

Prepared for:  
**Tronox LLC**  
**Henderson, Nevada**

# Data Validation Summary Report

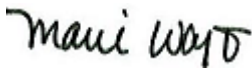
AECOM Environment  
August 2008 – revised December 2008  
**Document No.: 04020-023-110**

Prepared for:  
**Tronox LLC**  
**Henderson, Nevada**

# Data Validation Summary Report



Prepared By Robert Kennedy  
Senior Project Chemist  
ENSR International



Reviewed By Marie Wojtas

ENSR Corporation  
August 2008 – revised December 2008  
**Document No.: 04020-023-110**



Susan Crowley  
Staff Environmental Specialist

(702) 651-2234  
Fax (405) 302-4607  
susan.crowley@tronox.com

December 18, 2008

Ms. Shannon Harbour, P.E.  
Nevada Division of Environmental Protection  
2030 East Flamingo Road, Suite 230  
Las Vegas, Nevada 89119-0818

**Subject: Appendix E- Data Validation Summary Report (DVSR)  
Annual Remedial Performance Report for  
Chromium and Perchlorate, July 2007 through June 2008  
Tronox LLC, Henderson Nevada**

Dear Ms. Harbour:

Please find enclosed the Tronox response to NDEP comments dated October 6, 2008 for *Appendix E- Data Validation Summary Report (DVSR) Annual Remedial Performance Report for Chromium and Perchlorate, July 2007 through June 2008* general comment a) will be addressed and revised in future submittals accordingly, and comment b & c) are addressed in the enclosed attachments.

Please contact me at (702) 651-2234 if you have any comments or questions concerning this correspondence.

Sincerely,

Susan M. Crowley  
Staff Environmental Specialist

Overnight Mail

Attachment: As stated  
CC: See attached Distribution List

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Wilkinson	Craig	Timet		X	
Mack	Joel	Montrose Counsel			

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## 1.0 INTRODUCTION

The purpose of limited data validation performed on laboratory results for the first and second quarter of 2008 was to determine the suitability of the data for future on-site environmental assessments, including the Annual Remedial Performance Report for Chromium and Perchlorate covering July 2007 through June 2008. The majority of the reviewed data discussed below was collected between January and June 2008. Some previously unvalidated data collected between July and December 2007 was also included in the reviewed dataset. In addition, data reviewed in previous quarterly and semiannual reports, although within the annual report date range, are not discussed in this Data Validation Summary Report (DVSR).

MWH Laboratories in Monrovia, CA was the lab contracted by Tronox for the chemical analyses discussed below as a part of the routine monitoring program at the Tronox facility in Henderson, Nevada. All samples were collected unfiltered by Veolia or AECOM Environment (formerly ENSR) personnel. The specific analyses performed by the laboratory and reviewed in this report include only the subset of analytes discussed in the Annual Remedial Performance Report for Chromium and Perchlorate. Samples in the reviewed report set were analyzed for one or more of the following parameters: perchlorate, chlorate, hexavalent chromium, total chromium, total dissolved solids (TDS), and nitrate. **Table E-4** lists the sample IDs (well ID and collection date), sample delivery group (SDG) using MWH report numbers, and analyte/method list for each sample reviewed and included in this DVSR.

## 2.0 DATA VALIDATION PROCESS

All the results contained in the lab reports listed in the data validation memoranda were subjected to thorough data review called limited validation. Full data packages, including raw data, were subjected to full validation for 10 percent of samples as recommended in the guidance on data validation provided by Nevada Department of Environmental Protection (NDEP) for the BMI Plant Sites (NDEP, 2006). Those SDGs subjected to full validation are indicated in bold in **Table E-4**. A total of 790 samples in 140 SDGs were validated. Of those, a total of eleven SDGs, including 81 samples, underwent full data validation. The laboratory submitted sample and batch quality control (QC) results with narratives in pdf format and EQUIS format electronic data deliverables (EDDs) for all samples, and raw data for only the data packages that were subjected to full validation. The EDDs were imported into an EQUIS database at Tronox specifically created for the ongoing monitoring at the Henderson site. AECOM performed a limited validation on the data using the hard copy data package and subsequently entered the qualifiers and associated reason codes into the database.

Limited validation consisted of reviewing the following data elements to the level of summary data forms.

- Agreement of analyses conducted with chain-of-custody (COC) requests;
- Holding times and sample preservation;
- Laboratory blanks/equipment blanks/ field blanks;
- Laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) results;
- Matrix spike/matrix spike duplicate (MS/MSD) results;
- Laboratory duplicate results;
- Field duplicate results; and

- Sample results and detection limits.

Full validation consisted in reviewing the above data elements plus the following extra elements, all to the level of raw data review.

- Initial and continuing calibrations;
- Interference check sample results; and
- Inductively coupled plasma (ICP) serial dilution results.

Analytical data were evaluated with reference to the Environmental Protection Agency (EPA) National Functional Guidelines (EPA 2004) and other method-appropriate validation guidance documents, as well as the Region 9 Superfund Data Evaluation/Validation Guidance (EPA, 2001), the above mentioned NDEP Guidance on Data Validation (NDEP, 2006), and by the QC criteria provided by the laboratory. The regional and national functional guidelines were modified to accommodate the non-Contract Laboratory Program methodologies. The specific guidelines used for the various methods were as follows:

- Inorganic analytical data were evaluated with reference to US EPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (EPA, 2004).

In general, the validation qualifiers and definitions employed were based on those used by the EPA in the document mentioned above. Validation qualifiers and definitions are listed in **Table E-1**. A reason code was assigned to all validation qualifiers applied during this review. The reason codes and their explanations are listed in **Table E-2**. Reason codes were simplified in 2008 by removing the redundant prefix-associated validation qualifier but are consistent with the suffix of past codes. These codes were entered in the project database to indicate the primary reason(s) for data validation qualification (resulting in a change to a lab qualifier or result value). Conversions of the laboratory reported "ND" for not detected to the U qualifier in the database and the laboratory-applied "J" qualifier to indicate results less than the reporting limit (RL) but greater than the method detection limit (MDL) are not further discussed in this report.

Data validation was organized by MWH Laboratory Report number which is also identified as the sample SDG in the tables. Three combined data validation memoranda for all the reviewed reports were written by data validators and reviewed by a peer at AECOM's Westford office. These memoranda are included on a CD-ROM as pdf documents and each includes a list of the data reviewed by the laboratory SDGs listed in Attachment A.

### 3.0 DATA VALIDATION RESULTS

The data validation qualifiers and reason codes were used to select all the data in the database where results were qualified as a result of validation. This information was sorted by the QC review elements listed below:

- Agreement of analyses conducted with COC requests;
- Initial and continuing calibrations (full validation only);
- Interference check sample results (full validation only);
- Holding times and sample preservation;
- Laboratory blanks/equipment blanks/ field blanks;
- LCS/LCSD results;
- MS/MSD results;

- Laboratory duplicate results;
- Field duplicate results;
- ICP serial dilution results (full validation only);
- Quantitation limits and sample results; and
- Calculation and transcription verifications.

**Tables E-3** lists all the results that were qualified based on QC issues identified with regard to holding times, equipment blank results, MS results, LCS results, quantitation problems, lab duplicate precision, and field duplicate precision. No QC issues were identified that resulted in qualification of results based on initial and continuing calibrations, interference check sample results, or ICP serial dilution results. As requested by NDEP, Reason codes, Data Quality Indicators (DQI), and the nonconforming DQI results are listed in **Table E-3**.

### 3.1 Holding Times and Sample Preservation

Holding times were derived from the EPA methods utilized and were calculated beginning from the time of sample collection. The majority of analyses were performed within the method-specified holding times. Exceptions are listed in **Table E-3** and summarized in the validation memoranda. The DQI result value for holding time in **Table E-3** is the time elapsed between sample collection and analysis in days.

The holding time for hexavalent chromium samples analyzed by EPA Method 7196 is 24 hours from collection to analysis. A revision to this holding time was made for samples analyzed using EPA Method 218.6 collected on or after April 11, 2007. On this date (April 11, 2007) the new Federal Register rules published on March 12, 2007 became effective. Using the new rule, samples collected, preserved, filtered, and analyzed in accordance with EPA Method 218.6 requirements have a holding time of 28 days.

The holding time for perchlorate and chlorate in water is 28 days from collection to analysis. The holding time for TDS in water is 7 days from collection to analysis. The holding time for nitrate analysis by EPA Method 300 is 48 hours. Most results with holding exceedances were qualified as estimated, but nondetect result values in two samples were rejected as discussed below in Section 3.8.

The reason for holding time exceedance was usually a client requested reanalysis due to nonconformity with historical results. Results for hexavalent chromium, nitrate, chlorate, perchlorate, and TDS required qualification on the basis of holding time issues as discussed in the data review memoranda. Where the TDS holding time was exceeded, TDS results were qualified as J- because the method specifically mentions potential biodegradation of solids as the reason samples should be filtered as soon as possible. In addition the estimated and potential low bias qualification (J-) was applied to detected sample results with holding time exceedances analyzed for perchlorate, chlorate, and nitrate.

The hexavalent chromium qualifiers for hold time exceedance were not assigned a low bias because it was unclear which direction (positive or negative bias) the result would deviate. Hexavalent chromium concentrations can change unpredictably over time in response to absorption of gases, pH changes, and redox condition changes.

Sample preservation requirements were met for all samples.



### 3.2 Blank Contamination

In general, laboratory and field blanks were free of contamination. The equipment blanks collected on 2/5/08 and 5/7/08 and analyzed for perchlorate appeared to be contaminated. The 5/7/08 equipment blank also appeared to be contaminated with TDS. The associated perchlorate result in one sample (M-92\_05/07/08) was qualified as estimated and possibly biased high (J+). Other associated sample data did not require qualification due to blank contamination because the sample results were greater than 10 times the associated blank concentrations.

### 3.3 Laboratory Control Samples

LCS and LCSD recoveries met QC acceptance criteria for all of the analyses reviewed with the exception of the low level TDS LCS associated with samples in SDGs 240326 and 240243R. The associated high level LCS spike exhibited acceptable recoveries, therefore only sample results less than 700mg/L were qualified as estimated. Nondetect results for TDS in two equipment blanks (EB050808\_05/08/08 and EB050908\_05/09/08) and one field blank (FB050808\_05/08/08) were qualified as estimated (UJ).

### 3.4 Matrix Spike Samples

MS and MSD recoveries met the QC-acceptance criteria for all the analyses reviewed in this report with one exception. The MSD recovery of nitrate in the batch analyzed for SDG 241086R was slightly above the laboratory acceptance limits of 80 to 112 percent. Detected nitrate results for all six samples in this batch were therefore qualified as estimated and possibly biased high (J+).

### 3.5 Laboratory Duplicates

The evaluation of laboratory duplicate precision included an assessment of the agreement between LCS and LCSDs, MS and MSDs, and matrix duplicates, as measured through relative percent difference (RPD). Laboratory duplicate RPD results were all within control limits except for the TDS results on samples PC-86 (14.6 percent) and PC-66D (23.5 percent) in SDGs 233998 and 240701, respectively. The positive results and non-detect results for TDS in the 31 samples associated with these SDGs, listed in **Table E-3** were therefore qualified as estimated (J/UJ).

### 3.6 Field Duplicates

The results of the 16 groundwater sample duplicate pairs collected February to May of 2008 were evaluated during validation. RPDs were compared to the objectives of 30 percent maximum RPD for aqueous samples. The RPD for a single sample/duplicate pair (M-23/MD-5) collected on 5/5/2008 (in SDG 239631) and analyzed for nitrate exceeded this criterion. The seven detect and non-detect results for nitrate samples associated with this SDG were therefore qualified as estimated (J and UJ, respectively).

### 3.7 Sample Results, Detection Limits, and Quantitation

Results for nitrate in four samples were qualified as estimated (J) due to interference by bromide in the ion chromatography reported in SDG 240115.

### 3.8 Rejected Results

Non-detect results for TDS in sample EB051208\_05/12/08 and nitrate in sample EFFLUENT\_02/25/08 were rejected due to gross holding time exceedances.

## 4.0 EVALUATION OF DATA QUALITY INDICATORS

Data validation information was used to evaluate the DQI of precision, accuracy, representativeness, comparability, completeness, and sensitivity for results in the dataset for the Henderson Quarterly Performance Perchlorate Report. Each of these DQI parameters is discussed in sections below.

### 4.1 Precision

Precision is the measure of agreement among repeated measurements of the same property under identical or substantially similar conditions. Field precision was assessed through the collection and measurement of field duplicates and expressed as the RPD of the sample and field duplicate pair results. In general, the field duplicate precision was acceptable for all analytes reported. A single exception for nitrate in one sample/field duplicate pair is noted previously in Section 3.6.

Laboratory precision was assessed through the RPD results for matrix duplicates, LCS/LCSD pairs, and MS/MSD pairs. In general, the laboratory duplicate precision was acceptable. Two exceptions for TDS analysis in lab duplicate pairs are noted previously in Section 3.5.

### 4.2 Accuracy

Accuracy is the degree of agreement between an observed value and an accepted reference or true value. Laboratory accuracy was assessed during the validation using the recoveries of positive control samples (i.e., MS and MSD, and LCS and LCSD). The results of all positive control samples were acceptable with the exception of those discussed in Sections 3.3 and 3.4. Accuracy is also indirectly addressed via the negative control samples for field activities (i.e. trip, equipment, and field blanks), as well as laboratory negative control samples (i.e., method blanks and calibration blanks). All negative control sample results were acceptable with the exceptions discussed in Section 3.2. Accuracy was also assessed in the review of initial and continuing calibrations for the data packages subjected to full validation.

Bias as a component of accuracy is also evaluated with the validation of holding time results discussed in Section 3.1 of this report. These evaluations resulted in the minor qualification of some results and rejection of two results as described in the data validation memo and Section 3.1 and 3.8.

### 4.3 Representativeness

Representativeness is the measure of the degree to which data suitably represent a characteristic of a population, parameter variations at a sampling point, a process condition, or an environmental condition. Aspects of representativeness addressed during validation include the review of sample collection information in the COC documentation, conformity of laboratory analyses to workplan intentions, adherence of the documented laboratory procedures to method requirements, and completeness of the laboratory data packages. Most of the issues identified during this evaluation did not result in the qualification of laboratory data but did involve re-submittals of data from the laboratories to correct problems that were discovered during the data review or validation process. All of these issues were resolved or were judged to have no impact on data validation. Other aspects of data representativeness such as adherence to recommended holding times are discussed in Section 3.1 of this report.

### 4.4 Completeness

Completeness is a measure of the amount of valid data obtained from a measurement system, expressed as a percentage of the number of valid measurements that were or should have been collected. Valid data is defined as all the data points judged to be valid (i.e. not rejected), as a result of the validation process.

Field completeness is defined as the percentage of samples actually collected versus those intended to be collected in accordance with the plan for routine monitoring. All intended samples were collected in accordance with the monitoring schedule. All COC requests were faithfully executed by the laboratories with the minor exceptions discussed in the validation memoranda.

Laboratory completeness is defined as percentage of valid data points versus the total expected from the laboratory analyses. Actual laboratory completeness was 100 percent on the basis of sample analysis (i.e., all requested analyses were performed and reported by the laboratories), and 99.91 percent completeness based on valid data as a percentage of the total data points attempted.

## 4.5 Comparability

Comparability is a qualitative expression of the measure of confidence that two or more data sets may contribute to a common analysis. Comparability of data within the investigation was maximized by using standard methods for sampling and analysis, reporting data, and data validation. The following standard water/wastewater program methods from EPA were employed by the MWH Laboratory for all analyses:

- Perchlorate by EPA Method 314;
- Hexavalent chromium by SW-846 Method 7196 or EPA Method 218.6;
- Total chromium by SW846 6010B or EPA Method 200.7;
- TDS by SM2540C or EPAMethod 160.1;
- Chlorate by EPA Method 300.0 or EPA 9056; and
- Nitrate by EPA Method 300.0 or EPA 9056.

The methods used for hexavalent chromium, EPA Method 7196 and EPA Method 218.6, both employ the same colorimetric analytical detection system. Method 218.6 utilizes a prior ion chromatographic separation to reduce interferences but both methods have been judged to be comparable by EPA in 40CFR Part 136, where Standard Methods SM 3500-Cr (essentially equivalent to EPA Method 7196) and EPA Method 218.6 are both approved methods. EPA Method 7196 and EPA Method 218.6 methods are expected to produce comparable data for hexavalent chromium in the groundwater matrix at the Henderson site. Note MWH now consistently uses EPA Method 218.6 for only the influent/effluent samples under National Pollution Discharge Elimination System permit and EPA Method 7196 for all other wells at the site.

The methods used for total chromium analysis, EPA Method 6010 and EPA Method 200.7, are both ICP/Atomic Emission Spectrometry methods with very similar preparation and analysis procedures. These two methods are expected to produce comparable data for total chromium. Minor differences in the QC control limits exist between the methods but MWH appears to consistently use the slightly tighter 200.7 QC limits.

The methods cited for TDS, EPA Method 160.1 and SM2540C, are essentially identical and can be expected to produce comparable data.

The methods cited for chlorate and nitrate analysis, EPA Method 300.0 and EPA Method 9056, are essentially identical and can be expected to produce comparable data.

## 4.6 Sensitivity

Sensitivity is the capability of a method or instrument to discriminate between measurement responses representing different levels of the variable of interest and particularly the capability of measuring a constituent at low levels. For the EPA methods employed in this project, sensitivity is measured by the MDL and RL. Reporting limits in general were sample quantitation limits based on the low point of calibration and adjusted

for sample-specific factors such as exact aliquot size, dilutions, etc. Sensitivity of the methods employed was adequate for the routine monitoring needs and consistent with the historical data for the site.

## 5.0 CONCLUSIONS

One hundred percent of the laboratory data used for the Annual Remedial Performance Report for Chromium and Perchlorate covering the sample collection time period from July 2007 to June 2008 were subjected to a limited validation using standardized guidelines and procedures recommended by EPA and NDEP. Ten percent of the samples, in laboratory data packages with complete documentation including raw data, were subjected to full data validation. A limited set of analytical parameters, defined by the laboratory reports listed in **Table E-4** are covered by this DVSR. Previous Quarterly and Semiannual Reports covered the other samples within the Annual Report date range. Ninety-four percent of the results for this project were accepted as reported by the laboratory without additional qualification based on validation actions and should be considered valid for all decision making purposes. A subset of the laboratory results were qualified based on issues discovered during the validation and those results are summarized in **Tables E-3**. The qualified data are grouped in this table based on the reason for qualification (see **Table E-2**), the DQI involved, and the qualifier flags applied (see **Table E-1**). Six percent of the results for this project were qualified as estimated due to minor QC problems with sample holding time, blank contamination/LCS recoveries, matrix spike recoveries, laboratory duplicate precision, field duplicate precision, and sample quantitation issues. These estimated results should be considered usable for decision making purposes provided the potential bias is considered when the data are used. Only two results out of 2,237 validated were rejected as unusable due to serious QC problems. Based on the results of data validation the overall goals for data quality were achieved for the dataset used in the Annual Remedial Performance Report for Chromium and Perchlorate covering the sample collection time period from July 2007 to June 2008.

## 6.0 REFERENCES

- EPA, 1999. USEPA "Contract Laboratory Program National Functional Guidelines for Organic Data Review"
- EPA, 2001. USEPA "Draft Region 9 Superfund Data Evaluation/Validation Guidance"
- EPA, 2004. USEPA "Contract Laboratory Program National Functional Guidelines for Inorganic Data Review"
- ENSR, 2006. DRAFT Quality Assurance Project Plan, Tronox LLC Facility Henderson, Nevada. August.
- NDEP, 2006. NDEP "Guidance on Data Validation, BMI Pant Sites and Common Areas Projects, Henderson, Nevada"

## Memorandum

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Date: December 18, 2008  
To: Sally Bilodeau/Camarillo  
From: Sheena Blair/Westford  
Subject: Data Review  
Routine Monitoring Program  
Annual Remedial Performance Report for Chromium and Perchlorate,  
July 2007- June 2008  
Tronox LLC, Henderson, Nevada

Distribution: Robert Kennedy/Westford

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1<sup>st</sup> & 2<sup>nd</sup> 2008Full2.doc

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### SUMMARY

A full Tier 2 validation was performed on the data for raw groundwater samples analyzed for all or a subset of the following parameters:

- Perchlorate by EPA Method 314
- Hexavalent chromium by SW-846 Method 7196 or EPA Method 218.6
- Total chromium by SW846 6010B or EPA Method 200.7
- Total dissolved solids (TDS) by EPA Method 160.1/Standard Methods (SM) 2540C
- Nitrate as Nitrogen by EPA Method 300.0 or SW-846 Method 9056
- Chlorate by EPA Method 300.0 or SW-846 Method 9056

The samples were collected at the Tronox LLC site in Henderson, Nevada from July 10, 2007 to June 23, 2008 and were submitted to MWH Laboratories in Monrovia, California for analysis. The MWH project numbers, sample collection dates, and analyses included in this review are summarized in **Attachment A** at the end of this memo. The original data for all reports provided by MWH did not support a validation at the Tier 2 level as requested by NDEP. MWH was contacted and the information required to perform a Tier 2 validation was requested. All provided quality control (QC) elements submitted by MWH were reviewed and results of that are summarized below.

The sample results were assessed according to the "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review" (October 2004), the Region 9 Superfund Data Evaluation/Validation Guidance, NDEP guidance (May 2006), and by the laboratory QC criteria. The validation guidelines were modified to accommodate the non-CLP methodologies. The data reviewed required minor qualification for selected samples and appear generally acceptable for decision making. No data were rejected. Selected detected results were qualified as estimated for QC nonconformances (see discussion below).

## **REVIEW ELEMENTS**

Sample data were reviewed for the following elements:

- Agreement of analyses conducted with chain-of-custody (COC) requests
- Holding times and sample preservation
- Initial and continuing calibrations
- Interference check sample (ICS) results (total chromium only)
- Laboratory blanks/equipment blanks/field blanks
- Laboratory control sample/laboratory control sample duplicate (LCS/LCSD) results
- Matrix spike/matrix spike duplicate (MS/MSD) results
- Laboratory duplicate results
- Field duplicate results
- Serial dilution results (total chromium only)
- Sample results/detection limits

## **DISCUSSION**

### **Agreement of Analyses Conducted with COC Requests**

Sample reports were checked to verify that the results reported corresponded to analytical requests as detailed on the COC documentation. The following discrepancies were noted:

- **Report number 240233:** The COC listed samples M-84 and MD-2; however these samples were cancelled upon authorization of the client. No validation action was taken other than this notation.

Two separate samples were collected from location M-10 on 5/8/2008 and analyzed by different analytical methods for the same parameters. The affected parameters are total chromium by SW846 method 6010B and EPA method 200.7, and nitrate as nitrogen by EPA method 300.0 and SW-846 method 9056. The results from SW-846 method 6010B and EPA method 9056 were reported since this sample location is regulated under RCRA methods. No validation actions on this basis were taken other than this notation.

- **Report number 209942:** The Effluent sample for nitrate as nitrogen analysis was submitted to the laboratory in a sample bottle that contained the preservative nitric acid. The laboratory performed the analysis on an addition aliquot of sample that was unpreserved. However, by the time the error was noted, the laboratory performed the analysis beyond the 48 hour method recommended holding time (HT). Therefore, the nondetect nitrate as nitrogen result for the Effluent sample was qualified as estimated (UJ).
- **Report number 216651:** The laboratory flagged the hexavalent chromium results for samples Influent and Effluent as (H) for out of HT. However, these samples were properly preserved and analyzed within the recommended HT of 28 days for EPA method 218.6. The laboratory (H) flags were removed from the database qualifiers during validation. No validation actions were required on the basis of HT.

## **Holding Times and Sample Preservation**

Method-specified holding times were met for all samples analyzed except for the following:

- **Report number 240233:** The initial TDS analysis for samples M-17A, M-36, M-38, M-71, and M-73 were performed within the method specified HT of 7-days; however, the samples were reanalyzed at the client's request due to the results being inconsistent with historical data. The re-analyses were performed 23 days, beyond the method-specified HT criterion. The results of the re-analyses were reported and the detected TDS results for samples M-17A, M-36, M-38, M-71, and M-73 were qualified as estimated, biased low (J-).

The cooler temperatures upon sample receipt at the laboratories met the acceptable range of  $4 \pm 2^{\circ}\text{C}$ .

Documentation regarding sample pH verification upon receipt at the laboratory for total chromium was not included in the data package. No action was taken except for this notation.

## **Initial and Continuing Calibrations**

All criteria were met for the calibration curves and the initial and continuing calibration verification (ICV/CCV) standards (where applicable).

## **ICS Results**

All criteria were met for the analyses of the ICS A and ICS AB solutions.

## **Laboratory Blanks/Equipment Blanks/Field Blanks**

No equipment or field blanks were submitted with the samples in the report numbers under review for this full validation.

No target analytes were detected in the laboratory blanks, i.e., preparation blanks (PB) and the initial and continuing calibration blanks (ICBs and CCBs) associated with the samples in this data set.

## **LCS/LCSD Results**

The percent recoveries (%Rs) and relative percent differences (RPDs) of the LCSs/LCSDs met the laboratory acceptance criteria for all analyses except as follows.

- **Report number 240233:** The %R (77.6%) for low-level TDS LCS associated with samples M-17A and M-38 fell below the laboratory acceptance criteria of 80-114%. The laboratory also analyzed a mid level LCS at 700mg/L, with acceptable results. The TDS results for M-17A and M-38 were greater than 700 mg/L; thus, professional judgement was used and the data was accepted unqualified due to the acceptable mid level LCS.

## **MS/MSD Results**

A MS/MSD analysis was performed on the client specific samples Effluent (in report numbers 223000 and 226843) for hexavalent chromium. The %Rs and RPDs of the MS/MSDs met the laboratory acceptance criteria.

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In most other cases the batch MS/MSD analyses were performed on samples from other clients, and although this practice is acceptable, the results could not be directly applied to the samples reviewed in this data set due to possible differences in the sample matrix and type. No validation action was taken on this basis.

**Laboratory Duplicate Results**

The RPDs of the laboratory duplicates for the TDS analyses performed on client specific samples M-10, M-38, and M-86, and for total chromium analysis on sample M-85 (in report number 240233) met the laboratory acceptance criteria

In most other cases batch laboratory duplicate analyses were performed on samples from other clients, and although this practice is acceptable, the results could not be directly applied to the samples reviewed in these data packages due to possible differences in the sample matrix and type. No validation action was taken on this basis.

No laboratory duplicates were analyzed for perchlorate, total chromium, and hexavalent chromium. Precision in the laboratory was demonstrated by the MS/MSD and/or the LCS/LCSD analyses (see discussions above).

**Field Duplicate Results**

No field duplicates were submitted with the samples under review for this full validation. No validation actions were required on this basis.

**ICP Serial Dilution Results**

In most cases batch serial dilution analyses were performed on samples from other clients, and although this practice is acceptable, the results could not be directly applied to the samples reviewed in these data packages due to possible differences in the sample matrix and type. No validation action was taken on this basis.

**Sample Results/Detection Limits**

Calculations were spot-checked. There were no discrepancies noted.

Analytical dilutions were necessary for most samples due to matrix interferences or to bring analyte concentrations within the instrument calibration range.



**Attachment A**

<b>MWH Report #</b>	<b>Sample Collection Date</b>	<b>Analyses</b>
236536	4/7/2008	Perchlorate, Total Dissolved Solids
240233	5/8/2008	Perchlorate, Total Chromium, Total Dissolved Solids, Hexavalent Chromium, Nitrate as nitrogen, Chlorate
209942	7/10/2007	Perchlorate, Chlorate, Nitrate as Nitrogen, Total Chromium, Hexavalent Chromium
216651	9/17/2007	Perchlorate, Chlorate, Nitrate as Nitrogen, Total Chromium, Hexavalent Chromium
223000	11/19/2007	Perchlorate, Chlorate, Nitrate as Nitrogen, Total Chromium, Hexavalent Chromium
226843	12/30/2007-01/05/2008	Perchlorate
229554	2/4/202008	Perchlorate, Chlorate, Nitrate as Nitrogen, Total Chromium, Hexavalent Chromium
242355	5/27/2008	Perchlorate, Chlorate, Nitrate as Nitrogen, Total Chromium, Hexavalent Chromium
245247	6/23/08	Perchlorate, Chlorate, Nitrate as Nitrogen, Total Chromium, Hexavalent Chromium

The results of selected data submitted in the following MWH Report Numbers are entered in the database under alternative MWH Report Numbers. The following table lists the report numbers affected.

<b>MWH Report Number</b>	<b>Database Report Number</b>
226843	226881
240233	240267

**Table E-4**  
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SDG	SampleID	EPA 160.1 Total Dissolved Solids	EPA 200.7 Total Chromium	EPA 218.6 Chromium- hexavalent	EPA 300.0 Nitrate (as N)	EPA 300.1B Chlorate	EPA 314 Perchlorate	EPA 6010B Total Chromium	EPA 7196 Chromium- hexavalent	EPA 9056 Chlorate	EPA 9056 Nitrate (as N)
<b>209942</b>	<b>EFFLUENT_07/10/07</b>		X	X	X	X	X				
209671	EFFLUENT-COMP_07/07/07						X				
209671	INFLUENT-COMP_07/07/07						X				
<b>209942</b>	<b>INFLUENT_07/10/07</b>		X	X	X	X	X				
210513	EFFLUENT_07/16/07		X	X	X	X	X				
210513	INFLUENT_07/16/07		X	X	X	X	X				
210523	INFLUENT-COMP_07/14/07						X				
211351	EFFLUENT-COMP_07/21/07						X				
211351	INFLUENT-COMP_07/21/07						X				
211352	EFFLUENT_07/23/07		X	X	X	X	X				
211352	INFLUENT_07/23/07		X	X	X	X	X				
211862	EFFLUENT_07/30/07		X	X	X	X	X				
211862	INFLUENT_07/30/07		X	X	X	X	X				
211900	EFFLUENT-COMP_07/28/07						X				
211900	INFLUENT-COMP_07/28/07						X				
212440	EFFLUENT-COMP_08/04/07						X				
212440	INFLUENT-COMP_08/04/07						X				
212455	EFFLUENT_08/06/07		X	X	X	X	X				
212455	INFLUENT_08/06/07		X	X	X	X	X				
213163	EFFLUENT-COMP_08/11/07						X				
213163	INFLUENT-COMP_08/11/07						X				
213190	EFFLUENT_08/13/07		X	X	X	X	X				
213190	INFLUENT_08/13/07		X	X	X	X	X				
213912	EFFLUENT-COMP_08/18/07						X				
213912	INFLUENT-COMP_08/18/07						X				
213923	EFFLUENT_08/20/07		X	X	X	X	X				
213923	INFLUENT_08/20/07		X	X	X	X	X				
214521	EFFLUENT_08/27/07		X	X	X	X	X				
214521	INFLUENT_08/27/07		X	X	X	X	X				
214740	EFFLUENT-COMP_08/25/07						X				
214740	INFLUENT-COMP_08/25/07						X				
215298	EFFLUENT_09/04/07		X	X	X	X	X				
215298	INFLUENT_09/04/07		X	X	X	X	X				
215322	EFFLUENT-COMP_09/01/07						X				
215322	INFLUENT-COMP_09/01/07						X				
215831	EFFLUENT-COMP_09/10/07						X				
215831	INFLUENT-COMP_09/10/07						X				
215917	EFFLUENT_09/10/07		X	X	X	X	X				
215917	INFLUENT_09/10/07		X	X	X	X	X				
216593	EFFLUENT-COMP_09/15/07						X				
216593	INFLUENT-COMP_09/15/07						X				
<b>216651</b>	<b>EFFLUENT_09/17/07</b>		X	X	X	X	X				
<b>216651</b>	<b>INFLUENT_09/17/07</b>		X	X	X	X	X				
217277	EFFLUENT-COMP_09/22/07						X				

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217277	INFLUENT-COMP_09/22/07						X				
217312	EFFLUENT_09/24/07		X	X	X	X	X				
217312	INFLUENT_09/24/07		X	X	X	X	X				
218081	EFFLUENT_10/01/07		X	X	X	X	X				
218081	INFLUENT_10/01/07		X	X	X	X	X				
218165	EFFLUENT-COMP_09/29/07						X				
218165	INFLUENT-COMP_09/29/07						X				
218819	EFFLUENT-COMP_10/06/07						X				
218826	EFFLUENT_10/08/07		X	X	X	X	X				
218826	INFLUENT_10/08/07		X	X	X	X	X				
219583	EFFLUENT-COMP_10/13/07						X				
219583	INFLUENT-COMP_10/13/07						X				
219640	EFFLUENT_10/15/07		X	X	X	X	X				
219640	INFLUENT_10/15/07		X	X	X	X	X				
220240	EFFLUENT-COMP_10/20/07						X				
220240	INFLUENT-COMP_10/20/07						X				
220317	EFFLUENT_10/22/07		X	X	X	X	X				
220317	INFLUENT_10/22/07		X	X	X	X	X				
220871	EFFLUENT-COMP_10/27/07						X				
220871	INFLUENT-COMP_10/27/07						X				
220913	EFFLUENT_10/29/07		X	X	X	X	X				
220913	INFLUENT_10/29/07		X	X	X	X	X				
221435	EFFLUENT_11/05/07		X	X	X	X	X				
221435	INFLUENT_11/05/07		X	X	X	X	X				
221449	EFFLUENT-COMP_11/03/07						X				
221449	INFLUENT-COMP_11/03/07						X				
222215	EFFLUENT_11/12/07		X	X	X	X	X				
222215	INFLUENT_11/12/07		X	X	X	X	X				
222229	EFFLUENT-COMP_11/10/07						X				
222229	INFLUENT-COMP_11/10/07						X				
222963	EFFLUENT-COMP_11/17/07						X				
222963	INFLUENT-COMP_11/17/07						X				
<b>223000</b>	<b>EFFLUENT_11/19/07</b>		<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>				
<b>223000</b>	<b>INFLUENT_11/19/07</b>		<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>				
223401	EFFLUENT-COMP_11/24/07						X				
223401	INFLUENT-COMP_11/24/07						X				
223421	EFFLUENT_11/26/07		X	X	X	X	X				
223421	INFLUENT_11/26/07		X	X	X	X	X				
223885	EFFLUENT-COMP_12/01/07						X				
223885	INFLUENT-COMP_12/01/07						X				
224147	EFFLUENT_12/04/07		X	X	X	X	X				
224147	INFLUENT_12/04/07		X	X	X	X	X				
224617	EFFLUENT-COMP_12/08/07						X				
224617	INFLUENT-COMP_12/08/07						X				

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224657	EFFLUENT_12/10/07		X	X	X	X	X				
224657	INFLUENT_12/10/07		X	X	X	X	X				
225322	EFFLUENT_12/17/07		X	X	X	X	X				
225322	INFLUENT_12/17/07		X	X	X	X	X				
225519	EFFLUENT-COMP_12/15/07						X				
225519	INFLUENT-COMP_12/15/07						X				
226005	EFFLUENT-COMP_12/22/07						X				
226005	INFLUENT-COMP_12/22/07						X				
226070	EFFLUENT_12/26/07		X	X	X	X	X				
226070	INFLUENT_12/26/07		X	X	X	X	X				
226444	EFFLUENT_01/02/08		X	X	X	X	X				
226444	INFLUENT_01/02/08		X	X	X	X	X				
226447	EFFLUENT-COMP_12/29/07						X				
226447	INFLUENT-COMP_12/29/07						X				
226763	ART-1_01/07/08	X					X				
226763	ART-2_01/07/08	X					X				
226763	ART-3_01/07/08	X					X				
226763	ART-4_01/07/08	X					X				
226763	ART-6_01/07/08	X					X				
226763	ART-7_01/07/08	X					X				
226763	ART-8_01/07/08	X					X				
226763	ART-9_01/07/08	X					X				
226763	PC-115R_01/07/08	X					X				
226763	PC-116R_01/07/08	X					X				
226763	PC-117_01/07/08	X					X				
226763	PC-118_01/07/08	X					X				
226763	PC-119_01/07/08	X					X				
226763	PC-120_01/07/08	X					X				
226763	PC-121_01/07/08	X					X				
226763	PC-133_01/07/08	X					X				
226763	PC-99R2/R3_01/07/08	X					X				
226763	SF-1_01/07/08	X					X				
226782	INFLUENT-COMP_01/05/08						X				
<b>226881</b>	<b>EFFLUENT_01/07/08</b>		<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>				
<b>226881</b>	<b>INFLUENT_01/07/08</b>		<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>				
227339	ARP-1_01/09/08	X					X				
227339	ARP-2_01/09/08	X					X				
227339	ARP-3_01/09/08	X					X				
227339	ARP-7_01/10/08	X					X				
227339	L-635_01/08/08	X					X				
227339	L-637_01/08/08	X					X				
227339	MWK-4_01/09/08	X					X				
227339	MWK-5_01/10/08	X					X				
227339	PC-101R_01/09/08	X					X				

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227339	PC-103_01/10/08	X					X				
227339	PC-122_01/10/08	X					X				
227339	PC-17_01/09/08	X					X				
227339	PC-18_01/09/08	X					X				
227339	PC-53_01/10/08	X					X				
227339	PC-55_01/08/08	X					X				
227339	PC-56_01/07/08	X					X				
227339	PC-58_01/07/08	X					X				
227339	PC-59_01/07/08	X					X				
227339	PC-60_01/07/08	X					X				
227339	PC-62_01/07/08	X					X				
227339	PC-86_01/09/08	X					X				
227339	PC-90_01/09/08	X					X				
227339	PC-91_01/09/08	X					X				
227339	PC-97_01/09/08	X					X				
227339	PC-98R_01/10/08	X					X				
227540	INFLUENT-COMP_01/12/08						X				
227614	EFFLUENT_01/14/08		X	X	X	X	X				
227614	INFLUENT_01/14/08				X	X	X				
228116	AA-MW-16_01/17/08	X					X				
228116	ARP-4A_01/18/08	X					X				
228116	ARP-5A_01/18/08	X					X				
228116	ARP-6B_01/18/08	X					X				
228116	I-AA_01/17/08	X	X				X				
228116	M-111A_01/18/08	X	X				X				
228116	M-126_01/17/08	X	X				X				
228116	M-131_01/17/08	X					X				
228116	M-132_01/17/08	X	X				X				
228116	M-133_01/17/08	X	X				X				
228116	M-134_01/17/08	X	X				X				
228116	M-135_01/17/08	X	X				X				
228116	M-136_01/17/08	X	X				X				
228116	M-83_01/17/08	X					X				
228116	M-87_01/17/08	X					X				
228116	PC-134_01/18/08	X	X				X				
228116	PC-135_01/18/08	X					X				
228116	PC-136_01/18/08	X					X				
228116	PC-137_01/18/08	X	X				X				
228212	EFFLUENT-COMP_01/19/08						X				
228212	INFLUENT-COMP_01/19/08						X				
228226	EFFLUENT_01/21/08		X	X	X	X	X				
228226	INFLUENT_01/21/08		X	X	X	X	X				
228827	EFFLUENT-COMP_01/26/08						X				
228827	INFLUENT-COMP_01/26/08						X				

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228904	EFFLUENT_01/28/08		X	X	X	X	X				
228904	INFLUENT_01/28/08		X	X	X	X	X				
229480	EFFLUENT-COMP_02/02/08						X				
229480	INFLUENT-COMP_02/02/08						X				
229550	FB-1_02/04/08	X					X	X	X		
229550	M-23_02/04/08	X					X	X			
229550	M-44_02/04/08	X					X	X			
229550	M-48_02/04/08	X					X	X			
229550	M-94_02/04/08	X					X	X	X		
229550	M-95_02/04/08	X					X	X			
229550	M-96_02/04/08	X					X	X			
229550	MD-1_02/04/08	X					X	X	X		
229550	MD-3_02/04/08	X					X	X			
229550	PC-123_02/04/08	X					X	X			
229550	PC-124_02/04/08	X					X	X			
229550	PC-125_02/04/08	X					X	X			
229550	PC-126_02/04/08	X					X	X			
229550	PC-127_02/04/08	X					X	X			
229550	PC-128_02/04/08	X					X	X			
229550	PC-129_02/04/08	X					X	X			
229550	PC-130_02/04/08	X					X	X			
229550	PC-131_02/04/08	X					X	X			
229550	PC-132_02/04/08	X					X	X			
229550	PC-37_02/04/08	X					X	X			
229550	PC-54_02/04/08	X					X	X			
229550	PC-71_02/04/08	X					X	X			
229550	PC-72_02/04/08	X					X	X			
229550	PC-73_02/04/08	X					X	X			
<b>229554</b>	<b>EFFLUENT_02/04/08</b>		<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>				
<b>229554</b>	<b>INFLUENT_02/04/08</b>		<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>				
229639	I-B_02/05/08	X					X	X			
229639	I-C_02/05/08	X					X	X			
229639	I-D_02/05/08	X					X	X			
229639	I-E_02/05/08	X					X	X			
229639	I-H_02/05/08	X					X	X			
229639	I-L_02/05/08	X					X	X			
229639	I-M_02/05/08	X					X	X			
229639	I-O_02/05/08	X					X	X			
229639	I-P_02/05/08	X					X	X			
229639	I-Q_02/05/08	X					X	X			
229639	I-R_02/05/08	X					X	X			
229639	I-S_02/05/08	X					X	X			
229639	I-T_02/05/08	X					X	X			
229690	AA-MW-16_02/05/08	X					X	X			

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229690	EB-1_02/05/08	X					X	X	X		
229690	I-AA_02/05/08	X					X	X			
229690	M-126_02/05/08	X					X	X			
229690	M-131_02/05/08	X					X	X			
229690	M-134_02/05/08	X					X	X			
229690	M-135_02/05/08	X					X	X			
229690	M-136_02/05/08	X					X	X			
229690	M-25_02/05/08	X					X	X			
229690	M-37_02/05/08	X					X	X	X		
229690	M-57A_02/05/08	X					X	X			
229690	M-64_02/05/08	X					X	X			
229690	M-65_02/05/08	X					X	X			
229690	M-66_02/05/08	X					X	X			
229690	M-69_02/05/08	X					X	X			
229690	M-79_02/05/08	X					X	X			
229690	M-99_02/05/08	X					X	X			
229690	MD-4_02/05/08	X					X	X			
229879	EFFLUENT-COMP_01/05/08						X				
229879	EFFLUENT-COMP_01/12/08						X				
230021	M-11_02/07/08	X					X	X	X		
230021	M-22A_02/07/08	X					X	X			
230021	M-36_02/07/08	X					X	X	X		
230021	M-38_02/07/08	X					X	X			
230021	M-70_02/07/08	X					X	X			
230021	M-71_02/07/08	X					X	X			
230021	M-72_02/07/08	X					X	X			
230021	M-83_02/07/08	X					X	X			
230021	M-84_02/07/08	X					X	X	X		
230021	M-85_02/07/08	X					X	X			
230021	M-86_02/07/08	X					X	X			
230021	M-87_02/07/08	X					X	X			
230021	M-89_02/07/08	X					X	X			
230021	MD-2_02/07/08	X					X	X	X		
230036	M-10_02/07/08	X	X		X						
<b>230066</b>	<b>I-N_02/08/08</b>	<b>X</b>					<b>X</b>	<b>X</b>			
<b>230066</b>	<b>M-111A_02/08/08</b>	<b>X</b>					<b>X</b>	<b>X</b>			
<b>230066</b>	<b>M-115_02/08/08</b>	<b>X</b>					<b>X</b>	<b>X</b>			
<b>230066</b>	<b>M-14A_02/08/08</b>	<b>X</b>					<b>X</b>	<b>X</b>			
<b>230066</b>	<b>M-17A_02/08/08</b>	<b>X</b>					<b>X</b>	<b>X</b>			
<b>230066</b>	<b>M-75_02/08/08</b>	<b>X</b>					<b>X</b>	<b>X</b>			
<b>230066</b>	<b>M-76_02/08/08</b>	<b>X</b>					<b>X</b>	<b>X</b>			
230241	EFFLUENT-COMP_02/09/08						X				
230241	INFLUENT-COMP_02/09/08						X				
230253	ART-1_02/11/08	X	X				X				

**Table E-4**  
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SDG	SampleID	EPA 160.1 Total Dissolved Solids	EPA 200.7 Total Chromium	EPA 218.6 Chromium- hexavalent	EPA 300.0 Nitrate (as N)	EPA 300.1B Chlorate	EPA 314 Perchlorate	EPA 6010B Total Chromium	EPA 7196 Chromium- hexavalent	EPA 9056 Chlorate	EPA 9056 Nitrate (as N)
230253	ART-2_02/11/08	X	X				X				
230253	ART-3_02/11/08	X	X				X				
230253	ART-4_02/11/08	X	X				X				
230253	ART-5_02/11/08	X	X				X				
230253	ART-6_02/11/08	X	X				X				
230253	ART-7_02/11/08	X	X				X				
230253	ART-8_02/11/08	X	X				X				
230253	ART-9_02/11/08	X	X				X				
230253	PC-115R_02/11/08	X	X				X				
230253	PC-116R_02/11/08	X	X				X				
230253	PC-117_02/11/08	X	X				X				
230253	PC-118_02/11/08	X	X				X				
230253	PC-119_02/11/08	X	X				X				
230253	PC-120_02/11/08	X	X				X				
230253	PC-121_02/11/08	X	X				X				
230253	PC-133_02/11/08	X	X				X				
230253	PC-99R2/R3_02/11/08	X	X				X				
230253	SEEP SURFACE FLOW_02/11/08	X	X				X				
230253	SF-1_02/11/08	X	X				X				
230307	EFFLUENT_02/11/08		X	X	X	X	X				
230307	INFLUENT_02/11/08		X	X	X	X	X				
230772	ARP-1_02/13/08	X	X				X				
230772	ARP-2_02/13/08	X	X				X				
230772	ARP-3_02/13/08	X	X				X				
230772	ARP-4A_02/13/08	X	X				X				
230772	ARP-5A_02/13/08	X	X				X				
230772	ARP-6B_02/14/08	X	X				X				
230772	ARP-7_02/14/08	X	X				X				
230772	L-635_02/12/08	X	X				X				
230772	L-637_02/12/08	X	X				X				
230772	M-83_02/12/08	X	X				X				
230772	M-87_02/12/08	X	X				X				
230772	MWK-4_02/13/08	X	X				X				
230772	MWK-5_02/14/08	X	X				X				
230772	PC-101R_02/13/08	X	X				X				
230772	PC-103_02/14/08	X	X				X				
230772	PC-122_02/14/08	X	X				X				
230772	PC-134_02/13/08	X	X				X				
230772	PC-135_02/13/08	X	X				X				
230772	PC-136_02/13/08	X	X				X				
230772	PC-137_02/14/08	X	X				X				
230772	PC-17_02/13/08	X	X				X				
230772	PC-18_02/13/08	X	X				X				
230772	PC-53_02/14/08	X	X				X				



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SDG	SampleID	EPA 160.1 Total Dissolved Solids	EPA 200.7 Total Chromium	EPA 218.6 Chromium- hexavalent	EPA 300.0 Nitrate (as N)	EPA 300.1B Chlorate	EPA 314 Perchlorate	EPA 6010B Total Chromium	EPA 7196 Chromium- hexavalent	EPA 9056 Chlorate	EPA 9056 Nitrate (as N)
230772	PC-55_02/12/08	X	X				X				
230772	PC-56_02/11/08	X	X				X				
230772	PC-58_02/11/08	X	X				X				
230772	PC-59_02/11/08	X	X				X				
230772	PC-60_02/11/08	X	X				X				
230772	PC-62_02/11/08	X	X				X				
230772	PC-68_02/11/08	X	X				X				
230772	PC-86_02/12/08	X	X				X				
230772	PC-90_02/12/08	X	X				X				
230772	PC-91_02/12/08	X	X				X				
230772	PC-97_02/12/08	X	X				X				
230772	PC-98R_02/14/08	X	X				X				
230943	EFFLUENT-COMP_02/16/08						X				
230943	INFLUENT-COMP_02/16/08						X				
230975	EFFLUENT_02/18/08		X	X	X	X	X				
230975	INFLUENT_02/18/08		X	X	X	X	X				
231734	EFFLUENT_02/25/08		X	X	X	X	X				
231734	INFLUENT_02/25/08		X	X	X	X	X				
231827	EFFLUENT-COMP_02/23/08						X				
231827	INFLUENT-COMP_02/23/08						X				
232539	EFFLUENT_03/03/08		X	X	X	X	X				
232539	INFLUENT_03/03/08		X	X	X	X	X				
232561	EFFLUENT-COMP_03/01/08						X				
232561	INFLUENT-COMP_03/01/08						X				
233325	EFFLUENT_03/10/08		X	X	X	X	X				
233325	INFLUENT_03/10/08		X	X	X	X	X				
233336	EFFLUENT-COMP_03/08/08						X				
233336	INFLUENT-COMP_03/08/08						X				
233399	ART-1_03/10/08	X					X				
233399	ART-2_03/10/08	X					X				
233399	ART-3_03/10/08	X					X				
233399	ART-4_03/10/08	X					X				
233399	ART-5_03/10/08	X					X				
233399	ART-6_03/10/08	X					X				
233399	ART-7_03/10/08	X					X				
233399	ART-8_03/10/08	X					X				
233399	ART-9_03/10/08	X					X				
233399	PC-115R_03/10/08	X					X				
233399	PC-116R_03/10/08	X					X				
233399	PC-117_03/10/08	X					X				
233399	PC-118_03/10/08	X					X				
233399	PC-119_03/10/08	X					X				
233399	PC-120_03/10/08	X					X				
233399	PC-121_03/10/08	X					X				

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SDG	SampleID	EPA 160.1 Total Dissolved Solids	EPA 200.7 Total Chromium	EPA 218.6 Chromium- hexavalent	EPA 300.0 Nitrate (as N)	EPA 300.1B Chlorate	EPA 314 Perchlorate	EPA 6010B Total Chromium	EPA 7196 Chromium- hexavalent	EPA 9056 Chlorate	EPA 9056 Nitrate (as N)
233399	PC-133_03/10/08	X					X				
233399	PC-99R2/R3_03/10/08	X					X				
233399	SEEP SURFACE FLOW_03/10/08	X					X				
233399	SF-1_03/10/08	X					X				
233998	ARP-1_03/12/08	X					X				
233998	ARP-2_03/12/08	X					X				
233998	ARP-3_03/12/08	X					X				
233998	ARP-4A_03/12/08	X					X				
233998	ARP-5A_03/12/08	X					X				
233998	ARP-6B_03/13/08	X					X				
233998	ARP-7_03/13/08	X					X				
233998	L-635_03/11/08	X					X				
233998	L-637_03/11/08	X					X				
233998	M-83_03/13/08	X					X				
233998	M-87_03/13/08	X					X				
233998	MWK-4_03/12/08	X					X				
233998	MWK-5_03/13/08	X					X				
233998	PC-101R_03/12/08	X					X				
233998	PC-103_03/13/08	X					X				
233998	PC-122_03/13/08	X					X				
233998	PC-17_03/12/08	X					X				
233998	PC-18_03/12/08	X					X				
233998	PC-53_03/13/08	X					X				
233998	PC-55_03/11/08	X					X				
233998	PC-56_03/10/08	X					X				
233998	PC-58_03/10/08	X					X				
233998	PC-59_03/10/08	X					X				
233998	PC-60_03/10/08	X					X				
233998	PC-62_03/10/08	X					X				
233998	PC-68_03/10/08	X					X				
233998	PC-86_03/12/08	X					X				
233998	PC-90_03/12/08	X					X				
233998	PC-91_03/12/08	X					X				
233998	PC-97_03/12/08	X					X				
233998	PC-98R_03/13/08	X					X				
234187	EFFLUENT_03/17/08		X	X	X	X	X				
234187	INFLUENT_03/17/08		X	X	X	X	X				
234259	EFFLUENT-COMP_03/15/08						X				
234259	INFLUENT-COMP_03/15/08						X				
234930	EFFLUENT-COMP_03/22/08						X				
234930	INFLUENT-COMP_03/22/08						X				
234938	EFFLUENT_03/24/08		X	X	X	X	X				
234938	INFLUENT_03/24/08		X	X	X	X	X				
235624	EFFLUENT-COMP_03/29/08						X				

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SDG	SampleID	EPA 160.1 Total Dissolved Solids	EPA 200.7 Total Chromium	EPA 218.6 Chromium- hexavalent	EPA 300.0 Nitrate (as N)	EPA 300.1B Chlorate	EPA 314 Perchlorate	EPA 6010B Total Chromium	EPA 7196 Chromium- hexavalent	EPA 9056 Chlorate	EPA 9056 Nitrate (as N)
235624	INFLUENT-COMP_03/29/08						X				
235626	EFFLUENT_03/31/08		X	X	X	X	X				
235626	INFLUENT_03/31/08		X	X	X	X	X				
236457	EFFLUENT-COMP_04/05/08						X				
236457	INFLUENT-COMP_04/05/08						X				
236473	EFFLUENT_04/07/08		X	X	X	X	X				
236473	INFLUENT_04/07/08		X	X	X	X	X				
236536	ART-1_04/07/08	X					X				
236536	ART-2_04/07/08	X					X				
236536	ART-3_04/07/08	X					X				
236536	ART-4_04/07/08	X					X				
236536	ART-5_04/07/08	X					X				
236536	ART-6_04/07/08	X					X				
236536	ART-7_04/07/08	X					X				
236536	ART-8_04/07/08	X					X				
236536	ART-9_04/07/08	X					X				
236536	PC-115R_04/07/08	X					X				
236536	PC-116R_04/07/08	X					X				
236536	PC-117_04/07/08	X					X				
236536	PC-118_04/07/08	X					X				
236536	PC-119_04/07/08	X					X				
236536	PC-120_04/07/08	X					X				
236536	PC-121_04/07/08	X					X				
236536	PC-133_04/07/08	X					X				
236536	PC-99R2/R3_04/07/08	X					X				
236536	SEEP SURFACE FLOW_04/07/08	X					X				
236536	SF-1_04/07/08	X					X				
237426	EFFLUENT_04/14/08		X	X	X	X	X				
237426	INFLUENT_04/14/08		X	X	X	X	X				
237653	EFFLUENT-COMP_04/12/08						X				
237653	INFLUENT-COMP_04/12/08						X				
237937	ARP-1_04/17/08	X					X				
237937	ARP-2_04/17/08	X					X				
237937	ARP-3_04/17/08	X					X				
237937	ARP-4A_04/17/08	X					X				
237937	ARP-5A_04/17/08	X					X				
237937	ARP-6B_04/17/08	X					X				
237937	L-635_04/16/08	X					X				
237937	L-637_04/16/08	X					X				
237937	M-83_04/17/08	X					X				
237937	M-87_04/17/08	X					X				
237937	MWK-4_04/17/08	X					X				
237937	MWK-5_04/17/08	X					X				
237937	PC-101R_04/16/08	X					X				

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**SDGs, Sample IDs, and Analytes**  
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SDG	SampleID	EPA 160.1 Total Dissolved Solids	EPA 200.7 Total Chromium	EPA 218.6 Chromium- hexavalent	EPA 300.0 Nitrate (as N)	EPA 300.1B Chlorate	EPA 314 Perchlorate	EPA 6010B Total Chromium	EPA 7196 Chromium- hexavalent	EPA 9056 Chlorate	EPA 9056 Nitrate (as N)
237937	PC-103_04/17/08	X					X				
237937	PC-122_04/17/08	X					X				
237937	PC-17_04/16/08	X					X				
237937	PC-18_04/16/08	X					X				
237937	PC-53_04/17/08	X					X				
237937	PC-55_04/16/08	X					X				
237937	PC-56_04/17/08	X					X				
237937	PC-58_04/17/08	X					X				
237937	PC-59_04/17/08	X					X				
237937	PC-60_04/17/08	X					X				
237937	PC-62_04/17/08	X					X				
237937	PC-68_04/17/08	X					X				
237937	PC-86_04/17/08	X					X				
237937	PC-90_04/17/08	X					X				
237937	PC-91_04/16/08	X					X				
237937	PC-97_04/16/08	X					X				
237937	PC-98R_04/17/08	X					X				
238142	EFFLUENT-COMP_04/19/08						X				
238142	INFLUENT-COMP_04/19/08						X				
238185	EFFLUENT_04/21/08		X	X	X	X	X				
238185	INFLUENT_04/21/08		X	X	X	X	X				
238547	ARP-7_04/23/08	X					X				
238983	EFFLUENT_04/28/08		X	X	X	X	X				
238983	INFLUENT_04/28/08		X	X	X	X	X				
239009	EFFLUENT-COMP_04/26/08						X				
239615	EFFLUENT_05/05/08			X	X	X	X				
239615	INFLUENT_05/05/08			X	X	X	X				
239631	FB-1_05/05/08	X					X	X			
239631	M-23_05/05/08	X					X	X		X	X
239631	M-44_05/05/08	X					X	X	X		
239631	M-48_05/05/08	X					X	X		X	X
239631	M-95_05/05/08	X					X	X			
239631	M-96_05/05/08	X					X	X			
239631	MD-1_05/05/08	X					X	X	X		
239631	MD-5_05/05/08	X					X	X		X	X
239631	PC-123_05/05/08	X					X	X			
239631	PC-124_05/05/08	X					X	X		X	X
239631	PC-125_05/05/08	X					X	X			
239631	PC-126_05/05/08	X					X	X		X	X
239631	PC-127_05/05/08	X					X	X			
239631	PC-128_05/05/08	X					X	X		X	X
239631	PC-129_05/05/08	X					X	X			
239631	PC-131_05/05/08	X					X	X			
239631	PC-132_05/05/08	X					X	X		X	X

**Table E-4**  
**SDGs, Sample IDs, and Analytes**  
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SDG	SampleID	EPA 160.1 Total Dissolved Solids	EPA 200.7 Total Chromium	EPA 218.6 Chromium- hexavalent	EPA 300.0 Nitrate (as N)	EPA 300.1B Chlorate	EPA 314 Perchlorate	EPA 6010B Total Chromium	EPA 7196 Chromium- hexavalent	EPA 9056 Chlorate	EPA 9056 Nitrate (as N)
239631	PC-37_05/05/08	X					X	X			
239631	PC-54_05/05/08	X					X	X			
239631	PC-71_05/05/08	X					X	X			
239631	PC-72_05/05/08	X					X	X			
239631	PC-73_05/05/08	X					X	X			
239738	EFFLUENT-COMP_05/03/08						X				
239738	INFLUENT-COMP_05/03/08						X				
239784	I-AA_05/06/08	X					X	X			
239784	I-AR_05/06/08	X					X	X			
239784	I-B_05/06/08	X					X	X			
239784	I-C_05/06/08	X					X	X			
239784	I-D_05/06/08	X					X	X			
239784	I-E_05/06/08	X					X	X			
239784	I-F_05/06/08	X					X	X			
239784	I-H_05/06/08	X					X	X			
239784	I-L_05/06/08	X					X	X			
239784	I-M_05/06/08	X					X	X			
239784	I-N_05/06/08	X					X	X			
239784	I-O_05/06/08	X					X	X			
239784	I-P_05/06/08	X					X	X			
239784	I-Q_05/06/08	X					X	X			
239784	I-R_05/06/08	X					X	X			
239784	I-S_05/06/08	X					X	X			
239784	I-T_05/06/08	X					X	X			
239784	I-U_05/06/08	X					X	X			
239919	H-28A_05/06/08	X					X	X			
239919	M-5A_05/06/08	X					X	X			
239919	M-6A_05/06/08	X					X	X			
239919	M-7B_05/06/08	X					X	X			
240016	M-131_05/06/08	X					X	X			
240016	M-135_05/06/08	X					X	X			
240016	M-25_05/06/08	X					X	X		X	X
240016	M-37_05/06/08	X					X	X	X	X	X
240016	M-57A_05/06/08	X					X	X			
240016	M-69_05/06/08	X					X	X			
240016	M-79_05/06/08	X					X	X			
240016	M-99_05/06/08	X					X	X			
240016	MD-3_05/06/08	X					X	X			
240016	PC-130_05/06/08	X					X	X		X	X
240115	EB-2_05/07/08	X					X	X	X		
240115	I-I_05/07/08	X					X	X			
240115	I-J_05/07/08	X					X	X			
240115	I-K_05/07/08	X					X	X			
240115	I-V_05/07/08	X					X	X			

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SDG	SampleID	EPA 160.1 Total Dissolved Solids	EPA 200.7 Total Chromium	EPA 218.6 Chromium- hexavalent	EPA 300.0 Nitrate (as N)	EPA 300.1B Chlorate	EPA 314 Perchlorate	EPA 6010B Total Chromium	EPA 7196 Chromium- hexavalent	EPA 9056 Chlorate	EPA 9056 Nitrate (as N)
240115	I-Z_05/07/08	X					X	X			
240115	M-11_05/07/08	X					X	X	X	X	X
240115	M-12A_05/07/08	X					X	X	X	X	X
240115	M-13_05/07/08	X					X	X		X	X
240115	M-19_05/07/08	X					X	X			
240115	M-21_05/07/08	X					X	X			
240115	M-31A_05/07/08	X					X	X			
240115	M-33_05/07/08	X					X	X			
240115	M-39_05/07/08	X					X	X	X	X	X
240115	M-50_05/07/08	X					X	X			
240115	M-52_05/07/08	X					X	X			
240115	M-68_05/07/08	X					X	X			
240115	M-77_05/07/08	X					X	X			
240115	M-92_05/07/08	X					X	X			
240115	M-97_05/07/08	X					X	X			
240115	MD-4_05/07/08	X					X	X			
240191	EB050708_05/07/08	X					X	X		X	X
240191	FB050708_05/07/08	X					X	X			
240191	HMW-9_05/07/08	X					X				
240191	PC-74_05/07/08	X					X				
240191	PC-77_05/07/08	X					X				
240191	PC-79_05/07/08	X					X	X			
240191	PC-82_05/07/08	X					X			X	X
240191	PC-96_05/07/08	X					X				
240233	M-10_05/08/08	X					X	X	X	X	X
240233	M-17A_05/08/08	X					X	X			
240233	M-2A_05/08/08	X					X	X			
240233	M-36_05/08/08	X					X	X	X	X	X
240233	M-38_05/08/08	X					X	X			
240233	M-70_05/08/08	X					X	X			
240233	M-71_05/08/08	X					X	X			
240233	M-72_05/08/08	X					X	X			
240233	M-73_05/08/08	X					X	X			
240233	M-74_05/08/08	X					X	X			
240233	M-75_05/08/08	X					X	X			
240233	M-76_05/08/08	X					X	X			
240233	M-83_05/08/08	X					X	X			
240233	M-85_05/08/08	X					X	X			
240233	M-86_05/08/08	X					X	X			
240233	M-87_05/08/08	X					X	X			
240233	M-88_05/08/08	X					X	X			
240233	M-89_05/08/08	X					X	X			
240243	EB050808_05/08/08	X					X	X		X	X
240243	FB050808_05/08/08	X					X	X		X	X

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SDG	SampleID	EPA 160.1 Total Dissolved Solids	EPA 200.7 Total Chromium	EPA 218.6 Chromium- hexavalent	EPA 300.0 Nitrate (as N)	EPA 300.1B Chlorate	EPA 314 Perchlorate	EPA 6010B Total Chromium	EPA 7196 Chromium- hexavalent	EPA 9056 Chlorate	EPA 9056 Nitrate (as N)
240243	H-11_05/08/08	X					X				
240243	HM-2_05/08/08	X					X				
240243	HMW-13_05/08/08	X					X				
240243	HMW-14_05/08/08	X					X				
240243	HMW-15_05/08/08	X					X				
240243	HMW-16_05/08/08	X					X				
240243	HSW-1_05/08/08	X					X				
240243	LK-3_05/08/08	X					X				
240243	PC-1_05/08/08	X					X	X			
240243	PC-104_05/08/08	X					X	X			
240243	PC-107_05/08/08	X					X				
240243	PC-2_05/08/08	X					X	X		X	X
240243	PC-24_05/08/08	X					X	X			
240243	PC-2D_05/08/08	X					X	X		X	X
240243	PC-4_05/08/08	X					X	X		X	X
240243	PC-50_05/08/08	X					X	X			
240326	CLD1-R_05/09/08	X					X	X			
240326	CLD2-R_05/09/08	X					X	X			
240326	CLD2-RD_05/09/08	X					X	X			
240326	EB050908_05/09/08	X					X	X			
240326	M-129_05/09/08	X					X	X			
240326	M-130_05/09/08	X					X	X			
240326	PC-108_05/09/08	X					X				
240326	PC-110_05/09/08	X					X				
240326	PC-112_05/09/08	X					X				
240326	PC-62_05/09/08	X					X	X			
240327	M-115_05/09/08	X					X	X			
240327	M-14A_05/09/08	X					X	X			
240327	M-22A_05/09/08	X					X	X			
240568	EFFLUENT COMP_05/10/08						X				
240568	INFLUENT COMP_05/10/08						X				
240600	ART-1_05/12/08	X					X	X			
240600	ART-2_05/12/08	X					X	X			
240600	ART-3_05/12/08	X					X	X			
240600	ART-4_05/12/08	X					X	X			
240600	ART-7_05/12/08	X					X	X			
240600	ART-8_05/12/08	X					X	X			
240600	ART-9_05/12/08	X					X	X			
240600	PC-115R_05/12/08	X					X	X			
240600	PC-116R_05/12/08	X					X	X			
240600	PC-117_05/12/08	X					X	X			
240600	PC-118_05/12/08	X					X	X			
240600	PC-119_05/12/08	X					X	X			
240600	PC-120_05/12/08	X					X	X			

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SDG	SampleID	EPA 160.1 Total Dissolved Solids	EPA 200.7 Total Chromium	EPA 218.6 Chromium- hexavalent	EPA 300.0 Nitrate (as N)	EPA 300.1B Chlorate	EPA 314 Perchlorate	EPA 6010B Total Chromium	EPA 7196 Chromium- hexavalent	EPA 9056 Chlorate	EPA 9056 Nitrate (as N)
240600	PC-121_05/12/08	X					X	X			
240600	PC-133_05/12/08	X					X	X			
240600	PC-99R2/R3_05/12/08	X					X	X			
240600	SF-1_05/12/08	X					X	X			
240608	M-84_05/12/08	X					X	X	X		
240608	MD-2_05/12/08	X					X	X	X		
240609	EFFLUENT_05/12/08		X	X	X	X	X				
240609	INFLUENT_05/12/08		X	X	X	X	X				
240701	EB051008_05/10/08	X					X	X			
240701	EB051108_05/11/08	X					X	X			
240701	EB051208_05/12/08	X					X	X		X	X
240701	H-48_05/10/08	X					X				
240701	H-55_05/10/08	X					X				
240701	M-111A_05/12/08	X					X	X			
240701	M-120_05/10/08	X					X	X			
240701	M-121_05/10/08	X					X	X			
240701	M-126_05/11/08	X					X	X			
240701	M-132_05/12/08	X					X	X			
240701	M-133_05/12/08	X					X	X			
240701	M-134_05/11/08	X					X	X			
240701	M-135_05/11/08	X					X	X			
240701	M-136_05/11/08	X					X	X			
240701	M-34_05/12/08	X					X	X			
240701	M-35_05/12/08	X					X				
240701	M-61_05/12/08	X					X	X			
240701	M-64_05/12/08	X					X	X			
240701	M-65_05/12/08	X					X	X			
240701	M-66_05/12/08	X					X	X			
240701	M-67_05/12/08	X					X	X			
240701	M-67D_05/12/08	X					X	X			
240701	MC-29_05/11/08	X					X				
240701	MC-3_05/10/08	X					X				
240701	MC-50_05/11/08	X					X				
240701	MC-51_05/10/08	X					X				
240701	MC-53_05/11/08	X					X	X			
240701	MC-6_05/10/08	X					X				
240701	MC-65_05/10/08	X					X				
240701	MC-69_05/10/08	X					X				
240701	MC-7_05/10/08	X					X				
240701	MC-93_05/11/08	X					X				
240701	MC-97_05/11/08	X					X				
240701	MW-16_05/12/08	X					X	X			
240701	PC-134_05/11/08	X					X	X			
240701	PC-137_05/11/08	X					X	X			



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SDG	SampleID	EPA 160.1 Total Dissolved Solids	EPA 200.7 Total Chromium	EPA 218.6 Chromium- hexavalent	EPA 300.0 Nitrate (as N)	EPA 300.1B Chlorate	EPA 314 Perchlorate	EPA 6010B Total Chromium	EPA 7196 Chromium- hexavalent	EPA 9056 Chlorate	EPA 9056 Nitrate (as N)
240701	PC-21A_05/12/08	X					X	X		X	X
240701	PC-28_05/10/08	X					X	X			
240701	PC-31_05/10/08	X					X	X			
240701	PC-31D_05/10/08	X					X	X			
240701	PC-40_05/10/08	X					X	X			
240701	PC-40D_05/10/08	X					X	X			
240701	PC-64_05/11/08	X					X	X			
240701	PC-65_05/11/08	X					X	X			
240701	PC-66_05/11/08	X					X	X			
240701	PC-66D_05/11/08	X					X	X			
240701	PC-67_05/11/08	X					X	X			
240912	EB051308_05/13/08	X					X	X			
240912	M-103_05/13/08	X					X	X			
240912	M-117_05/13/08	X					X	X			
240912	M-118_05/13/08	X					X	X			
240912	TR-10_05/13/08	X			X		X	X			
240912	TR-11_05/13/08	X			X		X	X			
240912	TR-9_05/13/08	X			X		X	X			
241086	EB051408_05/14/08	X					X	X		X	X
241086	TR-1_05/14/08	X					X	X		X	X
241086	TR-2_05/14/08	X					X	X		X	X
241086	TR-2D_05/14/08	X					X	X		X	X
241086	TR-5_05/14/08	X					X	X		X	X
241086	TR-6_05/14/08	X					X	X		X	X
241086	TR-7_05/14/08	X					X	X		X	X
241086	TR-8_05/14/08	X					X	X		X	X
241119	ARP-1_05/14/08	X					X	X			
241119	ARP-2_05/14/08	X					X	X			
241119	ARP-7_05/14/08	X					X	X			
241119	L-635_05/13/08	X					X	X			
241119	L-637_05/13/08	X					X	X			
241119	M-83_05/12/08	X					X	X			
241119	M-87_05/12/08	X					X	X			
241119	PC-101R_05/13/08	X					X	X			
241119	PC-122_05/14/08	X					X	X			
241119	PC-136_05/14/08	X					X	X			
241119	PC-17_05/13/08	X					X	X			
241119	PC-18_05/13/08	X					X	X			
241119	PC-55_05/13/08	X					X	X			
241119	PC-56_05/14/08	X					X	X			
241119	PC-58_05/14/08	X					X	X			
241119	PC-59_05/14/08	X					X	X			
241119	PC-60_05/14/08	X					X	X			
241119	PC-62_05/14/08	X					X	X			

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SDG	SampleID	EPA 160.1 Total Dissolved Solids	EPA 200.7 Total Chromium	EPA 218.6 Chromium- hexavalent	EPA 300.0 Nitrate (as N)	EPA 300.1B Chlorate	EPA 314 Perchlorate	EPA 6010B Total Chromium	EPA 7196 Chromium- hexavalent	EPA 9056 Chlorate	EPA 9056 Nitrate (as N)
241119	PC-68_05/14/08	X					X	X			
241119	PC-86_05/14/08	X			X	X	X	X			
241119	PC-90_05/14/08	X			X	X	X	X			
241119	PC-91_05/14/08	X			X	X	X	X			
241119	PC-97_05/14/08	X					X	X			
241233	ARP-4A_05/15/08	X					X	X			
241233	ARP-5A_05/15/08	X					X	X			
241233	ARP-6B_05/15/08	X					X	X			
241233	MW-K4_05/15/08	X					X	X			
241233	MW-K5_05/15/08	X			X	X	X	X			
241233	PC-103_05/15/08	X			X	X	X	X			
241233	PC-53_05/15/08	X					X	X			
241233	PC-98R_05/15/08	X					X	X			
241249	EB051508_05/15/08	X			X			X			
241249	TR-12_05/15/08	X			X		X	X			
241249	TR-3_05/15/08	X			X		X	X			
241249	TR-4_05/15/08	X			X		X	X			
241249	TR-4D_05/15/08	X			X		X	X			
241471	EFFLUENT_05/19/08		X	X	X	X	X				
241471	INFLUENT_05/19/08		X	X	X	X	X				
241525	EFFLUENT-COMP_05/17/08						X				
241525	INFLUENT-COMP_05/17/08						X				
242317	EFFLUENT-COMP_05/24/08						X				
242317	INFLUENT-COMP_05/24/08						X				
<b>242355</b>	<b>EFFLUENT_05/27/08</b>		<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>				
<b>242355</b>	<b>INFLUENT_05/27/08</b>		<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>				
242769	EFFLUENT-COMP_05/31/08						X				
242769	INFLUENT-COMP_05/31/08						X				
242835	M-129_06/02/08	X					X	X			
242835	M-130_06/02/08	X					X	X			
242868	EFFLUENT_06/02/08		X	X	X	X	X				
242868	INFLUENT_06/02/08		X	X	X	X	X				
243607	ART-1_06/09/08	X					X				
243607	ART-2_06/09/08	X					X				
243607	ART-3_06/09/08	X					X				
243607	ART-4_06/09/08	X					X				
243607	ART-6_06/09/08	X					X				
243607	ART-7_06/09/08	X					X				
243607	ART-8_06/09/08	X					X				
243607	ART-9_06/09/08	X					X				
243607	PC-115R_06/09/08	X					X				
243607	PC-116R_06/09/08	X					X				
243607	PC-117_06/09/08	X					X				
243607	PC-118_06/09/08	X					X				

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SDG	SampleID	EPA 160.1 Total Dissolved Solids	EPA 200.7 Total Chromium	EPA 218.6 Chromium- hexavalent	EPA 300.0 Nitrate (as N)	EPA 300.1B Chlorate	EPA 314 Perchlorate	EPA 6010B Total Chromium	EPA 7196 Chromium- hexavalent	EPA 9056 Chlorate	EPA 9056 Nitrate (as N)
243607	PC-119_06/09/08	X					X				
243607	PC-120_06/09/08	X					X				
243607	PC-121_06/09/08	X					X				
243607	PC-133_06/09/08	X					X				
243607	PC-99R2/R3_06/09/08	X					X				
243607	SF-1_06/09/08	X					X				
243689	EFFLUENT-COMP_06/07/08						X				
243689	INFLUENT-COMP_06/07/08						X				
244394	EFFLUENT COMP_06/14/08						X				
244394	INFLUENT COMP_06/14/08						X				
244956	ARP-1_06/17/08	X					X				
244956	ARP-4A_06/17/08	X					X				
244956	ARP-5A_06/17/08	X					X				
244956	ARP-6B_06/17/08	X					X				
244956	L-635_06/18/08	X					X				
244956	L-637_06/18/08	X					X				
244956	M-87_06/18/08	X					X				
244956	MWK-4_06/17/08	X					X				
244956	MWK-5_06/17/08	X					X				
244956	PC-103_06/17/08	X					X				
244956	PC-122_06/17/08	X					X				
244956	PC-17_06/17/08	X					X				
244956	PC-18_06/17/08	X					X				
244956	PC-53_06/17/08	X					X				
244956	PC-55_06/18/08	X					X				
244956	PC-56_06/18/08	X					X				
244956	PC-58_06/18/08	X					X				
244956	PC-59_06/18/08	X					X				
244956	PC-60_06/18/08	X					X				
244956	PC-62_06/18/08	X					X				
244956	PC-68_06/18/08	X					X				
244956	PC-86_06/17/08	X					X				
244956	PC-90_06/17/08	X					X				
244956	PC-91_06/17/08	X					X				
244956	PC-97_06/17/08	X					X				
244956	PC-98R_06/17/08	X					X				
<b>245247</b>	<b>EFFLUENT_06/23/08</b>		X	X	X	X	X				
<b>245247</b>	<b>INFLUENT_06/23/08</b>		X	X	X	X	X				
245253	EFFLUENT-COMP_06/21/08						X				
245253	INFLUENT-COMP_06/21/08						X				
245535	M-100_06/25/08						X	X			
245535	M-102_06/25/08						X	X			