
Total Suspended Solids, mg/L	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane, µg/L	8.8 DJ	7.4 DJ	4.7 J	6.1	5.0 U	6.7
1,1-Dichloroethene, µg/L	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U
Cis - 1,2 - Dichloroethene, µg/L	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene Chloride, µg/L	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1 - Trichloroethane, µg/L	180 D	170 D	92	110	1.9 J	96
Trichloroethene, µg/L	2.0 DJ	10 U	1.1 J	1.6 J	5.0 U	1.0 J
Toluene, µg/L	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl Chloride, µg/L	10 U	10 U	5.0 U	5.0 U	5.0 U	5.0 U
Total Confident VOCs, µg/L	191	174	98	118	2	104

Sampling Event	43/GW	44/GW	45/GW	46/GW	47/GW	48/GW
Date	5/20/2004	6/16/2004	7/15/2004	8/26/2004	9/14/2004	10/28/2004
Field Influent pH, std pH units	NA	7.32	NA	NA	NA	NA
Total Suspended Solids, mg/L	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane, µg/L	5.5	10 D	7.5	3.3 J	9.1 DJ	4.1 J
1,1-Dichloroethene, µg/L	5.0 U	10 U	2.3 J	5.0 U	10 U	2.3 J
Cis - 1,2 - Dichloroethene, µg/L	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U
Methylene Chloride, µg/L	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U
1,1,1 - Trichloroethane, µg/L	150	180 D	190	74	170 D	90
Trichloroethene, µg/L	5.0 U	10 U	1.6 J	5.0 U	10 U	1.1 J
Toluene, µg/L	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U
Vinyl Chloride, µg/L	5.0 U	10 U	5.0 U	5.0 U	10 U	5.0 U
Total Confident VOCs, µg/L	156	190	201	77	179	97

Sampling Event	49/GW	50/GW	51/GW	52/GW	53/GW	54/GW
Date	12/14/2004	1/27/2005	3/22/2005	4/26/2005	5/30/2005	6/7/2005
Field Influent pH, std pH units	6.23	NA	7.04	NA	NA	7.50
Total Suspended Solids, mg/L	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane, µg/L	7.4	9.8	2.9 J	2.5 J	6.3	2.5
1,1-Dichloroethene, µg/L	2.5 J	3.0 J	5.0 U	5.0 U	1.9	0.84 J
Cis - 1,2 - Dichloroethene, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
Methylene Chloride, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
1,1,1 - Trichloroethane, µg/L	130	180	65	67	230	65
Trichloroethene, µg/L	1.6 J	2.2 J	5.0 U	5.0 U	1.2 J	0.68 J
Toluene, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
Vinyl Chloride, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U
Total Confident VOCs, µg/L	141.5	195	67.9	69.5	239.4	69.0

Table 1
Influent Analytical Results
Groundwater Treatment System
Byron Barrel and Drum Site
Byron, NY

Sampling Event	55/GW	56/GW	57/GW	58/GW	59/GW	60/GW
Date	7/28/2005	8/29/2005	9/13/2005	10/18/2005	11/22/2005	12/19/2005
Field Influent pH, std pH units	NA	NA	7.25	NA	NA	6.85
Total Suspended Solids, mg/L	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane, µg/L	10	9.5 J	2.3 J	7.1 J	5.2 J	2.7 J
1,1-Dichloroethene, µg/L	4.8	3.1 J	0.64 J	1.5 J	2.7 J	0.84 J
Cis - 1,2 - Dichloroethene, µg/L	1.0 U	25 U	5.0 U	10 U	20 U	5.0 U
Methylene Chloride, µg/L	1.0 U	2.4 J	5.0 U	10 U	2.0 J	5.0 U
1,1,1 - Trichloroethane, µg/L	260	220	53	180	130	61
Trichloroethene, µg/L	1.7	25 U	0.49 J	2.9 BJ	20 U	0.64 J
Toluene, µg/L	1.0 U	25 U	5.0 U	10 U	20 U	5.0 U
Vinyl Chloride, µg/L	1.0 U	25 U	5.0 U	10 U	20 U	5.0 U
Total Confident VOCs, µg/L	276.5	235.0	56.4	191.5	139.9	65.2

Sampling Event	61/GW	62/GW	63/GW	64/GW	65/GW	66/GW
Date	1/19/2006	2/24/2006	3/27/2006	4/20/2006	5/25/2006	6/20/2006
Field Influent pH, std pH units	NA	NA	6.99	NA	NA	NA
Total Suspended Solids, mg/L	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane, µg/L	6	4.7 J	4.5 J	5.5 J	6.2 J	3.6 J
1,1-Dichloroethene, µg/L	1.7 J	1.3 J	1.1 J	1.3 J	1.5 J	0.94 J
Cis - 1,2 - Dichloroethene, µg/L	5.0 U	10 U	5.0 U	10 U	10 U	5.0 U
Methylene Chloride, µg/L	5.0 U	2.1 BJ	5.0 U	10 U	1.3 J	5.0 U
1,1,1 - Trichloroethane, µg/L	170	100	110	140	160	80
Trichloroethene, µg/L	1.3 J	0.87 J	0.95 J	1.0 J	1.2 J	0.72 J
Toluene, µg/L	5.0 U	10 U	5.0 U	10 U	10 U	5.0 U
Vinyl Chloride, µg/L	5.0 U	10 U	5.0 U	10 U	10 U	5.0 U
Total Confident VOCs, µg/L	179.0	109.0	116.6	147.8	170.2	85.3

Sampling Event	67	68	69	70	71	72
Date	7/18/2006	8/7/2006	9/14/2006	10/12/2006	11/22/2006	12/14/2006
Field Influent pH, std pH units	NA	7.46	7.5	7.7	7.38	7.56
Total Suspended Solids, mg/L	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane, µg/L	6.3	5.7 J	4.0 J	5.5	9.5 J	2.8 J
1,1-Dichloroethene, µg/L	1.6 J	1.2 J	4.7 J	1.4 J	2.3 J	1.3 J
Cis - 1,2 - Dichloroethene, µg/L	5.0 U	10 U	5.0 U	5.0 U	10.0 U	5.0 U
Methylene Chloride, µg/L	5.0 U	2.8 BJ	5.0 U	5.0 U	10.0 U	5.0 U
1,1,1 - Trichloroethane, µg/L	155 E	140	94	82 D	140 D	56
Trichloroethene, µg/L	1.1 J	2.2 J	0.83 J	1.0 J	1.8 J	0.64 J
Toluene, µg/L	5.0 U	10 U	5.0 U	5.0 U	10.0 U	5.0 U
Vinyl Chloride, µg/L	5.0 U	10 U	5.0 U	5.0 U	10.0 U	5.0 U
Total Confident VOCs, µg/L	162.4	151.9	103.53	89.9	153.6	60.74

Table 1
Influent Analytical Results
Groundwater Treatment System
Byron Barrel and Drum Site
Byron, NY

Sampling Event	73	74	75	76	77	78
Date	1/18/2007	2/28/2007	3/21/2007	4/30/2007	5/23/2007	6/27/2007
Field Influent pH, std pH units	7.64	7.62	7.53	7.61	7.52	7.69
Total Suspended Solids, mg/L	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane, µg/L	1.8 J	5.6 DJ	6.2 J	8.2	8.7	5.0
1,1-Dichloroethene, µg/L	0.64 J	2.7 DJ	1.5 J	2.8 J	2.0 J	0.88 J
Cis - 1,2 - Dichloroethene, µg/L	5.0 U	10 U	10 U	5.0 U	5.0 U	5.0 U
Methylene Chloride, µg/L	5.0 U	1.0 DJ	10 U	5.0 U	5.0 U	5.0 U
1,1,1 - Trichloroethane, µg/L	62	170 D	230	210 D	200 D	180 D
Trichloroethene, µg/L	0.78 J	1.3 DJ	10 U	1.1 J	1.2 J	0.67J
Toluene, µg/L	5.0 U	10 U	10 U	5.0 U	5.0 U	5.0 U
Vinyl Chloride, µg/L	5.0 U	10 U	10 U	5.0 U	5.0 U	5.0 U
Total Confident VOCs, µg/L	65.22	180.6	245.5	222.1	211.9	186.55

Sampling Event	79	80	81	82	83	84
Date	7/24/2007	8/22/2007	9/12/2007	10/2007	11/2007	12/2007
Field Influent pH, std pH units	7.57	7.85	7.65	NS	NS	NS
Total Suspended Solids, mg/L	NA	NA	NA	NS	NS	NS
1,1-Dichloroethane, µg/L	6.6	5.9	7.1	NS	NS	NS
1,1-Dichloroethene, µg/L	5.2	1.0 J	10 U	NS	NS	NS
Cis - 1,2 - Dichloroethene, µg/L	5.0 U	5.0 U	10 U	NS	NS	NS
Methylene Chloride, µg/L	5.0 U	5.0 U	10 U	NS	NS	NS
1,1,1 - Trichloroethane, µg/L	230 D	140 D	160	NS	NS	NS
Trichloroethene, µg/L	0.82 J	0.81J	10 U	NS	NS	NS
Toluene, µg/L	5.0 U	5.0 U	10 U	NS	NS	NS
Vinyl Chloride, µg/L	5.0 U	5.0 U	10 U	NS	NS	NS
Total Confident VOCs, µg/L	242.62	147.71	167.1	NS	NS	NS

Sampling Event	85	86	87	88	89	90
Date	1/2008	2/2008	3/2008	4/2008	5/2008	6/2008
Field Influent pH, std pH units	NS	NS	NS	NS	NS	NS
Total Suspended Solids, mg/L	NS	NS	NS	NS	NS	NS
1,1-Dichloroethane, µg/L	NS	NS	NS	NS	NS	NS
1,1-Dichloroethene, µg/L	NS	NS	NS	NS	NS	NS
Cis - 1,2 - Dichloroethene, µg/L	NS	NS	NS	NS	NS	NS
Methylene Chloride, µg/L	NS	NS	NS	NS	NS	NS
1,1,1 - Trichloroethane, µg/L	NS	NS	NS	NS	NS	NS
Trichloroethene, µg/L	NS	NS	NS	NS	NS	NS
Toluene, µg/L	NS	NS	NS	NS	NS	NS
Vinyl Chloride, µg/L	NS	NS	NS	NS	NS	NS
Total Confident VOCs, µg/L	NS	NS	NS	NS	NS	NS

Table 1
Influent Analytical Results
Groundwater Treatment System
Byron Barrel and Drum Site
Byron, NY

Sampling Event	91	92	93	94	95	96
Date	9/2008	12/2008	3/2009	6/2009	9/2009	12/2009
Field Influent pH, std pH units	NS	NS	NS	NS	NS	NS
Total Suspended Solids, mg/L	NS	NS	NS	NS	NS	NS
1,1-Dichloroethane, µg/L	NS	NS	NS	NS	NS	NS
1,1-Dichloroethene, µg/L	NS	NS	NS	NS	NS	NS
Cis - 1,2 - Dichloroethene, µg/L	NS	NS	NS	NS	NS	NS
Methylene Chloride, µg/L	NS	NS	NS	NS	NS	NS
1,1,1 - Trichloroethane, µg/L	NS	NS	NS	NS	NS	NS
Trichloroethene, µg/L	NS	NS	NS	NS	NS	NS
Toluene, µg/L	NS	NS	NS	NS	NS	NS
Vinyl Chloride, µg/L	NS	NS	NS	NS	NS	NS
Total Confident VOCs, µg/L	NS	NS	NS	NS	NS	NS

Sampling Event	97	98	99	100	101	102
Date	3/2010	6/2010	9/2010	12/2010	3/2011	6/2011
Field Influent pH, std pH units	NS	NS	NS	NS	NS	NS
Total Suspended Solids, mg/L	NS	NS	NS	NS	NS	NS
1,1-Dichloroethane, µg/L	NS	NS	NS	NS	NS	NS
1,1-Dichloroethene, µg/L	NS	NS	NS	NS	NS	NS
Cis - 1,2 - Dichloroethene, µg/L	NS	NS	NS	NS	NS	NS
Methylene Chloride, µg/L	NS	NS	NS	NS	NS	NS
1,1,1 - Trichloroethane, µg/L	NS	NS	NS	NS	NS	NS
Trichloroethene, µg/L	NS	NS	NS	NS	NS	NS
Toluene, µg/L	NS	NS	NS	NS	NS	NS
Vinyl Chloride, µg/L	NS	NS	NS	NS	NS	NS
Total Confident VOCs, µg/L	NS	NS	NS	NS	NS	NS

Sampling Event	103	104	105
Date	9/2011	12/2011	3/2012
Field Influent pH, std pH units	NS	NS	NS
Total Suspended Solids, mg/L	NS	NS	NS
1,1-Dichloroethane, µg/L	NS	NS	NS
1,1-Dichloroethene, µg/L	NS	NS	NS
Cis - 1,2 - Dichloroethene, µg/L	NS	NS	NS
Methylene Chloride, µg/L	NS	NS	NS
1,1,1 - Trichloroethane, µg/L	NS	NS	NS
Trichloroethene, µg/L	NS	NS	NS
Toluene, µg/L	NS	NS	NS
Vinyl Chloride, µg/L	NS	NS	NS
Total Confident VOCs, µg/L	NS	NS	NS

NA = Not Applicable
NS = Not Sampled
Data Qualifiers: **U** - Undetectable at listed detection limit. **J** - Estimated value, less than the detection limit.
E - CC excedes calibration range. **D** - Identified in the secondary dilution factor. **B** - Analyte found in blank as well as sample.

Table 2
Effluent Analytical Results
Groundwater Treatment System
Byron Barrel and Drum Site
Byron, NY

Sampling Event	01/GW	02/GW	03/GW	04/GW	05/GW	06/GW
Date	7/28/2001	8/8/2001	8/18/2001	9/18/2001	9/27/2001	10/5/2001
Field Effluent pH, std pH units	8.44	8.44	8.5	8.38	8.38	8.32
Total Suspended Solids, mg/L	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
1,1-Dichloroethane, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cis - 1,2 - Dichloroethene, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene Chloride, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1 - Trichloroethane, µg/L	1.5 J	5.0 U	1.5 J	5.0 U	5.0 U	5.0 U
Trichloroethene, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl Chloride, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Sampling Event	07/GW	08/GW	09/GW	10/GW	11/GW	12/GW
Date	10/17/2001	11/8/2001	11/28/2001	12/13/2001	12/27/2001	1/18/2002
Field Effluent pH, std pH units	8.35	8.35	8.29	8.43	8.30	8.38
Total Suspended Solids, mg/L	4.0 U	4.0 U	8.0	4.0 U	4.0 U	4.0U
1,1-Dichloroethane, µg/L	5.0 U	5.0 U	5.0U	5.0 U	5.0 U	5.0U
1,1-Dichloroethene, µg/L	5.0 U	5.0 U	5.0U	5.0 U	5.0 U	5.0U
Cis - 1,2 - Dichloroethene, µg/L	5.0 U	5.0 U	5.0U	5.0 U	5.0 U	5.0U
Methylene Chloride, µg/L	5.0 U	5.0 U	5.0U	5.0 U	5.0 U	5.0U
1,1,1 - Trichloroethane, µg/L	5.0 U	5.0 U	5.0U	5.0 U	5.0 U	5.0U
Trichloroethene, µg/L	5.0 U	5.0 U	5.0U	5.0 U	5.0 U	5.0U
Toluene, µg/L	5.0 U	5.0 U	5.0U	5.0 U	5.0 U	5.0U
Vinyl Chloride, µg/L	5.0 U	5.0 U	5.0U	5.0 U	5.0 U	5.0U

Sampling Event	13/GW	14/GW	15/GW	16/GW	17/GW	18/GW
Date	1/30/2002	2/13/2002	2/23/2002	3/8/2002	3/20/2002	4/8/2002
Field Effluent pH, std pH units	8.39	8.31	8.22	8.39	8.47	8.05
Total Suspended Solids, mg/L	4.0U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
1,1-Dichloroethane, µg/L	5.0U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene, µg/L	5.0U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cis - 1,2 - Dichloroethene, µg/L	5.0U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene Chloride, µg/L	5.0U	5.0 U	5.0 U	5.0 U	1.3 J	2.8 B,J
1,1,1 - Trichloroethane, µg/L	5.0U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene, µg/L	5.0U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene, µg/L	5.0U	5.0 U	2.5J	5.0 U	5.0 U	5.0 U
Vinyl Chloride, µg/L	5.0U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Table 2
Effluent Analytical Results
Groundwater Treatment System
Byron Barrel and Drum Site
Byron, NY

Sampling Event	19/GW	20/GW	21/GW	22/GW	23/GW	24/GW
Date	4/24/2002	5/8/2002	5/21/2002	6/4/2002	6/13/2002	7/11/2002
Field Effluent pH, std pH units	8.0	8.08	8.23	8.23	8.16	8.06
Total Suspended Solids, mg/L	4.0 U	4.0	4.0 U	4.0 U	4.0 U	4.0 U
1,1-Dichloroethane, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cis - 1,2 - Dichloroethene, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene Chloride, µg/L	7.6 B	5.0 U	1.2 BJ	1.1 J	1.7 B,J	2.6 B,J
1,1,1 - Trichloroethane, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene, µg/L	1.2 J	5.0 U	5.0 U	5.0 U	1.5 J	5.0 U
Vinyl Chloride, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Sampling Event	25/GW	26/GW	27/GW	28/GW	29/GW	30/GW
Date	7/23/02	9/18/02	12/18/02	4/30/03	6/23/03	9/24/03
Field Effluent pH, std pH units	6.66	7.11	7.22	7.72	7.68	7.81
Total Suspended Solids, mg/L	4.0 U	4.0 U	4.0 U	NA	NA	NA
1,1-Dichloroethane, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cis - 1,2 - Dichloroethene, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene Chloride, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1 - Trichloroethane, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl Chloride, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Sampling Event	31/GW	32/GW	33/GW	34/GW	35/GW	36/GW
Date	12/2/03	3/30/04	6/16/04	9/14/04	12/14/04	3/22/05
Field Effluent pH, std pH units	7.63	7.47	7.86	7.61	6.93	6.97
Total Suspended Solids, mg/L	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cis - 1,2 - Dichloroethene, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene Chloride, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1 - Trichloroethane, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Trichloroethene, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl Chloride, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Table 2
Effluent Analytical Results
Groundwater Treatment System
Byron Barrel and Drum Site
Byron, NY

Sampling Event	37/GW	38/GW	39/GW	40/GW	41/GW	42/GW
Date	6/7/2005	9/13/2005	12/19/2005	3/27/2006	6/20/2006	9/14/2006
Field Effluent pH, std pH units	8.01	7.95	7.64	7.74	7.71	8.4
Total Suspended Solids, mg/L	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane, µg/L	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1-Dichloroethene, µg/L	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Cis - 1,2 - Dichloroethene, µg/L	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methylene Chloride, µg/L	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,1,1 - Trichloroethane, µg/L	1.0 U	5.0 U	0.58 J	5.0 U	5.0 U	5.0 U
Trichloroethene, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Toluene, µg/L	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Vinyl Chloride, µg/L	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U

Sampling Event	43/GW	44/GW	45/GW	47/GW	48/GW	49/GW
Date	12/14/2006	3/21/2007	6/27/2007	9/12/2007	12/2007	3/2008
Field Effluent pH, std pH units	8.36	8.44	8.39	8.63	NS	NS
Total Suspended Solids, mg/L	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	NS	NS
1,1-Dichloroethene, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	NS	NS
Cis - 1,2 - Dichloroethene, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	NS	NS
Methylene Chloride, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	NS	NS
1,1,1 - Trichloroethane, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	NS	NS
Trichloroethene, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	NS	NS
Toluene, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	NS	NS
Vinyl Chloride, µg/L	5.0 U	5.0 U	5.0 U	5.0 U	NS	NS

Sampling Event	50/GW	51/GW	52/GW	53/GW	54/GW	55/GW
Date	6/2008	9/2008	12/2008	3/2009	6/2009	9/2009
Field Effluent pH, std pH units	NS	NS	NS	NS	NS	NS
Total Suspended Solids, mg/L	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane, µg/L	NS	NS	NS	NS	NS	NS
1,1-Dichloroethene, µg/L	NS	NS	NS	NS	NS	NS
Cis - 1,2 - Dichloroethene, µg/L	NS	NS	NS	NS	NS	NS
Methylene Chloride, µg/L	NS	NS	NS	NS	NS	NS
1,1,1 - Trichloroethane, µg/L	NS	NS	NS	NS	NS	NS
Trichloroethene, µg/L	NS	NS	NS	NS	NS	NS
Toluene, µg/L	NS	NS	NS	NS	NS	NS
Vinyl Chloride, µg/L	NS	NS	NS	NS	NS	NS

Table 2
Effluent Analytical Results
Groundwater Treatment System
Byron Barrel and Drum Site
Byron, NY

Sampling Event	56/GW	57/GW	58/GW	59/GW	60/GW	61/GW
Date	12/2009	3/2010	6/2010	9/2010	12/2010	3/2011
Field Effluent pH, std pH units	NS	NS	NS	NS	NS	NS
Total Suspended Solids, mg/L	NA	NA	NA	NA	NA	NA
1,1-Dichloroethane, µg/L	NS	NS	NS	NS	NS	NS
1,1-Dichloroethene, µg/L	NS	NS	NS	NS	NS	NS
Cis - 1,2 - Dichloroethene, µg/L	NS	NS	NS	NS	NS	NS
Methylene Chloride, µg/L	NS	NS	NS	NS	NS	NS
1,1,1 - Trichloroethane, µg/L	NS	NS	NS	NS	NS	NS
Trichloroethene, µg/L	NS	NS	NS	NS	NS	NS
Toluene, µg/L	NS	NS	NS	NS	NS	NS
Vinyl Chloride, µg/L	NS	NS	NS	NS	NS	NS

Sampling Event	62/GW	63/GW	64/GW	65/GW
Date	6/2011	9/2011	12/2011	3/2012
Field Effluent pH, std pH units	NS	NS	NS	NS
Total Suspended Solids, mg/L	NA	NA	NA	NA
1,1-Dichloroethane, µg/L	NS	NS	NS	NS
1,1-Dichloroethene, µg/L	NS	NS	NS	NS
Cis - 1,2 - Dichloroethene, µg/L	NS	NS	NS	NS
Methylene Chloride, µg/L	NS	NS	NS	NS
1,1,1 - Trichloroethane, µg/L	NS	NS	NS	NS
Trichloroethene, µg/L	NS	NS	NS	NS
Toluene, µg/L	NS	NS	NS	NS
Vinyl Chloride, µg/L	NS	NS	NS	NS

NA = Not Applicable

NS = Not Sampled

Data Qualifiers: **U** - Undetectable at listed detection limit. **J** - Estimated value, less than the detection limit.

E - CC excedes calibration range. **D** - Identified in the secondary dilution factor. **B** - Analyte found in blank as well as sample.

Table 3
Field Parameters
Quarterly Sampling Event
March 21, 2012
Byron Barrel and Drum Site
Byron, NY

Parameter / Units	Time	Temp. °C	ORP mV	pH Std. Units	TDS g/L	DO mg/L	Spec. Cond. mS/cm
MW-1-9/GW41	930	9.1	-275	7.53	0.6	0.73	915
	935	9.2	-279	7.50	0.6	0.70	917
	940	9.2	-281	7.49	0.6	0.69	920
	945	9.2	-283	7.48	0.6	0.67	923
	950	9.2	-283	7.46	0.6	0.65	923
	955	9.2	-284	7.45	0.6	0.64	925
MW-4-9/GW41	1020	10.6	-253	7.29	0.6	0.42	946
	1025	10.6	-254	7.29	0.6	0.41	950
	1030	10.6	-256	7.29	0.6	0.40	952
	1035	10.7	-256	7.28	0.6	0.39	953
	1040	10.7	-257	7.28	0.6	0.38	955
	1045	10.8	-257	7.28	0.6	0.37	956
MW-10B-9/GW41	1110	10.2	-234	7.00	1.3	0.43	2000
	1115	10.2	-234	7.00	1.3	0.41	1999
	1120	10.2	-235	7.00	1.3	0.40	1990
	1125	10.1	-237	6.99	1.3	0.39	1980
	1130	10.2	-237	6.99	1.3	0.38	1980
	1135	10.3	-238	6.99	1.3	0.37	1980
MW-21-9/GW41	1425	11.8	-185	7.62	0.8	0.76	1232
	1430	11.6	-187	7.60	0.8	0.74	1220
	1435	11.7	-188	7.57	0.8	0.72	1210
	1440	11.5	-189	7.57	0.8	0.70	1210
	1445	11.6	-189	7.57	0.8	0.68	1210
MW-Residential/GW41	1340	12.8	-190	8.35	0.2	0.83	255
	1345	12.8	-191	8.37	0.2	0.80	249
	1350	12.7	-191	8.40	0.2	0.78	247
	1355	12.7	-191	8.40	0.2	0.77	247
	1400	12.8	-191	8.41	0.2	0.75	245
PW-1/GW41	1245	11.1	-150	7.30	2.3	0.48	3600
PW-2/GW41	1210	10.7	-146	6.85	3.0	0.73	4670
PW-3/GW41	1320	10.6	-157	7.25	1.0	0.54	1530

Note: Flow through cell was calibrated for all chemistry parameters prior to gauging.

Table 4
Groundwater Elevations
March 2012 Sampling Event
Byron Barrel and Drum Site
Byron, NY

Operator: P. Little

Date: 3/21/20112

Pumping Wells	DTW	TOC Elevation	GW Elevation	TD	WC, ft.
PW-1	7.93	642.82	634.89	-	-
PW-2	6.36	641.34	634.98	-	-
PW-3	6.15	641.11	634.96	-	-
Monitoring Wells					
MW-1	4.82	639.63	634.81	11.78	6.96
MW-2	11.31	646.36	635.05	15.14	3.83
MW-4	3.65	638.56	634.91	11.43	7.78
MW-10B	9.36	644.44	635.08	20.33	10.97
MW-21	8.18	642.52	634.34	27.82	19.64
Residential	15.97	650.78	634.81	34.88	18.91
Piezometers					
PZ-1	6.98	643.11	636.13	26.87	19.89
PZ-2	7.46	642.39	634.93	26.95	19.49

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Table 5
Historic Groundwater Quality - Select Analytes
Byron Barrel and Drum Site
Byron, NY

Sample Location ID	Date	Top of Casing (ft)	Depth to Water (ft)	Groundwater Elevation (ft)	1,1-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	Methylene Chloride	1,1,1-Trichloroethane	Trichloroethene	Toluene	Vinyl Chloride
		Groundwater Cleanup Levels (µg/L):			5	5	NA	5	5	5	5	2
MW-1	4/29/2003	639.63	4.53	635.10	**57**	**34**	NA	25 U	**1300 J**	25 U	25 U	25 U
	6/24/2003	639.63	5.36	634.27	**32**	**24**	NA	5 U	**720**	4 J	5 U	5 U
	9/24/2003	639.63	6.72	632.91	24 J	17 J	NA	25 U	**580**	25 U	25 U	25 U
	12/3/2003	639.63	5.53	634.10	33 J	28 J	NA	40 U	**860 J**	40 U	40 U	40 U
	3/30/2004	639.63	3.40	636.23	30 J	**31**	NA	25 U	**830 J**	25 UJ	25 U	25 U
	6/16/2004	639.63	4.20	635.43	**26**	22 J	NA	25 UJ	**870**	25 U	25 U	25 U
	9/14/2004	639.63	4.56	635.07	**28**	**26**	NA	25 U	**730**	25 U	25 U	25 U
	12/14/2004	639.63	4.61	635.02	**31**	**26**	NA	25 U	**760**	25 UJ	25 U	25 U
	3/22/2005	639.63	4.32	635.31	**41**	**110**	NA	5 U	**830**	**5**	5 U	5 U
	6/7/2005	639.63	5.45	634.18	10 J	14 J	NA	13 J	**340**	50 U	50 UJ	50 U
	9/13/2005	639.63	6.89	632.74	**14**	**16**	NA	5 U	**410**	2 J	5 UJ	5 U
	12/20/2005	639.63	4.78	634.85	24 J	24 J	NA	40 U	**580**	40 U	40 U	40 U
	3/26/2006	639.63	5.07	634.56	**29**	**24**	NA	5 U	**540**	4 J	5 U	5 U
	6/22/2006	639.63	5.68	633.95	**7**	**9**	NA	5 U	**220**	2 J	5 U	5 U
	9/14/2006	639.63	5.15	634.48	5 J	**6** J	NA	10 U	**190**	2 J	10 U	10 U
	12/7/2006	639.63	4.54	635.09	**6** J	**9** J	NA	10 U	**170**	2 J	10 U	10 U
	3/22/2007	639.63	4.19	635.44	2 J	4 J	NA	10 U	**100**	2 J	10 U	10 U
	6/14/2007	639.63	5.30	634.33	**6**	3 J	NA	5 U	**200**	2 J	5 U	5 U
	9/12/2007	639.63	6.56	633.07	**7** J	3 J	NA	20 U	**200**	20 U	20 U	20 U
	12/19/2007	639.63	4.95	634.68	**10**	2 J	NA	10 U	**200**	2 J	10 U	10 U
	3/26/2008	639.63	4.33	635.30	**8** J	3 J	NA	20 U	**210**	20 U	20 U	20 U
	6/18/2008	639.63	4.83	634.80	**19**	3 J	NA	10 U	**130**	1 J	10 U	10 U
	9/25/2008	639.63	5.25	634.38	**20**	1 J	NA	10 U	**47**	1 J	10 U	10 U
	12/11/2008	639.63	4.70	634.93	**55**	2 J	NA	5 U	**54**	2 J	5 U	5 U
	3/30/2009	639.63	4.57	635.06	**36**	3.5 J	NA	5 U	**160**	1.6 J	5 U	0.46 J
	6/23/2009	639.63	5.08	634.55	**44**	4.1 J	NA	5 U	**110**	3.2 J	5 U	0.45 J
	9/25/2009	639.63	5.57	634.06	**51**	**7.3**	NA	5 U	**160**	1.8 J	5 U	5 U
	12/9/2009	639.63	4.61	635.02	**76**	**7.2** J	NA	10 U	**290**	2.1 J	10 U	10 U
	3/11/2010	639.63	4.28	635.35	**39**	**8** J	NA	20 U	**200**	20 U	20 U	20 U
	6/17/2010	639.63	4.81	634.82	**39**	4.2 J	NA	5 U	**210**	1.6 J	5 U	1.4 J
	9/23/2010	639.63	4.90	634.73	**75**	2.4 J	NA	5 U	**22**	1.2 J	5 U	5 U
	12/20/2010	639.63	3.91	635.72	**77**	5.2	NA	5 U	**130**	2.1 J	5 U	5 U
	3/28/2011	639.63	4.02	635.61	**65**	22	NA	5 U	**180**	1.4 J	5 U	5 U
	6/24/2011	639.63	4.55	635.08	**43**	1.7 J	NA	5 U	**25**	1.3 J	5 U	5 U
	9/20/2011	639.63	5.13	634.50	**95**	3.8 J	NA	20 U	**3.6** J	20 U	2.6 J	20 U
	12/16/2011	639.63	4.43	635.20	**40**	2 J	NA	25 U	4.9 J	25 U	25 U	25 U
	3/21/2012	639.63	4.82	634.81	**32**	2.8 J	NA	5 U	**11**	0.67 J	5 U	5 U

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Table 5
Historic Groundwater Quality - Select Analytes
Byron Barrel and Drum Site
Byron, NY

Sample Location ID	Date	Top of Casing (ft)	Depth to Water (ft)	Groundwater Elevation (ft)	1,1-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	Methylene Chloride	1,1,1-Trichloroethane	Trichloroethene	Toluene	Vinyl Chloride
		Groundwater Cleanup Levels (µg/L):			5	5	NA	5	5	5	5	2
MW-4	4/29/2003	638.56	4.50	634.06	**31**	13 J	NA	25 U	**530**	25 U	25 U	25 U
	6/24/2003	638.56	4.58	633.98	5 UJ	5 UJ	NA	5 U	17 J	4 J	5 U	5 UJ
	9/24/2003	638.56	5.91	632.65	**35**	9 J	NA	10 U	**240**	8 J	10 U	10 U
	12/3/2003	638.56	4.98	633.58	**65**	17 J	NA	20 U	**550**	11 J	20 U	20 U
	3/30/2004	638.56	4.15	634.41	**12**	**5**	NA	5 U	**130**	3 J	5 U	5 U
	6/16/2004	638.56	3.64	634.92	15 J	25 UJ	NA	25 UJ	**150**	25 U	25 U	25 U
	9/14/2004	638.56	3.71	634.85	11 J	25 U	NA	25 U	**87**	25 U	25 U	25 U
	12/14/2004	638.56	3.97	634.59	11 J	25 U	NA	25 U	**67**	25 U	25 U	25 U
	3/22/2005	638.56	3.55	635.01	50 U	50 U	NA	50 UJ	**87**	50 U	50 U	50 U
	6/7/2005	638.56	4.25	634.31	5 U	5 U	NA	5 U	**8**	1 J	5 U	5 U
	9/13/2005	638.56	5.84	632.72	5 U	5 U	NA	5 U	**11**	2 J	5 U	5 U
	12/20/2005	638.56	4.75	633.81	4 J	25 U	NA	25 U	**48**	25 U	25 U	25 U
	3/25/2006	638.56	4.32	634.24	5 U	5 U	NA	5 U	**8**	1 J	5 U	5 U
	6/22/2006	638.56	4.50	634.06	5 U	5 U	NA	5 U	**9**	1 J	5 U	5 U
	9/14/2006	638.56	3.92	634.64	5 U	5 U	NA	5 U	**13**	2 J	5 U	5 U
	12/7/2006	638.56	3.64	634.92	25 U	25 U	NA	25 U	6 J	25 U	25 U	25 U
	3/22/2007	638.56	3.24	635.32	5 U	5 U	NA	5 U	**10**	1 J	5 U	5 U
	6/14/2007	638.56	4.50	634.06	5 U	5 U	NA	5 U	**10**	1 J	5 U	5 U
	9/12/2007	638.56	5.30	633.26	5 U	5 U	NA	5 U	**14**	2 J	5 U	5 U
	12/19/2007	638.56	3.79	634.77	5 U	5 U	NA	5 U	**16**	1 J	5 U	5 U
	3/26/2008	638.56	2.99	635.57	4 J	20 U	NA	20 U	**31**	2 J	20 U	20 U
	6/18/2008	638.56	3.48	635.08	4 J	20 U	NA	20 U	**16** J	1 J	20 U	20 U
	9/25/2008	638.56	4.29	634.27	**11**	10 U	NA	10 U	**15**	2 J	10 U	10 U
	12/11/2008	638.56	3.61	634.95	**37**	20 U	NA	20 U	**49**	5 J	20 U	20 U
	3/30/2009	638.56	3.05	635.51	**45**	5 U	NA	**9.6**	**160**	4	5 U	5 U
	6/23/2009	638.56	3.58	634.98	**19**	0.98 J	NA	5 U	**39**	3.5 J	5 U	5 U
	9/25/2009	638.56	4.18	634.38	**21** J	25 U	NA	25 U	**21** J	25 U	25 U	25 U
	12/9/2009	638.56	2.71	635.85	**39**	25 U	NA	25 U	**11** J	25 U	25 U	25 U
	3/11/2010	638.56	3.08	635.48	**33**	2	NA	25 U	**38**	25 U	25 U	25 U
	6/17/2010	638.56	3.22	635.34	**32**	25 U	NA	25 U	**8.4** J	25 U	25 U	25 U
	9/23/2010	638.56	3.76	634.80	**27**	0.59 J	NA	5 U	**9.5**	5 U	5 U	5 U
	12/20/2010	638.56	2.98	635.58	**19**	1.2 J	NA	5 U	5 U	0.59 J	5 U	5 U
	3/28/2011	638.56	2.54	636.02	**19**	1.7 J	NA	5 U	1.3 J	0.9 J	5 U	5 U
	6/24/2011	638.56	3.38	635.18	**18**	2.1 J	NA	5 U	5 U	0.82 J	5 U	5 U
	9/20/2011	638.56	4.10	634.46	**21**	2.0 J	NA	20 U	20 U	20 U	2.8 J	20 U
	12/16/2011	638.56	3.55	635.01	**8.4** J	20 U	NA	20 U	20 U	20 U	20 U	20 U
	3/21/2012	638.56	3.65	634.91	**14**	3.2 J	NA	5 U	2.3 J	1.2 J	5	1.0 J

Table 5
Historic Groundwater Quality - Select Analytes
Byron Barrel and Drum Site
Byron, NY

Sample Location ID	Date	Top of Casing (ft)	Depth to Water (ft)	Groundwater Elevation (ft)	1,1-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	Methylene Chloride	1,1,1-Trichloroethane	Trichloroethene	Toluene	Vinyl Chloride
		Groundwater Cleanup Levels (µg/L):			5	5	NA	5	5	5	5	2
MW-10B	4/30/2003	644.44	9.28	635.16	5 U	5 U	NA	5 U	**8**	5 U	5 U	5 U
	6/23/2003	644.44	9.39	635.05	5 U	5 U	NA	5 U	3 J	5 U	5 U	5 U
	9/24/2003	644.44	10.93	633.51	5 U	5 U	NA	5 U	**7**	5 U	5 U	5 U
	3/30/2004	644.44	8.99	635.45	5 U	5 U	NA	5 U	**17**	5 U	5 U	5 U
	9/14/2004	644.44	8.76	635.68	5 U	5 U	NA	5 U	**14**	5 U	5 U	5 U
	3/22/2005	644.44	8.69	635.75	5 U	5 U	NA	5 U	**11**	5 U	5 U	5 U
	9/13/2005	644.44	10.84	633.60	5 U	5 U	NA	5 U	**5**	5 U	5 U	5 U
	3/25/2006	644.44	9.28	635.16	5 U	5 U	NA	5 U	**6**	5 U	5 U	5 U
	9/14/2006	644.44	9.82	634.62	5 U	5 U	NA	5 U	**6**	5 U	5 U	5 U
	3/22/2007	644.44	8.44	636.00	5 U	5 U	NA	5 U	**6**	5 U	5 U	5 U
	9/12/2007	644.44	10.98	633.46	5 U	5 U	NA	5 U	1 J	5 U	5 U	5 U
	12/19/2007	644.44	9.54	634.90	64 J	120 U	NA	31 J	**1300**	120 U	120 U	120 U
	3/26/2008	644.44	8.68	635.76	5 U	5 U	NA	5 U	**8**	5 U	5 U	5 U
	6/18/2008	644.44	9.19	635.25	0.4 J	5 U	NA	5 U	**5**	5 U	5 U	5 U
	9/25/2008	644.44	9.81	634.63	5 U	5 U	NA	5 U	1 J	5 U	5 U	5 U
	12/11/2008	644.44	9.34	635.10	0.8 J	5 U	NA	5 U	2 J	5 U	5 U	5 U
	3/30/2009	644.44	8.79	635.65	5 U	5 U	NA	**8.8**	4.1	5 U	5 U	5 U
	6/23/2009	644.44	9.08	635.36	0.53 J	5 U	NA	5 U	0.91 J	0.97 J	5 U	5 U
	9/25/2009	644.44	9.98	634.46	25 U	25 U	NA	25 U	25 U	25 U	25 U	25 U
	12/9/2009	644.44	9.28	635.16	**33**	25 U	NA	**10** J	25 U	25 U	25 U	25 U
	3/11/2010	644.44	8.88	635.56	**6.6**	5 U	NA	**1.6** J	5 U	5 U	5 U	5 U
	6/17/2010	644.44	8.97	635.47	**1.3** J	5 U	NA	5 U	5 U	5 U	5 U	5 U
	9/23/2010	644.44	9.53	634.91	**9.6**	5 U	NA	5 U	5 U	5 U	5 U	5 U
	12/20/2010	644.44	8.71	635.73	**62**	3 J	NA	0.9 J	**37**	0.93 J	5 U	5 U
	3/28/2011	644.44	8.17	636.27	**7.6**	1.1 J	NA	5 U	2.8 J	0.52 J	5 U	5 U
	6/24/2011	644.44	9.02	635.42	0.48 J	5 U	NA	5 U	5 U	5 U	5 U	5 U
	9/20/2011	644.44	9.89	634.55	**10** J	20 U	NA	20 U	20 U	20 U	2.5 J	20 U
	12/16/2011	644.44	9.31	635.13	**24** J	25 U	NA	25 U	25 U	25 U	25 U	25 U
	3/21/2012	644.44	9.36	635.08	**33**	0.55 J	NA	5 U	1.1 J	0.5 J	5 U	5 U

Table 5
Historic Groundwater Quality - Select Analytes
Byron Barrel and Drum Site
Byron, NY

Sample Location ID	Date	Top of Casing (ft)	Depth to Water (ft)	Groundwater Elevation (ft)	1,1-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	Methylene Chloride	1,1,1-Trichloroethane	Trichloroethene	Toluene	Vinyl Chloride
		Groundwater Cleanup Levels (µg/L):			5	5	NA	5	5	5	5	2
MW-21	3/26/1999	NA	NA	NA	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U
	3/21/2002	642.52	7.70	634.82	25 U	25 U	NA	25 U	25 U	25 U	25 U	25 U
	6/12/2002	642.52	7.69	634.83	25 U	25 U	NA	25 U	25 U	25 U	**5 BJ**	25 U
	9/17/2002	642.52	9.50	633.02	5 U	5 UJ	NA	5 UJ	5 U	5 U	5 U	5 U
	12/17/2002	642.52	8.23	634.29	5 U	5 UJ	NA	5 U	5 UJ	5 U	5 U	5 U
	4/30/2003	642.52	7.91	634.61	25 U	25 U	NA	25 U	25 U	25 U	25 U	25 U
	3/30/2004	642.52	7.56	634.96	5 UJ	5 UJ	NA	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ
	3/22/2005	642.52	7.42	635.10	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
	3/25/2006	642.52	7.78	634.74	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
	3/22/2007	642.52	7.38	635.14	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
	12/19/2007	642.52	7.81	634.71	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
	3/26/2008	642.52	7.34	635.18	20 U	20 U	NA	20 U	20 U	20 U	20 U	20 U
	3/30/2009	642.52	7.74	634.78	5 U	5 U	NA	**9.8**	5 U	5 U	5 U	5 U
	3/11/2010	642.52	7.52	635.00	5 U	5 U	NA	5 U	5 U	5 U	5 U	5 U
	3/28/2011	642.52	7.32	635.20	5 U	5 U	NA	5 U	5 U	5 U	5 U	5 U
	3/21/2012	642.52	8.18	634.34	5 U	5 U	NA	5 U	5 U	5 U	5 U	5 U
MW-Residential	3/21/2002	650.78	15.79	634.99	5 U	5 U	NA	5 U	5 U	5 U	5 U	5 U
	6/12/2002	650.78	15.62	635.16	5 U	5 U	NA	5 U	5 U	5 U	5 U	5 U
	9/17/2002	650.78	17.50	633.28	5 U	5 UJ	NA	5 UJ	5 U	5 U	5 U	5 U
	12/17/2002	650.78	16.52	634.26	5 U	5 U	NA	5 U	5 U	5 U	5 U	5 U
	4/30/2003	650.78	17.74	633.04	5 U	5 U	NA	5 U	5 U	5 U	5 U	5 U
	3/30/2004	650.78	15.47	635.31	5 U	5 U	NA	5 U	5 U	5 U	5 U	5 U
	3/22/2005	650.78	15.24	635.54	5 U	5 U	NA	5 U	5 U	5 U	5 U	5 U
	3/25/2006	650.78	15.75	635.03	5 U	5 U	NA	5 U	5 U	5 U	5 U	5 U
	3/22/2007	650.78	15.09	635.69	5 U	5 U	NA	5 U	5 U	5 U	5 U	5 U
	3/26/2008	650.78	15.25	635.53	5 U	5 U	NA	5 U	5 U	5 U	5 U	5 U
	3/30/2009	650.78	15.28	635.50	5 U	5 U	NA	5 U	5 U	5 U	5 U	5 U
	3/11/2010	650.78	15.44	635.34	5 U	5 U	NA	5 U	5 U	5 U	5 U	5 U
	3/28/2011	650.78	14.80	635.98	5 U	5 U	NA	5 U	5 U	5 U	5 U	5 U
	3/21/2012	650.78	15.97	634.81	5 U	5 U	NA	5 U	5 U	5 U	5 U	5 U

Table 5
Historic Groundwater Quality - Select Analytes
Byron Barrel and Drum Site
Byron, NY

Sample Location ID	Date	Top of Casing (ft)	Depth to Water (ft)	Groundwater Elevation (ft)	1,1-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	Methylene Chloride	1,1,1-Trichloroethane	Trichloroethene	Toluene	Vinyl Chloride
		Groundwater Cleanup Levels (µg/L):			5	5	NA	5	5	5	5	2
PW-1	4/30/2003	642.82	20.96	621.86	**11**	2 J	5 U	5 U	**180**	2 J	5 U	5 U
	6/23/2003	642.82	22.41	620.41	**12**	2 J	5 U	5 U	**190**	2 J	5 U	5 U
	9/24/2003	642.82	22.59	620.23	**8**	5 U	5 U	5 U	**120**	5 U	5 U	5 U
	12/3/2003	642.82	21.74	621.08	**8**	2 J	5 U	5 U	**150**	2 J	5 U	5 U
	3/30/2004	642.82	21.80	621.02	**6**	2 J	5 U	5 U	**150**	5 U	5 U	5 U
	6/16/2004	642.82	19.08	623.74	**13**	3 J	5 U	5 UJ	**380**	2 J	5 U	5 U
	9/14/2004	642.82	20.62	622.20	**10**	2 J	5 U	5 U	**210**	5 U	5 U	5 U
	12/14/2004	642.82	21.23	621.59	**6**	2 J	5 U	5 U	**140**	5 U	5 U	5 U
	3/22/2005	642.82	22.65	620.17	**15**	**23**	5 U	5 U	**200 J**	2 J	5 U	5 U
	6/7/2005	642.82	21.50	621.32	**10**	2 J	10 U	2 U	**59**	1 J	10 U	10 U
	9/13/2005	642.82	21.73	621.09	3 J	0.9 J	5 U	5 U	**73**	0.5 J	5 U	5 U
	12/19/2005	642.82	20.98	621.84	**9**	2 J	5 U	5 U	**140**	2 J	5 U	5 U
	3/26/2006	642.82	21.44	621.38	4 J	0.9 J	5 U	5 U	**76**	0.6 J	5 U	5 U
	6/22/2006	642.82	21.28	621.54	4 J	1 J	5 U	5 U	**77**	0.8 J	5 U	5 U
	9/14/2006	642.82	8.23	634.59	**9** DJ	25 U	25 U	25 U	**230**	25 U	25 U	25 U
	12/7/2006	642.82	20.82	622.00	**6** J	2 J	10 U	10 U	**160**	1 J	10 U	10 U
	3/22/2007	642.82	14.50	628.32	**6** J	2 J	10 U	10 U	**170**	1 J	10 U	10 U
	6/14/2007	642.82	13.43	629.39	**9** J	2 J	10 U	10 U	**280**	2 J	10 U	10 U
	9/12/2007	642.82	9.43	633.39	**5** J	10 U	10 U	10 U	**130**	10 U	10 U	10 U
	12/21/2007[1]	642.82	7.95	634.87	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U
	3/26/2008	642.82	7.11	635.71	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
	6/18/2008	642.82	7.19	635.63	**7**	100 U	100 U	100 U	**7**	100 U	100 U	100 U
	9/25/2008	642.82	8.39	634.43	**12**	5 U	5 U	5 U	3 J	0.6 J	2 J	5 U
	12/11/2008	642.82	7.91	634.91	**32**	5 U	5 U	2 J	2 J	1 J	0.8 J	5 U
	3/30/2009	642.82	7.40	635.42	**10**	5 U	5 U	**16**	5 U	5 U	5 U	5 U
	6/23/2009	642.82	8.73	634.09	**6.8**	5 U	5 U	5 U	5 U	1.2 J	0.81 J	5 U
	9/25/2009	642.82	9.29	633.53	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
	12/9/2009	642.82	9.15	633.67	50 U	50 U	50 U	50 U	50 U	50 U	**44** J	50 U
	3/11/2010	642.82	8.32	634.50	50 U	50 U	50 U	50 U	50 U	50 U	**16** J	50 U
	6/17/2010	642.82	8.63	634.19	100 U	100 U	100 U	100 U	100 U	100 U	**16** J	100 U
	9/23/2010	642.82	8.07	634.75	**16** J	50 U	50 U	50 U	50 U	50 U	**11** J	50 U
	12/20/2010	642.82	7.26	635.56	**23** J	50 U	50 U	50 U	50 U	50 U	**5.3** J	50 U
	3/28/2011	642.82	6.79	636.03	**24** J	25 U	25 U	25 U	25 U	25 U	3.1 J	25 U
	6/24/2011	642.82	8.50	634.32	**13** J	25 U	25 U	2.6 J	25 U	25 U	2.6 J	25 U
	9/20/2011	642.82	8.49	634.33	**9.4** J	20 U	20 U	2.2 J	20 U	20 U	4.7 J	20 U
	12/16/2011	642.82	7.83	634.99	**13** J	50 U	50 U	50 U	50 U	50 U	50 U	50 U
	3/21/2012	642.82	7.93	634.89	**10** J	5 U	5 U	5 U	5 U	5 U	2.5 J	5 U

Sustainable Resources Group

Table 5
Historic Groundwater Quality - Select Analytes
Byron Barrel and Drum Site
Byron, NY

Sample Location ID	Date	Top of Casing (ft)	Depth to Water (ft)	Groundwater Elevation (ft)	1,1-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	Methylene Chloride	1,1,1-Trichloroethane	Trichloroethene	Toluene	Vinyl Chloride
		Groundwater Cleanup Levels (µg/L):			5	5	NA	5	5	5	5	2
PW-2	4/30/2003	641.34	16.82	624.52	**11**	**6**	5 U	5 U	**200**	2 J	5 U	5 U
	6/23/2003	641.34	19.41	621.93	**8**	**5**	5 U	5 U	**180**	5 U	5 U	5 U
	9/24/2003	641.34	17.45	623.89	**6**	2 J	5 U	5 U	**120**	5 U	5 U	5 U
	12/3/2003	641.34	18.78	622.56	**6**	3 J	5 U	5 U	**160**	5 U	5 U	5 U
	3/30/2004	641.34	19.24	622.10	4 J	3 J	5 U	5 U	**140**	5 U	5 U	5 U
	6/16/2004	641.34	18.58	622.76	**5**	5 U	5 U	5 UJ	**120**	5 U	5 U	5 U
	9/14/2004	641.34	18.25	623.09	**5**	4 J	5 U	5 U	**160**	5 U	5 U	5 U
	12/14/2004	641.34	17.63	623.71	**8**	**5**	5 U	5 U	**160**	2 J	5 U	5 U
	3/22/2005	641.34	19.33	622.01	**5**	**11**	5 U	5 U	**140**	5 U	5 U	5 U
	6/7/2005	641.34	19.40	621.94	3 J	2 J	5 U	5 U	**70**	1 J	5 U	5 U
	9/13/2005	641.34	19.52	621.82	3 J	3 J	5 U	5 U	**94 J**	2 J	5 U	5 U
	12/19/2005	641.34	17.35	623.99	1 J	5 U	5 U	5 U	**30**	0.5 J	5 U	5 U
	3/26/2006	641.34	17.22	624.12	**5**	1 J	5 U	5 U	**54**	0.8 J	5 U	5 U
	6/22/2006	641.34	18.59	622.75	4 J	2 J	10 U	10 BL	**170**	1 J	10 U	10 U
	9/14/2006	641.34	6.75	634.59	3 DJ	1 DJ	10 U	10 U	**92**	1 DJ	10 U	10 U
	12/7/2006	641.34	6.11	635.23	**9** DJ	3 DJ	10 U	10 U	**230**	2 J	10 U	10 U
	3/22/2007	641.34	4.19	637.15	**8** J	4 J	10 U	10 U	**90**	1 J	10 U	10 U
	6/14/2007	641.34	4.72	636.62	**8** J	2 J	20 U	20 U	**270**	20 U	20 U	20 U
	9/12/2007	641.34	7.97	633.37	**5** J	1 J	10 U	10 U	**140**	10 U	10 U	10 U
	12/21/2007[1]	641.34	6.31	635.03	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U	2000 U
	3/26/2008	641.34	4.19	637.15	250 U	250 U	250 U	250 U	**30** J	250 U	**29** J	250 U
	6/18/2008	641.34	4.24	637.10	250 U	250 U	250 U	250 U	250 U	250 U	250 U	250 U
	9/25/2008	641.34	6.92	634.42	**14**	5 U	5 U	5 U	5 U	0.7 J	3 J	5 U
	12/11/2008	641.34	7.39	633.95	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
	3/30/2009	641.34	5.78	635.56	5 U	5 U	5 U	**16**	5 U	5 U	5 U	5 U
	6/23/2009	641.34	7.52	633.82	0.41 J	5 U	5 U	**5** U	5 U	1.3 J	1.3 J	5 U
	9/25/2009	641.34	7.86	633.48	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
	12/9/2009	641.34	5.78	635.56	50 U	50 U	50 U	50 U	50 U	50 U	**19** J	50 U
	3/11/2010	641.34	5.28	636.06	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
	6/17/2010	641.34	6.22	635.12	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
	9/23/2010	641.34	6.50	634.84	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
	12/20/2010	641.34	5.58	635.76	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
	3/28/2011	641.34	5.21	636.13	**6.0** J	25 U	25 U	25 U	25 U	25 U	25 U	25 U
	6/24/2011	641.34	6.23	635.11	**6.2** J	5 U	5 U	2.6 J	5 U	5 U	2.6 J	5 U
	9/20/2011	641.34	6.88	634.46	**9.8** J	20 U	20 U	20 U	20 U	20 U	9.8 J	20 U
	12/16/2011	641.34	6.22	635.12	**7.4** J	50 U	50 U	50 U	50 U	50 U	50 U	50 U
	3/21/2012	641.34	6.36	634.98	**5.9** J	5 U	5 U	5 U	5 U	5 U	1.8 U	5 U

Table 5
Historic Groundwater Quality - Select Analytes
Byron Barrel and Drum Site
Byron, NY

Sample Location ID	Date	Top of Casing (ft)	Depth to Water (ft)	Groundwater Elevation (ft)	1,1-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	Methylene Chloride	1,1,1-Trichloroethane	Trichloroethene	Toluene	Vinyl Chloride
		Groundwater Cleanup Levels (µg/L):			5	5	NA	5	5	5	5	2
PW-3	4/30/2003	641.11	19.46	621.65	5 U	5 U	5 U	5 U	3 J	5 U	5 U	5 U
	6/23/2003	641.11	18.55	622.56	5 U	5 U	5 U	5 U	3 J	5 U	5 U	5 U
	9/24/2003	641.11	20.97	620.14	5 U	5 U	5 U	5 U	2 J	5 U	5 U	5 U
	12/3/2003	641.11	20.28	620.83	5 U	5 U	5 U	5 U	3 J	5 U	5 U	5 U
	3/30/2004	641.11	20.52	620.59	5 U	5 U	5 U	5 U	2 J	5 U	5 U	5 U
	6/16/2004	641.11	19.65	621.46	5 U	5 U	5 U	5 UJ	2 J	5 U	5 U	5 U
	9/14/2004	641.11	20.91	620.20	5 U	5 U	5 U	5 U	2 J	5 U	5 U	5 U
	12/14/2004	641.11	18.33	622.78	5 U	5 U	5 U	5 U	2 J	5 U	5 U	5 U
	3/22/2005	641.11	22.17	618.94	5 U	5 U	5 U	5 U	2 J	5 U	5 U	5 U
	6/7/2005	641.11	20.30	620.81	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
	9/13/2005	641.11	21.52	619.59	5 U	5 U	5 U	5 U	1 J	5 U	5 U	5 U
	12/19/2005	641.11	20.36	620.75	5 U	5 U	5 U	5 U	1 J	5 U	5 U	5 U
	3/26/2006	641.11	22.31	618.80	5 U	5 U	5 U	5 U	1 J	5 U	5 U	5 U
	6/22/2006	641.11	20.72	620.39	5 U	5 U	5 U	5 U	1 J	5 U	5 U	5 U
	9/14/2006	641.11	6.53	634.58	5 U	5 U	5 U	5 U	2 J	5 U	5 U	5 U
	12/7/2006	641.11	7.81	633.30	**6** DJ	2 DJ	5 U	5 U	**170**	1 J	5 U	5 U
	3/22/2007	641.11	5.45	635.66	**7**	4 J	5 U	5 U	**210**	1 J	5 U	5 U
	6/14/2007	641.11	5.18	635.93	**9** J	3 J	20 U	20 U	**260**	20 U	20 U	20 U
	9/12/2007	641.11	7.73	633.38	**4** J	1 J	10	10	**130**	10 U	10 U	10 U
	12/21/2007	641.11	6.23	634.88	NA	NA	NA	NA	NA	NA	NA	NA
	4/10/2008	641.11	5.48	635.63	0.9 J	5 U	5 U	5 U	**24**	5 U	5 U	5 U
	6/18/2008	641.11	5.53	635.58	0.6 J	5 U	5 U	5 U	**24**	5 U	5 U	5 U
	9/25/2008	641.11	6.62	634.49	5 U	5 U	5 U	5 U	**22**	5 U	5 U	5 U
	12/11/2008	641.11	6.04	635.07	5 U	5 U	5 U	5 U	**14**	5 U	5 U	5 U
	3/30/2009	641.11	5.64	635.47	5 U	5 U	5 U	5 U	**18**	5 U	5 U	5 U
	6/23/2009	641.11	7.07	634.04	0.41 J	5 U	5 U	5 U	**16**	0.77 J	5 U	5 U
	9/25/2009	641.11	6.80	634.31	5 U	5 U	5	5 U	**9**	5 U	5 U	5 U
	12/9/2009	641.11	5.99	635.12	50 U	50 U	50 U	**16** J	**7.2** J	50 U	50 U	50 U
	3/11/2010	641.11	5.83	635.28	50 U	50 U	50 U	**6.6** J	**5.1** J	50 U	50 U	50 U
	6/17/2010	641.11	5.83	635.28	100 U	100 U	100 U	100 U	100 U	100 U	100 U	100 U
	9/23/2010	641.11	6.23	634.88	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
	12/20/2010	641.11	5.49	635.62	20 J	100 U	100 U	13 J	100 U	100 U	100 U	100 U
	3/28/2011	641.11	5.00	636.11	25 U	25 U	25 U	3.7 J	25 U	25 U	25 U	25 U
	6/24/2011	641.11	5.94	635.17	0.64 J	5 U	5 U	0.78 J	5 U	5 U	5 U	5 U
	9/20/2011	641.11	6.44	634.67	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
	12/16/2011	641.11	6.08	635.03	50 U	50 U	50 U	50 U	50 U	50 U	50 U	50 U
	3/21/2012	641.11	6.15	634.96	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U

Notes: All concentrations in micrograms per liter (µg/L)
Exceedences of the groundwater cleanup standard are indicated in bold.
[1] Diluted in lab due to substrate from injection

NM = Not Measured
NA = Not Available

Sustainable Resources Group

APPENDIX A
First Quarter 2012 Field Notes

ECOR Solutions, Inc.
Byron Barrel & Drum Site
Field Sampling Record Form

Site: Byron Barrel and Drum Date: 3-21-12

Job #: 01501.002

Sample ID: MW-1-9 / GW-41

Well ID: MW-1 Time onsite: Time Offsite:

Samplers: PLittle 920 1004

Depth of Well (from top of casing) 11.79 Time: 1003

Static water level (from top of casing) 4.92 Time: 920

Purging Method:
Dedicated bladder pump, QED SamplePro MP-SP-4C

Field Tests:

Time	Flowrate (mL/min) / purge volume (mL)	Temp. °C	ORP mV	pH Std. Units	TDS g/L	DO mg/L	Spec. Cond. mS/cm
930	30 mL/min	9.6	-275	7.53	0.6	0.73	915
935	↓	9.2	-279	7.50	0.6	0.70	917
940	↓	9.2	-281	7.49	0.6	0.69	920
945	↓	9.2	-283	7.48	0.6	0.67	923
950	↓	9.2	-283	7.46	0.6	0.65	923
955	↓	9.2	-284	7.45	0.6	0.64	925

Sampling:

Time of Sample Collectio 955

Collection Method:
X Dedicated pump

Analyses:
X VOCs

Analytical Method:
8260 X 503 ___ Other: TOC

Observations:

Weather/Temperature: Sun 64°

Sample Description: Clear

Free Product?	Yes	___	No ✓	Descript.:
Sheen?	Yes	___	No ✓	Descript.:
Odor?	Yes	___	No ✓	Descript.:

Comments:

ECOR Solutions, Inc.
Byron Barrel & Drum Site
Field Sampling Record Form

Site: Byron Barrel and Drum Date: 3-21-12

Job #: 01501.002

Sample ID: MW-4-S/ Dup-41

Well ID: MW-4 Time onsite: Time Offsite:

Samplers: PL/TH/C 1010 1054

Depth of Well (from top of casing) 11.43 Time: 1053

Static water level (from top of casing) 3.65 Time: 1010

Purging Method:

Dedicated bladder pump, QED SamplePro MP-SP-4C

Field Tests:

Time	Flowrate (mL/min) / purge volume (mL)	Temp. °C	ORP mV	pH Std. Units	TDS g/L	DO mg/L	Spec. Cond. mS/cm
1020	400 ml/min	10.6	-253	7.29	0.6	0.42	946
1025		10.6	-254	7.29	0.6	0.41	950
1030		10.6	-256	7.29	0.6	0.40	952
1035		10.7	-256	7.28	0.6	0.39	953
1040		10.7	-257	7.28	0.6	0.38	955
1045		10.8	-257	7.28	0.6	0.37	956

Sampling:

Time of Sample Collectio 1045

Collection Method:	*Analyses:*	*Analytical Method:*
X Dedicated pump	X VOCs	8260 X 503 ___ Other: TOC

Observations:

Weather/Temperature: Sun 70°

Sample Description: clear

Free Product?	Yes	___	No X	Descript.:
Sheen?	Yes	___	No X	Descript.:
Odor?	Yes	___	No X	Descript.:

Comments:

ECOR Solutions, Inc.
Byron Barrel & Drum Site
Field Sampling Record Form

Site: Byron Barrel and Drum Date: 3-21-12

Job #: 01501.002

Sample ID: MW-10B-9/ GW-41

Well ID: MW-10B Time onsite: Time Offsite:

Samplers: PLittle 1100 1144

Depth of Well (from top of casing) 20.33 Time: 1143

Static water level (from top of casing) 9.36 Time: 1100

Purging Method:

Dedicated bladder pump, QED SamplePro MP-SP-4C

Field Tests:

Time	Flowrate (mL/min) / purge volume (mL)	Temp. °C	ORP mV	pH Std. Units	TDS g/L	DO mg/L	Spec. Cond. mS/cm
1110	40 mL/min	10.2	-234	7.00	1.3	0.43	2000
1115	↓	10.2	-234	7.00	1.3	0.41	1999
1120	↓	10.2	-235	7.00	1.3	0.40	1990
1125	↓	10.1	-237	6.99	1.3	0.39	1980
1130	↓	10.2	-237	6.99	1.3	0.38	1980
1135	↓	10.3	-238	6.99	1.3	0.37	1980

Sampling:

Time of Sample Collectio 11:35

Collection Method:	*Analyses:*	*Analytical Method:*
X Dedicated pump	X VOCs	8260 X 503 ___ Other: TOC

Observations:

Weather/Temperature: Sun 74°

Sample Description: Clear

Free Product?	Yes	___	No X	Descript.:
Sheen?	Yes	___	No X	Descript.:
Odor?	Yes	___	No X	Descript.:

Comments:

ECOR Solutions, Inc.
Byron Barrel & Drum Site
Field Sampling Record Form

Site: Byron Barrel and Drum

Date: 3-21-12

Job #: 01501.002

Sample ID: MW-RESIDENTIAL-9/16W-41

Well ID: RESIDENTIAL

Time onsite: 1331 Time Offsite: 1408

Samplers: PL HHC

Depth of Well (from top of casing) 34.88 Time: 1407

Static water level (from top of casing) 15.97 Time: 1331

Purging Method:
Dedicated bladder pump, QED SamplePro MP-SP-4C

Field Tests:

Time	Flowrate (mL/min) / purge volume (mL)	Temp. °C	ORP mV	pH Std. Units	TDS g/L	DO mg/L	Spec. Cond. mS/cm
1340	40 mL/min	12.8	-190	8.35	0.2	0.83	255
1345		12.9	-191	8.37	0.2	0.80	249
1350		12.7	-191	8.40	0.2	0.78	247
1355		12.7	-191	8.40	0.2	0.77	247
1400		12.8	-191	8.41	0.2	0.75	245

Sampling:

Time of Sample Collectio 1400

Collection Method:
X Dedicated pump

Analyses:
X VOCs

Analytical Method:
8260 X 503 ___ Other: TOC

Observations:

Weather/Temperature: Sun 80

Sample Description: clear

Free Product? Yes ___ No X Descript.: ___

Sheen? Yes ___ No X Descript.: ___

Odor? Yes ___ No X Descript.: ___

Comments:

DUP Sample on VOA

ECOR Solutions, Inc.
Byron Barrel & Drum Site
Field Sampling Record Form

Site: Byron Barrel and Drum

Date: 3-21-12

Job #: 01501.002

Sample ID: MW-21-9 / GW-41

Well ID: MW-21

Time onsite: 1415 Time Offsite: 1457

Samplers: PLittle

Depth of Well (from top of casing) 27.82 Time: 1457

Static water level (from top of casing) 8.18 Time: 1415

Purging Method:
Dedicated bladder pump, QED SamplePro MP-SP-4C

Field Tests:

Time	Flowrate (mL/min) / purge volume (mL)	Temp. °C	ORP mV	pH Std. Units	TDS g/L	DO mg/L	Spec. Cond. mS/cm
1425	40 mL/min	11.8	-185	7.62	0.8	0.76	1232
1430	↓	11.6	-187	7.60	0.8	0.74	1220
1435	↓	11.7	-188	7.57	0.8	0.72	1210
1440	↓	11.5	-189	7.57	0.8	0.70	1210
1445	↓	11.6	-189	7.57	0.8	0.68	1210

Sampling:

Time of Sample Collectio 1445

Collection Method:
X Dedicated pump

Analyses:
X VOCs

Analytical Method:
8260 X 503 ___ Other: TOC

Observations:

Weather/Temperature: Sun 83

Sample Description: Clear

Free Product? Yes ___ No X Descript.:

Sheen? Yes ___ No X Descript.:

Odor? Yes ___ No X Descript.:

Comments:

MS/MSD on VOA

ECOR Solutions, Inc.
Byron Barrel & Drum Site
Pumping Well Field Chemistry Parameters

Parameter / Units	Time	Temp. °C	ORP mV	pH Std. Units	TDS g/L	DO mg/L	Spec. Cond. mS/cm
PW-1/GW 41	1245	11.1	-150	7.30	2.3	0.48	3600
PW-2/GW 41	1210	10.7	-146	6.85	3.0	0.73	4670
PW-3/GW 41	1320	10.6	-157	7.25	1.0	0.54	1530

Note: Flow through cell was calibrated for all chemistry parameters prior to gauging.

ECOR Solutions, Inc.
Byron Barrel & Drum Site
Groundwater Elevations

Operator: Paul Little

Date: 3-21-12

Pumping Wells	DTW	TOC Elevation	GW Elevation	TD	WC, ft.
PW-1	7.93	642.82	634.89	-	-
PW-2	6.36	641.34	634.98	-	-
PW-3	6.15	641.11	634.96	-	-
Monitoring Wells					
MW-1	4.82	639.63	634.81	11.78	6.96
MW-2	11.31	646.36	635.05	15.14	3.83
MW-4	3.65	638.56	634.91	11.43	7.78
MW-10B	9.36	644.44	635.08	20.33	10.97
MW-21	8.18	642.52	634.34	27.82	19.64
Residential	15.97	650.78	634.81	34.88	18.91
Piezometers					
PZ-1	6.98	643.11	636.13	26.57	19.89
PZ-2	7.46	642.39	634.93	26.95	19.49

PZ-1 AT ANGLE

APPENDIX B
First Quarter 2012 Data Validation Report

Project: Byron Barrel and Drum Site
Laboratory: Test America
Sample Delivery Group: 480-17525-1
Fraction: Organic
Matrix: Aqueous
Report Date: 5/11/2012

This analytical quality assurance report is based upon a review of analytical data generated for groundwater samples. The sample locations, laboratory identification numbers, sample collection dates, sample matrix, and analyses performed are presented in Table 1. All analyses were performed by Test America.

The samples were analyzed for volatile organic compounds and total suspended solids. The sample analyses were performed in accordance with the procedures outlined in the method referenced at the end of this report. The data deliverables provided by the laboratory were New York State Department of Environmental Conservation Analytical Services Protocol (NYSDEC ASP) Category B format.

All sample analyses have undergone an analytical quality assurance review to ensure adherence to the required protocols. Results have been validated or qualified according to Region II "Validating Volatile Organic Compounds by SW-846 Method 8260B", SOP HW-24, Revision 2, October 2006. The parameters presented on the following page were evaluated.

X	•	Data Completeness
X	•	Chain of Custody Documentation
X	•	Holding Times
X	•	Instrument Performance
X	•	Initial and Continuing Calibrations
X	•	Laboratory and Field Blank Analysis Results
X	•	Surrogate Compound Recoveries
X	•	Matrix Spike/Matrix Spike Duplicate Recoveries and Reproducibility
X	•	Field Duplicate Analysis Results
X	•	Laboratory Control Sample Results
X	•	Internal Standard Performance
X	•	Qualitative Identification
X	•	Quantitation/Reporting Limits

X - Denotes parameter evaluated.

It is recommended that the data only be used according to the qualifiers presented, and discussed in this report. All other data should be considered qualitatively and quantitatively valid as reported by the laboratory, based on the items evaluated.

Report Approved By:

Shawne M. Rodgers
President

5/12/20K

Date

1.0 *DATA COMPLETENESS*

The data package was complete.

2.0 *CHAIN OF CUSTODY DOCUMENTATION*

The chain of custody documentation was complete.

3.0 *HOLDING TIMES*

The holding times were met for all analyses.

4.0 *INSTRUMENT PERFORMANCE*

All criteria were met. No qualifiers were applied.

5.0 *INITIAL AND CONTINUING CALIBRATIONS*

All criteria were met. No qualifiers were applied.

6.0 *LABORATORY AND FIELD BLANK ANALYSIS RESULTS*

All criteria were met. No qualifiers were applied.

7.0 *SURROGATE COMPOUNDS*

The positive result for volatile organic compounds for samples PW-1/GW-41 and PW-2/GW-41 should be considered biased high quantitative estimates, and may be higher than reported. High recoveries were obtained for the surrogate compound, 4-bromomfluorobenzene, for these samples. The laboratory re-analyzed the samples, resulting in acceptable surrogate recoveries. The initial analysis results have been selected for reporting purposes. The results have been marked with "J" qualifiers to indicate that they are biased high quantitative estimates.

8.0 *MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERIES AND REPRODUCIBILITY*

All criteria were met. No qualifiers were applied.

9.0 *FIELD DUPLICATE RESULTS*

Duplicate samples MW-RESIDENTIAL-9/GW-41and DUP-9/GW-41 were submitted to the laboratory to evaluate sampling and analytical precision for those organic compounds determined to be present. There were no positive results for the field duplicate samples.

10.0 *LABORATORY CONTROL SAMPLE RESULTS*

All criteria were met. No qualifiers were applied.

11.0 *INTERNAL STANDARD PERFORMANCE*

All criteria were met. No qualifiers were applied.

12.0 *QUALITATIVE IDENTIFICATION*

All criteria were met. No qualifiers were applied.

13.0 *QUANTITATION/REPORTING LIMITS*

The following samples were analyzed at dilutions. The dilution analyses were performed because of the suspected presence of high levels of target compounds and/or interferences. Reporting limits (RLs) are elevated by the dilution factor for these samples for target compounds that were not detected. The elevated RLs should be noted when assessing the data for these samples.

Sample	Dilution Factor
PW-3/GW-41	5.0

As required by USEPA protocol, all compounds, which were qualitatively identified at concentrations below their respective reporting limits (RLs) have been marked with "J" qualifiers to indicate that they are quantitative estimates.

METHODOLOGY REFERENCES

Analysis	Reference
Volatile Organic Compounds	Method 8260B, "Test Methods for Evaluating Solid Wastes", SW-846, third edition, Promulgated Updates II, IIA, and III, June 1997
Total Suspended Solids	Method 160.2, "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983, and revisions

Table 1 Samples For Data Validation Review
Groundwater Sampling March 2012
Byron Site Groundwater Monitoring
Byron Township, New York
Test America Sample Delivery Group 480-17525-1

Sample ID	Lab ID		Collection Date	MATRIX	VOC	TSS
MW-1-9/GW-41	480-17526	01	3/21/2012	Groundwater	X	
MW-4-9/GW-41	480-17526	02	3/21/2012	Groundwater	X	
MW-10B/GW-41	480-17526	03	3/21/2012	Groundwater	X	
DUP-9/GW-41	480-17526	04	3/21/2012	Groundwater	X	
MW-RESIDENTIAL-9/GW-41	480-17526	05	3/21/2012	Groundwater	X	
MW-21/GW-41	480-17526	06	3/21/2012	Groundwater	X	
TRIP BLANK	480-17526	07	3/21/2012	Trip Blank	X	
PW-1/GW-41	480-17525	01	3/21/2012	Groundwater	X	X
PW-2/GW-41	480-17525	02	3/21/2012	Groundwater	X	X
PW-3/GW-41	480-17525	03	3/21/2012	Groundwater	X	X

Notes:
VOC Volatile Organic Compounds
TSS Total Suspended Solids

Client: Sustainable Resources Group Inc

Job Number: 480-17525-1

Client Sample ID: **PW-1/GW-41**

Lab Sample ID: 480-17525-1
Client Matrix: Water

Date Sampled: 03/21/2012 1245
Date Received: 03/21/2012 1545

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-56291	Instrument ID:	HP5973S
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	S12082.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	03/22/2012 1745			Final Weight/Volume:	5 mL
Prep Date:	03/22/2012 1745				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	5.0
1,1-Dichloroethane	10	J	0.38	5.0
1,1-Dichloroethene	ND		0.29	5.0
cis-1,2-Dichloroethene	ND		0.81	5.0
Methylene Chloride	ND		0.44	5.0
Toluene	2.5	J	0.51	5.0
Trichloroethene	ND		0.46	5.0
Vinyl chloride	ND		0.90	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	111		66 - 137
Toluene-d8 (Surr)	120		71 - 126
4-Bromofluorobenzene (Surr)	124	X	73 - 120

Report

5/8/12

Client: Sustainable Resources Group Inc

Job Number: 480-17525-1

Client Sample ID: **PW-1/GW-41**

Lab Sample ID: 480-17525-1
Client Matrix: Water

Date Sampled: 03/21/2012 1245
Date Received: 03/21/2012 1545

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-56456	Instrument ID:	HP5973S
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	S12132.D
Dilution:	20			Initial Weight/Volume:	5 mL
Analysis Date:	03/23/2012 1735	Run Type:	RA	Final Weight/Volume:	5 mL
Prep Date:	03/23/2012 1735				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		16	100
1,1-Dichloroethane	11	J	7.6	100
1,1-Dichloroethene	ND		5.8	100
cis-1,2-Dichloroethene	ND		16	100
Methylene Chloride	ND		8.8	100
Toluene	ND		10	100
Trichloroethene	ND		9.2	100
Vinyl chloride	ND		18	100

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	116		66 - 137
Toluene-d8 (Surr)	115		71 - 126
4-Bromofluorobenzene (Surr)	113		73 - 120

Report Initial

5/8/2012

Client: Sustainable Resources Group Inc

Job Number: 480-17525-1

Client Sample ID: PW-2/GW-41

Lab Sample ID: 480-17525-2
Client Matrix: Water

Date Sampled: 03/21/2012 1210
Date Received: 03/21/2012 1545

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-56291	Instrument ID:	HP5973S
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	S12083.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	03/22/2012 1806			Final Weight/Volume:	5 mL
Prep Date:	03/22/2012 1806				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	5.0
1,1-Dichloroethane	5.9	J	0.38 SSH	5.0
1,1-Dichloroethene	ND		0.29	5.0
cis-1,2-Dichloroethene	ND		0.81	5.0
Methylene Chloride	ND		0.44	5.0
Toluene	1.8	J	0.51 SSH	5.0
Trichloroethene	ND		0.46	5.0
Vinyl chloride	ND		0.90	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	112		66 - 137
Toluene-d8 (Surr)	122		71 - 126
4-Bromofluorobenzene (Surr)	124	X	73 - 120

Repat

SMT 5/8/2012

Client: Sustainable Resources Group Inc

Job Number: 480-17525-1

Client Sample ID: **PW-2/GW-41**

Lab Sample ID: 480-17525-2
Client Matrix: Water

Date Sampled: 03/21/2012 1210
Date Received: 03/21/2012 1545

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-56456	Instrument ID:	HP5973S
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	S12133.D
Dilution:	20			Initial Weight/Volume:	5 mL
Analysis Date:	03/23/2012 1757	Run Type:	RA	Final Weight/Volume:	5 mL
Prep Date:	03/23/2012 1757				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		16	100
1,1-Dichloroethane	ND		7.6	100
1,1-Dichloroethene	ND		5.8	100
cis-1,2-Dichloroethene	ND		16	100
Methylene Chloride	ND		8.8	100
Toluene	ND		10	100
Trichloroethene	ND		9.2	100
Vinyl chloride	ND		18	100

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	117		66 - 137
Toluene-d8 (Surr)	121		71 - 126
4-Bromofluorobenzene (Surr)	116		73 - 120

Report the initial

SMM 6/8/2012

Client: Sustainable Resources Group Inc

Job Number: 480-17525-1

Client Sample ID: **PW-3/GW-41**

Lab Sample ID: 480-17525-3
Client Matrix: Water

Date Sampled: 03/21/2012 1320
Date Received: 03/21/2012 1545

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-56706	Instrument ID:	HP5975T
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	T6538.D
Dilution:	5.0			Initial Weight/Volume:	5 mL
Analysis Date:	03/26/2012 1420			Final Weight/Volume:	5 mL
Prep Date:	03/26/2012 1420				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		4.1	25
1,1-Dichloroethane	ND		1.9	25
1,1-Dichloroethene	ND		1.5	25
cis-1,2-Dichloroethene	ND		4.1	25
Methylene Chloride	ND		2.2	25
Toluene	ND		2.6	25
Trichloroethene	ND		2.3	25
Vinyl chloride	ND		4.5	25

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	112		66 - 137
Toluene-d8 (Surr)	122		71 - 126
4-Bromofluorobenzene (Surr)	114		73 - 120

5/8/2012

Client: Sustainable Resources Group Inc

Job Number: 480-17525-1

Client Sample ID: MW-1-9/GW-41

Lab Sample ID: 480-17526-1
Client Matrix: Water

Date Sampled: 03/21/2012 0955
Date Received: 03/21/2012 1545

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-56296	Instrument ID:	HP5973N
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	N6299.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	03/22/2012 1609			Final Weight/Volume:	5 mL
Prep Date:	03/22/2012 1609				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	11		0.82	5.0
1,1,2-Trichloroethane	ND		0.23	5.0
1,1-Dichloroethane	32		0.38	5.0
1,1-Dichloroethene	2.8	J	0.29	5.0
1,2-Dichlorobenzene	ND		0.79	5.0
1,2-Dichloroethane	ND		0.21	5.0
1,4-Dichlorobenzene	ND		0.84	5.0
2-Butanone	ND		1.3	10
Benzene	ND		0.41	5.0
Bromodichloromethane	ND		0.39	5.0
Carbon tetrachloride	ND		0.27	5.0
Chlorobenzene	ND		0.75	5.0
Dibromochloromethane	ND		0.32	5.0
Chloroform	ND		0.34	5.0
Methylene Chloride	ND		0.44	5.0
Tetrachloroethene	ND		0.36	5.0
Toluene	ND		0.51	5.0
Trichloroethene	0.67	J	0.46	5.0
Vinyl chloride	ND		0.90	5.0
Xylenes, Total	ND		0.66	15

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	101		66 - 137
Toluene-d8 (Surr)	106		71 - 126
4-Bromofluorobenzene (Surr)	97		73 - 120

5/8/20K

Client: Sustainable Resources Group Inc

Job Number: 480-17525-1

Client Sample ID: **MW-4-9/GW-41**

Lab Sample ID: 480-17526-2
Client Matrix: Water

Date Sampled: 03/21/2012 1045
Date Received: 03/21/2012 1545

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-56296	Instrument ID:	HP5973N
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	N6300.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	03/22/2012 1634			Final Weight/Volume:	5 mL
Prep Date:	03/22/2012 1634				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	2.3	J	0.82	5.0
1,1,2-Trichloroethane	ND		0.23	5.0
1,1-Dichloroethane	14		0.38	5.0
1,1-Dichloroethene	3.2	J	0.29	5.0
1,2-Dichlorobenzene	ND		0.79	5.0
1,2-Dichloroethane	ND		0.21	5.0
1,4-Dichlorobenzene	ND		0.84	5.0
2-Butanone	3.3	J	1.3	10
Benzene	ND		0.41	5.0
Bromodichloromethane	ND		0.39	5.0
Carbon tetrachloride	ND		0.27	5.0
Chlorobenzene	ND		0.75	5.0
Dibromochloromethane	ND		0.32	5.0
Chloroform	ND		0.34	5.0
Methylene Chloride	ND		0.44	5.0
Tetrachloroethene	ND		0.36	5.0
Toluene	ND		0.51	5.0
Trichloroethene	1.2	J	0.46	5.0
Vinyl chloride	1.0	J	0.90	5.0
Xylenes, Total	ND		0.66	15

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	104		66 - 137
Toluene-d8 (Surr)	106		71 - 126
4-Bromofluorobenzene (Surr)	97		73 - 120

SMK 5/9/2012

Client: Sustainable Resources Group Inc

Job Number: 480-17525-1

Client Sample ID: **MW-10B-9/GW-41**

Lab Sample ID: 480-17526-3
Client Matrix: Water

Date Sampled: 03/21/2012 1135
Date Received: 03/21/2012 1545

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-56296	Instrument ID:	HP5973N
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	N6301.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	03/22/2012 1658			Final Weight/Volume:	5 mL
Prep Date:	03/22/2012 1658				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	1.1	J	0.82	5.0
1,1,2-Trichloroethane	ND		0.23	5.0
1,1-Dichloroethane	33		0.38	5.0
1,1-Dichloroethene	0.55	J	0.29	5.0
1,2-Dichlorobenzene	ND		0.79	5.0
1,2-Dichloroethane	ND		0.21	5.0
1,4-Dichlorobenzene	ND		0.84	5.0
2-Butanone	6.7	J	1.3	10
Benzene	ND		0.41	5.0
Bromodichloromethane	ND		0.39	5.0
Carbon tetrachloride	ND		0.27	5.0
Chlorobenzene	ND		0.75	5.0
Dibromochloromethane	ND		0.32	5.0
Chloroform	ND		0.34	5.0
Methylene Chloride	ND		0.44	5.0
Tetrachloroethene	ND		0.36	5.0
Toluene	ND		0.51	5.0
Trichloroethene	0.50	J	0.46	5.0
Vinyl chloride	ND		0.90	5.0
Xylenes, Total	ND		0.66	15

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	103		66 - 137
Toluene-d8 (Surr)	107		71 - 126
4-Bromofluorobenzene (Surr)	97		73 - 120

5/8/2012

Client: Sustainable Resources Group Inc

Job Number: 480-17525-1

Client Sample ID: DUP-9/GW-41

Lab Sample ID: 480-17526-4FD
Client Matrix: Water

Date Sampled: 03/21/2012 1400
Date Received: 03/21/2012 1545

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-56296	Instrument ID:	HP5973N
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	N6302.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	03/22/2012 1722			Final Weight/Volume:	5 mL
Prep Date:	03/22/2012 1722				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	5.0
1,1,2-Trichloroethane	ND		0.23	5.0
1,1-Dichloroethane	ND		0.38	5.0
1,1-Dichloroethene	ND		0.29	5.0
1,2-Dichlorobenzene	ND		0.79	5.0
1,2-Dichloroethane	ND		0.21	5.0
1,4-Dichlorobenzene	ND		0.84	5.0
2-Butanone	ND		1.3	10
Benzene	ND		0.41	5.0
Bromodichloromethane	ND		0.39	5.0
Carbon tetrachloride	ND		0.27	5.0
Chlorobenzene	ND		0.75	5.0
Dibromochloromethane	ND		0.32	5.0
Chloroform	ND		0.34	5.0
Methylene Chloride	ND		0.44	5.0
Tetrachloroethene	ND		0.36	5.0
Toluene	ND		0.51	5.0
Trichloroethene	ND		0.46	5.0
Vinyl chloride	ND		0.90	5.0
Xylenes, Total	ND		0.66	15

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	100		66 - 137
Toluene-d8 (Surr)	108		71 - 126
4-Bromofluorobenzene (Surr)	96		73 - 120

SMM 5/8/2012

Client: Sustainable Resources Group Inc

Job Number: 480-17525-1

Client Sample ID: MW-RESIDENTIAL-9/GW-41

Lab Sample ID: 480-17526-5
Client Matrix: Water

Date Sampled: 03/21/2012 1400
Date Received: 03/21/2012 1545

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-56296	Instrument ID:	HP5973N
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	N6303.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	03/22/2012 1746			Final Weight/Volume:	5 mL
Prep Date:	03/22/2012 1746				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	5.0
1,1,2-Trichloroethane	ND		0.23	5.0
1,1-Dichloroethane	ND		0.38	5.0
1,1-Dichloroethene	ND		0.29	5.0
1,2-Dichlorobenzene	ND		0.79	5.0
1,2-Dichloroethane	ND		0.21	5.0
1,4-Dichlorobenzene	ND		0.84	5.0
2-Butanone	ND		1.3	10
Benzene	ND		0.41	5.0
Bromodichloromethane	ND		0.39	5.0
Carbon tetrachloride	ND		0.27	5.0
Chlorobenzene	ND		0.75	5.0
Dibromochloromethane	ND		0.32	5.0
Chloroform	ND		0.34	5.0
Methylene Chloride	ND		0.44	5.0
Tetrachloroethene	ND		0.36	5.0
Toluene	ND		0.51	5.0
Trichloroethene	ND		0.46	5.0
Vinyl chloride	ND		0.90	5.0
Xylenes, Total	ND		0.66	15

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	104		66 - 137
Toluene-d8 (Surr)	107		71 - 126
4-Bromofluorobenzene (Surr)	97		73 - 120

SMT 5/9/2012

Client: Sustainable Resources Group Inc

Job Number: 480-17525-1

Client Sample ID: **MW-21-9/GW-41**

Lab Sample ID: 480-17526-6
Client Matrix: Water

Date Sampled: 03/21/2012 1445
Date Received: 03/21/2012 1545

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-56296	Instrument ID:	HP5973N
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	N6304.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	03/22/2012 1810			Final Weight/Volume:	5 mL
Prep Date:	03/22/2012 1810				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	5.0
1,1,2-Trichloroethane	ND		0.23	5.0
1,1-Dichloroethane	ND		0.38	5.0
1,1-Dichloroethene	ND		0.29	5.0
1,2-Dichlorobenzene	ND		0.79	5.0
1,2-Dichloroethane	ND		0.21	5.0
1,4-Dichlorobenzene	ND		0.84	5.0
2-Butanone	ND		1.3	10
Benzene	ND		0.41	5.0
Bromodichloromethane	ND		0.39	5.0
Carbon tetrachloride	ND		0.27	5.0
Chlorobenzene	ND		0.75	5.0
Dibromochloromethane	ND		0.32	5.0
Chloroform	ND		0.34	5.0
Methylene Chloride	ND		0.44	5.0
Tetrachloroethene	ND		0.36	5.0
Toluene	ND		0.51	5.0
Trichloroethene	ND		0.46	5.0
Vinyl chloride	ND		0.90	5.0
Xylenes, Total	ND		0.66	15

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	104		66 - 137
Toluene-d8 (Surr)	108		71 - 126
4-Bromofluorobenzene (Surr)	98		73 - 120

SM 5/8/2012

Client: Sustainable Resources Group Inc

Job Number: 480-17525-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-17526-7TB
Client Matrix: Water

Date Sampled: 03/21/2012 0800
Date Received: 03/21/2012 1545

8260B Volatile Organic Compounds (GC/MS)

Analysis Method:	8260B	Analysis Batch:	480-56296	Instrument ID:	HP5973N
Prep Method:	5030B	Prep Batch:	N/A	Lab File ID:	N6307.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	03/22/2012 1920			Final Weight/Volume:	5 mL
Prep Date:	03/22/2012 1920				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	5.0
1,1,2-Trichloroethane	ND		0.23	5.0
1,1-Dichloroethane	ND		0.38	5.0
1,1-Dichloroethene	ND		0.29	5.0
1,2-Dichlorobenzene	ND		0.79	5.0
1,2-Dichloroethane	ND		0.21	5.0
1,4-Dichlorobenzene	ND		0.84	5.0
2-Butanone	ND		1.3	10
Benzene	ND		0.41	5.0
Bromodichloromethane	ND		0.39	5.0
Carbon tetrachloride	ND		0.27	5.0
Chlorobenzene	ND		0.75	5.0
Dibromochloromethane	ND		0.32	5.0
Chloroform	ND		0.34	5.0
Methylene Chloride	ND		0.44	5.0
Tetrachloroethene	ND		0.36	5.0
Toluene	ND		0.51	5.0
Trichloroethene	ND		0.46	5.0
Vinyl chloride	ND		0.90	5.0
Xylenes, Total	ND		0.66	15

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	103		66 - 137
Toluene-d8 (Surr)	106		71 - 126
4-Bromofluorobenzene (Surr)	96		73 - 120

General Chemistry

Client Sample ID: **PW-1/GW-41**

Lab Sample ID: 480-17525-1
Client Matrix: Water

Date Sampled: 03/21/2012 1245
Date Received: 03/21/2012 1545

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Total Organic Carbon	5.2		mg/L	0.43	1.0	1.0	9060

Analysis Batch: 480-56768 Analysis Date: 03/23/2012 1814

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Total Suspended Solids	26.4		mg/L	4.0	4.0	1.0	SM 2540D

Analysis Batch: 480-56548 Analysis Date: 03/23/2012 1557

★ Validation

5/8/2012

General Chemistry

Client Sample ID: **PW-2/GW-41**

Lab Sample ID: 480-17525-2
Client Matrix: Water

Date Sampled: 03/21/2012 1210
Date Received: 03/21/2012 1545

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Total Organic Carbon	3310		mg/L	17.4	40.0	40	9060

Analysis Batch: 480-57774 Analysis Date: 03/30/2012 1458

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Total Suspended Solids	62.4		mg/L	4.0	4.0	1.0	SM 2540D

Analysis Batch: 480-56548 Analysis Date: 03/23/2012 1600

General Chemistry

Client Sample ID: **PW-3/GW-41**

Lab Sample ID: 480-17525-3
Client Matrix: Water

Date Sampled: 03/21/2012 1320
Date Received: 03/21/2012 1545

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Total Organic Carbon	96.8		mg/L	0.43	1.0	1.0	9060

Analysis Batch: 480-56768 Analysis Date: 03/23/2012 1915

Analyte	Result	Qual	Units	RL	RL	Dil	Method
Total Suspended Solids	122		mg/L	5.0	5.0	1.0	SM 2540D

Analysis Batch: 480-56548 Analysis Date: 03/23/2012 1602

APPENDIX C
Mann-Kendall Statistical Analysis of Select Wells

Appendix C
Mann-Kendall Statistical Test - MW-1
Byron Barrel Drum Site
Byron Township, NY

State of Wisconsin — **Mann-Kendall Statistical Test**
Department of Natural Resources — **Form 4400-215 (5/2000)**
Remediation and Redevelopment Program

Notice: This form is provided to consultants as an optional tool to be used to provide groundwater contaminant data required to support site closure requests under s. Comm 46.07 or s. NR 746.07, Wis. Adm. Code. Use this form or a manual method to calculate the Mann-Kendall statistic, as specified in Appendix A of ch. Comm 46 and ch. NR 746, Wis. Adm. Code.

Instructions: To use the spreadsheet, provide at least four rounds and not more than 10 rounds of data. Use cells with yellow background for data entry. Use consistent units. The spreadsheet contains several error checks, and a data entry error may cause "DATA ERR" to be displayed. Dates that are not consecutive will show an error message and will not display the test results. The spreadsheet tests the data for both increasing and decreasing trends at an 80% confidence level. If an increasing or decreasing trend is not present, use an additional coefficient of variation test is used for stable and non-stable conditions as proposed by Wiedemeier et al, 1999. For additional information, refer to guidance in Interim Guidance on Natural Attenuation for Petroleum Releases, dated October 1999. Refer to the guidance for recommendations on data entry for non-detect values.

Site Name =	Byron Barrel & Drum	Byron Township	New York	BRRTS No. =		Well Number =	MW-1
	Compound	11DCA	11DCE	MEK	111TCA	TCE	TVOCs
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	9-Dec-09	88.00	9.60	1.30	290.00	2.20	390.00
2	11-Mar-10	39.00	8.00	1.30	200.00	1.00	247.00
3	17-Jun-10	39.00	4.20	1.30	180.00	1.60	226.00
4	23-Sep-10	75.00	2.40	1.30	22.00	1.20	101.00
5	20-Dec-10	77.00	5.20	1.30	130.00	2.10	214.00
6	28-Mar-11	65.00	22.00	1.30	180.00	1.40	268.00
7	24-Jun-11	43.00	1.70	7.70	25.00	1.30	79.00
8	20-Sep-11	95.00	3.80	1.30	3.60	1.00	105.00
9	16-Dec-11	40.00	2.00	1.30	4.90	1.00	46.90
10	21-Mar-12	32.00	2.80	1.30	11.00	0.67	46.00
	S =	-8	-19	3	-30	-24	-31
	n =	10	10	10	10	10	10
	Average =	59.3	6.17	1.94	104.65	1.347	172.29
	Standard Deviation =	23.32880909	6.138050722	2.023857703	104.1103821	0.494953421	113.8952584
	Coefficient of Variation(CV)=	0.393403189	0.994821835	1.04322562	0.994843594	0.367448716	0.661067145
Increasing Trend (80% Confidence)		NO	NO	NO	NO	NO	NO
Decreasing Trend (80% Confidence)		NO	YES	NO	YES	YES	YES
Undetermined Stable Trend, CV<=1		YES	NO	NO	NO	NO	NO
Undetermined Non-Stable Trend, CV>1		NO	NO	**YES**	NO	NO	NO
Error Check, OK if Blank							
Stable or Decreasing Trend at 80% Confidence Level		YES	YES	**NO**	YES	YES	YES
	Data Entry By =	KBR	Date =	12-Jul-12	Checked By =		

Appendix C
Mann-Kendall Statistical Test - MW-4
Byron Barrel Drum Site
Byron Township, NY

State of Wisconsin — **Mann-Kendall Statistical Test**
Department of Natural Resources — **Form 4400-215 (5/2000)**
Remediation and Redevelopment Program

Notice: This form is provided to consultants as an optional tool to be used to provide groundwater contaminant data required to support site closure requests under s. Comm 46.07 or s. NR 746.07, Wis. Adm. Code. Use this form or a manual method to calculate the Mann-Kendall statistic, as specified in Appendix A of ch. Comm 46 and ch. NR 746, Wis. Adm. Code.

Instructions: To use the spreadsheet, provide at least four rounds and not more than 10 rounds of data. Use cells with yellow background for data entry. Use consistent units. The spreadsheet contains several error checks, and a data entry error may cause "DATA ERR" to be displayed. Dates that are not consecutive will show an error message and will not display the test results. The spreadsheet tests the data for both increasing and decreasing trends at an 80% confidence level. If an increasing or decreasing trend is not present, use an additional coefficient of variation test is used for stable and non-stable conditions as proposed by Wiedemeier et al, 1999. For additional information, refer to guidance in Interim Guidance on Natural Attenuation for Petroleum Releases, dated October 1999. Refer to the guidance for recommendations on data entry for non-detect values.

Site Name =	Byron Barrel & Drum	Byron Township	New York	BRRTS No. =		Well Number =	MW-4
	Compound	11DCA	11DCE	MEK	111TCA	TCE	TVOCs
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	9-Dec-09	39.00	1.00	1.30	11.00	1.00	50.00
2	11-Mar-10	33.00	2.00	1.30	38.00	1.00	73.00
3	17-Jun-10	32.00	1.50	1.30	8.40	1.00	40.40
4	23-Sep-10	27.00	1.00	1.30	9.50	1.00	37.00
5	20-Dec-10	19.00	1.20	42.00	9.50	1.00	72.00
6	28-Mar-11	19.00	1.70	100.00	1.30	1.00	123.00
7	24-Jun-11	18.00	2.10	20.00	1.00	1.00	61.00
8	20-Sep-11	21.00	2.00	140.00	1.00	1.00	166.00
9	16-Dec-11	8.40	2.00	1.30	1.00	1.00	8.40
10	21-Mar-12	14.00	3.20	3.30	2.30	1.20	25.00
	S =	-36	25	15	-27	9	-5
	n =	10	10	10	10	10	10
	Average =	23.04	1.77	31.18	8.3	1.02	65.58
	Standard Deviation =	9.475957882	0.658364978	49.51028625	11.24050216	0.063245553	47.26797836
	Coefficient of Variation(CV)=	0.411282894	0.371957615	1.587886025	1.354277369	0.062005444	0.720768197
Increasing Trend (80% Confidence)		NO	**YES**	**YES**	NO	NO	NO
Decreasing Trend (80% Confidence)		YES	NO	NO	YES	NO	NO
Undetermined Stable Trend, CV<=1		NO	NO	NO	NO	YES	YES
Undetermined Non-Stable Trend, CV>1		NO	NO	NO	NO	NO	NO
Error Check, OK if Blank							
Stable or Decreasing Trend at 80% Confidence Level		YES	**NO**	**NO**	YES	YES	YES
	Data Entry By =	KBR	Date =	12-Jul-12	Checked By =		

Appendix C
Mann-Kendall Statistical Test - MW-10B
Byron Barrel Drum Site
Byron Township, NY

State of Wisconsin — **Mann-Kendall Statistical Test**
Department of Natural Resources — **Form 4400-215 (5/2000)**
Remediation and Redevelopment Program

Notice: This form is provided to consultants as an optional tool to be used to provide groundwater contaminant data required to support site closure requests under s. Comm 46.07 or s. NR 746.07, Wis. Adm. Code. Use this form or a manual method to calculate the Mann-Kendall statistic, as specified in Appendix A of ch. Comm 46 and ch. NR 746, Wis. Adm. Code.

Instructions: To use the spreadsheet, provide at least four rounds and not more than 10 rounds of data. Use cells with yellow background for data entry. Use consistent units. The spreadsheet contains several error checks, and a data entry error may cause "DATA ERR" to be displayed. Dates that are not consecutive will show an error message and will not display the test results. The spreadsheet tests the data for both increasing and decreasing trends at an 80% confidence level. If an increasing or decreasing trend is not present, use an additional coefficient of variation test is used for stable and non-stable conditions as proposed by Wiedemeier et al, 1999. For additional information, refer to guidance in Interim Guidance on Natural Attenuation for Petroleum Releases, dated October 1999. Refer to the guidance for recommendations on data entry for non-detect values.

Site Name =	Byron Barrel & Drum	Byron Township	New York	BRRTS No. =		Well Number =	MW-10B

	Compound	11DCA	11DCE	MEK	111TCA	TCE	TVOCs
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	9-Dec-09	33.00	1.00	1.30	1.00	1.00	126.00
2	11-Mar-10	6.60	1.00	1.30	1.00	1.00	15.70
3	17-Jun-10	1.30	1.00	1.30	1.00	1.00	1.30
4	23-Sep-10	9.60	1.00	2.80	1.00	1.00	12.40
5	20-Dec-10	62.00	3.00	16.00	37.00	1.00	120.00
6	28-Mar-11	7.60	1.10	15.00	2.80	1.00	27.02
7	24-Jun-11	1.00	1.00	1.30	1.00	1.00	0.48
8	20-Sep-11	10.00	1.00	9.10	1.00	1.00	21.60
9	16-Dec-11	24.00	1.00	1.30	1.00	1.00	24.00
10	21-Mar-12	33.00	1.00	6.70	0.50	1.00	40.75
	S =	8	-1	9	-8	0	1
	n =	10	10	10	10	10	10
	Average =	18.81	1.21	5.61	4.73	1	38.925
	Standard Deviation =	19.31035704	0.629726572	5.871484764	11.35469066	0	45.89821716
	Coefficient of Variation(CV)=	1.026600587	0.520435184	1.046610475	2.40056885	0	1.17914495
Increasing Trend (80% Confidence)		NO	NO	NO	NO	NO	NO
Decreasing Trend (80% Confidence)		NO	NO	NO	NO	NO	NO
Undetermined Stable Trend, CV<=1		NO	YES	NO	NO	YES	NO
Undetermined Non-Stable Trend, CV>1		**YES**	NO	**YES**	**YES**	NO	**YES**
Error Check, OK if Blank							
Stable or Decreasing Trend at 80% Confidence Level		**NO**	YES	**NO**	**NO**	YES	**NO**

Data Entry By = KBR | Date = 12-Jul-12 | Checked By =

Appendix C
Mann-Kendall Statistical Test - PW-1
Byron Barrel Drum Site
Byron Township, NY

State of Wisconsin — **Mann-Kendall Statistical Test**
Department of Natural Resources — **Form 4400-215 (5/2000)**
Remediation and Redevelopment Program

Notice: This form is provided to consultants as an optional tool to be used to provide groundwater contaminant data required to support site closure requests under s. Comm 46.07 or s. NR 746.07, Wis. Adm. Code. Use this form or a manual method to calculate the Mann-Kendall statistic, as specified in Appendix A of ch. Comm 46 and ch. NR 746, Wis. Adm. Code.

Instructions: To use the spreadsheet, provide at least four rounds and not more than 10 rounds of data. Use cells with yellow background for data entry. Use consistent units. The spreadsheet contains several error checks, and a data entry error may cause "DATA ERR" to be displayed. Dates that are not consecutive will show an error message and will not display the test results. The spreadsheet tests the data for both increasing and decreasing trends at an 80% confidence level. If an increasing or decreasing trend is not present, use an additional coefficient of variation test is used for stable and non-stable conditions as proposed by Wiedemeier et al, 1999. For additional information, refer to guidance in Interim Guidance on Natural Attenuation for Petroleum Releases, dated October 1999. Refer to the guidance for recommendations on data entry for non-detect values.

Site Name =	Byron Barrel & Drum	Byron Township	New York	BRRTS No. =		Well Number =	PW-1
	Compound	11DCA	11DCE	Toluene	111TCA	TCE	TVOCs
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	9-Dec-09	1.00	1.00	44.00	1.00	1.00	8.80
2	11-Mar-10	1.00	1.00	16.00	1.00	1.00	16.00
3	17-Jun-10	1.00	1.00	16.00	1.00	1.00	16.00
4	23-Sep-10	16.00	1.00	11.00	1.00	1.00	27.00
5	20-Dec-10	23.00	1.00	5.30	1.00	1.00	28.00
6	28-Mar-11	24.00	1.00	3.10	1.00	1.00	27.10
7	24-Jun-11	13.00	1.00	2.50	1.00	1.00	15.20
8	20-Sep-11	9.40	1.00	4.70	1.00	1.00	16.30
9	16-Dec-11	13.00	1.00	4.70	1.00	1.00	13.00
10	21-Mar-12	10.00	1.00	2.50	1.00	1.00	12.50
	S =	11	0	-34	0	0	-4
	n =	10	10	10	10	10	10
	Average =	11.14	1	10.98	1	1	17.99
	Standard Deviation =	8.494207176	0	12.7269443	0	0	6.851025876
	Coefficient of Variation(CV)=	0.762496156	0	1.159102395	0	0	0.380824118
Increasing Trend (80% Confidence)		YES	NO	NO	NO	NO	NO
Decreasing Trend (80% Confidence)		NO	NO	YES	NO	NO	NO
Undetermined Stable Trend, CV<=1		NO	YES	NO	YES	YES	YES
Undetermined Non-Stable Trend, CV>1		NO	NO	NO	NO	NO	NO
Error Check, OK if Blank							
Stable or Decreasing Trend at 80% Confidence Level		NO	YES	YES	YES	YES	YES
	Data Entry By =	KBR	Date =	12-Jul-12	Checked By =		

Appendix C
Mann-Kendall Statistical Test - PW-2
Byron Barrel Drum Site
Byron Township, NY

State of Wisconsin — **Mann-Kendall Statistical Test**
Department of Natural Resources — **Form 4400-215 (5/2000)**
Remediation and Redevelopment Program

Notice: This form is provided to consultants as an optional tool to be used to provide groundwater contaminant data required to support site closure requests under s. Comm 46.07 or s. NR 746.07, Wis. Adm. Code. Use this form or a manual method to calculate the Mann-Kendall statistic, as specified in Appendix A of ch. Comm 46 and ch. NR 746, Wis. Adm. Code.

Instructions: To use the spreadsheet, provide at least four rounds and not more than 10 rounds of data. Use cells with yellow background for data entry. Use consistent units. The spreadsheet contains several error checks, and a data entry error may cause "DATA ERR" to be displayed. Dates that are not consecutive will show an error message and will not display the test results. The spreadsheet tests the data for both increasing and decreasing trends at an 80% confidence level. If an increasing or decreasing trend is not present, use an additional coefficient of variation test is used for stable and non-stable conditions as proposed by Wiedemeier et al, 1999. For additional information, refer to guidance in Interim Guidance on Natural Attenuation for Petroleum Releases, dated October 1999. Refer to the guidance for recommendations on data entry for non-detect values.

Site Name =	Byron Barrel & Drum	Byron Township	New York	BRRTS No. =		Well Number =	PW-2

	Compound	11DCA	11DCE	Toluene	111TCA	TCE	TVOCs
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	9-Dec-09	1.00	1.00	5.00	5.00	1.00	19.00
2	11-Mar-10	1.00	1.00	5.00	5.00	1.00	1.00
3	17-Jun-10	1.00	1.00	5.00	5.00	1.00	1.00
4	23-Sep-10	1.00	1.00	5.00	5.00	1.00	1.00
5	20-Dec-10	1.00	1.00	5.00	5.00	1.00	1.00
6	28-Mar-11	6.00	1.00	5.00	5.00	1.00	6.00
7	24-Jun-11	6.20	1.00	5.00	5.00	1.00	11.40
8	20-Sep-11	9.80	1.00	4.30	5.00	1.00	14.10
9	16-Dec-11	7.40	1.00	4.30	5.00	1.00	7.40
10	21-Mar-12	5.90	1.00	1.80	5.00	1.00	7.70
	S =	25	0	-23	0	0	13
	n =	10	10	10	10	10	10
	Average =	4.03	1	4.54	5	1	6.96
	Standard Deviation =	3.377063155	0	1.005761182	0	0	6.319317825
	Coefficient of Variation(CV)=	0.837980932	0	0.2215333	0	0	0.907947963
Increasing Trend (80% Confidence)		YES	NO	NO	NO	NO	YES
Decreasing Trend (80% Confidence)		NO	NO	YES	NO	NO	NO
Undetermined Stable Trend, CV<=1		NO	YES	NO	YES	YES	NO
Undetermined Non-Stable Trend, CV>1		NO	NO	NO	NO	NO	NO
Error Check, OK if Blank							
Stable or Decreasing Trend at 80% Confidence Level		NO	YES	YES	YES	YES	NO

Data Entry By =	KBR	Date =	12-Jul-12	Checked By =	

Appendix C
Mann-Kendall Statistical Test - PW-3
Byron Barrel Drum Site
Byron Township, NY

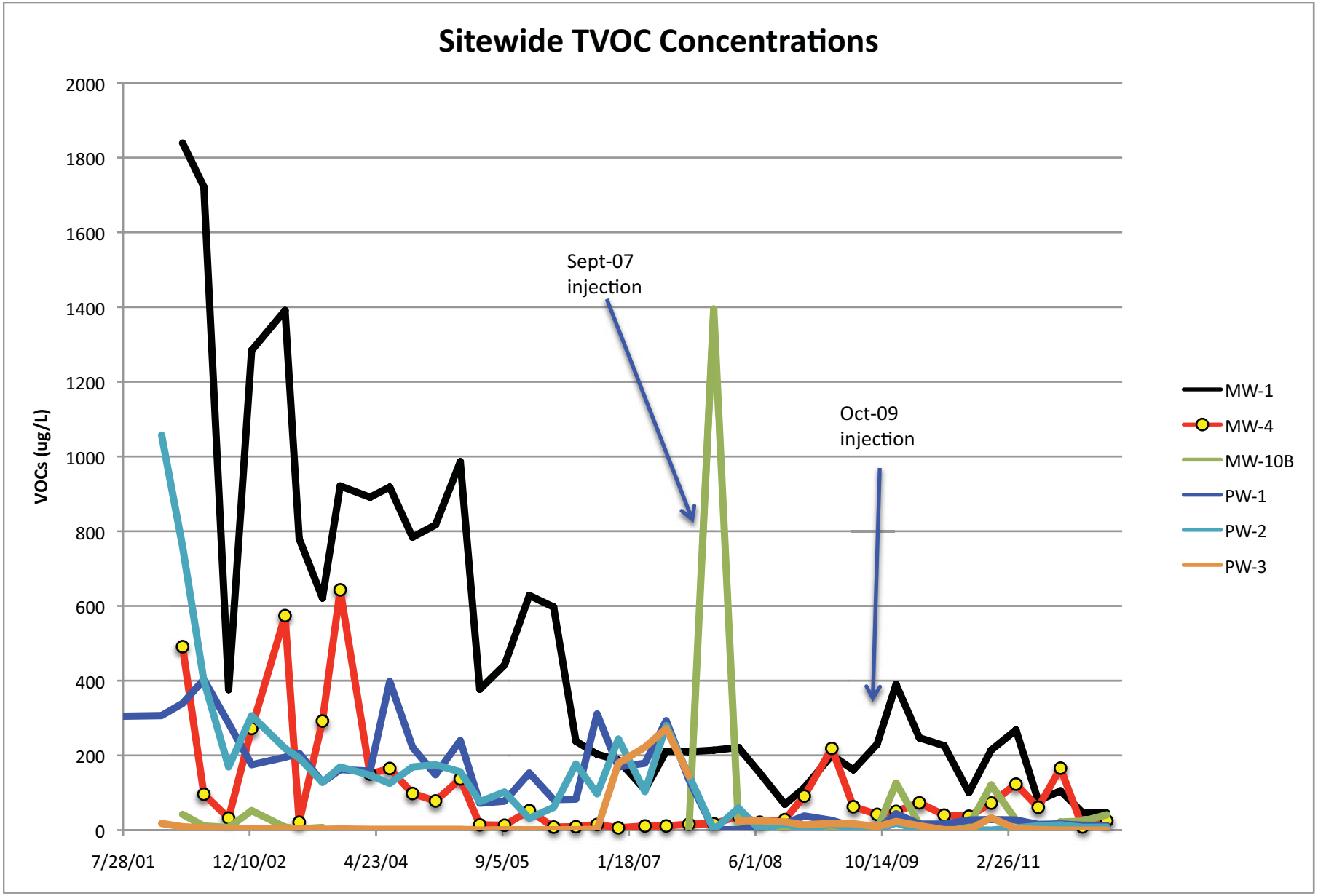
State of Wisconsin — **Mann-Kendall Statistical Test**
Department of Natural Resources — **Form 4400-215 (5/2000)**
Remediation and Redevelopment Program

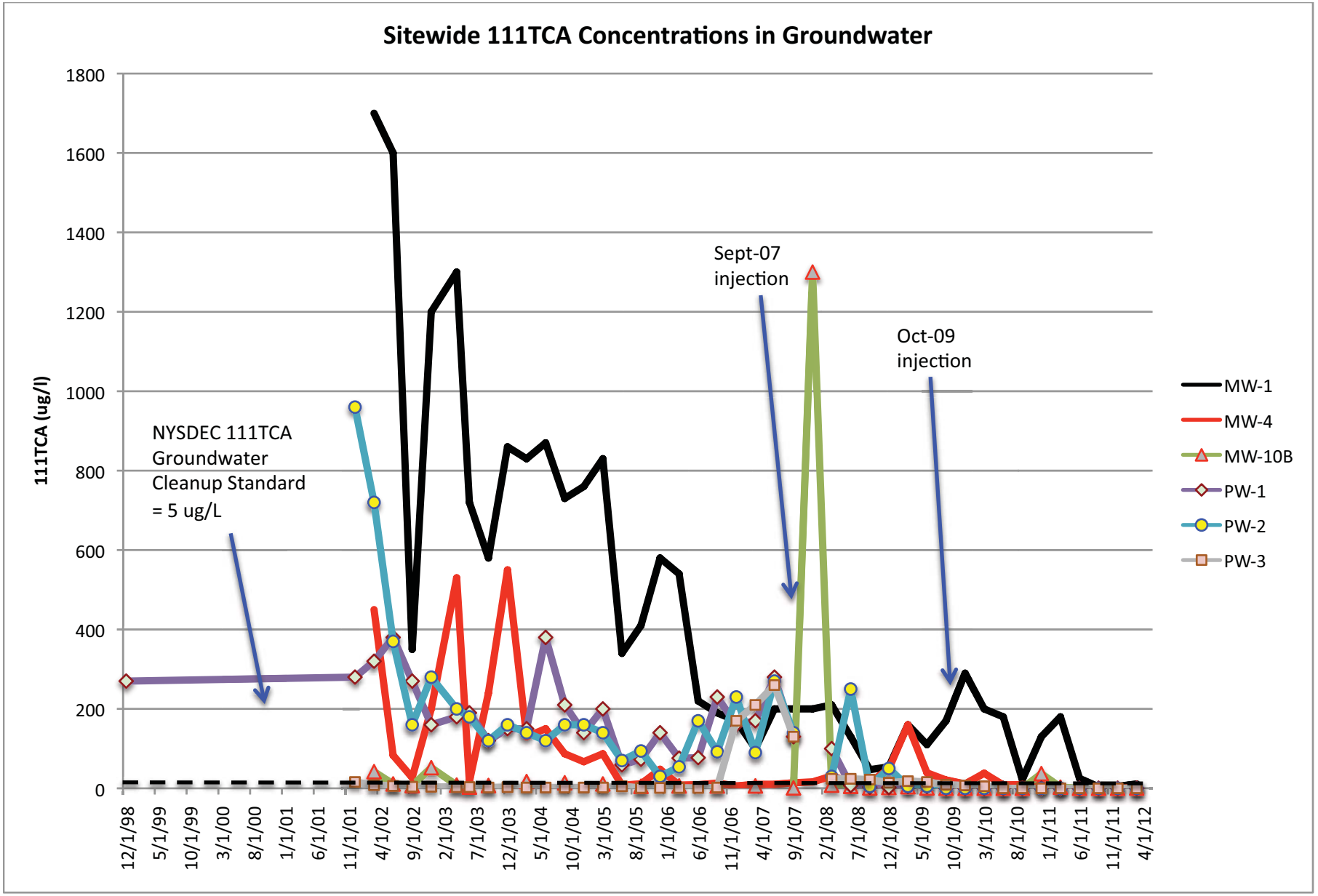
Notice: This form is provided to consultants as an optional tool to be used to provide groundwater contaminant data required to support site closure requests under s. Comm 46.07 or s. NR 746.07, Wis. Adm. Code. Use this form or a manual method to calculate the Mann-Kendall statistic, as specified in Appendix A of ch. Comm 46 and ch. NR 746, Wis. Adm. Code.

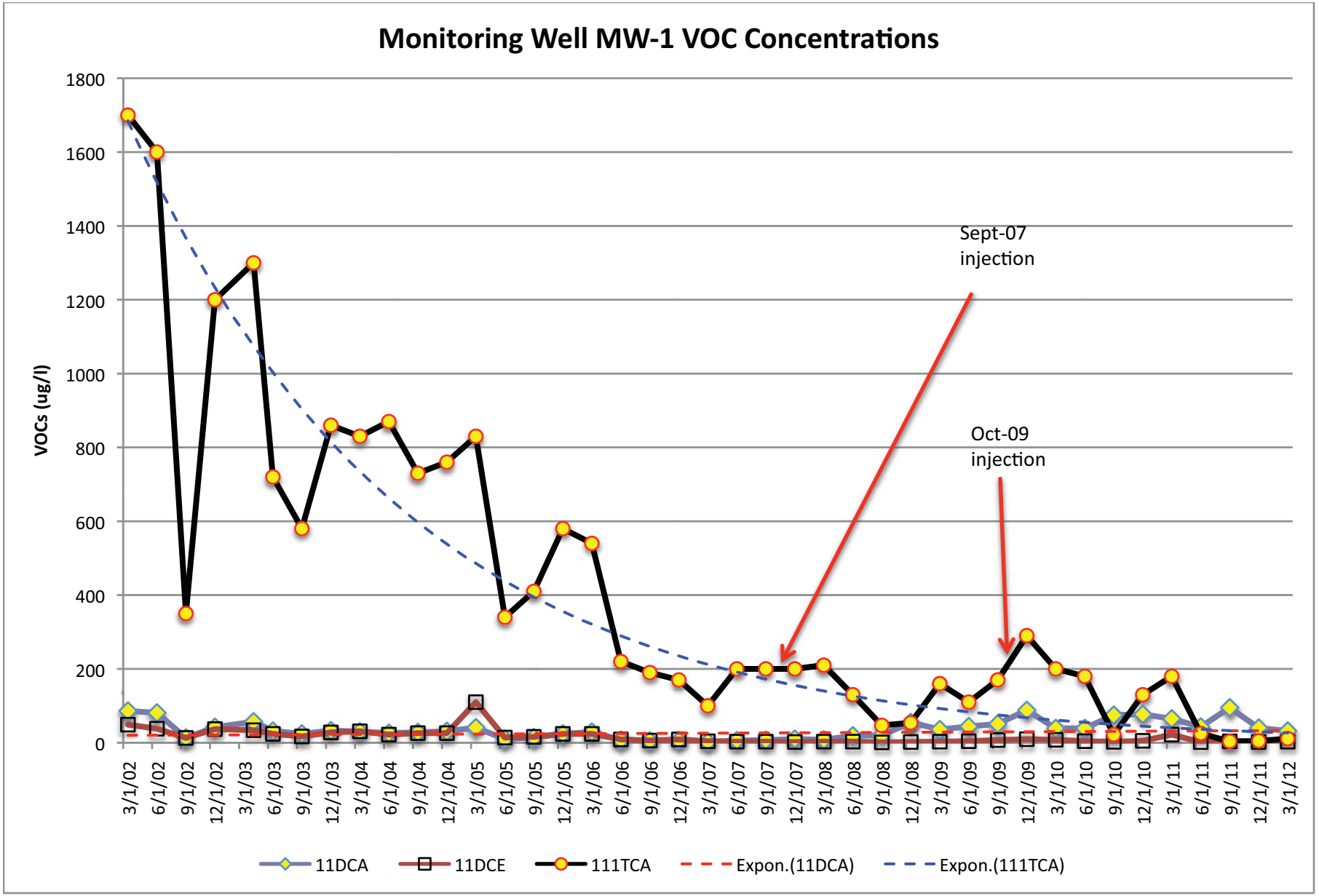
Instructions: To use the spreadsheet, provide at least four rounds and not more than 10 rounds of data. Use cells with yellow background for data entry. Use consistent units. The spreadsheet contains several error checks, and a data entry error may cause "DATA ERR" to be displayed. Dates that are not consecutive will show an error message and will not display the test results. The spreadsheet tests the data for both increasing and decreasing trends at an 80% confidence level. If an increasing or decreasing trend is not present, use an additional coefficient of variation test is used for stable and non-stable conditions as proposed by Wiedemeier et al, 1999. For additional information, refer to guidance in Interim Guidance on Natural Attenuation for Petroleum Releases, dated October 1999. Refer to the guidance for recommendations on data entry for non-detect values.

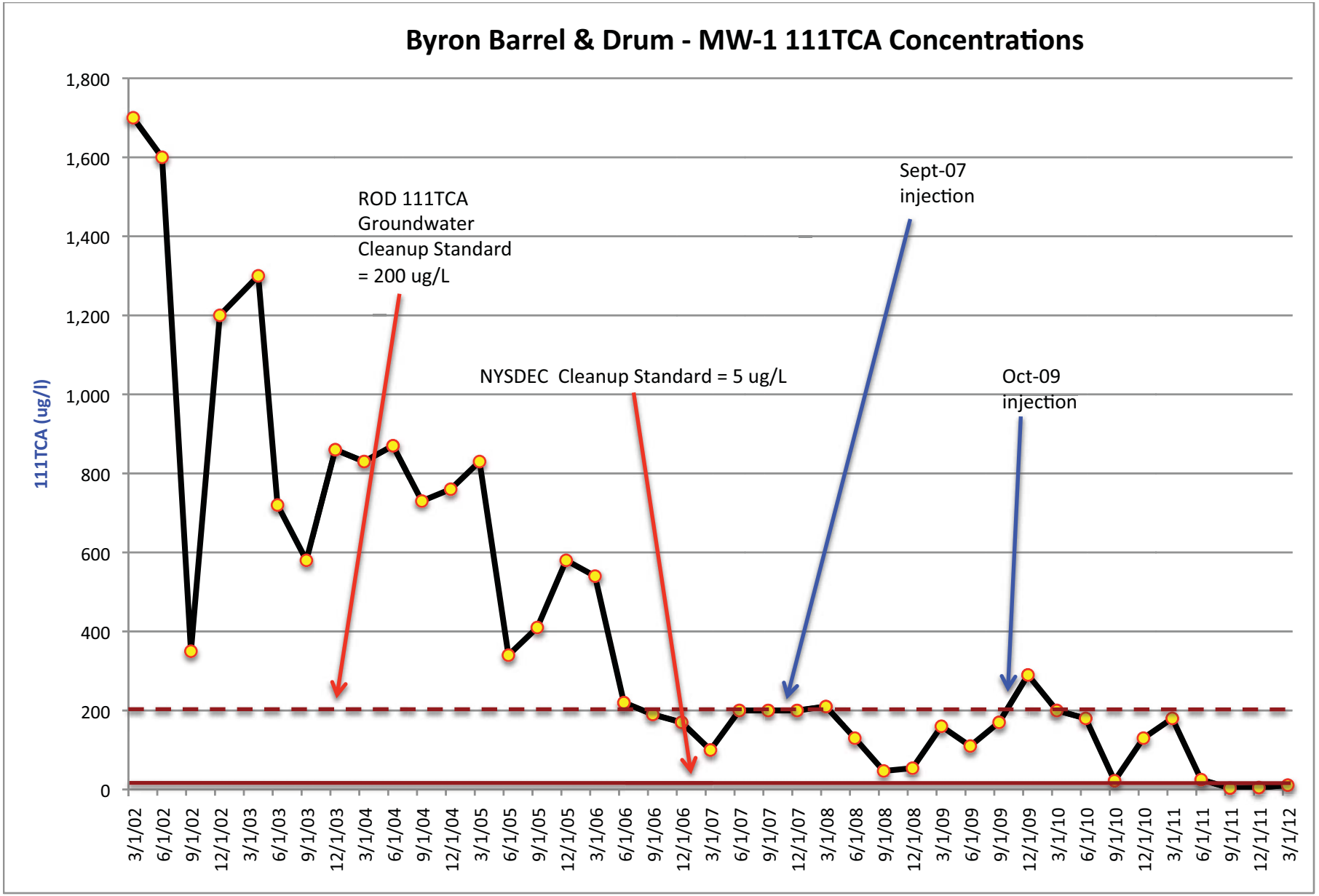
Site Name =	Byron Barrel & Drum	Byron Township	New York	BRRTS No. =		Well Number =	PW-3
	Compound	11DCA	11DCE	Methylene Chloride	111TCA	TCE	TVOCs
Event Number	Sampling Date (most recent last)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)	Concentration (leave blank if no data)
1	9-Dec-09	1.00	1.00	16.00	1.00	7.20	23.20
2	11-Mar-10	1.00	1.00	6.60	1.00	5.10	11.70
3	17-Jun-10	1.00	1.00	1.00	1.00	1.00	1.00
4	23-Sep-10	1.00	1.00	1.00	1.00	1.00	1.00
5	20-Dec-10	20.00	1.00	13.00	1.00	1.00	33.00
6	28-Mar-11	1.00	1.00	3.70	1.00	1.00	3.70
7	24-Jun-11	1.00	1.00	1.00	1.00	1.00	1.40
8	20-Sep-11	1.00	1.00	1.00	1.00	1.00	1.00
9	16-Dec-11	1.00	1.00	1.00	1.00	1.00	1.00
10	21-Mar-12	1.00	1.00	1.00	1.00	1.00	1.00
	S =	-1	0	-20	0	-17	-19
	n =	10	10	10	10	10	10
	Average =	2.9	1	4.53	1	2.03	7.8
	Standard Deviation =	6.008327554	0	5.607940799	0	2.22713069	11.43279882
	Coefficient of Variation(CV)=	2.071837088	0	1.237956026	0	1.097108714	1.465743439
Increasing Trend (80% Confidence)		NO	NO	NO	NO	NO	NO
Decreasing Trend (80% Confidence)		NO	NO	YES	NO	YES	YES
Undetermined Stable Trend, CV<=1		NO	YES	NO	YES	NO	NO
Undetermined Non-Stable Trend, CV>1		**YES**	NO	NO	NO	NO	NO
Error Check, OK if Blank							
Stable or Decreasing Trend at 80% Confidence Level		**NO**	YES	YES	YES	YES	YES
	Data Entry By =	KBR	Date =	12-Jul-12	Checked By =		

APPENDIX D
Well Isoconcentration Graphs


Sitewide TVOC Concentrations
VOCs (ug/L)
2000
1800
1600
1400
1200
1000
800
600
400
200
0
7/28/01
12/10/02
4/23/04
9/5/05
1/18/07
6/1/08
10/14/09
2/26/11
Sept-07 injection
Oct-09 injection
MW-1
MW-4
MW-10B
PW-1
PW-2
PW-3


Sitewide 111TCA Concentrations in Groundwater
111TCA (ug/l)
1800
1600
1400
1200
1000
800
600
400
200
0
NYSDEC 111TCA Groundwater Cleanup Standard = 5 ug/L
Sept-07 injection
Oct-09 injection
MW-1
MW-4
MW-10B
PW-1
PW-2
PW-3
12/1/98
5/1/99
10/1/99
3/1/00
8/1/00
1/1/01
6/1/01
11/1/01
4/1/02
9/1/02
2/1/03
7/1/03
12/1/03
5/1/04
10/1/04
3/1/05
8/1/05
1/1/06
6/1/06
11/1/06
4/1/07
9/1/07
2/1/08
7/1/08
12/1/08
5/1/09
10/1/09
3/1/10
8/1/10
1/1/11
6/1/11
11/1/11
4/1/12


Monitoring Well MW-1 VOC Concentrations
VOCs (ug/l)
1800
1600
1400
1200
1000
800
600
400
200
0
Sept-07
injection
Oct-09
injection
3/1/02
6/1/02
9/1/02
12/1/02
3/1/03
6/1/03
9/1/03
12/1/03
3/1/04
6/1/04
9/1/04
12/1/04
3/1/05
6/1/05
9/1/05
12/1/05
3/1/06
6/1/06
9/1/06
12/1/06
3/1/07
6/1/07
9/1/07
12/1/07
3/1/08
6/1/08
9/1/08
12/1/08
3/1/09
6/1/09
9/1/09
12/1/09
3/1/10
6/1/10
9/1/10
12/1/10
3/1/11
6/1/11
9/1/11
12/1/11
3/1/12
11DCA
11DCE
111TCA
Expon.(11DCA)
Expon.(111TCA)


Byron Barrel & Drum - MW-1 111TCA Concentrations
111TCA (ug/l)
1,800
1,600
1,400
1,200
1,000
800
600
400
200
0
ROD 111TCA Groundwater Cleanup Standard = 200 ug/L
NYSDEC Cleanup Standard = 5 ug/L
Sept-07 injection
Oct-09 injection
3/1/02
6/1/02
9/1/02
12/1/02
3/1/03
6/1/03
9/1/03
12/1/03
3/1/04
6/1/04
9/1/04
12/1/04
3/1/05
6/1/05
9/1/05
12/1/05
3/1/06
6/1/06
9/1/06
12/1/06
3/1/07
6/1/07
9/1/07
12/1/07
3/1/08
6/1/08
9/1/08
12/1/08
3/1/09
6/1/09
9/1/09
12/1/09
3/1/10
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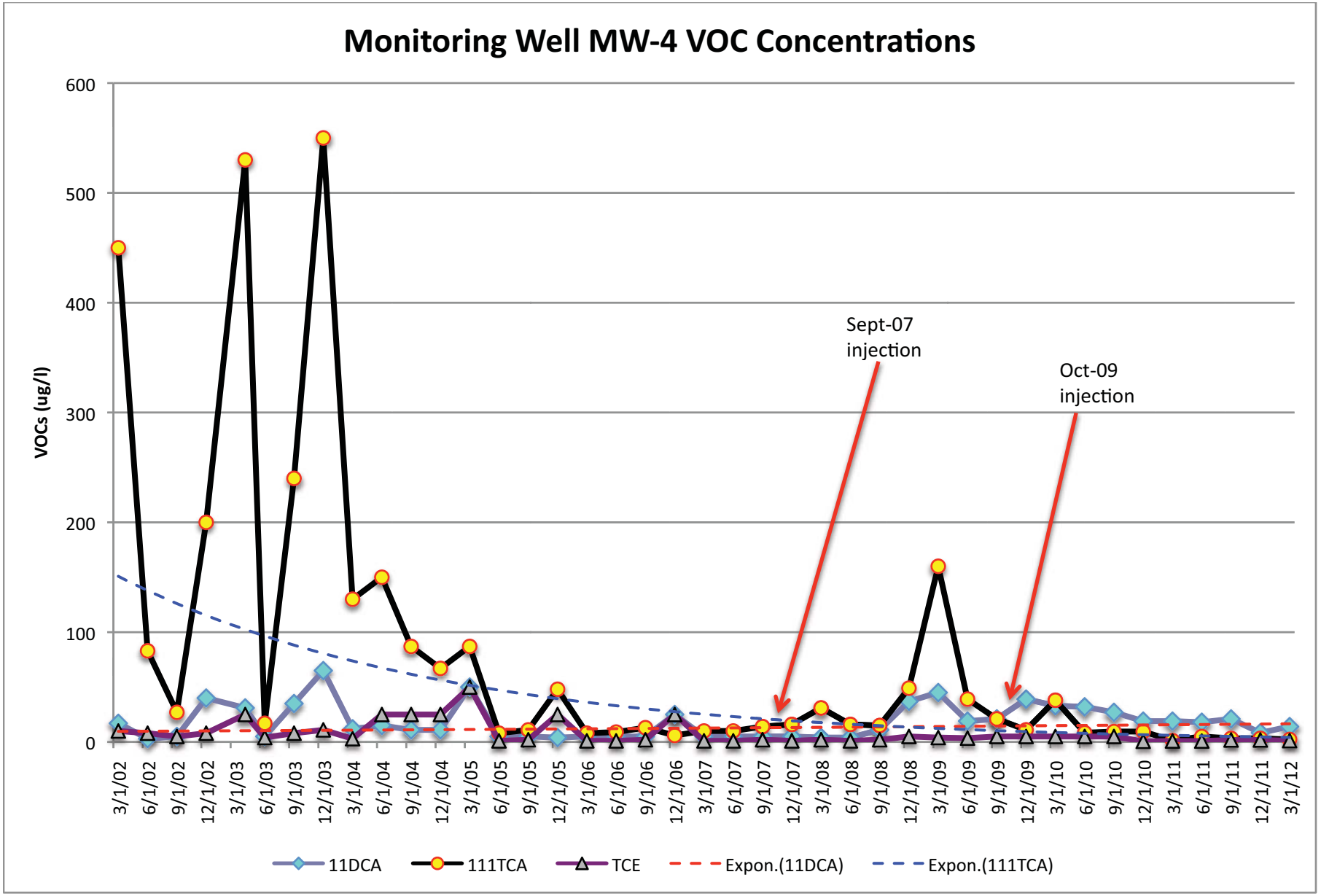
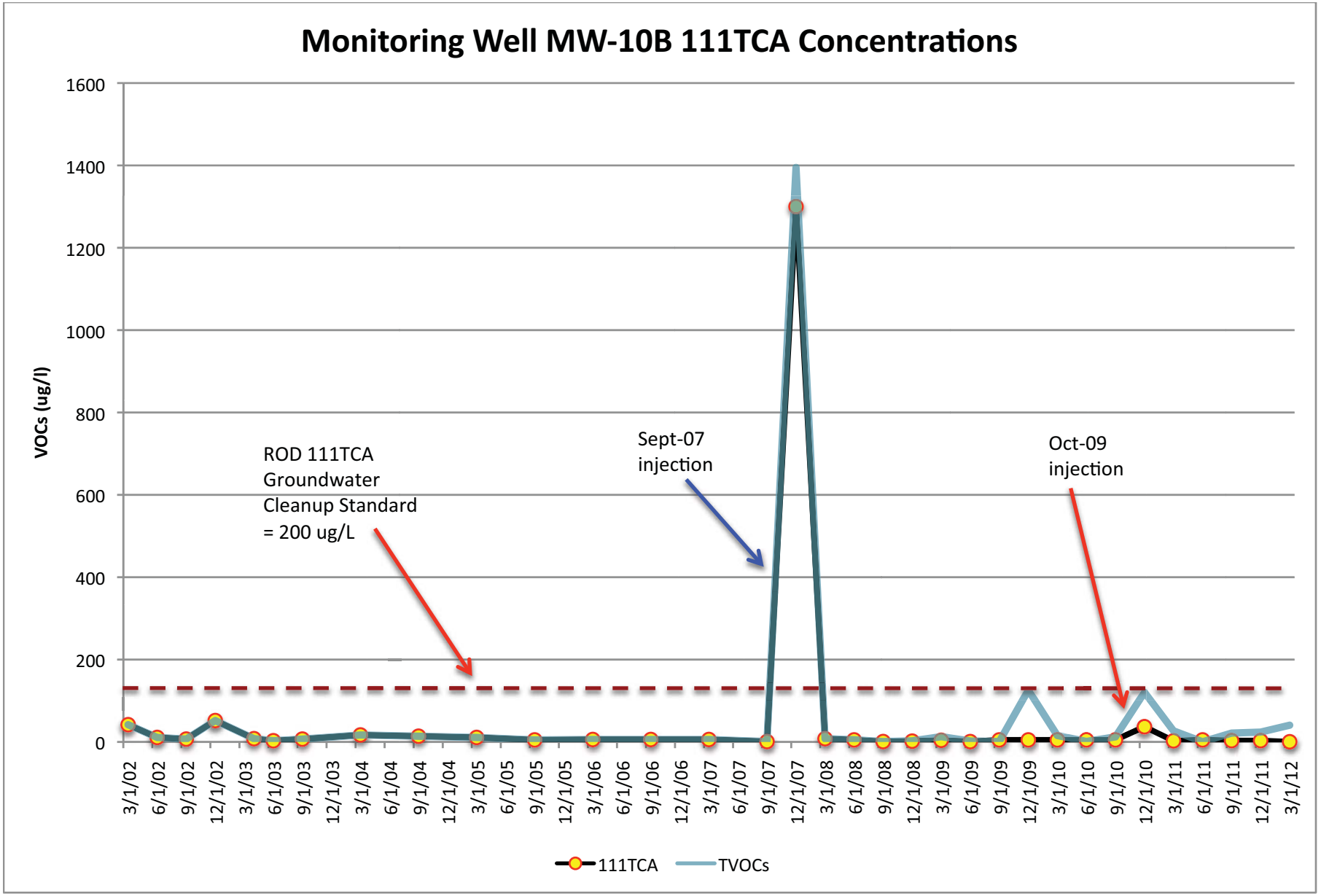
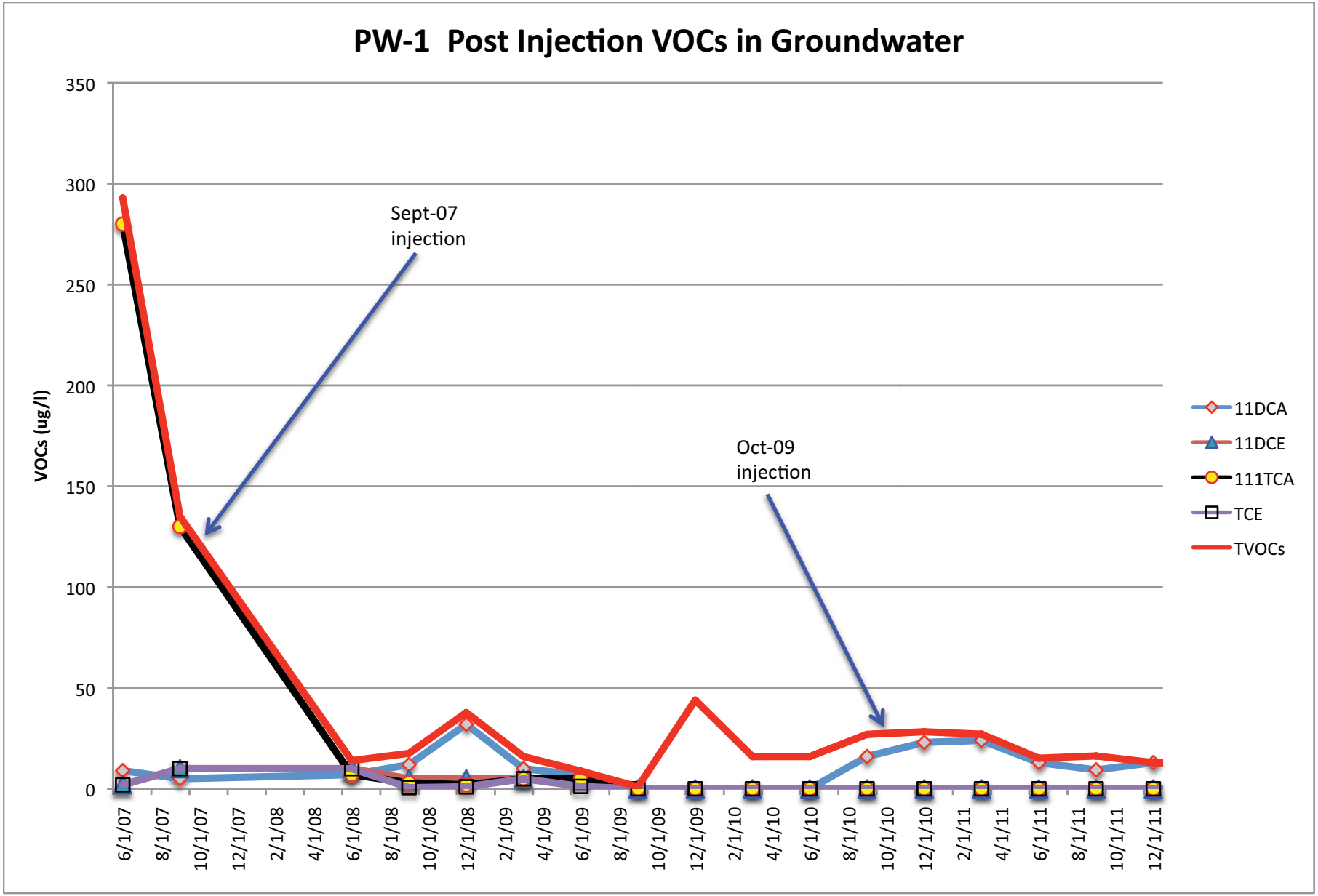
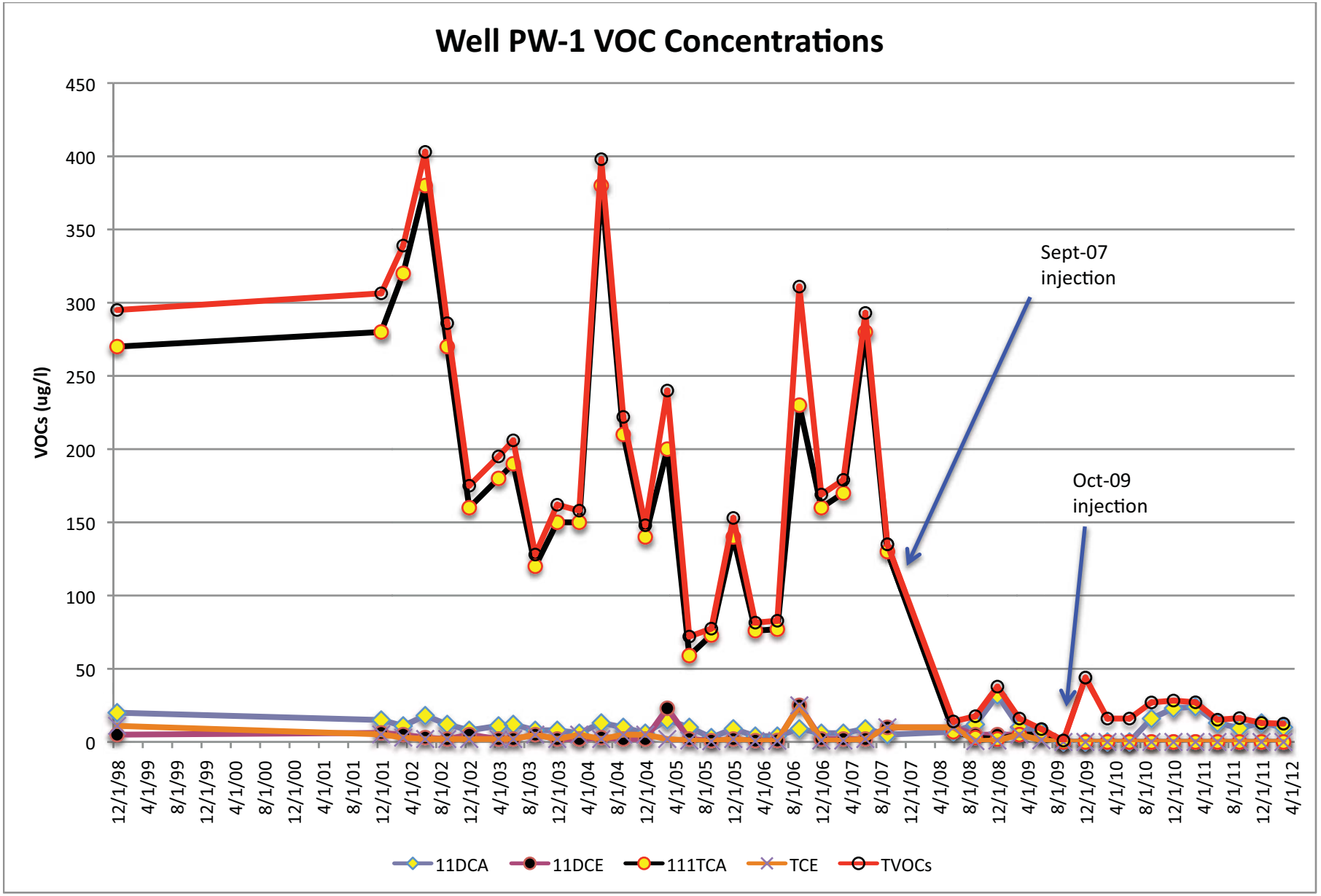
6/1/11
9/1/11
12/1/11
3/1/12


Monitoring Well MW-4 VOC Concentrations
VOCs (ug/l)
600
500
400
300
200
100
0
Sept-07 injection
Oct-09 injection
3/1/02
6/1/02
9/1/02
12/1/02
3/1/03
6/1/03
9/1/03
12/1/03
3/1/04
6/1/04
9/1/04
12/1/04
3/1/05
6/1/05
9/1/05
12/1/05
3/1/06
6/1/06
9/1/06
12/1/06
3/1/07
6/1/07
9/1/07
12/1/07
3/1/08
6/1/08
9/1/08
12/1/08
3/1/09
6/1/09
9/1/09
12/1/09
3/1/10
6/1/10
9/1/10
12/1/10
3/1/11
6/1/11
9/1/11
12/1/11
3/1/12
11DCA
111TCA
TCE
Expon.(11DCA)
Expon.(111TCA)


Monitoring Well MW-10B 111TCA Concentrations
VOCs (ug/l)
1600
1400
1200
1000
800
600
400
200
0
ROD 111TCA
Groundwater
Cleanup Standard
= 200 ug/L
Sept-07
injection
Oct-09
injection
3/1/02
6/1/02
9/1/02
12/1/02
3/1/03
6/1/03
9/1/03
12/1/03
3/1/04
6/1/04
9/1/04
12/1/04
3/1/05
6/1/05
9/1/05
12/1/05
3/1/06
6/1/06
9/1/06
12/1/06
3/1/07
6/1/07
9/1/07
12/1/07
3/1/08
6/1/08
9/1/08
12/1/08
3/1/09
6/1/09
9/1/09
12/1/09
3/1/10
6/1/10
9/1/10
12/1/10
3/1/11
6/1/11
9/1/11
12/1/11
3/1/12
111TCA
TVOCs


PW-1 Post Injection VOCs in Groundwater
VOCs (ug/l)
350
300
250
200
150
100
50
0
Sept-07
injection
Oct-09
injection
6/1/07
8/1/07
10/1/07
12/1/07
2/1/08
4/1/08
6/1/08
8/1/08
10/1/08
12/1/08
2/1/09
4/1/09
6/1/09
8/1/09
10/1/09
12/1/09
2/1/10
4/1/10
6/1/10
8/1/10
10/1/10
12/1/10
2/1/11
4/1/11
6/1/11
8/1/11
10/1/11
12/1/11
11DCA
11DCE
111TCA
TCE
TVOCs


Well PW-1 VOC Concentrations
VOCs (ug/l)
450
400
350
300
250
200
150
100
50
0
12/1/98
4/1/99
8/1/99
12/1/99
4/1/00
8/1/00
12/1/00
4/1/01
8/1/01
12/1/01
4/1/02
8/1/02
12/1/02
4/1/03
8/1/03
12/1/03
4/1/04
8/1/04
12/1/04
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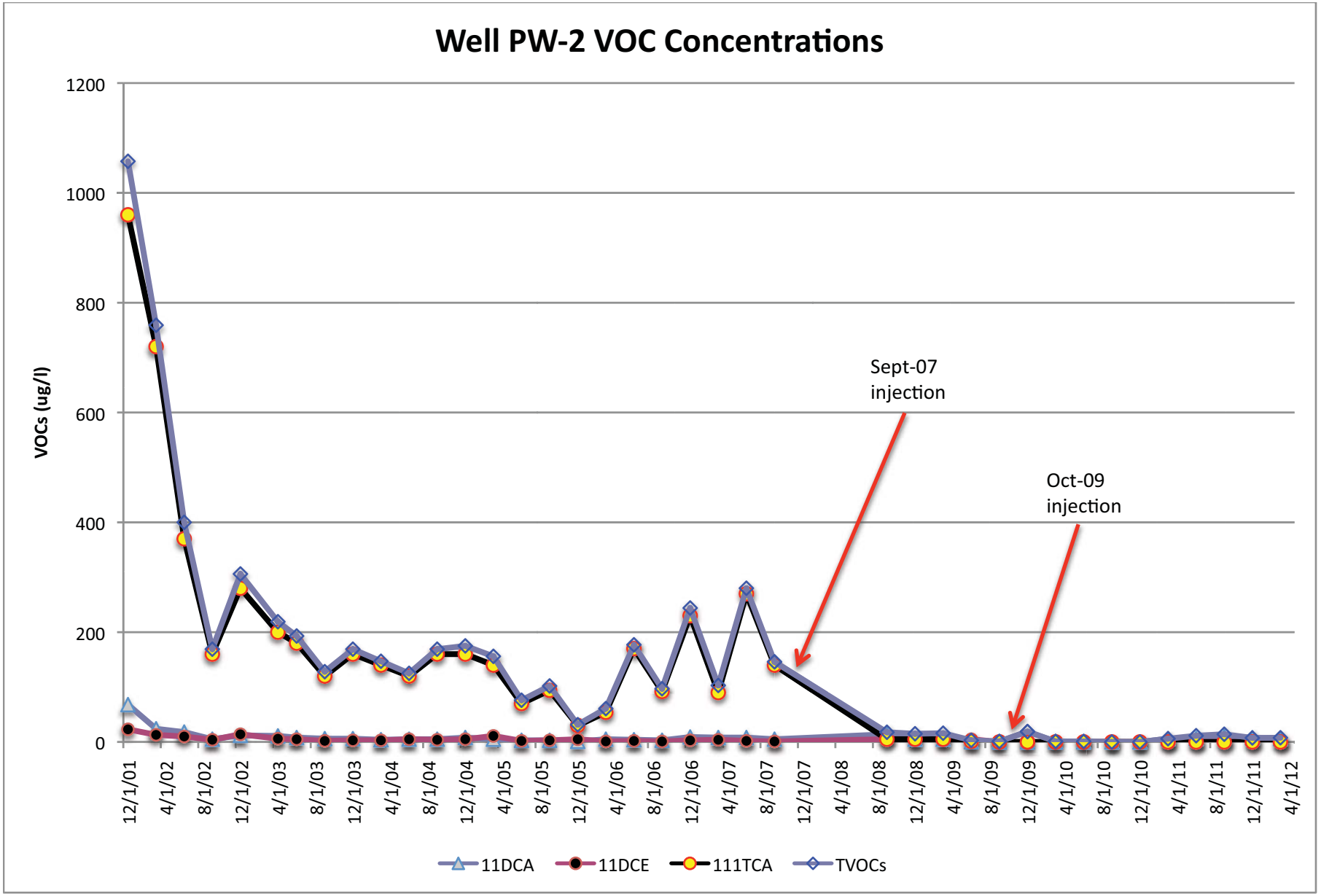
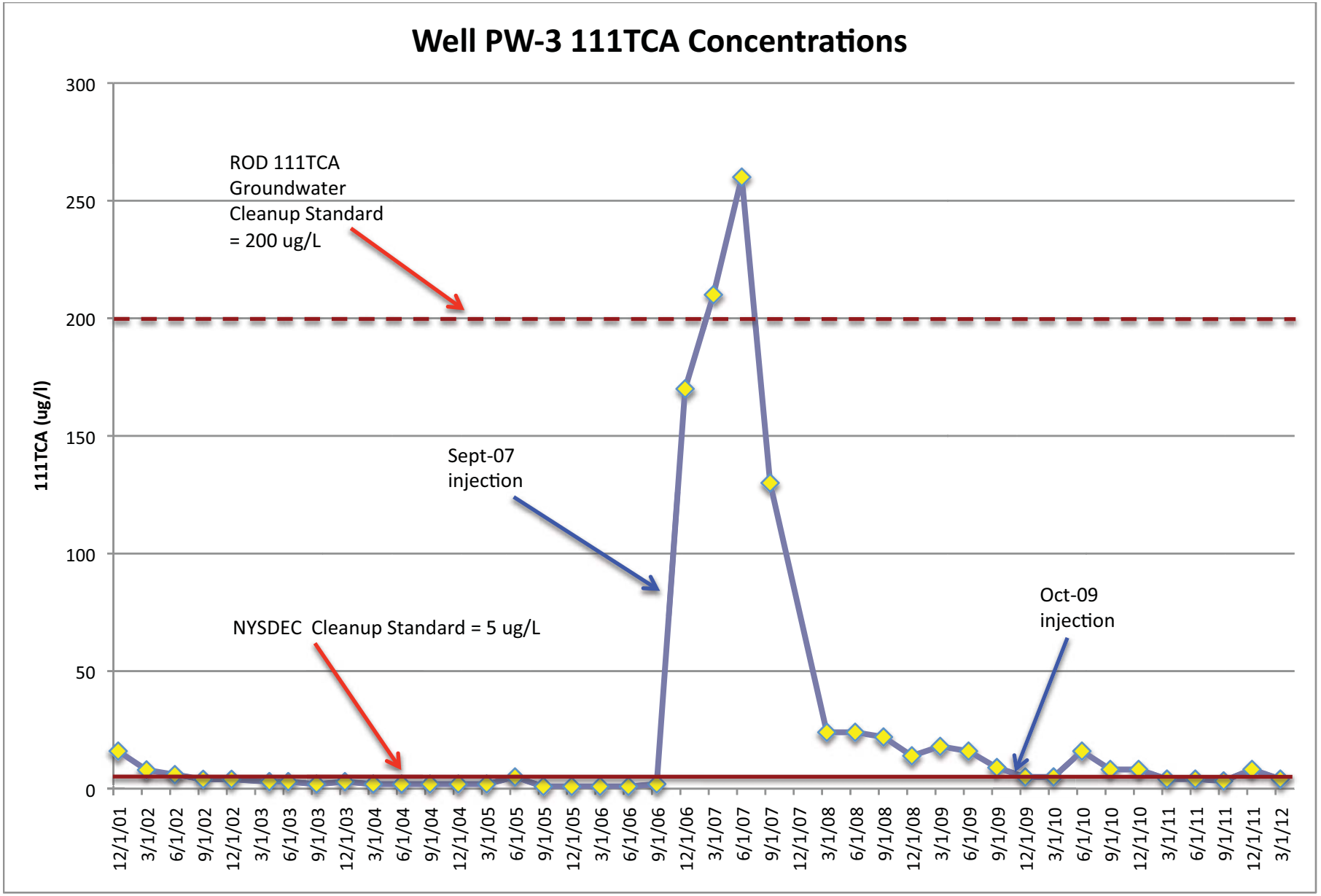
4/1/07
8/1/07
12/1/07
4/1/08
8/1/08
12/1/08
4/1/09
8/1/09
12/1/09
4/1/10
8/1/10
12/1/10
4/1/11
8/1/11
12/1/11
4/1/12
Sept-07 injection
Oct-09 injection
11DCA
11DCE
111TCA
TCE
TVOCs


Well PW-2 VOC Concentrations
VOCs (ug/l)
1200
1000
800
600
400
200
0
Sept-07
injection
Oct-09
injection
12/1/01
4/1/02
8/1/02
12/1/02
4/1/03
8/1/03
12/1/03
4/1/04
8/1/04
12/1/04
4/1/05
8/1/05
12/1/05
4/1/06
8/1/06
12/1/06
4/1/07
8/1/07
12/1/07
4/1/08
8/1/08
12/1/08
4/1/09
8/1/09
12/1/09
4/1/10
8/1/10
12/1/10
4/1/11
8/1/11
12/1/11
4/1/12
11DCA
11DCE
111TCA
TVOCs


Well PW-3 111TCA Concentrations
111TCA (ug/l)
300
250
200
150
100
50
0
ROD 111TCA
Groundwater
Cleanup Standard
= 200 ug/L
Sept-07
injection
Oct-09
injection
NYSDEC Cleanup Standard = 5 ug/L
12/1/01
3/1/02
6/1/02
9/1/02
12/1/02
3/1/03
6/1/03
9/1/03
12/1/03
3/1/04
6/1/04
9/1/04
12/1/04
3/1/05
6/1/05
9/1/05
12/1/05
3/1/06
6/1/06
9/1/06
12/1/06
3/1/07
6/1/07
9/1/07
12/1/07
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9/1/09
12/1/09
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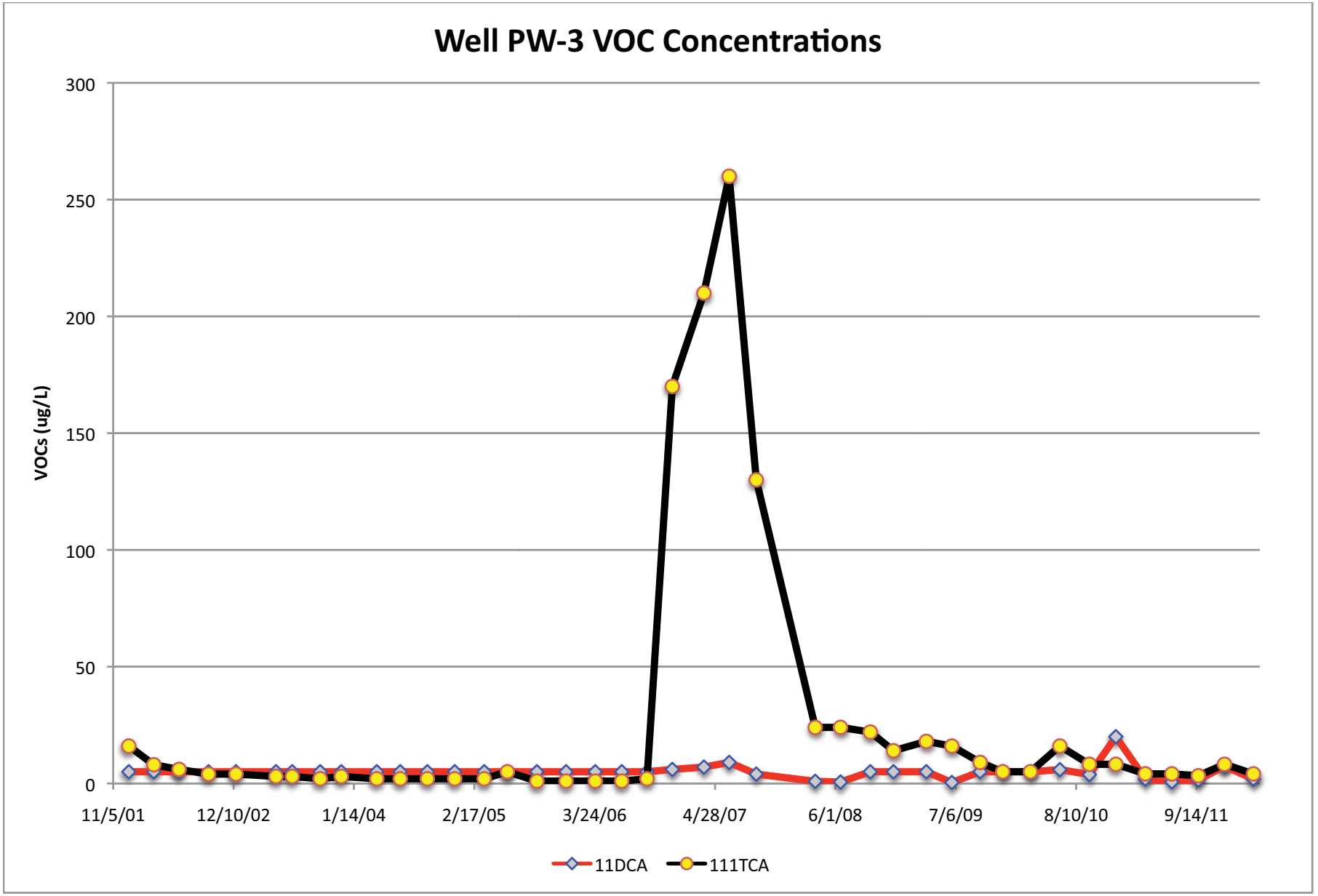
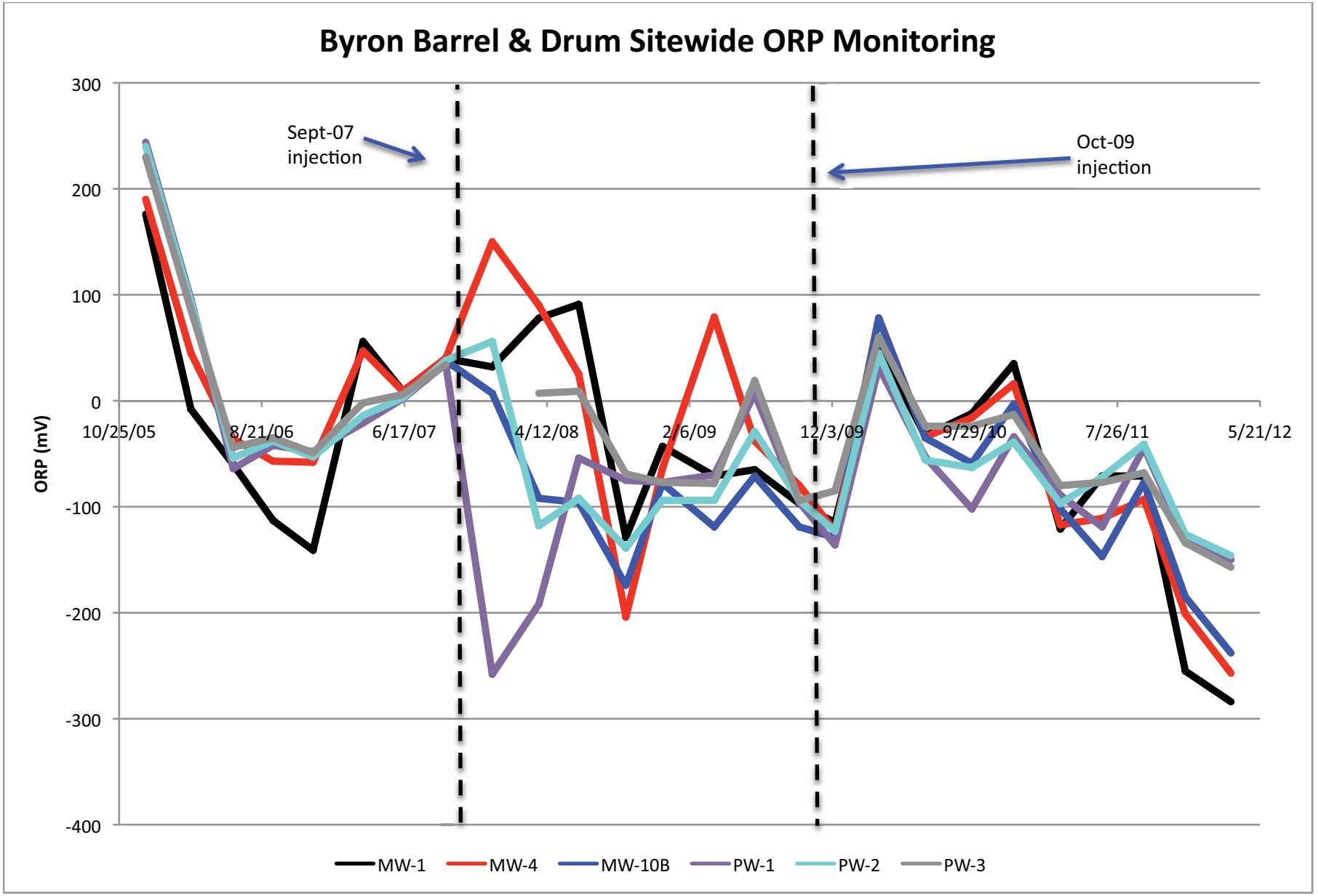
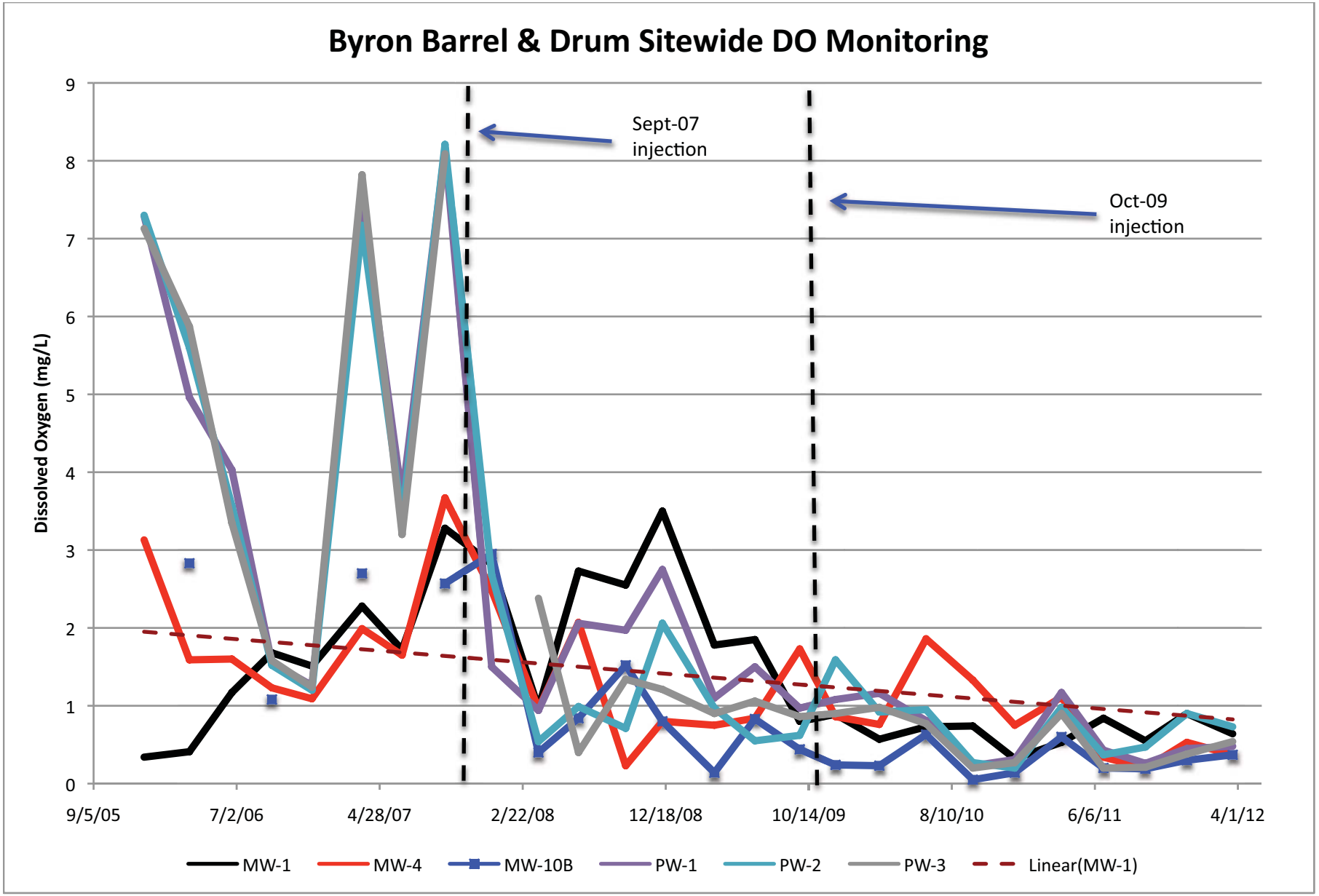
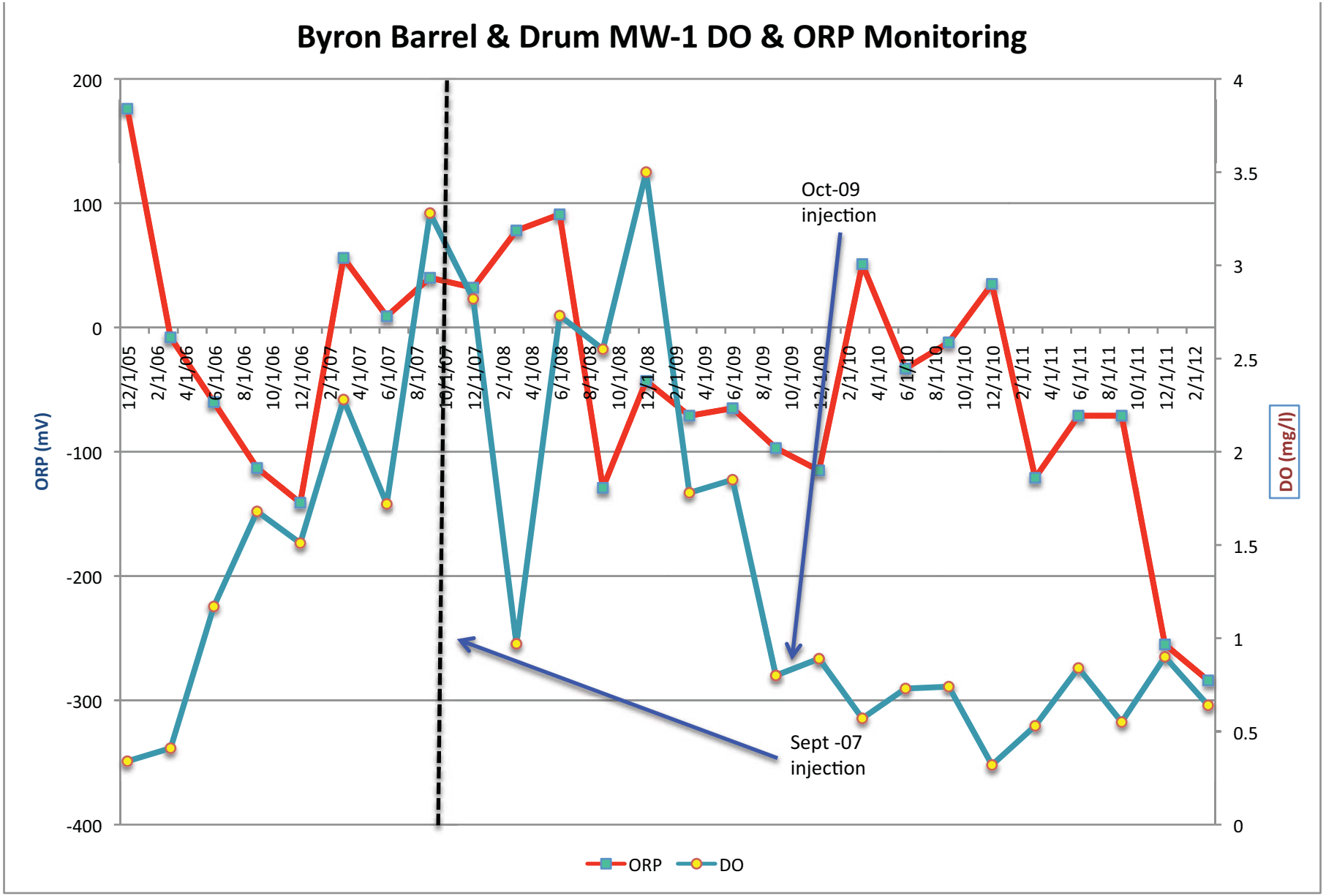
6/1/11
9/1/11
12/1/11
3/1/12

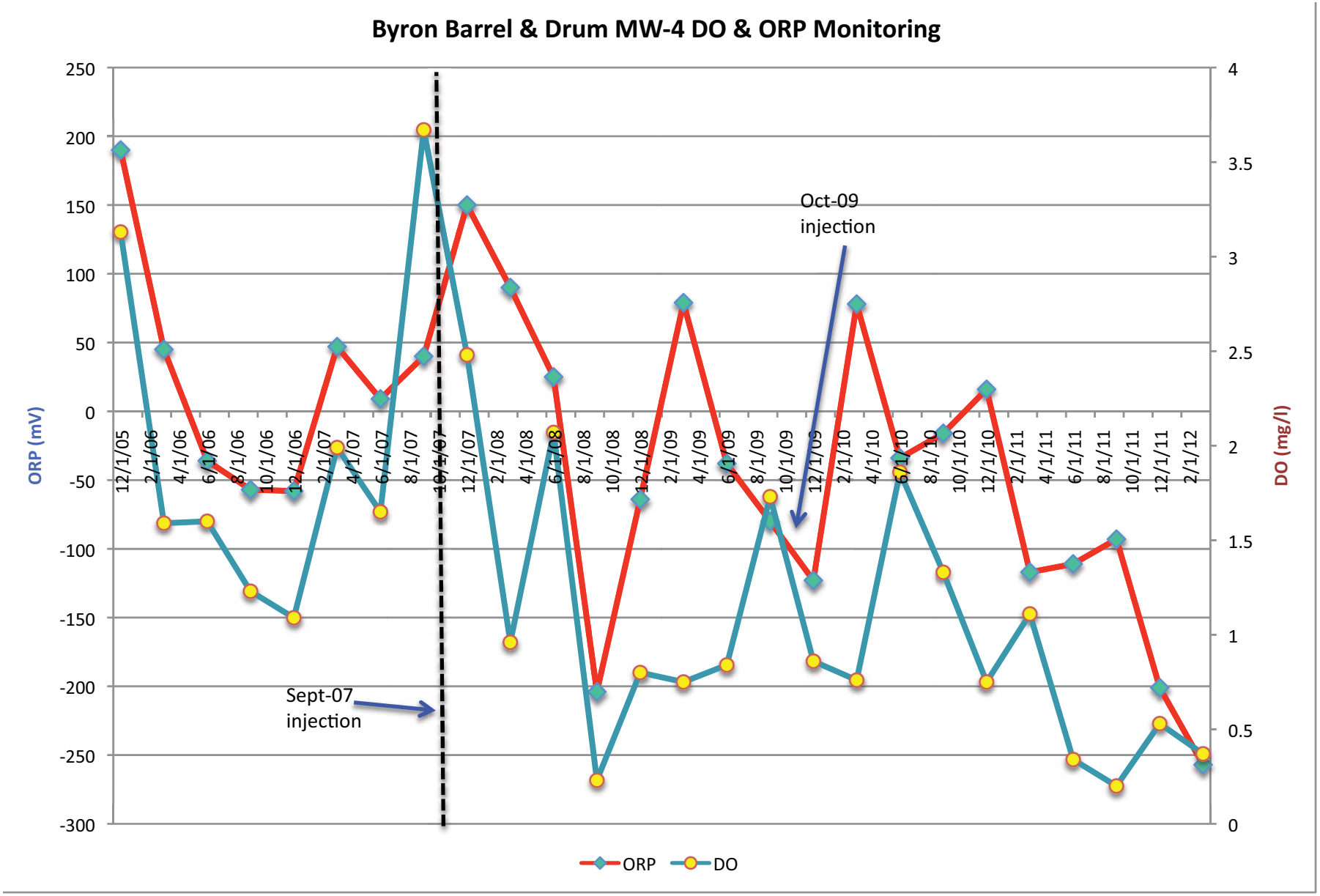

Well PW-3 VOC Concentrations
VOCs (ug/L)
300
250
200
150
100
50
0
11/5/01
12/10/02
1/14/04
2/17/05
3/24/06
4/28/07
6/1/08
7/6/09
8/10/10
9/14/11
11DCA
111TCA

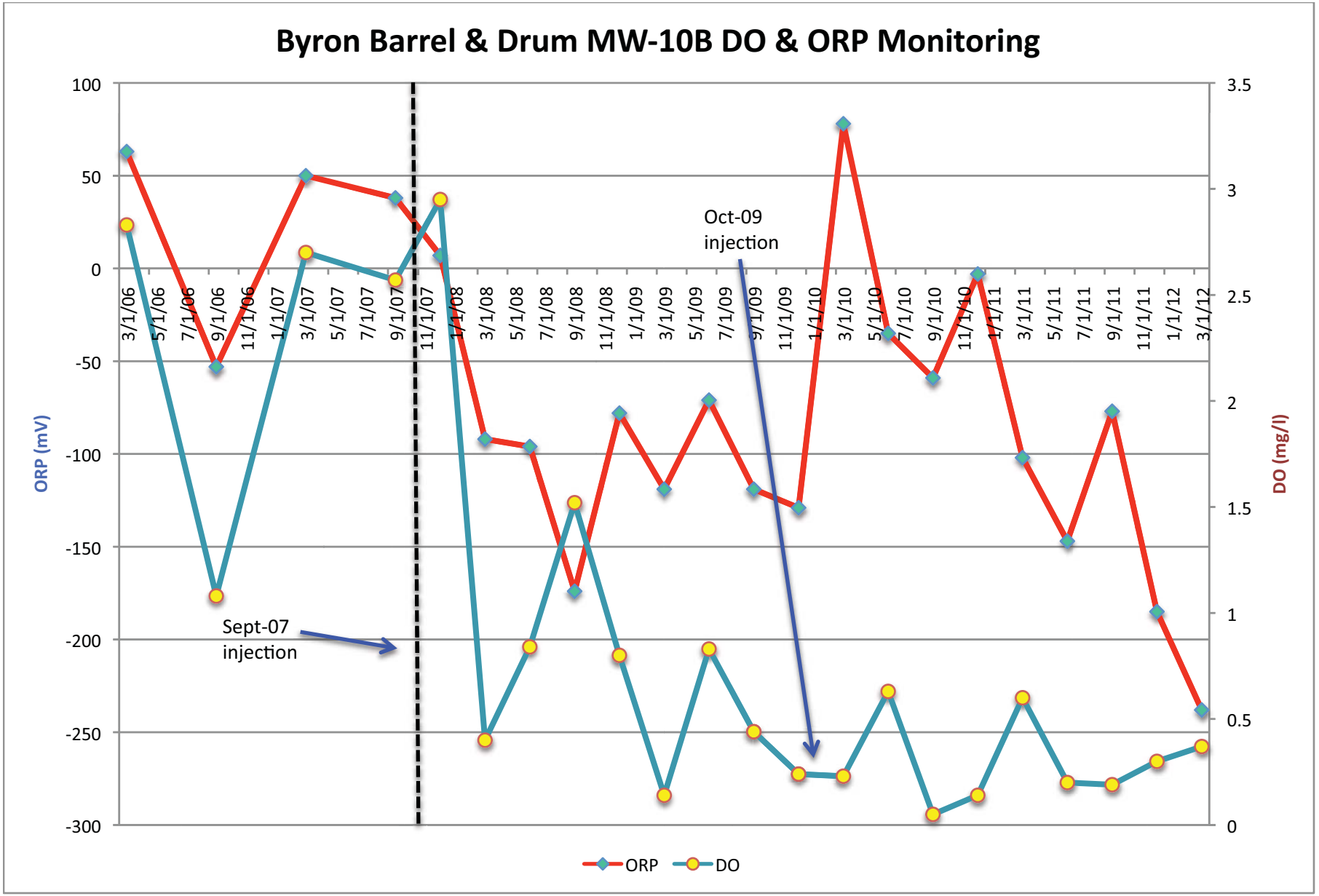
APPENDIX E
ISRT Analytical and Microbial Data

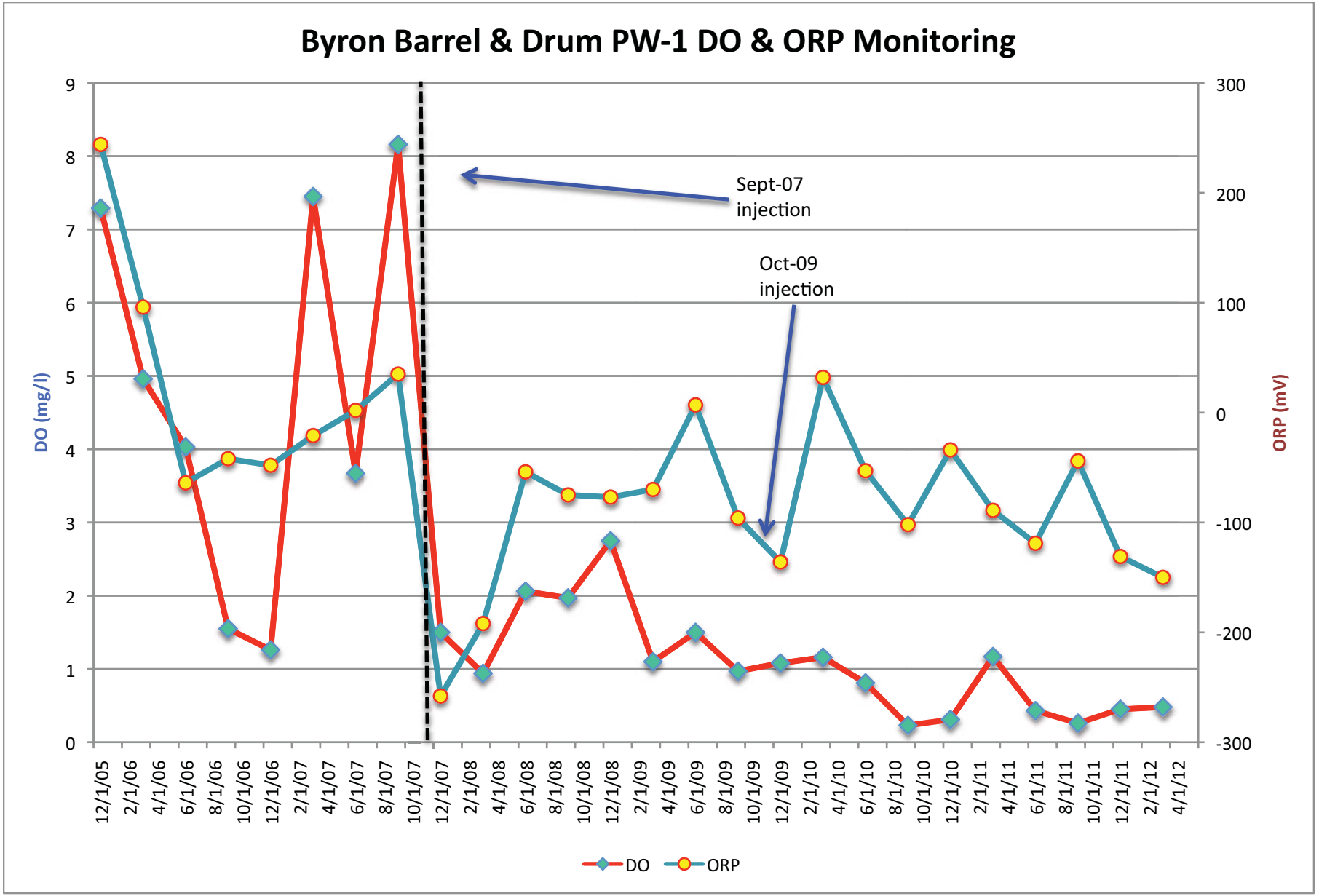

Byron Barrel & Drum Sitewide ORP Monitoring
ORP (mV)
300
200
100
0
-100
-200
-300
-400
10/25/05
8/21/06
6/17/07
4/12/08
2/6/09
12/3/09
9/29/10
7/26/11
5/21/12
Sept-07 injection
Oct-09 injection
MW-1
MW-4
MW-10B
PW-1
PW-2
PW-3

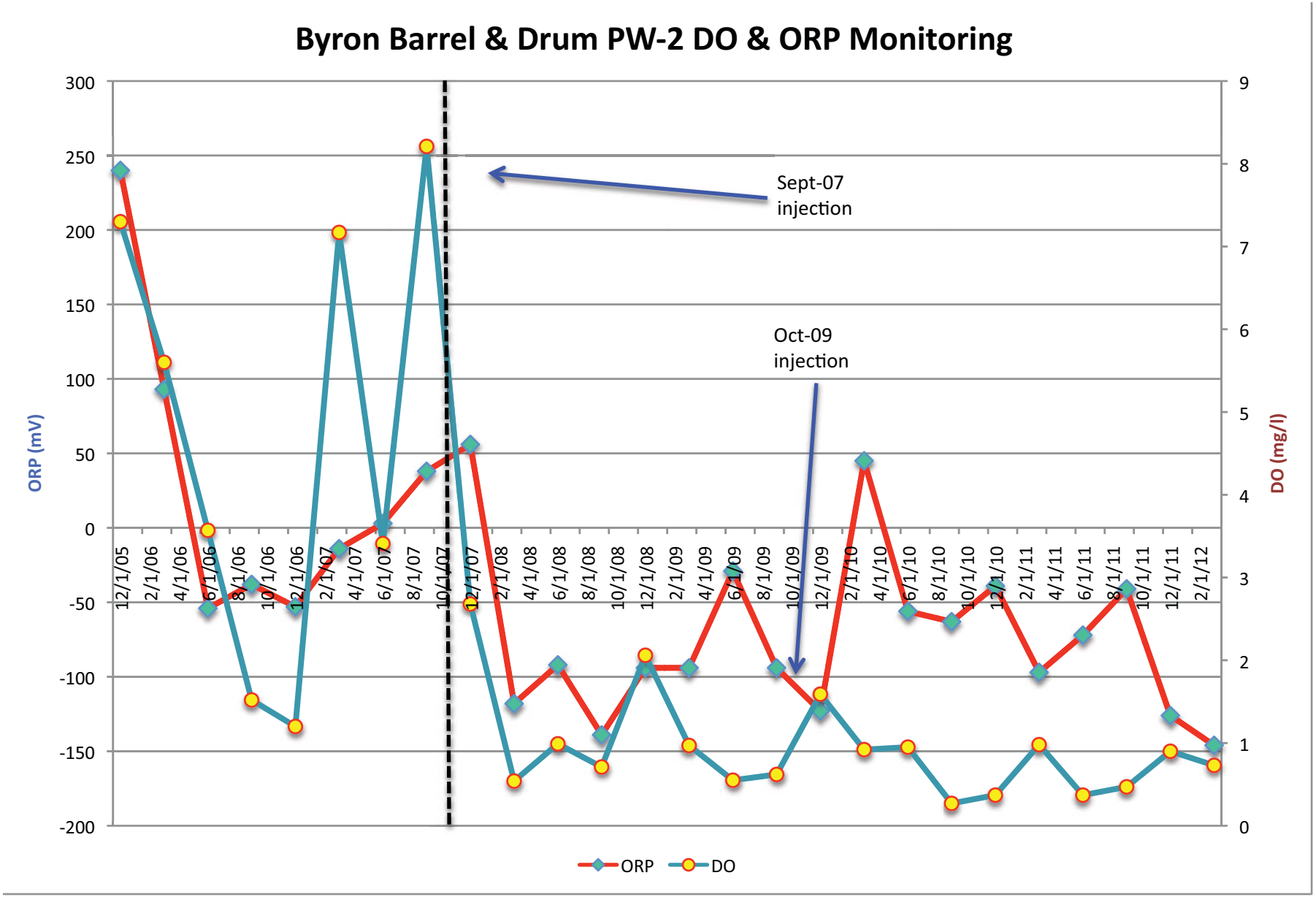

Byron Barrel & Drum Sitewide DO Monitoring
Dissolved Oxygen (mg/L)
9
8
7
6
5
4
3
2
1
0
Sept-07 injection
Oct-09 injection
9/5/05
7/2/06
4/28/07
2/22/08
12/18/08
10/14/09
8/10/10
6/6/11
4/1/12
MW-1
MW-4
MW-10B
PW-1
PW-2
PW-3
Linear(MW-1)

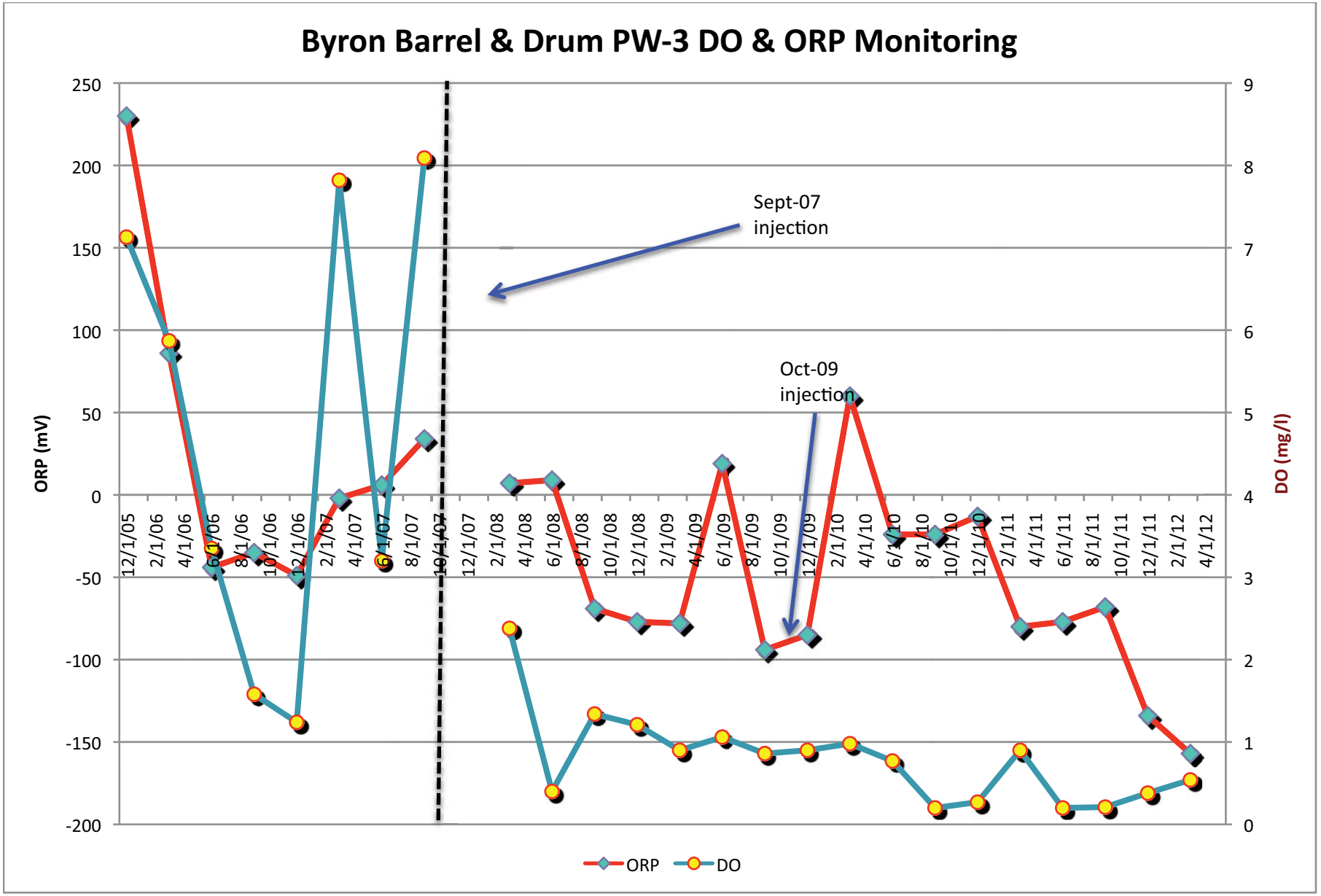

Byron Barrel & Drum MW-1 DO & ORP Monitoring
ORP (mV)
DO (mg/l)
200
100
0
-100
-200
-300
-400
4
3.5
3
2.5
2
1.5
1
0.5
0
12/1/05
2/1/06
4/1/06
6/1/06
8/1/06
10/1/06
12/1/06
2/1/07
4/1/07
6/1/07
8/1/07
10/1/07
12/1/07
2/1/08
4/1/08
6/1/08
8/1/08
10/1/08
12/1/08
2/1/09
4/1/09
6/1/09
8/1/09
10/1/09
12/1/09
2/1/10
4/1/10
6/1/10
8/1/10
10/1/10
12/1/10
2/1/11
4/1/11
6/1/11
8/1/11
10/1/11
12/1/11
2/1/12
Oct-09
injection
Sept -07
injection
ORP
DO


Byron Barrel & Drum MW-4 DO & ORP Monitoring
ORP (mV)
DO (mg/l)
250
200
150
100
50
0
-50
-100
-150
-200
-250
-300
4
3.5
3
2.5
2
1.5
1
0.5
0
12/1/05
2/1/06
4/1/06
6/1/06
8/1/06
10/1/06
12/1/06
2/1/07
4/1/07
6/1/07
8/1/07
10/1/07
12/1/07
2/1/08
4/1/08
6/1/08
8/1/08
10/1/08
12/1/08
2/1/09
4/1/09
6/1/09
8/1/09
10/1/09
12/1/09
2/1/10
4/1/10
6/1/10
8/1/10
10/1/10
12/1/10
2/1/11
4/1/11
6/1/11
8/1/11
10/1/11
12/1/11
2/1/12
Oct-09
injection
Sept-07
injection
ORP
DO

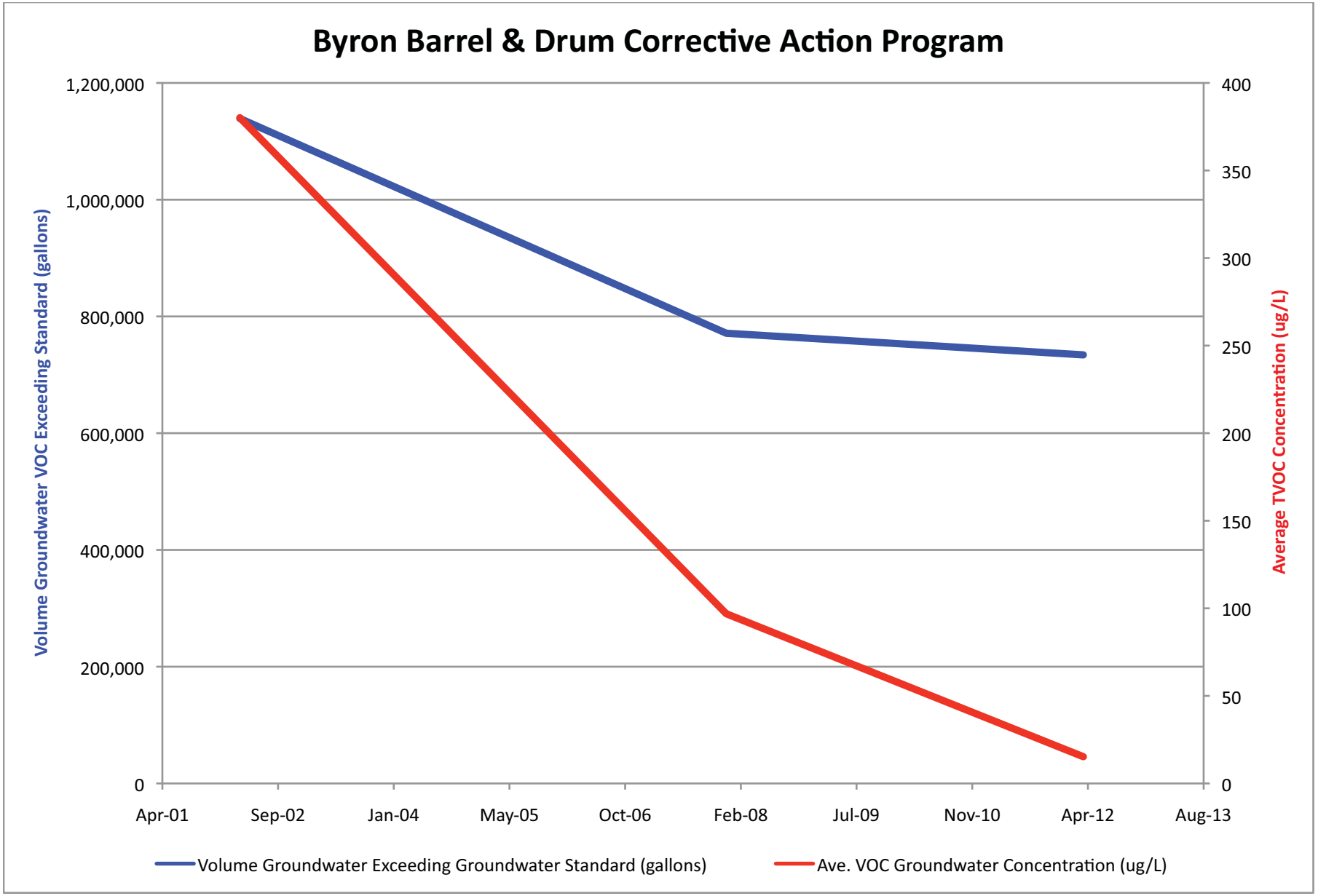

Byron Barrel & Drum MW-10B DO & ORP Monitoring
ORP (mV)
DO (mg/l)
100
50
0
-50
-100
-150
-200
-250
-300
3.5
3
2.5
2
1.5
1
0.5
0
3/1/06
5/1/06
7/1/06
9/1/06
11/1/06
1/1/07
3/1/07
5/1/07
7/1/07
9/1/07
11/1/07
1/1/08
3/1/08
5/1/08
7/1/08
9/1/08
11/1/08
1/1/09
3/1/09
5/1/09
7/1/09
9/1/09
11/1/09
1/1/10
3/1/10
5/1/10
7/1/10
9/1/10
11/1/10
1/1/11
3/1/11
5/1/11
7/1/11
9/1/11
11/1/11
1/1/12
3/1/12
Oct-09
injection
Sept-07
injection
ORP
DO


Byron Barrel & Drum PW-1 DO & ORP Monitoring
DO (mg/l)
ORP (mV)
Sept-07 injection
Oct-09 injection
DO
ORP


Byron Barrel & Drum PW-2 DO & ORP Monitoring
ORP (mV)
DO (mg/l)
300
250
200
150
100
50
0
-50
-100
-150
-200
9
8
7
6
5
4
3
2
1
0
Sept-07
injection
Oct-09
injection
12/1/05
2/1/06
4/1/06
6/1/06
8/1/06
10/1/06
12/1/06
2/1/07
4/1/07
6/1/07
8/1/07
10/1/07
12/1/07
2/1/08
4/1/08
6/1/08
8/1/08
10/1/08
12/1/08
2/1/09
4/1/09
6/1/09
8/1/09
10/1/09
12/1/09
2/1/10
4/1/10
6/1/10
8/1/10
10/1/10
12/1/10
2/1/11
4/1/11
6/1/11
8/1/11
10/1/11
12/1/11
2/1/12
ORP
DO


Byron Barrel & Drum PW-3 DO & ORP Monitoring
ORP (mV)
DO (mg/l)
250
200
150
100
50
0
-50
-100
-150
-200
9
8
7
6
5
4
3
2
1
0
Sept-07
injection
Oct-09
injection
12/1/05
2/1/06
4/1/06
6/1/06
8/1/06
10/1/06
12/1/06
2/1/07
4/1/07
6/1/07
8/1/07
10/1/07
12/1/07
2/1/08
4/1/08
6/1/08
8/1/08
10/1/08
12/1/08
2/1/09
4/1/09
6/1/09
8/1/09
10/1/09
12/1/09
2/1/10
4/1/10
6/1/10
8/1/10
10/1/10
12/1/10
2/1/11
4/1/11
6/1/11
8/1/11
10/1/11
12/1/11
2/1/12
4/1/12
ORP
DO

APPENDIX F
ERD Well Graphs

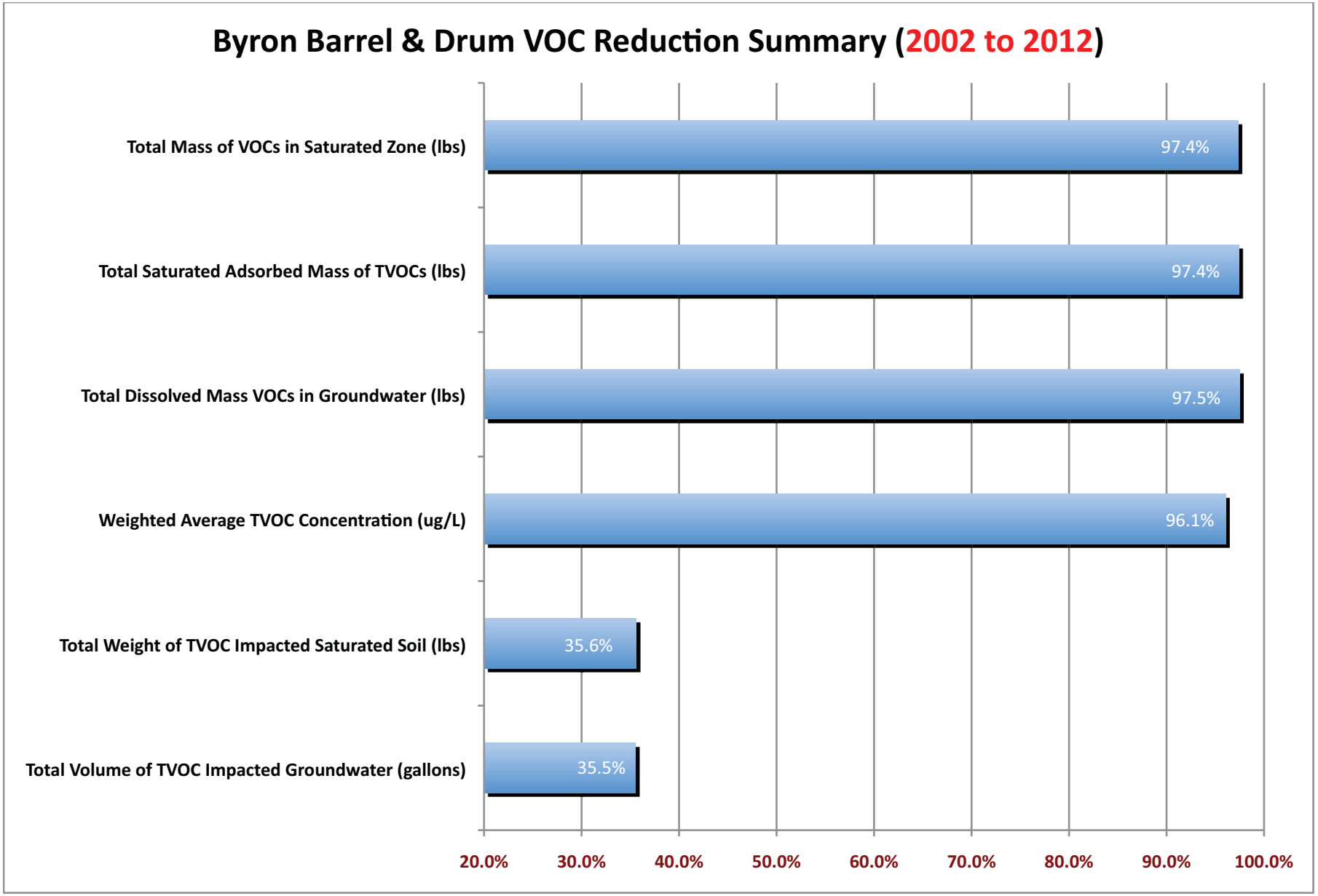

Byron Barrel & Drum Corrective Action Program
Volume Groundwater VOC Exceeding Standard (gallons)
Average TVOC Concentration (ug/L)
1,200,000
1,000,000
800,000
600,000
400,000
200,000
0
400
350
300
250
200
150
100
50
0
Apr-01
Sep-02
Jan-04
May-05
Oct-06
Feb-08
Jul-09
Nov-10
Apr-12
Aug-13
Volume Groundwater Exceeding Groundwater Standard (gallons)
Ave. VOC Groundwater Concentration (ug/L)

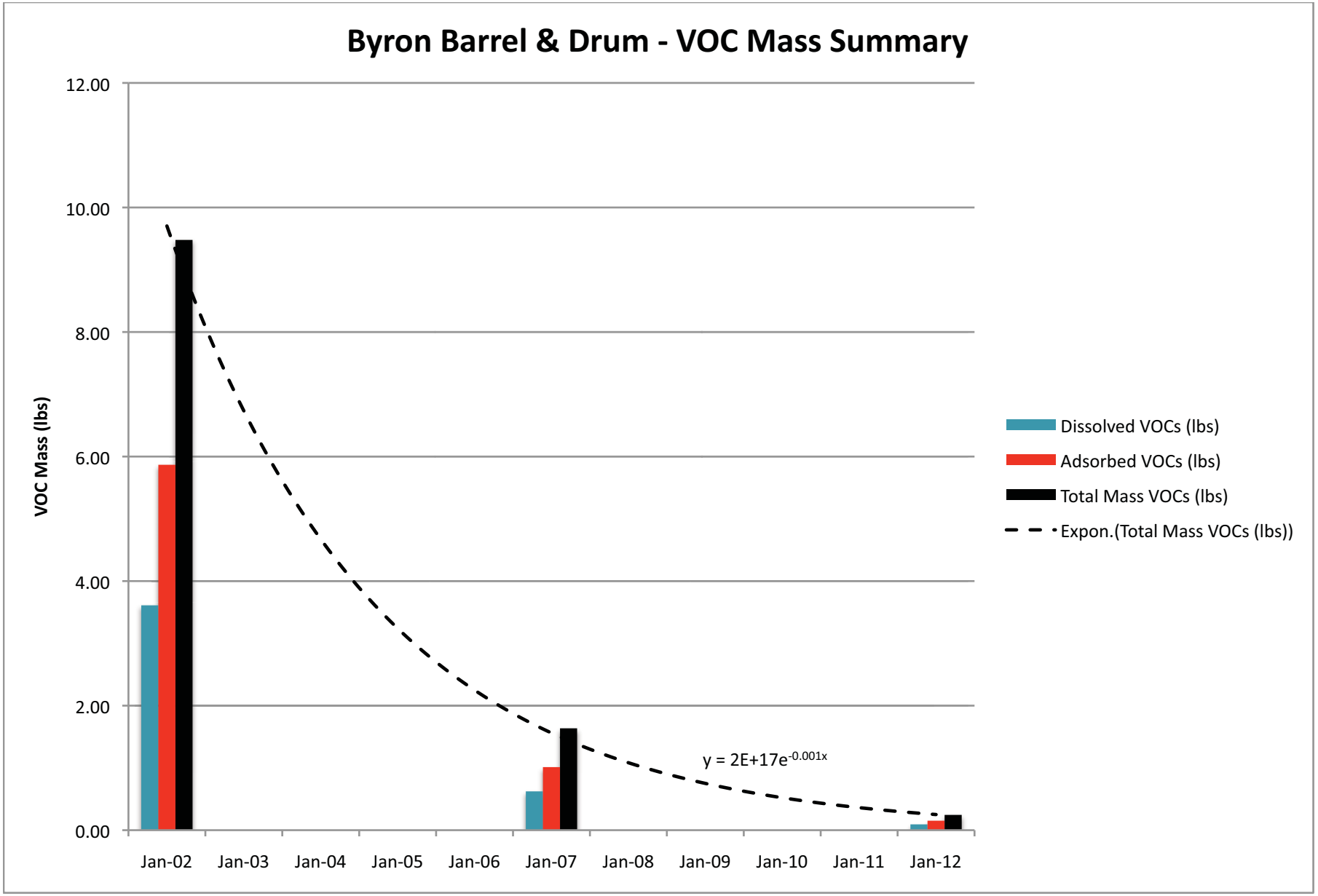
Summary Table
VOC Mass Balance Summary
Byron Barrel Drum - Area #2

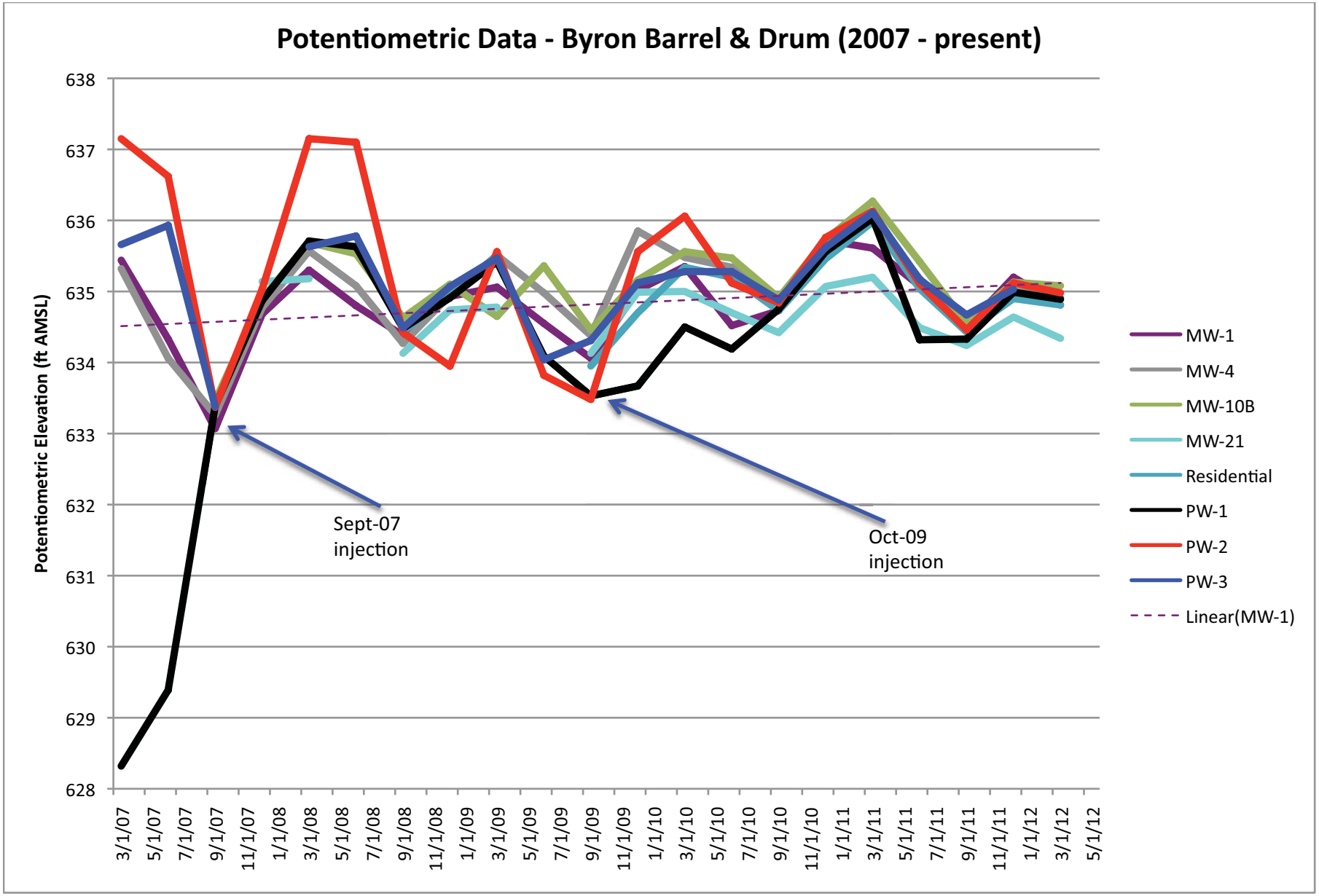
Zone of Interest	Date of Interest	Constituent of Concern	Area of Specific Average Concentration (ft^2)	Average Thickness (feet)	Volume of Impacted Groundwater (gal)	Maximum Concentration (ppb)	Minimum Concentration (ppb)	Average Concentration (ppb)	Constituent Mass (lbs)	Weight of Impacted Saturated Soil (lbs)	Constituent Adsorbed Mass (lbs)
1 - Area #2	Mar-02	TVOCs	0	20	0	35000	10000	22500	0.00	0.00E+00	0.00
2 - Area #2	Mar-02	TVOCs	4,766	20	142,586	1839	1000	1419.5	1.69	6.75E+06	2.74
3 - Area #2	Mar-02	TVOCs	12,966	20	387,928	1000	100	550	1.78	1.84E+07	2.89
4 - Area #2	Mar-02	TVOCs	9,358	20	279,978	100	10	55	0.13	1.33E+07	0.21
5 - Area #2	Mar-02	TVOCs	10,979	20	328,505	10	1	5.5	0.02	1.55E+07	0.02
Area #2 - Weighted Average TVOCs Concentration					**380**						
Area #2 - Total Volume of TVOCs Impacted Groundwater					**1,138,996**	**Area #2 - Total Weight of TVOCs Impacted Saturated Soil**					**5.39E+07**
TOTAL DISSOLVED MASS OF TVOCs					**3.61**	**TOTAL ADSORBED MASS OF TVOCs**					**5.87**
TOTAL MASS OF TVOCs					**9.48**						

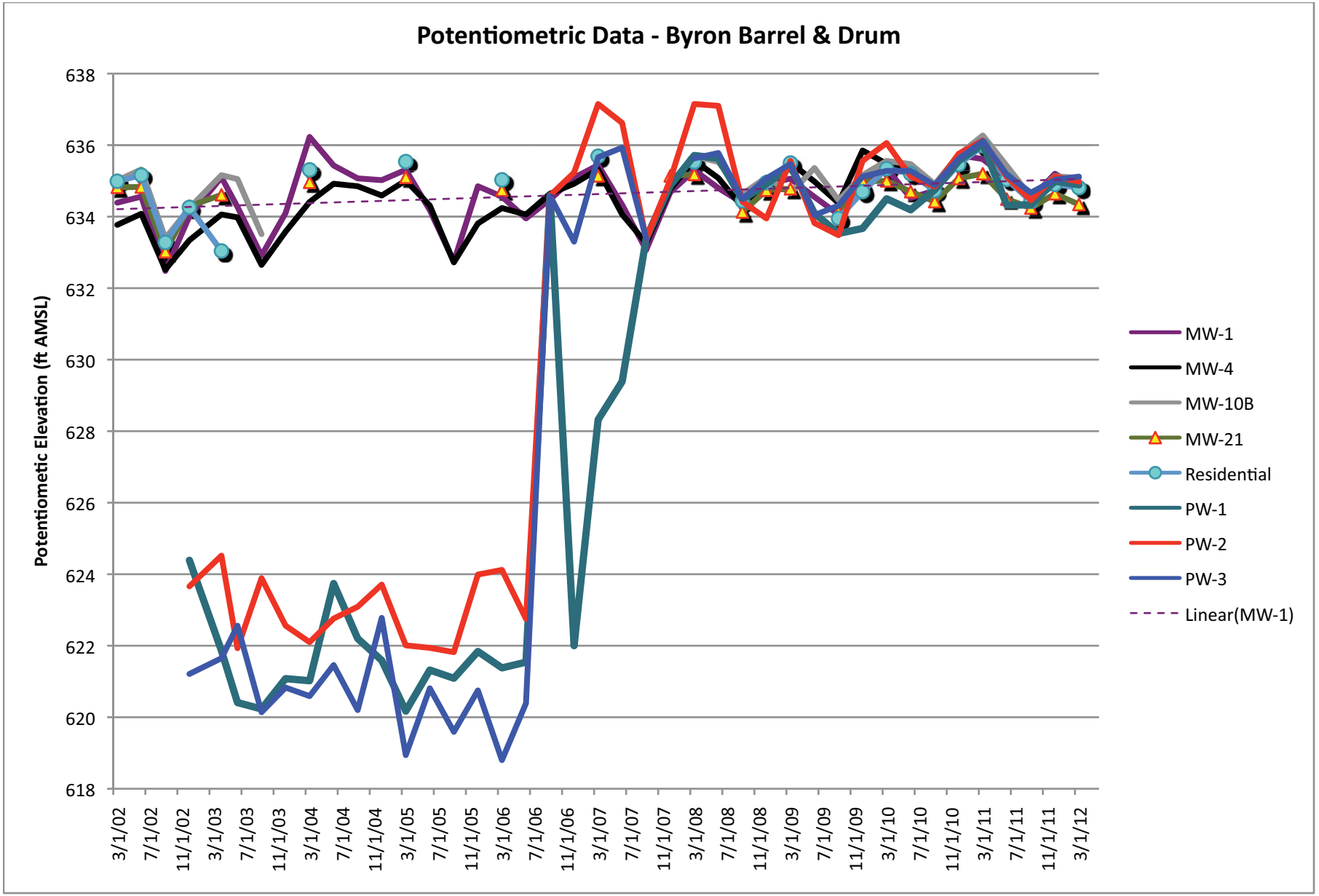
Zone of Interest	Date of Interest	Constituent of Concern	Area of Specific Average Concentration (ft^2)	Average Thickness (feet)	Volume of Impacted Groundwater (gal)	Maximum Concentration (ppb)	Minimum Concentration (ppb)	Average Concentration (ppb)	Constituent Mass (lbs)	Weight of Impacted Saturated Soil (lbs)	Constituent Adsorbed Mass (lbs)
1 - Area #2	Dec-07	TVOCs	0	20	0	35000	10000	22500	0.00	0.00E+00	0.00
2 - Area #2	Dec-07	TVOCs	405	20	12,121	1395	1000	1197.5	0.12	5.74E+05	0.20
3 - Area #2	Dec-07	TVOCs	6,049	20	180,989	214	100	157	0.24	8.57E+06	0.39
4 - Area #2	Dec-07	TVOCs	19,321	20	578,090	100	10	55	0.27	2.74E+07	0.43
Area #2 - Weighted Average TVOCs Concentration					**97**						
Area #2 - Total Volume of TVOCs Impacted Groundwater					**771,200**	**Area #2 - Total Weight of TVOCs Impacted Saturated Soil**					**3.65E+07**
TOTAL DISSOLVED MASS OF TVOCs					**0.62**	**TOTAL ADSORBED MASS OF TVOCs**					**1.01**
TOTAL MASS OF TVOCs					**1.64**						

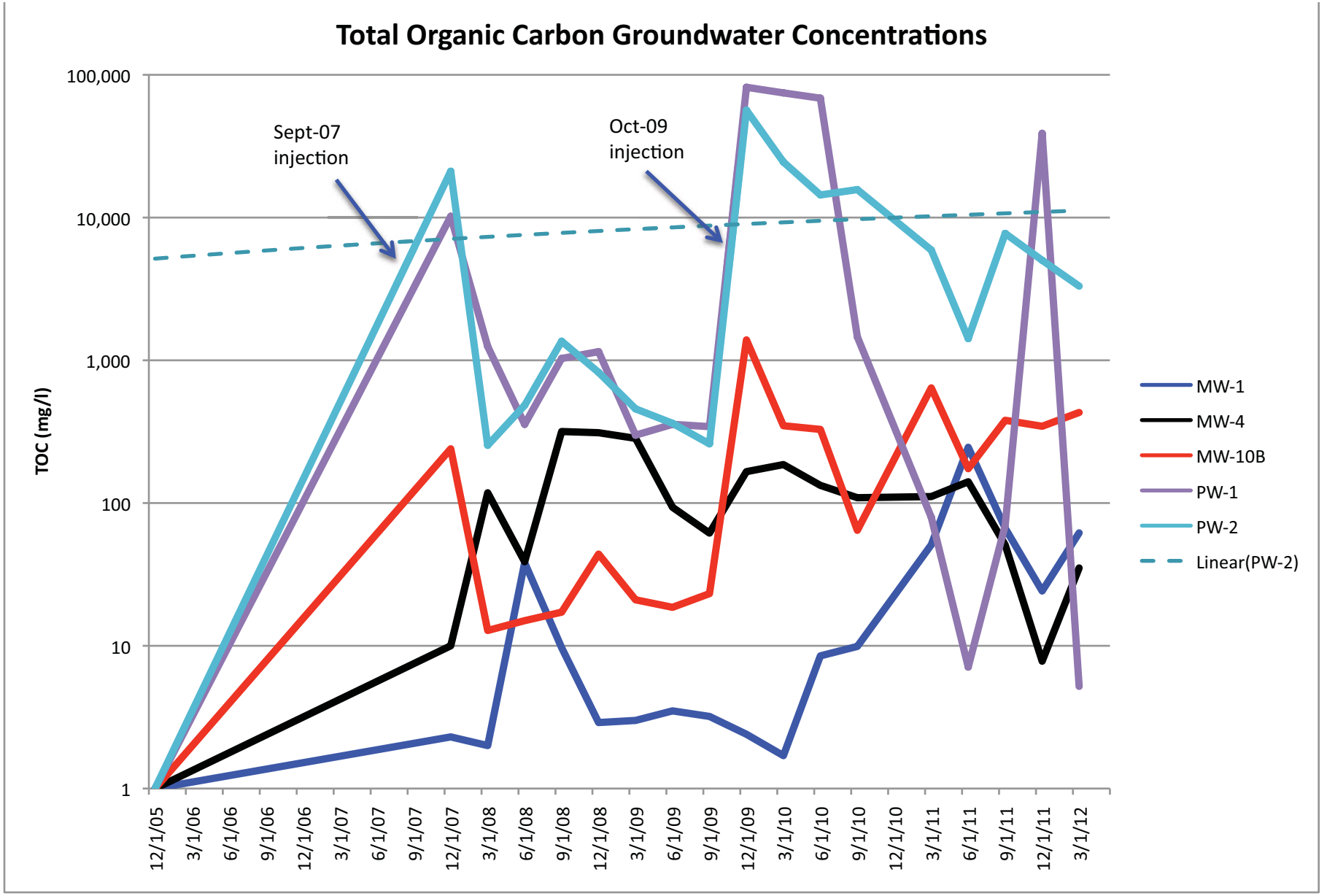
Zone of Interest	Date of Interest	Constituent of Concern	Area of Specific Average Concentration (ft^2)	Average Thickness (feet)	Volume of Impacted Groundwater (gal)	Maximum Concentration (ppb)	Minimum Concentration (ppb)	Average Concentration (ppb)	Constituent Mass (lbs)	Weight of Impacted Saturated Soil (lbs)	Constituent Adsorbed Mass (lbs)
1 - Area #2	Mar-12	TVOCs	0	20	0	0	0	0	0.00	0.00E+00	0.00
2 - Area #2	Mar-12	TVOCs	0	20	0	0	0	0	0.00	0.00E+00	0.00
3 - Area #2	Mar-12	TVOCs	11,324	20	338,813	46	10	28	0.08	1.60E+07	0.13
4 - Area #2	Mar-12	TVOCs	13,213	20	395,339	7.7	1	4.35	0.01	1.87E+07	0.02
Area #2 - Weighted Average TVOCs Concentration					**15**						
Area #2 - Total Volume of TVOCs Impacted Groundwater					**734,152**	**Facility - Total Weight of TVOCs Impacted Saturated Soil**					**3.47E+07**
TOTAL DISSOLVED MASS OF TVOCs					**0.09**	**TOTAL ADSORBED MASS OF TVOCs**					**0.15**
TOTAL MASS OF TVOCs					**0.25**						

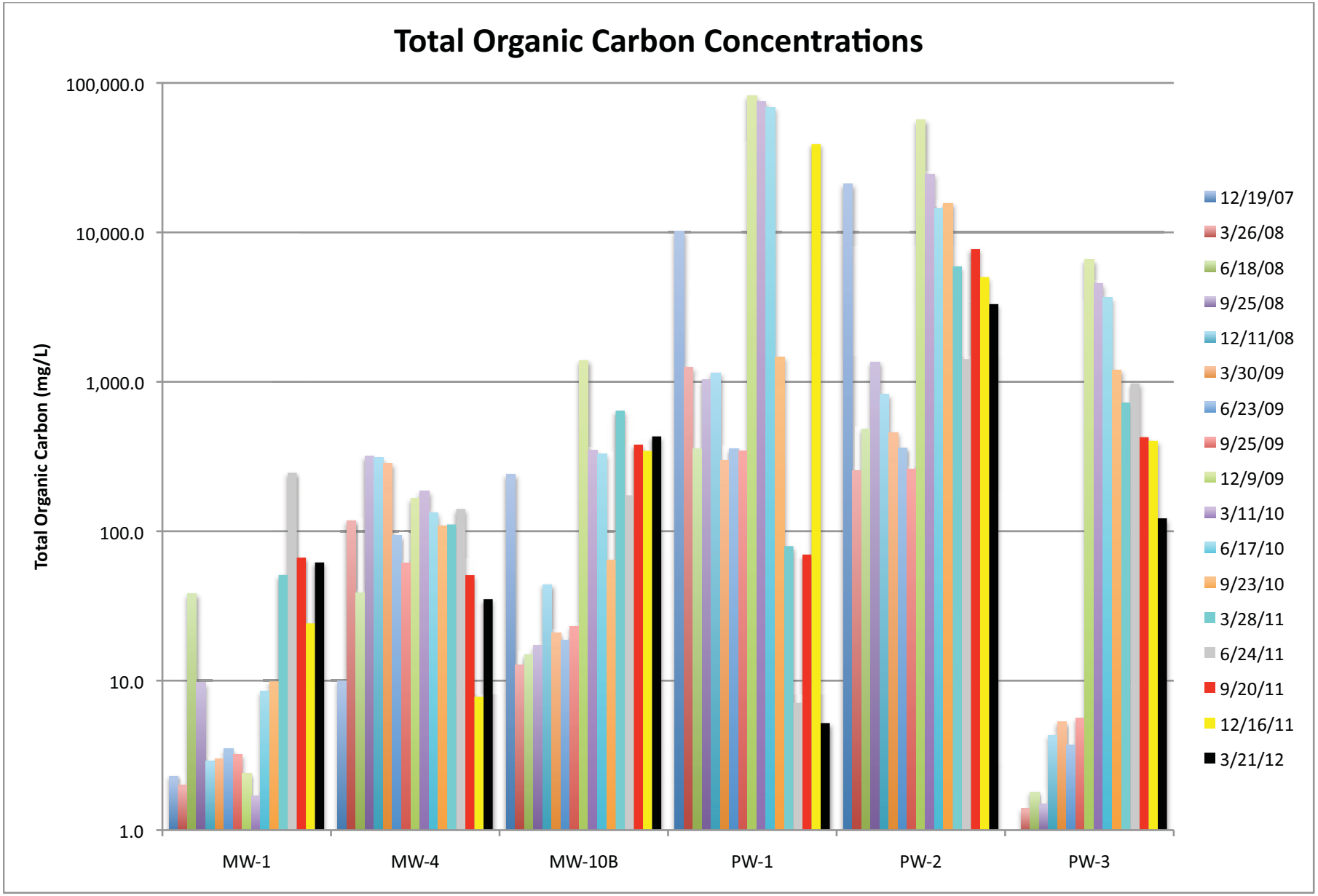

Byron Barrel & Drum VOC Reduction Summary (2002 to 2012)
Total Mass of VOCs in Saturated Zone (lbs)
97.4%
Total Saturated Adsorbed Mass of TVOCs (lbs)
97.4%
Total Dissolved Mass VOCs in Groundwater (lbs)
97.5%
Weighted Average TVOC Concentration (ug/L)
96.1%
Total Weight of TVOC Impacted Saturated Soil (lbs)
35.6%
Total Volume of TVOC Impacted Groundwater (gallons)
35.5%
20.0%
30.0%
40.0%
50.0%
60.0%
70.0%
80.0%
90.0%
100.0%

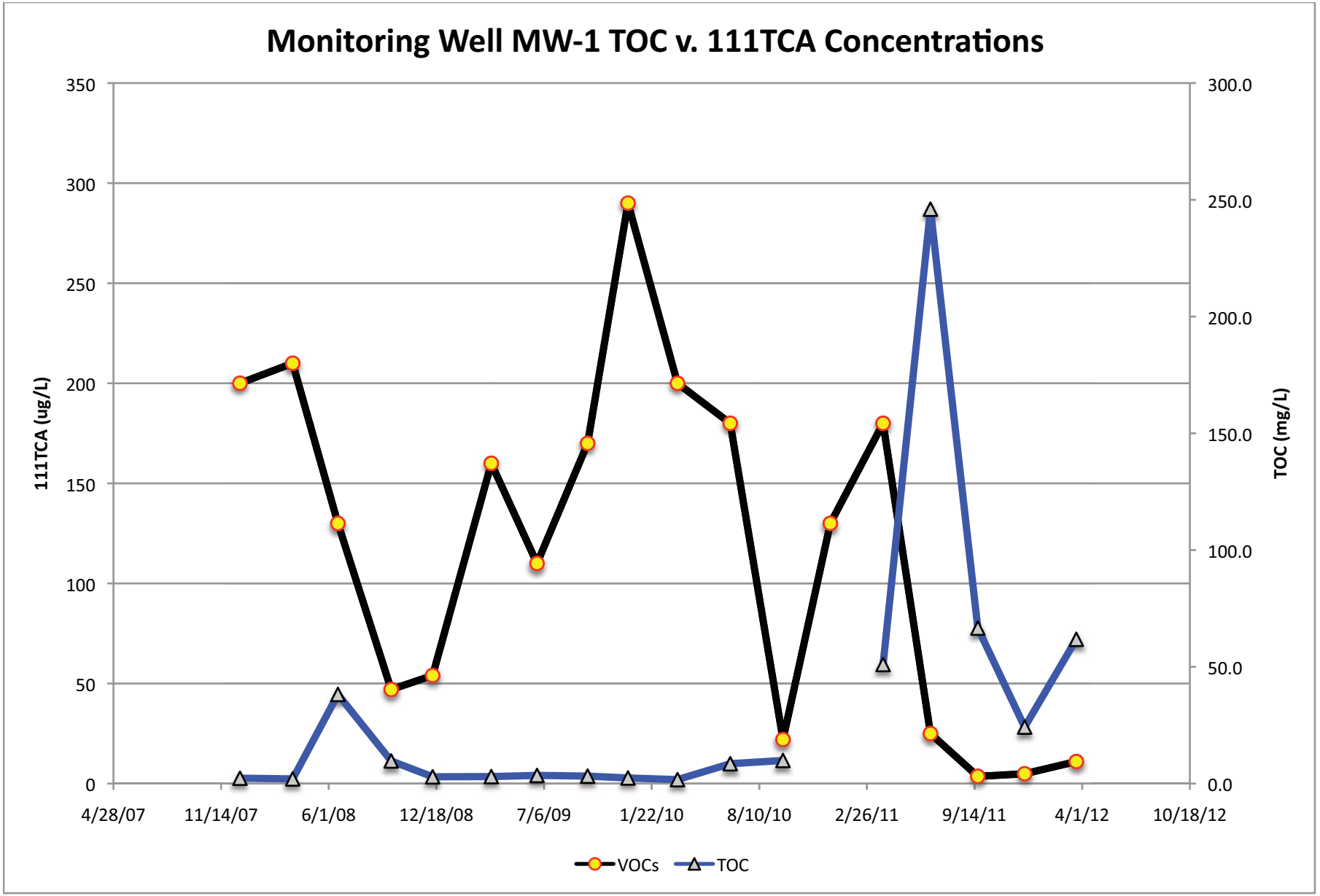

Byron Barrel & Drum - VOC Mass Summary
VOC Mass (lbs)
12.00
10.00
8.00
6.00
4.00
2.00
0.00
Jan-02
Jan-03
Jan-04
Jan-05
Jan-06
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
y = 2E+17e-0.001x
Dissolved VOCs (lbs)
Adsorbed VOCs (lbs)
Total Mass VOCs (lbs)
Expon.(Total Mass VOCs (lbs))

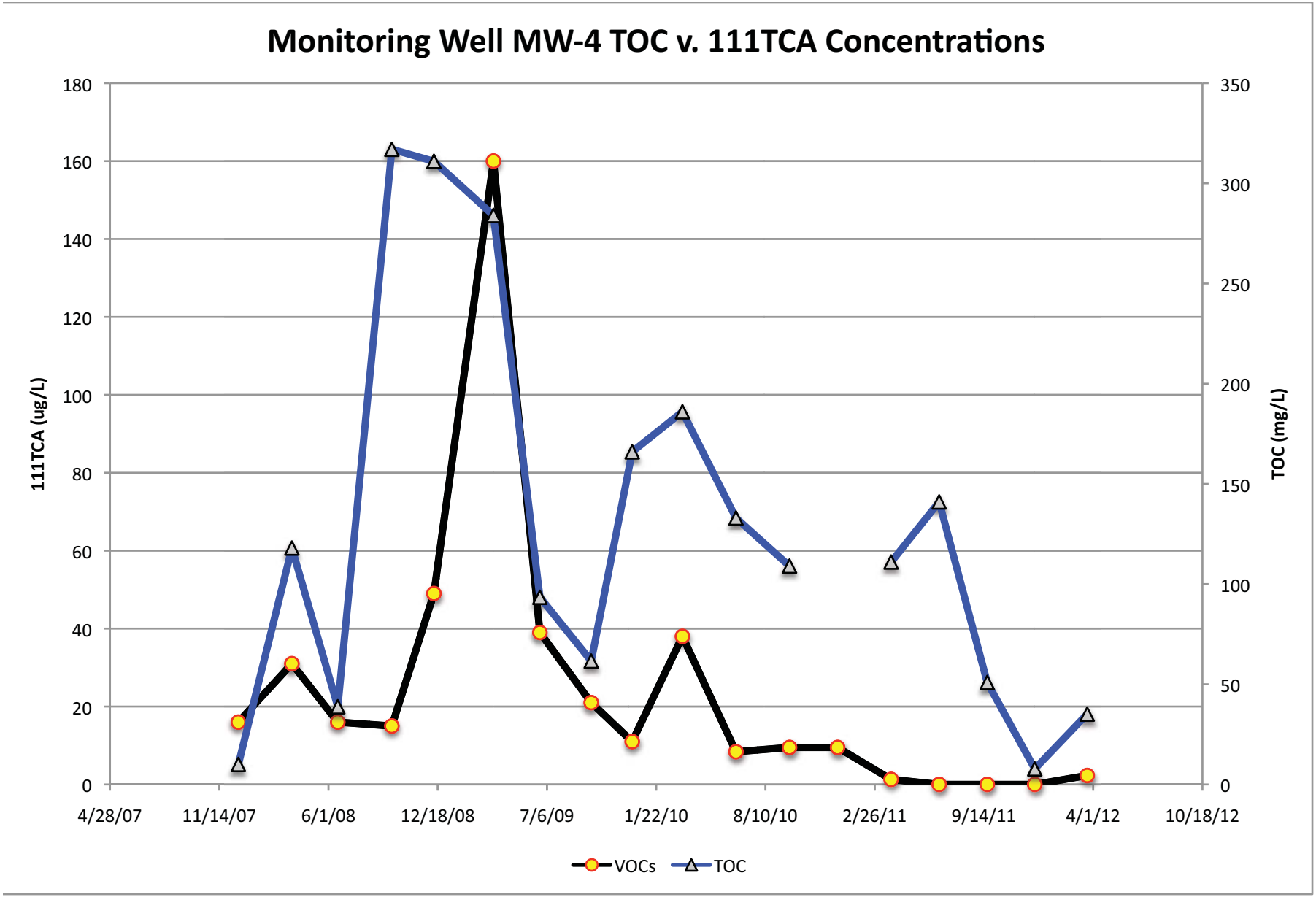

Potentiometric Data - Byron Barrel & Drum (2007 - present)
Potentiometric Elevation (ft AMSL)
638
637
636
635
634
633
632
631
630
629
628
3/1/07
5/1/07
7/1/07
9/1/07
11/1/07
1/1/08
3/1/08
5/1/08
7/1/08
9/1/08
11/1/08
1/1/09
3/1/09
5/1/09
7/1/09
9/1/09
11/1/09
1/1/10
3/1/10
5/1/10
7/1/10
9/1/10
11/1/10
1/1/11
3/1/11
5/1/11
7/1/11
9/1/11
11/1/11
1/1/12
3/1/12
5/1/12
Sept-07 injection
Oct-09 injection
MW-1
MW-4
MW-10B
MW-21
Residential
PW-1
PW-2
PW-3
Linear(MW-1)

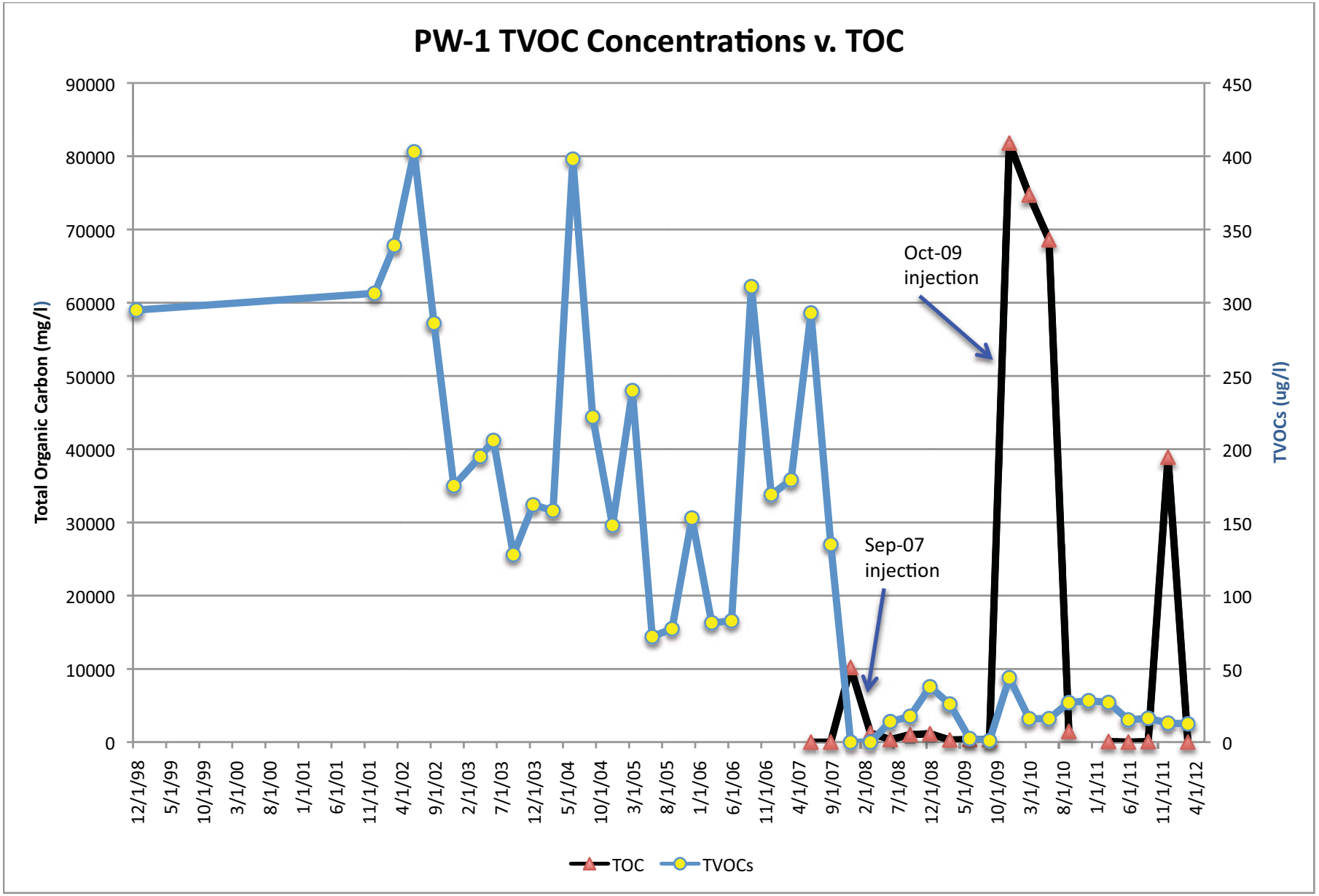

Potentiometric Data - Byron Barrel & Drum
Potentiometic Elevation (ft AMSL)
638
636
634
632
630
628
626
624
622
620
618
3/1/02
7/1/02
11/1/02
3/1/03
7/1/03
11/1/03
3/1/04
7/1/04
11/1/04
3/1/05
7/1/05
11/1/05
3/1/06
7/1/06
11/1/06
3/1/07
7/1/07
11/1/07
3/1/08
7/1/08
11/1/08
3/1/09
7/1/09
11/1/09
3/1/10
7/1/10
11/1/10
3/1/11
7/1/11
11/1/11
3/1/12
MW-1
MW-4
MW-10B
MW-21
Residential
PW-1
PW-2
PW-3
Linear(MW-1)


Total Organic Carbon Groundwater Concentrations
TOC (mg/l)
100,000
10,000
1,000
100
10
1
Sept-07 injection
Oct-09 injection
12/1/05
3/1/06
6/1/06
9/1/06
12/1/06
3/1/07
6/1/07
9/1/07
12/1/07
3/1/08
6/1/08
9/1/08
12/1/08
3/1/09
6/1/09
9/1/09
12/1/09
3/1/10
6/1/10
9/1/10
12/1/10
3/1/11
6/1/11
9/1/11
12/1/11
3/1/12
MW-1
MW-4
MW-10B
PW-1
PW-2
Linear(PW-2)


Total Organic Carbon Concentrations
Total Organic Carbon (mg/L)
100,000.0
10,000.0
1,000.0
100.0
10.0
1.0
MW-1
MW-4
MW-10B
PW-1
PW-2
PW-3
12/19/07
3/26/08
6/18/08
9/25/08
12/11/08
3/30/09
6/23/09
9/25/09
12/9/09
3/11/10
6/17/10
9/23/10
3/28/11
6/24/11
9/20/11
12/16/11
3/21/12


Monitoring Well MW-1 TOC v. 111TCA Concentrations
111TCA (ug/L)
TOC (mg/L)
350
300
250
200
150
100
50
0
300.0
250.0
200.0
150.0
100.0
50.0
0.0
4/28/07
11/14/07
6/1/08
12/18/08
7/6/09
1/22/10
8/10/10
2/26/11
9/14/11
4/1/12
10/18/12
VOCs
TOC


Monitoring Well MW-4 TOC v. 111TCA Concentrations
111TCA (ug/L)
TOC (mg/L)
180
160
140
120
100
80
60
40
20
0
350
300
250
200
150
100
50
0
4/28/07
11/14/07
6/1/08
12/18/08
7/6/09
1/22/10
8/10/10
2/26/11
9/14/11
4/1/12
10/18/12
VOCs
TOC


PW-1 TVOC Concentrations v. TOC
Total Organic Carbon (mg/l)
TVOCs (ug/l)
90000
80000
70000
60000
50000
40000
30000
20000
10000
0
450
400
350
300
250
200
150
100
50
0
Oct-09
injection
Sep-07
injection
12/1/98
5/1/99
10/1/99
3/1/00
8/1/00
1/1/01
6/1/01
11/1/01
4/1/02
9/1/02
2/1/03
7/1/03
12/1/03
5/1/04
10/1/04
3/1/05
8/1/05
1/1/06
6/1/06
11/1/06
4/1/07
9/1/07
2/1/08
7/1/08
12/1/08
5/1/09
10/1/09
3/1/10
8/1/10
1/1/11
6/1/11
11/1/11
4/1/12
TOC
TVOCs

APPENDIX G
Well Security Photographs

Byron Barrel & Drum Superfund Site - Area #2	From	Byron PRP Group	Title	Monitoring Well Photographs
	Spot	Well Stencil & Security	By	Keith B. Rapp

Shot 1: Monitoring Well MW-1

Date: May 24, 2012

Shot 2: Monitoring Well MW-2

Date: May 24, 2012

Shot 3: Monitoring Well MW-4

Date: May 24, 2012

Shot 4: Monitoring Well MW-10B

Date: May 24, 2012

Shot 5: Residential Well

Date: May 24, 2012

Shot 6: Monitoring Well MW-21

Date: May 24, 2012

Byron Barrel & Drum Superfund Site - Area #2	From	Byron PRP Group	Title	Monitoring Well Photographs
	Spot	Well Stencil & Security	By	Keith B. Rapp

Shot 7: Well PZ-1
Date: May 24, 2012

Shot 8: Well PZ-2
Date: May 24, 2012

Shot 9: Pumping Well PW-1
Date: May 24, 2012

Shot 10: Pumping Well PW-2
Date: May 24, 2012

Shot 11: Pumping Well PW-3
Date: May 24, 2012

Shot 12: Locked Security Gate
Date: May 24, 2012