Prepared for:
Tronox LLC
Henderson, Nevada

Data Validation Summary Report

ENSR Corporation
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Prepared By Robert Kennedy
Senior Project Chemist
ENSR International

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Reviewed By Marie Wojtas

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TABLES

1.0 INTRODUCTION

The purpose of limited data validation performed on laboratory results for the first and second quarter of 2007 was to determine the suitability of the data for future on-site environmental assessments, including the Annual Performance Report for Chromium and Perchlorate covering July of 2006 – June of 2007. The majority of the reviewed data discussed below was collected between January and June of 2007. Some previously unvalidated data collected between July and December of 2006 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 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 ENSR personnel. The specific analyses performed by the laboratory and reviewed in this report include only the subset of analytes listed in Appendix A&B of the Annual Performance Report for Chromium and Perchlorate. Samples in the reviewed report set were analyzed for one on 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), SDG (MWH report numbers), and analyte/method list for each sample included in this DVSR.

2.0 DATA VALIDATION PROCESS

The results contained in the lab reports listed in the data validation memorandum were subjected to thorough data review called limited validation, similar to a Tier 2 review as recommended in the guidance on data validation provided by NDEP for the BMI Plant Sites (NDEP, 2006), rather than formal full data validation. MWH did not provide complete data packages with raw data, therefore, verification of elements on the Tier 2 list, but beyond batch quality control (QC), (e.g., initial and continuing calibrations) were not available for review. The laboratory submitted sample and batch QC results with narratives in pdf format and EQuIS format EDDs. The EDDs were imported into an EQuIS database at Tronox specifically created for the ongoing monitoring at the Henderson site. ENSR 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
- Sample results and detection limits

Analytical data were evaluated with reference to the 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 quality control (QC) criteria provided by the laboratory. The Regional and National Functional Guidelines were modified to accommodate the non-Contract Laboratory Program (CLP) methodologies. The specific guidelines used for the various methods were as follows:

- Inorganic analytical data were evaluated with reference to "USEPA 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 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**. 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 which is also identified as the sample delivery group (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 ENSR's Westford office. These memoranda are included on 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 quality control (QC) review elements listed below:

- 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
- Quantitation limits and sample results
- Calculation and transcription verifications

Tables E-3 lists all the results which were qualified based on quality control issues identified with regard to holding times, sample preservation, equipment blank results, matrix spike results, and field duplicates. Although calibration issues are not part of the review element set, the laboratory did provide limited calibration nonconformance information in one report narrative and some data was qualified on this basis. No QC issues were identified that resulted in qualification of results based on LCS/LCSD results, lab duplicate results, or quantitation problems. 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 collected before April 11, 2007 is 24 hours from collection to analysis. A revision to this holding time was made for samples 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 in water is 28 days from collection to analysis. The holding time for Total Dissolved Solids (TDS) in water is 7 days from collection to analysis. The holding time for nitrate analysis by EPA Method 300 is 48 hours. No data were rejected on the basis of holding time exceedances but some results were qualified as estimated. Results for hexavalent chromium, nitrate, 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. The Cr (VI) qualifiers for hold time exceedance were not assigned a low bias because it is unclear which direction (positive or negative bias) the result would deviate. Cr (VI) 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 with the exception of a temperature exceedance in the influent and effluent samples received on 2/5/07. The cooler temperature was 11°C and therefore the detect and nondetect results for nitrate, chlorate, and perchlorate were qualified as estimated (J and UJ, respectively).

3.2 Blank Contamination

In general, laboratory and field blanks were free of contamination. The field blanks collected on 4/30/07, 5/1/07, and 5/2/07, and analyzed for TDS appeared to be contaminated. The associated TDS results in six equipment blanks were qualified as estimated and possibly biased high (J+). Low levels of perchlorate, chlorate, and TDS were detected in several equipment blanks, but associated sample data did not require qualification due to blank contamination because the sample results were greater than 10 times the blank concentrations.

3.3 Laboratory Control Samples

LCS and LCSD recoveries met QC acceptance criteria for all of the analyses reviewed

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. MS and MSD recoveries of hexavalent chromium in the effluent sample collected on 3/26/07 were outside the laboratory acceptance limits of 90-110%. The nondetect result for Cr (VI) in this effluent sample was therefore qualified as estimated (UJ) and the associated positive influent result was also qualified as estimated (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). None of the results required qualified during validation based on laboratory duplicate precision.

3.6 Field Duplicates

The results of the ten groundwater sample duplicate pairs collected during April and May of 2007 were evaluated during validation. RPDs were compared to the objectives of 30% maximum RPD for aqueous samples. The RPD for a single sample/duplicate pair (M-100/MD-2) collected on 5/3/2007 and analyzed for perchlorate and TDS exceeded this criterion. The associated 38 detect and nondetect results for these analytes were therefore qualified as estimated (J and UJ, respectively). It appears the sample marked M-100 may have been mislabeled given that the RPD values for both perchlorate and TDS are exactly 108% and that the MD-2 results agree well with historical data for M-100. Therefore the M-100 results for perchlorate and TDS were flagged "not reportable" in the database. The reported values are provided in Table E-3 for review. Checks of the samples based on conductivity were performed by the lab and support the original analyses. Formal rejection (R) of data based on field duplicate results is not performed during validation.

3.7 Quantitation Limits, Sample Results, and Calibration

No results were qualified based on QC related to quantitation limits or sample results reported.

Although calibration issues are not part of the review element set, the laboratory did provide limited calibration nonconformance information in one report narrative and some data was qualified on this basis. Results for nitrate in the influent/effluent sample pair collected on 1/29/07 were qualified as estimated based on the absence of a CCV in the analytical sequence performed within holding time. Reanalysis of these samples outside holding time with proper CCVs confirmed the original results.

3.8 Rejected Results

No results in the reviewed dataset were rejected based on validation criteria or QC nonconformances.

4.0 EVALUATION OF DATA QUALITY INDICATORS

Data validation information was used to evaluate the data quality indicators (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.

Laboratory precision was assessed through the RPD results for matrix duplicates, LCS/LCSD pairs, and MS/MSD pairs. No nonconformances which resulted in the application of validation qualifiers were discovered. In general, the laboratory duplicate precision was acceptable.

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, LCS and LCSD, and surrogate spikes). The results of all positive control samples were acceptable with the exception of those discussed in Section 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 above in Section 3.2.

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 as described in the data validation memo and Section 3.1 above.

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 chain-of-custody (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% on the basis of sample analysis (i.e., all requested analyses were performed and reported by the laboratories), and 100% 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 200.7
- Total dissolved solids (TDS) by SM2540C or EPA160.1
- Chlorate by EPA Method 300.0 or EPA 9056
- Nitrate by EPA Method 300.0 or EPA 9056

The methods used for hexavalent chromium, EPA 7196 and EPA 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 Part136, where SM 3500-Cr (essentially equivalent to EPA 7196) and EPA 218.6 are both approved methods. The EPA 7196 and EPA 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 218.6 for only the influent/effluent samples under NPDES permit and EPA 7196 for all other wells at the site.

The methods used for total chromium analysis, EPA 6010 and EPA 200.7, are both ICP/AES methods with very similar prep 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 160.1 and SM2540C, are essentially identical and can be expected to produce comparable data.

The methods cited for chlorate and nitrate analysis, EPA 300.0 and EPA 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 method detection limit (MDL) and reporting limit (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 Performance Report for Chromium and Perchlorate covering the sample collection time period July 2006 to June 2007 were subjected to a limited validation using standardized guidelines and procedures recommended by EPA and NDEP. A limited set of analytical data, 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 data range. Ninety three 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 Data Quality Indicator (DQI) involved, and the qualifier flags applied (see Table E-1). Seven percent of the results for this project were qualified as estimated due to minor QC problems with sample holding time, sample preservation, blank contamination, matrix spike recoveries, and field duplicate precision. These estimated results should be considered usable for decision making purposes provided the potential bias is considered when the data are used. No results 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 Performance Report for Chromium and Perchlorate covering the sample collection time period July 2006 to June 2007.

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, August 2006 DRAFT Quality Assurance Project Plan, Tronox LLC Facility Henderson, Nevada

NDEP, 2006 NDEP "Guidance on Data Validation, BMI Pant Sites and Common Areas Projects, Henderson, Nevada"

Table E-1
Data Validation Qualifiers
Annual Performance Report for Chromium and Perchlorate
July 2006 - June 2007
Tronox LLC Henderson, Nevada

Validation Qualifier	Definition
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity and the result may be biased high. This qualifier is applied only to inorganic analyte results.
J-	The result is an estimated quantity and the result may be biased low. This qualifier is applied only to inorganic analyte results.
UJ	The analyte was not detected above the sample reporting limit and the reporting limit is approximate.
U	The analyte was analyzed for, but was not detected above the sample reporting limit
R	The result is rejected and unusable due to serious data deficiencies. The presence or absence of the analyte cannot be verified.
B	The result may be a false positive totally attributable to blank contamination. This qualifier is applied only to radiochemical results.
JB	The result may be biased high and partially attributable to blank contamination. This qualifier is applied only to radiochemical results.

Table E-2
Data Validation Qualifier Reason Codes
Annual Performance Report for Chromium and Perchlorate
Henderson, Nevada
July 2006 - June 2007

Code	Explanation
j-b	estimated due to blank contamination
j-be	estimated due to equipment blank contamination
j-bl	estimated due to lab blank contamination
j-c	estimated due to calibration problems
j-d	estimated due to lab duplicate imprecision (matrix duplicate, MSD, LCSD)
j-f	estimated due to field duplicate imprecision
j-h	estimated due to holding time exceedance
j-i	estimated due to internal standard areas
j-l	estimated due to LCS recoveries
j-m	estimated due to matrix spike recoveries
j-r	estimated due to quantitation problem
j-s	estimated due to surrogate recoveries
j-t	estimated due to preservation temperature exceedance
j-x	estimated due to low % solids
j-y	estimated due to serial dilution results
j-z	estimated due to ICS results
r-c	rejected due to calibration
r-h	rejected due to holding time exceedance
r-l	rejected due to LCS recoveries
r-m	rejected due to matrix spike recoveries
r-s	rejected due to surrogate recoveries
u-be	negated due to equipment blank contamination
u-bl	negated due to lab blank contamination
uj-a	estimated nondetect due to low abundance (radiochemical activity)
uj-b	estimated nondetect due to negative blank contamination (nondetect results only)
uj-be	estimated nondetect due to negative equipment blank contamination (nondetect results only)
uj-bl	estimated nondetect due to negative lab blank contamination (nondetect results only)
uj-c	estimated nondetect due to calibration issues
uj-cp	estimated nondetect due to insufficient ingrowth (radiochemical only)
uj-d	estimated nondetect due to lab duplicate imprecision (matrix duplicate, MSD, LCSD)
uj-f	estimated nondetect due to field duplicate imprecision
uj-h	estimated nondetect due to holding time exceedance
uj-i	estimated nondetect due to internal standard areas
uj-l	estimated nondetect due to LCS recoveries
uj-m	estimated nondetect due to matrix spike recoveries
uj-q	estimated nondetect level changed due to quantitation problem
uj-s	estimated nondetect due to surrogate recoveries
uj-t	estimated nondetect due to preservation temperature exceedance
uj-x	estimated nondetect due to low % solids
uj-z	estimated nondetect due to ICS results
u-q	nondetected level changed due to quantitation problem

Table E-3
Qualifications Based on DQI Exceedances
Annual Performance Report for Chromium and Perchlorate
Henderson, Nevada
July 2006 - June 2007

Sample ID	SDG	Method	Analyte	Result	Units	Validation Qualifier	Reason Code	DQI	DQI Result
EB050107_05/01/07	203319	EPA 160.1	Total Dissolved Solids	10	mg/l	J+	j-be	Blanks	104 mg/L
EB-1_05/01/07	203332	EPA 160.1	Total Dissolved Solids	40	mg/l	J+	j-be	Blanks	104 mg/L
EB-2_05/02/07	203411	EPA 160.1	Total Dissolved Solids	38	mg/l	J+	j-be	Blanks	62 mg/L
EB050207_05/02/07	203423	EPA 160.1	Total Dissolved Solids	51	mg/l	J+	j-be	Blanks	104 mg/L
EB050307_05/03/07	203590	EPA 160.1	Total Dissolved Solids	29	mg/l	J+	j-be	Blanks	104 mg/L
EB043007_04/30/07	203157R	EPA 160.1	Total Dissolved Solids	10	mg/l	J+	j-be	Blanks	104 mg/L
EFFLUENT_01/29/07	194620	EPA 300.0	Nitrate (as N)	0.625	mg/l	UJ	uj-c	Calibration	no CCV
INFLUENT_01/29/07	194620	EPA 300.0	Nitrate (as N)	15.6	mg/l	J	j-c	Calibration	no CCV
I-V_05/03/07	203591	EPA 160.1	Total Dissolved Solids	14000	mg/l	J	j-f	Field Duplicates	108% RPD
I-V_05/03/07	203591	EPA 314	Perchlorate	1650000	ug/l	J	j-f	Field Duplicates	108% RPD
M-100_05/03/07	203591	EPA 160.1	Total Dissolved Solids	546	mg/l	J	j-f	Field Duplicates	108% RPD
M-100_05/03/07	203591	EPA 314	Perchlorate	12900	ug/l	J	j-f	Field Duplicates	108% RPD
M-101_05/03/07	203591	EPA 160.1	Total Dissolved Solids	3390	mg/l	J	j-f	Field Duplicates	108% RPD
M-101_05/03/07	203591	EPA 314	Perchlorate	100000	ug/l	J	j-f	Field Duplicates	108% RPD
M-102_05/03/07	203591	EPA 160.1	Total Dissolved Solids	1920	mg/l	J	j-f	Field Duplicates	108% RPD
M-102_05/03/07	203591	EPA 314	Perchlorate	92100	ug/l	J	j-f	Field Duplicates	108% RPD
M-12A_05/03/07	203591	EPA 160.1	Total Dissolved Solids	7910	mg/l	J	j-f	Field Duplicates	108% RPD
M-12A_05/03/07	203591	EPA 314	Perchlorate	283000	ug/l	J	j-f	Field Duplicates	108% RPD
M-13_05/03/07	203591	EPA 160.1	Total Dissolved Solids	3310	mg/l	J	j-f	Field Duplicates	108% RPD
M-13_05/03/07	203591	EPA 314	Perchlorate	18600	ug/l	J	j-f	Field Duplicates	108% RPD
M-36_05/03/07	203591	EPA 160.1	Total Dissolved Solids	15400	mg/l	J	j-f	Field Duplicates	108% RPD
M-36_05/03/07	203591	EPA 314	Perchlorate	1510000	ug/l	J	j-f	Field Duplicates	108% RPD
M-36_05/03/07	203591	SW 846 7196	Chromium-hexavalent	38	mg/l	J	j-h	Holding Time	108% RPD
M-68_05/03/07	203591	EPA 160.1	Total Dissolved Solids	5610	mg/l	J	j-f	Field Duplicates	108% RPD
M-68_05/03/07	203591	EPA 314	Perchlorate	35400	ug/l	J	j-f	Field Duplicates	108% RPD
M-73_05/03/07	203591	EPA 160.1	Total Dissolved Solids	2120	mg/l	J	j-f	Field Duplicates	108% RPD
M-73_05/03/07	203591	EPA 314	Perchlorate	86100	ug/l	J	j-f	Field Duplicates	108% RPD
M-74_05/03/07	203591	EPA 160.1	Total Dissolved Solids	6010	mg/l	J	j-f	Field Duplicates	108% RPD
M-74_05/03/07	203591	EPA 314	Perchlorate	33900	ug/l	J	j-f	Field Duplicates	108% RPD
M-83_05/03/07	203591	EPA 160.1	Total Dissolved Solids	1040	mg/l	J	j-f	Field Duplicates	108% RPD
M-83_05/03/07	203591	EPA 314	Perchlorate	7070	ug/l	J	j-f	Field Duplicates	108% RPD
M-84_05/03/07	203591	EPA 160.1	Total Dissolved Solids	1250	mg/l	J	j-f	Field Duplicates	108% RPD

Table E-3
Qualifications Based on DQI Exceedances
Annual Performance Report for Chromium and Perchlorate
Henderson, Nevada
July 2006 - June 2007

Sample ID	SDG	Method	Analyte	Result	Units	Validation Qualifier	Reason Code	DQI	DQI Result
M-84_05/03/07	203591	EPA 314	Perchlorate	4100	ug/l	J	j-f	Field Duplicates	108% RPD
M-85_05/03/07	203591	EPA 160.1	Total Dissolved Solids	958	mg/l	J	j-f	Field Duplicates	108% RPD
M-85_05/03/07	203591	EPA 314	Perchlorate	17800	ug/l	J	j-f	Field Duplicates	108% RPD
M-86_05/03/07	203591	EPA 160.1	Total Dissolved Solids	3240	mg/l	J	j-f	Field Duplicates	108% RPD
M-86_05/03/07	203591	EPA 314	Perchlorate	295000	ug/l	J	j-f	Field Duplicates	108% RPD
M-87_05/03/07	203591	EPA 160.1	Total Dissolved Solids	2030	mg/l	J	j-f	Field Duplicates	108% RPD
M-87_05/03/07	203591	EPA 314	Perchlorate	121000	ug/l	J	j-f	Field Duplicates	108% RPD
M-88_05/03/07	203591	EPA 160.1	Total Dissolved Solids	6260	mg/l	J	j-f	Field Duplicates	108% RPD
M-88_05/03/07	203591	EPA 314	Perchlorate	47800	ug/l	J	j-f	Field Duplicates	108% RPD
M-92_05/03/07	203591	EPA 160.1	Total Dissolved Solids	1920	mg/l	J	j-f	Field Duplicates	108% RPD
M-92_05/03/07	203591	EPA 314	Perchlorate	695	ug/l	J	j-f	Field Duplicates	108% RPD
M-97_05/03/07	203591	EPA 160.1	Total Dissolved Solids	3770	mg/l	J	j-f	Field Duplicates	108% RPD
M-97_05/03/07	203591	EPA 314	Perchlorate	76800	ug/l	J	j-f	Field Duplicates	108% RPD
MD-2_05/03/07	203591	EPA 160.1	Total Dissolved Solids	1830	mg/l	J	j-f	Field Duplicates	108% RPD
MD-2_05/03/07	203591	EPA 314	Perchlorate	43400	ug/l	J	j-f	Field Duplicates	108% RPD
INFLUENT_01/08/07	192735	EPA 218.6	Chromium-hexavalent	1.7	ug/l	J	j-h	Holding Time	1.25 days
INFLUENT_02/05/07	195316	EPA 218.6	Chromium-hexavalent	69	ug/l	J	j-h	Holding Time	1.41 days
EFFLUENT_02/05/07	195316	EPA 218.6	Chromium-hexavalent	0.100	ug/l	UJ	uj-h	Holding Time	1.41 days
EFFLUENT_02/05/07	195318	EPA 300.0	Nitrate (as N)	5.000	mg/l	UJ	uj-h	Holding Time	2.29 days
EFFLUENT_03/19/07	199076	EPA 218.6	Chromium-hexavalent	0.100	ug/l	UJ	uj-h	Holding Time	1.01 days
INFLUENT_03/19/07	199076	EPA 218.6	Chromium-hexavalent	7.3	ug/l	J	j-h	Holding Time	1.02 days
FB-1_04/30/07	203068	SW 846 7196	Chromium-hexavalent	0.005	mg/l	UJ	uj-h	Holding Time	1.24 days
MD-1_04/30/07	203068	SW 846 7196	Chromium-hexavalent	0.99	mg/l	J	j-h	Holding Time	1.58 days
M-37_05/01/07	203332	SW 846 7196	Chromium-hexavalent	0.1	mg/l	UJ	uj-h	Holding Time	1.16 days
M-10_05/01/07	203332	SW 846 7196	Chromium-hexavalent	0.016	mg/l	J	j-h	Holding Time	1.17 days
EB-1_05/01/07	203332	SW 846 7196	Chromium-hexavalent	0.005	mg/l	UJ	uj-h	Holding Time	1.27 days
EB-2_05/02/07	203411	SW 846 7196	Chromium-hexavalent	0.005	mg/l	UJ	uj-h	Holding Time	1.02
FB050307_05/03/07	203590	EPA 160.1	Total Dissolved Solids	104	mg/l	J-	j-h	Holding Time	11.65 days
M-12A_05/03/07	203591	SW 846 7196	Chromium-hexavalent	14	mg/l	J	j-h	Holding Time	1.01 days
M-100_05/03/07	203591	SW 846 7196	Chromium-hexavalent	0.27	mg/l	J	j-h	Holding Time	1.02 days
M-84_05/03/07	203591	SW 846 7196	Chromium-hexavalent	0.046	mg/l	J	j-h	Holding Time	1.03 days
MD-2_05/03/07	203591	SW 846 7196	Chromium-hexavalent	0.31	mg/l	J	j-h	Holding Time	1.50 days

Table E-3
Qualifications Based on DQI Exceedances
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Sample ID	SDG	Method	Analyte	Result	Units	Validation Qualifier	Reason Code	DQI	DQI Result
M67D_05/04/07	203614	EPA 160.1	Total Dissolved Solids	7620	mg/l	J-	j-h	Holding Time	10.88 days
ART-1_05/07/07	203746	EPA 160.1	Total Dissolved Solids	82700	mg/l	J-	j-h	Holding Time	24.23 days
ART-2_05/07/07	203746	EPA 160.1	Total Dissolved Solids	10600	mg/l	J-	j-h	Holding Time	24.23 days
ART-3_05/07/07	203746	EPA 160.1	Total Dissolved Solids	88300	mg/l	J-	j-h	Holding Time	24.23 days
ART-4_05/07/07	203746	EPA 160.1	Total Dissolved Solids	6550	mg/l	J-	j-h	Holding Time	24.23 days
ART-7_05/07/07	203746	EPA 160.1	Total Dissolved Solids	10600	mg/l	J-	j-h	Holding Time	24.23 days
ART-8_05/07/07	203746	EPA 160.1	Total Dissolved Solids	10040	mg/l	J-	j-h	Holding Time	24.23 days
PC-117_05/21/07	205321	EPA 160.1	Total Dissolved Solids	4110	mg/l	J-	j-h	Holding Time	16.31 days
EFFLUENT_05/21/07	205408	EPA 300.0	Nitrate (as N)	5	mg/l	UJ	uj-h	Holding Time	2.13 days
SF-1_06/11/07	207169	EPA 160.1	Total Dissolved Solids	6400	mg/l	J-	j-h	Holding Time	11.38 days
PC-122_06/11/07	207600	EPA 160.1	Total Dissolved Solids	9520	mg/l	J-	j-h	Holding Time	8.19 days
PC-68_06/11/07	207600	EPA 160.1	Total Dissolved Solids	2140	mg/l	J-	j-h	Holding Time	8.20 days
PC-62_06/11/07	207600	EPA 160.1	Total Dissolved Solids	3450	mg/l	J-	j-h	Holding Time	8.21 days
PC-59_06/11/07	207600	EPA 160.1	Total Dissolved Solids	5140	mg/l	J-	j-h	Holding Time	8.21 days
PC-60_06/11/07	207600	EPA 160.1	Total Dissolved Solids	3970	mg/l	J-	j-h	Holding Time	8.21 days
PC-56_06/11/07	207600	EPA 160.1	Total Dissolved Solids	4380	mg/l	J-	j-h	Holding Time	8.22 days
PC-58_06/11/07	207600	EPA 160.1	Total Dissolved Solids	6000	mg/l	J-	j-h	Holding Time	8.22 days
PC-121_06/18/07	207885	EPA 160.1	Total Dissolved Solids	2650	mg/l	J-	j-h	Holding Time	17.31 days
EFFLUENT_03/26/07	199684	EPA 218.6	Chromium-hexavalent	0.100	ug/l	UJ	uj-m	Matrix Spikes	79.5%-71.5%
INFLUENT_03/26/07	199684	EPA 218.6	Chromium-hexavalent	4.7	ug/l	J-	j-m	Matrix Spikes	79.5%-71.5%
EFFLUENT_02/05/07	195318	EPA 300.1B	Chlorate	50.000	ug/l	UJ	uj-t	Temperature	11°C
EFFLUENT_02/05/07	195318	EPA 314	Perchlorate	10.000	ug/l	UJ	uj-t	Temperature	11°C
INFLUENT_02/05/07	195318	EPA 300.0	Nitrate (as N)	17	mg/l	J-	j-t	Temperature	11°C
INFLUENT_02/05/07	195318	EPA 300.1B	Chlorate	411000	ug/l	J-	j-t	Temperature	11°C
INFLUENT_02/05/07	195318	EPA 314	Perchlorate	203000	ug/l	J-	j-t	Temperature	11°C

Table E-4
Samples IDs, SDGs, and Analyses
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SDG	SampleID	EPA 160_1 TDS	EPA 200_7 Total Cr	EPA 218_6 Cr(VI)	EPA 300_0 Nitrate (as N)	EPA 300_1B Chlorate	EPA 314 Perchlorate	SW 846 6010B Cr	SW 846 7196 Cr(VI)	SW 846 9056 Chlorate	SW 846 9056 Nitrate (as N)
180764	EFFLUENT-COMP_08/05/06						X				
180764	INFLUENT-COMP_08/05/06						X				
191948	EFFLUENT-COMP_12/23/06						X				
191948	INFLUENT-COMP_12/23/06						X				
192296	EFFLUENT_01/02/07		X		X	X	X				
192296	INFLUENT_01/02/07		X		X	X	X				
192305	EFFLUENT_01/02/07			X							
192305	INFLUENT_01/02/07			X							
192314	EFFLUENT-COMP_12/30/06						X				
192314	INFLUENT-COMP_12/30/06						X				
192735	EFFLUENT_01/08/07			X							
192735	INFLUENT_01/08/07			X							
192741	EFFLUENT-COMP_01/06/07						X				
192741	INFLUENT-COMP_01/06/07						X				
192802	EFFLUENT_01/08/07		X		X	X	X				
192802	INFLUENT_01/08/07		X		X	X	X				
193311	EFFLUENT-COMP_01/13/07						X				
193311	INFLUENT-COMP_01/13/07						X				
193318	EFFLUENT_01/15/07			X							
193318	INFLUENT_01/15/07			X							
193331	EFFLUENT_01/15/07		X		X	X	X				
193331	INFLUENT_01/15/07		X		X	X	X				
194029	EFFLUENT_01/22/07			X							
194029	INFLUENT_01/22/07			X							
194066	EFFLUENT_01/22/07		X		X	X	X				
194066	INFLUENT_01/22/07		X		X	X	X				
194072	EFFLUENT-COMP_01/20/07						X				
194072	INFLUENT-COMP_01/20/07						X				
194581	EFFLUENT_01/29/07			X							
194581	INFLUENT_01/29/07			X							
194620	EFFLUENT_01/29/07		X		X	X	X				

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SDG	SampleID	EPA 160_1 TDS	EPA 200_7 Total Cr	EPA 218_6 Cr(VI)	EPA 300_0 Nitrate (as N)	EPA 300_1B Chlorate	EPA 314 Perchlorate	SW 846 6010B Cr	SW 846 7196 Cr(VI)	SW 846 9056 Chlorate	SW 846 9056 Nitrate (as N)
194620	INFLUENT_01/29/07		X		X	X	X				
194719	EFFLUENT-COMP_01/27/07						X				
194719	INFLUENT-COMP_01/27/07						X				
195314	EFFLUENT-COMP_02/03/07						X				
195314	INFLUENT-COMP_02/03/07						X				
195316	EFFLUENT_02/05/07			X							
195316	INFLUENT_02/05/07			X							
195318	EFFLUENT_02/05/07		X		X	X	X				
195318	INFLUENT_02/05/07		X		X	X	X				
195932	EFFLUENT_02/12/07			X							
195932	INFLUENT_02/12/07			X							
195979	EFFLUENT-COMP_02/10/07						X				
195979	INFLUENT-COMP_02/10/07						X				
195993	EFFLUENT_02/12/07		X		X	X	X				
195993	INFLUENT_02/12/07		X		X	X	X				
196536	EFFLUENT-COMP_02/17/07						X				
196536	INFLUENT-COMP_02/17/07						X				
196537	EFFLUENT_02/19/07			X							
196537	INFLUENT_02/19/07			X							
196539	EFFLUENT_02/19/07		X		X	X	X				
196539	INFLUENT_02/19/07		X		X	X	X				
197212	EFFLUENT_02/26/07		X		X	X	X				
197212	INFLUENT_02/26/07		X		X	X	X				
197237	EFFLUENT_02/26/07			X							
197237	INFLUENT_02/26/07			X							
197247	EFFLUENT-COMP_02/24/07						X				
197247	INFLUENT-COMP_02/24/07						X				
197807	EFFLUENT-COMP_03/03/07						X				
197807	INFLUENT-COMP_03/03/07						X				
198145	EFFLUENT_03/07/07		X		X	X	X				
198145	INFLUENT_03/07/07		X		X	X	X				

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SDG	SampleID	EPA 160_1 TDS	EPA 200_7 Total Cr	EPA 218_6 Cr(VI)	EPA 300_0 Nitrate (as N)	EPA 300_1B Chlorate	EPA 314 Perchlorate	SW 846 6010B Cr	SW 846 7196 Cr(VI)	SW 846 9056 Chlorate	SW 846 9056 Nitrate (as N)
199707	PC-121_03/26/07	X					X				
199707	PC-133_03/26/07	X					X				
199707	PC-99R2/R3_03/26/07	X					X				
199707	SEEP SURFACE FLOW_03/2	X					X				
199707	SF-1_03/26/07	X					X				
199749	EFFLUENT-COMP_03/24/07						X				
199749	INFLUENT-COMP_03/24/07						X				
200346	EFFLUENT-COMP_03/31/07						X				
200346	INFLUENT-COMP_03/31/07						X				
200347	EFFLUENT_04/02/07		X		X	X	X				
200347	INFLUENT_04/02/07		X		X	X	X				
200564	EFFLUENT_04/03/07			X							
200564	INFLUENT_04/03/07			X							
201017	EFFLUENT_04/09/07			X							
201017	INFLUENT_04/09/07			X							
201058	EFFLUENT-COMP_04/07/07						X				
201058	INFLUENT-COMP_04/07/07						X				
201080	EFFLUENT_04/09/07		X		X	X	X				
201080	INFLUENT_04/09/07		X		X	X	X				
201550	ARP-1_04/11/07	X					X				
201550	ARP-2_04/11/07	X					X				
201550	ARP-3_04/11/07	X					X				
201550	ARP-7_04/12/07	X					X				
201550	L-635_04/10/07	X					X				
201550	L-637_04/10/07	X					X				
201550	M-83_04/12/07	X					X				
201550	M-87_04/12/07	X					X				
201550	MWK-4_04/11/07	X					X				
201550	MWK-5_04/12/07	X					X				
201550	PC-101R_04/11/07	X					X				
201550	PC-103_04/12/07	X					X				

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SDG	SampleID	EPA 160_1 TDS	EPA 200_7 Total Cr	EPA 218_6 Cr(VI)	EPA 300_0 Nitrate (as N)	EPA 300_1B Chlorate	EPA 314 Perchlorate	SW 846 6010B Cr	SW 846 7196 Cr(VI)	SW 846 9056 Chlorate	SW 846 9056 Nitrate (as N)
203157_rev	PC77_04/30/07						X	X			
203157_rev	PC79_04/30/07	X					X	X			
203157_rev	PC82_04/30/07	X					X			X	X
203157_rev	PC86_04/30/07	X						X			
203157_rev	PC92_04/30/07	X					X	X		X	X
203157_rev	PC93_04/30/07						X	X			X
203157_rev	PC96_04/30/07	X					X				
203166	ART-1_04/30/07	X					X				
203166	ART-2_04/30/07	X					X				
203166	ART-3_04/30/07	X					X				
203166	ART-4_04/30/07	X					X				
203166	ART-6_04/30/07	X					X				
203166	ART-7_04/30/07	X					X				
203166	ART-8_04/30/07	X					X				
203166	ART-9_04/30/07	X					X				
203166	PC-115R_04/30/07	X					X				
203166	PC-116R_04/30/07	X					X				
203166	PC-117_04/30/07	X					X				
203166	PC-118_04/30/07	X					X				
203166	PC-119_04/30/07	X					X				
203166	PC-120_04/30/07	X					X				
203166	PC-121_04/30/07	X					X				
203166	PC-133_04/30/07	X					X				
203166	PC-99R2/R3_04/30/07	X					X				
203166	SEEP SURFACE FLOW_04/3	X					X				
203166	SF-1_04/30/07	X					X				
203319	EB050107_05/01/07	X						X			X
203319	HM2_05/01/07	X									
203319	HSW-1_05/01/07						X				
203319	LK3_05/01/07	X					X				
203319	PC1_05/01/07	X					X	X			

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SDG	SampleID	EPA 160_1 TDS	EPA 200_7 Total Cr	EPA 218_6 Cr(VI)	EPA 300_0 Nitrate (as N)	EPA 300_1B Chlorate	EPA 314 Perchlorate	SW 846 6010B Cr	SW 846 7196 Cr(VI)	SW 846 9056 Chlorate	SW 846 9056 Nitrate (as N)
198149	EFFLUENT_03/07/07			X							
198149	INFLUENT_03/07/07			X							
198443	EFFLUENT-COMP_03/10/07						X				
198443	INFLUENT-COMP_03/10/07						X				
198457	EFFLUENT_03/12/07			X							
198457	INFLUENT_03/12/07			X							
198527	EFFLUENT_03/12/07		X		X	X	X				
198527	INFLUENT_03/12/07		X		X	X	X				
199076	EFFLUENT_03/19/07			X							
199076	INFLUENT_03/19/07			X							
199093	EFFLUENT-COMP_03/17/07						X				
199093	INFLUENT-COMP_03/17/07						X				
199120	EFFLUENT_03/19/07		X		X	X	X				
199120	INFLUENT_03/19/07		X		X	X	X				
199439	INFLUENT-COMP_03/03/07						X				
199684	EFFLUENT_03/26/07			X							
199684	INFLUENT_03/26/07			X							
199707	ART-1_03/26/07	X					X				
199707	ART-2_03/26/07	X					X				
199707	ART-3_03/26/07	X					X				
199707	ART-4_03/26/07	X					X				
199707	ART-6_03/26/07	X					X				
199707	ART-7_03/26/07	X					X				
199707	ART-8_03/26/07	X					X				
199707	ART-9_03/26/07	X					X				
199707	PC-115R_03/26/07	X					X				
199707	PC-116R_03/26/07	X					X				
199707	PC-117_03/26/07	X					X				
199707	PC-118_03/26/07	X					X				
199707	PC-119_03/26/07	X					X				
199707	PC-120_03/26/07	X					X				

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SDG	SampleID	EPA 160_1 TDS	EPA 200_7 Total Cr	EPA 218_6 Cr(VI)	EPA 300_0 Nitrate (as N)	EPA 300_1B Chlorate	EPA 314 Perchlorate	SW 846 6010B Cr	SW 846 7196 Cr(VI)	SW 846 9056 Chlorate	SW 846 9056 Nitrate (as N)
202443	INFLUENT_04/23/07		X	X	X	X	X				
203058	EFFLUENT_04/30/07		X	X	X	X	X				
203058	INFLUENT_04/30/07		X	X	X	X	X				
203068	FB-1_04/30/07	X					X	X	X		
203068	M-23_04/30/07	X					X	X		X	X
203068	M-44_04/30/07	X					X	X	X		
203068	M-48_04/30/07	X					X	X		X	X
203068	M-94_04/30/07	X					X	X	X		
203068	M-95_04/30/07	X					X	X			
203068	M-96_04/30/07	X					X	X			
203068	MD-1_04/30/07	X					X	X	X		
203068	MD-3_04/30/07	X					X	X			
203068	MD-5_04/30/07	X					X	X		X	X
203068	PC-123_04/30/07	X					X	X			
203068	PC-124_04/30/07	X					X	X		X	X
203068	PC-125_04/30/07	X					X	X			
203068	PC-126_04/30/07	X					X	X		X	X
203068	PC-128_04/30/07	X					X	X		X	X
203068	PC-129_04/30/07	X					X	X			
203068	PC-130_04/30/07	X					X	X		X	X
203068	PC-131_04/30/07	X					X	X			
203068	PC-132_04/30/07	X					X	X		X	X
203068	PC-37_04/30/07	X					X	X			
203068	PC-54_04/30/07	X					X	X			
203068	PC-71_04/30/07	X					X	X			
203068	PC-72_04/30/07	X					X	X			
203068	PC-73_04/30/07	X					X	X			
203096	EFFLUENT-COMP_04/28/07						X				
203096	INFLUENT-COMP_04/28/07						X				
203157_rev	EB043007_04/30/07	X					X	X		X	X
203157_rev	PC4_04/30/07						X	X			

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SDG	SampleID	EPA 160_1 TDS	EPA 200_7 Total Cr	EPA 218_6 Cr(VI)	EPA 300_0 Nitrate (as N)	EPA 300_1B Chlorate	EPA 314 Perchlorate	SW 846 6010B Cr	SW 846 7196 Cr(VI)	SW 846 9056 Chlorate	SW 846 9056 Nitrate (as N)
201550	PC-122_04/09/07	X					X				
201550	PC-17_04/11/07	X					X				
201550	PC-18_04/11/07	X					X				
201550	PC-53_04/12/07	X					X				
201550	PC-55_04/10/07	X					X				
201550	PC-56_04/09/07	X					X				
201550	PC-58_04/09/07	X					X				
201550	PC-59_04/09/07	X					X				
201550	PC-60_04/09/07	X					X				
201550	PC-62_04/09/07	X					X				
201550	PC-68_04/09/07	X					X				
201550	PC-86_04/11/07	X					X				
201550	PC-90_04/11/07	X					X				
201550	PC-91_04/11/07	X					X				
201550	PC-95_04/11/07	X					X				
201550	PC-97_04/11/07	X					X				
201550	PC-98R_04/12/07	X					X				
201775	ART-1_04/16/07	X					X				
201775	ART-2_04/16/07	X					X				
201775	ART-3_04/16/07	X					X				
201775	ART-4_04/16/07	X					X				
201775	ART-6_04/16/07	X					X				
201775	ART-7_04/16/07	X					X				
201775	ART-8_04/16/07	X					X				
201775	ART-9_04/16/07	X					X				
201775	PC-115R_04/16/07	X					X				
201775	PC-116R_04/16/07	X					X				
201775	PC-117_04/16/07	X					X				
201775	PC-118_04/16/07	X					X				
201775	PC-119_04/16/07	X					X				
201775	PC-120_04/16/07	X					X				

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SDG	SampleID	EPA 160_1 TDS	EPA 200_7 Total Cr	EPA 218_6 Cr(VI)	EPA 300_0 Nitrate (as N)	EPA 300_1B Chlorate	EPA 314 Perchlorate	SW 846 6010B Cr	SW 846 7196 Cr(VI)	SW 846 9056 Chlorate	SW 846 9056 Nitrate (as N)
201775	PC-121_04/16/07	X					X				
201775	PC-133_04/16/07	X					X				
201775	PC-99R2/R3_04/16/07	X					X				
201775	SEEP SURFACE FLOW_04/1	X					X				
201775	SF-1_04/16/07	X					X				
201811	EFFLUENT-COMP_04/14/07						X				
201811	INFLUENT-COMP_04/14/07						X				
201958	EFFLUENT_04/17/07			X							
201958	INFLUENT_04/17/07			X							
202425	EFFLUENT-COMP_04/21/07						X				
202425	INFLUENT-COMP_04/21/07						X				
202436	ART-1_04/23/07	X					X				
202436	ART-2_04/23/07	X					X				
202436	ART-3_04/23/07	X					X				
202436	ART-4_04/23/07	X					X				
202436	ART-6_04/23/07	X					X				
202436	ART-7_04/23/07	X					X				
202436	ART-8_04/23/07	X					X				
202436	ART-9_04/23/07	X					X				
202436	PC-115R_04/23/07	X					X				
202436	PC-116R_04/23/07	X					X				
202436	PC-117_04/23/07	X					X				
202436	PC-118_04/23/07	X					X				
202436	PC-119_04/23/07	X					X				
202436	PC-120_04/23/07	X					X				
202436	PC-121_04/23/07	X					X				
202436	PC-133_04/23/07	X					X				
202436	PC-99R2/R3_04/23/07	X					X				
202436	SEEP SURFACE FLOW_04/2	X					X				
202436	SF-1_04/23/07	X					X				
202443	EFFLUENT_04/23/07		X	X	X	X	X				

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SDG	SampleID	EPA 160_1 TDS	EPA 200_7 Total Cr	EPA 218_6 Cr(VI)	EPA 300_0 Nitrate (as N)	EPA 300_1B Chlorate	EPA 314 Perchlorate	SW 846 6010B Cr	SW 846 7196 Cr(VI)	SW 846 9056 Chlorate	SW 846 9056 Nitrate (as N)
203319	PC107_05/01/07	X					X				
203319	PC108_05/01/07						X				
203319	PC2_05/01/07	X						X			
203319	PC2D_05/01/07	X					X	X			X
203319	PC62_05/01/07							X			
203319	PC65_05/01/07	X					X	X			
203319	PC66_05/01/07	X						X			
203319	PC66D_05/01/07	X					X	X			
203319	PC67_05/01/07						X	X			
203321	M-10_05/01/07	X	X		X						
203332	EB-1_05/01/07	X					X	X	X		
203332	I-AR_05/01/07	X					X	X			
203332	I-B_05/01/07	X					X	X			
203332	I-C_05/01/07	X					X	X			
203332	I-D_05/01/07	X					X	X			
203332	I-E_05/01/07	X					X	X			
203332	I-F_05/01/07	X					X	X			
203332	I-H_05/01/07	X					X	X			
203332	I-L_05/01/07	X					X	X			
203332	I-M_05/01/07	X					X	X			
203332	I-N_05/01/07	X					X	X			
203332	I-O_05/01/07	X					X	X			
203332	I-P_05/01/07	X					X	X			
203332	I-Q_05/01/07	X					X	X			
203332	I-R_05/01/07	X					X	X			
203332	I-S_05/01/07	X					X	X			
203332	I-T_05/01/07	X					X	X			
203332	I-U_05/01/07	X					X	X			
203332	M-10_05/01/07	X					X	X	X	X	X
203332	M-25_05/01/07	X					X	X		X	X
203332	M-37_05/01/07	X					X	X	X	X	X

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SDG	SampleID	EPA 160_1 TDS	EPA 200_7 Total Cr	EPA 218_6 Cr(VI)	EPA 300_0 Nitrate (as N)	EPA 300_1B Chlorate	EPA 314 Perchlorate	SW 846 6010B Cr	SW 846 7196 Cr(VI)	SW 846 9056 Chlorate	SW 846 9056 Nitrate (as N)
203332	M-57A_05/01/07	X					X	X			
203332	M-69_05/01/07	X					X	X			
203332	M-79_05/01/07	X					X	X			
203332	M-98_05/01/07	X					X	X			
203332	M-99_05/01/07	X					X	X			
203332	MD-4_05/01/07	X					X	X			
203332	PC-127_05/01/07	X					X	X			
203401	H-28A_05/02/07	X					X	X			
203401	M-5A_05/02/07	X					X	X			
203401	M-6A_05/02/07	X					X	X			
203401	M-7B_05/02/07	X					X	X			
203411	EB-2_05/02/07	X					X	X	X		
203411	M-11_05/02/07	X					X	X	X	X	X
203411	M-19_05/02/07	X					X	X			
203411	M-21_05/02/07	X					X	X			
203411	M-31A_05/02/07	X					X	X			
203411	M-39_05/02/07	X					X	X		X	X
203411	M-50_05/02/07	X					X	X			
203411	M-52_05/02/07	X					X	X			
203411	M-77_05/02/07	X					X	X			
203423	EB050207_05/02/07	X					X	X		X	X
203423	HMW13_05/02/07	X					X				
203423	HMW14_05/02/07	X					X				
203423	HMW15_05/02/07	X					X				
203423	HMW16_05/02/07	X					X				
203423	M34_05/02/07	X					X	X			
203423	M35_05/02/07	X					X	X			
203423	PC104_05/02/07	X					X	X			
203423	PC110_05/02/07	X					X				
203423	PC112_05/02/07	X					X				
203423	PC21A_05/02/07	X					X	X		X	X

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SDG	SampleID	EPA 160_1 TDS	EPA 200_7 Total Cr	EPA 218_6 Cr(VI)	EPA 300_0 Nitrate (as N)	EPA 300_1B Chlorate	EPA 314 Perchlorate	SW 846 6010B Cr	SW 846 7196 Cr(VI)	SW 846 9056 Chlorate	SW 846 9056 Nitrate (as N)
203423	PC24_05/02/07	X					X	X			
203423	PC28_05/02/07	X					X	X			
203423	PC31_05/02/07	X					X	X			
203423	PC31D_05/02/07	X					X	X			
203423	PC50_05/02/07	X					X	X			
203423	PC64_05/02/07	X					X	X			
203590	EB050307_05/03/07	X					X	X		X	X
203590	FB050307_05/03/07	X					X	X		X	X
203590	H11_05/03/07	X					X				
203590	H48_05/03/07	X					X				
203590	M29_05/03/07	X					X	X		X	X
203590	M61_05/03/07	X					X	X			
203590	MC29_05/03/07	X					X				
203590	MC3_05/03/07	X					X				
203590	MC50_05/03/07	X					X				
203590	MC51_05/03/07	X					X				
203590	MC53_05/03/07	X					X	X			
203590	MC53D_05/03/07	X					X	X			
203590	MC6_05/03/07	X					X				
203590	MC65_05/03/07	X					X				
203590	MC69_05/03/07	X					X				
203590	MC7_05/03/07	X					X				
203590	MC93_05/03/07	X					X				
203590	MC97_05/03/07	X					X				
203590	PC40_05/03/07	X					X	X			
203590	PC73_05/03/07	X					X	X		X	X
203591	I-V_05/03/07	X					X	X			
203591	M-100_05/03/07	X					X	X	X		
203591	M-101_05/03/07	X					X	X			
203591	M-102_05/03/07	X					X	X			
203591	M-12A_05/03/07	X					X	X	X	X	X

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SDG	SampleID	EPA 160_1 TDS	EPA 200_7 Total Cr	EPA 218_6 Cr(VI)	EPA 300_0 Nitrate (as N)	EPA 300_1B Chlorate	EPA 314 Perchlorate	SW 846 6010B Cr	SW 846 7196 Cr(VI)	SW 846 9056 Chlorate	SW 846 9056 Nitrate (as N)
203591	M-13_05/03/07	X					X	X		X	X
203591	M-36_05/03/07	X					X	X	X	X	X
203591	M-68_05/03/07	X					X	X			
203591	M-73_05/03/07	X					X	X			
203591	M-74_05/03/07	X					X	X			
203591	M-83_05/03/07	X					X	X			
203591	M-84_05/03/07	X					X	X	X		
203591	M-85_05/03/07	X					X	X			
203591	M-86_05/03/07	X					X	X			
203591	M-87_05/03/07	X					X	X			
203591	M-88_05/03/07	X					X	X			
203591	M-92_05/03/07	X					X	X			
203591	M-97_05/03/07	X					X	X			
203591	MD-2_05/03/07	X					X	X	X		
203614	M103_05/04/07	X					X	X			
203614	M117_05/04/07	X					X	X			
203614	M118_05/04/07	X					X	X			
203614	M120_05/04/07	X					X	X			
203614	M121_05/04/07	X					X	X			
203614	M64_05/04/07	X					X	X			
203614	M65_05/04/07	X					X	X			
203614	M66_05/04/07	X					X	X			
203614	M67_05/04/07	X					X	X			
203614	M67D_05/04/07	X					X	X			
203746	ART-1_05/07/07	X	X				X				
203746	ART-2_05/07/07	X	X				X				
203746	ART-3_05/07/07	X	X				X				
203746	ART-4_05/07/07	X	X				X				
203746	ART-6_05/07/07	X	X				X				
203746	ART-7_05/07/07	X	X				X				
203746	ART-8_05/07/07	X	X				X				

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SDG	SampleID	EPA 160_1 TDS	EPA 200_7 Total Cr	EPA 218_6 Cr(VI)	EPA 300_0 Nitrate (as N)	EPA 300_1B Chlorate	EPA 314 Perchlorate	SW 846 6010B Cr	SW 846 7196 Cr(VI)	SW 846 9056 Chlorate	SW 846 9056 Nitrate (as N)
203746	ART-9_05/07/07	X	X				X				
203746	PC-115R_05/07/07	X	X				X				
203746	PC-116R_05/07/07	X	X				X				
203746	PC-117_05/07/07	X	X				X				
203746	PC-118_05/07/07	X	X				X				
203746	PC-119_05/07/07	X	X				X				
203746	PC-120_05/07/07	X	X				X				
203746	PC-121_05/07/07	X	X				X				
203746	PC-133_05/07/07	X	X				X				
203746	PC-99R2/R3_05/07/07	X	X				X				
203746	SEEP SURFACE FLOW_05/(	X	X				X				
203746	SF-1_05/07/07	X	X				X				
203786	EFFLUENT-COMP_05/05/07						X				
203786	INFLUENT-COMP_05/05/07						X				
203814	EFFLUENT_05/07/07		X	X	X	X	X				
203814	INFLUENT_05/07/07		X	X	X	X	X				
204159	CLD1R_05/09/07	X					X	X			
204159	CLD2R_05/09/07	X					X	X			
204523	EFFLUENT-COMP_05/12/07						X				
204523	INFLUENT-COMP_05/12/07						X				
204530	ART-1_05/14/07	X					X				
204530	ART-2_05/14/07	X					X				
204530	ART-3_05/14/07	X					X				
204530	ART-4_05/14/07	X					X				
204530	ART-6_05/14/07	X					X				
204530	ART-7_05/14/07	X					X				
204530	ART-8_05/14/07	X					X				
204530	ART-9_05/14/07	X					X				
204530	PC-115R_05/14/07	X					X				
204530	PC-116R_05/14/07	X					X				
204530	PC-117_05/14/07	X					X				

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SDG	SampleID	EPA 160_1 TDS	EPA 200_7 Total Cr	EPA 218_6 Cr(VI)	EPA 300_0 Nitrate (as N)	EPA 300_1B Chlorate	EPA 314 Perchlorate	SW 846 6010B Cr	SW 846 7196 Cr(VI)	SW 846 9056 Chlorate	SW 846 9056 Nitrate (as N)
204530	PC-118_05/14/07	X					X				
204530	PC-119_05/14/07	X					X				
204530	PC-120_05/14/07	X					X				
204530	PC-121_05/14/07	X					X				
204530	PC-133_05/14/07	X					X				
204530	PC-99R2/R3_05/14/07	X					X				
204530	SEEP SURFACE FLOW_05/1	X					X				
204530	SF-1_05/14/07	X					X				
204609	MW-K4_05/14/07	X	X				X				
205321	ART-1_05/21/07	X					X				
205321	ART-2_05/21/07	X					X				
205321	ART-3_05/21/07	X					X				
205321	ART-4_05/21/07	X					X				
205321	ART-6_05/21/07	X					X				
205321	ART-7_05/21/07	X					X				
205321	ART-8_05/21/07	X					X				
205321	ART-9_05/21/07	X					X				
205321	PC-115R_05/21/07	X					X				
205321	PC-116R_05/21/07	X					X				
205321	PC-117_05/21/07	X					X				
205321	PC-118_05/21/07	X					X				
205321	PC-119_05/21/07	X					X				
205321	PC-120_05/21/07	X					X				
205321	PC-121_05/21/07	X					X				
205321	PC-133_05/21/07	X					X				
205321	PC-99R2/R3_05/21/07	X					X				
205321	SF-1_05/21/07	X					X				
205397	EFFLUENT-COMP_05/19/07						X				
205397	INFLUENT-COMP_05/19/07						X				
205408	EFFLUENT_05/21/07		X	X	X	X	X				
205408	INFLUENT_05/21/07		X	X	X	X	X				

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SDG	SampleID	EPA 160_1 TDS	EPA 200_7 Total Cr	EPA 218_6 Cr(VI)	EPA 300_0 Nitrate (as N)	EPA 300_1B Chlorate	EPA 314 Perchlorate	SW 846 6010B Cr	SW 846 7196 Cr(VI)	SW 846 9056 Chlorate	SW 846 9056 Nitrate (as N)
206010	EFFLUENT-COMP_05/26/07						X				
206010	INFLUENT-COMP_05/26/07						X				
206012	ART-1_05/29/07	X					X				
206012	ART-2_05/29/07	X					X				
206012	ART-3_05/29/07	X					X				
206012	ART-4_05/29/07	X					X				
206012	ART-6_05/29/07	X					X				
206012	ART-7_05/29/07	X					X				
206012	ART-8_05/29/07	X					X				
206012	ART-9_05/29/07	X					X				
206012	PC-115R_05/29/07	X					X				
206012	PC-116R_05/29/07	X					X				
206012	PC-117_05/29/07	X					X				
206012	PC-118_05/29/07	X					X				
206012	PC-119_05/29/07	X					X				
206012	PC-120_05/29/07	X					X				
206012	PC-121_05/29/07	X					X				
206012	PC-133_05/29/07	X					X				
206012	PC-99R2/R3_05/29/07	X					X				
206012	SF-1_05/29/07	X					X				
206014	EFFLUENT_05/29/07		X	X	X	X	X				
206014	INFLUENT_05/29/07		X	X	X	X	X				
206435	ART-1_06/04/07	X					X				
206435	ART-2_06/04/07	X					X				
206435	ART-3_06/04/07	X					X				
206435	ART-4_06/04/07	X					X				
206435	ART-6_06/04/07	X					X				
206435	ART-7_06/04/07	X					X				
206435	ART-8_06/04/07	X					X				
206435	ART-9_06/04/07	X					X				
206435	PC-115R_06/04/07	X					X				

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SDG	SampleID	EPA 160_1 TDS	EPA 200_7 Total Cr	EPA 218_6 Cr(VI)	EPA 300_0 Nitrate (as N)	EPA 300_1B Chlorate	EPA 314 Perchlorate	SW 846 6010B Cr	SW 846 7196 Cr(VI)	SW 846 9056 Chlorate	SW 846 9056 Nitrate (as N)
206435	PC-116R_06/04/07	X					X				
206435	PC-117_06/04/07	X					X				
206435	PC-118_06/04/07	X					X				
206435	PC-119_06/04/07	X					X				
206435	PC-120_06/04/07	X					X				
206435	PC-121_06/04/07	X					X				
206435	PC-133_06/04/07	X					X				
206435	PC-99R2/R3_06/04/07	X					X				
206435	SEEP SURFACE FLOW_06/(	X					X				
206435	SF-1_06/04/07	X					X				
206516	EFFLUENT-COMP_06/02/07						X				
206516	INFLUENT-COMP_06/02/07						X				
206546	EFFLUENT_06/04/07		X	X	X	X	X				
207164	EFFLUENT-COMP_06/09/07						X				
207164	INFLUENT-COMP_06/09/07						X				
207169	ART-1_06/11/07	X					X				
207169	ART-2_06/11/07	X					X				
207169	ART-3_06/11/07	X					X				
207169	ART-4_06/11/07	X					X				
207169	ART-6_06/11/07	X					X				
207169	ART-7_06/11/07	X					X				
207169	ART-8_06/11/07	X					X				
207169	ART-9_06/11/07	X					X				
207169	PC-115R_06/11/07	X					X				
207169	PC-116R_06/11/07	X					X				
207169	PC-117_06/11/07	X					X				
207169	PC-118_06/11/07	X					X				
207169	PC-119_06/11/07	X					X				
207169	PC-120_06/11/07	X					X				
207169	PC-121_06/11/07	X					X				
207169	PC-133_06/11/07	X					X				

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SDG	SampleID	EPA 160_1 TDS	EPA 200_7 Total Cr	EPA 218_6 Cr(VI)	EPA 300_0 Nitrate (as N)	EPA 300_1B Chlorate	EPA 314 Perchlorate	SW 846 6010B Cr	SW 846 7196 Cr(VI)	SW 846 9056 Chlorate	SW 846 9056 Nitrate (as N)
207169	PC-99R2/R3_06/11/07	X					X				
207169	SF-1_06/11/07	X					X				
207230	EFFLUENT_06/11/07		X	X	X	X	X				
207230	INFLUENT_06/11/07		X	X	X	X	X				
207600	ARP-1_06/13/07	X					X				
207600	ARP-2_06/13/07	X					X				
207600	ARP-3_06/13/07	X					X				
207600	ARP-7_06/14/07	X					X				
207600	L-635_06/12/07	X					X				
207600	L-637_06/12/07	X					X				
207600	M-83_06/14/07	X					X				
207600	M-87_06/14/07	X					X				
207600	MWK-4_06/13/07	X					X				
207600	MWK-5_06/14/07	X					X				
207600	PC-101R_06/13/07	X					X				
207600	PC-103_06/14/07	X					X				
207600	PC-122_06/11/07	X					X				
207600	PC-17_06/13/07	X					X				
207600	PC-18_06/13/07	X					X				
207600	PC-53_06/14/07	X					X				
207600	PC-55_06/12/07	X					X				
207600	PC-56_06/11/07	X					X				
207600	PC-58_06/11/07	X					X				
207600	PC-59_06/11/07	X					X				
207600	PC-60_06/11/07	X					X				
207600	PC-62_06/11/07	X					X				
207600	PC-68_06/11/07	X					X				
207600	PC-86_06/13/07	X					X				
207600	PC-90_06/13/07	X					X				
207600	PC-91_06/13/07	X					X				
207600	PC-95_06/13/07	X					X				

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SDG	SampleID	EPA 160_1 TDS	EPA 200_7 Total Cr	EPA 218_6 Cr(VI)	EPA 300_0 Nitrate (as N)	EPA 300_1B Chlorate	EPA 314 Perchlorate	SW 846 6010B Cr	SW 846 7196 Cr(VI)	SW 846 9056 Chlorate	SW 846 9056 Nitrate (as N)
207600	PC-97_06/13/07	X					X				
207600	PC-98R_06/14/07	X					X				
207869	EFFLUENT-COMP_06/16/07						X				
207869	INFLUENT-COMP_06/16/07						X				
207885	ART-1_06/18/07	X					X				
207885	ART-2_06/18/07	X					X				
207885	ART-3_06/18/07	X					X				
207885	ART-4_06/18/07	X					X				
207885	ART-6_06/18/07	X					X				
207885	ART-7_06/18/07	X					X				
207885	ART-8_06/18/07	X					X				
207885	ART-9_06/18/07	X					X				
207885	PC-115R_06/18/07	X					X				
207885	PC-116R_06/18/07	X					X				
207885	PC-117_06/18/07	X					X				
207885	PC-118_06/18/07	X					X				
207885	PC-119_06/18/07	X					X				
207885	PC-120_06/18/07	X					X				
207885	PC-121_06/18/07	X					X				
207885	PC-133_06/18/07	X					X				
207885	PC-99R2/R3_06/18/07	X					X				
207885	SF-1_06/18/07	X					X				
207940	EFFLUENT_06/18/07		X	X	X	X	X				
207940	INFLUENT_06/18/07		X	X	X	X	X				
208508	EFFLUENT-COMP_06/23/07						X				
208508	INFLUENT-COMP_06/23/07						X				