

APPENDIX G

Section 20

Outfall 008, February 16, 2009

MEC^X Data Validation Report



DATA VALIDATION REPORT

Boeing SSFL NPDES

SAMPLE DELIVERY GROUP: ISB1787

Prepared by

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I. INTRODUCTION

Task Order Title: Boeing SSFL NPDES
 Contract Task Order: 1261.100D.00
 Sample Delivery Group: ISB1787
 Project Manager: B. Kelly
 Matrix: Water
 QC Level: IV
 No. of Samples: 1
 No. of Reanalyses/Dilutions: 0
 Laboratory: TestAmerica-Irvine

Table 1. Sample Identification

Client ID	Laboratory ID	Sub-Laboratory ID	Matrix	Collected	Method
Outfall 008	ISB1786-01	D9B190131-001, D9C050251-001, 31439-001, F9B180218-001, CSB0581-001, 127223-1	Water	02/16/09 0830	100.2, 200.7, 200.7 (Diss), 200.8, 200.8 (Diss) 245.1, 245.1 (Diss), 525.2, 608, 900.0, 901.1, 903.0, 904.0, 905.0, 906.0, 908.0, 1613B, SM2340B, SM2540D, SM4500-CN- CE

II. Sample Management

No anomalies were observed regarding sample management. The samples were received at all laboratories within the temperature limit of $4 \pm 2^{\circ}\text{C}$. According to the case narrative for this SDG, the samples were received intact at all laboratories. The COCs were appropriately signed and dated by field and/or laboratory personnel. As the sample was couriered to TestAmerica-Irvine, EMS, and TestAmerica Ontario, custody seals were not required. Custody seal were present and intact upon arrival at TestAmerica-Denver, TestAmerica-St. Louis, and Vista. If necessary, the client ID was added to the sample result summary by the reviewer.

Data Qualifier Reference Table

Qualifier	Organics	Inorganics
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit. The associated value is the quantitation limit or the estimated detection limit for dioxins.	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit. The associated value is the sample detection limit or the quantitation limit for perchlorate only.
J	The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.	The associated value is an estimated quantity.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."	Not applicable.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.	Not applicable.
UJ	The analyte was not deemed above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.	The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to analyze the sample and to meet quality control criteria. The presence or absence of the analyte cannot be verified.

Qualification Code Reference Table

Qualifier	Organics	Inorganics
H	Holding times were exceeded.	Holding times were exceeded.
S	Surrogate recovery was outside QC limits.	The sequence or number of standards used for the calibration was incorrect
C	Calibration %RSD or %D was noncompliant.	Correlation coefficient is <0.995.
R	Calibration RRF was <0.05.	%R for calibration is not within control limits.
B	Presumed contamination as indicated by the preparation (method) blank results.	Presumed contamination as indicated by the preparation (method) or calibration blank results.
L	Laboratory Blank Spike/Blank Spike Duplicate %R was not within control limits.	Laboratory Control Sample %R was not within control limits.
Q	MS/MSD recovery was poor or RPD high.	MS recovery was poor.
E	Not applicable.	Duplicates showed poor agreement.
I	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
A	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
T	Presumed contamination as indicated by the trip blank results.	Not applicable.
+	False positive – reported compound was not present.	Not applicable.
-	False negative – compound was present but not reported.	Not applicable.
F	Presumed contamination as indicated by the FB or ER results.	Presumed contamination as indicated by the FB or ER results.
\$	Reported result or other information was incorrect.	Reported result or other information was incorrect.
?	TIC identity or reported retention time has been changed.	Not applicable.

Qualification Code Reference Table Cont.

D	The analysis with this flag should not be used because another more technically sound analysis is available.	The analysis with this flag should not be used because another more technically sound analysis is available.
P	Instrument performance for pesticides was poor.	Post Digestion Spike recovery was not within control limits.
DNQ	The reported result is above the method detection limit but is less than the reporting limit.	The reported result is above the method detection limit but is less than the reporting limit.
*II, *III	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.	Unusual problems found with the data that have been described in Section II, "Sample Management," or Section III, "Method Analyses." The number following the asterisk (*) will indicate the report section where a description of the problem can be found.

III. Method Analyses

A. EPA METHOD 100.2—Asbestos

Reviewed By: P. Meeks

Date Reviewed: March 27, 2009

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the *MEC^x Data Validation Procedure for General Minerals (DVP-6, Rev. 0)*, *EPA Method 100.2*, and the *National Functional Guidelines for Inorganic Data Review (10/04)*.

- Holding Times: The sample was filtered within 48 hours of collection. There is no established holding time for asbestos analysis; however, the sample was analyzed within 30 days of collection.
- Calibration: The laboratory provided no documentation for the light microscope refractive index calibration.
- Blanks: A method blank was analyzed with the site sample. Asbestos was not detected in the method blank.
- Blank Spikes and Laboratory Control Samples: Not applicable to this analysis.
- Laboratory Duplicates: No laboratory duplicate analyses were performed.
- Matrix Spike/Matrix Spike Duplicate: Not applicable to this analysis.
- Sample Result Verification: The sample result was verified against the raw data. No transcription errors were noted. Due to the turbidity of the sample, the standard sensitivity was not met. Detects reported below the reporting limit were qualified as estimated, "J," and coded with "DNQ," in order to comply with the NPDES permit. Reported nondetects are valid to the MDL.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: This SDG had no identified field blank or equipment rinsate samples.
 - Field Duplicates: There were no field duplicate samples identified for this SDG.

B. EPA METHOD 1613—Dioxin/Furans

Reviewed By: K. Shadowlight

Date Reviewed: March 30, 2009

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for Dioxins and Furans (DVP-19, Rev. 0)*, *USEPA Method 1613*, and the *National Functional Guidelines Chlorinated Dioxin/Furan Data Review (9/05)*.

- Holding Times: Extraction and analytical holding times were met. The water sample was extracted and analyzed within one year of collection.
- Instrument Performance: Instrument performance criteria were met. Following are findings associated with instrument performance.
 - GC Column Performance: A Windows Defining Mix (WDM) containing the first and last eluting congeners of each descriptor and isomer specificity compounds was not analyzed prior to the initial calibration sequence or at the beginning of each analytical sequence; however, the first and last eluting congeners and isomer specificity compounds were added to the midpoint of the initial calibration and to the continuing calibration standards. The GC column performance in the calibrations was acceptable, with the height of the valley between the closely eluting isomers and 2,3,7,8-TCDD reported as less than 25%.
 - Mass Spectrometer Performance: The mass spectrometer performance was acceptable with the static resolving power greater than 10,000.
- Calibration: Calibration criteria were met.
 - Initial Calibration: Initial calibration criteria were met. The initial calibration was acceptable with %RSDs $\leq 20\%$ for the 16 native compounds (calibration by isotope dilution) and $\leq 35\%$ for the one native and all labeled compounds (calibration by internal standard). The relative retention times and ion abundance ratios were within the Method 1613 QC limits for all standards.
 - Continuing Calibration: Calibration verification (VER) consisted of a mid-level standard (CS3) analyzed at the beginning of each analytical sequence. The VERs were acceptable with the concentrations within the acceptance criteria listed in Table 6 of EPA Method 1613. The ion abundance ratios and relative retention times were within the method QC limits.
- Blanks: The method blank had no target compound detects above the EDL.
- Blank Spikes and Laboratory Control Samples: OPR recoveries were within the acceptance criteria listed in Table 6 of Method 1613.

- **Field QC Samples:** Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - **Field Blanks and Equipment Rinsates:** This SDG had no identified field blank or equipment rinsate samples.
 - **Field Duplicates:** There were no field duplicate samples identified for this SDG.
- **Internal Standards Performance:** The labeled standard recoveries were within the acceptance criteria listed in Table 7 of Method 1613.
- **Compound Identification:** Compound identification was verified. The laboratory analyzed for polychlorinated dioxins/furans by EPA Method 1613.
- **Compound Quantification and Reported Detection Limits:** Compound quantitation was verified by recalculating any sample detects and a representative number of blank spike concentrations. The laboratory calculated and reported compound-specific detection limits. Any estimated maximum possible concentrations (EMPCs) were qualified as estimated nondetects, "UJ," in the sample of this SDG. As the laboratory did not include EMPCs in the reported total concentration, the result for total HpCDD was not qualified. Any detects between the estimated detection limit (EDL) and the reporting limit (RL) were qualified as estimated, "J," and coded with "DNQ," in order to comply with the NPDES permit. Nondetects are valid to the estimated detection limit (EDL).

C. EPA METHODS 200.7, 200.8, and 245.1—Metals and Mercury

Reviewed By: P. Meeks

Date Reviewed: March 27, 2009

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the *MEC^x Data Validation Procedure for Metals (DVP-5, Rev. 0 and DVP-21, Rev. 0)*, *EPA Methods 2007, 200.8, and 245.1*, and the *National Functional Guidelines for Inorganic Data Review (10/04)*.

- **Holding Times:** The analytical holding times, 180 days for ICP and ICP-MS metals and 28 days for mercury, were met.
- **Tuning:** The mass calibration and resolution checks criteria were met. All tuning solution %RSDs were $\leq 5\%$, and all masses of interest were calibrated to ≤ 0.1 amu and ≤ 0.9 amu at 10% peak height.
- **Calibration:** Calibration criteria were met. Mercury initial calibration r^2 values were ≥ 0.995 . Initial and continuing calibration recoveries were within 90-110% for the ICP and ICP-MS metals and 85-115% for mercury. The zinc CRI recovery associated with the dissolved

metals analyses was 63%; therefore, nondetected dissolved zinc in the sample was qualified as estimated, "UJ." The remaining CRI and CRA and check standards were recovered within the control limits of 70-130%.

- Blanks: Chromium was detected in the total method blank at 2.93 µg/L; therefore, total chromium detected in the sample was qualified as nondetected, "U," at the reporting limit. Zinc was reported in a CCB bracketing the dissolved metals analysis at -7.7 µg/L; therefore, nondetected dissolved zinc in the sample was qualified as estimated, "UJ." There were no other applicable detects in the method blanks or CCBs.
- Interference Check Samples: Recoveries were within the method-established control limits. There were detects and negative results in the ICSA associated with the ICP analyses; however, the concentration of interferents in the site sample were insufficient to cause matrix interference.
- Blank Spikes and Laboratory Control Samples: The recoveries were within the laboratory-established QC limits.
- Laboratory Duplicates: No laboratory duplicate analysis was performed on the sample in this SDG.
- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were performed on the sample in this SDG for total mercury only. Both total mercury recoveries were below the control limit; therefore, total mercury detected in the sample was qualified as estimated, "J." Method accuracy for the remaining analytes was evaluated based on LCS results.
- Serial Dilution: No serial dilution analyses were performed on the sample in this SDG.
- Internal Standards Performance: All associated sample internal standard intensities were within 60-125% of the internal standard intensities measured in the initial calibration.
- Sample Result Verification: Calculations were verified and the sample results reported on the sample result summaries were verified against the raw data. No transcription errors or calculation errors were noted. Detects reported below the reporting limit were qualified as estimated, "J," and coded with "DNQ," in order to comply with the NPDES permit. Reported nondetects are valid to the MDL.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: This SDG had no identified field blank or equipment rinsate samples.
 - Field Duplicates: There were no field duplicate samples identified for this SDG.

D. EPA METHOD 608—Pesticides and PCBs

Reviewed By: K. Shadowlight

Date Reviewed: March 30, 2009

The sample listed in Table 1 for these analyses was validated based on the guidelines outlined in the *MEC^x Data Validation Procedure for Organochlorine Pesticides/PCBs by GC (DVP-4, Rev. 0)*, *EPA Method 608*, and the *National Functional Guidelines for Organic Data Review (10/99)*.

- **Holding Times:** The original extraction and analytical holding times were met. The water sample was originally extracted within seven days of collection; however, as the detect for alpha BHC was suspected to be a lab contaminant, the sample was re-extracted at TestAmerica-Irvine and another extraction was performed at TestAmerica-Denver. The re-extraction performed at TestAmerica-Denver was outside of the holding time period. The retained result (nondetect) for alpha-BHC was qualified as estimated, "UJ," in sample Outfall 008 (see the Blank section). The PCB sample was extracted within seven days of collection and the pesticide and PCB analyses were performed within 40 days of extraction.
- **Calibration:** The initial calibration had average %RSDs of $\leq 10\%$ or $r^2 \geq 0.995$ for the pesticides and PCB analyses. The %Ds for all analytes except aldrin, dieldrin, methoxychlor, chlordane, and toxaphene exceeded 15% in one or both of the low-level CCVs bracketing the pesticide analysis; therefore, the results for these target compounds were qualified as estimated, "J," for detects and "UJ," for nondetects in the retained analysis of the sample in this SDG. The ICV and remaining CCVs bracketing the sample analyses had %Ds within the QC limit of $\leq 15\%$. The ICV and CCVs %Ds bracketing the PCB analysis were $\leq 15\%$.
- **Blanks:** Alpha-BHC was detected at a concentration of 0.00634 $\mu\text{g/L}$ in the method blank for batch 9B20074; however, the associated result for alpha BHC was rejected due to laboratory contamination (see below). There were no other target compound detects above the MDL in method blank 9B20074 associated with the original analysis of Outfall 008.

Alpha BHC was reported in sample Outfall 008; however, the laboratory suspected contamination related to one highly contaminated sample with percent level alpha-BHC. A second extraction of Outfall 008 yielded a low-level concentration of alpha BHC, indicating that the laboratory was not contamination free. The sample was sent to TestAmerica-Denver for alpha-BHC analysis. The nondetect result yielded from the TestAmerica-Denver analysis confirmed the suspicion that the original results were indeed laboratory contamination; therefore, the original result for alpha BHC in extraction batch 9B20074 and the sample re-extraction from batch 9B23113 were rejected, "R," in favor of the result for alpha BHC reported in batch 9064381 from TestAmerica-Denver. Several corrective action steps have been taken by TestAmerica-Irvine including replacing glassware throughout the organics department and implementing an acid wash procedure to prevent future contamination issues.

Beta-BHC was reported above the MDL in the original extraction of sample Outfall 008 and was confirmed in the re-extraction of Outfall 008 (9B23113). It should be noted that beta-BHC was also detected in the associated method blank (9B23113) at a concentration slightly below the MDL. As beta-BHC was confirmed in the re-extraction analysis, the detect for beta-BHC in the re-extraction (9B23113) was rejected, "R," in favor of the result reported in the original extraction of Outfall 008 (9B20074). Endrin aldehyde was also detected at a concentration above the MDL in the original extraction of Outfall 008 (9B20074). Although endrin aldehyde was not reported in the re-extraction analysis of Outfall 008 (9B23113), it should be noted that the analyte was detected just below the MDL; therefore, the result for endrin aldehyde in the re-extraction analysis was rejected, "R," in favor of the result reported in the original analysis of Outfall 008. The remaining analytes in the re-extraction analysis were rejected as duplicate data (see above).

- Blank Spikes and Laboratory Control Samples: Recoveries and RPDs for the blank spike/blank spike duplicate pairs were within laboratory-established QC limits.
- Surrogate Recovery: Recoveries were within laboratory-established QC limits.
- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were not performed for the sample in this SDG. Method accuracy and precision was evaluated based on the blank spike/blank spike duplicate results.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: This SDG had no identified field blank or equipment rinsate samples.
 - Field Duplicates: There were no field duplicate samples identified for this SDG.
- Compound Identification: Compound identification was verified. The laboratory analyzed for pesticides and PCBs by EPA Method 608. Review of the sample chromatograms and retention times indicated no problems with target compound identification.
- Compound Quantification and Reported Detection Limits: Compound quantification was verified from the raw data. The reporting limits were supported by the lower level of the initial calibration. Any result reported between the MDL and the reporting limit was qualified as estimated, "J," and coded with "DNQ," in order to comply with the NPDES permit. Reported nondetects are valid to the reporting limit.

E. VARIOUS EPA METHODS — Radionuclides

Reviewed By: P. Meeks

Date Reviewed: March 25, 2009

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the *EPA Methods 900.0, 901.1, 903.1, 904.0, 905.0, and 906.0, ASTM Method D-5174*, and the *National Functional Guidelines for Inorganic Data Review (10/04)*.

- **Holding Times:** The tritium sample was analyzed within 180 days of collection. The aliquots for gross alpha, gross beta, cesium-137, potassium-40, and total uranium were prepared beyond the five-day holding time for unpreserved samples; therefore, the results for these analytes were qualified as estimated, "J," for detects and, "UJ," for nondetects. All remaining aliquots were prepared within the five-day holding time for unpreserved samples.
- **Calibration:** The laboratory calibration information included the standard certificates and applicable preparation/dilutions logs for NIST-traceability.

The gross alpha detector efficiency was less than 20%; therefore, nondetected gross alpha in the sample was qualified as estimated, "J." The gross beta detector efficiency was greater than 20%.

The tritium aliquot was spiked for efficiency determination; therefore, no calibration was necessary. The tritium detector efficiency for the sample was at least 20% and was considered acceptable. The strontium, radium-226, and radium-228 chemical yields were considered acceptable. The gamma spectroscopy analytes were determined at the maximum photopeak energy. The kinetic phosphorescence analyzer (KPA) was calibrated immediately prior to the sample analysis. All KPA calibration check standard recoveries were within 90-110% and were deemed acceptable.

- **Blanks:** There were no analytes detected in the method blanks.
- **Blank Spikes and Laboratory Control Samples:** The recoveries and the strontium-90, radium-226, and radium-228 RPDs were within laboratory-established control limits.
- **Laboratory Duplicates:** No laboratory duplicate analyses were performed on the sample in this SDG.
- **Matrix Spike/Matrix Spike Duplicate:** No matrix spike or MS/MSD analyses were performed on the sample in this SDG. Method accuracy and precision, when applicable, were evaluated based on LCS results.
- **Sample Result Verification:** An EPA Level IV review was performed for the sample in this data package. The sample results and MDAs reported on the sample result form were verified against the raw data and no calculation or transcription errors were noted. Total

uranium, normally reported in aqueous units, was converted to pCi/L using a conversion factor for naturally occurring uranium. Detects reported below the reporting limit were qualified as estimated, "J," and coded with "DNQ," in order to comply with the NPDES permit. Reported nondetects are valid to the MDA.

- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: This SDG had no identified field blank or equipment rinsate samples.
 - Field Duplicates: There were no field duplicate samples identified for this SDG.

F. EPA METHOD 525.2—Semivolatile Organic Compounds (SVOCs)

Reviewed By: P. Meeks

Date Reviewed: March 27, 2009

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for Semivolatile Organics (DVP-3, Rev. 0)*, *EPA Method 525.2*, and the *National Functional Guidelines for Organic Data Review (10/99)*.

- Holding Times: Extraction and analytical holding times were met. The water sample was extracted within 24 hours of collection and analyzed within 30 days of extraction.
- GC/MS Tuning: The DFTPP tunes met the method abundance criteria. The sample was analyzed within 12 hours of the DFTPP injection time.
- Calibration: Calibration criteria were met. The diazinon initial calibration average RRF was ≥ 0.05 and $\%RSD \leq 30\%$. The continuing calibration RRF for diazinon was ≥ 0.05 and recovery was within the method QC limits of 70-130%. The reviewer could not duplicate the chlorpyrifos initial calibration; however, the calculated average RRF was ≥ 0.05 and the calculated $\%RSD \leq 30\%$. Additionally the calculated chlorpyrifos continuing calibration RRF was ≥ 0.05 and the calculated recovery was within the method QC limits of 70-130%.
- Blanks: The method blank had no applicable target compound detects above the MDL.
- Blank Spikes and Laboratory Control Samples: The recoveries and RPDs were within laboratory-established QC limits.
- Surrogate Recovery: Recoveries were within laboratory-established QC limits.

- Matrix Spike/Matrix Spike Duplicate: No MS/MSD analyses were performed on the sample in this SDG. Method accuracy was evaluated based on the LCS result.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: This SDG had no identified field blank or equipment rinsate samples.
 - Field Duplicates: There were no field duplicate samples identified for this SDG.
- Internal Standards Performance: The internal standard area counts and retention times were within the method control limits established by the continuing calibration standards of $\pm 30\%$.
- Compound Identification: Compound identification was verified. The laboratory analyzed for chlorpyrifos and diazinon by Method 525.2. Review of the sample chromatogram, retention times, and spectra indicated no problems with target compound identification.
- Compound Quantification and Reported Detection Limits: Compound quantification was verified. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. Reported nondetects are valid to the reporting limit.
- Tentatively Identified Compounds: TICs were not reported by the laboratory for this analysis.
- System Performance: Review of the raw data indicated no problems with system performance.

G. VARIOUS EPA METHODS—General Minerals

Reviewed By: P. Meeks

Date Reviewed: March 27, 2009

The sample listed in Table 1 for these analyses was validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for General Minerals (DVP-6, Rev. 0)*, *Standard Methods SM2540D and SM4500-CN-C,E*, and the *National Functional Guidelines for Inorganic Data Review (10/04)*.

- Holding Times: Analytical holding times, 7 days from collection for TSS and 14 days for cyanide, were met.

- Calibration: Calibration criteria were met. The cyanide initial calibration r^2 value was ≥ 0.995 and all initial and continuing calibration recoveries were within 90-110%. Balance calibration logs were reviewed and found to be acceptable.
- Blanks: Method blanks and CCBs had no detects.
- Blank Spikes and Laboratory Control Samples: Recoveries were within laboratory-established QC limits.
- Laboratory Duplicates: No laboratory duplicate analyses were performed on the sample in this SDG.
- Matrix Spike/Matrix Spike Duplicate: No MS/MSD analyses were performed on the sample in this SDG. Method accuracy was evaluated based on LCS results.
- Sample Result Verification: Calculations were verified and the sample results reported on the sample result summary were verified against the raw data. No transcription errors or calculation errors were noted. Any detects reported below the reporting limit were qualified as estimated, "J," and coded with "DNQ," in order to comply with the NPDES permit. Reported nondetects are valid to the MDL.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: This SDG had no identified field blank or equipment rinsate samples.
 - Field Duplicates: There were no field duplicate samples identified for this SDG.

Sample ID: **ISB1787-01** *Outfall 008*

EPA Method 1613

Client Data		Sample Data	
Name:	Test America-Irvine, CA	Matrix:	Aqueous
Project:	ISB1787	Sample Size:	1.03 L
Date Collected:	16-Feb-09		
Time Collected:	0830		

Laboratory Data			
Lab Sample:	31439-001	Date Received:	18-Feb-09
QC Batch No.:	1907	Date Extracted:	21-Feb-09
Date Analyzed DB-5:	24-Feb-09	Date Analyzed DB-225:	NA

Analyte	Conc. (ug/L)	DL ^a	EMPC ^b	Qualifiers	Labeled Standard	%R	LCL-UCL ^d	Qualifiers
2,3,7,8-TCDD	ND U	0.000000563			<u>IS</u> 13C-2,3,7,8-TCDD	85.4	25 - 164	
1,2,3,7,8-PeCDD	ND	0.00000114			13C-1,2,3,7,8-PeCDD	75.6	25 - 181	
1,2,3,4,7,8-HxCDD	ND	0.00000173			13C-1,2,3,4,7,8-HxCDD	78.6	32 - 141	
1,2,3,6,7,8-HxCDD	ND	0.00000175			13C-1,2,3,6,7,8-HxCDD	77.3	28 - 130	
1,2,3,7,8,9-HxCDD	ND	0.00000168			13C-1,2,3,4,6,7,8-HpCDD	75.2	23 - 140	
1,2,3,4,6,7,8-HpCDD	0.0000178 <i>5/DND</i>			J	13C-OCDD	64.6	17 - 157	
OCDD	0.000151				13C-2,3,7,8-TCDF	89.0	24 - 169	
2,3,7,8-TCDF	ND U	0.000000627			13C-1,2,3,7,8-PeCDF	78.7	24 - 185	
1,2,3,7,8-PeCDF	ND	0.000000881			13C-2,3,4,7,8-PeCDF	75.2	21 - 178	
2,3,4,7,8-PeCDF	ND	0.000000920			13C-1,2,3,4,7,8-HxCDF	82.9	26 - 152	
1,2,3,4,7,8-HxCDF	ND	0.000000959			13C-1,2,3,6,7,8-HxCDF	77.5	26 - 123	
1,2,3,6,7,8-HxCDF	ND	0.000000975			13C-2,3,4,6,7,8-HxCDF	81.6	28 - 136	
2,3,4,6,7,8-HxCDF	ND	0.00000111			13C-1,2,3,7,8,9-HxCDF	76.9	29 - 147	
1,2,3,7,8,9-HxCDF	ND	0.00000159			13C-1,2,3,4,6,7,8-HpCDF	74.9	28 - 143	
1,2,3,4,6,7,8-HpCDF	ND	0.00000573			13C-1,2,3,4,7,8,9-HpCDF	73.5	26 - 138	
1,2,3,4,7,8,9-HpCDF	ND	0.00000216			13C-OCDF	61.0	17 - 157	
OCDF	0.0000144 <i>5/DND</i>			J	<u>CRS</u> 37Cl-2,3,7,8-TCDD	92.4	35 - 197	
Totals					Footnotes			
Total TCDD	ND U	0.000000563			a. Sample specific estimated detection limit.			
Total PeCDD	ND	0.00000114			b. Estimated maximum possible concentration.			
Total HxCDD	ND	0.00000172			c. Method detection limit.			
Total HpCDD	0.0000178 <i>5/DND</i>		0.0000372		d. Lower control limit - upper control limit.			
Total TCDF	ND U	0.000000627						
Total PeCDF	ND U	0.000000900						
Total HxCDF	0.00000277 <i>5/DND</i>							
Total HpCDF	ND U <i>5/DND</i>		0.0000110					

Analyst: JMH

10 3:30:09

Approved By:

Martha M. Maier

07-Mar-2009 08:45

LEVEL IV

MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly	Project ID: Annual Outfall 008 Report Number: ISB1787	Sampled: 02/16/09 Received: 02/16/09
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METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ISB1787-01 (Outfall 008 - Water) - cont.									
Reporting Units: mg/l									
Hardness as CaCO3	SM2340B	[CALC]	N/A	0.33	66	1	02/23/09	02/24/09	
Boron	EPA 200.7	9B23087	0.020	0.050	0.061	1	02/23/09	02/24/09	
Calcium	EPA 200.7	9B23087	0.050	0.10	20	1	02/23/09	02/24/09	
Iron	EPA 200.7	9B23087	0.015	0.040	3.0	1	02/23/09	02/24/09	
Magnesium	EPA 200.7	9B23087	0.012	0.020	3.9	1	02/23/09	02/24/09	

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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly	Project ID: Annual Outfall 008 Report Number: ISB1787	Sampled: 02/16/09 Received: 02/16/09
---	--	---

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ISB1787-01 (Outfall 008 - Water) - cont.									
Reporting Units: ug/l									
Aluminum	EPA 200.7	9B23087	40	50	3100	1	02/23/09	02/24/09	
Arsenic U	EPA 200.7	9B23087	7.0	10	ND	1	02/23/09	02/24/09	
Antimony *	EPA 200.8	9B23088	0.20	2.0	0.35	1	02/23/09	02/24/09	Ja
Beryllium U	EPA 200.7	9B23087	0.90	2.0	ND	1	02/23/09	02/24/09	
Chromium U/B	EPA 200.7	9B23087	2.0	5.0	3.4	1	02/23/09	02/24/09	B, Ja
Nickel J/DNQ	EPA 200.7	9B23087	2.0	10	3.5	1	02/23/09	02/24/09	Ja
Silver U	EPA 200.7	9B23087	6.0	10	ND	1	02/23/09	02/24/09	
Cadmium *	EPA 200.8	9B23088	0.11	1.0	ND	1	02/23/09	02/24/09	
Vanadium J/DNQ	EPA 200.7	9B23087	3.0	10	6.8	1	02/23/09	02/24/09	Ja
Zinc J/DNQ	EPA 200.7	9B23087	6.0	20	14	1	02/23/09	02/24/09	Ja
Copper *	EPA 200.8	9B23088	0.75	2.0	4.1	1	02/23/09	02/24/09	
Lead ↓	EPA 200.8	9B23088	0.30	1.0	2.6	1	02/23/09	02/24/09	
Selenium ↓	EPA 200.8	9B23088	0.30	2.0	ND	1	02/23/09	02/24/09	
Thallium ↓	EPA 200.8	9B23088	0.20	1.0	ND	1	02/23/09	02/24/09	C

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Attention: Bronwyn Kelly

Project ID: Annual Outfall 008

Report Number: ISB1787

Sampled: 02/16/09
Received: 02/16/09

DISSOLVED METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ISB1787-01 (Outfall 008 - Water) - cont.									
Reporting Units: mg/l									
Hardness as CaCO3	SM2340B-Diss	[CALC]	N/A	0.33	61	1	02/20/09	02/23/09	
Boron	EPA 200.7-Diss	9B20105	0.020	0.050	0.060	1	02/20/09	02/24/09	
Calcium	EPA 200.7-Diss	9B20105	0.050	0.10	19	1	02/20/09	02/23/09	
Iron	EPA 200.7-Diss	9B20105	0.015	0.040	0.14	1	02/20/09	02/23/09	
Magnesium	EPA 200.7-Diss	9B20105	0.012	0.020	3.2	1	02/20/09	02/23/09	

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---	--	---

DISSOLVED METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ISB1787-01 (Outfall 008 - Water) - cont.									
Reporting Units: ug/l									
Aluminum	EPA 200.7-Diss	9B20105	40	50	160	1	02/20/09	02/23/09	
Arsenic U	EPA 200.7-Diss	9B20105	7.0	10	ND	1	02/20/09	02/23/09	
Antimony *	EPA 200.8-Diss	9B20106	0.20	2.0	0.33	1	02/20/09	02/25/09	Ja
Beryllium U	EPA 200.7-Diss	9B20105	0.90	2.0	ND	1	02/20/09	02/23/09	
Chromium ↓	EPA 200.7-Diss	9B20105	2.0	5.0	ND	1	02/20/09	02/23/09	
Nickel ↓	EPA 200.7-Diss	9B20105	2.0	10	ND	1	02/20/09	02/23/09	
Silver ↓	EPA 200.7-Diss	9B20105	6.0	10	ND	1	02/20/09	02/23/09	
Cadmium *	EPA 200.8-Diss	9B20106	0.11	1.0	ND	1	02/20/09	02/23/09	C
Vanadium U	EPA 200.7-Diss	9B20105	3.0	10	ND	1	02/20/09	02/23/09	
Zinc UJ/B *III	EPA 200.7-Diss	9B20105	6.0	20	ND	1	02/20/09	02/23/09	
Copper *	EPA 200.8-Diss	9B20106	0.75	2.0	2.0	1	02/20/09	02/23/09	
Lead ↓	EPA 200.8-Diss	9B20106	0.30	1.0	ND	1	02/20/09	02/23/09	
Selenium ↓	EPA 200.8-Diss	9B20106	0.30	2.0	0.68	1	02/20/09	02/23/09	Ja
Thallium ↓	EPA 200.8-Diss	9B20106	0.20	1.0	ND	1	02/20/09	02/23/09	C

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Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Annual Outfall 008

Report Number: ISB1787

Sampled: 02/16/09
Received: 02/16/09

MCAWW 245.1

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ISB1787-01 (Outfall 008 - Water) - cont.									
Reporting Units: ug/L									
Mercury J/Q	MCAWW 245.1	9065187	0.027	0.2	0.029	1	03/09/09	03/09/09	J

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Attention: Bronwyn Kelly

Project ID: Annual Outfall 008

Report Number: ISB1787

Sampled: 02/16/09
Received: 02/16/09

MCAWW 245.1-DISS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ISB1787-01 (Outfall 008 - Water) - cont.									
Reporting Units: ug/L									
Mercury U	MCAWW 245.1-DISS	9050182	0.027	0.2	ND	1	02/19/09	02/19/09	

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Project ID: Annual Outfall 008

Report Number: ISB1787

Sampled: 02/16/09
Received: 02/16/09

ORGANOCHLORINE PESTICIDES (EPA 608)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ISB1787-01 (Outfall 008 - Water) - cont.									
Reporting Units: ug/l									
4,4'-DDD	UJIC	9B20074	0.0019	0.0047	ND	0.943	02/20/09	02/22/09	
4,4'-DDE	UJIC	9B20074	0.0028	0.0047	ND	0.943	02/20/09	02/22/09	
4,4'-DDT	UJIC	9B20074	0.0038	0.0094	ND	0.943	02/20/09	02/22/09	
Aldrin	U	9B20074	0.0014	0.0047	ND	0.943	02/20/09	02/22/09	
alpha-BHC	R/D	9B20074	0.0024	0.0047	0.012	0.943	02/20/09	02/22/09	N2
beta-BHC	J/DNQ,C	9B20074	0.0038	0.0094	0.0052	0.943	02/20/09	02/22/09	Ja
delta-BHC	UJIC	9B20074	0.0033	0.0047	ND	0.943	02/20/09	02/22/09	
Dieldrin	U	9B20074	0.0019	0.0047	ND	0.943	02/20/09	02/22/09	
Endosulfan I	UJIC	9B20074	0.0019	0.0047	ND	0.943	02/20/09	02/22/09	
Endosulfan II	UJIC	9B20074	0.0028	0.0047	ND	0.943	02/20/09	02/22/09	
Endosulfan sulfate	UJIC	9B20074	0.0028	0.0094	ND	0.943	02/20/09	02/22/09	
Endrin	UJIC	9B20074	0.0019	0.0047	ND	0.943	02/20/09	02/22/09	
Endrin aldehyde	J/DNQ,C	9B20074	0.0019	0.0094	0.0027	0.943	02/20/09	02/22/09	C, Ja
Endrin ketone	UJIC	9B20074	0.0028	0.0094	ND	0.943	02/20/09	02/22/09	
gamma-BHC (Lindane)	UJIC	9B20074	0.0028	0.019	ND	0.943	02/20/09	02/22/09	
Heptachlor	UJIC	9B20074	0.0028	0.0094	ND	0.943	02/20/09	02/22/09	
Heptachlor epoxide	UJIC	9B20074	0.0024	0.0047	ND	0.943	02/20/09	02/22/09	
Methoxychlor	U	9B20074	0.0033	0.0047	ND	0.943	02/20/09	02/22/09	
Chlordane	U	9B20074	0.038	0.094	ND	0.943	02/20/09	02/22/09	
Toxaphene	U	9B20074	0.24	0.47	ND	0.943	02/20/09	02/22/09	
Surrogate: Decachlorobiphenyl (45-120%)					75 %				
Surrogate: Tetrachloro-m-xylene (35-115%)					67 %				

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Project ID: Annual Outfall 008
Report Number: ISB1787

Sampled: 02/16/09
Received: 02/16/09

ORGANOCHLORINE PESTICIDES (EPA 608)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ISB1787-01RE1 (Outfall 008 - Water) - cont.									
Reporting Units: ug/l									
4,4'-DDD	EPA 608	9B23113	0.0019	0.0048	ND	0.957	02/23/09	02/25/09	
4,4'-DDE	EPA 608	9B23113	0.0029	0.0048	ND	0.957	02/23/09	02/25/09	
4,4'-DDT	EPA 608	9B23113	0.0038	0.0096	ND	0.957	02/23/09	02/25/09	
Aldrin	EPA 608	9B23113	0.0014	0.0048	ND	0.957	02/23/09	02/25/09	
alpha-BHC	EPA 608	9B23113	0.0024	0.0048	0.0098	0.957	02/23/09	02/25/09	N2
beta-BHC	EPA 608	9B23113	0.0038	0.0096	0.0068	0.957	02/23/09	02/25/09	Ja
delta-BHC	EPA 608	9B23113	0.0033	0.0048	ND	0.957	02/23/09	02/25/09	
Dieldrin	EPA 608	9B23113	0.0019	0.0048	ND	0.957	02/23/09	02/25/09	
Endosulfan I	EPA 608	9B23113	0.0019	0.0048	ND	0.957	02/23/09	02/25/09	
Endosulfan II	EPA 608	9B23113	0.0029	0.0048	ND	0.957	02/23/09	02/25/09	
Endosulfan sulfate	EPA 608	9B23113	0.0029	0.0096	ND	0.957	02/23/09	02/25/09	
Endrin	EPA 608	9B23113	0.0019	0.0048	ND	0.957	02/23/09	02/25/09	
Endrin aldehyde	EPA 608	9B23113	0.0019	0.0096	ND	0.957	02/23/09	02/25/09	
Endrin ketone	EPA 608	9B23113	0.0029	0.0096	ND	0.957	02/23/09	02/25/09	
gamma-BHC (Lindane)	EPA 608	9B23113	0.0029	0.019	ND	0.957	02/23/09	02/25/09	
Heptachlor	EPA 608	9B23113	0.0029	0.0096	ND	0.957	02/23/09	02/25/09	
Heptachlor epoxide	EPA 608	9B23113	0.0024	0.0048	ND	0.957	02/23/09	02/25/09	
Methoxychlor	EPA 608	9B23113	0.0033	0.0048	ND	0.957	02/23/09	02/25/09	
Chlordane	EPA 608	9B23113	0.038	0.096	ND	0.957	02/23/09	02/25/09	
Toxaphene	EPA 608	9B23113	0.24	0.48	ND	0.957	02/23/09	02/25/09	
Surrogate: Decachlorobiphenyl (45-120%)					87 %				
Surrogate: Tetrachloro-m-xylene (35-115%)					81 %				

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Attention: Bronwyn Kelly

Project ID: Annual Outfall 008

Report Number: ISB1787

Sampled: 02/16/09
Received: 02/16/09

CFR136A 608

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ISB1787-01 (Outfall 008 - Water) - cont.									
Reporting Units: ug/L									
alpha-BHC	CFR136A 608	9064381	0.0053	0.05	ND	1	03/05/09	03/10/09	HTV
Surrogate: Decachlorobiphenyl (32-144%)					53 %				
Surrogate: Tetrachloro-m-xylene (52-117%)					86 %				

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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 008

Report Number: ISB1787

Sampled: 02/16/09

Received: 02/16/09

TOTAL PCBS (EPA 608)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ISB1787-01 (Outfall 008 - Water) - cont.									
Reporting Units: ug/l									
Aroclor 1016	EPA 608	9B20074	0.24	0.47	ND	0.943	02/20/09	02/21/09	
Aroclor 1221	EPA 608	9B20074	0.24	0.47	ND	0.943	02/20/09	02/21/09	
Aroclor 1232	EPA 608	9B20074	0.24	0.47	ND	0.943	02/20/09	02/21/09	
Aroclor 1242	EPA 608	9B20074	0.24	0.47	ND	0.943	02/20/09	02/21/09	
Aroclor 1248	EPA 608	9B20074	0.24	0.47	ND	0.943	02/20/09	02/21/09	
Aroclor 1254	EPA 608	9B20074	0.24	0.47	ND	0.943	02/20/09	02/21/09	
Aroclor 1260	EPA 608	9B20074	0.24	0.47	ND	0.943	02/20/09	02/21/09	
Surrogate: Decachlorobiphenyl (45-120%)					90 %				

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TestAmerica Irvine

Client Sample ID: ISB1787-01

Outfall 008

Radiochemistry

Lab Sample ID: F9B180218-001
 Work Order: K7DJJD
 Matrix: WATER

Date Collected: 02/16/09 0830
 Date Received: 02/18/09 0930

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	mdc	Prep Date	Analysis Date
Gamma Cs-137 & Hits by EPA 901.1 MOD				pCi/L		Batch # 9058211	Yld %
Cesium 137 <i>U/J/H</i>	3.2	U	8.8	20.0	16	02/27/09	03/14/09
Potassium 40 <i>↓ ↓</i>	-50	U	380		240	02/27/09	03/14/09
Gross Alpha/Beta EPA 900				pCi/L		Batch # 9050133	Yld %
Gross Alpha <i>U/J/H,C</i>	1.9	U	1.3	3.0	1.9	02/24/09	03/03/09
Gross Beta <i>J/H</i>	4.7		1.1	4.0	1.4	02/24/09	03/03/09
TRITIUM (Distill) by EPA 906.0 MOD				pCi/L		Batch # 9066052	Yld %
Tritium <i>U</i>	300	U	200	500	310	03/07/09	03/13/09
SR-90 BY GFPC EPA-905 MOD				pCi/L		Batch # 9049442	Yld % 36
Strontium 90 <i>U</i>	0.34	U	0.46	3.00	0.76	02/18/09	02/28/09
Total Uranium by KPA ASTM 5174-91				pCi/L		Batch # 9050413	Yld %
Total Uranium <i>J/H, DNQ</i>	0.549	J	0.062	0.677	0.21	02/19/09	03/08/09
Radium 226 by EPA 903.0 MOD				pCi/L		Batch # 9049439	Yld % 76
Radium (226) <i>J/DNQ</i>	0.24	J	0.15	1.00	0.19	02/18/09	03/13/09
Radium 228 by GFPC EPA 904 MOD				pCi/L		Batch # 9049441	Yld % 68
Radium 228 <i>U</i>	-0.05	U	0.30	1.00	0.54	02/18/09	03/13/09

LEVEL IV

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC.

J Result is greater than sample detection limit but less than stated reporting limit.

U Result is less than the sample detection limit.

LOT # F9B180218

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MWH-Pasadena/Boeing 618 Michillinda Avenue, Suite 200 Arcadia, CA 91007 Attention: Bronwyn Kelly	Project ID: Annual Outfall 008 Report Number: ISB1787	Sampled: 02/16/09 Received: 02/16/09
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ORGANIC COMPOUNDS BY GC/MS (EPA 525.2)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ISB1787-01 (Outfall 008 - Water) - cont.									
Reporting Units: ug/l									
Chlorpyrifos U	EPA 525.2	C9B1701	0.10	1.0	ND	1	02/17/09	02/17/09	
Diazinon ↓	EPA 525.2	C9B1701	0.24	0.25	ND	1	02/17/09	02/17/09	
Surrogate: 1,3-Dimethyl-2-nitrobenzene (70-130%)					108 %				
Surrogate: 1,3-Dimethyl-2-nitrobenzene (70-130%)					108 %				
Surrogate: Triphenylphosphate (70-130%)					126 %				
Surrogate: Triphenylphosphate (70-130%)					126 %				
Surrogate: Perylene-d12 (70-130%)					112 %				
Surrogate: Perylene-d12 (70-130%)					112 %				

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---	--	---

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ISB1787-01 (Outfall 008 - Water) - cont.									
Reporting Units: mg/l									
Ammonia-N (Distilled) *	SM4500NH3-C	9B24128	0.50	0.50	1.1	1	02/24/09	02/24/09	
Chloride *	EPA 300.0	9B16057	0.25	0.50	8.0	1	02/16/09	02/16/09	
Total Cyanide	SM4500-CN-C,E	9B19142	0.0022	0.0050	0.0087	1	02/19/09	02/19/09	
Fluoride *	SM 4500-F-C	9B20008	0.020	0.10	0.23	1	02/20/09	02/20/09	B
Nitrate-N	EPA 300.0	9B16057	0.060	0.11	1.9	1	02/16/09	02/16/09	
Nitrite-N	EPA 300.0	9B16057	0.090	0.15	ND	1	02/16/09	02/16/09	
Nitrate/Nitrite-N	EPA 300.0	9B16057	0.15	0.26	1.9	1	02/16/09	02/16/09	
Sulfate	EPA 300.0	9B16057	0.20	0.50	10	1	02/16/09	02/16/09	
Total Dissolved Solids	SM2540C	9B18065	10	10	140	1	02/18/09	02/18/09	
Total Suspended Solids	SM 2540D	9B21068	1.0	10	55	1	02/21/09	02/21/09	

LEVEL IV

*Analysis not validated

TestAmerica Irvine

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Project Manager

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