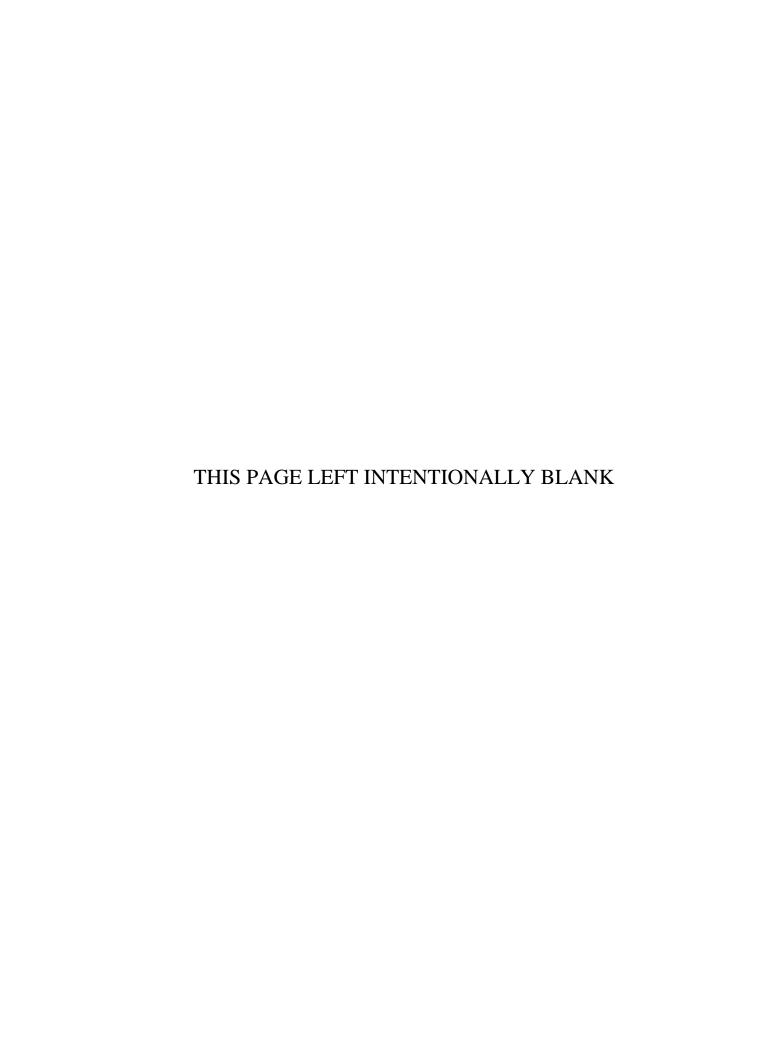
APPENDIX G

Section 3

Outfall 001 - February 6, 2010

MECX Data Validation Report





DATA VALIDATION REPORT

Boeing SSFL NPDES

SAMPLE DELIVERY GROUP: ITB0887

Prepared by

MEC^X, LP 12269 East Vassar Drive Aurora, CO 80014

I. INTRODUCTION

Task Order Title: Boeing SSFL NPDES

Contract Task Order: 1261.100D.00

Sample Delivery Group: ITB0887 Project Manager: B. Kelly

Matrix: Water
QC Level: IV

No. of Samples: 4
No. of Reanalyses/Dilutions: 1

Laboratory: TestAmerica-Irvine

Table 1. Sample Identification

Client ID	Laboratory ID	Sub- Laboratory ID	Matrix	Collected	Method
Outfall 001 (Grab)	ITB0887-01		Water	2/5/10 1:40 PM	120.1, 8015M
Trip Blank	ITB0887-02		Water	2/6/10 11:15 AM	624
Outfall 001	ITB0887- 04RE1	G0B100422- 001	Water	2/6/10 11:15 AM	1613B
Outfall 001 (Comp)	ITB0887-04	G0B100422- 001, F0B090486- 001, 987726	Water	2/5/10 1:40 PM	180.1, 200.7, 200.7 (Diss), 200.8, 200.8 (Diss), 245.1, 245.1 (Diss), 625, 900.0, 901.1, 903.0, 904, 905, 906.0, 1613B, 8315M, SM2340B, SM2340B (Diss), SM2540D, SM5310B, ASTM 5174-91
Outfall 001 (Composite) Dup	ITB0887-05		Water	2/6/2010 6:40:00 AM	SM2340B

II. Sample Management

No anomalies were observed regarding sample management. The samples were received at ambient temperature at TestAmerica-St. Louis and although the case narrative reported that the samples were received with the temperature limits at Truesdail, the sample receiving documentation noted the temperature to be 14°C. Due to the non volatile nature of these analytes, no qualifications were required. The samples in this SDG were received at the remaining laboratories within the temperature limits of 4°C ±2°C. According to the case narrative for this SDG, the samples were received intact, on ice, and properly preserved, if applicable. The COCs were appropriately signed and dated by field and/or laboratory personnel. Custody seals were intact at TestAmerica-St. Louis and TestAmerica-West Sacramento. As the samples were delivered by courier to the remaining laboratories, no custody seals were required. If necessary, the client ID was added to the sample result summary by the reviewer.

Data Qualifier Reference Table

Qualifie	er 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 or PCB congeners.	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
Н	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
С	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.
В	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.
Е	Not applicable.	Duplicates showed poor agreement.
1	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
Α	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
Т	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.
Р	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.
*11, *111	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 1613—Dioxin/Furans

Reviewed By: L. Calvin

Date Reviewed: March 27, 2010

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.
 - O GC Column Performance: A Windows Defining Mix (WDM) containing the first and last eluting congeners of each descriptor and isomer specificity compounds was analyzed with the initial calibration sequence and at the beginning of each analytical sequence. 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.
 - o Initial Calibration: Initial calibration criteria were met. The initial calibration was acceptable with %RSDs ≤20% for the 16 native compounds (calibration by isotope dilution) and ≤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.
 - o 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 detects between the EDL and the RL for all target compounds except 2,3,7,8-TCDD, 1,2,3,7,8-PeCDF, and 2,3,4,7,8-PeCDF. Most detects in the method blank did not meet ratio criteria and were reported as EMPCs; however, due to the extent of contamination present in the method blank, it was the reviewer's professional opinion that those results be utilized to qualify applicable sample results.

Isomers present in the sample between the EDLs and RLs were qualified as nondetected, "U," at the levels of contamination. The sample results for totals HpCDD and TCDF were qualified as nondetected, "U," as the same peaks comprising the totals were present in the method blank. Total PeCDF in the sample did not contain the same peaks as the method blank and was therefore not qualified. Remaining total results were qualified as estimated, "J," as only a portion of the total was considered method blank contamination. The method blank result for OCDD was insufficient to qualify the sample result.

- 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.
 - o 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. The laboratory performed a
 confirmation analysis for 2,3,7,8-TCDF; however, as the initial result was previously
 qualified as nondetected for method blank contamination, the confirmation result was
 rejected, "R," in favor of the original result.
- Compound Quantification and Reported Detection Limits: Compound quantitation was verified by recalculating a representative number of reportable sample results. Any isomers reported as EMPCs and not previously qualified as method blank contamination were qualified as estimated and nondetected, "UJ," at the level of the EMPC. Any total results reported as EMPCs or including EMPCs were qualified as estimated, "J." Any detects reported below the EDL, or 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 EDL.

B. EPA METHOD 8315M—Hydrazines

Reviewed By: P. Meeks

Date Reviewed: March 23, 2010

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the MEC^{\times} Data Validation Procedure for General Minerals (DVP-6, Rev. 0), EPA Method 8315M, and the National Functional Guidelines for Organic Data Review (10/99).

- Holding Times: Extraction and analytical holding times were met. The water sample was derivitized within three days of collection and analyzed within 3 days of derivitization.
- Calibration: Calibration criteria were met. The initial calibration r² values were ≥0.995. The ICV and QCS recoveries were within 85-115%.
- Blanks: The method blank had no target compound detects above the MDL.
- Blank Spikes and Laboratory Control Samples: Recoveries and RPDs 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 and precision were evaluated based on LCS/LCSD 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. 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. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. Any results reported between the MDL and 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 reporting limit.

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

Reviewed By: P. Meeks

Date Reviewed: March 21, 2010

The sample listed in Table 1 for these analyses 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 200.7, 200.8, 245.1, and SM2340B, and the National Functional Guidelines for Inorganic Data Review (7/02).

- Holding Times: Analytical holding times, six months for ICP and ICP-MS metals and 28 days for mercury, were met.
- Tuning: The measured mass for beryllium was >0.1 amu from the true value in the analytical sequence associated with dissolved copper. As the mass of copper is closer to the mass of magnesium, which was acceptably measured, no qualifications were required. The remaining mass calibration and resolution checks criteria were met. All tuning solution %RSDs were ≤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 r² values were ≥0.995 and all initial and continuing calibration recoveries were within 90-110% for the ICP and ICP-MS metals and 85-115% for mercury. CRDL/CRI recoveries were within the control limits of 70-130%.
- Blanks: Boron was detected in the dissolved method blank at 45.3 μg/L; therefore, dissolved boron detected in the sample was qualified as nondetected, "U," at the level of contamination. Method blanks and CCBs had no other applicable detects.
- Interference Check Samples: Recoveries were within the method- (200.7) or laboratory- (200.8) established control limits, except for potassium in the ICSAB 200.7 total analysis. As the concentration of potassium in the site sample was less than 5% of the ICSAB concentration, no qualifications were required. Boron was reported in the ICSAs associated with the total and dissolved analyses at -41 and -75 μg/L, respectively; however, the concentration of the interfering analyte, iron, was not sufficient to cause matrix interference in the site sample. Most analytes were detected in the 200.8 ICSA; however the reviewer was unable to determine if these detects were due to level contamination of the standard. There were no other target compounds present in the ICSA solution at concentrations indicative of matrix interference.
- Blank Spikes and Laboratory Control Samples: Recoveries were within laboratoryestablished QC limits.
- Laboratory Duplicates: No laboratory duplicate analyses were performed on the sample in this SDG.

 Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were performed on the 200.7 total and dissolved analytes. The recoveries and RPDs were within method-established QC limits. 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 sample internal standard intensities were within 60-125% of the internal standard intensities measured in the initial calibration blank. Copper was not bracketed by an internal standard of lower mass; therefore, copper detected in the sample was qualified as estimated, "J."
- 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. The 200.8 analytes were reported from a 2x dilution due to matrix interference. Dissolved chromium was not reported on the sample result summary or the QC summaries. Dissolved chromium was not detected in the dissolved fraction and all QC results were acceptable.

When the sample results were qualified and the reviewer was able to clearly determine bias, detected results were qualified as either "J+" or "J-"; otherwise, bias was not indicated in the qualification. Any detects between the method detection limit and 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. VARIOUS EPA METHODS — Radionuclides

Reviewed By: P. Meeks

Date Reviewed: March 23, 2010

The samples listed in Table 1 for these analyses were 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 aliquots for total uranium and radium-228 were prepared beyond 3x
the five-day holding time for unpreserved samples; therefore, total uranium in the sample

was qualified as estimated, "J," and nondetected radium-228 was rejected, "R." Aliquots for gross alpha and gross beta were prepared beyond the five-day analytical holding time for unpreserved samples; therefore, the detected results for these analytes were qualified as estimated, "J." Aliquots for radium-226, strontium-90, and gamma spectroscopy were prepared within the five-day holding time for unpreserved aqueous samples. The tritium sample was analyzed within 180 days of collection.

• Calibration: The laboratory calibration information included the standard certificates and applicable preparation/dilutions logs for NIST-traceability.

The gross alpha and radium-226 detector efficiencies were less than 20%; therefore, the results for these analytes were qualified as estimated, "J," for detects and, "UJ," for nondetects. The remaining detector efficiencies were greater than 20%.

The tritium aliquot was spiked for efficiency determination; therefore, no calibration was necessary. All chemical yields were at least 40% and 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.

The reviewer noted that the KPA preparation log was not signed as reviewed.

- Blanks: Tritium was detected in the method blank but was not detected in the site samples. There were no other analytes detected in the method blanks or the KPA CCBs.
- Blank Spikes and Laboratory Control Samples: The recoveries and radium-228 RPD 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 MS/MSD analyses were performed for the sample in this SDG. Method accuracy was evaluated based on the 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. Any
 detects between the MDA and 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.

E. EPA METHOD 625—Semivolatile Organic Compounds (SVOCs)

Reviewed By: P. Meeks

Date Reviewed: March 23. 2010

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the MEC^{\times} Data Validation Procedure for Semivolatile Organics (DVP-3, Rev. 0), EPA Method 625, 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 seven days of collection and analyzed within 40 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 %RSD for di-n-octyl phthalate exceeded the control limit and the r² value for benzoic aicd was less than the control limit; therefore, the nondetected results for these compounds were qualified as estimated, "UJ." Initial calibration average RRFs were ≥0.05 and the remaining %RSDs ≤15% or r² values were ≥0.995. The second source ICV had %Ds above 20% for benzyl alcohol, hexachlorobutadiene, 2,4-dinitrophenol, pentachlorophenol, 4,6-dinitro-2-methylphenol, and n-nitrosodiphenylamine; therefore, the nondetected results for these compound were qualified as estimated, "UJ." The ICV RRFs were ≥0.05 and the remaining %Ds ≤20%. The continuing calibration associated with the sample analysis had %Ds above 20% for benzoic acid, hexachlorocyclopentadiene, and di-n-octyl phthalate; therefore, the nondetected results for these compounds were qualified as estimated, "UJ." The continuing calibration RRFs were ≥0.05 and the remaining %Ds ≤20%.
- Blanks: The reviewer noted an unreported detect for n-nitrosodimethylamine in the method blank at 0.60 μg/L; however, the analyte was not detected in the site sample. Method blanks had no other target compound detects above the MDL.
- Blank Spikes and Laboratory Control Samples: The recoveries were within laboratoryestablished 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 LCS 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.
- Internal Standards Performance: The internal standard area counts and retention times were within the control limits established by the continuing calibration standards:
 -50%/+100% for internal standard areas and ±30 seconds for retention times.
- Compound Identification: Compound identification was verified. 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. 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.
- Tentatively Identified Compounds: TICs were not reported by the laboratory for this SDG.
- System Performance: Review of the raw data indicated no problems with system performance.

F. EPA METHOD 8015B—Extractable Total Fuel Hydrocarbons (EFHs)

Reviewed By: P. Meeks

Date Reviewed: March 23, 2010

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the MEC^{\times} Data Validation Procedure for Total Fuel Hydrocarbons (DVP-8, Rev. 0), EPA Method 8015B, and the National Functional Guidelines for Organic Data Review (2/94).

- Holding Times: Extraction and analytical holding times were met. The water sample was extracted within 14 days of collection and analyzed within 40 days of extraction.
- Calibration: Calibration criteria were met. Initial calibration %RSDs were ≤20% and continuing calibration %Ds ≤15%.
- Blanks: The method blank had no target compound detect above the MDL.

 Blank Spikes and Laboratory Control Samples: The recovery was within laboratoryestablished QC limits.

- Surrogate Recovery: The recovery was within laboratory-established QC limits.
- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were not performed on the sample from this SDG. Evaluation of method accuracy was based on the LCS 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. GRO (C4-C12) was reported. Review of the sample chromatogram and retention times 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. 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.

G. VARIOUS EPA METHODS—General Minerals

Reviewed By: P. Meeks

Date Reviewed: March 23, 2010

The samples listed in Table 1 for these analyses were validated based on the guidelines outlined in the MEC^{x} Data Validation Procedure for General Minerals (DVP-6, Rev. 0), EPA Methods 120.1, 180.1, SM2540D, SM5310B, and the National Functional Guidelines for Inorganic Data Review (7/02).

- Holding Times: All analytical holding times were met.
- Calibration: Calibration criteria were met. Initial calibration r² values were ≥0.995 and all initial and continuing calibration recoveries were within 90-110%. Balance calibration check logs were acceptable.
- Blanks: Method blanks and CCBs had no detects.

 Blank Spikes and Laboratory Control Samples: Recoveries were within laboratoryestablished QC limits.

- Laboratory Duplicates: A laboratory duplicate analysis was performed for specific conductance. The RPD was within the laboratory-established control limit.
- 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. When the sample results were qualified and the reviewer was able to clearly determine bias, detected results were qualified as either "J+" or "J-"; otherwise, bias was not indicated in the qualification.

In order to report the result within the linear range of the calibration, turbidity was reported from a 10× dilution. Any detects between the method detection limit and 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.

TRUESDAIL LABORATORIES, INC.

EXCELLENCE IN INDEPENDENT TESTING



Established 1931

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Client:

Test America - Irvine

17461 Derian Avenue, Suite 100

Irvine, CA 92614-5817

Attention:

Joseph Doak Water / 1 Sample

Sample: Project Name:

ITB0887

Project Number: Method Number: ITB0887 EPA 8315 (Modified)

Investigation:

Hydrazines

REPORT

Laboratory No: 987726

Report Date: February 11, 2010

Sampling Date: February 6, 2010 Receiving Date: February 8, 2010

Extraction Date: February 8, 2010
Analysis Date: February 9, 2010

Analysis Date: Febru

Reported By: JS

Analytical Results

		Sample	Dilution	Monomethyl	u-Dimethyl	Hydrazine	Qualifier
Sample ID	Sample Description	Amount (mL)	Factor	Hydrazine	Hydrazine		Codes
708690-MB	Method Blank	100	1	→ ND	% ND	₹ ND	None
987726 Outfal	1 001 ITB0887-04	100	1	○ ND	∪ ND	OND	None
MDL				0.857	1.42	0.452	
PQL				5.0	5.0	1.00	
Sample Reportin	g Limits			5.0	5.0	1.00	

Note: Results based on detector #1 (UV=365nm) data.

LEVEL IV

Linda Saetern, Project Manager

Analytical Services, Truesdail Laboratories, Inc.

Analysis not valo docked

PM 3/29/10

This report applies only to the sample, or samples, investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a mutual protection to clients, the public, and these laboratories, this report is submitted and accepted for the exclusive use of the client to whom it is addressed and upon the condition that it is not to be used, in whole or in part, in any advertising or publicity matter without prior written authorization from Truesdail Laboratories.

Validated Sample Result Forms ITB0887

Sample Name	Outfall 001 (C	Composite)	Matri	x Type:	WATER	7	alidation Le	vel: IV	
Lab Sample Name:	ITB0887-04	Sam	ple Date:	2/6/2010	6:40:00 AM				
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes	
Total Uranium	7440-61-1	0.369	0.693	0.21	pCi/L	Jb	J	H,DNQ	
Analysis Metho	ed EPA	120.1							
Sample Name	Outfall 001 (0	1 (Grab) Matrix Type: Water Validation					alidation Le	n Level: IV	
Lab Sample Name:	ITB0887-01	Sam	ple Date:	2/6/2010	10:20:00 AM				
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes	
Specific Conductance	NA	130	1.0	1.0	uS/cm				
Analysis Metho	d EPA	180.1							
•									
Sample Name	Outfall 001 (0	Composite)	Matri	x Type:	Water	V	alidation Le	vel: IV	
_	Outfall 001 (C	•		• •	Water 6:40:00 AM	V	alidation Le	vel: IV	
Sample Name Lab Sample Name: Analyte		•		• •		Lab Qualifier	Validation Le Validation Qualifier	vel: IV Validation Notes	

Monday, April 05, 2010 Page 1 of 9

Analysis Method EPA 200.7

Sample Name	Outfall 001 (C	Composite) Matri	ix Type:	Water	Validation Level: IV		
Lab Sample Name:	ITB0887-04	Sam	ple Date:	2/6/2010	6:40:00 AM			
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Arsenic	7440-38-2	ND	10	7.0	ug/l		U	
Barium	7440-39-3	0.076	0.010	0.0060	mg/l			
Beryllium	7440-41-7	ND	2.0	0.90	ug/l		U	
Boron	7440-42-8	0.042	0.050	0.020	mg/l	Ja	J	DNQ
Calcium	7440-70-2	13	0.10	0.050	mg/l	MHA		
Chromium	7440-47-3	11	5.0	2.0	ug/l			
Cobalt	7440-48-4	2.5	10	2.0	ug/l	Ja	J	DNQ
Iron	7439-89-6	9.7	0.040	0.015	mg/l	MHA		
Magnesium	7439-95-4	5.4	0.020	0.012	mg/l			
Manganese	7439-96-5	150	20	7.0	ug/l			
Nickel	7440-02-0	6.1	10	2.0	ug/l	Ja	J	DNQ
Vanadium	7440-62-2	20	10	3.0	ug/l			
Zinc	7440-66-6	34	20	6.0	ug/l			

Analysis Method EPA 200.7-Diss

Sample Name	Outfall 001 (0	Composite) Matri	іх Туре:	Water	Validation Level: IV			
Lab Sample Name:	ITB0887-04	Sam	ple Date:	2/6/2010	6:40:00 AM				
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes	
Arsenic	7440-38-2	ND	10	7.0	ug/l		U		
Barium	7440-39-3	0.015	0.010	0.0060	mg/l				
Beryllium	7440-41-7	ND	2.0	0.90	ug/l		U		
Boron	7440-42-8	ND	0.070	0.020	mg/l	В	U	В	
Calcium	7440-70-2	11	0.10	0.050	mg/l	MHA			
Cobalt	7440-48-4	ND	10	2.0	ug/l		U		
Iron	7439-89-6	0.64	0.040	0.015	mg/l				
Magnesium	7439-95-4	3.2	0.020	0.012	mg/l				
Manganese	7439-96-5	ND	20	7.0	ug/l		U		
Nickel	7440-02-0	ND	10	2.0	ug/l		U		
Vanadium	7440-62-2	ND	10	3.0	ug/l		U		
Zinc	7440-66-6	10	20	6.0	ug/l	Ja	J	DNQ	

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Analysis Method EPA 200.	Analysis	Method	EPA	200.8
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Sample Name	Outfall 001 (C	Composite	e) Matri	ix Type:	Water	7	Validation Le	vel: IV	
Lab Sample Name:	ITB0887-04	Sam	ple Date:	2/6/2010	6:40:00 AM				
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes	
Antimony	7440-36-0	ND	4.0	0.60	ug/l	RL1	U		
Cadmium	7440-43-9	ND	2.0	0.20	ug/l	RL1	U		
Copper	7440-50-8	14.3	4.0	1.0	ug/l		J	*III	
Lead	7439-92-1	6.4	2.0	0.40	ug/l				
Selenium	7782-49-2	1.3	4.0	1.0	ug/l	RL1, Ja	J	DNQ	
Silver	7440-22-4	ND	2.0	0.20	ug/l	RL1	U		
Thallium	7440-28-0	ND	2.0	0.40	ug/l	RL1	U		
Analysis Metho	od EPA	200.8-I	<i>Diss</i>						
Sample Name	Outfall 001 (C	Outfall 001 (Composite) Matrix Type: Water			V	Validation Level: IV			
Lab Sample Name:	ITB0887-04	Sam	ple Date:	2/6/2010	6:40:00 AM				
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes	
Antimony	7440-36-0	ND	2.0	0.30	ug/l		U		
Cadmium	7440-43-9	ND	1.0	0.10	ug/l		U		
Copper	7440-50-8	2.3	2.0	0.50	ug/l		J	*III	
ead	7439-92-1	ND	1.0	0.20	ug/l		U		
elenium	7782-49-2	ND	2.0	0.50	ug/l		U		
Silver	7440-22-4	ND	1.0	0.10	ug/l		U		
Γhallium	7440-28-0	ND	1.0	0.20	ug/l		U		
Analysis Metho	od EPA	245.1							
Sample Name	Outfall 001 (C	Composite) Matri	іх Туре:	Water	7	Validation Le	vel: IV	
Lab Sample Name:	ITB0887-04	Sam	ple Date:	2/6/2010	6:40:00 AM				
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes	
Mercury	7439-97-6	ND	0.20	0.10	ug/l		U		
Analysis Metho	od EPA	245.1-I	<i>Diss</i>						
Sample Name	Outfall 001 (C	Composite) Matri	іх Туре:	Water	V	Validation Le	vel: IV	
Lab Sample Name:	ITB0887-04	Sam	ple Date:	2/6/2010	6:40:00 AM				
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes	
Mercury	7439-97-6	ND	0.20	0.10	ug/l		U		

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Sample Name	Outfall 001 (0	Composite) Matr	ix Type:	Water	Validation Level: IV		
Lab Sample Name:	ITB0887-04	Sam	ple Date:	2/6/2010	6:40:00 AM			
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,2,4-Trichlorobenzene	120-82-1	ND	0.94	0.094	ug/l		U	
1,2-Dichlorobenzene	95-50-1	ND	0.47	0.094	ug/l		U	
1,2- Diphenylhydrazine/Azobenze	103-33-3	ND	0.94	0.094	ug/l		U	
1,3-Dichlorobenzene	541-73-1	ND	0.47	0.094	ug/l		U	
1,4-Dichlorobenzene	106-46-7	ND	0.47	0.19	ug/l		U	
2,4,5-Trichlorophenol	95-95-4	ND	1.9	0.19	ug/l		U	
2,4,6-Trichlorophenol	88-06-2	ND	0.94	0.094	ug/l		U	
2,4-Dichlorophenol	120-83-2	ND	1.9	0.19	ug/l		U	
2,4-Dimethylphenol	105-67-9	ND	1.9	0.28	ug/l		U	
2,4-Dinitrophenol	51-28-5	ND	4.7	0.85	ug/l		UJ	С
2,4-Dinitrotoluene	121-14-2	ND	4.7	0.19	ug/l		U	
2,6-Dinitrotoluene	606-20-2	ND	4.7	0.094	ug/l		U	
2-Chloronaphthalene	91-58-7	ND	0.47	0.094	ug/l		U	
2-Chlorophenol	95-57-8	ND	0.94	0.19	ug/l		U	
2-Methylnaphthalene	91-57-6	ND	0.94	0.094	ug/l		U	
2-Methylphenol	95-48-7	ND	1.9	0.094	ug/l		U	
2-Nitroaniline	88-74-4	ND	4.7	0.094	ug/l		U	
2-Nitrophenol	88-75-5	ND	1.9	0.094	ug/l		U	
3,3'-Dichlorobenzidine	91-94-1	ND	4.7	4.7	ug/l		U	
3-Nitroaniline	99-09-2	ND	4.7	0.19	ug/l		U	
4,6-Dinitro-2-methylphenol	534-52-1	ND	4.7	0.19	ug/l		UJ	С
4-Bromophenyl phenyl ether	101-55-3	ND	0.94	0.094	ug/l		U	
4-Chloro-3-methylphenol	59-50-7	ND	1.9	0.19	ug/l		U	
4-Chloroaniline	106-47-8	ND	1.9	0.094	ug/l		U	
4-Chlorophenyl phenyl ether	7005-72-3	ND	0.47	0.094	ug/l		U	
4-Methylphenol	106-44-5	ND	4.7	0.19	ug/l		U	
4-Nitroaniline	100-01-6	ND	4.7	0.47	ug/l		U	
4-Nitrophenol	100-02-7	ND	4.7	2.4	ug/l		U	
Acenaphthene	83-32-9	ND	0.47	0.094	ug/l		U	
Acenaphthylene	208-96-8	ND	0.47	0.094	ug/l		U	
Aniline	62-53-3	ND	9.4	0.28	ug/l		U	
Anthracene	120-12-7	ND	0.47	0.094	ug/l		U	
Benzidine	92-87-5	ND	4.7	4.7	ug/l		U	
Benzo(a)anthracene	56-55-3	ND	4.7	0.094	ug/l		U	
Benzo(a)pyrene	50-32-8	ND	1.9	0.094	ug/l		U	
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Analysis Method EPA 625

Benzo(b)fluoranthene	205-99-2	ND	1.9	0.094	ug/l		U	
Benzo(g,h,i)perylene	191-24-2	ND	4.7	0.094	ug/l		U	
Benzo(k)fluoranthene	207-08-9	ND	0.47	0.094	ug/l		U	
Benzoic acid	65-85-0	ND	19	2.8	ug/l		UJ	C
Benzyl alcohol	100-51-6	ND	4.7	0.094	ug/l		UJ	C
Bis(2-chloroethoxy)methane	111-91-1	ND	0.47	0.094	ug/l		U	
Bis(2-chloroethyl)ether	111-44-4	ND	0.47	0.094	ug/l		U	
Bis(2-chloroisopropyl)ether	108-60-1	ND	0.47	0.094	ug/l		U	
Bis(2-ethylhexyl)phthalate	117-81-7	ND	4.7	1.6	ug/l		U	
Butyl benzyl phthalate	85-68-7	ND	4.7	0.66	ug/l		U	
Chrysene	218-01-9	ND	0.47	0.094	ug/l		U	
Dibenz(a,h)anthracene	53-70-3	ND	0.47	0.094	ug/l		U	
Dibenzofuran	132-64-9	ND	0.47	0.094	ug/l		U	
Diethyl phthalate	84-66-2	0.13	0.94	0.094	ug/l	Ja	J	DNQ
Dimethyl phthalate	131-11-3	ND	0.47	0.094	ug/l		U	
Di-n-butyl phthalate	84-74-2	ND	1.9	0.19	ug/l		U	
Di-n-octyl phthalate	117-84-0	ND	4.7	0.094	ug/l		UJ	C
Fluoranthene	206-44-0	ND	0.47	0.094	ug/l		U	
Fluorene	86-73-7	ND	0.47	0.094	ug/l		U	
Hexachlorobenzene	118-74-1	ND	0.94	0.094	ug/l		U	
Hexachlorobutadiene	87-68-3	ND	1.9	0.19	ug/l		UJ	C
Hexachlorocyclopentadiene	77-47-4	ND	4.7	0.094	ug/l		UJ	C
Hexachloroethane	67-72-1	ND	2.8	0.19	ug/l		U	
Indeno(1,2,3-cd)pyrene	193-39-5	ND	1.9	0.094	ug/l		U	
Isophorone	78-59-1	ND	0.94	0.094	ug/l		U	
Naphthalene	91-20-3	ND	0.94	0.094	ug/l		U	
Nitrobenzene	98-95-3	ND	0.94	0.094	ug/l		U	
N-Nitrosodimethylamine	62-75-9	ND	1.9	0.094	ug/l		U	
N-Nitroso-di-n-propylamine	621-64-7	ND	1.9	0.094	ug/l		U	
N-Nitrosodiphenylamine	86-30-6	ND	0.94	0.094	ug/l		UJ	C
Pentachlorophenol	87-86-5	ND	1.9	0.094	ug/l		UJ	С
Phenanthrene	85-01-8	ND	0.47	0.094	ug/l		U	
Phenol	108-95-2	ND	0.94	0.28	ug/l		U	
Pyrene	129-00-0	ND	0.47	0.094	ug/l		U	

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Analysis Method EPA 8015 Mod.

Outfall 001 (C	irab)	Matri	x Type:	Water	V	alidation Le	vel: IV
ITB0887-01	Sam	ple Date:	2/6/2010	10:20:00 AM			
CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
8006-61-9	25	100	25	ug/l	Ja	J	DNQ
od EPA 9	900.0 N	10D					
Outfall 001 (C	Composite) Matri	х Туре:	WATER	V	alidation Le	vel: IV
ITB0887-04	Sam	ple Date:	2/6/2010	6:40:00 AM			
CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
12587-46-1	6.9	3	1.6	pCi/L		J	Н,С
12587-47-2	8.1	4	1.2	pCi/L		1	Н
od EPA 9	901.1 N	10D					
Outfall 001 (C	Composite) Matri	х Туре:	WATER	V	alidation Le	vel: IV
ITB0887-04	Sam	ple Date:	2/6/2010	6:40:00 AM			
CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
		20	15	C: /I	T T	U	
10045-97-3	1.3	20	13	pCi/L	U	U	
10045-97-3 13966-00-2	1.3 -180	0	290	pCi/L	U	Ü	
13966-00-2		0					
13966-00-2	-180 203.0 M	0 MOD	290		U		vel: IV
13966-00-2 od EPA 9	-180 903.0 M	0 MOD Matri	290 x Type:	pCi/L	U	U	vel: IV
13966-00-2 od EPA 9 Outfall 001 (C	-180 903.0 M	0 MOD Matri	290 x Type:	pCi/L WATER	U	U	
13966-00-2 od EPA 9 Outfall 001 (C ITB0887-04	-180 PO3.0 M Composite Sam Result	0 MOD Matri ple Date:	290 x Type: 2/6/2010	pCi/L WATER 6:40:00 AM Result	U V	U Validation Le Validation	Validation
13966-00-2 od EPA 9 Outfall 001 (C ITB0887-04 CAS No 13982-63-3	-180 PO3.0 M Composite Sam Result Value	0 MOD Matri ple Date: RL	290 x Type: 2/6/2010 MDL	pCi/L WATER 6:40:00 AM Result Units	U V Lab Qualifier	U Validation Le Validation Qualifier	Validation Notes
13966-00-2 od EPA 9 Outfall 001 (C ITB0887-04 CAS No 13982-63-3	-180 PO3.0 M Composite Sam Result Value 0.06	O Matri ple Date: RL	290 x Type: 2/6/2010 MDL	pCi/L WATER 6:40:00 AM Result Units	U V Lab Qualifier U	U Validation Le Validation Qualifier	Validation Notes
13966-00-2 od EPA 9 Outfall 001 (C ITB0887-04 CAS No 13982-63-3 od EPA 9	Composite Sam Result Value 0.06 004 MC	O Matri ple Date: RL	290 x Type: 2/6/2010 MDL 0.21 x Type:	pCi/L WATER 6:40:00 AM Result Units pCi/L	U V Lab Qualifier U	Validation Le Validation Qualifier UJ	Validation Notes
13966-00-2 od EPA 9 Outfall 001 (C ITB0887-04 CAS No 13982-63-3 od EPA 9 Outfall 001 (C	Composite Sam Result Value 0.06 004 MC	O Matri ple Date: RL DD Matri	290 x Type: 2/6/2010 MDL 0.21 x Type:	pCi/L WATER 6:40:00 AM Result Units pCi/L WATER	U V Lab Qualifier U	Validation Le Validation Qualifier UJ	Validation Notes
	CAS No 8006-61-9 od EPA 9 Outfall 001 (C ITB0887-04 CAS No 12587-46-1 12587-47-2 od EPA 9 Outfall 001 (C ITB0887-04 CAS No	CAS No Result Value 8006-61-9 25 25 26 EPA 900.0 M Outfall 001 (Composite ITB0887-04 Sam CAS No Result Value 12587-46-1 6.9 12587-47-2 8.1 Od EPA 901.1 M Outfall 001 (Composite ITB0887-04 Sam CAS No Result Value CAS No Result Value	CAS No Result RL Value 8006-61-9 25 100 Od EPA 900.0 MOD Outfall 001 (Composite) Matri ITB0887-04 Sample Date: CAS No Result RL Value 12587-46-1 6.9 3 12587-47-2 8.1 4 Od EPA 901.1 MOD Outfall 001 (Composite) Matri ITB0887-04 Sample Date: CAS No Result RL Value	CAS No Result RL MDL 8006-61-9 25 100 25 25 100 25 26 EPA 900.0 MOD Outfall 001 (Composite) Matrix Type: ITB0887-04 Sample Date: 2/6/2010 CAS No Result RL MDL Value 12587-46-1 6.9 3 1.6 12587-47-2 8.1 4 1.2 26 EPA 901.1 MOD Outfall 001 (Composite) Matrix Type: ITB0887-04 Sample Date: 2/6/2010 CAS No Result RL MDL Value	CAS No	CAS No Result RL Value	CAS No Result Value Value Validation Value Value Validation Vali

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Analysis Method EPA 905 MOD

Sample Name	Outfall 001 (C	Composite)	Matri	х Туре:	WATER	7	Validation Le	evel: IV		
Lab Sample Name:	ITB0887-04	Samj	ole Date:	2/6/2010	6:40:00 AM					
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes		
Strontium 90	10098-97-2	-0.24	3	0.64	pCi/L	U	U			
Analysis Method EPA 906.0 MOD										
Sample Name	Outfall 001 (C	Composite)	Matri	x Type:	WATER	7	Validation Le	evel: IV		
Lab Sample Name:	ITB0887-04	Samj	ole Date:	2/6/2010	6:40:00 AM					
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes		
Tritium	10028-17-8	65	500	96	pCi/L	U	U			

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Analysis Method EPA-5 1613B

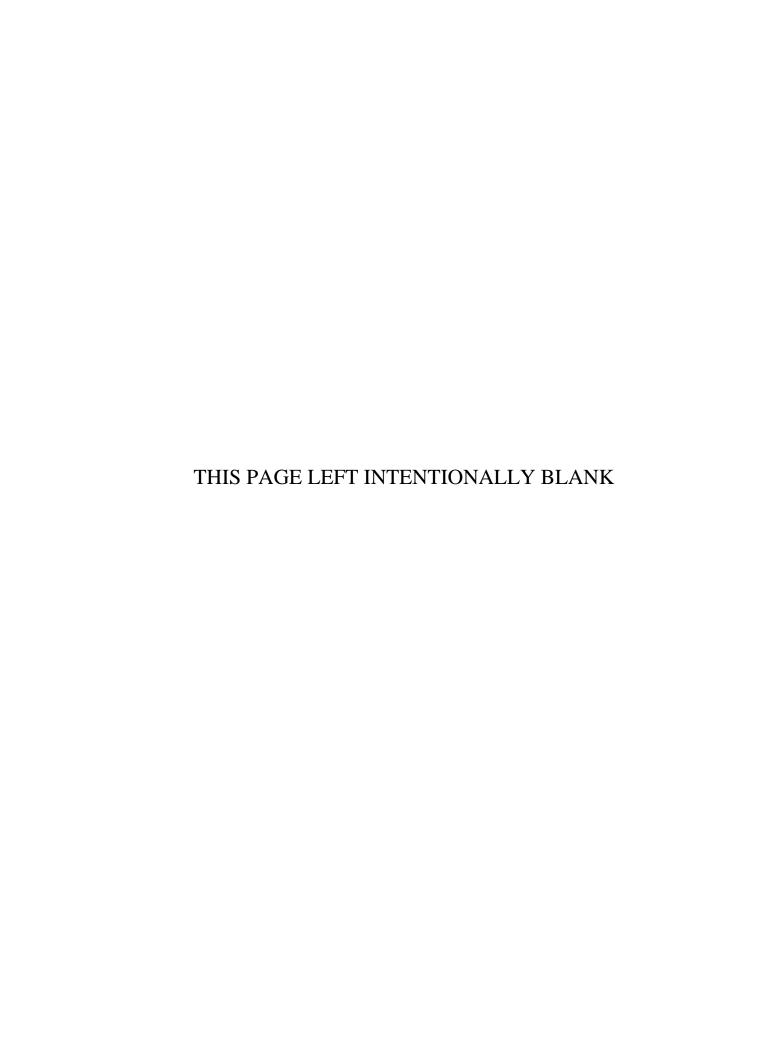
Sample Name	Outfall 001 (C	omposite)) Matri	x Type:	VATER	V	alidation Le	vel: IV
Lab Sample Name:	ITB0887-04	Sam	ple Date:	2/6/2010 6:	40:00 AM			
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,2,3,4,6,7,8-HpCDD	35822-46-9	ND	0.000047	0.0000018	ug/L	J, Ba	U	В
1,2,3,4,6,7,8-HpCDF	67562-39-4	ND	0.000047	0.0000017	ug/L	J, Ba	U	В
1,2,3,4,7,8,9-HpCDF	55673-89-7	ND	0.000012	0.0000025	ug/L	J, Q, Ba	U	В
1,2,3,4,7,8-HxCDD	39227-28-6	ND	0.00001	0.0000022	ug/L	J, Q, Ba	U	В
1,2,3,4,7,8-HxCDF	70648-26-9	ND	0.000047	0.0000013	ug/L	J, Ba	U	В
1,2,3,6,7,8-HxCDD	57653-85-7	ND	0.000011	0.000002	ug/L	J, Q, Ba	U	В
1,2,3,6,7,8-HxCDF	57117-44-9	ND	0.0000088	0.0000012	ug/L	J, Q, Ba	U	В
1,2,3,7,8,9-HxCDD	19408-74-3	ND	0.000047	0.0000019	ug/L	J, Ba	U	В
1,2,3,7,8,9-HxCDF	72918-21-9	ND	0.000047	0.0000015	ug/L	J, Ba	U	В
1,2,3,7,8-PeCDD	40321-76-4	ND	0.000047	0.0000023	ug/L	J, Ba	U	В
1,2,3,7,8-PeCDF	57117-41-6	0.000006	0.000047	0.0000012	ug/L	J	J	DNQ
2,3,4,6,7,8-HxCDF	60851-34-5	ND	0.0000099	0.0000012	ug/L	J, Q, Ba	U	В
2,3,4,7,8-PeCDF	57117-31-4	ND	0.0000082	0.0000015	ug/L	J, Q	UJ	*III
2,3,7,8-TCDD	1746-01-6	ND	0.0000094	0.0000014	ug/L		U	
2,3,7,8-TCDF	51207-31-9	ND	0.0000094	0.000002	ug/L		R	D
2,3,7,8-TCDF	51207-31-9	ND	0.0000015	0.0000006	ug/L	J, Q, Ba	U	В
OCDD	3268-87-9	0.00028	0.000094	0.0000016	ug/L	Ba		
OCDF	39001-02-0	ND	0.000094	0.0000014	ug/L	J, Ba	U	В
Total HpCDD	37871-00-4	ND	0.000047	0.0000018	ug/L	J, Ba	U	В
Total HpCDF	38998-75-3	0.000042	0.000042	0.0000017	ug/L	J, Q, Ba	J	B,DNQ,*III
Total HxCDD	34465-46-8	0.000034	0.000034	0.0000019	ug/L	J, Q, Ba	J	B,DNQ,*III
Total HxCDF	55684-94-1	0.000045	0.000045	0.0000012	ug/L	J, Q, Ba	J	B,DNQ,*III
Total PeCDD	36088-22-9	0.000011	0.000011	0.0000023	ug/L	J, Q, Ba	J	B,DNQ,*III
Total PeCDF	30402-15-4	0.000016	0.000016	0.0000007	ug/L	J, Q, Ba	J	DNQ, *III
Total TCDD	41903-57-5	ND	0.0000094	0.0000014	ug/L		U	
Total TCDF	55722-27-5	ND	0.0000015	0.0000006	ug/L	J, Q, Ba	U	В
Analysis Metho	d SM 25	540D						
Sample Name	Outfall 001 (C	omposite)	Matri	x Type:	Vater	V	alidation Le	vel: IV
Lab Sample Name:	ITB0887-04	Sam	ple Date:	2/6/2010 6:	40:00 AM			
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Total Suspended Solids	TSS	170	20	2.0	mg/l			

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Analysis Method SM2340B

Sample Name	Outfall 001 (0	Composite)) Matri	x Type:	Water		alidation Le	evel: IV
Lab Sample Name:	ITB0887-04	Sam	ple Date:	2/6/2010	6:40:00 AM			
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Hardness as CaCO3		54	0.33	0.17	mg/l			
Sample Name	Outfall 001 (0	Composite) D Matri	x Type:	Water	V	alidation Le	vel: IV
Lab Sample Name:	ITB0887-05	Sam	ple Date:	2/6/2010	6:40:00 AM			
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Hardness as CaCO3		55	0.33	0.17	mg/l			
Analysis Metho	od SM23	840B-Di	iss					
Sample Name	Outfall 001 (0	Composite) Matri	х Туре:	Water	V	alidation Le	vel: IV
Lab Sample Name:	ITB0887-04	Sam	ple Date:	2/6/2010	6:40:00 AM			
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Hardness as CaCO3		41	0.33	0.17	mg/l			
Analysis Metho	od SM53	810B						
Sample Name	Outfall 001 (0	Composite) Matri	х Туре:	Water	V	alidation Le	vel: IV
Lab Sample Name:	ITB0887-04	Sam	ple Date:	2/6/2010	6:40:00 AM			
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Total Organic Carbon	TOC	12	1.0	0.50	mg/l			

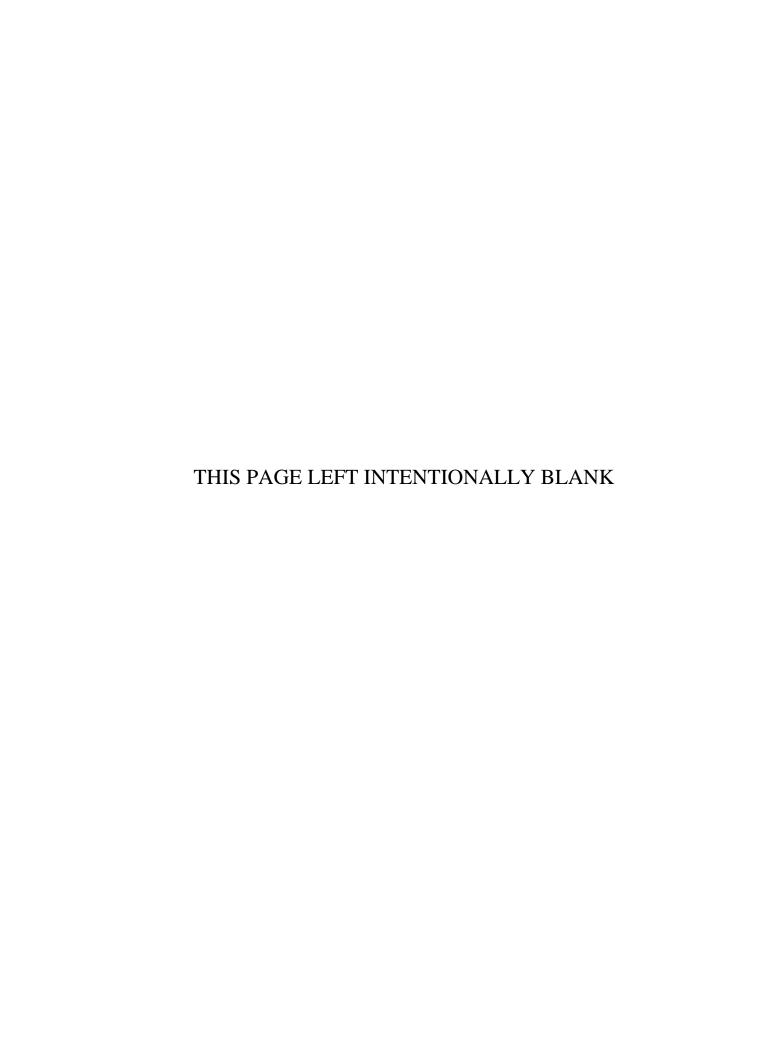
Monday, April 05, 2010 Page 9 of 9



APPENDIX G

Section 4

Outfall 001 - February 6, 2010 Test America Analytical Laboratory Report





LABORATORY REPORT

Prepared For: MWH-Pasadena/Boeing Project: Annual Outfall 001

618 Michillinda Avenue, Suite 200 Annual Outfall 001

Arcadia, CA 91007

Attention: Bronwyn Kelly Sampled: 02/06/10

Received: 02/06/10 Revised: 04/09/10 14:26

NELAP #01108CA California ELAP#2706 CSDLAC #10256 AZ #AZ0671 NV #CA01531

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. The Chain(s) of Custody, 3 pages, are included and are an integral part of this report.

This entire report was reviewed and approved for release.

SAMPLE CROSS REFERENCE

SUBCONTRACTED: Refer to the last page for specific subcontract laboratory information included in this report.

ADDITIONAL

INFORMATION: Final revised report to correct units and merge .pdf file of Radchem. Copper in 3 sig figs.

Revised report to include surrogates for the 625 analysis.

LABORATORY ID	CLIENT ID	MATRIX
ITB0887-01	Outfall 001 (Grab)	Water
ITB0887-02	Trip Blank	Water
ITB0887-04	Outfall 001 (Composite)	Water

Reviewed By:

TestAmerica Irvine

Debby Wilson For Heather Clark Project Manager

Debby Wilson



17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

Project ID: Annual Outfall 001

Annual Outfall 001

Sampled: 02/06/10 Report Number: ITB0887 Received: 02/06/10

Attention: Bronwyn Kelly

618 Michillinda Avenue, Suite 200

MWH-Pasadena/Boeing

Arcadia, CA 91007

VOLATILE FUEL HYDROCARBONS (EPA 5030/CADHS Mod. 8015)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0887-01 (Outfall 001 (Grab) - Water)					Sample	ed: 02/06/1	10		
Reporting Units: ug/l									
GRO (C4 - C12)	EPA 8015 Mod.	10B1582	25	100	25	1	02/12/10	02/12/10	Ja
Surrogate: 4-BFB (FID) (65-140%)					97 %				



17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

Project ID: Annual Outfall 001

Annual Outfall 001

Sampled: 02/06/10 Report Number: ITB0887 Received: 02/06/10

Attention: Bronwyn Kelly

618 Michillinda Avenue, Suite 200

MWH-Pasadena/Boeing

Arcadia, CA 91007

EXTRACTABLE FUEL HYDROCARBONS (EPA 3510C/EPA 8015B)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0887-01 (Outfall 001 (Grab) - Water)					Sample	d: 02/06/1	10		
Reporting Units: ug/l									
DRO (C13 - C28)	EPA 8015B	10B1526	47	94	ND	0.943	02/12/10	02/12/10	
Surrogate: n-Octacosane (45-120%)					47 %				



MWH-Pasadena/Boeing Project ID: Annual Outfall 001

618 Michillinda Avenue, Suite 200 Annual Outfall 001 Sampled: 02/06/10 Arcadia, CA 91007 Report Number: ITB0887 Received: 02/06/10

Attention: Bronwyn Kelly

PURGEABLES BY GC/MS (EPA 624)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0887-01 (Outfall 001 (Gral	o) - Water)				Sample	ed: 02/06/1	10		
Reporting Units: ug/l					•				
Benzene	EPA 624	10B0840	0.28	0.50	ND	1	02/08/10	02/09/10	
Bromodichloromethane	EPA 624	10B0840	0.30	0.50	ND	1	02/08/10	02/09/10	
Bromoform	EPA 624	10B0840	0.40	0.50	ND	1	02/08/10	02/09/10	
Bromomethane	EPA 624	10B0840	0.42	1.0	ND	1	02/08/10	02/09/10	
Carbon tetrachloride	EPA 624	10B0840	0.28	0.50	ND	1	02/08/10	02/09/10	
Chlorobenzene	EPA 624	10B0840	0.36	0.50	ND	1	02/08/10	02/09/10	
Chloroethane	EPA 624	10B0840	0.40	1.0	ND	1	02/08/10	02/09/10	
Chloroform	EPA 624	10B0840	0.33	0.50	ND	1	02/08/10	02/09/10	
Chloromethane	EPA 624	10B0840	0.40	0.50	ND	1	02/08/10	02/09/10	
Dibromochloromethane	EPA 624	10B0840	0.40	0.50	ND	1	02/08/10	02/09/10	
1,2-Dichlorobenzene	EPA 624	10B0840	0.32	0.50	ND	1	02/08/10	02/09/10	
1,3-Dichlorobenzene	EPA 624	10B0840	0.35	0.50	ND	1	02/08/10	02/09/10	
1,4-Dichlorobenzene	EPA 624	10B0840	0.37	0.50	ND	1	02/08/10	02/09/10	
1,1-Dichloroethane	EPA 624	10B0840	0.40	0.50	ND	1	02/08/10	02/09/10	
1,2-Dichloroethane	EPA 624	10B0840	0.28	0.50	ND	1	02/08/10	02/09/10	
1,1-Dichloroethene	EPA 624	10B0840	0.42	0.50	ND	1	02/08/10	02/09/10	
cis-1,2-Dichloroethene	EPA 624	10B0840	0.32	0.50	ND	1	02/08/10	02/09/10	
trans-1,2-Dichloroethene	EPA 624	10B0840	0.30	0.50	ND	1	02/08/10	02/09/10	
1,2-Dichloropropane	EPA 624	10B0840	0.35	0.50	ND	1	02/08/10	02/09/10	
cis-1,3-Dichloropropene	EPA 624	10B0840	0.22	0.50	ND	1	02/08/10	02/09/10	
trans-1,3-Dichloropropene	EPA 624	10B0840	0.32	0.50	ND	1	02/08/10	02/09/10	
1,2-Dichloro-1,1,2-trifluoroethane	EPA 624	10B0840	1.1	2.0	ND	1	02/08/10	02/09/10	
Ethylbenzene	EPA 624	10B0840	0.25	0.50	ND	1	02/08/10	02/09/10	
Methylene chloride	EPA 624	10B0840	0.95	1.0	ND	1	02/08/10	02/09/10	
1,1,2,2-Tetrachloroethane	EPA 624	10B0840	0.30	0.50	ND	1	02/08/10	02/09/10	
Tetrachloroethene	EPA 624	10B0840	0.32	0.50	ND	1	02/08/10	02/09/10	
Toluene	EPA 624	10B0840	0.36	0.50	ND	1	02/08/10	02/09/10	
1,1,1-Trichloroethane	EPA 624	10B0840	0.30	0.50	ND	1	02/08/10	02/09/10	
1,1,2-Trichloroethane	EPA 624	10B0840	0.30	0.50	ND	1	02/08/10	02/09/10	
Trichloroethene	EPA 624	10B0840	0.26	0.50	ND	1	02/08/10	02/09/10	
Trichlorofluoromethane	EPA 624	10B0840	0.34	0.50	ND	1	02/08/10	02/09/10	
Trichlorotrifluoroethane (Freon 113)	EPA 624	10B0840	0.50	5.0	ND	1	02/08/10	02/09/10	
Vinyl chloride	EPA 624	10B0840	0.40	0.50	ND	1	02/08/10	02/09/10	
Xylenes, Total	EPA 624	10B0840	0.90	1.5	ND	1	02/08/10	02/09/10	
Cyclohexane	EPA 624	10B0840	0.40	1.0	ND	1	02/08/10	02/09/10	
Surrogate: 4-Bromofluorobenzene (80-120%)					91 %				
Surrogate: 4-Bromofluorobenzene (80-120%)					91 %				
Surrogate: Dibromofluoromethane (80-1209					106 %				
Surrogate: Dibromofluoromethane (80-1209	%)				106 %				
Surrogate: Toluene-d8 (80-120%)					107 %				
Surrogate: Toluene-d8 (80-120%)					107 %				
Test America Irvine									

TestAmerica Irvine

Debby Wilson For Heather Clark Project Manager

Sampled: 02/06/10



THE LEADER IN ENVIRONMENTAL TESTING

MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Attention: Bronwyn Kelly

Arcadia, CA 91007

Project ID: Annual Outfall 001

Annual Outfall 001

Report Number: ITB0887 Received: 02/06/10

PURGEABLES BY GC/MS (EPA 624)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
•								j u	
Sample ID: ITB0887-02 (Trip Blank - Water Reporting Units: ug/l	1)				Sample	ed: 02/06/1	10		
Benzene	EPA 624	10B0840	0.28	0.50	ND	1	02/08/10	02/09/10	
Bromodichloromethane	EPA 624	10B0840	0.30	0.50	ND	1	02/08/10	02/09/10	
Bromoform	EPA 624	10B0840	0.40	0.50	ND	1	02/08/10	02/09/10	
Bromomethane	EPA 624	10B0840	0.42	1.0	ND	1	02/08/10	02/09/10	
Carbon tetrachloride	EPA 624	10B0840	0.28	0.50	ND	1	02/08/10	02/09/10	
Chlorobenzene	EPA 624	10B0840	0.36	0.50	ND	1	02/08/10	02/09/10	
Chloroethane	EPA 624	10B0840	0.40	1.0	ND	1	02/08/10	02/09/10	
Chloroform	EPA 624	10B0840	0.33	0.50	ND	1	02/08/10	02/09/10	
Chloromethane	EPA 624	10B0840	0.40	0.50	ND	1	02/08/10	02/09/10	
Dibromochloromethane	EPA 624	10B0840	0.40	0.50	ND	1	02/08/10	02/09/10	
1,2-Dichlorobenzene	EPA 624	10B0840	0.32	0.50	ND	1	02/08/10	02/09/10	
1,3-Dichlorobenzene	EPA 624	10B0840	0.35	0.50	ND	1	02/08/10	02/09/10	
1,4-Dichlorobenzene	EPA 624	10B0840	0.37	0.50	ND	1	02/08/10	02/09/10	
1,1-Dichloroethane	EPA 624	10B0840	0.40	0.50	ND	1	02/08/10	02/09/10	
1,2-Dichloroethane	EPA 624	10B0840	0.28	0.50	ND	1	02/08/10	02/09/10	
1,1-Dichloroethene	EPA 624	10B0840	0.42	0.50	ND	1	02/08/10	02/09/10	
cis-1,2-Dichloroethene	EPA 624	10B0840	0.32	0.50	ND	1	02/08/10	02/09/10	
trans-1,2-Dichloroethene	EPA 624	10B0840	0.30	0.50	ND	1	02/08/10	02/09/10	
1,2-Dichloropropane	EPA 624	10B0840	0.35	0.50	ND	1	02/08/10	02/09/10	
cis-1,3-Dichloropropene	EPA 624	10B0840	0.22	0.50	ND	1	02/08/10	02/09/10	
trans-1,3-Dichloropropene	EPA 624	10B0840	0.32	0.50	ND	1	02/08/10	02/09/10	
1,2-Dichloro-1,1,2-trifluoroethane	EPA 624	10B0840	1.1	2.0	ND	1	02/08/10	02/09/10	
Ethylbenzene	EPA 624	10B0840	0.25	0.50	ND	1	02/08/10	02/09/10	
Methylene chloride	EPA 624	10B0840	0.95	1.0	ND	1	02/08/10	02/09/10	
1,1,2,2-Tetrachloroethane	EPA 624	10B0840	0.30	0.50	ND	1	02/08/10	02/09/10	
Tetrachloroethene	EPA 624	10B0840	0.32	0.50	ND	1	02/08/10	02/09/10	
Toluene	EPA 624	10B0840	0.36	0.50	ND	1	02/08/10	02/09/10	
1,1,1-Trichloroethane	EPA 624	10B0840	0.30	0.50	ND	1	02/08/10	02/09/10	
1,1,2-Trichloroethane	EPA 624	10B0840	0.30	0.50	ND	1	02/08/10	02/09/10	
Trichloroethene	EPA 624	10B0840	0.26	0.50	ND	1	02/08/10	02/09/10	
Trichlorofluoromethane	EPA 624	10B0840	0.34	0.50	ND	1	02/08/10	02/09/10	
Trichlorotrifluoroethane (Freon 113)	EPA 624	10B0840	0.50	5.0	ND	1	02/08/10	02/09/10	
Vinyl chloride	EPA 624	10B0840	0.40	0.50	ND	1	02/08/10	02/09/10	
Xylenes, Total	EPA 624	10B0840	0.90	1.5	ND	1	02/08/10	02/09/10	
Cyclohexane	EPA 624	10B0840	0.40	1.0	ND	1	02/08/10	02/09/10	
Surrogate: 4-Bromofluorobenzene (80-120%))				92 %				
Surrogate: 4-Bromofluorobenzene (80-120%))				92 %				
Surrogate: Dibromofluoromethane (80-120%))				104 %				
Surrogate: Dibromofluoromethane (80-120%))				104 %				
Surrogate: Toluene-d8 (80-120%)					108 %				
Surrogate: Toluene-d8 (80-120%)					108 %				
TT 4 A									

TestAmerica Irvine

Debby Wilson For Heather Clark Project Manager

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

Project ID: Annual Outfall 001

Annual Outfall 001

Sampled: 02/06/10 Report Number: ITB0887 Received: 02/06/10

Attention: Bronwyn Kelly

618 Michillinda Avenue, Suite 200

MWH-Pasadena/Boeing

Arcadia, CA 91007

PURGEABLES-- GC/MS (EPA 624)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0887-01 (Outfall 001 (Grab) - Water)				Sample	ed: 02/06/1	10		
Reporting Units: ug/l					-				
Acrolein	EPA 624	10B0840	4.0	5.0	ND	1	02/08/10	02/09/10	
Acrylonitrile	EPA 624	10B0840	1.2	2.0	ND	1	02/08/10	02/09/10	
2-Chloroethyl vinyl ether	EPA 624	10B0840	1.8	5.0	ND	1	02/08/10	02/09/10	
Surrogate: 4-Bromofluorobenzene (80-120%))				91 %				
Surrogate: Dibromofluoromethane (80-120%	5)				106 %				
Surrogate: Toluene-d8 (80-120%)					107 %				
Sample ID: ITB0887-02 (Trip Blank - Wate	er)		Sampled: 02/06/10						
Reporting Units: ug/l									
Acrolein	EPA 624	10B0840	4.0	5.0	ND	1	02/08/10	02/09/10	
Acrylonitrile	EPA 624	10B0840	1.2	2.0	ND	1	02/08/10	02/09/10	
2-Chloroethyl vinyl ether	EPA 624	10B0840	1.8	5.0	ND	1	02/08/10	02/09/10	
Surrogate: 4-Bromofluorobenzene (80-120%))				92 %				
Surrogate: Dibromofluoromethane (80-120%	5)				104 %				
Surrogate: Toluene-d8 (80-120%)					108 %				



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Project ID: Annual Outfall 001

Annual Outfall 001 Sampled: 02/06/10

Report Number: ITB0887 Received: 02/06/10

Attention: Bronwyn Kelly

618 Michillinda Avenue, Suite 200

MWH-Pasadena/Boeing

Arcadia, CA 91007

1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)

			MDL	Reporting	Sample	Dilution	Date	Date	Data
Analyte	Method	Batch	Limit	Limit	Result	Factor	Extracted	Analyzed	Qualifiers
Sample ID: ITB0887-04 (Outfall 001 (C	omposite) - Water)				Sample	d: 02/06/1	0		
Reporting Units: ug/l									
1,4-Dioxane	EPA 8260B-SIM	10B0317	1.0	2.0	ND	1	02/08/10	02/08/10	
Surrogate: Dibromofluoromethane (80-1	20%)				100 %				



Project ID: Annual Outfall 001

618 Michillinda Avenue, Suite 200 Annual Outfall 001 Sampled: 02/06/10 Arcadia, CA 91007 Report Number: ITB0887 Received: 02/06/10

Attention: Bronwyn Kelly

MWH-Pasadena/Boeing

ACID & BASE/NEUTRALS BY GC/MS (EPA 625)

			MDL	Reporting	Sample	Dilution	Date	Date	Data
Analyte	Method	Batch	Limit	Limit	Result	Factor	Extracted	Analyzed	Qualifiers
Sample ID: ITB0887-04 (Outfall 001 (Co	omposite) - Water)				Sample	ed: 02/06/1	10		
Reporting Units: ug/l									
Acenaphthene	EPA 625	10B1159	0.094	0.47	ND	0.943	02/10/10	02/15/10	
Acenaphthylene	EPA 625	10B1159	0.094	0.47	ND	0.943	02/10/10	02/15/10	
Aniline	EPA 625	10B1159	0.28	9.4	ND	0.943	02/10/10	02/15/10	
Anthracene	EPA 625	10B1159	0.094	0.47	ND	0.943	02/10/10	02/15/10	
Benzidine	EPA 625	10B1159	4.7	4.7	ND	0.943	02/10/10	02/15/10	
Benzo(a)anthracene	EPA 625	10B1159	0.094	4.7	ND	0.943	02/10/10	02/15/10	
Benzo(a)pyrene	EPA 625	10B1159	0.094	1.9	ND	0.943	02/10/10	02/15/10	
Benzo(b)fluoranthene	EPA 625	10B1159	0.094	1.9	ND	0.943	02/10/10	02/15/10	
Benzo(g,h,i)perylene	EPA 625	10B1159	0.094	4.7	ND	0.943	02/10/10	02/15/10	
Benzo(k)fluoranthene	EPA 625	10B1159	0.094	0.47	ND	0.943	02/10/10	02/15/10	
Benzoic acid	EPA 625	10B1159	2.8	19	ND	0.943	02/10/10	02/15/10	
Benzyl alcohol	EPA 625	10B1159	0.094	4.7	ND	0.943	02/10/10	02/15/10	
4-Bromophenyl phenyl ether	EPA 625	10B1159	0.094	0.94	ND	0.943	02/10/10	02/15/10	
Butyl benzyl phthalate	EPA 625	10B1159	0.66	4.7	ND	0.943	02/10/10	02/15/10	
4-Chloro-3-methylphenol	EPA 625	10B1159	0.19	1.9	ND	0.943	02/10/10	02/15/10	
4-Chloroaniline	EPA 625	10B1159	0.094	1.9	ND	0.943	02/10/10	02/15/10	
Bis(2-chloroethoxy)methane	EPA 625	10B1159	0.094	0.47	ND	0.943	02/10/10	02/15/10	
Bis(2-chloroethyl)ether	EPA 625	10B1159	0.094	0.47	ND	0.943	02/10/10	02/15/10	
Bis(2-chloroisopropyl)ether	EPA 625	10B1159	0.094	0.47	ND	0.943	02/10/10	02/15/10	
Bis(2-ethylhexyl)phthalate	EPA 625	10B1159	1.6	4.7	ND	0.943	02/10/10	02/15/10	
2-Chloronaphthalene	EPA 625	10B1159	0.094	0.47	ND	0.943	02/10/10	02/15/10	
2-Chlorophenol	EPA 625	10B1159	0.19	0.94	ND	0.943	02/10/10	02/15/10	
4-Chlorophenyl phenyl ether	EPA 625	10B1159	0.094	0.47	ND	0.943	02/10/10	02/15/10	
Chrysene	EPA 625	10B1159	0.094	0.47	ND	0.943	02/10/10	02/15/10	
Dibenz(a,h)anthracene	EPA 625	10B1159	0.094	0.47	ND	0.943	02/10/10	02/15/10	
Dibenzofuran	EPA 625	10B1159	0.094	0.47	ND	0.943	02/10/10	02/15/10	
Di-n-butyl phthalate	EPA 625	10B1159	0.19	1.9	ND	0.943	02/10/10	02/15/10	
1,2-Dichlorobenzene	EPA 625	10B1159	0.094	0.47	ND	0.943	02/10/10	02/15/10	
1,3-Dichlorobenzene	EPA 625	10B1159	0.094	0.47	ND	0.943	02/10/10	02/15/10	
1,4-Dichlorobenzene	EPA 625	10B1159	0.19	0.47	ND	0.943	02/10/10	02/15/10	
3,3'-Dichlorobenzidine	EPA 625	10B1159	4.7	4.7	ND	0.943	02/10/10	02/15/10	
2,4-Dichlorophenol	EPA 625	10B1159	0.19	1.9	ND	0.943	02/10/10	02/15/10	
Diethyl phthalate	EPA 625	10B1159	0.094	0.94	0.13	0.943	02/10/10	02/15/10	Ja
2,4-Dimethylphenol	EPA 625	10B1159	0.28	1.9	ND	0.943	02/10/10	02/15/10	
Dimethyl phthalate	EPA 625	10B1159	0.094	0.47	ND	0.943	02/10/10	02/15/10	
4,6-Dinitro-2-methylphenol	EPA 625	10B1159	0.19	4.7	ND	0.943	02/10/10	02/15/10	
2,4-Dinitrophenol	EPA 625	10B1159	0.85	4.7	ND	0.943	02/10/10	02/15/10	
2,4-Dinitrotoluene	EPA 625	10B1159	0.19	4.7	ND	0.943	02/10/10	02/15/10	
2,6-Dinitrotoluene	EPA 625	10B1159	0.094	4.7	ND	0.943	02/10/10	02/15/10	
Di-n-octyl phthalate	EPA 625	10B1159	0.094	4.7	ND	0.943	02/10/10	02/15/10	
1,2-Diphenylhydrazine/Azobenzene	EPA 625	10B1159	0.094	0.94	ND	0.943	02/10/10	02/15/10	

TestAmerica Irvine



Project ID: Annual Outfall 001

618 Michillinda Avenue, Suite 200 Annual Outfall 001 Sampled: 02/06/10 Arcadia, CA 91007 Report Number: ITB0887 Received: 02/06/10

Attention: Bronwyn Kelly

MWH-Pasadena/Boeing

ACID & BASE/NEUTRALS BY GC/MS (EPA 625)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0887-04 (Outfall 001 (Comp	oosite) - Water)	- cont.			Sample	ed: 02/06/1	10		
Reporting Units: ug/l	,				ошпри				
Fluoranthene	EPA 625	10B1159	0.094	0.47	ND	0.943	02/10/10	02/15/10	
Fluorene	EPA 625	10B1159	0.094	0.47	ND	0.943	02/10/10	02/15/10	
Hexachlorobenzene	EPA 625	10B1159	0.094	0.94	ND	0.943	02/10/10	02/15/10	
Hexachlorobutadiene	EPA 625	10B1159	0.19	1.9	ND	0.943	02/10/10	02/15/10	
Hexachlorocyclopentadiene	EPA 625	10B1159	0.094	4.7	ND	0.943	02/10/10	02/15/10	
Hexachloroethane	EPA 625	10B1159	0.19	2.8	ND	0.943	02/10/10	02/15/10	
Indeno(1,2,3-cd)pyrene	EPA 625	10B1159	0.094	1.9	ND	0.943	02/10/10	02/15/10	
Isophorone	EPA 625	10B1159	0.094	0.94	ND	0.943	02/10/10	02/15/10	
2-Methylnaphthalene	EPA 625	10B1159	0.094	0.94	ND	0.943	02/10/10	02/15/10	
2-Methylphenol	EPA 625	10B1159	0.094	1.9	ND	0.943	02/10/10	02/15/10	
4-Methylphenol	EPA 625	10B1159	0.19	4.7	ND	0.943	02/10/10	02/15/10	
Naphthalene	EPA 625	10B1159	0.094	0.94	ND	0.943	02/10/10	02/15/10	
2-Nitroaniline	EPA 625	10B1159	0.094	4.7	ND	0.943	02/10/10	02/15/10	
3-Nitroaniline	EPA 625	10B1159	0.19	4.7	ND	0.943	02/10/10	02/15/10	
4-Nitroaniline	EPA 625	10B1159	0.47	4.7	ND	0.943	02/10/10	02/15/10	
Nitrobenzene	EPA 625	10B1159	0.094	0.94	ND	0.943	02/10/10	02/15/10	
2-Nitrophenol	EPA 625	10B1159	0.094	1.9	ND	0.943	02/10/10	02/15/10	
4-Nitrophenol	EPA 625	10B1159	2.4	4.7	ND	0.943	02/10/10	02/15/10	
N-Nitroso-di-n-propylamine	EPA 625	10B1159	0.094	1.9	ND	0.943	02/10/10	02/15/10	
N-Nitrosodimethylamine	EPA 625	10B1159	0.094	1.9	ND	0.943	02/10/10	02/15/10	
N-Nitrosodiphenylamine	EPA 625	10B1159	0.094	0.94	ND	0.943	02/10/10	02/15/10	
Pentachlorophenol	EPA 625	10B1159	0.094	1.9	ND	0.943	02/10/10	02/15/10	
Phenanthrene	EPA 625	10B1159	0.094	0.47	ND	0.943	02/10/10	02/15/10	
Phenol	EPA 625	10B1159	0.28	0.94	ND	0.943	02/10/10	02/15/10	
Pyrene	EPA 625	10B1159	0.094	0.47	ND	0.943	02/10/10	02/15/10	
1,2,4-Trichlorobenzene	EPA 625	10B1159	0.094	0.94	ND	0.943	02/10/10	02/15/10	
2,4,5-Trichlorophenol	EPA 625	10B1159	0.19	1.9	ND	0.943	02/10/10	02/15/10	
2,4,6-Trichlorophenol	EPA 625	10B1159	0.094	0.94	ND	0.943	02/10/10	02/15/10	
Surrogate: 2,4,6-Tribromophenol (40-120%)					96 %				
Surrogate: 2-Fluorobiphenyl (50-120%)					75 %				
Surrogate: 2-Fluorophenol (30-120%)					59 %				
Surrogate: Nitrobenzene-d5 (45-120%)					75 %				
Surrogate: Phenol-d6 (35-120%)					65 %				
Surrogate: Terphenyl-d14 (50-125%)					86 %				

TestAmerica Irvine



17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

Project ID: Annual Outfall 001

Annual Outfall 001 Sampled: 02/06/10 Received: 02/06/10

Report Number: ITB0887

Attention: Bronwyn Kelly

618 Michillinda Avenue, Suite 200

MWH-Pasadena/Boeing

Arcadia, CA 91007

ORGANOCHLORINE PESTICIDES (EPA 608)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0887-04 (Outfall 001 (Comp	osita) Watan)				6 1			•	
Reporting Units: ug/l	oosite) - water)				Sample	d: 02/06/1	10		
4.4'-DDD	EPA 608	10B1291	0.0019	0.0047	ND	0.943	02/11/10	02/13/10	С
4,4'-DDE	EPA 608	10B1291	0.0028	0.0047	ND	0.943	02/11/10	02/13/10	C
4,4'-DDT	EPA 608	10B1291	0.0038	0.0094	ND	0.943	02/11/10	02/13/10	
Aldrin	EPA 608	10B1291	0.0014	0.0047	ND	0.943	02/11/10	02/13/10	
alpha-BHC	EPA 608	10B1291	0.0024	0.0047	ND	0.943	02/11/10	02/13/10	
beta-BHC	EPA 608	10B1291	0.0038	0.0094	ND	0.943	02/11/10	02/13/10	
delta-BHC	EPA 608	10B1291	0.0033	0.0047	ND	0.943	02/11/10	02/13/10	
Dieldrin	EPA 608	10B1291	0.0019	0.0047	ND	0.943	02/11/10	02/13/10	
Endosulfan I	EPA 608	10B1291	0.0019	0.0047	ND	0.943	02/11/10	02/13/10	
Endosulfan II	EPA 608	10B1291	0.0028	0.0047	ND	0.943	02/11/10	02/13/10	
Endosulfan sulfate	EPA 608	10B1291	0.0028	0.0094	ND	0.943	02/11/10	02/13/10	
Endrin	EPA 608	10B1291	0.0019	0.0047	ND	0.943	02/11/10	02/13/10	C
Endrin aldehyde	EPA 608	10B1291	0.0019	0.0094	ND	0.943	02/11/10	02/13/10	
Endrin ketone	EPA 608	10B1291	0.0028	0.0094	ND	0.943	02/11/10	02/13/10	
gamma-BHC (Lindane)	EPA 608	10B1291	0.0028	0.019	ND	0.943	02/11/10	02/13/10	
Heptachlor	EPA 608	10B1291	0.0028	0.0094	ND	0.943	02/11/10	02/13/10	C
Heptachlor epoxide	EPA 608	10B1291	0.0024	0.0047	ND	0.943	02/11/10	02/13/10	
Methoxychlor	EPA 608	10B1291	0.0033	0.0047	ND	0.943	02/11/10	02/13/10	
Chlordane	EPA 608	10B1291	0.038	0.094	ND	0.943	02/11/10	02/13/10	
Toxaphene	EPA 608	10B1291	0.24	0.47	ND	0.943	02/11/10	02/13/10	
Surrogate: Decachlorobiphenyl (45-120%)					71 %				
Surrogate: Decachlorobiphenyl (45-120%)					71 %				
Surrogate: Tetrachloro-m-xylene (35-115%)					54 %				
Surrogate: Tetrachloro-m-xylene (35-115%)					54 %				



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Project ID: Annual Outfall 001

Annual Outfall 001 Sampled: 02/06/10

Report Number: ITB0887 Received: 02/06/10

Arcadia, CA 91007 Attention: Bronwyn Kelly

618 Michillinda Avenue, Suite 200

MWH-Pasadena/Boeing

TOTAL PCBS (EPA 608)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0887-04 (Outfall 001 (Com	posite) - Water)	- cont.			Sample	ed: 02/06/1	10		
Reporting Units: ug/l									
Aroclor 1016	EPA 608	10B1291	0.24	0.47	ND	0.943	02/11/10	02/12/10	
Aroclor 1221	EPA 608	10B1291	0.24	0.47	ND	0.943	02/11/10	02/12/10	
Aroclor 1232	EPA 608	10B1291	0.24	0.47	ND	0.943	02/11/10	02/12/10	
Aroclor 1242	EPA 608	10B1291	0.24	0.47	ND	0.943	02/11/10	02/12/10	
Aroclor 1248	EPA 608	10B1291	0.24	0.47	ND	0.943	02/11/10	02/12/10	
Aroclor 1254	EPA 608	10B1291	0.24	0.47	ND	0.943	02/11/10	02/12/10	
Aroclor 1260	EPA 608	10B1291	0.24	0.47	ND	0.943	02/11/10	02/12/10	
Surrogate: Decachlorobiphenyl (45-120%)					76 %				



MWH-Pasadena/Boeing

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

Project ID: Annual Outfall 001

618 Michillinda Avenue, Suite 200 Annual Outfall 001 Sampled: 02/06/10

Arcadia, CA 91007 Report Number: ITB0887 Received: 02/06/10 Attention: Bronwyn Kelly

HEXANE EXTRACTABLE MATERIAL

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0887-01 (Outfall 001 (Grab) - Water)					Sample	d: 02/06/1	0		
Reporting Units: mg/l									
Hexane Extractable Material (Oil &	EPA 1664A	10B1991	1.4	4.9	ND	1	02/17/10	02/17/10	
Grease)									



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Project ID: Annual Outfall 001

Annual Outfall 001 Sampled: 02/06/10

Report Number: ITB0887 Received: 02/06/10

Attention: Bronwyn Kelly

618 Michillinda Avenue, Suite 200

MWH-Pasadena/Boeing

Arcadia, CA 91007

METALS

		1	VILL I A	LIS					
Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0887-04 (Outfall 001 (Co	omposite) - Water)				Sample	ed: 02/06/1	10		
Reporting Units: mg/l									
Hardness as CaCO3	SM2340B	[CALC]	N/A	0.33	54	1	02/08/10	02/08/10	
Barium	EPA 200.7	10B0874	0.0060	0.010	0.076	1	02/08/10	02/08/10	
Boron	EPA 200.7	10B0874	0.020	0.050	0.042	1	02/08/10	02/08/10	Ja
Calcium	EPA 200.7	10B0874	0.050	0.10	13	1	02/08/10	02/08/10	MHA
Iron	EPA 200.7	10B0874	0.015	0.040	9.7	1	02/08/10	02/08/10	MHA
Magnesium	EPA 200.7	10B0874	0.012	0.020	5.4	1	02/08/10	02/08/10	
Sample ID: ITB0887-04 (Outfall 001 (Co	omposite) - Water)				Sample	ed: 02/06/1	10		
Reporting Units: ug/l									
Mercury	EPA 245.1	10B0921	0.10	0.20	ND	1	02/08/10	02/08/10	
Arsenic	EPA 200.7	10B0874	7.0	10	ND	1	02/08/10	02/08/10	
Antimony	EPA 200.8	10B0879	0.60	4.0	ND	2	02/08/10	02/08/10	RL1
Beryllium	EPA 200.7	10B0874	0.90	2.0	ND	1	02/08/10	02/08/10	
Chromium	EPA 200.7	10B0874	2.0	5.0	11	1	02/08/10	02/08/10	
Cobalt	EPA 200.7	10B0874	2.0	10	2.5	1	02/08/10	02/08/10	Ja
Manganese	EPA 200.7	10B0874	7.0	20	150	1	02/08/10	02/08/10	
Nickel	EPA 200.7	10B0874	2.0	10	6.1	1	02/08/10	02/08/10	Ja
Cadmium	EPA 200.8	10B0879	0.20	2.0	ND	2	02/08/10	02/08/10	RL1
Vanadium	EPA 200.7	10B0874	3.0	10	20	1	02/08/10	02/08/10	
Zinc	EPA 200.7	10B0874	6.0	20	34	1	02/08/10	02/08/10	
Copper	EPA 200.8	10B0879	1.00	4.00	14.3	2	02/08/10	02/08/10	
Lead	EPA 200.8	10B0879	0.40	2.0	6.4	2	02/08/10	02/08/10	
Selenium	EPA 200.8	10B0879	1.0	4.0	1.3	2	02/08/10	02/08/10	RL1, Ja
Silver	EPA 200.8	10B0879	0.20	2.0	ND	2	02/08/10	02/08/10	RL1
Thallium	EPA 200.8	10B0879	0.40	2.0	ND	2	02/08/10	02/08/10	RL1

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Project ID: Annual Outfall 001

Annual Outfall 001 Sampled: 02/06/10

Report Number: ITB0887 Received: 02/06/10

Attention: Bronwyn Kelly

618 Michillinda Avenue, Suite 200

MWH-Pasadena/Boeing

Arcadia, CA 91007

DISSOLVED METALS

		210001	_ ,						
Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
-								J	
Sample ID: ITB0887-04 (Outfall 001 (Composite) - Water)				Sample	ed: 02/06/1	10		
Reporting Units: mg/l									
Hardness as CaCO3	SM2340B-Diss	[CALC]	N/A	0.33	41	1	02/15/10	02/16/10	
Barium	EPA 200.7-Diss	10B1846	0.0060	0.010	0.015	1	02/15/10	02/16/10	
Boron	EPA 200.7-Diss	10B1846	0.020	0.050	0.070	1	02/15/10	02/16/10	В
Calcium	EPA 200.7-Diss	10B1846	0.050	0.10	11	1	02/15/10	02/16/10	MHA
Iron	EPA 200.7-Diss	10B1846	0.015	0.040	0.64	1	02/15/10	02/16/10	
Magnesium	EPA 200.7-Diss	10B1846	0.012	0.020	3.2	1	02/15/10	02/16/10	
Sample ID: ITB0887-04 (Outfall 001 (Composite) - Water)				Sample	ed: 02/06/1	10		
Reporting Units: ug/l									
Mercury	EPA 245.1-Diss	10B1953	0.10	0.20	ND	1	02/16/10	02/16/10	
Arsenic	EPA 200.7-Diss	10B1846	7.0	10	ND	1	02/15/10	02/16/10	
Antimony	EPA 200.8-Diss	10B1845	0.30	2.0	ND	1	02/15/10	02/17/10	
Beryllium	EPA 200.7-Diss	10B1846	0.90	2.0	ND	1	02/15/10	02/16/10	
Cobalt	EPA 200.7-Diss	10B1846	2.0	10	ND	1	02/15/10	02/16/10	
Manganese	EPA 200.7-Diss	10B1846	7.0	20	ND	1	02/15/10	02/16/10	
Nickel	EPA 200.7-Diss	10B1846	2.0	10	ND	1	02/15/10	02/16/10	
Cadmium	EPA 200.8-Diss	10B1845	0.10	1.0	ND	1	02/15/10	02/17/10	
Vanadium	EPA 200.7-Diss	10B1846	3.0	10	ND	1	02/15/10	02/16/10	
Zinc	EPA 200.7-Diss	10B1846	6.0	20	10	1	02/15/10	02/16/10	Ja
Copper	EPA 200.8-Diss	10B2106	0.500	2.00	2.35	1	02/17/10	02/17/10	
Lead	EPA 200.8-Diss	10B1845	0.20	1.0	ND	1	02/15/10	02/17/10	
Selenium	EPA 200.8-Diss	10B1845	0.50	2.0	ND	1	02/15/10	02/17/10	
Silver	EPA 200.8-Diss	10B1845	0.10	1.0	ND	1	02/15/10	02/17/10	
Thallium	EPA 200.8-Diss	10B1845	0.20	1.0	ND	1	02/15/10	02/17/10	



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Project ID: Annual Outfall 001

Annual Outfall 001

Sampled: 02/06/10 Report Number: ITB0887 Received: 02/06/10

Attention: Bronwyn Kelly

618 Michillinda Avenue, Suite 200

MWH-Pasadena/Boeing

Arcadia, CA 91007

DISSOLVED INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0887-01 (Outfall 001 (Grab) - Water)					Sample	d: 02/06/1	0		
Reporting Units: ug/l									
Chromium VI	EPA 218.6	10B0756	0.25	1.0	ND	1	02/06/10	02/06/10	



MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 001

Annual Outfall 001

Report Number: ITB0887

Sampled: 02/06/10

Received: 02/06/10

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0887-04 (Outfall 001 (Composite) - Water)				Sample	ed: 02/06/1	10		
Reporting Units: mg/l									
Ammonia-N (Distilled)	SM4500NH3-C	10B1575	0.50	0.50	0.56	1	02/12/10	02/12/10	
Biochemical Oxygen Demand	SM5210B	10B0795	0.50	2.0	2.2	1	02/07/10	02/12/10	
Chloride	EPA 300.0	10B0807	0.25	0.50	4.6	1	02/07/10	02/07/10	
Fluoride	SM 4500-F-C	10B0814	0.020	0.10	0.22	1	02/08/10	02/08/10	В
Nitrate-N	EPA 300.0	10B0807	0.060	0.11	0.40	1	02/07/10	02/07/10	
Nitrite-N	EPA 300.0	10B0807	0.090	0.15	ND	1	02/07/10	02/07/10	
Nitrate/Nitrite-N	EPA 300.0	10B0807	0.15	0.26	0.40	1	02/07/10	02/07/10	
Sulfate	EPA 300.0	10B0807	0.20	0.50	8.8	1	02/07/10	02/07/10	
Surfactants (MBAS)	SM5540-C	10B0757	0.025	0.10	ND	1	02/06/10	02/06/10	
Total Dissolved Solids	SM2540C	10B1487	1.0	10	150	1	02/12/10	02/12/10	
Total Organic Carbon	SM5310B	10B1284	0.50	1.0	12	1	02/11/10	02/11/10	
Total Suspended Solids	SM 2540D	10B1607	2.0	20	170	1	02/12/10	02/12/10	
Sample ID: ITB0887-01 (Outfall 001 (Reporting Units: ml/l	Grab) - Water)				Sample	ed: 02/06/1	10		
Total Settleable Solids	SM2540F	10B0770	0.10	0.10	ND	1	02/07/10	02/07/10	
Sample ID: ITB0887-04 (Outfall 001 (Reporting Units: NTU	Composite) - Water)				Sample	ed: 02/06/1	10		
Turbidity	EPA 180.1	10B0771	0.40	10	160	10	02/07/10	02/07/10	
Sample ID: ITB0887-01 (Outfall 001 (Reporting Units: ug/l	Grab) - Water)				Sample	ed: 02/06/1	10		
Total Cyanide	SM4500CN-E	10B1250	2.2	5.0	ND	1	02/10/10	02/10/10	
Sample ID: ITB0887-04 (Outfall 001 (Reporting Units: ug/l	Composite) - Water)				Sample	ed: 02/06/1	10		
Perchlorate	EPA 314.0	10B1001	0.90	4.0	ND	1	02/09/10	02/09/10	
Sample ID: ITB0887-01 (Outfall 001 (Reporting Units: umhos/cm	Grab) - Water)				Sample	ed: 02/06/1	10		
Specific Conductance	EPA 120.1	10B1489	1.0	1.0	130	1	02/12/10	02/12/10	

TestAmerica Irvine

Sampled: 02/06/10

Received: 02/06/10



THE LEADER IN ENVIRONMENTAL TESTING

MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Attention: Bronwyn Kelly

Arcadia, CA 91007

Project ID: Annual Outfall 001

Annual Outfall 001

Report Number: ITB0887

EPA-5 1613B

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result		Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0887-04 (Outfall 001 (C	omposite) - Water)				Sample	d: 02/06/1	10		
Reporting Units: ug/L	omposite, water,				Sample	u. 02/00/1	10		
1,2,3,4,6,7,8-HpCDD	EPA-5 1613B	47247	0.0000018	3 0.000047	0.000042	0.95	02/16/10	02/18/10	J, Ba
1,2,3,4,6,7,8-HpCDF	EPA-5 1613B	47247		7 0.000047	0.000017	0.95	02/16/10	02/18/10	J, Ba
2,3,7,8-TCDF	EPA-5 1613B	47247	0.0000006	50.0000094	0.0000015		02/16/10	02/18/10	J, Q, Ba
1,2,3,4,7,8,9-HpCDF	EPA-5 1613B	47247	0.0000023	5 0.000047	0.000012	0.95	02/16/10	02/18/10	J, Q, Ba
1,2,3,4,7,8-HxCDD	EPA-5 1613B	47247		2 0.000047	0.00001	0.95	02/16/10	02/18/10	J, Q, Ba
1,2,3,4,7,8-HxCDF	EPA-5 1613B	47247	0.0000013	3 0.000047	0.00001	0.95	02/16/10	02/18/10	J, Ba
1,2,3,6,7,8-HxCDD	EPA-5 1613B	47247	0.000002	0.000047	0.000011	0.95	02/16/10	02/18/10	J, Q, Ba
1,2,3,6,7,8-HxCDF	EPA-5 1613B	47247	0.0000012	2 0.000047	0.0000088	0.95	02/16/10	02/18/10	J, Q, Ba
1,2,3,7,8,9-HxCDD	EPA-5 1613B	47247	0.0000019	0.000047	0.000011	0.95	02/16/10	02/18/10	J, Ba
1,2,3,7,8,9-HxCDF	EPA-5 1613B	47247	0.0000013	5 0.000047	0.000012	0.95	02/16/10	02/18/10	J, Ba
1,2,3,7,8-PeCDD	EPA-5 1613B	47247	0.0000023	3 0.000047	0.0000082	0.95	02/16/10	02/18/10	J, Ba
1,2,3,7,8-PeCDF	EPA-5 1613B	47247	0.0000012	2 0.000047	0.0000067	0.95	02/16/10	02/18/10	J
2,3,4,6,7,8-HxCDF	EPA-5 1613B	47247	0.0000012	2 0.000047	0.0000099	0.95	02/16/10	02/18/10	J, Q, Ba
2,3,4,7,8-PeCDF	EPA-5 1613B	47247	0.0000013	5 0.000047	0.0000082	0.95	02/16/10	02/18/10	J, Q
2,3,7,8-TCDD	EPA-5 1613B	47247	0.0000014	4 0.0000094	ND	0.95	02/16/10	02/18/10	
OCDD	EPA-5 1613B	47247	0.000001	6 0.000094	0.00028	0.95	02/16/10	02/18/10	Ba
OCDF	EPA-5 1613B	47247	0.0000014	4 0.000094	0.00005	0.95	02/16/10	02/18/10	J, Ba
Total HpCDD	EPA-5 1613B	47247	0.0000018	3 0.000047	0.000072	0.95	02/16/10	02/18/10	J, Ba
Total HpCDF	EPA-5 1613B	47247	0.000001	7 0.000047	0.000042	0.95	02/16/10	02/18/10	J, Q, Ba
Total HxCDD	EPA-5 1613B	47247	0.0000019	9 0.000047	0.000034	0.95	02/16/10	02/18/10	J, Q, Ba
Total HxCDF	EPA-5 1613B	47247	0.0000012	2 0.000047	0.000045	0.95	02/16/10	02/18/10	J, Q, Ba
Total PeCDD	EPA-5 1613B	47247	0.0000023	3 0.000047	0.000011	0.95	02/16/10	02/18/10	J, Q, Ba
Total PeCDF	EPA-5 1613B	47247	0.0000007	8 0.000047	0.000016	0.95	02/16/10	02/18/10	J, Q, Ba
Total TCDD	EPA-5 1613B	47247	0.0000014	4 0.0000094	ND	0.95	02/16/10	02/18/10	
Total TCDF	EPA-5 1613B	47247	0.0000006	50.0000094	0.0000015	0.95	02/16/10	02/18/10	J, Q, Ba
Surrogate: 13C-2,3,7,8-TCDF (24-169%))				69 %				
Surrogate: 37Cl4-2,3,7,8-TCDD (35-197	· /				82 %				
Surrogate: 13C-1,2,3,4,6,7,8-HpCDD (23	3-140%)				66 %				
Surrogate: 13C-1,2,3,4,6,7,8-HpCDF (28	3-143%)				71 %				
Surrogate: 13C-1,2,3,4,7,8,9-HpCDF (26	5-138%)				62 %				
Surrogate: 13C-1,2,3,4,7,8-HxCDD (32-1					69 %				
Surrogate: 13C-1,2,3,4,7,8-HxCDF (26-1	<i>'</i>				71 %				
Surrogate: 13C-1,2,3,6,7,8-HxCDD (28-1					67 %				
Surrogate: 13C-1,2,3,6,7,8-HxCDF (26-1	*				75 %				
Surrogate: 13C-1,2,3,7,8,9-HxCDF (29-1					68 %				
Surrogate: 13C-1,2,3,7,8-PeCDD (25-18					52 %				
Surrogate: 13C-1,2,3,7,8-PeCDF (24-18.					54 %				
Surrogate: 13C-2,3,4,6,7,8-HxCDF (28-1					74 %				
Surrogate: 13C-2,3,4,7,8-PeCDF (21-176					53 %				
Surrogate: 13C-2,3,7,8-TCDD (25-164%))				63 %				
Surrogate: 13C-OCDD (17-157%)					53 %				

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MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 001

Annual Outfall 001

Report Number: ITB0887

Sampled: 02/06/10

Received: 02/06/10

EPA-5 1613B

Analyte	Method	Batch	MDL Limit	Limit	Sample Result	Factor	Extracted Extracted	Date Analyzed	Qualifiers
Sample ID: ITB0887-04RE1 (Outfall 001	(Composite) - Wa	ter) - cont.			Sample	d: 02/06/1	10		
Reporting Units: ug/L									
2,3,7,8-TCDF	EPA-5 1613B	47247	0.000002	0.0000094	ND	0.95	02/16/10	02/19/10	
Surrogate: 13C-2,3,7,8-TCDF (24-169%)					76 %				
Surrogate: 37Cl4-2,3,7,8-TCDD (35-197%)	5)				81 %				



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Project ID: Annual Outfall 001

Annual Outfall 001 Sampled: 02/06/10

Report Number: ITB0887 Received: 02/06/10

Attention: Bronwyn Kelly

618 Michillinda Avenue, Suite 200

MWH-Pasadena/Boeing

Arcadia, CA 91007

ASTM 5174-91

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0887-04 (Outfall 001 (Sample	ed: 02/06/1	10			
Reporting Units: pCi/L									
Total Uranium	ASTM 5174-91	53280	0.21	0.693	0.369	1	02/23/10	02/26/10	Jb



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Project ID: Annual Outfall 001

Annual Outfall 001

Sampled: 02/06/10 Report Number: ITB0887 Received: 02/06/10

Attention: Bronwyn Kelly

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Arcadia, CA 91007

EPA 900.0 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0887-04 (Outfall 0	01 (Composite) - Water)				Sample	ed: 02/06/1	10		
Reporting Units: pCi/L									
Gross Alpha	EPA 900.0 MOD	43108	1.6	3	6.9	1	02/10/10	02/19/10	
Gross Beta	EPA 900.0 MOD	43108	1.2	4	8.1	1	02/10/10	02/19/10	



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Project ID: Annual Outfall 001

Annual Outfall 001 Sampled: 02/06/10

Report Number: ITB0887 Received: 02/06/10

Attention: Bronwyn Kelly

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Arcadia, CA 91007

EPA 901.1 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers	
Sample ID: ITB0887-04 (Outfall (001 (Composite) - Water)			Sampled: 02/06/10						
Reporting Units: pCi/L										
Cesium 137	EPA 901.1 MOD	42136	15	20	1.3	1	02/11/10	02/19/10	U	
Potassium 40	EPA 901.1 MOD	42136	290	NA	-180	1	02/11/10	02/19/10	U	



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Project ID: Annual Outfall 001

Annual Outfall 001

Sampled: 02/06/10 Report Number: ITB0887 Received: 02/06/10

Attention: Bronwyn Kelly

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MWH-Pasadena/Boeing

Arcadia, CA 91007

EPA 903.0 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0887-04 (Outfall 00	01 (Composite) - Water)				Sample	d: 02/06/1	10		
Reporting Units: pCi/L									
Radium (226)	EPA 903.0 MOD	41160	0.21	1	0.06	1	02/10/10	02/26/10	U



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MWH-Pasadena/Boeing Project ID: Annual Outfall 001

618 Michillinda Avenue, Suite 200 Annual Outfall 001 Sampled: 02/06/10 Arcadia, CA 91007 Report Number: ITB0887 Received: 02/06/10

Arcadia, CA 91007 Report Number: ITB0887 Received
Attention: Bronwyn Kelly

EPA 904 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0887-04RE1 (Outfall 0	01 (Composite) - Wa	ter)		Sampled: 02/06/10					
Reporting Units: pCi/L									
Radium 228	EPA 904 MOD	60257	0.41	1	0.18	1	03/01/10	03/05/10	U



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618 Michillinda Avenue, Suite 200 Annual Outfall 001 Sampled: 02/06/10

Arcadia, CA 91007 Report Number: ITB0887 Received: 02/06/10 Attention: Bronwyn Kelly

EPA 905 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0887-04 (Outfall 00)	1 (Composite) - Water)				Sample	d: 02/06/1	10		
Reporting Units: pCi/L									
Strontium 90	EPA 905 MOD	41162	0.64	3	-0.24	1	02/10/10	02/19/10	U



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Arcadia, CA 91007 Report Number: ITB0887 Attention: Bronwyn Kelly

EPA 906.0 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITB0887-04 (Outfall 00	1 (Composite) - Water)				Sample	ed: 02/06/1	10		
Reporting Units: pCi/L									
Tritium	EPA 906.0 MOD	49035	96	500	65	1	02/18/10	02/18/10	U



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Project ID: Annual Outfall 001

Annual Outfall 001 Sampled: 02/06/10

Report Number: ITB0887 Received: 02/06/10

Attention: Bronwyn Kelly

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Arcadia, CA 91007

SHORT HOLD TIME DETAIL REPORT

	Hold Time (in days)	Date/Time Sampled	Date/Time Received	Date/Time Extracted	Date/Time Analyzed
Sample ID: Outfall 001 (Grab) (ITB0887-01)	- Water				
EPA 218.6	1	02/06/2010 10:20	02/06/2010 17:00	02/06/2010 19:20	02/06/2010 20:27
EPA 624	3	02/06/2010 10:20	02/06/2010 17:00	02/08/2010 00:00	02/09/2010 01:19
SM2540F	2	02/06/2010 10:20	02/06/2010 17:00	02/07/2010 08:03	02/07/2010 09:00
Sample ID: Trip Blank (ITB0887-02) - Water	r				
EPA 624	3	02/06/2010 10:20	02/06/2010 17:00	02/08/2010 00:00	02/09/2010 01:49
Sample ID: Outfall 001 (Composite) (ITB088	7-04) - Water				
EPA 180.1	2	02/06/2010 06:40	02/06/2010 17:00	02/07/2010 08:03	02/07/2010 08:30
EPA 300.0	2	02/06/2010 06:40	02/06/2010 17:00	02/07/2010 18:15	02/07/2010 18:31
SM5210B	2	02/06/2010 06:40	02/06/2010 17:00	02/07/2010 11:58	02/12/2010 16:10
SM5540-C	2	02/06/2010 06:40	02/06/2010 17:00	02/06/2010 20:00	02/06/2010 20:36

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Attention: Bronwyn Kelly

Project ID: Annual Outfall 001

Annual Outfall 001

Report Number: ITB0887

Sampled: 02/06/10

Received: 02/06/10

METHOD BLANK/QC DATA

VOLATILE FUEL HYDROCARBONS (EPA 5030/CADHS Mod. 8015)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B1582 Extracted: 02/12/10	<u>) </u>										
Blank Analyzed: 02/12/2010 (10B1582-B	LK1)										
GRO (C4 - C12)	ND	100	25	ug/l							
Surrogate: 4-BFB (FID)	9.01			ug/l	10.0		90	65-140			
LCS Analyzed: 02/12/2010 (10B1582-BS	1)										
GRO (C4 - C12)	824	100	25	ug/l	800		103	80-120			
Surrogate: 4-BFB (FID)	14.1			ug/l	10.0		141	65-140			Z2
Matrix Spike Analyzed: 02/12/2010 (10B	81582-MS1)				Sou	rce: ITB	1073-01				
GRO (C4 - C12)	296	100	25	ug/l	220	ND	134	65-140			
Surrogate: 4-BFB (FID)	8.45			ug/l	10.0		84	65-140			
Matrix Spike Dup Analyzed: 02/12/2010	(10B1582-M	SD1)			Sou	rce: ITB	1073-01				
GRO (C4 - C12)	267	100	25	ug/l	220	ND	122	65-140	10	20	
Surrogate: 4-BFB (FID)	8.42			ug/l	10.0		84	65-140			

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Project ID: Annual Outfall 001

Annual Outfall 001

Report Number: ITB0887

Sampled: 02/06/10

Received: 02/06/10

METHOD BLANK/QC DATA

EXTRACTABLE FUEL HYDROCARBONS (EPA 3510C/EPA 8015B)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B1526 Extracted: 02/12/10	_										
Blank Analyzed: 02/12/2010 (10B1526-B	LK1)										
DRO (C13 - C28)	ND	100	50	ug/l							
EFH (C10 - C28)	ND	100	50	ug/l							
Surrogate: n-Octacosane	145			ug/l	200		72	45-120			
LCS Analyzed: 02/12/2010 (10B1526-BS	1)										MNR1
EFH (C10 - C28)	547	100	50	ug/l	1000		55	40-115			
Surrogate: n-Octacosane	116			ug/l	200		58	45-120			
LCS Dup Analyzed: 02/12/2010 (10B1520	6-BSD1)										
EFH (C10 - C28)	584	100	50	ug/l	1000		58	40-115	7	25	
Surrogate: n-Octacosane	125			ug/l	200		63	45-120			

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Project ID: Annual Outfall 001

618 Michillinda Avenue, Suite 200 Annual Outfall 001 Sampled: 02/06/10

Arcadia, CA 91007 Report Number: ITB0887 Received: 02/06/10
Attention: Bronwyn Kelly

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 10B0840 Extracted: 02/08/	10										
Blank Analyzed: 02/08/2010 (10B0840	-BLK1)										
Benzene	ND	0.50	0.28	ug/l							
Bromodichloromethane	ND	0.50	0.30	ug/l							
Bromoform	ND	0.50	0.40	ug/l							
Bromomethane	ND	1.0	0.42	ug/l							
Carbon tetrachloride	ND	0.50	0.28	ug/l							
Chlorobenzene	ND	0.50	0.36	ug/l							
Chloroethane	ND	1.0	0.40	ug/l							
Chloroform	ND	0.50	0.33	ug/l							
Chloromethane	ND	0.50	0.40	ug/l							
Dibromochloromethane	ND	0.50	0.40	ug/l							
1,2-Dichlorobenzene	ND	0.50	0.32	ug/l							
1,3-Dichlorobenzene	ND	0.50	0.35	ug/l							
1,4-Dichlorobenzene	ND	0.50	0.37	ug/l							
1,1-Dichloroethane	ND	0.50	0.40	ug/l							
1,2-Dichloroethane	ND	0.50	0.28	ug/l							
1,1-Dichloroethene	ND	0.50	0.42	ug/l							
cis-1,2-Dichloroethene	ND	0.50	0.32	ug/l							
trans-1,2-Dichloroethene	ND	0.50	0.30	ug/l							
1,2-Dichloropropane	ND	0.50	0.35	ug/l							
cis-1,3-Dichloropropene	ND	0.50	0.22	ug/l							
trans-1,3-Dichloropropene	ND	0.50	0.32	ug/l							
1,2-Dichloro-1,1,2-trifluoroethane	ND	2.0	1.1	ug/l							
Ethylbenzene	ND	0.50	0.25	ug/l							
Methylene chloride	ND	1.0	0.95	ug/l							
1,1,2,2-Tetrachloroethane	ND	0.50	0.30	ug/l							
Tetrachloroethene	ND	0.50	0.32	ug/l							
Toluene	ND	0.50	0.36	ug/l							
1,1,1-Trichloroethane	ND	0.50	0.30	ug/l							
1,1,2-Trichloroethane	ND	0.50	0.30	ug/l							
Trichloroethene	ND	0.50	0.26	ug/l							
Trichlorofluoromethane	ND	0.50	0.34	ug/l							
Trichlorotrifluoroethane (Freon 113)	ND	5.0	0.50	ug/l							
Vinyl chloride	ND	0.50	0.40	ug/l							
Xylenes, Total	ND	1.5	0.90	ug/l							
Cyclohexane	ND	1.0	0.40	ug/l							

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MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 001

Annual Outfall 001

Report Number: ITB0887

Sampled: 02/06/10 Received: 02/06/10

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source	%REC	%REC	RPD	RPD Limit	Data Qualifiers
·		Limit	MIDL	Cilits	Level	Kesuit	/OKEC	Limits	KI D	Limit	Quanners
Batch: 10B0840 Extracted: 02/08/1	<u>0</u>										
Blank Analyzed: 02/08/2010 (10B0840-l	BLK1)										
Surrogate: 4-Bromofluorobenzene	23.4			ug/l	25.0		94	80-120			
Surrogate: Dibromofluoromethane	25.6			ug/l	25.0		102	80-120			
Surrogate: Toluene-d8	27.0			ug/l	25.0		108	80-120			
LCS Analyzed: 02/08/2010 (10B0840-B	S1)										
Benzene	23.2	0.50	0.28	ug/l	25.0		93	70-120			
Bromodichloromethane	24.0	0.50	0.30	ug/l	25.0		96	70-135			
Bromoform	20.1	0.50	0.40	ug/l	25.0		81	55-130			
Bromomethane	28.6	1.0	0.42	ug/l	25.0		115	65-140			
Carbon tetrachloride	24.9	0.50	0.28	ug/l	25.0		99	65-140			
Chlorobenzene	24.7	0.50	0.36	ug/l	25.0		99	75-120			
Chloroethane	26.6	1.0	0.40	ug/l	25.0		107	60-140			
Chloroform	24.0	0.50	0.33	ug/l	25.0		96	70-130			
Chloromethane	28.4	0.50	0.40	ug/l	25.0		114	50-140			
Dibromochloromethane	22.3	0.50	0.40	ug/l	25.0		89	70-140			
1,2-Dichlorobenzene	24.5	0.50	0.32	ug/l	25.0		98	75-120			
1,3-Dichlorobenzene	25.1	0.50	0.35	ug/l	25.0		100	75-120			
1,4-Dichlorobenzene	24.6	0.50	0.37	ug/l	25.0		99	75-120			
1,1-Dichloroethane	23.8	0.50	0.40	ug/l	25.0		95	70-125			
1,2-Dichloroethane	23.1	0.50	0.28	ug/l	25.0		92	60-140			
1,1-Dichloroethene	26.6	0.50	0.42	ug/l	25.0		106	70-125			
cis-1,2-Dichloroethene	26.5	0.50	0.32	ug/l	25.0		106	70-125			
trans-1,2-Dichloroethene	25.9	0.50	0.30	ug/l	25.0		104	70-125			
1,2-Dichloropropane	21.7	0.50	0.35	ug/l	25.0		87	70-125			
cis-1,3-Dichloropropene	25.8	0.50	0.22	ug/l	25.0		103	75-125			
trans-1,3-Dichloropropene	19.9	0.50	0.32	ug/l	25.0		80	70-125			
Ethylbenzene	25.0	0.50	0.25	ug/l	25.0		100	75-125			
Methylene chloride	24.0	1.0	0.95	ug/l	25.0		96	55-130			
1,1,2,2-Tetrachloroethane	25.5	0.50	0.30	ug/l	25.0		102	55-130			
Tetrachloroethene	25.2	0.50	0.32	ug/l	25.0		101	70-125			
Toluene	24.1	0.50	0.36	ug/l	25.0		96	70-120			
1,1,1-Trichloroethane	24.2	0.50	0.30	ug/l	25.0		97	65-135			
1,1,2-Trichloroethane	24.2	0.50	0.30	ug/l	25.0		97	70-125			
Trichloroethene	25.6	0.50	0.26	ug/l	25.0		102	70-125			
Trichlorofluoromethane	28.1	0.50	0.34	ug/l	25.0		112	65-145			
Vinyl chloride	33.6	0.50	0.40	ug/l	25.0		134	55-135			
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618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 001

Annual Outfall 001

Report Number: ITB0887

Sampled: 02/06/10 Received: 02/06/10

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source	%REC	%REC	RPD	RPD Limit	Data Qualifiers
•		Limit	MIDL	Units	Levei	Result	/0KEC	Limits	KI D	Lillit	Quanners
Batch: 10B0840 Extracted: 02/08/10	<u>)</u>										
LCS Analyzed: 02/08/2010 (10B0840-BS	1)										
Xylenes, Total	77.5	1.5	0.90	ug/l	75.0		103	70-125			
Surrogate: 4-Bromofluorobenzene	25.5			ug/l	25.0		102	80-120			
Surrogate: Dibromofluoromethane	26.0			ug/l	25.0		104	80-120			
Surrogate: Toluene-d8	26.4			ug/l	25.0		105	80-120			
Matrix Spike Analyzed: 02/08/2010 (10B	30840-MS1)				Sou	rce: ITB(0892-01				
Benzene	24.9	0.50	0.28	ug/l	25.0	ND	100	65-125			
Bromodichloromethane	27.4	0.50	0.30	ug/l	25.0	ND	109	70-135			
Bromoform	22.2	0.50	0.40	ug/l	25.0	ND	89	55-135			
Bromomethane	30.0	1.0	0.42	ug/l	25.0	ND	120	55-145			
Carbon tetrachloride	25.9	0.50	0.28	ug/l	25.0	ND	103	65-140			
Chlorobenzene	26.9	0.50	0.36	ug/l	25.0	ND	108	75-125			
Chloroethane	28.3	1.0	0.40	ug/l	25.0	ND	113	55-140			
Chloroform	27.1	0.50	0.33	ug/l	25.0	ND	108	65-135			
Chloromethane	29.6	0.50	0.40	ug/l	25.0	ND	118	45-145			
Dibromochloromethane	25.1	0.50	0.40	ug/l	25.0	ND	100	65-140			
1,2-Dichlorobenzene	26.3	0.50	0.32	ug/l	25.0	ND	105	75-125			
1,3-Dichlorobenzene	27.5	0.50	0.35	ug/l	25.0	ND	110	75-125			
1,4-Dichlorobenzene	27.0	0.50	0.37	ug/l	25.0	ND	108	75-125			
1,1-Dichloroethane	26.2	0.50	0.40	ug/l	25.0	ND	105	65-130			
1,2-Dichloroethane	25.0	0.50	0.28	ug/l	25.0	ND	100	60-140			
1,1-Dichloroethene	27.3	0.50	0.42	ug/l	25.0	ND	109	60-130			
cis-1,2-Dichloroethene	29.2	0.50	0.32	ug/l	25.0	ND	117	65-130			
trans-1,2-Dichloroethene	27.6	0.50	0.30	ug/l	25.0	ND	111	65-130			
1,2-Dichloropropane	24.3	0.50	0.35	ug/l	25.0	ND	97	65-130			
cis-1,3-Dichloropropene	29.5	0.50	0.22	ug/l	25.0	ND	118	70-130			
trans-1,3-Dichloropropene	22.6	0.50	0.32	ug/l	25.0	ND	90	65-135			
Ethylbenzene	26.3	0.50	0.25	ug/l	25.0	ND	105	65-130			
Methylene chloride	26.0	1.0	0.95	ug/l	25.0	ND	104	50-135			
1,1,2,2-Tetrachloroethane	26.1	0.50	0.30	ug/l	25.0	ND	104	55-135			
Tetrachloroethene	26.4	0.50	0.32	ug/l	25.0	ND	106	65-130			
Toluene	25.9	0.50	0.36	ug/l	25.0	ND	104	70-125			
1,1,1-Trichloroethane	25.8	0.50	0.30	ug/l	25.0	ND	103	65-140			
1,1,2-Trichloroethane	26.8	0.50	0.30	ug/l	25.0	ND	107	65-130			
Trichloroethene	26.8	0.50	0.26	ug/l	25.0	ND	107	65-125			
Trichlorofluoromethane	29.0	0.50	0.34	ug/l	25.0	ND	116	60-145			
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THE LEADER IN ENVIRONMENTAL TESTING

MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 001

Annual Outfall 001

Report Number: ITB0887

Sampled: 02/06/10 Received: 02/06/10

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC	RPD	RPD Limit	Data Oualifiers
·		Limit	WIDE	Chits	Level	resure	/UKEC	Limits	KI D	Limit	Quamiers
Batch: 10B0840 Extracted: 02/08/1	<u>.0</u>										
Matrix Spike Analyzed: 02/08/2010 (10	B0840-MS1)				Sou	rce: ITB(892-01				
Vinyl chloride	34.1	0.50	0.40	ug/l	25.0	ND	137	45-140			
Xylenes, Total	83.0	1.5	0.90	ug/l	75.0	ND	111	60-130			
Surrogate: 4-Bromofluorobenzene	26.5			ug/l	25.0		106	80-120			
Surrogate: Dibromofluoromethane	26.8			ug/l	25.0		107	80-120			
Surrogate: Toluene-d8	26.7			ug/l	25.0		107	80-120			
Matrix Spike Dup Analyzed: 02/08/201	0 (10B0840-M	SD1)			Sou	rce: ITB(892-01				
Benzene	23.8	0.50	0.28	ug/l	25.0	ND	95	65-125	4	20	
Bromodichloromethane	25.6	0.50	0.30	ug/l	25.0	ND	102	70-135	7	20	
Bromoform	21.2	0.50	0.40	ug/l	25.0	ND	85	55-135	5	25	
Bromomethane	29.2	1.0	0.42	ug/l	25.0	ND	117	55-145	3	25	
Carbon tetrachloride	25.1	0.50	0.28	ug/l	25.0	ND	100	65-140	3	25	
Chlorobenzene	26.0	0.50	0.36	ug/l	25.0	ND	104	75-125	3	20	
Chloroethane	26.8	1.0	0.40	ug/l	25.0	ND	107	55-140	5	25	
Chloroform	25.4	0.50	0.33	ug/l	25.0	ND	102	65-135	6	20	
Chloromethane	28.7	0.50	0.40	ug/l	25.0	ND	115	45-145	3	25	
Dibromochloromethane	23.7	0.50	0.40	ug/l	25.0	ND	95	65-140	6	25	
1,2-Dichlorobenzene	25.2	0.50	0.32	ug/l	25.0	ND	101	75-125	4	20	
1,3-Dichlorobenzene	26.2	0.50	0.35	ug/l	25.0	ND	105	75-125	5	20	
1,4-Dichlorobenzene	25.9	0.50	0.37	ug/l	25.0	ND	103	75-125	4	20	
1,1-Dichloroethane	25.1	0.50	0.40	ug/l	25.0	ND	100	65-130	4	20	
1,2-Dichloroethane	23.4	0.50	0.28	ug/l	25.0	ND	94	60-140	6	20	
1,1-Dichloroethene	26.4	0.50	0.42	ug/l	25.0	ND	106	60-130	3	20	
cis-1,2-Dichloroethene	27.3	0.50	0.32	ug/l	25.0	ND	109	65-130	7	20	
trans-1,2-Dichloroethene	26.2	0.50	0.30	ug/l	25.0	ND	105	65-130	6	20	
1,2-Dichloropropane	23.2	0.50	0.35	ug/l	25.0	ND	93	65-130	5	20	
cis-1,3-Dichloropropene	28.0	0.50	0.22	ug/l	25.0	ND	112	70-130	5	20	
trans-1,3-Dichloropropene	20.9	0.50	0.32	ug/l	25.0	ND	84	65-135	8	25	
Ethylbenzene	25.5	0.50	0.25	ug/l	25.0	ND	102	65-130	3	20	
Methylene chloride	25.0	1.0	0.95	ug/l	25.0	ND	100	50-135	4	20	
1,1,2,2-Tetrachloroethane	24.5	0.50	0.30	ug/l	25.0	ND	98	55-135	6	30	
Tetrachloroethene	25.8	0.50	0.32	ug/l	25.0	ND	103	65-130	2	20	
Toluene	24.8	0.50	0.36	ug/l	25.0	ND	99	70-125	4	20	
1,1,1-Trichloroethane	25.1	0.50	0.30	ug/l	25.0	ND	100	65-140	3	20	
1,1,2-Trichloroethane	24.4	0.50	0.30	ug/l	25.0	ND	97	65-130	9	25	
Trichloroethene	25.8	0.50	0.26	ug/l	25.0	ND	103	65-125	4	20	

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MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly

Project ID: Annual Outfall 001

Annual Outfall 001

Report Number: ITB0887

Sampled: 02/06/10

Received: 02/06/10

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 10B0840 Extracted: 02/08/10	_										
Matrix Spike Dup Analyzed: 02/08/2010	(10B0840-MS	D1)			Sou	rce: ITB(0892-01				
Trichlorofluoromethane	28.2	0.50	0.34	ug/l	25.0	ND	113	60-145	3	25	
Vinyl chloride	33.1	0.50	0.40	ug/l	25.0	ND	132	45-140	3	30	
Xylenes, Total	81.0	1.5	0.90	ug/l	75.0	ND	108	60-130	2	20	
Surrogate: 4-Bromofluorobenzene	25.8			ug/l	25.0		103	80-120			
Surrogate: Dibromofluoromethane	26.7			ug/l	25.0		107	80-120			
Surrogate: Toluene-d8	26.3			ug/l	25.0		105	80-120			

MWH-Pasadena/Boeing

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Received: 02/06/10

METHOD BLANK/QC DATA

PURGEABLES-- GC/MS (EPA 624)

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 10B0840 Extracted: 02/08/10	<u>.</u>										
Blank Analyzed: 02/08/2010 (10B0840-B	LK1)										
Acrolein	ND	5.0	4.0	ug/l							
Acrylonitrile	ND	2.0	1.2	ug/l							
2-Chloroethyl vinyl ether	ND	5.0	1.8	ug/l							
Surrogate: 4-Bromofluorobenzene	23.4			ug/l	25.0		94	80-120			
Surrogate: Dibromofluoromethane	25.6			ug/l	25.0		102	80-120			
Surrogate: Toluene-d8	27.0			ug/l	25.0		108	80-120			
LCS Analyzed: 02/08/2010 (10B0840-BS	1)										
2-Chloroethyl vinyl ether	13.8	5.0	1.8	ug/l	25.0		55	25-170			
Surrogate: 4-Bromofluorobenzene	25.5			ug/l	25.0		102	80-120			
Surrogate: Dibromofluoromethane	26.0			ug/l	25.0		104	80-120			
Surrogate: Toluene-d8	26.4			ug/l	25.0		105	80-120			
Matrix Spike Analyzed: 02/08/2010 (10B	0840-MS1)				Sou	rce: ITB(0892-01				
2-Chloroethyl vinyl ether	13.8	5.0	1.8	ug/l	25.0	ND	55	25-170			
Surrogate: 4-Bromofluorobenzene	26.5			ug/l	25.0		106	80-120			
Surrogate: Dibromofluoromethane	26.8			ug/l	25.0		107	80-120			
Surrogate: Toluene-d8	26.7			ug/l	25.0		107	80-120			
Matrix Spike Dup Analyzed: 02/08/2010	(10B0840-M	ISD1)			Sou	rce: ITB(0892-01				
2-Chloroethyl vinyl ether	12.8	5.0	1.8	ug/l	25.0	ND	51	25-170	7	25	
Surrogate: 4-Bromofluorobenzene	25.8			ug/l	25.0		103	80-120			
Surrogate: Dibromofluoromethane	26.7			ug/l	25.0		107	80-120			
Surrogate: Toluene-d8	26.3			ug/l	25.0		105	80-120			

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MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly

Project ID: Annual Outfall 001

Annual Outfall 001

Report Number: ITB0887

Sampled: 02/06/10 Received: 02/06/10

METHOD BLANK/QC DATA

1,4-DIOXANE BY GCMS - SINGLE ION MONITORING (SIM)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B0317 Extracted: 02/08/10	-										
Blank Analyzed: 02/08/2010 (10B0317-B	LK1)										
1,4-Dioxane	ND	2.0	1.0	ug/l							
Surrogate: Dibromofluoromethane	0.980			ug/l	1.00		98	80-120			
LCS Analyzed: 02/08/2010 (10B0317-BS)	1)										
1,4-Dioxane	9.80	2.0	1.0	ug/l	10.0		98	70-125			
Surrogate: Dibromofluoromethane	0.960			ug/l	1.00		96	80-120			
Matrix Spike Analyzed: 02/08/2010 (10B	0317-MS1)				Sou	rce: ITB(0632-01				
1,4-Dioxane	9.00	2.0	1.0	ug/l	10.0	ND	90	70-130			
Surrogate: Dibromofluoromethane	1.03			ug/l	1.00		103	80-120			
Matrix Spike Dup Analyzed: 02/08/2010	(10B0317-M	SD1)			Sou	rce: ITB(0632-01				
1,4-Dioxane	9.37	2.0	1.0	ug/l	10.0	ND	94	70-130	4	30	
Surrogate: Dibromofluoromethane	1.02			ug/l	1.00		102	80-120			

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%REC

RPD

Data

Project ID: Annual Outfall 001

Annual Outfall 001

Sampled: 02/06/10 Report Number: ITB0887 Received: 02/06/10

Spike

Source

Attention: Bronwyn Kelly

618 Michillinda Avenue, Suite 200

MWH-Pasadena/Boeing

Arcadia, CA 91007

METHOD BLANK/QC DATA

ACID & BASE/NEUTRALS BY GC/MS (EPA 625)

Reporting

		Reporting			Spike	Source		%REC		KPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 10B1159 Extracted: 02/10/10	<u>) </u>										
Blank Analyzed: 02/15/2010 (10B1159-B	BLK1)										
Acenaphthene	ND	0.50	0.10	ug/l							
Acenaphthylene	ND	0.50	0.10	ug/l							
Aniline	ND	10	0.30	ug/l							
Anthracene	ND	0.50	0.10	ug/l							
Benzidine	ND	5.0	5.0	ug/l							
Benzo(a)anthracene	ND	5.0	0.10	ug/l							
Benzo(a)pyrene	ND	2.0	0.10	ug/l							
Benzo(b)fluoranthene	ND	2.0	0.10	ug/l							
Benzo(g,h,i)perylene	ND	5.0	0.10	ug/l							
Benzo(k)fluoranthene	ND	0.50	0.10	ug/l							
Benzoic acid	ND	20	3.0	ug/l							
Benzyl alcohol	ND	5.0	0.10	ug/l							
4-Bromophenyl phenyl ether	ND	1.0	0.10	ug/l							
Butyl benzyl phthalate	ND	5.0	0.70	ug/l							
4-Chloro-3-methylphenol	ND	2.0	0.20	ug/l							
4-Chloroaniline	ND	2.0	0.10	ug/l							
Bis(2-chloroethoxy)methane	ND	0.50	0.10	ug/l							
Bis(2-chloroethyl)ether	ND	0.50	0.10	ug/l							
Bis(2-chloroisopropyl)ether	ND	0.50	0.10	ug/l							
Bis(2-ethylhexyl)phthalate	ND	5.0	1.7	ug/l							
2-Chloronaphthalene	ND	0.50	0.10	ug/l							
2-Chlorophenol	ND	1.0	0.20	ug/l							
4-Chlorophenyl phenyl ether	ND	0.50	0.10	ug/l							
Chrysene	ND	0.50	0.10	ug/l							
Dibenz(a,h)anthracene	ND	0.50	0.10	ug/l							
Dibenzofuran	ND	0.50	0.10	ug/l							
Di-n-butyl phthalate	ND	2.0	0.20	ug/l							
1,2-Dichlorobenzene	ND	0.50	0.10	ug/l							
1,3-Dichlorobenzene	ND	0.50	0.10	ug/l							
1,4-Dichlorobenzene	ND	0.50	0.20	ug/l							
3,3'-Dichlorobenzidine	ND	5.0	5.0	ug/l							
2,4-Dichlorophenol	ND	2.0	0.20	ug/l							
Diethyl phthalate	ND	1.0	0.10	ug/l							
2,4-Dimethylphenol	ND	2.0	0.30	ug/l							
Dimethyl phthalate	ND	0.50	0.10	ug/l							

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MWH-Pasadena/Boeing Project ID: Annual Outfall 001

618 Michillinda Avenue, Suite 200 Annual Outfall 001 Sampled: 02/06/10

Arcadia, CA 91007 Report Number: ITB0887 Received: 02/06/10
Attention: Bronwyn Kelly

METHOD BLANK/QC DATA

ACID & BASE/NEUTRALS BY GC/MS (EPA 625)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC	RPD	RPD Limit	Data Qualifiers
•		Ziiiii	WIDE	Circs	Ecver	resure	/UILE	Limits	I L	Limit	Quantiers
Batch: 10B1159 Extracted: 02/10/10	<u>)</u>										
Blank Analyzed: 02/15/2010 (10B1159-E	RLK1)										
4,6-Dinitro-2-methylphenol	ND	5.0	0.20	ug/l							
2,4-Dinitrophenol	ND	5.0	0.90	ug/l							
2,4-Dinitrotoluene	ND	5.0	0.20	ug/l							
2,6-Dinitrotoluene	ND	5.0	0.10	ug/l							
Di-n-octyl phthalate	ND	5.0	0.10	ug/l							
1,2-Diphenylhydrazine/Azobenzene	ND	1.0	0.10	ug/l							
Fluoranthene	ND	0.50	0.10	ug/l							
Fluorene	ND	0.50	0.10	ug/l							
Hexachlorobenzene	ND	1.0	0.10	ug/l							
Hexachlorobutadiene	ND	2.0	0.20	ug/l							
Hexachlorocyclopentadiene	ND	5.0	0.10	ug/l							
Hexachloroethane	ND	3.0	0.20	ug/l							
Indeno(1,2,3-cd)pyrene	ND	2.0	0.10	ug/l							
Isophorone	ND	1.0	0.10	ug/l							
2-Methylnaphthalene	ND	1.0	0.10	ug/l							
2-Methylphenol	ND	2.0	0.10	ug/l							
4-Methylphenol	ND	5.0	0.20	ug/l							
Naphthalene	ND	1.0	0.10	ug/l							
2-Nitroaniline	ND	5.0	0.10	ug/l							
3-Nitroaniline	ND	5.0	0.20	ug/l							
4-Nitroaniline	ND	5.0	0.50	ug/l							
Nitrobenzene	ND	1.0	0.10	ug/l							
2-Nitrophenol	ND	2.0	0.10	ug/l							
4-Nitrophenol	ND	5.0	2.5	ug/l							
N-Nitroso-di-n-propylamine	ND	2.0	0.10	ug/l							
N-Nitrosodimethylamine	ND	2.0	0.10	ug/l							
N-Nitrosodiphenylamine	ND	1.0	0.10	ug/l							
Pentachlorophenol	ND	2.0	0.10	ug/l							
Phenanthrene	ND	0.50	0.10	ug/l							
Phenol	ND	1.0	0.30	ug/l							
Pyrene	ND	0.50	0.10	ug/l							
1,2,4-Trichlorobenzene	ND	1.0	0.10	ug/l							
2,4,5-Trichlorophenol	ND	2.0	0.20	ug/l							
2,4,6-Trichlorophenol	ND	1.0	0.10	ug/l							
Surrogate: 2,4,6-Tribromophenol	20.9			ug/l	20.0		104	40-120			
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TestAmerica Irvine

Sampled: 02/06/10

Received: 02/06/10



THE LEADER IN ENVIRONMENTAL TESTING

MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 001

Annual Outfall 001

Report Number: ITB0887

METHOD BLANK/QC DATA

ACID & BASE/NEUTRALS BY GC/MS (EPA 625)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC	RPD	RPD Limit	Data Oualifiers
•							,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				C
Batch: 10B1159 Extracted: 02/10/	10										
Blank Analyzed: 02/15/2010 (10B1159	-BLK1)										
Surrogate: 2-Fluorobiphenyl	10.3			ug/l	10.0		103	50-120			
Surrogate: 2-Fluorophenol	14.7			ug/l	20.0		74	30-120			
Surrogate: Nitrobenzene-d5	8.54			ug/l	10.0		85	45-120			
Surrogate: Phenol-d6	15.2			ug/l	20.0		76	35-120			
Surrogate: Terphenyl-d14	10.2			ug/l	10.0		102	50-125			
LCS Analyzed: 02/15/2010 (10B1159-I	3S1)										
Acenaphthene	8.64	0.50	0.10	ug/l	10.0		86	60-120			
Acenaphthylene	9.02	0.50	0.10	ug/l	10.0		90	60-120			
Aniline	7.16	10	0.30	ug/l	10.0		72	35-120			Ja
Anthracene	9.24	0.50	0.10	ug/l	10.0		92	65-120			
Benzidine	5.98	5.0	5.0	ug/l	10.0		60	30-160			
Benzo(a)anthracene	9.58	5.0	0.10	ug/l	10.0		96	65-120			
Benzo(a)pyrene	9.92	2.0	0.10	ug/l	10.0		99	55-130			
Benzo(b)fluoranthene	9.96	2.0	0.10	ug/l	10.0		100	55-125			
Benzo(g,h,i)perylene	11.1	5.0	0.10	ug/l	10.0		111	45-135			
Benzo(k)fluoranthene	9.34	0.50	0.10	ug/l	10.0		93	50-125			
Benzoic acid	8.18	20	3.0	ug/l	10.0		82	25-120			Ja
Benzyl alcohol	8.10	5.0	0.10	ug/l	10.0		81	50-120			
4-Bromophenyl phenyl ether	9.46	1.0	0.10	ug/l	10.0		95	60-120			
Butyl benzyl phthalate	10.2	5.0	0.70	ug/l	10.0		102	55-130			
4-Chloro-3-methylphenol	8.26	2.0	0.20	ug/l	10.0		83	60-120			
4-Chloroaniline	7.82	2.0	0.10	ug/l	10.0		78	55-120			
Bis(2-chloroethoxy)methane	8.26	0.50	0.10	ug/l	10.0		83	55-120			
Bis(2-chloroethyl)ether	7.66	0.50	0.10	ug/l	10.0		77	50-120			
Bis(2-chloroisopropyl)ether	7.12	0.50	0.10	ug/l	10.0		71	45-120			
Bis(2-ethylhexyl)phthalate	10.1	5.0	1.7	ug/l	10.0		101	65-130			
2-Chloronaphthalene	8.34	0.50	0.10	ug/l	10.0		83	60-120			
2-Chlorophenol	7.78	1.0	0.20	ug/l	10.0		78	45-120			
4-Chlorophenyl phenyl ether	10.1	0.50	0.10	ug/l	10.0		101	65-120			
Chrysene	9.58	0.50	0.10	ug/l	10.0		96	65-120			
Dibenz(a,h)anthracene	10.2	0.50	0.10	ug/l	10.0		102	50-135			
Dibenzofuran	9.46	0.50	0.10	ug/l	10.0		95	65-120			
Di-n-butyl phthalate	9.34	2.0	0.20	ug/l	10.0		93	60-125			
1,2-Dichlorobenzene	7.14	0.50	0.10	ug/l	10.0		71	40-120			
1,3-Dichlorobenzene	6.68	0.50	0.10	ug/l	10.0		67	35-120			

TestAmerica Irvine

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

Project ID: Annual Outfall 001

Annual Outfall 001

Sampled: 02/06/10 Report Number: ITB0887 Received: 02/06/10

Attention: Bronwyn Kelly

618 Michillinda Avenue, Suite 200

MWH-Pasadena/Boeing

Arcadia, CA 91007

METHOD BLANK/QC DATA

ACID & BASE/NEUTRALS BY GC/MS (EPA 625)

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 10B1159 Extracted: 02/10	/10										
LCS Analyzed: 02/15/2010 (10B1159-	·BS1)										
1,4-Dichlorobenzene	6.72	0.50	0.20	ug/l	10.0		67	35-120			
3,3'-Dichlorobenzidine	8.16	5.0	5.0	ug/l	10.0		82	45-135			
2,4-Dichlorophenol	8.26	2.0	0.20	ug/l	10.0		83	55-120			
Diethyl phthalate	9.78	1.0	0.10	ug/l	10.0		98	55-120			
2,4-Dimethylphenol	7.00	2.0	0.30	ug/l	10.0		70	40-120			
Dimethyl phthalate	10.2	0.50	0.10	ug/l	10.0		102	30-120			
4,6-Dinitro-2-methylphenol	8.02	5.0	0.20	ug/l	10.0		80	45-120			
2,4-Dinitrophenol	8.18	5.0	0.90	ug/l	10.0		82	40-120			
2,4-Dinitrotoluene	9.60	5.0	0.20	ug/l	10.0		96	65-120			
2,6-Dinitrotoluene	9.78	5.0	0.10	ug/l	10.0		98	65-120			
Di-n-octyl phthalate	10.1	5.0	0.10	ug/l	10.0		101	65-135			
1,2-Diphenylhydrazine/Azobenzene	8.90	1.0	0.10	ug/l	10.0		89	60-120			
Fluoranthene	9.30	0.50	0.10	ug/l	10.0		93	60-120			
Fluorene	9.88	0.50	0.10	ug/l	10.0		99	65-120			
Hexachlorobenzene	9.10	1.0	0.10	ug/l	10.0		91	60-120			
Hexachlorobutadiene	6.16	2.0	0.20	ug/l	10.0		62	40-120			
Hexachlorocyclopentadiene	6.54	5.0	0.10	ug/l	10.0		65	25-120			
Hexachloroethane	6.02	3.0	0.20	ug/l	10.0		60	35-120			
Indeno(1,2,3-cd)pyrene	10.7	2.0	0.10	ug/l	10.0		107	45-135			
Isophorone	8.36	1.0	0.10	ug/l	10.0		84	50-120			
2-Methylnaphthalene	8.12	1.0	0.10	ug/l	10.0		81	55-120			
2-Methylphenol	7.62	2.0	0.10	ug/l	10.0		76	50-120			
4-Methylphenol	7.82	5.0	0.20	ug/l	10.0		78	50-120			
Naphthalene	7.80	1.0	0.10	ug/l	10.0		78	55-120			
2-Nitroaniline	9.98	5.0	0.10	ug/l	10.0		100	65-120			
3-Nitroaniline	10.2	5.0	0.20	ug/l	10.0		102	60-120			
4-Nitroaniline	9.78	5.0	0.50	ug/l	10.0		98	55-125			
Nitrobenzene	7.98	1.0	0.10	ug/l	10.0		80	55-120			
2-Nitrophenol	8.60	2.0	0.10	ug/l	10.0		86	50-120			
4-Nitrophenol	10.6	5.0	2.5	ug/l	10.0		106	45-120			
N-Nitroso-di-n-propylamine	7.64	2.0	0.10	ug/l	10.0		76	45-120			
N-Nitrosodimethylamine	8.18	2.0	0.10	ug/l	10.0		82	45-120			
N-Nitrosodiphenylamine	9.40	1.0	0.10	ug/l	10.0		94	60-120			
Pentachlorophenol	8.12	2.0	0.10	ug/l	10.0		81	50-120			
Phenanthrene	9.14	0.50	0.10	ug/l	10.0		91	65-120			

TestAmerica Irvine



MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly

Project ID: Annual Outfall 001

Annual Outfall 001

Report Number: ITB0887

Sampled: 02/06/10 Received: 02/06/10

METHOD BLANK/QC DATA

ACID & BASE/NEUTRALS BY GC/MS (EPA 625)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC	RPD	RPD Limit	Data Qualifiers
Batch: 10B1159 Extracted: 02/10/10	0										
Batta. 10B1137 Extracted. 02/10/10	<u>o</u>										
LCS Analyzed: 02/15/2010 (10B1159-BS	S1)										
Phenol	7.70	1.0	0.30	ug/l	10.0		77	40-120			
Pyrene	9.56	0.50	0.10	ug/l	10.0		96	55-125			
1,2,4-Trichlorobenzene	7.14	1.0	0.10	ug/l	10.0		71	45-120			
2,4,5-Trichlorophenol	9.00	2.0	0.20	ug/l	10.0		90	55-120			
2,4,6-Trichlorophenol	8.56	1.0	0.10	ug/l	10.0		86	55-120			
Surrogate: 2,4,6-Tribromophenol	20.9			ug/l	20.0		104	40-120			
Surrogate: 2-Fluorobiphenyl	8.88			ug/l	10.0		89	50-120			
Surrogate: 2-Fluorophenol	13.7			ug/l	20.0		69	30-120			
Surrogate: Nitrobenzene-d5	8.20			ug/l	10.0		82	45-120			
Surrogate: Phenol-d6	14.9			ug/l	20.0		75	35-120			
Surrogate: Terphenyl-d14	9.58			ug/l	10.0		96	50-125			
Matrix Spike Analyzed: 02/15/2010 (101	B1159-MS1)				Sou	rce: ITB	0810-01				
Acenaphthene	8.02	0.49	0.098	ug/l	9.80	ND	82	60-120			
Acenaphthylene	7.22	0.49	0.098	ug/l	9.80	ND	74	60-120			
Aniline	ND	9.8	0.29	ug/l	9.80	ND		35-120			M2
Anthracene	7.84	0.49	0.098	ug/l	9.80	ND	80	65-120			
Benzidine	ND	4.9	4.9	ug/l	9.80	ND		30-160			M2
Benzo(a)anthracene	8.73	4.9	0.098	ug/l	9.80	ND	89	65-120			
Benzo(a)pyrene	8.22	2.0	0.098	ug/l	9.80	ND	84	55-130			
Benzo(b)fluoranthene	9.22	2.0	0.098	ug/l	9.80	ND	94	55-125			
Benzo(g,h,i)perylene	9.82	4.9	0.098	ug/l	9.80	ND	100	45-135			
Benzo(k)fluoranthene	8.45	0.49	0.098	ug/l	9.80	ND	86	55-125			
Benzoic acid	11.6	20	2.9	ug/l	9.80	ND	118	25-125			Ja
Benzyl alcohol	7.59	4.9	0.098	ug/l	9.80	ND	77	40-120			
4-Bromophenyl phenyl ether	8.25	0.98	0.098	ug/l	9.80	ND	84	60-120			
Butyl benzyl phthalate	9.51	4.9	0.69	ug/l	9.80	ND	97	55-130			
4-Chloro-3-methylphenol	3.18	2.0	0.20	ug/l	9.80	ND	32	60-120			M2
4-Chloroaniline	ND	2.0	0.098	ug/l	9.80	ND		55-120			M2
Bis(2-chloroethoxy)methane	7.12	0.49	0.098	ug/l	9.80	ND	73	50-120			
Bis(2-chloroethyl)ether	7.29	0.49	0.098	ug/l	9.80	ND	74	50-120			
Bis(2-chloroisopropyl)ether	6.71	0.49	0.098	ug/l	9.80	ND	68	45-120			
Bis(2-ethylhexyl)phthalate	9.55	4.9	1.7	ug/l	9.80	ND	97	65-130			
2-Chloronaphthalene	6.92	0.49	0.098	ug/l	9.80	ND	71	60-120			
2-Chlorophenol	6.12	0.98	0.20	ug/l	9.80	ND	62	45-120			
4-Chlorophenyl phenyl ether	9.33	0.49	0.098	ug/l	9.80	ND	95	65-120			

TestAmerica Irvine

17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

Project ID: Annual Outfall 001 MWH-Pasadena/Boeing

Annual Outfall 001 618 Michillinda Avenue, Suite 200 Sampled: 02/06/10 Received: 02/06/10

Arcadia, CA 91007 Report Number: ITB0887 Attention: Bronwyn Kelly

METHOD BLANK/QC DATA

ACID & BASE/NEUTRALS BY GC/MS (EPA 625)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source	%REC	%REC	RPD	RPD Limit	Data Qualifiers
-		Lillit	MDL	Units	Level	Result	70KEC	Lillits	KFD	Lillit	Quanners
Batch: 10B1159 Extracted: 02/10/1	<u>0</u>										
M	D1150 MC1)				C	TTD/	0010.01				
Matrix Spike Analyzed: 02/15/2010 (10)	<i>'</i>	0.40	0.000	/1		rce: ITB(65.100			
Chrysene	8.61	0.49	0.098	ug/l	9.80	ND	88	65-120			
Dibenz(a,h)anthracene	8.78	0.49	0.098	ug/l	9.80	ND	90	45-135			
Dibenzofuran	8.84	0.49	0.098	ug/l	9.80	ND	90	65-120			
Di-n-butyl phthalate	8.59	2.0	0.20	ug/l	9.80	ND	88	60-125			
1,2-Dichlorobenzene	9.25	0.49	0.098	ug/l	9.80	ND	94	40-120			
1,3-Dichlorobenzene	6.55	0.49	0.098	ug/l	9.80	ND	67	35-120			
1,4-Dichlorobenzene	6.53	0.49	0.20	ug/l	9.80	ND	67	35-120			
3,3'-Dichlorobenzidine	ND	4.9	4.9	ug/l	9.80	ND		45-135			M2
2,4-Dichlorophenol	5.47	2.0	0.20	ug/l	9.80	ND	56	55-120			
Diethyl phthalate	10.1	0.98	0.098	ug/l	9.80	ND	103	55-120			
2,4-Dimethylphenol	ND	2.0	0.29	ug/l	9.80	ND		40-120			M2
Dimethyl phthalate	9.53	0.49	0.098	ug/l	9.80	ND	97	30-120			
4,6-Dinitro-2-methylphenol	10.7	4.9	0.20	ug/l	9.80	ND	109	45-120			
2,4-Dinitrophenol	11.4	4.9	0.88	ug/l	9.80	ND	116	40-120			
2,4-Dinitrotoluene	9.41	4.9	0.20	ug/l	9.80	ND	96	65-120			
2,6-Dinitrotoluene	10.3	4.9	0.098	ug/l	9.80	ND	105	65-120			
Di-n-octyl phthalate	9.51	4.9	0.098	ug/l	9.80	ND	97	65-135			
1,2-Diphenylhydrazine/Azobenzene	9.12	0.98	0.098	ug/l	9.80	ND	93	60-120			
Fluoranthene	8.51	0.49	0.098	ug/l	9.80	ND	87	60-120			
Fluorene	9.31	0.49	0.098	ug/l	9.80	ND	95	65-120			
Hexachlorobenzene	8.04	0.98	0.098	ug/l	9.80	ND	82	60-120			
Hexachlorobutadiene	6.39	2.0	0.20	ug/l	9.80	ND	65	40-120			
Hexachlorocyclopentadiene	6.39	4.9	0.098	ug/l	9.80	ND	65	25-120			
Hexachloroethane	6.14	2.9	0.20	ug/l	9.80	ND	63	35-120			
Indeno(1,2,3-cd)pyrene	9.31	2.0	0.098	ug/l	9.80	ND	95	40-135			
Isophorone	7.65	0.98	0.098	ug/l	9.80	0.333	75	50-120			
2-Methylnaphthalene	6.78	0.98	0.098	ug/l	9.80	ND	69	55-120			
2-Methylphenol	0.451	2.0	0.098	ug/l	9.80	ND	5	50-120			M2, Ja
4-Methylphenol	0.275	4.9	0.20	ug/l	9.80	ND	3	50-120			M2, Ja
Naphthalene	7.12	0.98	0.098	ug/l	9.80	ND	73	55-120			
2-Nitroaniline	5.57	4.9	0.098	ug/l	9.80	ND	57	65-120			M2
3-Nitroaniline	ND	4.9	0.20	ug/l	9.80	ND		60-120			M2
4-Nitroaniline	1.00	4.9	0.49	ug/l	9.80	ND	10	55-125			M2, Ja
Nitrobenzene	11.9	0.98	0.098	ug/l	9.80	ND	121	55-120			M1
2-Nitrophenol	12.4	2.0	0.098	ug/l	9.80	ND	126	50-120			M1
*				J							

TestAmerica Irvine



MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly

Project ID: Annual Outfall 001

Annual Outfall 001

Report Number: ITB0887

Sampled: 02/06/10 Received: 02/06/10

METHOD BLANK/QC DATA

ACID & BASE/NEUTRALS BY GC/MS (EPA 625)

Matrix Spike Analyzed: 02/15/2010 (10B1159-MS1)	Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC	RPD	RPD Limit	Data Qualifiers
Matrix Spike Analyzed: 02/15/2010 (1081159-MS1)	•	10/10										
4-Nitrophenol 16.5 4.9 2.5 ug/l 9.80 ND 168 45-120 H Mality No. Nitroso-di-n-propylamine 7.57 2.0 0.098 ug/l 9.80 ND 75 45-120 H A P A A 45-120 H A A 1.0 N N N 75 45-120 H A 1.0 N N 0.93 Ug/l 9.80 ND 93 0-120 H A 1.0 A 1.0 N 0.98 ND 93 0-120 H A 1.0 0.0 0.0 0.0 0.0 N 0.0	Batch. 10B1137 Extracted. 02/1	10/10										
N-Nitrosod-din-propylamine 7.57 2.0 0.098 ugl 9.80 ND 75 45-120 ND 75 45-120 ND 75 ND 75 45-120 ND 75 ND 75 45-120 ND 75	Matrix Spike Analyzed: 02/15/2010	(10B1159-MS1)				Sou	rce: ITB	0810-01				
N-Nitrosodinenlylamine	4-Nitrophenol	16.5	4.9	2.5	ug/l	9.80	ND	168	45-120			MI
N-Nitrosodiphenylamine	N-Nitroso-di-n-propylamine	7.57	2.0	0.098	ug/l	9.80	ND	77	45-120			
Penachlorophenol 9,12 2,0 0,098 1g/l 9,80 ND 93 50-120 1 1 1 1 1 1 1 1 1	N-Nitrosodimethylamine	7.31	2.0	0.098	ug/l	9.80	ND	75	45-120			
Phenolithrene 8.33 0.49 0.098 ug/l 9.80 ND 85 65-120 File File File 1.00	N-Nitrosodiphenylamine	6.55	0.98	0.098	ug/1	9.80	ND	67	60-120			
Phenol	Pentachlorophenol	9.12	2.0	0.098	ug/1	9.80	ND	93	50-120			
Pyrene	Phenanthrene	8.33	0.49	0.098	ug/1	9.80	ND	85	65-120			
1.2,4-Trichlorobenzene 6.88 0.98 0.098 ugl 9.80 ND 70 45-120	Phenol	7.92	0.98	0.29	ug/1	9.80	ND	81	40-120			
2.4.5-Trichlorophenol	Pyrene	8.88	0.49	0.098	ug/l	9.80	ND	91	55-125			
2,4,6-Trichlorophenol 9,18 0,98 0,98 ugl 19,80 ND 94 55-120 Surrogate: 2,4,6-Trithromophenol 17,4 ugl 19,6 ugl 19,6 30 30-120 Surrogate: 2-Fluorophpenyl 6,96 ugl 19,6 ugl 19,6 30-120 Surrogate: 2-Fluorophenyl 6,96 ugl 19,6 ugl 19,6 30-120 Surrogate: Nitrobenzene-d5 7,65 ugl 19,6 ugl 19,6 30-120 Surrogate: Phenol-d6 8,53 ugl 19,6 ugl 19,6 30-120 Surrogate: Phenol-d6 8,53 ugl 19,6 ugl	1,2,4-Trichlorobenzene	6.88	0.98	0.098	ug/l	9.80	ND	70	45-120			
Surrogate: 2,4,6-Tribromophenol	2,4,5-Trichlorophenol	9.37	2.0	0.20	ug/l	9.80	ND	96	55-120			
Surrogate: 2-Fluorophenol 8.49 19.6 19.6 19.6 14.3 30-120 19.6	2,4,6-Trichlorophenol	9.18	0.98	0.098	ug/l	9.80	ND	94	55-120			
Surrogate: 2-Fluorophenol 8.49 19.6 19.6 19.6 19.5 19.6 19.5 19.6	Surrogate: 2,4,6-Tribromophenol	17.4			ug/l	19.6		89	40-120			
Surrogate: Nitrobenzene-d5	Surrogate: 2-Fluorobiphenyl	6.96			ug/l	9.80		71	50-120			
Surrogate: Phenol-d6	Surrogate: 2-Fluorophenol	8.49			ug/l	19.6		43	30-120			
Matrix Spike Dup Analyzed: 02/15/2010 (10B1159-MSD1)	Surrogate: Nitrobenzene-d5	7.65			ug/l	9.80		78	45-120			
Matrix Spike Dup Analyzed: 02/15/2010 (10B1159-MSDI) Source: ITB0810-01 Acenaphthene 7.43 0.49 0.098 ug/l 9.80 ND 76 60-120 8 25 Acenaphthylene 6.16 0.49 0.098 ug/l 9.80 ND 76 60-120 16 25 Aniline ND 9.8 0.29 ug/l 9.80 ND 75-120 4 25 Anthracene 7.53 0.49 0.098 ug/l 9.80 ND 7 65-120 4 25 Benzidine ND 4.9 4.9 ug/l 9.80 ND 7 65-120 4 25 Benzidine ND 4.9 0.098 ug/l 9.80 ND 81 65-120 6 20 Benzo(a)anthracene 8.20 4.9 0.098 ug/l 9.80 ND 81 55-130 4 25 Benzo(a)pyrene 7.90 2.0 <	Surrogate: Phenol-d6	8.53			ug/l	19.6		44	35-120			
Acenaphthene 7.43 0.49 0.098 ug/l 9.80 ND 76 60-120 8 25 Acenaphthylene 6.16 0.49 0.098 ug/l 9.80 ND 63 60-120 16 25 Aniline ND 9.8 0.29 ug/l 9.80 ND 77 65-120 4 25 Anthracene 7.53 0.49 0.098 ug/l 9.80 ND 77 65-120 4 25 Benzidine ND 4.9 4.9 ug/l 9.80 ND 77 65-120 4 25 Benzidine ND 4.9 4.9 ug/l 9.80 ND 84 65-120 6 20 Benzidine ND 2.0 0.098 ug/l 9.80 ND 81 55-130 4 25 Benzo(a)aphracene 8.47 2.0 0.098 ug/l 9.80 ND 86 55-125 8 </td <td>Surrogate: Terphenyl-d14</td> <td>8.73</td> <td></td> <td></td> <td>ug/l</td> <td>9.80</td> <td></td> <td>89</td> <td>50-125</td> <td></td> <td></td> <td></td>	Surrogate: Terphenyl-d14	8.73			ug/l	9.80		89	50-125			
Acenaphthylene 6.16 0.49 0.098 ug/l 9.80 ND 63 60-120 16 25 Aniline ND 9.8 0.29 ug/l 9.80 ND 35-120 30 M2 Anthracene 7.53 0.49 0.098 ug/l 9.80 ND 77 65-120 4 25 Benzidine ND 4.9 4.9 ug/l 9.80 ND 77 65-120 4 25 Benzidine ND 4.9 4.9 ug/l 9.80 ND 30-160 35 M2 Benzidine ND 4.9 4.9 0.098 ug/l 9.80 ND 84 65-120 6 20 Benzidine 7.90 2.0 0.098 ug/l 9.80 ND 81 55-130 4 25 Benzid(b)fluoranthene 8.47 2.0 0.098 ug/l 9.80 ND 83 55-125 8 2	Matrix Spike Dup Analyzed: 02/15/	2010 (10B1159-N	(ISD1)			Sou	rce: ITB	0810-01				
Aniline ND 9.8 0.29 ug/l 9.80 ND 35-120 30 M2 Anthracene 7.53 0.49 0.098 ug/l 9.80 ND 77 65-120 4 25 Benzidine ND 4.9 4.9 ug/l 9.80 ND 30-160 35 M2 Benzo(a)anthracene 8.20 4.9 0.098 ug/l 9.80 ND 84 65-120 6 20 Benzo(a)pyrene 7.90 2.0 0.098 ug/l 9.80 ND 81 55-130 4 25 Benzo(b)fluoranthene 8.47 2.0 0.098 ug/l 9.80 ND 86 55-125 8 25 Benzo(g,h,i)perylene 9.24 4.9 0.098 ug/l 9.80 ND 86 55-125 8 25 Benzo(k)fluoranthene 8.18 0.49 0.098 ug/l 9.80 ND 94 45-135 6 30 Benzo(k)fluoranthene 8.18 0.49 0.098 ug/l 9.80 ND 83 55-125 3 30 Benzoic acid 10.2 20 2.9 ug/l 9.80 ND 83 55-125 13 30 Ja Benzyl alcohol 6.84 4.9 0.098 ug/l 9.80 ND 104 25-125 13 30 Ja Benzyl alcohol 6.84 4.9 0.098 ug/l 9.80 ND 70 40-120 10 30 4-Bromophenyl phenyl ether 8.04 0.98 0.098 ug/l 9.80 ND 82 60-120 3 25 Butyl benzyl phthalate 9.35 4.9 0.69 ug/l 9.80 ND 95 55-130 2 25 4-Chloro-3-methylphenol 5.67 2.0 0.20 ug/l 9.80 ND 58 60-120 56 25 M2, R-3 4-Chloroaniline ND 2.0 0.098 ug/l 9.80 ND 55-120 56 25 M2, R-3 4-Chloroaniline ND 2.0 0.098 ug/l 9.80 ND 55-120 56 25 M2, R-3	Acenaphthene	7.43	0.49	0.098	ug/l	9.80	ND	76	60-120	8	25	
Anthracene 7.53 0.49 0.098 ug/l 9.80 ND 77 65-120 4 25 Benzidine ND 4.9 4.9 ug/l 9.80 ND 30-160 35 M2 Benzo(a)anthracene 8.20 4.9 0.098 ug/l 9.80 ND 84 65-120 6 20 Benzo(a)pyrene 7.90 2.0 0.098 ug/l 9.80 ND 81 55-130 4 25 Benzo(b)fluoranthene 8.47 2.0 0.098 ug/l 9.80 ND 86 55-125 8 25 Benzo(g,h,i)perylene 9.24 4.9 0.098 ug/l 9.80 ND 86 55-125 8 25 Benzo(k)fluoranthene 8.18 0.49 0.098 ug/l 9.80 ND 83 55-125 3 30 Benzo(k)fluoranthene 8.18 0.49 0.098 ug/l 9.80 ND 83 55-125 3 30 Benzoic acid 10.2 20 2.9 ug/l 9.80 ND 83 55-125 13 30 Ja Benzoic acid 6.84 4.9 0.098 ug/l 9.80 ND 104 25-125 13 30 Ja Benzyl alcohol 6.84 4.9 0.098 ug/l 9.80 ND 70 40-120 10 30 4-Bromophenyl phenyl ether 8.04 0.98 0.098 ug/l 9.80 ND 82 60-120 3 25 Butyl benzyl phthalate 9.35 4.9 0.69 ug/l 9.80 ND 95 55-130 2 25 4-Chloro-3-methylphenol 5.67 2.0 0.20 ug/l 9.80 ND 58 60-120 56 25 M2, R-3 4-Chloro-aniline ND 2.0 0.098 ug/l 9.80 ND 55-120 56 25 M2, R-3 4-Chloroaniline		6.16	0.49	0.098	ug/l	9.80	ND	63	60-120	16	25	
Benzo(a)anthracene R.20 A.9	Aniline	ND	9.8	0.29	ug/l	9.80	ND		35-120		30	M2
Benzo(a)anthracene 8.20 4.9 0.098 ug/l 9.80 ND 84 65-120 6 20 Benzo(a)pyrene 7.90 2.0 0.098 ug/l 9.80 ND 81 55-130 4 25 Benzo(b)fluoranthene 8.47 2.0 0.098 ug/l 9.80 ND 86 55-125 8 25 Benzo(g,h,i)perylene 9.24 4.9 0.098 ug/l 9.80 ND 94 45-135 6 30 Benzo(k)fluoranthene 8.18 0.49 0.098 ug/l 9.80 ND 83 55-125 3 30 Benzoic acid 10.2 20 2.9 ug/l 9.80 ND 104 25-125 13 30 Ja Benzyl alcohol 6.84 4.9 0.098 ug/l 9.80 ND 70 40-120 10 30 4-Bromophenyl phenyl ether 8.04 0.98 ug/l 9.80 ND	Anthracene	7.53	0.49	0.098	ug/l	9.80	ND	77	65-120	4	25	
Benzo(a)anthracene 8.20 4.9 0.098 ug/l 9.80 ND 84 65-120 6 20 Benzo(a)pyrene 7.90 2.0 0.098 ug/l 9.80 ND 81 55-130 4 25 Benzo(b)fluoranthene 8.47 2.0 0.098 ug/l 9.80 ND 86 55-125 8 25 Benzo(g,h,i)perylene 9.24 4.9 0.098 ug/l 9.80 ND 94 45-135 6 30 Benzo(k)fluoranthene 8.18 0.49 0.098 ug/l 9.80 ND 83 55-125 3 30 Benzoic acid 10.2 20 2.9 ug/l 9.80 ND 104 25-125 13 30 Ja Benzyl alcohol 6.84 4.9 0.098 ug/l 9.80 ND 70 40-120 10 30 4-Bromophenyl phenyl ether 8.04 0.98 ug/l 9.80 ND	Benzidine	ND	4.9	4.9	ug/l	9.80	ND		30-160		35	M2
Benzo(b)fluoranthene 8.47 2.0 0.098 ug/l 9.80 ND 86 55-125 8 25 Benzo(g,h,i)perylene 9.24 4.9 0.098 ug/l 9.80 ND 94 45-135 6 30 Benzo(k)fluoranthene 8.18 0.49 0.098 ug/l 9.80 ND 83 55-125 3 30 Benzoic acid 10.2 20 2.9 ug/l 9.80 ND 104 25-125 13 30 Ja Benzyl alcohol 6.84 4.9 0.098 ug/l 9.80 ND 70 40-120 10 30 4-Bromophenyl phenyl ether 8.04 0.98 0.098 ug/l 9.80 ND 82 60-120 3 25 Butyl benzyl phthalate 9.35 4.9 0.69 ug/l 9.80 ND 95 55-130 2 25 M2, R-3 4-Chloro-3-methylphenol 5.67 2.0 0.098 <td>Benzo(a)anthracene</td> <td>8.20</td> <td>4.9</td> <td>0.098</td> <td></td> <td>9.80</td> <td>ND</td> <td>84</td> <td>65-120</td> <td>6</td> <td>20</td> <td></td>	Benzo(a)anthracene	8.20	4.9	0.098		9.80	ND	84	65-120	6	20	
Benzo(b)fluoranthene 8.47 2.0 0.098 ug/l 9.80 ND 86 55-125 8 25 Benzo(g,h,i)perylene 9.24 4.9 0.098 ug/l 9.80 ND 94 45-135 6 30 Benzo(k)fluoranthene 8.18 0.49 0.098 ug/l 9.80 ND 83 55-125 3 30 Benzoic acid 10.2 20 2.9 ug/l 9.80 ND 104 25-125 13 30 Ja Benzyl alcohol 6.84 4.9 0.098 ug/l 9.80 ND 70 40-120 10 30 4-Bromophenyl phenyl ether 8.04 0.98 0.098 ug/l 9.80 ND 82 60-120 3 25 Butyl benzyl phthalate 9.35 4.9 0.69 ug/l 9.80 ND 95 55-130 2 25 M2, R-3 4-Chloro-3-methylphenol 5.67 2.0 0.098 <td>Benzo(a)pyrene</td> <td>7.90</td> <td>2.0</td> <td>0.098</td> <td>ug/l</td> <td>9.80</td> <td>ND</td> <td>81</td> <td>55-130</td> <td>4</td> <td>25</td> <td></td>	Benzo(a)pyrene	7.90	2.0	0.098	ug/l	9.80	ND	81	55-130	4	25	
Benzo(k)fluoranthene 8.18 0.49 0.098 ug/l 9.80 ND 83 55-125 3 30 Benzoic acid 10.2 20 2.9 ug/l 9.80 ND 104 25-125 13 30 Ja Benzyl alcohol 6.84 4.9 0.098 ug/l 9.80 ND 70 40-120 10 30 4-Bromophenyl phenyl ether 8.04 0.98 0.098 ug/l 9.80 ND 82 60-120 3 25 Butyl benzyl phthalate 9.35 4.9 0.69 ug/l 9.80 ND 95 55-130 2 25 4-Chloro-3-methylphenol 5.67 2.0 0.20 ug/l 9.80 ND 58 60-120 56 25 M2, R-3 4-Chloroaniline ND 2.0 0.098 ug/l 9.80 ND 55-120 56 25 M2, R-3	Benzo(b)fluoranthene	8.47	2.0	0.098	ug/l	9.80	ND	86	55-125	8	25	
Benzoic acid 10.2 20 2.9 ug/l 9.80 ND 104 25-125 13 30 Ja Benzyl alcohol 6.84 4.9 0.098 ug/l 9.80 ND 70 40-120 10 30 4-Bromophenyl phenyl ether 8.04 0.98 0.098 ug/l 9.80 ND 82 60-120 3 25 Butyl benzyl phthalate 9.35 4.9 0.69 ug/l 9.80 ND 95 55-130 2 25 4-Chloro-3-methylphenol 5.67 2.0 0.20 ug/l 9.80 ND 58 60-120 56 25 M2, R-3 4-Chloroaniline ND 2.0 0.098 ug/l 9.80 ND 55-120 25 M2	Benzo(g,h,i)perylene	9.24	4.9	0.098	ug/l	9.80	ND	94	45-135	6	30	
Benzyl alcohol 6.84 4.9 0.098 ug/l 9.80 ND 70 40-120 10 30 4-Bromophenyl phenyl ether 8.04 0.98 0.098 ug/l 9.80 ND 82 60-120 3 25 Butyl benzyl phthalate 9.35 4.9 0.69 ug/l 9.80 ND 95 55-130 2 25 4-Chloro-3-methylphenol 5.67 2.0 0.20 ug/l 9.80 ND 58 60-120 56 25 M2, R-3 4-Chloroaniline ND 2.0 0.098 ug/l 9.80 ND 55-120 25 M2	Benzo(k)fluoranthene	8.18	0.49	0.098	ug/l	9.80	ND	83	55-125	3	30	
4-Bromophenyl phenyl ether 8.04 0.98 0.098 ug/l 9.80 ND 82 60-120 3 25 Butyl benzyl phthalate 9.35 4.9 0.69 ug/l 9.80 ND 95 55-130 2 25 4-Chloro-3-methylphenol 5.67 2.0 0.20 ug/l 9.80 ND 58 60-120 56 25 M2, R-3 4-Chloroaniline ND 2.0 0.098 ug/l 9.80 ND 55-120 25 M2	Benzoic acid	10.2	20	2.9	ug/l	9.80	ND	104	25-125	13	30	Ja
Butyl benzyl phthalate 9.35 4.9 0.69 ug/l 9.80 ND 95 55-130 2 25 4-Chloro-3-methylphenol 5.67 2.0 0.20 ug/l 9.80 ND 58 60-120 56 25 M2, R-3 4-Chloroaniline ND 2.0 0.098 ug/l 9.80 ND 55-120 25 M2	Benzyl alcohol	6.84	4.9	0.098	ug/l	9.80	ND	70	40-120	10	30	
Butyl benzyl phthalate 9.35 4.9 0.69 ug/l 9.80 ND 95 55-130 2 25 4-Chloro-3-methylphenol 5.67 2.0 0.20 ug/l 9.80 ND 58 60-120 56 25 M2, R-3 4-Chloroaniline ND 2.0 0.098 ug/l 9.80 ND 55-120 25 M2	4-Bromophenyl phenyl ether	8.04	0.98	0.098	ug/l	9.80	ND	82	60-120	3	25	
4-Chloroaniline ND 2.0 0.098 ug/l 9.80 ND 55-120 25 <i>M</i> 2		9.35	4.9	0.69	ug/l	9.80	ND	95	55-130	2	25	
	4-Chloro-3-methylphenol	5.67	2.0	0.20	ug/l	9.80	ND	58	60-120	56	25	M2, R-3
Bis(2-chloroethoxy)methane 6.57 0.49 0.098 ug/l 9.80 ND 67 50-120 8 25	4-Chloroaniline	ND	2.0	0.098	ug/l	9.80	ND		55-120		25	M2
	Bis(2-chloroethoxy)methane	6.57	0.49	0.098	ug/l	9.80	ND	67	50-120	8	25	

TestAmerica Irvine

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MWH-Pasadena/Boeing Project ID: Annual Outfall 001

618 Michillinda Avenue, Suite 200 Annual Outfall 001 Sampled: 02/06/10 Arcadia, CA 91007 Report Number: ITB0887 Received: 02/06/10

Arcadia, CA 91007 Report Number: ITB0887
Attention: Bronwyn Kelly

METHOD BLANK/QC DATA

ACID & BASE/NEUTRALS BY GC/MS (EPA 625)

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 10B1159 Extracted: 02/10/1	<u>0</u>										
Matrix Spike Dup Analyzed: 02/15/2010) (10B1159-N	ISD1)			Sou	rce: ITB(0810-01				
Bis(2-chloroethyl)ether	6.73	0.49	0.098	ug/l	9.80	ND	69	50-120	8	25	
Bis(2-chloroisopropyl)ether	5.22	0.49	0.098	ug/l	9.80	ND	53	45-120	25	25	
Bis(2-ethylhexyl)phthalate	9.18	4.9	1.7	ug/l	9.80	ND	94	65-130	4	25	
2-Chloronaphthalene	6.53	0.49	0.098	ug/l	9.80	ND	67	60-120	6	20	
2-Chlorophenol	6.31	0.98	0.20	ug/l	9.80	ND	64	45-120	3	25	
4-Chlorophenyl phenyl ether	8.71	0.49	0.098	ug/l	9.80	ND	89	65-120	7	25	
Chrysene	7.92	0.49	0.098	ug/l	9.80	ND	81	65-120	8	25	
Dibenz(a,h)anthracene	8.53	0.49	0.098	ug/l	9.80	ND	87	45-135	3	30	
Dibenzofuran	8.02	0.49	0.098	ug/l	9.80	ND	82	65-120	10	25	
Di-n-butyl phthalate	8.43	2.0	0.20	ug/l	9.80	ND	86	60-125	2	25	
1,2-Dichlorobenzene	6.98	0.49	0.098	ug/l	9.80	ND	71	40-120	28	25	R
1,3-Dichlorobenzene	5.14	0.49	0.098	ug/l	9.80	ND	52	35-120	24	25	
1,4-Dichlorobenzene	5.04	0.49	0.20	ug/l	9.80	ND	51	35-120	26	25	R
3,3'-Dichlorobenzidine	ND	4.9	4.9	ug/l	9.80	ND		45-135		25	M2
2,4-Dichlorophenol	5.73	2.0	0.20	ug/l	9.80	ND	58	55-120	5	25	
Diethyl phthalate	9.02	0.98	0.098	ug/l	9.80	ND	92	55-120	11	30	
2,4-Dimethylphenol	ND	2.0	0.29	ug/l	9.80	ND		40-120		25	M2
Dimethyl phthalate	8.84	0.49	0.098	ug/l	9.80	ND	90	30-120	7	30	
4,6-Dinitro-2-methylphenol	9.63	4.9	0.20	ug/l	9.80	ND	98	45-120	11	25	
2,4-Dinitrophenol	11.0	4.9	0.88	ug/l	9.80	ND	112	40-120	4	25	
2,4-Dinitrotoluene	8.65	4.9	0.20	ug/l	9.80	ND	88	65-120	8	25	
2,6-Dinitrotoluene	9.69	4.9	0.098	ug/l	9.80	ND	99	65-120	6	20	
Di-n-octyl phthalate	9.45	4.9	0.098	ug/l	9.80	ND	96	65-135	0.6	20	
1,2-Diphenylhydrazine/Azobenzene	8.37	0.98	0.098	ug/l	9.80	ND	85	60-120	9	25	
Fluoranthene	8.12	0.49	0.098	ug/l	9.80	ND	83	60-120	5	25	
Fluorene	8.59	0.49	0.098	ug/l	9.80	ND	88	65-120	8	25	
Hexachlorobenzene	7.73	0.98	0.098	ug/l	9.80	ND	79	60-120	4	25	
Hexachlorobutadiene	4.96	2.0	0.20	ug/l	9.80	ND	51	40-120	25	25	
Hexachlorocyclopentadiene	5.55	4.9	0.098	ug/l	9.80	ND	57	25-120	14	30	
Hexachloroethane	4.47	2.9	0.20	ug/l	9.80	ND	46	35-120	31	25	R
Indeno(1,2,3-cd)pyrene	9.18	2.0	0.098	ug/l	9.80	ND	94	40-135	1	30	
Isophorone	6.82	0.98	0.098	ug/l	9.80	0.333	66	50-120	11	25	
2-Methylnaphthalene	6.06	0.98	0.098	ug/l	9.80	ND	62	55-120	11	20	
2-Methylphenol	1.49	2.0	0.098	ug/l	9.80	ND	15	50-120	107	25	M2, R-3, Ja
4-Methylphenol	1.18	4.9	0.20	ug/l	9.80	ND	12	50-120	124	25	M2, R-3, Ja

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MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 001

Annual Outfall 001

Report Number: ITB0887

Sampled: 02/06/10 Received: 02/06/10

METHOD BLANK/QC DATA

ACID & BASE/NEUTRALS BY GC/MS (EPA 625)

. 17	D 14	Reporting	MDI	T T •4	Spike	Source	0/ DEC	%REC	DDD	RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 10B1159 Extracted: 02/10/	<u>/10</u>										
M 4 : 5 ! D 4 1 1 00/15/20	10 (10D1150 M	(CD4)			6	TTD/	0010 01				
Matrix Spike Dup Analyzed: 02/15/20	`	,				rce: ITB(
Naphthalene	6.24	0.98	0.098	ug/l	9.80	ND	64	55-120	13	25	
2-Nitroaniline	3.16	4.9	0.098	ug/l	9.80	ND	32	65-120	55	25	M2, R-3, Ja
3-Nitroaniline	ND	4.9	0.20	ug/l	9.80	ND		60-120		25	M2
4-Nitroaniline	ND	4.9	0.49	ug/l	9.80	ND		55-125		25	M2
Nitrobenzene	9.80	0.98	0.098	ug/l	9.80	ND	100	55-120	19	25	
2-Nitrophenol	9.75	2.0	0.098	ug/l	9.80	ND	99	50-120	24	25	
4-Nitrophenol	13.3	4.9	2.5	ug/l	9.80	ND	136	45-120	21	30	M1
N-Nitroso-di-n-propylamine	6.45	2.0	0.098	ug/l	9.80	ND	66	45-120	16	25	
N-Nitrosodimethylamine	6.84	2.0	0.098	ug/l	9.80	ND	70	45-120	7	25	
N-Nitrosodiphenylamine	6.57	0.98	0.098	ug/l	9.80	ND	67	60-120	0.3	25	
Pentachlorophenol	8.57	2.0	0.098	ug/l	9.80	ND	87	50-120	6	25	
Phenanthrene	7.94	0.49	0.098	ug/l	9.80	ND	81	65-120	5	25	
Phenol	9.53	0.98	0.29	ug/l	9.80	ND	97	40-120	18	25	
Pyrene	8.33	0.49	0.098	ug/l	9.80	ND	85	55-125	6	25	
1,2,4-Trichlorobenzene	5.45	0.98	0.098	ug/l	9.80	ND	56	45-120	23	20	R
2,4,5-Trichlorophenol	8.51	2.0	0.20	ug/l	9.80	ND	87	55-120	10	30	
2,4,6-Trichlorophenol	8.06	0.98	0.098	ug/l	9.80	ND	82	55-120	13	30	
Surrogate: 2,4,6-Tribromophenol	16.4			ug/l	19.6		83	40-120			
Surrogate: 2-Fluorobiphenyl	6.69			ug/l	9.80		68	50-120			
Surrogate: 2-Fluorophenol	9.96			ug/l	19.6		51	30-120			
Surrogate: Nitrobenzene-d5	6.75			ug/l	9.80		69	45-120			
Surrogate: Phenol-d6	10.6			ug/l	19.6		54	35-120			
Surrogate: Terphenyl-d14	8.06			ug/l	9.80		82	50-125			
O							-				

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Project ID: Annual Outfall 001 MWH-Pasadena/Boeing

Annual Outfall 001 618 Michillinda Avenue, Suite 200 Sampled: 02/06/10

Arcadia, CA 91007 Report Number: ITB0887 Received: 02/06/10 Attention: Bronwyn Kelly

METHOD BLANK/QC DATA

ORGANOCHLORINE PESTICIDES (EPA 608)

Analysta	Dogult	Reporting Limit	MDI	Unita	Spike Level	Source	0/ DEC	%REC	DDD	RPD	Data Qualifiers
Analyte	Result	Limit	MDL	Units	Levei	Result	%REC	Limits	RPD	Limit	Quaimers
Batch: 10B1291 Extracted: 02/11/10	<u>) </u>										
Blank Analyzed: 02/12/2010 (10B1291-B	LK1)										
4,4'-DDD	ND	0.0050	0.0020	ug/l							
4,4'-DDE	ND	0.0050	0.0030	ug/l							
4,4'-DDT	ND	0.010	0.0040	ug/l							
Aldrin	ND	0.0050	0.0015	ug/l							
alpha-BHC	ND	0.0050	0.0025	ug/l							
beta-BHC	ND	0.010	0.0040	ug/l							
delta-BHC	ND	0.0050	0.0035	ug/l							
Dieldrin	ND	0.0050	0.0020	ug/l							
Endosulfan I	ND	0.0050	0.0020	ug/l							
Endosulfan II	ND	0.0050	0.0030	ug/l							
Endosulfan sulfate	ND	0.010	0.0030	ug/l							
Endrin	ND	0.0050	0.0020	ug/l							
Endrin aldehyde	ND	0.010	0.0020	ug/l							
Endrin ketone	ND	0.010	0.0030	ug/l							
gamma-BHC (Lindane)	ND	0.020	0.0030	ug/l							
Heptachlor	ND	0.010	0.0030	ug/l							
Heptachlor epoxide	ND	0.0050	0.0025	ug/l							
Methoxychlor	ND	0.0050	0.0035	ug/l							
Chlordane	ND	0.10	0.040	ug/l							
Toxaphene	ND	0.50	0.25	ug/l							
Surrogate: Decachlorobiphenyl	0.387			ug/l	0.500		77	45-120			
Surrogate: Decachlorobiphenyl	0.387			ug/l	0.500		77	45-120			
Surrogate: Tetrachloro-m-xylene	0.240			ug/l	0.500		48	35-115			
Surrogate: Tetrachloro-m-xylene	0.240			ug/l	0.500		48	35-115			
LCS Analyzed: 02/12/2010 (10B1291-BS	1)										
4,4'-DDD	0.464	0.0050	0.0020	ug/l	0.500		93	55-120			
4,4'-DDE	0.418	0.0050	0.0030	ug/l	0.500		84	50-120			
4,4'-DDT	0.450	0.010	0.0040	ug/l	0.500		90	55-120			
Aldrin	0.374	0.0050	0.0015	ug/l	0.500		75	40-115			
				-							
alpha-BHC	0.369	0.0050	0.0025	ug/l	0.500		74	45-115			
beta-BHC	0.361	0.010	0.0040	ug/l	0.500		72	55-115			
delta-BHC	0.404	0.0050	0.0035	ug/l	0.500		81	55-115			
Dieldrin	0.434	0.0050	0.0020	ug/l	0.500		87	55-115			
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MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 001

Annual Outfall 001

Report Number: ITB0887

Sampled: 02/06/10 Received: 02/06/10

METHOD BLANK/QC DATA

ORGANOCHLORINE PESTICIDES (EPA 608)

Analyta	Result	Reporting Limit	MDL	Units	Spike Level	Source	%REC	%REC	RPD	RPD Limit	Data Qualifiers
Analyte		Lillit	MIDL	Units	Level	Result	70KEC	Limits	KFD	Lillit	Quanners
Batch: 10B1291 Extracted: 02/11/10	<u>) </u>										
LCS Analyzed: 02/12/2010 (10B1291-BS	<i>'</i>										
Endosulfan I	0.423	0.0050	0.0020	ug/l	0.500		85	55-115			
Endosulfan II	0.464	0.0050	0.0030	ug/l	0.500		93	55-120			
Endosulfan sulfate	0.431	0.010	0.0030	ug/l	0.500		86	60-120			
Endrin	0.477	0.0050	0.0020	ug/l	0.500		95	55-115			
Endrin aldehyde	0.393	0.010	0.0020	ug/l	0.500		79	50-120			
Endrin ketone	0.454	0.010	0.0030	ug/l	0.500		91	55-120			
gamma-BHC (Lindane)	0.381	0.020	0.0030	ug/l	0.500		76	45-115			
Heptachlor	0.415	0.010	0.0030	ug/l	0.500		83	45-115			
Heptachlor epoxide	0.407	0.0050	0.0025	ug/l	0.500		81	55-115			
Methoxychlor	0.485	0.0050	0.0035	ug/l	0.500		97	60-120			
Surrogate: Decachlorobiphenyl	0.394			ug/l	0.500		79	45-120			
Surrogate: Decachlorobiphenyl	0.394			ug/l	0.500		79	45-120			
Surrogate: Tetrachloro-m-xylene	0.339			ug/l	0.500		68	35-115			
Surrogate: Tetrachloro-m-xylene	0.339			ug/l	0.500		68	35-115			
Matrix Spike Analyzed: 02/12/2010 (10E	31291-MS1)				Sou	ırce: ITB	0602-01				
4,4'-DDD	0.362	0.019	0.0075	ug/l	0.472	ND	77	50-125			
4,4'-DDE	0.530	0.019	0.011	ug/l	0.472	ND	112	45-125			
4,4'-DDT	0.402	0.038	0.015	ug/l	0.472	ND	85	50-125			
Aldrin	0.386	0.019	0.0057	ug/l	0.472	ND	82	35-120			
alpha-BHC	0.372	0.019	0.0094	ug/l	0.472	ND	79	40-120			
beta-BHC	0.186	0.038	0.015	ug/l	0.472	ND	39	50-120			M2
delta-BHC	0.314	0.019	0.013	ug/l	0.472	ND	67	50-120			
Dieldrin	0.390	0.019	0.0075	ug/l	0.472	ND	83	50-120			
Endosulfan I	0.475	0.019	0.0075	ug/l	0.472	ND	101	50-120			
Endosulfan II	0.390	0.019	0.011	ug/l	0.472	ND	83	50-125			
Endosulfan sulfate	0.333	0.038	0.011	ug/l	0.472	ND	71	55-125			
Endrin	0.413	0.019	0.0075	ug/l	0.472	ND	88	50-120			
Endrin aldehyde	0.190	0.038	0.0075	ug/l	0.472	ND	40	45-125			M2
Endrin ketone	0.342	0.038	0.011	ug/l	0.472	ND	72	50-125			
gamma-BHC (Lindane)	0.371	0.075	0.011	ug/l	0.472	ND	79	40-120			
Heptachlor	0.452	0.038	0.011	ug/l	0.472	ND	96	40-120			
Heptachlor epoxide	0.450	0.019	0.0094	ug/l	0.472	ND	95	50-120			
Methoxychlor	0.447	0.019	0.013	ug/l	0.472	ND	95	55-125			
Surrogate: Decachlorobiphenyl	0.418			ug/l	0.472		89	45-120			

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MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 001

Annual Outfall 001

Report Number: ITB0887

Sampled: 02/06/10 Received: 02/06/10

METHOD BLANK/QC DATA

ORGANOCHLORINE PESTICIDES (EPA 608)

Ameliote	D14	Reporting	MDI	TI24-	Spike	Source	0/DEC	%REC	DDD	RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 10B1291 Extracted: 02/11/10	_										
					~						
Matrix Spike Analyzed: 02/12/2010 (10B	,					rce: ITB(
Surrogate: Decachlorobiphenyl	0.418			ug/l	0.472		89	45-120			
Surrogate: Tetrachloro-m-xylene	0.220			ug/l	0.472		47	35-115			
Surrogate: Tetrachloro-m-xylene	0.220			ug/l	0.472		47	35-115			
Matrix Spike Dup Analyzed: 02/12/2010	(10B1291-M	ISD1)			Sou	rce: ITB(0602-01				
4,4'-DDD	0.364	0.019	0.0075	ug/l	0.472	ND	77	50-125	0.5	30	
4,4'-DDE	0.527	0.019	0.011	ug/l	0.472	ND	112	45-125	0.7	30	
4,4'-DDT	0.396	0.038	0.015	ug/l	0.472	ND	84	50-125	1	30	
Aldrin	0.384	0.019	0.0057	ug/l	0.472	ND	81	35-120	0.6	30	
alpha-BHC	0.367	0.019	0.0094	ug/l	0.472	ND	78	40-120	1	30	
beta-BHC	0.196	0.038	0.015	ug/l	0.472	ND	42	50-120	5	30	M2
delta-BHC	0.313	0.019	0.013	ug/l	0.472	ND	66	50-120	0.2	30	
Dieldrin	0.387	0.019	0.0075	ug/l	0.472	ND	82	50-120	0.7	30	
Endosulfan I	0.471	0.019	0.0075	ug/l	0.472	ND	100	50-120	1	30	
Endosulfan II	0.393	0.019	0.011	ug/l	0.472	ND	83	50-125	0.7	30	
Endosulfan sulfate	0.346	0.038	0.011	ug/l	0.472	ND	73	55-125	4	30	
Endrin	0.409	0.019	0.0075	ug/l	0.472	ND	87	50-120	1	30	
Endrin aldehyde	0.197	0.038	0.0075	ug/l	0.472	ND	42	45-125	4	30	M2
Endrin ketone	0.338	0.038	0.011	ug/l	0.472	ND	72	50-125	1	30	
gamma-BHC (Lindane)	0.368	0.075	0.011	ug/l	0.472	ND	78	40-120	0.6	30	
Heptachlor	0.441	0.038	0.011	ug/l	0.472	ND	93	40-120	3	30	
Heptachlor epoxide	0.447	0.019	0.0094	ug/l	0.472	ND	95	50-120	0.7	30	
Methoxychlor	0.442	0.019	0.013	ug/l	0.472	ND	94	55-125	1	30	
Surrogate: Decachlorobiphenyl	0.407			ug/l	0.472		86	45-120			
Surrogate: Decachlorobiphenyl	0.407			ug/l	0.472		86	45-120			
Surrogate: Tetrachloro-m-xylene	0.264			ug/l	0.472		56	35-115			
Surrogate: Tetrachloro-m-xylene	0.264			ug/l	0.472		56	35-115			

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Arcadia, CA 91007

Attention: Bronwyn Kelly

Project ID: Annual Outfall 001

Annual Outfall 001

Report Number: ITB0887

Sampled: 02/06/10

Received: 02/06/10

METHOD BLANK/QC DATA

TOTAL PCBS (EPA 608)

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 10B1291 Extracted: 02/11/1	<u>0</u>										
Blank Analyzed: 02/11/2010 (10B1291-l	BLK1)										
Aroclor 1016	ND	0.50	0.25	ug/l							
Aroclor 1221	ND	0.50	0.25	ug/l							
Aroclor 1232	ND	0.50	0.25	ug/l							
Aroclor 1242	ND	0.50	0.25	ug/l							
Aroclor 1248	ND	0.50	0.25	ug/l							
Aroclor 1254	ND	0.50	0.25	ug/l							
Aroclor 1260	ND	0.50	0.25	ug/l							
Surrogate: Decachlorobiphenyl	0.422			ug/l	0.500		84	45-120			
LCS Analyzed: 02/11/2010 (10B1291-B	S2)										
Aroclor 1016	2.94	0.50	0.25	ug/l	4.00		74	50-115			
Aroclor 1260	3.60	0.50	0.25	ug/1	4.00		90	60-120			
Surrogate: Decachlorobiphenyl	0.432			ug/l	0.500		86	45-120			
Matrix Spike Analyzed: 02/11/2010 (10)	B1291-MS2)				Sou	rce: ITB	0602-01				
Aroclor 1016	4.30	0.47	0.24	ug/l	3.77	ND	114	45-120			
Aroclor 1260	3.32	0.47	0.24	ug/l	3.77	ND	88	55-125			
Surrogate: Decachlorobiphenyl	0.388			ug/l	0.472		82	45-120			
Matrix Spike Dup Analyzed: 02/11/2010	0 (10B1291-N	ISD2)			Sou	rce: ITB	0602-01				
Aroclor 1016	4.36	0.47	0.24	ug/l	3.77	ND	116	45-120	1	30	
Aroclor 1260	3.32	0.47	0.24	ug/l	3.77	ND	88	55-125	0.2	25	
Surrogate: Decachlorobiphenyl	0.383			ug/l	0.472		81	45-120			



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METHOD BLANK/QC DATA

HEXANE EXTRACTABLE MATERIAL

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B1991 Extracted: 02/17/10	-										
Blank Analyzed: 02/17/2010 (10B1991-Bl	LK1)										
Hexane Extractable Material (Oil & Grease)	ND	5.0	1.4	mg/l							
LCS Analyzed: 02/17/2010 (10B1991-BS)	1)										
Hexane Extractable Material (Oil & Grease)	20.5	5.0	1.4	mg/l	20.0		102	78-114			
LCS Dup Analyzed: 02/17/2010 (10B199)	1-BSD1)										
Hexane Extractable Material (Oil & Grease)	20.2	5.0	1.4	mg/l	20.0		101	78-114	1	11	



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METHOD BLANK/QC DATA

METALS

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 10B0874 Extracted: 02/08/10	_										
Blank Analyzed: 02/08/2010 (10B0874-B)	LK1)										
Arsenic	ND	10	7.0	ug/l							
Barium	ND	0.010	0.0060	mg/l							
Beryllium	ND	2.0	0.90	ug/l							
Boron	ND	0.050	0.020	mg/l							
Calcium	ND	0.10	0.050	mg/l							
Chromium	ND	5.0	2.0	ug/l							
Cobalt	ND	10	2.0	ug/l							
Iron	ND	0.040	0.015	mg/l							
Magnesium	ND	0.020	0.012	mg/l							
Manganese	ND	20	7.0	ug/l							
Nickel	ND	10	2.0	ug/l							
Vanadium	ND	10	3.0	ug/l							
Zinc	ND	20	6.0	ug/l							
LCS Analyzed: 02/08/2010 (10B0874-BS)	1)										
Arsenic	489	10	7.0	ug/l	500		98	85-115			
Barium	0.490	0.010	0.0060	mg/l	0.500		98	85-115			
Beryllium	486	2.0	0.90	ug/l	500		97	85-115			
Boron	0.503	0.050	0.020	mg/l	0.500		101	85-115			
Calcium	2.44	0.10	0.050	mg/l	2.50		98	85-115			
Chromium	473	5.0	2.0	ug/l	500		95	85-115			
Cobalt	462	10	2.0	ug/l	500		92	85-115			
Iron	0.474	0.040	0.015	mg/l	0.500		95	85-115			
Magnesium	2.41	0.020	0.012	mg/l	2.50		96	85-115			
Manganese	474	20	7.0	ug/l	500		95	85-115			
Nickel	476	10	2.0	ug/l	500		95	85-115			
Vanadium	475	10	3.0	ug/l	500		95	85-115			
Zinc	474	20	6.0	ug/l	500		95	85-115			

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METHOD BLANK/QC DATA

METALS

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 10B0874 Extracted: 02/08/10	0										
	_										
Matrix Spike Analyzed: 02/08/2010 (101	30874-MS1)				Sou	rce: ITB(0887-04				
Arsenic	479	10	7.0	ug/l	500	ND	96	70-130			
Barium	0.560	0.010	0.0060	mg/l	0.500	0.0762	97	70-130			
Beryllium	488	2.0	0.90	ug/l	500	ND	98	70-130			
Boron	0.528	0.050	0.020	mg/l	0.500	0.0420	97	70-130			
Calcium	15.2	0.10	0.050	mg/l	2.50	12.7	101	70-130			MHA
Chromium	484	5.0	2.0	ug/l	500	10.6	95	70-130			
Cobalt	466	10	2.0	ug/l	500	2.50	93	70-130			
Iron	9.51	0.040	0.015	mg/l	0.500	9.71	-40	70-130			MHA
Magnesium	7.65	0.020	0.012	mg/l	2.50	5.35	92	70-130			
Manganese	620	20	7.0	ug/l	500	151	94	70-130			
Nickel	482	10	2.0	ug/l	500	6.05	95	70-130			
Vanadium	493	10	3.0	ug/l	500	20.1	95	70-130			
Zinc	505	20	6.0	ug/l	500	33.9	94	70-130			
Matrix Spike Dup Analyzed: 02/08/2010	(10B0874-M	SD1)			Sou	rce: ITB(0887-04				
Arsenic	487	10	7.0	ug/l	500	ND	97	70-130	2	20	
Barium	0.572	0.010	0.0060	mg/l	0.500	0.0762	99	70-130	2	20	
Beryllium	490	2.0	0.90	ug/l	500	ND	98	70-130	0.5	20	
Boron	0.544	0.050	0.020	mg/l	0.500	0.0420	100	70-130	3	20	
Calcium	15.4	0.10	0.050	mg/l	2.50	12.7	107	70-130	1	20	MHA
Chromium	489	5.0	2.0	ug/l	500	10.6	96	70-130	1	20	
Cobalt	474	10	2.0	ug/l	500	2.50	94	70-130	2	20	
Iron	9.03	0.040	0.015	mg/l	0.500	9.71	-137	70-130	5	20	MHA
Magnesium	7.76	0.020	0.012	mg/l	2.50	5.35	96	70-130	1	20	
Manganese	623	20	7.0	ug/1	500	151	94	70-130	0.6	20	
Nickel	493	10	2.0	ug/1	500	6.05	97	70-130	2	20	
Vanadium	504	10	3.0	ug/1	500	20.1	97	70-130	2	20	
Zinc	516	20	6.0	ug/l	500	33.9	96	70-130	2	20	

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METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source	%REC	%REC	RPD	RPD Limit	Data Qualifiers
·		Limit	MDL	Cints	Level	Result	/UKEC	Limits	KI D	Limit	Quantiers
Batch: 10B0879 Extracted: 02/08/10	<u> </u>										
Blank Analyzed: 02/08/2010 (10B0879-B	LK1)										
Antimony	ND	2.0	0.30	ug/l							
Cadmium	ND	1.0	0.10	ug/l							
Copper	ND	2.00	0.500	ug/l							
Lead	ND	1.0	0.20	ug/l							
Selenium	ND	2.0	0.50	ug/l							
Silver	ND	1.0	0.10	ug/l							
Thallium	ND	1.0	0.20	ug/l							
LCS Analyzed: 02/08/2010 (10B0879-BS	1)										
Antimony	87.8	2.0	0.30	ug/l	80.0		110	85-115			
Cadmium	87.1	1.0	0.10	ug/l	80.0		109	85-115			
Copper	80.1	2.00	0.500	ug/l	80.0		100	85-115			
Lead	85.6	1.0	0.20	ug/l	80.0		107	85-115			
Selenium	83.7	2.0	0.50	ug/l	80.0		105	85-115			
Silver	84.2	1.0	0.10	ug/l	80.0		105	85-115			
Thallium	85.9	1.0	0.20	ug/l	80.0		107	85-115			
Matrix Spike Analyzed: 02/08/2010 (10B	0879-MS1)				Sou	rce: ITB	0856-01				
Antimony	88.1	2.0	0.30	ug/l	80.0	1.47	108	70-130			
Cadmium	84.9	1.0	0.10	ug/l	80.0	0.186	106	70-130			
Copper	82.8	2.00	0.500	ug/l	80.0	1.22	102	70-130			
Lead	80.0	1.0	0.20	ug/l	80.0	1.52	98	70-130			
Selenium	80.2	2.0	0.50	ug/l	80.0	1.12	99	70-130			
Silver	81.6	1.0	0.10	ug/l	80.0	ND	102	70-130			
Thallium	82.8	1.0	0.20	ug/l	80.0	ND	104	70-130			
Matrix Spike Dup Analyzed: 02/08/2010	(10B0879-M	ISD1)			Sou	rce: ITB	0856-01				
Antimony	85.6	2.0	0.30	ug/l	80.0	1.47	105	70-130	3	20	
Cadmium	83.1	1.0	0.10	ug/l	80.0	0.186	104	70-130	2	20	
Copper	80.2	2.00	0.500	ug/l	80.0	1.22	99	70-130	3	20	
Lead	78.9	1.0	0.20	ug/l	80.0	1.52	97	70-130	1	20	
Selenium	79.4	2.0	0.50	ug/l	80.0	1.12	98	70-130	1	20	
Silver	79.4	1.0	0.10	ug/l	80.0	ND	99	70-130	3	20	
Thallium	81.4	1.0	0.20	ug/l	80.0	ND	102	70-130	2	20	

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Project ID: Annual Outfall 001

Annual Outfall 001

Report Number: ITB0887

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Received: 02/06/10

METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result		%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B0921 Extracted: 02/08/10	-										
Blank Analyzed: 02/08/2010 (10B0921-Bl	LK1)										
Mercury	ND	0.20	0.10	ug/l							
LCS Analyzed: 02/08/2010 (10B0921-BS)	1)										
Mercury	8.22	0.20	0.10	ug/l	8.00		103	85-115			
Matrix Spike Analyzed: 02/08/2010 (10B	0921-MS1)				Sou	rce: ITB(0263-07				
Mercury	8.24	0.20	0.10	ug/l	8.00	ND	103	70-130			
Matrix Spike Dup Analyzed: 02/08/2010 (10B0921-MSD1)					Sou	rce: ITB(0263-07				
Mercury	8.09	0.20	0.10	ug/l	8.00	ND	101	70-130	2	20	

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618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly

Project ID: Annual Outfall 001

Annual Outfall 001

Report Number: ITB0887

Sampled: 02/06/10

Received: 02/06/10

METHOD BLANK/QC DATA

DISSOLVED METALS

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 10B1845 Extracted: 02/15/10	_										
Blank Analyzed: 02/16/2010 (10B1845-B	LK1)										
Antimony	ND	2.0	0.30	ug/l							
Cadmium	ND	1.0	0.10	ug/l							
Lead	ND	1.0	0.20	ug/l							
Selenium	ND	2.0	0.50	ug/l							
Silver	ND	1.0	0.10	ug/l							
Thallium	ND	1.0	0.20	ug/l							
LCS Analyzed: 02/16/2010 (10B1845-BS	1)										
Antimony	81.7	2.0	0.30	ug/l	80.0		102	85-115			
Cadmium	81.8	1.0	0.10	ug/l	80.0		102	85-115			
Lead	84.1	1.0	0.20	ug/l	80.0		105	85-115			
Selenium	82.4	2.0	0.50	ug/l	80.0		103	85-115			
Silver	84.4	1.0	0.10	ug/l	80.0		105	85-115			
Thallium	87.0	1.0	0.20	ug/l	80.0		109	85-115			
Matrix Spike Analyzed: 02/16/2010 (10B	1845-MS1)				Sou	rce: ITB	1082-03				
Antimony	82.8	20	3.0	ug/l	80.0	ND	103	70-130			
Cadmium	81.7	10	1.0	ug/l	80.0	1.14	101	70-130			
Lead	74.3	10	2.0	ug/l	80.0	ND	93	70-130			
Selenium	88.1	20	5.0	ug/l	80.0	10.3	97	70-130			
Silver	82.2	10	1.0	ug/l	80.0	ND	103	70-130			
Thallium	78.4	10	2.0	ug/l	80.0	ND	98	70-130			
Matrix Spike Analyzed: 02/16/2010 (10B	1845-MS2)				Sou	rce: ITB(0888-01				
Antimony	86.1	2.0	0.30	ug/l	80.0	ND	108	70-130			
Cadmium	83.4	1.0	0.10	ug/l	80.0	ND	104	70-130			
Lead	78.5	1.0	0.20	ug/l	80.0	ND	98	70-130			
Selenium	83.6	2.0	0.50	ug/l	80.0	0.511	104	70-130			
Silver	82.6	1.0	0.10	ug/l	80.0	ND	103	70-130			
Thallium	85.5	1.0	0.20	ug/l	80.0	ND	107	70-130			



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DISSOLVED METALS

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 10B1845 Extracted: 02/15/10	<u>) </u>										
Matrix Spike Dup Analyzed: 02/16/2010						rce: ITB	1082-03				
Antimony	85.7	20	3.0	ug/l	80.0	ND	107	70-130	4	20	
Cadmium	84.8	10	1.0	ug/l	80.0	1.14	105	70-130	4	20	
Lead	76.5	10	2.0	ug/l	80.0	ND	96	70-130	3	20	
Selenium	93.5	20	5.0	ug/l	80.0	10.3	104	70-130	6	20	
Silver	84.5	10	1.0	ug/l	80.0	ND	106	70-130	3	20	
Thallium	80.8	10	2.0	ug/l	80.0	ND	101	70-130	3	20	
Batch: 10B1846 Extracted: 02/15/10	<u>) </u>										
Blank Analyzed: 02/16/2010 (10B1846-E	BLK1)										
Arsenic	ND	10	7.0	ug/l							
Barium	ND	0.010	0.0060	mg/l							
Beryllium	ND	2.0	0.90	ug/l							
Boron	0.0453	0.050	0.020	mg/l							Ja
Calcium	0.0573	0.10	0.050	mg/l							Ja
Cobalt	ND	10	2.0	ug/l							
Iron	0.0219	0.040	0.015	mg/l							Ja
Magnesium	0.0150	0.020	0.012	mg/l							Ja
Manganese	ND	20	7.0	ug/l							
Nickel	ND	10	2.0	ug/l							
Vanadium	ND	10	3.0	ug/l							
Zinc	ND	20	6.0	ug/l							
LCS Analyzed: 02/16/2010 (10B1846-BS	51)										
Arsenic	521	10	7.0	ug/l	500		104	85-115			
Barium	0.489	0.010	0.0060	mg/l	0.500		98	85-115			
Beryllium	486	2.0	0.90	ug/l	500		97	85-115			
Boron	0.521	0.050	0.020	mg/l	0.500		104	85-115			
Calcium	2.42	0.10	0.050	mg/l	2.50		97	85-115			
Cobalt	461	10	2.0	ug/l	500		92	85-115			
Iron	0.499	0.040	0.015	mg/l	0.500		100	85-115			
Magnesium	2.42	0.020	0.012	mg/l	2.50		97	85-115			
Manganese	481	20	7.0	ug/l	500		96	85-115			
Nickel	480	10	2.0	ug/l	500		96	85-115			
Vanadium	489	10	3.0	ug/l	500		98	85-115			
Zinc	499	20	6.0	ug/l	500		100	85-115			

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METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source	%REC	%REC	RPD	RPD Limit	Data Qualifiers
·		Lillit	MIDL	Units	Level	Result	70KEC	Limits	KrD	Lillit	Quanners
Batch: 10B1846 Extracted: 02/15/1	<u>0</u>										
Matrix Spike Analyzed: 02/16/2010 (10)	B1846-MS1)				Sou	rce: ITB(0895-01				
Arsenic	543	10	7.0	ug/l	500	ND	109	70-130			
Barium	0.525	0.010	0.0060	mg/l	0.500	0.0235	100	70-130			
Beryllium	503	2.0	0.90	ug/l	500	ND	101	70-130			
Boron	0.617	0.050	0.020	mg/l	0.500	0.110	102	70-130			
Calcium	28.3	0.10	0.050	mg/l	2.50	24.7	144	70-130			MHA
Cobalt	468	10	2.0	ug/l	500	ND	94	70-130			
Iron	0.567	0.040	0.015	mg/l	0.500	ND	113	70-130			
Magnesium	7.76	0.020	0.012	mg/l	2.50	4.98	111	70-130			
Manganese	686	20	7.0	ug/l	500	190	99	70-130			
Nickel	488	10	2.0	ug/l	500	ND	98	70-130			
Vanadium	500	10	3.0	ug/l	500	ND	100	70-130			
Zinc	523	20	6.0	ug/l	500	12.7	102	70-130			
Matrix Spike Analyzed: 02/16/2010 (10)	B1846-MS2)				Sou	rce: ITB(0887-04				
Arsenic	510	10	7.0	ug/l	500	ND	102	70-130			
Barium	0.496	0.010	0.0060	mg/l	0.500	0.0149	96	70-130			
Beryllium	481	2.0	0.90	ug/l	500	ND	96	70-130			
Boron	0.549	0.050	0.020	mg/l	0.500	0.0701	96	70-130			
Calcium	13.1	0.10	0.050	mg/l	2.50	11.0	84	70-130			MHA
Cobalt	453	10	2.0	ug/l	500	ND	91	70-130			
Iron	1.16	0.040	0.015	mg/l	0.500	0.642	104	70-130			
Magnesium	5.35	0.020	0.012	mg/l	2.50	3.23	85	70-130			
Manganese	477	20	7.0	ug/l	500	ND	95	70-130			
Nickel	465	10	2.0	ug/l	500	ND	93	70-130			
Vanadium	486	10	3.0	ug/l	500	ND	97	70-130			
Zinc	497	20	6.0	ug/l	500	10.3	97	70-130			
Matrix Spike Dup Analyzed: 02/16/2010) (10B1846-M	SD1)			Sou	rce: ITB(0895-01				
Arsenic	534	10	7.0	ug/l	500	ND	107	70-130	2	20	
Barium	0.502	0.010	0.0060	mg/l	0.500	0.0235	96	70-130	4	20	
Beryllium	480	2.0	0.90	ug/l	500	ND	96	70-130	5	20	
Boron	0.599	0.050	0.020	mg/l	0.500	0.110	98	70-130	3	20	
Calcium	27.1	0.10	0.050	mg/l	2.50	24.7	96	70-130	4	20	MHA
Cobalt	455	10	2.0	ug/l	500	ND	91	70-130	3	20	
Iron	0.509	0.040	0.015	mg/l	0.500	ND	102	70-130	11	20	
Magnesium	7.37	0.020	0.012	mg/l	2.50	4.98	96	70-130	5	20	

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Attention: Bronwyn Kelly

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Annual Outfall 001

Report Number: ITB0887

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METHOD BLANK/QC DATA

DISSOLVED METALS

]	Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 10B1846 Extracted: 02/15/10											
	-										
Matrix Spike Dup Analyzed: 02/16/2010	(10B1846-MSI	D1)			Sou	rce: ITB(0895-01				
Manganese	658	20	7.0	ug/l	500	190	94	70-130	4	20	
Nickel	472	10	2.0	ug/l	500	ND	94	70-130	3	20	
Vanadium	480	10	3.0	ug/l	500	ND	96	70-130	4	20	
Zinc	510	20	6.0	ug/l	500	12.7	99	70-130	3	20	
Batch: 10B1953 Extracted: 02/16/10											
Blank Analyzed: 02/16/2010 (10B1953-Bl	LK1)										
Mercury	ND	0.20	0.10	ug/l							
LCS Analyzed: 02/16/2010 (10B1953-BS)	1)										
Mercury	8.15	0.20	0.10	ug/l	8.00		102	85-115			
Matrix Spike Analyzed: 02/16/2010 (10B	1953-MS1)				Sou	rce: ITB(907-01				
Mercury	7.43	0.20	0.10	ug/l	8.00	ND	93	70-130			
Matrix Spike Dup Analyzed: 02/16/2010	(10B1953-MSI	D1)			Sou	rce: ITB(907-01				
Mercury	7.66	0.20	0.10	ug/l	8.00	ND	96	70-130	3	20	
Batch: 10B2106 Extracted: 02/17/10											
	-										
Blank Analyzed: 02/17/2010 (10B2106-Bl	L K1)										
Copper	ND	2.00	0.500	ug/l							
LCS Analyzed: 02/17/2010 (10B2106-BS1	1)										
Copper	77.6	2.00	0.500	ug/l	80.0		97	85-115			



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DISSOLVED METALS

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 10B2106 Extracted: 02/17/	10										
Matrix Spike Analyzed: 02/17/2010 (1	yzed: 02/17/2010 (10B2106-MS1) Source: ITB1775-07										
Copper	76.0	2.00	0.500	ug/l	80.0	2.19	92	70-130			
Matrix Spike Dup Analyzed: 02/17/20	10 (10B2106-M		Sou	rce: ITB	1775-07						
Copper	77.2	2.00	0.500	ug/l	80.0	2.19	94	70-130	2	20	



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DISSOLVED INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B0756 Extracted: 02/06/10	-										
Blank Analyzed: 02/06/2010 (10B0756-Bl	LK1)										
Chromium VI	ND	1.0	0.25	ug/l							
LCS Analyzed: 02/06/2010 (10B0756-BS1	1)										
Chromium VI	4.95	1.0	0.25	ug/l	5.00		99	90-110			
Matrix Spike Analyzed: 02/06/2010 (10Bo	0756-MS1)				Sou	rce: ITB	0889-01				
Chromium VI	4.80	1.0	0.25	ug/l	5.00	ND	96	90-110			
Matrix Spike Dup Analyzed: 02/06/2010 (10B0756-MSD1)					Sou	rce: ITB	0889-01				
Chromium VI	4.91	1.0	0.25	ug/l	5.00	ND	98	90-110	2	10	

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INORGANICS

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 10B0757 Extracted: 02/06/10	-										
Blank Analyzed: 02/06/2010 (10B0757-B	L IZ 1)										
Surfactants (MBAS)	ND	0.10	0.050	mg/l							
,		0.10	0.050	mg/r							
LCS Analyzed: 02/06/2010 (10B0757-BS)	1)										
Surfactants (MBAS)	0.245	0.10	0.050	mg/l	0.250		98	90-110			
Matrix Spike Analyzed: 02/06/2010 (10B	0757-MS1)				Sou	rce: ITB(0702-01				
Surfactants (MBAS)	0.351	0.10	0.050	mg/l	0.250	0.130	88	50-125			
Matrix Spike Dup Analyzed: 02/06/2010	(10B0757-MS	SD1)			Sou	rce: ITB(702-01				
Surfactants (MBAS)	0.353	0.10	0.050	mg/l	0.250	0.130	89	50-125	0.4	20	
Batch: 10B0771 Extracted: 02/07/10	_										
Blank Analyzed: 02/07/2010 (10B0771-B	LK1)										
Turbidity	ND	1.0	0.040	NTU							
Duplicate Analyzed: 02/07/2010 (10B077	1-DUP1)				Sou	rce: ITB(0856-01				
Turbidity	7.94	1.0	0.040	NTU		7.93			0.1	20	
Batch: 10B0795 Extracted: 02/07/10	_										
Blank Analyzed: 02/12/2010 (10B0795-B	LK1)										
Biochemical Oxygen Demand	ND	2.0	0.50	mg/l							
,,		2.0	0.00								
LCS Analyzed: 02/12/2010 (10B0795-BS)	•										
Biochemical Oxygen Demand	198	100	25	mg/l	198		100	85-115			



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Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10B0795 Extracted: 02/07/10	-										
LCS Dup Analyzed: 02/12/2010 (10B0795	5-BSD1)										
Biochemical Oxygen Demand	201	100	25	mg/l	198		102	85-115	2	20	
Batch: 10B0807 Extracted: 02/07/10	-										
Blank Analyzed: 02/07/2010 (10B0807-Bl	LK1)										
Chloride	ND	0.50	0.25	mg/l							
Nitrate-N	ND	0.11	0.060	mg/l							
Nitrite-N	ND	0.15	0.090	mg/l							
Nitrate/Nitrite-N	ND	0.26	0.15	mg/l							
Sulfate	ND	0.50	0.20	mg/l							
LCS Analyzed: 02/07/2010 (10B0807-BS1	1)										
Chloride	4.79	0.50	0.25	mg/l	5.00		96	90-110			
Nitrate-N	1.06	0.11	0.060	mg/l	1.13		94	90-110			
Nitrite-N	1.47	0.15	0.090	mg/l	1.52		97	90-110			
Sulfate	9.92	0.50	0.20	mg/l	10.0		99	90-110			
Matrix Spike Analyzed: 02/07/2010 (10Bo	0807-MS1)				Sou	rce: ITB(0887-04				
Chloride	9.87	0.50	0.25	mg/l	5.00	4.64	105	80-120			
Nitrate-N	1.52	0.11	0.060	mg/l	1.13	0.404	99	80-120			
Nitrite-N	1.51	0.15	0.090	mg/l	1.52	ND	100	80-120			
Sulfate	19.0	0.50	0.20	mg/l	10.0	8.79	102	80-120			
Matrix Spike Analyzed: 02/07/2010 (10Bo	0807-MS2)				Sou	rce: ITB(0886-01				
Chloride	12.1	0.50	0.25	mg/l	5.00	7.33	96	80-120			C8
Nitrate-N	1.65	0.11	0.060	mg/l	1.13	0.587	94	80-120			
Nitrite-N	1.50	0.15	0.090	mg/l	1.52	ND	99	80-120			
Sulfate	16.1	0.50	0.20	mg/l	10.0	7.37	88	80-120			C8



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		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 10B0807 Extracted: 02/07/10											
	-										
Matrix Spike Dup Analyzed: 02/07/2010	(10B0807-MS)	D1)			Sou	rce: ITB0	0887-04				
Chloride	9.84	0.50	0.25	mg/l	5.00	4.64	104	80-120	0.3	20	
Nitrate-N	1.52	0.11	0.060	mg/l	1.13	0.404	98	80-120	0.4	20	
Nitrite-N	1.53	0.15	0.090	mg/l	1.52	ND	100	80-120	0.9	20	
Sulfate	19.0	0.50	0.20	mg/l	10.0	8.79	102	80-120	0.03	20	
Batch: 10B0814 Extracted: 02/08/10											
Blank Analyzed: 02/08/2010 (10B0814-Bl	LK1)										
Fluoride	0.0335	0.10	0.020	mg/l							Ja
LCS Analyzed: 02/08/2010 (10B0814-BS1	.)										
Fluoride	1.04	0.10	0.020	mg/l	1.00		104	90-110			
Matrix Spike Analyzed: 02/08/2010 (10Bo	0814-MS1)				Sou	rce: ITB(0610-01				
Fluoride	1.48	0.10	0.020	mg/l	1.00	0.481	100	80-120			
Matrix Spike Dup Analyzed: 02/08/2010	(10B0814-MS	D1)			Sou	rce: ITB(0610-01				
Fluoride	1.50	0.10	0.020	mg/l	1.00	0.481	101	80-120	1	20	
Batch: 10B1001 Extracted: 02/09/10	<u>-</u>										
Blank Analyzed: 02/09/2010 (10B1001-Bl	LK1)										
Perchlorate	ND	4.0	0.90	ug/l							
LCS Analyzed: 02/09/2010 (10B1001-BS1	.)										
Perchlorate	25.4	4.0	0.90	ug/l	25.0		102	85-115			

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		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 10B1001 Extracted: 02/09/10	-										
N	1001 3/01)				G	ITD	050.03				
Matrix Spike Analyzed: 02/09/2010 (10B)	,	400	00			rce: ITB(00.120			
Perchlorate	3400	400	90	ug/l	2500	958	98	80-120			
Matrix Spike Dup Analyzed: 02/09/2010	(10B1001-MS	SD1)			Sou	rce: ITB(950-03				
Perchlorate	3610	400	90	ug/l	2500	958	106	80-120	6	20	
Batch: 10B1250 Extracted: 02/10/10											
<u> </u>	-										
Blank Analyzed: 02/10/2010 (10B1250-Bl	LK1)										
Total Cyanide	ND	5.0	2.2	ug/l							
LCS Analyzed: 02/10/2010 (10B1250-BS)	D										
Total Cyanide	190	5.0	2.2	ug/l	200		95	90-110			
Matury Spiles Analyzed, 02/10/2010 (10D)	1250 MG1)				Com	rce: ITB(250.02				
Matrix Spike Analyzed: 02/10/2010 (10B Total Cyanide	1 250-MS1) 187	5.0	2.2	n ~/1	200	rce: 11 Bu ND	94	70-115			
Total Cyanide	10/	3.0	2.2	ug/l	200	ND	94	/0-113			
Matrix Spike Dup Analyzed: 02/10/2010	(10B1250-MS	SD1)			Sou	rce: ITB(0359-02				
Total Cyanide	182	5.0	2.2	ug/l	200	ND	91	70-115	3	15	
Batch: 10B1284 Extracted: 02/11/10											
	_										
Blank Analyzed: 02/11/2010 (10B1284-Bl	L K1)										
Total Organic Carbon	ND	1.0	0.50	mg/l							
LCS Analyzed: 02/11/2010 (10B1284-BS)	1)										
Total Organic Carbon	10.0	1.0	0.50	mg/l	10.0		100	90-110			

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MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 001

Annual Outfall 001

Report Number: ITB0887

Sampled: 02/06/10 Received: 02/06/10

METHOD BLANK/QC DATA

INORGANICS

		Reporting			Spike	Source		%REC		RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 10B1284 Extracted: 02/11/10	_										
Matrix Spike Analyzed: 02/11/2010 (10B)	1284-MS1)				Sou	rce: ITB1	1082-01				
Total Organic Carbon	9.13	1.0	0.50	mg/l	5.00	4.47	93	80-120			
Matrix Spike Dup Analyzed: 02/11/2010	(10B1284-MS	D1)			Sou	rce: ITB1	1082-01				
Total Organic Carbon	9.43	1.0	0.50	mg/l	5.00	4.47	99	80-120	3	20	
Batch: 10B1487 Extracted: 02/12/10											
<u> </u>	-										
Blank Analyzed: 02/12/2010 (10B1487-Bl	LK1)										
Total Dissolved Solids	ND	10	1.0	mg/l							
LCS Analyzed: 02/12/2010 (10B1487-BS1	1)										
Total Dissolved Solids	1010	10	1.0	mg/l	1000		101	90-110			
Duplicate Analyzed: 02/12/2010 (10B148'	7-DUP1)				Sou	rce: ITB1	1082-01				
Total Dissolved Solids	2140	10	1.0	mg/l		2150			0.7	10	
Batch: 10B1489 Extracted: 02/12/10											
Daten. 10D1409 Extracted. 02/12/10	-										
Blank Analyzed: 02/12/2010 (10B1489-Bl	LK1)										
Specific Conductance	ND	NA	0.0	umhos/cm							
LCS Analyzed: 02/12/2010 (10B1489-BS1	1)										
Specific Conductance	ND	NA	0.0	umhos/cm	0.00			90-110			
Duplicate Analyzed: 02/12/2010 (10B1489	9-DUP1)				Sou	rce: ITB(0887-01				
Specific Conductance	ND	NA	0.0	umhos/cm		0.00				5	



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Annual Outfall 001

Report Number: ITB0887

Sampled: 02/06/10 Received: 02/06/10

METHOD BLANK/QC DATA

INORGANICS

		Reporting	1.501	T T •.	Spike	Source	A/BEG	%REC	D.D.D.	RPD	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 10B1575 Extracted: 02/12/10	-										
Blank Analyzed: 02/12/2010 (10B1575-Bl	<i>'</i>										
Ammonia-N (Distilled)	ND	0.50	0.50	mg/l							
LCS Analyzed: 02/12/2010 (10B1575-BS1	1)										
Ammonia-N (Distilled)	10.6	0.50	0.50	mg/l	10.0		106	80-115			
Matrix Spike Analyzed: 02/12/2010 (10B	1575-MS1)				Sou	rce: ITB0	887-04				
Ammonia-N (Distilled)	11.2	0.50	0.50	mg/l	10.0	0.560	106	70-120			
Matrix Spike Dup Analyzed: 02/12/2010	(10B1575-MS	D1)			Sou	rce: ITB0	887-04				
Ammonia-N (Distilled)	11.5	0.50	0.50	mg/l	10.0	0.560	109	70-120	2	15	
Batch: 10B1607 Extracted: 02/12/10	_										
Blank Analyzed: 02/12/2010 (10B1607-Bl	,										
Total Suspended Solids	ND	10	1.0	mg/l							
LCS Analyzed: 02/12/2010 (10B1607-BS)	1)										
Total Suspended Solids	990	10	1.0	mg/l	1000		99	85-115			
Duplicate Analyzed: 02/12/2010 (10B160	7-DUP1)		Source: ITB0863-01								
Total Suspended Solids	14.0	10	1.0	mg/l		14.0			0	10	

%REC



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Annual Outfall 001

Report Number: ITB0887

Reporting

Sampled: 02/06/10 Received: 02/06/10

RPD

Data

METHOD BLANK/QC DATA

EPA-5 1613B

Spike

Source

		Keporung	g		Spike	Source		OKEC		KI D	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 47247 Extracted: 02/16/1	<u>0</u>										
Blank Analyzed: 02/18/2010 (G0B16	0000247B)				Sou	rce:					
1,2,3,4,6,7,8-HpCDD	0.0000052	0.00005	0.0000015	ug/L				-			J
1,2,3,4,6,7,8-HpCDF	0.0000039	0.00005	0.0000018	ug/L				-			J, Q
2,3,7,8-TCDF	0.00000096	0.00001	0.000001	ug/L				-			J, Q
1,2,3,4,7,8,9-HpCDF	0.0000029	0.00005	0.0000023	ug/L				-			J, Q
1,2,3,4,7,8-HxCDD	0.0000046	0.00005	0.0000014	ug/L				-			J
1,2,3,4,7,8-HxCDF	0.0000037	0.00005	0.0000011	ug/L				-			J, Q
1,2,3,6,7,8-HxCDD	0.000003	0.00005	0.0000014	ug/L				-			J, Q
1,2,3,6,7,8-HxCDF	0.0000034	0.00005	0.0000011	ug/L				-			J, Q
1,2,3,7,8,9-HxCDD	0.0000032	0.00005	0.0000011	ug/L				-			J, Q
1,2,3,7,8,9-HxCDF	0.0000033	0.00005	0.00000079	ug/L				-			J
1,2,3,7,8-PeCDD	0.0000024	0.00005	0.000003	ug/L				-			J, Q
1,2,3,7,8-PeCDF	ND	0.00005	0.0000016	ug/L				-			
2,3,4,6,7,8-HxCDF	0.0000029	0.00005	0.000001	ug/L				-			J, Q
2,3,4,7,8-PeCDF	ND	0.00005	0.0000014	ug/L				-			
2,3,7,8-TCDD	ND	0.00001	0.0000008	ug/L				-			
OCDD	0.000013	0.0001	0.000003	ug/L				-			J
OCDF	0.000008	0.0001	0.0000021	ug/L				-			J
Total HpCDD	0.0000052	0.00005	0.0000015	ug/L				-			J
Total HpCDF	0.0000068	0.00005	0.000002	ug/L				-			J, Q
Total HxCDD	0.000014	0.00005	0.0000013	ug/L				-			J, Q
Total HxCDF	0.000013	0.00005	0.00000079	ug/L				-			J, Q
Total PeCDD	0.0000058	0.00005	0.000003	ug/L				-			J, Q
Total PeCDF	0.0000011	0.00005	0.000001	ug/L				-			J, Q
Total TCDD	0.0000016	0.00001	0.00000072	ug/L				-			J, Q
Total TCDF	0.00000096	0.00001	0.000001	ug/L				-			J, Q
Surrogate: 13C-2,3,7,8-TCDF	0.0015			ug/L	0.00200		74	24-169			
Surrogate: 37Cl4-2,3,7,8-TCDD	0.00076			ug/L	0.000800		95	35-197			
Surrogate: 13C-1,2,3,4,6,7,8-HpCDD	0.0023			ug/L	0.00200		115	23-140			
Surrogate: 13C-1,2,3,4,6,7,8-HpCDF	0.002			ug/L	0.00200		100	28-143			
Surrogate: 13C-1,2,3,4,7,8,9-HpCDF	0.0021			ug/L	0.00200		104	26-138			
Surrogate: 13C-1,2,3,4,7,8-HxCDD	0.0017			ug/L	0.00200		85	32-141			
Surrogate: 13C-1,2,3,4,7,8-HxCDF	0.0017			ug/L	0.00200		85	26-152			
Surrogate: 13C-1,2,3,6,7,8-HxCDD	0.0016			ug/L	0.00200		79	28-130			
Surrogate: 13C-1,2,3,6,7,8-HxCDF	0.0017			ug/L	0.00200		83	26-123			
Surrogate: 13C-1,2,3,7,8,9-HxCDF	0.002			ug/L	0.00200		100	29-147			

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%REC

Sampled: 02/06/10

RPD

Data



THE LEADER IN ENVIRONMENTAL TESTING

MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 001

Annual Outfall 001

Report Number: ITB0887 Received: 02/06/10

Spike

Source

METHOD BLANK/QC DATA

EPA-5 1613B

Reporting

		Keporun	g		Spike	Source		/OKEC		KI D	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 47247 Extracted: 02/16/1	<u>0</u>										
Blank Analyzed: 02/18/2010 (G0B16	0000247B)				Sou	rce:					
Surrogate: 13C-1,2,3,7,8-PeCDD	0.0014			ug/L	0.00200		69	25-181			
Surrogate: 13C-1,2,3,7,8-PeCDF	0.0014			ug/L	0.00200		68	24-185			
Surrogate: 13C-2,3,4,6,7,8-HxCDF	0.0017			ug/L	0.00200		84	28-136			
Surrogate: 13C-2,3,4,7,8-PeCDF	0.0014			ug/L	0.00200		70	21-178			
Surrogate: 13C-2,3,7,8-TCDD	0.0013			ug/L	0.00200		67	25-164			
Surrogate: 13C-OCDD	0.0047			ug/L	0.00400		116	17-157			
LCS Analyzed: 02/18/2010 (G0B160	000247C)				Sou	rce:					
1,2,3,4,6,7,8-HpCDD	0.00109	0.00005	0.0000041	ug/L	0.00100		109	70-140			Ва
1,2,3,4,6,7,8-HpCDF	0.00111	0.00005	0.0000047	ug/L	0.00100		111	82-122			Ва
2,3,7,8-TCDF	0.000219	0.00001	0.00000096	ug/L	0.000200		109	75-158			Ва
1,2,3,4,7,8,9-HpCDF	0.00109	0.00005	0.0000059	ug/L	0.00100		109	78-138			Ва
1,2,3,4,7,8-HxCDD	0.00113	0.00005	0.0000012	ug/L	0.00100		113	70-164			Ва
1,2,3,4,7,8-HxCDF	0.00116	0.00005	0.00000098	ug/L	0.00100		116	72-134			Ва
1,2,3,6,7,8-HxCDD	0.00111	0.00005	0.0000011	ug/L	0.00100		111	76-134			Ва
1,2,3,6,7,8-HxCDF	0.0011	0.00005	0.00000088	ug/L	0.00100		110	84-130			Ва
1,2,3,7,8,9-HxCDD	0.00113	0.00005	0.00000092	ug/L	0.00100		113	64-162			Ва
1,2,3,7,8,9-HxCDF	0.00109	0.00005	0.00000074	ug/L	0.00100		109	78-130			Ва
1,2,3,7,8-PeCDD	0.00108	0.00005	0.0000031	ug/L	0.00100		108	70-142			Ва
1,2,3,7,8-PeCDF	0.00111	0.00005	0.0000023	ug/L	0.00100		111	80-134			
2,3,4,6,7,8-HxCDF	0.00113	0.00005	0.0000009	ug/L	0.00100		113	70-156			Ва
2,3,4,7,8-PeCDF	0.00114	0.00005	0.0000026	ug/L	0.00100		114	68-160			
2,3,7,8-TCDD	0.000199	0.00001	0.0000014	ug/L	0.000200		99	67-158			
OCDD	0.00208	0.0001	0.0000051	ug/L	0.00200		104	78-144			Ва
OCDF	0.00191	0.0001	0.0000025	ug/L	0.00200		95	63-170			Ва
Surrogate: 13C-2,3,7,8-TCDF	0.00153			ug/L	0.00200		76	22-152			
Surrogate: 37Cl4-2,3,7,8-TCDD	0.000733			ug/L	0.000800		92	31-191			
Surrogate: 13C-1,2,3,4,6,7,8-HpCDD	0.00206			ug/L	0.00200		103	26-166			
Surrogate: 13C-1,2,3,4,6,7,8-HpCDF	0.00184			ug/L	0.00200		92	21-158			
Surrogate: 13C-1,2,3,4,7,8,9-HpCDF	0.0018			ug/L	0.00200		90	20-186			
Surrogate: 13C-1,2,3,4,7,8-HxCDD	0.0015			ug/L	0.00200		75	21-193			
Surrogate: 13C-1,2,3,4,7,8-HxCDF	0.00167			ug/L	0.00200		83	19-202			
Surrogate: 13C-1,2,3,6,7,8-HxCDD	0.00167			ug/L	0.00200		83	25-163			
Surrogate: 13C-1,2,3,6,7,8-HxCDF	0.00155			ug/L	0.00200		77	21-159			
Surrogate: 13C-1,2,3,7,8,9-HxCDF	0.00171			ug/L	0.00200		86	17-205			
Surrogate: 13C-1,2,3,7,8-PeCDD	0.00139			ug/L	0.00200		70	21-227			

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%REC

MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 001

Annual Outfall 001

Report Number: ITB0887

Reporting

Sampled: 02/06/10

RPD

Data

Received: 02/06/10

METHOD BLANK/QC DATA

EPA-5 1613B

Spike Source

		reporting	5		Spine	Source		/UILL		IXI D	Data
Analyte	Result	Limit	MDL	Units	Level	Result	%REC	Limits	RPD	Limit	Qualifiers
Batch: 47247 Extracted: 02/16/10	<u>0</u>										
LCS Analyzed: 02/18/2010 (G0B1600	000247C)				Sou	rce:					
Surrogate: 13C-1,2,3,7,8-PeCDF	0.00137			ug/L	0.00200		68	21-192			
Surrogate: 13C-2,3,4,6,7,8-HxCDF	0.00149			ug/L	0.00200		74	22-176			
Surrogate: 13C-2,3,4,7,8-PeCDF	0.0014			ug/L	0.00200		70	13-328			
Surrogate: 13C-2,3,7,8-TCDD	0.00147			ug/L	0.00200		74	20-175			
Surrogate: 13C-OCDD	0.00408			ug/L	0.00400		102	13-199			
Blank Analyzed: 02/19/2010 (G0B160	000247B2)				Sou	rce:					
2,3,7,8-TCDF	ND	0.00001	0.0000019	ug/L				-			
Surrogate: 13C-2,3,7,8-TCDF	0.0016			ug/L	0.00200		81	24-169			
Surrogate: 37Cl4-2,3,7,8-TCDD	0.00071			ug/L	0.000800		89	35-197			



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Annual Outfall 001

Report Number: ITB0887

Sampled: 02/06/10 Received: 02/06/10

METHOD BLANK/QC DATA

ASTM 5174-91

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 53280 Extracted: 02/23/10											
Matrix Spike Dup Analyzed: 02/26/2010	(F0B09047000	01D)			Sou	rce: F0B0	09047000	1			
Total Uranium	30	1.4	0.4	pCi/L	27.7	0.566	106	62-150	1	20	
Matrix Spike Analyzed: 02/26/2010 (F0B	090470001S)				Sou	rce: F0B	09047000	1			
Total Uranium	29.7	1.4	0.4	pCi/L	27.7	0.566	105	62-150			
Blank Analyzed: 02/26/2010 (F0B220000	280B)				Sou	rce:					
Total Uranium	0.046	0.693	0.21	pCi/L				-			U
LCS Analyzed: 02/26/2010 (F0B2200002	80C)				Sou	rce:					
Total Uranium	30.2	0.7	0.2	pCi/L	27.7		109	90-120			

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Project ID: Annual Outfall 001

Annual Outfall 001

Report Number: ITB0887

Sampled: 02/06/10

Received: 02/06/10

METHOD BLANK/QC DATA

EPA 900.0 MOD

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 43108 Extracted: 02/10/10											
Matrix Spike Analyzed: 02/18/2010 (F0B	090470001S)				Sou	rce: F0B0	09047000	1			
Gross Alpha	47.2	3	1	pCi/L	5.54		108	90-120			
Gross Beta	79	4	1.5	pCi/L	49.4	2	91	35-150			
Duplicate Analyzed: 02/18/2010 (F0B090	470001X)				Sou	rce: F0B0	09047000	1			
Gross Alpha	0.84	3	0.94	pCi/L	68.0	3.9	110	54-150			
Gross Beta	3.2	4	1.5	pCi/L		2		-			U
Blank Analyzed: 02/19/2010 (F0B120000	108B)				Sou	rce: F0B0	09047000	1			
Gross Alpha	-0.28	2	0.87	pCi/L		3.9		-			Jb
Gross Beta	-0.23	4	1.1	pCi/L				-			U
LCS Analyzed: 02/19/2010 (F0B1200001	08C)				Sou	rce:					
Gross Alpha	34.8	3	1.2	pCi/L				-			U
Gross Beta	71.6	4	1	pCi/L	49.4		70	62-134			

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Project ID: Annual Outfall 001

Annual Outfall 001

Report Number: ITB0887

Sampled: 02/06/10

Received: 02/06/10

METHOD BLANK/QC DATA

EPA 901.1 MOD

Analyte <u>Batch: 42136 Extracted: 02/11/10</u>	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Duplicate Analyzed: 02/19/2010 (F0B09	0470001X)				Sou	rce: F0B0	9047000	1			
Cesium 137	1.2	20	14	pCi/L	68.0		105	58-133			
Potassium 40	-50	NA	200	pCi/L		-2.9		-			U
Blank Analyzed: 02/19/2010 (F0B11000	0136B)				Sou	rce: F0B0	9047000	1			
Cesium 137	1.8	20	14	pCi/L		-100		-			U
Potassium 40	-80	NA	210	pCi/L				-			U
LCS Analyzed: 02/19/2010 (F0B110000)	136C)				Sou	rce:					
Americium 241	140000	NA	500	pCi/L				-			U
Cobalt 60	88000	NA	200	pCi/L	53100		100	90-110			
Cesium 137	52900	20	200	pCi/L	141000		99	87-110			



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Annual Outfall 001

Report Number: ITB0887

Sampled: 02/06/10

Received: 02/06/10

METHOD BLANK/QC DATA

EPA 903.0 MOD

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 41160 Extracted: 02/10/10											
Duplicate Analyzed: 02/26/2010 (F0B090	467001X)				Sou	rce:					
Radium (226)	0.07	1	0.29	pCi/L	87900		100	89-110			
Blank Analyzed: 02/26/2010 (F0B100000	160B)				Sou	rce: F0B(9046700	1			
Radium (226)	0.092	1	0.14	pCi/L		0.089		-			U
LCS Analyzed: 02/26/2010 (F0B1000001	60C)				Sou	rce:					
Radium (226)	10.4	1	0.2	pCi/L				-			U



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Annual Outfall 001

Report Number: ITB0887

Sampled: 02/06/10 Received: 02/06/10

METHOD BLANK/QC DATA

EPA 904 MOD

Analyte Batch: 60257 Extracted: 03/01/10	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Blank Analyzed: 03/05/2010 (F0C01000) Radium 228	0257B) 0.08	1	0.39	pCi/L	Sou 11.3	rce:	93	68-136			
LCS Analyzed: 03/05/2010 (F0C0100002) Radium 228	257C) 6.23	1	0.39	pCi/L	Sou	rce:		_			U
LCS Dup Analyzed: 03/05/2010 (F0C01) Radium 228	0000257L) 6.35	1	0.4	pCi/L	Sou 6.40	rce:	97	60-142			



17461 Derian Avenue. Suite 100, Irvine, CA 92614 (949) 261-1022 Fax:(949) 260-3297

MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 001

Annual Outfall 001

Report Number: ITB0887

Sampled: 02/06/10

Received: 02/06/10

METHOD BLANK/QC DATA

EPA 905 MOD

Analyte <u>Batch: 41162 Extracted: 02/10/10</u>	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Duplicate Analyzed: 02/19/2010 (F0B09	0475001X)				Sou	rce:					
Strontium 90	-0.15	3	0.42	pCi/L	6.40		99	60-142	2	40	
Blank Analyzed: 02/19/2010 (F0B100000	0162B)				Sou	rce: F0B	09047500	1			
Strontium 90	-0.15	3	0.38	pCi/L		-0.05		-			U
LCS Analyzed: 02/19/2010 (F0B1000001	62C)				Sou	rce:					
Strontium 90	6.82	3	0.34	pCi/L				-			U



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MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007

Attention: Bronwyn Kelly

Project ID: Annual Outfall 001

Annual Outfall 001

Report Number: ITB0887

Sampled: 02/06/10

Received: 02/06/10

METHOD BLANK/QC DATA

EPA 906.0 MOD

Analyte Batch: 49035 Extracted: 02/18/10	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Duplicate Analyzed: 02/18/2010 (F0B090	470001X)				Sou	rce: F0B0	9047000	1			
Tritium	80	500	92	pCi/L	6.80		100	80-130			
Matrix Spike Analyzed: 02/18/2010 (F0E	3090473001S)				Sou	rce: F0B(9047000	1			
Tritium	4650	500	90	pCi/L		114		-			U
Blank Analyzed: 02/18/2010 (F0B180000	035B)				Sou	rce: F0B(9047300	1			
Tritium	165	500	95	pCi/L	4530	122	100	62-147			
LCS Analyzed: 02/18/2010 (F0B1800000	35C)				Sou	rce:					
Tritium	4440	500	90	pCi/L				-			Jb



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MWH-Pasadena/Boeing Project ID: Annual Outfall 001

618 Michillinda Avenue, Suite 200 Annual Outfall 001 Sampled: 02/06/10 Arcadia, CA 91007 Report Number: ITB0887 Received: 02/06/10

Attention: Bronwyn Kelly

DATA QUALIFIERS AND DEFINITIONS

B Analyte was detected in the associated Method Blank.	
---	--

- Ba Method blank contamination. The associated method blank contains the target analyte at a reportable level.
- C Calibration Verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.
- C8 Calibration Verification recovery was above the method control limit for this analyte. A high bias may be indicated.
- J Estimated result. Result is less than the reporting limit.
- Estimated value. Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). The user of this data should be aware that this data is of limited reliability.
- **Jb** Result is greater than sample detection limit but less than stated reporting limit.
- M1 The MS and/or MSD were above the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
- M2 The MS and/or MSD were below the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
- MHA Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).
- MNR1 There was no MS/MSD analyzed with this batch due to insufficient sample volume. See Blank Spike/Blank Spike Duplicate.
- **Q** Estimated maximum possible concentration (EMPC).
- R The RPD exceeded the method control limit due to sample matrix effects. The individual analyte QA/QC recoveries, however, were within acceptance limits.
- R-3 The RPD exceeded the acceptance limit due to sample matrix effects.
- **RL1** Reporting limit raised due to sample matrix effects.
- U Result is less than the sample detection limit.
- **Z2** Surrogate recovery was above the acceptance limits. Data not impacted.
- **ND** Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
- **RPD** Relative Percent Difference

ADDITIONAL COMMENTS

For 1,2-Diphenylhydrazine:

The result for 1,2-Diphenylhydrazine is based upon the reading of its breakdown product, Azobenzene.

For GRO (C4-C12):

GRO (C4-C12) is quantitated against a gasoline standard. Quantitation begins immediately following the methanol peak.

For Extractable Fuel Hydrocarbons (EFH, DRO, ORO):

Unless otherwise noted, Extractable Fuel Hydrocarbons (EFH, DRO, ORO) are quantitated against a Diesel Fuel Standard.

TestAmerica Irvine



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MWH-Pasadena/Boeing

618 Michillinda Avenue, Suite 200

Arcadia, CA 91007 Attention: Bronwyn Kelly Project ID: Annual Outfall 001

Annual Outfall 001

Report Number: ITB0887

Sampled: 02/06/10 Received: 02/06/10

Certification Summary

TestAmerica Irvine

Method	Matrix	Nelac	California
EPA 120.1	Water	X	X
EPA 1664A	Water	X	X
EPA 180.1	Water	X	X
EPA 200.7-Diss	Water	X	X
EPA 200.7	Water	X	X
EPA 200.8-Diss	Water	X	X
EPA 200.8	Water	X	X
EPA 218.6	Water	X	X
EPA 245.1-Diss	Water	X	X
EPA 245.1	Water	X	X
EPA 300.0	Water	X	X
EPA 314.0	Water	X	X
EPA 608	Water	X	X
EPA 624	Water	X	X
EPA 625	Water	X	X
EPA 8015 Mod.	Water	X	X
EPA 8015B	Water	X	X
EPA 8260B-SIM	Water	X	X
SM 2540D	Water	X	X
SM 4500-F-C	Water	X	X
SM2340B-Diss	Water		
SM2340B	Water	X	X
SM2540C	Water	X	
SM2540F	Water	X	X
SM4500CN-E	Water	X	X
SM4500NH3-C	Water	X	X
SM5210B	Water	X	X
SM5310B	Water	X	X
SM5540-C	Water	X	X

Nevada and NELAP provide analyte specific accreditations. Analyte specific information for TestAmerica may be obtained by contacting the laboratory or visiting our website at www.testamericainc.com

Subcontracted Laboratories

TestAmerica Irvine



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MWH-Pasadena/Boeing Project ID: Annual Outfall 001

618 Michillinda Avenue, Suite 200 Annual Outfall 001 Sampled: 02/06/10 Arcadia, CA 91007 Report Number: ITB0887 Received: 02/06/10

Attention: Bronwyn Kelly

Aquatic Testing Laboratories-SUB California Cert #1775

4350 Transport Street, Unit 107 - Ventura, CA 93003

Analysis Performed: Bioassay-7 dy Chrnic

Samples: ITB0887-04

Analysis Performed: Bioassay-Acute 96hr

Samples: ITB0887-01

TestAmerica St. Louis

13715 Rider Trail North - Earth City, MO 63045

Method Performed: ASTM 5174-91

Samples: ITB0887-04

Method Performed: EPA 900.0 MOD

Samples: ITB0887-04

Method Performed: EPA 901.1 MOD

Samples: ITB0887-04

Method Performed: EPA 903.0 MOD

Samples: ITB0887-04

Method Performed: EPA 904 MOD

Samples: ITB0887-04RE1

Method Performed: EPA 905 MOD

Samples: ITB0887-04

Method Performed: EPA 906.0 MOD

Samples: ITB0887-04

TestAmerica West Sacramento

880 Riverside Parkway - West Sacramento, CA 95605

Method Performed: EPA-5 1613B Samples: ITB0887-04, ITB0887-04RE1

Truesdail Laboratories-SUB California Cert #1237

14201 Franklin Avenue - Tustin, CA 92680 Analysis Performed: Hydrazine

Samples: ITB0887-04

TestAmerica Irvine

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With Hardcadia	
ager: Bronwyn Kelly Phone Number: Cable 568-6691 Fax Number: F	Field readings: (Log in and include in report Temp and pH) Temp °F = FF, 52, 5
Sample Container sed Sampling W VOAs 3	diesel/jet fuel citvity Time of readings = $\frac{z}{b}$
W VOAs 5 2 € 10 18.2b HCI 14,18,16,√ X W VOAs 3 Mone 2A,2B,2C√ X W 1L Poly 1 None 3 ✓ X W 1L Poly 1 None 4 ✓ X W 150 mL Poly 1 None 5 √ X W 500 mL Poly 1 None 9A; 9B; 9C,√ X W VOAs 3 HCI 10A √ X W VOAs 1 HCI 10A √ X W VOAs 2 HCI 10A √ X W 1L Amber 1 None 11B √ X W 500 mL Poly 2 None 12A;12B² X W 1 Gal Cube 1 ½[ip None 13° X	- 9108
W VOAs 3 None 2A, 2B, 2CV X W 1L Poly 1 None 3 ✓ X W 1L Poly 1 None 4 ✓ X W 150 mL Poly 1 None 5 √ X W 150 mL Poly 1 HCI 6A, 6B √ X W VOAs 3 HCI 8A, 8B, 8C √ X W VOAs 3 HCI 10A √ X W VOAs 1 HCI 10A √ X W VOAs 2 HCI 10B, 10C √ X W 1 L Amber 1 None 11B √ X W 500 mL Poly 2 None 12A,12B c W 500 mL Poly 2 None 12A,12B c	3
W 500 mL Poly 1 None 3 ✓ X W 1L Poly 1 None 4 ✓ X W 150 mL Poly 1 None 5 √ X W 1L Amber 2 HCI 6A; 6B √ X W VOAs 3 HCI 8A; 8B, 8C √ X W VOAs 3 HCI 10A √ X W VOAs 1 HCI 10A √ X W 1L Amber 1 None 11B √ X W 500 mL Poly 2 None 12A; 12B ² X W 1 Gal Cube 1 ½[p None 13° X	
W 1L Poly 1 None 4 ✓ X W 150 mL Poly 1 None 5 √ X W 1L Amber 2 HCI 6A, 8B, 8C, ✓ X W VOAs 3 HCI 8A, 8B, 8C, ✓ X W VOAs 3 HCI 10A √ X W VOAs 1 HCI 10A √ X W 1L Amber 1 None 11B √ X W 500 mL Poly 2 None 12A,12B ⁴ X W 1 Gal Cube 1 ½ None 13° X	24 TAT
W 150 mL Poly 1 None 5 √ X W 1L Amber 2 HCI 6A, 6B √ X W 500 mL Poly 1 NaOH 7 √ X W VOAs 3 HCI 8A, 9B, 9C √ X W VOAs 1 HCI 10A √ X W VOAs 2 HCI 10B, 10C √ X W 1L Amber 1 None 11B √ X W 500 mL Poly 2 None 12A, 12B ⁴ X W 1 Gal Cube 1 ½[p None 13³ X	
W 1L Amber 2 HCI 6A; 68 ℃ W VOAs 3 HCI 8A; 8B, 8C; X N W VOAs 1 HCI 10A ♥ X W VOAs 1 HCI 10A ♥ X W VOAs 2 HCI 10B 10C ♥ N W 1L Amber 1 None 11B ✓ N W 500 mL Poly 2 None 12A; 12B € None 13°	
W 500 mL Poly 1 NaOH 7 ✓ W VOAs 3 HCI 8Å, 8Å, 8C, X W VOAs 1 HCI 10A ✓ W VOAs 2 HCI 10B, 10C ✓ W 1L Amber 1 None 11B ✓ W 500 mL Poly 2 None 12A,12B ⁴ W 1 Gal Cube 1 Lájíp 18Zò None 13³	
W VOAs 3 HCI 8Å, 8Å, 8€, 8℃, X W VOAs 1 None 9Å, 9Å, 9Å, 9℃, X W VOAs 1 HCI 10A V W VOAs 2 HCI 10B. 10C√ W 1L Amber 1 None 11B √ W 500 mL Poly 2 None 12Å,12B² W 1 Gal Cube 1 13³	×
W VOAs 3 None 94,98,9C√ W VOAs 1 HCI 10A √ W VOAs 2 HCI 10B,10C √ W 1L Amber 1 None 11A √ W 500 mL Poly 2 None 12A²12B² W 1 Gal Cube 1 ½[jp i2Q None 13³	NS.
W VOAs 1 HCI W VOAs 2 HCI W 1L Amber 1 None W 500 mL Poly 2 V None W 1 Gal Cube 1 LGip R2Q None	
W VOAs 2 HCI W 1L Amber 1 None W 1L Amber 1 None W 500 mL Poly 2 V None W 1 Gal Cube 1 1 Lipip 1000 None	× 7000
W 1L Amber 1 None W 1L Amber 1 None W 500 mL Poly 2 V None W 1 Gal Cube 1 1 Ligit 10 None None	×
W 1. Sol mL Poly 2 None W 1. Gal Cube 1 2/6 D 2/6 None	S1:01 x
W 500 mL Poly 2 None W 1 Gal Cube 1 1/6 10 1020 None) <u> </u>
W 1 Gal Cube 1 2/6/10 (020 None	×
	×
These Samples are the Grab Portion of Outfall 001 for this storm event. Composite sample	Composite samples will follow and are to be added to this work order.
	74 Hour 72 Hour 10 Day
Retinquished By Date/Time: Received By Date/Time: Date/	Sample Integrity, (Check) 2 2 9 C

ANALYSIS REQUIRED		Pesticide	1 + (808 tini 4	TCP, 2,	edqlA 9,4,5	WALTH WATER	24 TAT				24 TAT	. 24 TAT		×	×	×		COC Days 2 of 3 are the composite complex for Outfall 004 for this storm event
			SST ,2	JiN ,N-e OT ,\yit	oidhuT							×	×					thing for O
	chlorate	л , F, Рег		l) stnetc						×	×						de	noeito cama
	aCO ₃	-	ll cong	, Co, V, (and a	TCDE			×	×								1	are the com
L	J, Pb, Hg, B, Ni, Se, Ag,	Be, Cd,	, sA , de	3 'UM 'e	Ba, Fe	14A 🗸 ×	14B / ×	15A,45B	16 1	17A, 17B	18A, 18B	7. 61	20Å, 20B	21 1	22K, 22B	23A, 23B		Dage 3 of 3
	PDES 001				Preservative	HNO3	HNO ₃	None 15	None	None 17	None 18	None	None 20	H ₂ SO₄	None 22	None 23		Da 2 20 C 01
Project:	Boeing-SSFL NPDES Annual Outfall 001 COMPOSITE		Phone Number: (626) 568-6691	Fax Number: (626) 568-6515	Sampling Date/Time	46/10 0840					*				À	46 10 0840		700
В		4	9 8	H (9)	# of Cont.	1 7	-	2	+	2	2	1	2	-	2	2 4	1	+
	- 6		<u>}</u>			>	_	-e-	>	oly	oly	oly	yoc	oly	er	Je .	+	-
	Suite 200		ronwyn Ke	Sear S	e Container	1L Poly	1L Poly	1L Amber	1L Poly	500 mL Poly	500 mL Poly	500 mL Poly	500 mL Poly	500 mL Poty	1L Amber	1L Amber		
Addres	dia la Ave, 91007	5	ger: B	c)mean	Sample Matrix	8	3	8	8	3	8	N	8	8	8	8		
Client Name/Address:	MWWH-Arcadia 618 Michillinda Ave, Suite 200 Arcadia, CA 91007 Test America Contact: Incent Door		Project Manager: Bronwyn Kelly	Sampler:	Sample Description	Outfall 001	Outfall 001 Dup	Outfall 001	Outfall 001	Outfall 001								

		Comments				Unfiltered and unpreserved	analysis				Filter w/in 24hrs of receipt at lab								10 Day:	+	762	1.
ANALYSIS REQUIRED	: Cu, Pb, Hg, B, Ba, I, Ni, Se, Ag, Ti, 5 CaCO ₃	is Se, As, Be, Co 1, Sb, As, Be, Co 1, V, Hardness a	Fe, Mr								×						COC Page 2 of 3 and Page 3 of 3 are the composite samples for Outfall 001 for this storm event. These milet he added to the same work order for COC Dage 1 of 3 for Outfall 001 for the same event.	Turn-around time: (Check)	24 Hour 72 Hour.	tegrit	(700 Intact Office: X	<i>J</i>
		c Toxicity	_	_						×							Outtall	5	1930	1	(6	
+	4	nethylhydrazine	Monor					×	×					1		4	es for	5	10		9)/	
	Total Organic Carbon Gross Alpha(900.0), Gross Beta(900.0), Tritium (H-3) (906.0), Sr-90 (905.0), Total Combined Radium 226 (903.0 or 903.1) & Radium 228 (904.0), Uranium (908.0), K- 40, CS-137 (901.0 or 901.1)				×	>	<						50				ork order for COC Pa	Date/Time	7	Date/Time:	\backslash	Date/Time
		oxsne	_	× (a)	_	`	5	^ ₈	78g	>	_	-	+		H	-	S Of 3 a	/ John	13	d By		名 P
			Bottle #	24A, 24B, 24C V	25 /	26A J	268	27 K. 27B	28A, 28B	7 62	70€						Page .	Received By	_	Received By		Received By
	001 001		Preservative	РC	- F	None	None	None	None	None	None						2 of 3 and	2000			2021	
ect:	Boeing-SSFL NPDES Annual Outfall 001 COMPOSITE	Phone Number: (626) 568-6691 Fax Number:	Sampling Date/Time	is obio	_						16/10 otho						COC Page 2 of 3 and	200			5	
Project:		(62£ Fax	-	61				Α.	Δ:	_	1 46				+	4	F A	Date/Time:		Date/Time:	240	Date/Time:
	Doak	<u></u>	er # of Cont.	m	ass 1	- pe	per 1	2	er 2	be 1		-			+	-		Date		Date	2	Date
	Suite 200	onwyn Ke	Containe	VOAs	250 mL Glass	2.5 Gal Cube	500 mL Amber	1L Amber	1L Amber	1 Gal Cube	1L Poly								/			
Address	dia la Ave, 9 91007 Contaci	nager: Bronw	Sample	3	×	*	\$	*	8	W	8							,	the		7	
Client Name/Address.	MWH-Arcadia 618 Michillinda Ave, Suite 200 Arcadia, CA 91007 Test America Contact: Joseph Doak	Project Manager: Bronwyn Kelly Sampler: 5 Dur Son	Sample Description	Outfall 001	Outfall 001	Outfall 004	Cottail oo	Outfall 001	Outfall 001	Outfall 001	Outfall 001							Relinquished By	Stully	Relinquished By	M	Relinquished By

LABORATORY REPORT

Date:

February 15, 2010

Client:

TestAmerica, Irvine

17461 Derian Ave., Suite 100

Irvine, CA 92614 Attn: Joseph Doak Aquatic Testing Laboratories

"dedicated to providing quality aquatic toxicity testing"

4350 Transport Street, Unit 107 Ventura, CA 93003

(805) 650-0546 FAX (805) 650-0756

CA DOHS ELAP Cert. No.: 1775

Laboratory No.:

A-10020702-001/002

Sample I.D.:

ITB0887-01, 04 (Outfall 001)

Sample Control:

The sample was received by ATL within the recommended hold time, chilled and

with the chain of custody record attached. Testing conducted on only one sample per

client instruction (rain runoff sample).

Date Sampled:

02/06/10

Date Received:

02/07/10

Temp. Received:

1.4°C

Chlorine (TRC):

Date Tested:

0.0 mg/l 02/07/10 to 02/14/10

Sample Analysis:

The following analyses were performed on your sample:

Fathead Minnow 96hr Percent Survival Bioassay (EPA Method 2000.0). *Ceriodaphnia dubia* Survival and Reproduction Test (EPA Method 1002).

Attached are the test data generated from the analysis of your sample.

Result Summary:

Acute:

Survival TUa

Fathead Minnow:

100% 0.0

Chronic:

NOEC 100% $\frac{\text{TUc}}{1.0}$

Ceriodaphnia Survival: Ceriodaphnia Reproduction:

100%

1.0

Quality Control:

Reviewed and approved by:

Joseph A. LeMay

Laboratory Director

FATHEAD MINNOW PERCENT SURVIVAL TEST EPA Method 2000.0



Lab No.: A-10020702-001

Client/ID: TestAmerica ITB0887-01 Outfall 001

Start Date: 02/07/2010

TEST SUMMARY

Species: Pimephales promelas.

Age: 12 (1-14) days. Regulations: NPDES.

Test solution volume: 250 ml. Feeding: prior to renewal at 48 hrs.

Number of replicates: 2.

Dilution water: Moderately hard reconstituted water.

Photoperiod: 16/8 hrs light/dark.

Source: In-laboratory Culture. Test type: Static-Renewal.

Test Protocol: EPA-821-R-02-012. Endpoints: Percent Survival at 96 hrs.

Test chamber: 600 ml beakers. Temperature: 20 +/- 1°C.

Number of fish per chamber: 10. QA/QC Batch No.: RT-100202.

TEST DATA

		100	DO	-0 m	# D	Dead	Analyst & Time
		°C	DO	рН	Α	В	of Readings
DUTIAL	Control	20.1	8-5	7.7	U	0	n
INITIAL	100%	20,0	9.9	7,4	0	0	1400
24.11	Control	19.4	8.1	8.0	0	0	2
24 Hr	100%	19.2	8.2	7.9	0	U	1700
40.77	Control	19.3	8.1	7.5	0	0	La
48 Hr	100%	19.1	8.0	8.0	0	0	1300
Danishood	Control	19.8	9.2	8.0	0	0	R
Renewal	100%	20.4	9.6	25	0	()	1300
70.11	Control	19.4	7-1	2.5	0	0	2m
72 Hr	100%	19.1	6.8	7.6	0	0	1500
06.11-	Control	19.1	8.2	2.7	0	D	Ru
96 Hr	100%	19.0	2.9	7.6	0	0	1400

Comments:

Sample as received: Chlorine: 0.0 mg/l; pH: 7.4; Conductivity: 15 6 umho; Temp: 1.4°C; DO: 9.9 mg/l; Alkalinity: 47 mg/l; Hardness: 54 mg/l; NH₃-N: 0.2 mg/l.

Sample aerated moderately (approx. 500 ml/min) to raise or lower DO? Yes / No.

Control: Alkalinity: 71 mg/l; Hardness: 10 mg/l; Conductivity: 325 umho.

Test solution aerated (not to exceed 100 bubbles/min) to maintain DO >4.0 mg/l? Yes / No.

Sample used for renewal is the original sample kept at 0-6°C with minimal headspace.

Dissolved Oxygen (DO) readings in mg/l O2.

RESULTS

Percent Survival In: Control: 100 % 100% Sample: 100 %



CERIODAPHNIA SURVIVAL AND REPRODUCTION TEST

- Test and Results Summary
- Data Summary and Statistical Analyses
- Raw Test Data: Water Quality & Test Organism Measurements

CERIODAPHNIA CHRONIC BIOASSAY EPA METHOD 1002.0



Lab No.: A-10020702-002 Date Tested: 02/07/10 to 02/14/10

Client/ID: Test America – ITB0887-04 (Outfall 001)

TEST SUMMARY

Test type: Daily static-renewal. Endpoints: Survival and Reproduction.

Species: Ceriodaphnia dubia.

Source: In-laboratory culture.

Age: < 24 hrs; all released within 8 hrs. Food: .1 ml YTC, algae per day. Test vessel size: 30 ml. Test solution volume: 15 ml.

Number of test organisms per vessel: 1. Number of replicates: 10.

Temperature: 25 +/- 1°C. Photoperiod: 16/8 hrs. light/dark cycle.

Dilution water: Mod. hard reconstituted (MHRW). Test duration: 7 days.

QA/QC Batch No.: RT-100207. Statistics: ToxCalc computer program.

RESULTS SUMMARY

Sample Concentration	Percent Survival	Mean Number of Young Per Female
Control	100%	27.9
100% Sample	100%	33.5

CHRONIC TOXICITY

Survival NOEC	100%
Survival TUc	1.0
Reproduction NOEC	100%
Reproduction TUc	1.0

QA/QC TEST ACCEPTABILITY

Parameter	Result
Control survival ≥80%	Pass (100% survival)
≥15 young per surviving control female	Pass (27.9 young)
≥60% surviving controls had 3 broods	Pass (100% with 3 broods)
PMSD <47% for reproduction; if >47% and no toxicity at IWC, the test must be repeated	Pass (PMSD = 9.5%)
Statistically significantly different concentrations relative difference > 13%	Pass (no concentration significantly different)
Concentration response relationship acceptable	Pass (no significant response at concentration tested)

				aphnia Sur						
Start Date:	2/7/2010 1	5:00	Test ID:	10020702	С		Sample ID):	ITB0887-0	
End Date:	2/14/2010	14:00	Lab ID:	CAATL-Ac	uatic Tes	ting Labs	Sample Ty	/pe:	EFF2-Indu	ıstrial
Sample Date:	2/6/2010 0	6:40	Protocol:	FWCH EP	A		Test Spec	ies:	CD-Cerioo	laphnia dubia
Comments:										
Conc-%	1	2	3	4	5	6	7	8	9	10
D-Contro	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
100	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

				Not			Fisher's	1-Tailed	Isot	onic
Conc-%	Mean	N-Mean	Resp	Resp	Total	N	Exact P	Critical	Mean	N-Mean
D-Control	1.0000	1.0000	0	10	10	10			1.0000	1.0000
100	1.0000	1.0000	0	10	10	10	1.0000	0.0500	1.0000	1.0000

Hypothesis	Test (1-tail,	0.05)	NOEC	LOEC	ChV	TU						
Fisher's Exa	act Test		100	>100		1						
Treatments	vs D-Control											
						lation (2	00 Resample	es)				
Point	%	SD	95%	CL	Skew							
IC05	>100											
IC10	>100											7.
IC15	>100						1.0 T					
IC20	>100						0.9				- 1	
IC25	>100										- 1	
IC40	>100						0.8 -					
IC50	>100						0.7					
							g 0.6					
							0.5					
							Response 0.6 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -					
							0.3					
							0.2					
							0.1					
							0.0					
							0	5	50	100	150	

Dose %

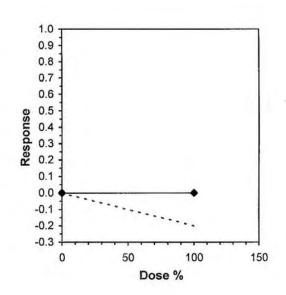
			Ceriod	aphnia Su	rvivai and	Reprodu	action res	st-Kebro	Juction		
Start Date:	2/7/2010 1	15:00	Test ID:	10020702	С		Sample ID):	ITB0887-0)4	
End Date:	2/14/2010	14:00	Lab ID:	CAATL-AC	quatic Tes	ting Labs	Sample Ty		EFF2-Indu		*
Sample Date:	2/6/2010 0	06:40	Protocol:	FWCH EP	Α		Test Spec	ies:	CD-Cerio	daphnia dubia	
Comments:											
Conc-%	1	2	3	4	5	6	7	8	9	10	
D-Control	30.000	26.000	31.000	29.000	30.000	32.000	24.000	30.000	22.000	25.000	
100	39.000	33.000	35,000	38.000	28.000	32.000	30.000	36.000	32.000	32.000	

			Transform: Untransformed 1-Tailed				Isotonic					
Conc-%	Mean	N-Mean	Mean	Min	Max	CV%	N	t-Stat	Critical	MSD	Mean	N-Mean
D-Control	27.900	1.0000	27.900	22.000	32.000	12.119	10				30.700	1.0000
100	33.500	1.2007	33.500	28.000	39.000	10.365	10	-3.654	1.734	2.658	30.700	1.0000

Auxiliary Tests	Statistic		Critical		Skew	Kurt
Shapiro-Wilk's Test indicates normal distribution (p > 0.05)	0.9605		0.905		-0.1751	-0.9651
F-Test indicates equal variances (p = 0.94)	1.05442		6.54109			
Hypothesis Test (1-tail, 0.05)	MSDu	MSDp	MSB	MSE	F-Prob	df ·
Homoscedastic t Test indicates no significant differences	2.65764	0.09526	156.8	11.7444	0.00182	1, 18
Treatments vs D-Control						

Linear Interpolation (200 Resamples) 95% CL **Point** SD Skew IC05 >100 IC10 >100 >100 IC15 IC20 >100 IC25 >100 IC40 >100

>100



IC50

CERIODAPHNIA DUBIA CHRONIC BIOASSAY EPA METHOD 1002.0 Raw Data Sheet



Lab No.: A-10020702-001

Client ID: TestAmerica - ITB0887-04 Outfall 001 Start Date: 02/07/2010 DAY I DAY 2 DAY 3 DAY 4 DAY 5 DAY 6 0 hr 24hr 0 hr 0 hr 0 hr 24hr 24hr 0 lir 24hr 0 hr 24hr 0 hr 24hr Analyst Initials: MB Time of Readings: 1500 400 1400 1400 1400 1500 1500 600 8.3 8.2 DO 8.0 7.6 pH 8.0 Control 24. Temp 24.4 25.0 DO 100% pH **Additional Parameters** Control 100% Sample Conductivity (umohms) Alkalinity (mg/l CaCO3) Hardness (mg/I CaCO₃) 90 2001 Ammonia (mg/l NH₃-N) Source of Neonates Replicate: B D G 63 54 4E 6 F 46 40 6 I Brood ID: Number of Young Produced Total Live No. Live Analyst Sample Day Young Adults Initials A B C D Ė G H J 1 0 0 0 0 10 2 U 3 3 10 4 46 10 Control 6 5 9 10 0 6 0 0 10 7 6 10 6 26 30) 3 29 30 7 22 25 30 279 Total 0 0 1 2 10 b 3 U 4 10 100% 9 5 0 0 6 Total

Circled fourth brood not used in statistical analysis.

⁷th day only used if <60% of the surviving control females have produced their third brood.



CHAIN OF CUSTODY

SUBCONTRACT ORDER TestAmerica Irvine

ITB0887

ENDING	ARORATORY.

TestAmerica Irvine

17461 Derian Avenue. Suite 100

Irvine, CA 92614

Phone: (949) 261-1022 Fax: (949) 260-3297

Project Manager: Joseph Doak

RECEIVING LABORATORY:

Aquatic Testing Laboratories-SUB 4350 Transport Street, Unit 107

Ventura, CA 93003 Phone :(805) 650-0546 Fax: (805) 650-0756

Project Location: CA - CALIFORNIA

Receipt Temperature:

Ice: Y

Analysis	Units	Expires	Comments
Sample ID: ITB0887-01 (Outfall 001 (Grab) - Wa	ter) Sampled: 02/06/10 10:20	
Bioassay-Acute 96hr	% Survival	02/07/10 22:20	FH minnow, EPA/821-R02-012, Sub to Aquatic
Containers Supplied:			
1 gal Poly (S)			
Sample ID: ITB0887-04 (Outfall 001 (Composite	e) - Water) Sampled: 02/06/10 06:40	
Bioassay-7 dy Chrnic	N/A	02/07/10 18:40	Cerio, EPA/821-R02-013, Sub to Aquatic
Containers Supplied:			
1 gal Poly (AA)			

Released By Date/Time Received By Date/Time
Released By Date/Time Received By Date/Time



REFERENCE TOXICANT DATA

FATHEAD MINNOW ACUTE Method 2000.0 Reference Toxicant - SDS



QA/QC Batch No.: RT-100202

TEST SUMMARY

Species: Pimephales promelas.

Age: 13 days old. Regulations: NPDES.

Test chamber volume: 250 ml. Feeding: Prior to renewal at 48 hrs.

Temperature: 20 +/- 1°C. Number of replicates: 2. Dilution water: MHSF.

Source: In-lab culture.

Test type: Static-Renewal.

Test Protocol: EPA-821-R-02-012.

Endpoints: LC50 at 96 hrs. Test chamber: 600 ml beakers.

Aeration: None.

Number of organisms per chamber: 10.

Photoperiod: 16/8 hrs light/dark.

TEST DATA

		INITIAI	3			24 Hr					48 Hr		
Date/Time:	2-2-	-10	1200	2-3	-10		13	OU	2-	4-10		120	2)
Analyst:		R	~	Land 18				en	on				
	"C	DO	-11	³C	DO	-11	# D	Dead	°C	DO	-11	# 0	ead
		DO	рН	3.0	DO	pН	A	В		DO	рН	A	В
Control	19.6	8.4	7.6	19.4	7.9	7.4	0	0	19.2	7.1	7.9	0	0
1.0 mg/I	19.6	8.5	7.6	19.2	8.0	7.4	0	0	19.2	7.3	7.7	0	0
2.0 mg/l	19.6	8.5	7-7	19.1	8.0	7.4	0	0	19.1	2.2	7.6	0	0
4.0 mg/l	19.6	8.5	22	19.1	7.6	24	0	0	19.1	7.2	7.6	0	0
8.0 mg/l	19.6	8.6	7.7	19.0	6.8	7.3	W	10	-	-	-	_	_

	R	ENEWA	\L			72 Hr				96 Hr				
Date/Time:	2-4-10 1200		2-5	2-5-10 1200)	2-10-10			1130			
Analyst:		Ru			en .				R					
	°C	DO	pH	"C	DO	417	# D	Dead	°C	DO	sir.	# [Dead	
		DO	pii		DO	рН	Α	В		DO	pН	A	В	
Control	19.5	8.8	7.8	19.5	7.4	7.4	0	0	20.6	6.3	7.4	0	0	
1.0 mg/l	19.5	8.8	7.8	19.4	7.4	7.4	0	0	20.6	6.6	7.4	0	0	
2.0 mg/l	19.5	8.9	7.8	19.2	2.4	7.4	0	0	20.6	6.5	7.4	0	0	
4.0 mg/l	19.5	8.9	7.8	19.2	2.3	7.4	0	0	20.5	6.4	2.4	0	0	
8.0 mg/l	-	_	-	_	-	_	-	-	-			_	_	

Comments: Control: Alkalinity: <u>69</u> mg/l; Hardness: <u>94</u> mg/l; Conductivity: <u>330</u> umho. SDS: Alkalinity: <u>68</u> mg/l; Hardness: <u>94</u> mg/l; Conductivity: <u>333</u> umho.

Concentration-response relationship acceptable? (see attached computer analysis):

Yes (response curve normal)

No (dose interrupted indicated or non-normal)

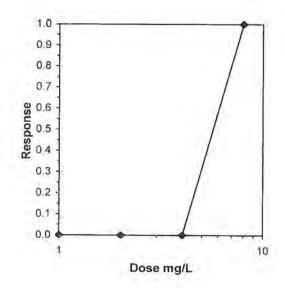
				Acute Fish Test-96	Hr Survival	
Start Date:	2/2/2010	12:00	Test ID:	RT100202f	Sample ID:	REF-Ref Toxicant
End Date:	2/6/2010	11:30	Lab ID:	CAATL-Aquatic Testing Labs	Sample Type:	SDS-Sodium dodecyl sulfate
Sample Date: Comments:	2/2/2010		Protocol:	ACUTE-EPA-821-R-02-012	Test Species:	PP-Pimephales promelas
Conc-mg/L	1	2				
D-Control	1.0000	1.0000				
1	1.0000	1.0000				
2	1.0000	1.0000				
4	1,0000	1.0000				
8	0.0000	0.0000				

			Tr	ansform:	Arcsin So	uare Root		Number Tot	Total Number	
Conc-mg/L	Mean	N-Mean	Mean	Min	Max	CV%	N	Resp Num		
D-Control	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	2	0	20	
1	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	2	0	20	
2	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	2	0	20	
4	1.0000	1.0000	1.4120	1.4120	1.4120	0.000	2	0	20	
8	0.0000	0.0000	0.1588	0.1588	0.1588	0.000	2	20	20	

Auxiliary Tests	Statistic	Critical	Skew	Kurt
Normality of the data set cannot be confirmed			13727	
Equality of variance cannot be confirmed				
	Graphical Method			

Trim Level	EC50	
0.0%	5.6569	

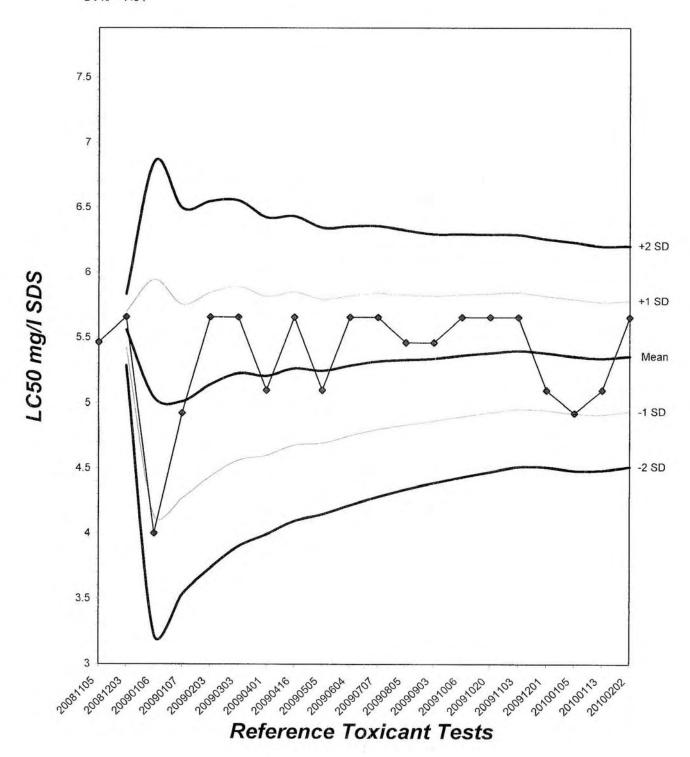
5.6569



Reviewed by:

Fathead Minnow Acute Laboratory Control Chart

CV% = 7.91



TEST ORGANISM LOG



FATHEAD MINNOW - LARVAL (Pimephales promelas)

QA/QC BATCH NO .: RT-100202
SOURCE: In-Lab Culture
DATE HATCHED: 1-20-10
APPROXIMATE QUANTITY:U W
APPROXIMATE QUANTITY: GENERAL APPEARANCE:
MORTALITIES 48 HOURS PRIOR TO TO USE IN TESTING:
DATE USED IN LAB: 1 / 5 / 10
AVERAGE FISH WEIGHT: 0,006 gm
LOADING LIMITS: 0.65 gm/liter @ 20°C, 0.40 gm/liter @ 25°C
Approximately 1000 fish per 10 liters limit if held overnight for acclimation without filtration @ 20°C for fish with a mean weight of 0.006 gm.
Approximately 650 fish per 10 liters limit if held overnight for acclimation without filtration @ 25°C for fish with a mean weight of 0.006 gm.
200 ml test solution volume = 0.013 gm mean fish weight limit @ 20°C; 0.008 @ 25°C 250 ml test solution volume = 0.016 gm mean fish weight limit @ 20°C; 0.010 @ 25°C
ACCLIMATION WATER QUALITY:
Temp.: <u>19-6</u> °C pH: <u>7-6</u> Ammonia: <u>10-1</u> mg/l NH ₃ -N
DO: 8 4 mg/l Alkalinity: 69 mg/l Hardness: 94 mg/l
READINGS RECORDED BY: DATE: Z-3-/O



Test Temperature Chart

Test No: RT-100202

Date Tested: 02/02/10 to 02/06/10

Acceptable Range: 20+/- 1°C





Ceriodaphnia dubia Chronic Toxicity Test Reference Toxicant Data

CERIODAPHNIA CHRONIC BIOASSAY EPA METHOD 1002.0 REFERENCE TOXICANT - NaCl



QA/QC Batch No.: RT-100207 Date Tested: 02/07/10 to 02/14/10

TEST SUMMARY

Test type: Daily static-renewal. Species: Ceriodaphnia dubia.

Age: <24 hrs; all released within 8 hrs.

Test vessel size: 30 ml.

Number of test organisms per vessel: 1.

Temperature: 25 +/- 1°C.

Dilution water: Mod. hard reconstituted (MHRW).

Reference Toxicant: Sodium chloride (NaCl).

Endpoints: Survival and Reproduction.

Source: In-laboratory culture. Food: .1 ml YTC, algae per day. Test solution volume: 20 ml. Number of replicates: 10.

Photoperiod: 16/8 hrs. light/dark cycle.

Test duration: 7 days.

Statistics: ToxCalc computer program.

RESULTS SUMMARY

Sample Concentration	Percent Surviv	Mean Number of Young Per Female			
Control	100%		28.5		
0.25 g/l	100%		30.9		
0.5 g/l	100%		25.5		
1.0 g/l	100%		15.4	*	
2.0 g/l	100%		2.9	*	
4.0 g/l	0%	*	0	**	

^{*} Statistically significantly less than control at P = 0.05 level

** Reproduction data from concentrations greater than survival NŒC are

excluded from statistical analysis.

CHRONIC TOXICITY

Survival LC50	2.8 g/l
Reproduction IC25	0.66 g/l
Reproduction 1C25	0.00 g/1

QA/QC TEST ACCEPTABILITY

Parameter	Result
Control survival ≥80%	Pass (100% Survival)
≥15 young per surviving control female	Pass (28.5 young)
≥60% surviving controls had 3 broods	Pass (100% with 3 broods)
PMSD <47% for reproduction	Pass (PMSD = 14.7%)
Stat. sig. diff. conc. relative difference > 13%	Pass (Stat. sig. diff. conc. Relative difference = 46.0%
Concentration response relationship acceptable	Pass (Response curve normal)

Start Date:	2/7/2010 1	5:00	Test ID:	RT100207	c		Sample ID	;	REF-Ref Toxicant				
End Date:	2/14/2010	14:00	Lab ID:	CAATL-Aquatic Testing Labs			Sample Ty	/pe:		lium chloride			
Sample Date:	2/7/2010		Protocol:	FWCH EP	A		Test Spec	ies:	CD-Ceriod	D-Ceriodaphnia dubia			
Comments: Conc-gm/L	4	2	3	4	5	6	7	8	9	10			
D-Control	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000		1.0000			
0.25		1.0000	1000000		1.0000	1.0000	1.0000	1.0000	1.0000	1.0000			
0.5	1.0000	1.0000	1.0000	1.0000	1,0000	1.0000	1.0000	1.0000	1.0000	1.0000			
1	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000			
2	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000			
4	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			

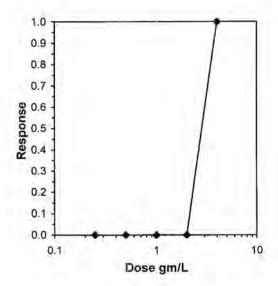
				Not			Fisher's	1-Tailed	Number	Total
Conc-am/L	Mean	N-Mean	Resp	Resp	Total	N	Exact P	Critical	Resp	Number
D-Control	1.0000	1.0000	0	10	10	10			0	10
0.25	1.0000	1.0000	0	10	10	10	1.0000	0.0500	0	10
0.5	1.0000	1.0000	0	10	10	10	1.0000	0.0500	0	10
1	1.0000	1.0000	0	10	10	10	1.0000	0.0500	0	10
2	1.0000	1.0000	0	10	10	10	1.0000	0.0500	0	10
4	0.0000	0.0000	10	0	10	10			10	10

Hypothesis Test (1-tail, 0.05)	NOEC	LOEC	ChV	TU	
Fisher's Exact Test	2	4	2.82843		
Treatments vs D-Control					

Graphical Method

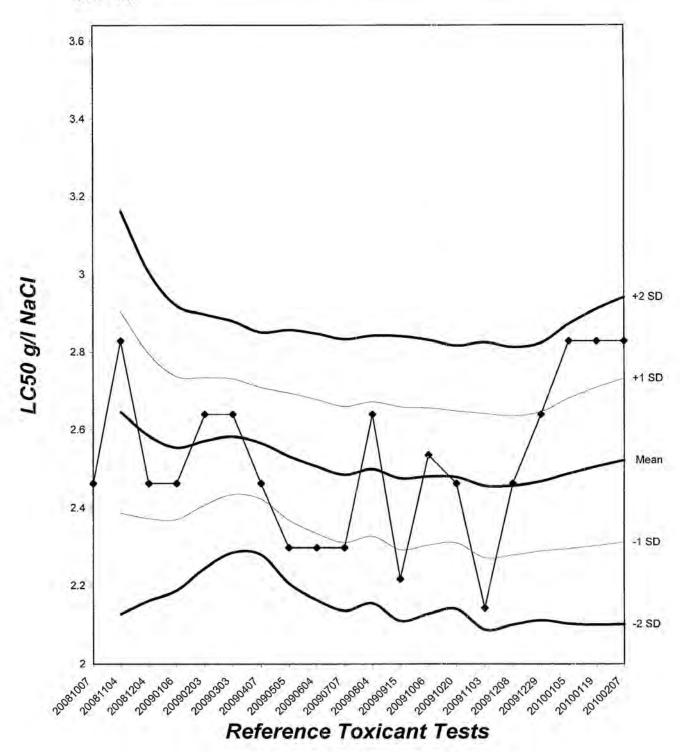
Trim Level EC50 0.0% 2.8284

2.8284



Ceriodaphnia Chronic Survival Laboratory Control Chart

CV% = 8.34



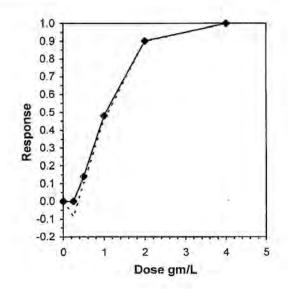
Start Date:	2/7/2010 1	5:00	Test ID:	RT100207	'c		Sample ID		REF-Ref Toxicant		
End Date:	2/14/2010	14:00	Lab ID:	CAATL-Aquatic Testing Labs			Sample Ty	/pe:	NACL-Soc	lium chloride	
Sample Date: Comments:	2/7/2010		Protocol:	FWCH EP	A		Test Spec	ies:	CD-Cerioo	laphnia dubia	
Conc-gm/L	1 -1	2	3	4	5	6	7	8	9	10	
D-Control	30.000	29.000	30,000	32.000	29.000	30.000	30.000	25.000	26.000	24.000	
0.25	48.000	29.000	31.000	31.000	27.000	27.000	28.000	36.000	25.000	27.000	
0.5	27.000	26.000	26.000	28.000	25.000	25.000	30.000	25.000	18.000	25.000	
1	24.000	13.000	15,000	19.000	24.000	13.000	11.000	13.000	11.000	11.000	
2	3.000	3.000	2.000	3.000	2.000	3.000	4.000	4.000	2.000	3.000	
4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

Mann	Moon			Transform	n: Untran	sformed		Rank	1-Tailed	Isot	onic
Mean	N-Mean	Mean	Min	Max	CV%	N	Sum	Critical	Mean	N-Mean	
28.500	1.0000	28.500	24,000	32.000	9.097	10			29.700	1.0000	
30.900	1.0842	30.900	25,000	48.000	21.867	10	110.50	76.00	29.700	1.0000	
25.500	0.8947	25.500	18.000	30.000	12.158	10	79.00	76.00	25.500	0.8586	
15.400	0.5404	15.400	11.000	24.000	33.280	10	56.00	76.00	15.400	0.5185	
2.900	0.1018	2.900	2.000	4.000	25.444	10	55.00	76.00	2.900	0.0976	
0.000	0.0000	0.000	0.000	0.000	0.000	10			0.000	0.0000	
	28.500 30.900 25.500 15.400 2.900	28.500 1.0000 30.900 1.0842 25.500 0.8947 15.400 0.5404 2.900 0.1018	Mean N-Mean Mean 28.500 1.0000 28.500 30.900 1.0842 30.900 25.500 0.8947 25.500 15.400 0.5404 15.400 2.900 0.1018 2.900	Mean N-Mean Mean Min 28.500 1.0000 28.500 24.000 30.900 1.0842 30.900 25.000 25.500 0.8947 25.500 18.000 15.400 0.5404 15.400 11.000 2.900 0.1018 2.900 2.000	Mean N-Mean Mean Min Max 28.500 1.0000 28.500 24.000 32.000 30.900 1.0842 30.900 25.000 48.000 25.500 0.8947 25.500 18.000 30.000 15.400 0.5404 15.400 11.000 24.000 2.900 0.1018 2.900 2.000 4.000	28.500 1.0000 28.500 24.000 32.000 9.097 30.900 1.0842 30.900 25.000 48.000 21.867 25.500 0.8947 25.500 18.000 30.000 12.158 15.400 0.5404 15.400 11.000 24.000 33.280 2.900 0.1018 2.900 2.000 4.000 25.444	Mean N-Mean Mean Min Max CV% N 28.500 1.0000 28.500 24.000 32.000 9.097 10 30.900 1.0842 30.900 25.000 48.000 21.867 10 25.500 0.8947 25.500 18.000 30.000 12.158 10 15.400 0.5404 15.400 11.000 24.000 33.280 10 2.900 0.1018 2.900 2.000 4.000 25.444 10	Mean N-Mean Mean Min Max CV% N Sum 28.500 1.0000 28.500 24.000 32.000 9.097 10 30.900 1.0842 30.900 25.000 48.000 21.867 10 110.50 25.500 0.8947 25.500 18.000 30.000 12.158 10 79.00 15.400 0.5404 15.400 11.000 24.000 33.280 10 56.00 2.900 0.1018 2.900 2.000 4.000 25.444 10 55.00	Mean N-Mean Mean Min Max CV% N Sum Critical 28.500 1.0000 28.500 24.000 32.000 9.097 10 30.900 1.0842 30.900 25.000 48.000 21.867 10 110.50 76.00 25.500 0.8947 25.500 18.000 30.000 12.158 10 79.00 76.00 15.400 0.5404 15.400 11.000 24.000 33.280 10 56.00 76.00 2.900 0.1018 2.900 2.000 4.000 25.444 10 55.00 76.00	Mean N-Mean Mean Min Max CV% N Sum Critical Mean 28.500 1.0000 28.500 24.000 32.000 9.097 10 29.700 30.900 1.0842 30.900 25.000 48.000 21.867 10 110.50 76.00 29.700 25.500 0.8947 25.500 18.000 30.000 12.158 10 79.00 76.00 25.500 15.400 0.5404 15.400 11.000 24.000 33.280 10 56.00 76.00 15.400 2.900 0.1018 2.900 2.000 4.000 25.444 10 55.00 76.00 2.900	

Auxiliary Tests					Statistic	Critical	Skew	Kurt
Shapiro-Wilk's Test indicates nor	-normal dis	stribution	$(p \le 0.05)$		0.87968	0.947	1.72192	5.90298
Bartlett's Test indicates unequal variances (p = 1.75E-06)					32.1843	13.2767		
Hypothesis Test (1-tail, 0.05)	NOEC	LOEC	ChV	TU				
Steel's Many-One Rank Test	0.5	1	0.70711					
Total Control of D. Octobrol								

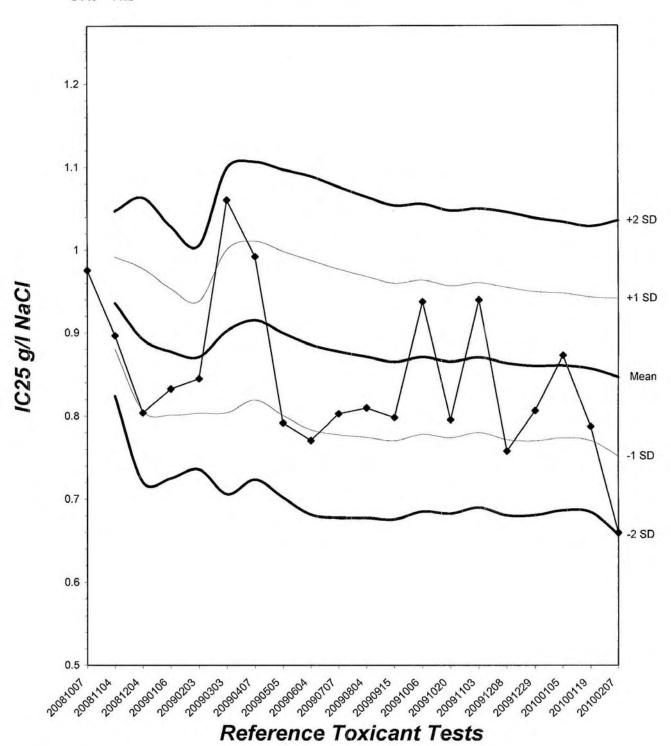
Treatments vs D-Control

				Linea	ar Interpolation	(200 Resamples)
Point	gm/L	SD	95%	CL	Skew	1-000
IC05	0.3384	0.0442	0.2691	0.4525	0.4001	
IC10	0.4268	0.0548	0.3537	0.5444	0.4118	
IC15	0.5126	0.0553	0.4160	0.6069	0.0105	1.0
IC20	0.5861	0.0571	0.4714	0.6748	-0.2745	0.9
IC25	0.6597	0.0572	0.5402	0.7608	-0.3338	0.8
IC40	0.8802	0.0645	0.7629	1.0101	0.4008	100
IC50	1.0440	0.0882	0.8903	1.2112	0.2244	0.7
						0.6 -



Ceriodaphnia Chronic Reproduction Laboratory Control Chart

CV% = 11.2



CERIODAPHNIA DUBIA CHRONIC BIOASSAY

Reference Toxicant - NaCl Reproduction and Survival Raw Data Sheet



QA/QC No.: RT-100207

Start Date: 02/07/2010

0 1				Nu	mbei	r of Y	oung	Produ	iced			Total	No.	Analyst
Sample	Day	A	В	C	D	E	F	G	н	1	J	Live Young	Live Adults	Initials
	1	0	0	0	0	0	0	0	0	0	0	0	10	2
	2	0	0	0	0	0	0	0	0	0	0	0	10	R
	3	5	0	4	4	3	4	4	4	3	4	35	10	R
Control	4	0	5	0	0	0	9	10	7	9	9	49	10	R
Control	5	8	8	12	11	10	0	16	14	14	11	104	10	Ly
	6	0	0	0	0	0	17	(19)	(3)	0	(Z)	17	10	h
	7	17	16	14	17	16	15)	0	0	0	0	80	10	1/2
	Total	30	29	30	32	29	30	30	25	26	24	285	10	1
	1	0	0	0	0	0	0	0	0	0	0	C	10	R
3	2	0	0	0	0	0	0	0	0	0	0	0	10	Ry
	3	0	4	4	4	5	3	4	0	4	3	31	10	R
0.25 ~/1	4	0	0	0	0	9	8	11	10	9	0	47	10	La
0.25 g/l	5	11	8	8	10	13	0	13	11	12	8	ad	10	Ly
	6	18	17	19	17	(13)	116	13	0	(13)	16	103	10	h
	7	19	0	(2)	(16)	0	1	0	15	0	(15)	34	10	16
	Total	88	29	31	31	27	27	28	36	25	27	309	10	1
	1	0	0	0	0	0	0	0	0	0	C	0	10	en
	2	0	0	0	0	0	0	0	0	0	0	0	10	Ru
	3	2	0	3	0	3	3	0	0	4	3	18	(0)	R
0.5 ~/1	4	0	4	4	2	5	0	6	4	6	5	36	10	Lin
0.5 g/l	5	7	5	0	0	0	7	8	6	8	0	41	10	Ro
	6	18	17	19	12	17	0	16	0	0	0	99	10	1
	7	0	0	0	14	(16)	15	0	15	(14)	17	61	10	1
	Total	27	26	26	Æ	25	25	30	25	18	25	255	10	10

Circled fourth brood not used in statistical analysis.

7th day only used if <60% of the surviving control females have produced their third brood.

CERIODAPHNIA DUBIA CHRONIC BIOASSAY

Reference Toxicant - NaCl Reproduction and Survival Raw Data Sheet



QA/QC No.: RT-100207

Start Date: 02/07/2010

6	K 200			Nu	ımbe	r of Y	oung l	Produ	ced			Total	No.	Analyst
Sample	Day	A	В	C	D	E	F	G	Н	1	J	Live Young	Live Adults	Initials
	1	0	0	0	0	0	0	0	0	0	0	0	10	1
	2	0	0	0	0	0	0	0	0	0	0	0	10	En
	3	3	0	2	3	3	0	0	2	2	0	15	10	In
1.0/1	4	0	2	5	2	4	0	0	3	3	0	19	10	La
1.0 g/l	5	5	4	0	0	0	6	4	0	0	0	19	10	In
	6	0	0	0	14	17	0	0	0	0	4	35	10	h
	7	16	7	8	0	0	2	7	8	6	7	66	10	6
	Total	24	13	15	19	24	13	-11	13	(1	10	154	10	1/
	1	O	0	0	0	0	0	C	C	0	C	0	10	1
	2	0	0	0	C	C	0	0	0	C	C	D	10	1
	3	0	0	0	0	0	0	0	0	C	0	()	10	2
2.0 -//	4	0	0	0	0	0	0	0	0	0	0	0	10	2
2.0 g/l	5	0	0	0	0	0	C	0	0	0	0	0	10	2
	6	0	0	2	C	0	0	0	M	0	0	5	10	2
	7	3	3	0	3	Z	3	4	1	2	3	24	10	1
	Total	3	3	2	3	2	-3	U	4	2	3	29	10	
	1	1000	A	100	2	X	X	X	X	X	/	0	0	1
	2	-	1)	1	1				1	
	3		_	-	-	_	-	-	-				1	
10 - 11	4	-					-	-	-		_	, (
4.0 g/l	5	-	-	-	_	_	-		_	-	_		_	-
	6	-	-			-	-	~	-	_	-	-	-	-
	7	_		_	-	-	-	-	-	_	-	- (-	
	Total	0	0	0	0	0	0	0	C	0	0	0	0	1

Circled fourth brood not used in statistical analysis.

7th day only used if <60% of the surviving control females have produced their third brood.

C\RIODAPHNIA DUBIA CHRONIC BIOASSAY

Reference Toxicant - NaCl Water Chemistries Raw Data Sheet



QA/QC No.: RT-100207

Start Date: 02/07/2010

A/QC No	o.: RT-10	00207										Start	Date:0	2/07/20)10
		DA	AY I	DA	Y 2	DA	AY 3	DA	Y 4	DA	Y 5	DA	Υ 6	DA	Y 7
		Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final
Analyst l	initials:	N	1		En	Ba	ho	Ru	Por	2	Rom	Rom	Ru	for	2/
Time of R	eadings:	1500	1430	1430	1500	1500	1400	1400	1400	1400	1500	15au	1600	1600	ppi
	DO	8.3	83	8.1	8.4	8,2	8.3	8.3	8.2	8.4	8.2	8.1	7.9	8.0	86
Control	pH	7-7	8.0	8.2	8.0	8.0	7.8	8.0	7.8	7.7	7.7	7.7	28	7.5	7-6
	Temp	243	24.2	24-7	25.0	25.7	25.1	24.4	24.0	25.7	24.8	25.4	25.2	25.9	24.5
	DO	8.4	8.4	8.2	8.4	8.2	8.3	8.3	8.2	8.4	8.2	8.1	8.0	8.0	7.9
0.25 g/l	pH	8.0	7.8	8.0	8.0	8.0	7.8	8.0	2.8	7.7	7.7	7.7	7.8	7.5	7.5
	Temp	24.1	24.2	24-6	25.1	25-8	25.2	24.5	24.2	25.7	24.9	25.4	25.3	25.9	250
	DO	8.2	8.3	8.2	8.3	8.2	8.3	8.3	8.1	8.4	8.2	8-1	820	8.0	8.1
0.5 g/l	рН	7-9	7-8	7-8	8.0	8.1	7-8	7.8	7.8	2.7	7.7	2.7	7.8	7.6	7-5
	Temp	74.4	24.6		25-2	23.8	25:4	24.5	24.2	25.7	25.0	2575	25.4	25.8	
	DO	8-3	8.4	8.4	8.3	8.3		8.3	8.1	8.3	8.3	8.2	29	8.0	8-6
1.0 g/l	pH	7.9	7-0	7-8	8.0	8.1	7-8	7.8	2.8	2.7	7.7	7.7	2.8	7.6	7.6
- Au	Temp	8.2	24,6	911	25.2		25.4	24.6	24.1	25.8	25.0	25.6	25.4	77	100
2.0 g/l	рН	7 5	28	0.9	8.5	8.3	8.2	7.8	2.8	8.3	8.3	2.8	8.1	7.7	7-6
2.0 g/1	Temp	74.6	24.8	245	25.2	8.1	25.3	24 - 4		25.9	25.1	25.8	25.3	25.1	247
	DO	8.3	8.0	_	_	_	-	_	_	_		-	-	_	
4.0 g/l	рН	8.1	7.7	1	_	_	_	5		_	_	~	3-	_	-
	Temp	24.5	25-1		_	-		-		_	_	_	-	-	_
	Di	issolved	l Oxyge	en (DO)	reading	gs are i	n mg/l	O2; Tem	perature	(Temp) reading	gs are i	n°С.		
	V						Conti	rol				High Co	ncentra	tion	
Additional Parameters				Day	1	Day :	3	Day 5		Day 1		Day 3	D	ay 5	
	Conduct	ivity (μS)		34	9	335		341	6	240	3	390	33	510
	Alkalinity				6	-	68		67		67		18	1	28
	Hardness	(mg/l CaC	(O ₃)		90		93		92		90		92		12
		-11						Veonates							
Rep	licate:		A 3A	3 B	C		D hD	E 1 C	T		G	Н	1		1

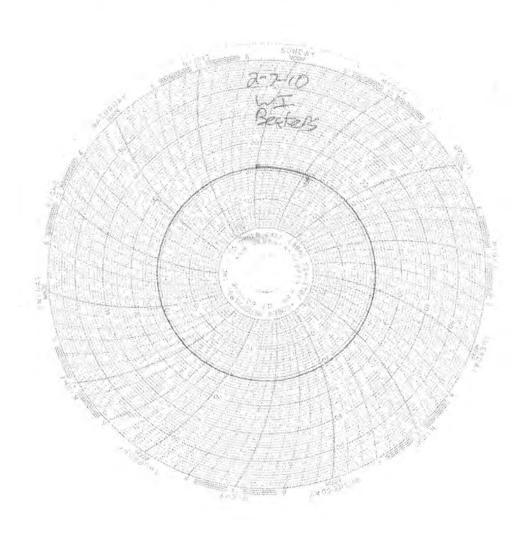


Test Temperature Chart

Test No: RT-100207

Date Tested: 02/07/10 to 02/14/10

Acceptable Range: 25+/- 1°C





TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

REVISED

PROJECT NO. ITB0887

MWH-Pasadena Boeing

Lot #: F0B090486

Joseph Doak

TestAmerica Irvine 17461 Derian Ave Suite 100 Irvine, CA 92614-5817

TESTAMERICA LABORATORIES, INC.

Project Manager

March 17, 2010

Case Narrative LOT NUMBER: F0B090486

Revised 03-17-10

This report contains the analytical results for the sample received under chain of custody by TestAmerica St. Louis on February 9, 2010. This sample is associated with your MWH-Pasadena Boeing project.

The analytical results included in this report meet all applicable quality control procedure requirements except as noted on the following page.

The test results in this report meet all NELAP requirements for parameters in which accreditations are held by TestAmerica St. Louis. Any exceptions to NELAP requirements are noted in the case narrative. **TestAmerica St. Louis' Florida certification number is E87689**. The case narrative is an integral part of this report.

This report shall not be reproduced, except in full, without the written approval of the laboratory.

All chemical analysis results are based upon sample as received, wet weight, unless noted otherwise. All radiochemistry results are based upon sample as dried and ground with the exception of tritium, unless requested wet weight by the client.

Report revised to report the KPA uranium results in pCi/L.

Observations/Nonconformances

Reference the chain of custody and condition upon receipt report for any variations on receipt conditions and temperature of samples on receipt.

There are no observations or nonconformances associated with the analysis in this lot.

SUBCONTRACT ORDER TestAmerica Irvine ITB0887 -

Revised

SENDING LABORATORY:

TestAmerica Irvine

17461 Derian Avenue. Suite 100

Irvine, CA 92614 Phone: (949) 261-1022

Fax: (949) 260-3297 Project Manager:

Joseph Doak

RECEIVING LABORATORY:

TestAmerica St. Louis 13715 Rider Trail North Earth City, MO 63045 Phone:(314) 298-8566 Fax: (314) 298-8757

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: ITB0887-04	Water 5	Sampled:02/06/10 06:40		
Gamma Spec-O	02/17/10 12:00	02/06/11 06:40		OutSt Louis, k-40 and cs-137 only, DO NOT FILTER!
Level 4 Data Package - Out	02/17/10 12:00	03/06/10 06:40		
'Uranium, Combined-O	02/17/10 12:00	02/06/11 06:40		Out St Louis, Boeing permit, DO NOT FILTER!
Strontium 90-O	02/17/10 12:00	02/06/11 06:40		Out St Louis, Boeing permit, DO NOT FILTER!
Radium, Combined-O	02/17/10 12:00	02/06/11 06:40		Out St Louis, Boeing permit, DO NOT FILTER!
Tritium-O	02/17/10 12:00	02/06/11 06:40		Out St Louis, Boeing permit, DO NOT FILTER!
Gross Beta-O	02/17/10 12:00	08/05/10 06:40		Out St Louis, Boeing permit, DO NOT FILTER!
-Gross Alpha-O	02/17/10 12:00	08/05/10 06:40		Out St Louis, Boeing permit, DO NOT FILTER!
Containers Supplied:				
2.5 gal Poly (U)	500 mL Amber	r (V)		

Released By	Date	Received By	Date
		sul Mas	2.9-10 1100
Released By	Date	Received By	Date

TestAmerica Irvine

ITB0887

SENDING LABORATORY:

TestAmerica Irvine

17461 Derian Avenue. Suite 100

Irvine, CA 92614

Phone: (949) 261-1022

Fax: (949) 260-3297 Project Manager: Joseph Doak

Client: MWH-Pasadena/Boeing

RECEIVING LABORATORY:

TestAmerica St. Louis 13715 Rider Trail North Earth City, MO 63045

Phone :(314) 298-8566 Fax: (314) 298-8757

Project Location: CA - CALIFORNIA

Receipt Temperature:

Ice: Y / N

Analysis	Units	Due	Expires	Interlab Price S	Surch	Comments
Sample ID: ITB0887-04 (Ou	tfall 001 (Co	emposite) - Wat	er) Sampled	1: 02/06/10 06:40	0	
Gross Alpha-O	pCi/L	02/17/10	08/05/10 06:40	\$90.00	50%	Out St Louis, Boeing permit, DO NOT FILTER!
Gross Beta-O	pCi/L	02/17/10	08/05/10 06:40	\$90.00	50%	Out St Louis, Boeing permit, DO NOT FILTER!
Level 4 Data Package - Ou	t N/A	02/17/10	03/06/10 06:40	\$0.00	0%	
Radium, Combined-O	pCi/L	02/17/10	02/06/11 06:40	\$200.00	50%	Out St Louis, Boeing permit, DO NOT FILTER!
Strontium 90-O	pCi/L	02/17/10	02/06/11 06:40	\$140.00	50%	Out St Louis, Boeing permit, DO NOT FILTER!
Tritium-O	pCi/L	02/17/10	02/06/11 06:40	\$80.00	50%	Out St Louis, Boeing permit, DO NOT FILTER!
Uranium, Combined-O	pCi/L	02/17/10	02/06/11 06:40	\$100.00	50%	Out St Louis, Boeing permit, DO NOT FILTER!
Containers Supplied:						
2.5 gal Poly (U)	500 mL Am	ber (V)				

Magula Salay 28ho 17:00
Released By Date/Time

Fed E/

2/8/10 17:00

Į	2017-11-11	SIICU .	E3 /4 =	- 4	y	10,482	489
THE	LEADER IN ENVIRONM	ENTAL TESTING			4	73.484	491
C	CONDITION	UPON RECEIPT FORM			ч	15,465	494
	Client:	TA Sovine	1/17		4	78(486)	495
	Quote No:	77435, 95044	-	100			
3	COC/RFA No:	Relaw		122			
niti	ated By:	N .	Da	ite: 2	.9.	10	Time: //00
70.5			7000	ormatio			7 mile
	Shipper: (F	edEx UPS DHL Courier Clie	nt Ot	her:		Mi	ultiple Packages: (Y) N
hip	ping # (s):*					Sample Tem	perature (s):**
1.	4289 2	133 2309 MB 6.				1. am	been 6.
		7.					
		8.					
		9.					
							10.
				18 P.O.			ot, note contents below. Temperature
		for yes, "N" for no and "N/A" for not applicable):					ls-Liquid or Rad tests- Liquid or Solids
(Y N	Are there custody seals present on the cooler?	8.	Y(N)):	Are there custo	ody seals present on bottles?
	Y N/A	Do custody seals on cooler appear to be tampered with?	9.	Y N	N/A	tampered with	
	O) N	Were contents of cooler frisked after opening, but before unpacking?	10.	YN	N/A3	Was sample re make note belo	ceived with proper pH1? (If not,
	N N Sug. K	Sample received with Chain of	11.(N			ed in proper containers?
5.	SN) N/A	Does the Chain of Custody match sample ID's on the container(s)?	12.	Y N	N/A	Headspace in \ (If Yes, note samp	VOA or TOX liquid samples? ole ID's below)
i, '	YN	Was sample received broken?	13.	RON	N/A	Was Internal C	OC/Workshare received?
	N X	Is sample volume sufficient for analysis?		_			by original TestAmerica lab?
or I	The second second	ANL, Sandia) sites, phy of ALL containers received (TB0887)		erified, EX	CEPT VO	DA, TOX and soils.	
Oth		180001	36				
		-88 SN 2.9.18	97		- 1	hickery	chains were
		94	98	,	~	evening.	raushod for
		88	, 99		Z	and a	- Line Trengo
-					D	ong pr	ajer.
_	Ni 1 de		300			-PAGAA	0001.
-			590		17	DUBUUL	abel time is 1315
_			12		C-	oi read	20 1254
-	ective Action:	96				÷	
	ective Action: Client Contact N	ame:	1	nformed	by:		
3	Sample(s) proce	ssed "as is"					
	Sample(s) on ho ect Management		If rele	ased, not	ify: ate:	2-110-1	10
		THE TOTAL		-		2 110 1	U

METHODS SUMMARY

F0B090486

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Gamma Spectroscopy - Cesium-137 & Hits	EPA 901.1 MOD	
Gross Alpha/Beta EPA 900	EPA 900.0 MOD	EPA 900.0
H-3 by Distillation & LSC	EPA 906.0 MOD	
Radium-226 by GFPC	EPA 903.0 MOD	
Radium-228 by GFPC	EPA 904 MOD	
Strontium 90 by GFPC	EPA 905 MOD	
Total Uranium By Laser Ph osphorimetry	ASTM 5174-91	
References:		
ACTM Annual Book Of ACTM Standards		

ASTM Annual Book Of ASTM Standards.

EPA "EASTERN ENVIRONMENTAL RADIATION FACILITY RADIOCHEMISTRY

PROCEDURES MANUAL" US EPA EPA 520/5-84-006 AUGUST 1984

SAMPLE SUMMARY

F0B090486

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
LVF6M	001	ITB0887-04	02/06/10	06:40
LVFOM	1034	1150667-04	02/00/10	

NOTE (S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

TestAmerica Irvine

Client Sample ID: ITB0887-04

Radiochemistry

Lab Sample ID: F0B090486-001

Work Order: Matrix:

LVF6M WATER Date Collected:

02/06/10 0640

Date Received:

02/09/10 1100

Parameter	Result	Qual	Total Uncert. (2 g+/-)	RL	mdc	Prep Date	Analysis Date
Gamma Cs-137 & H	its by EPA 901	.1 MOD		pCi/L	Batch #	0042136	Yld %
Cesium 137	1.3	ü	8.1	20.0	15	02/11/10	02/19/10
Potassium 40	-180	Ü	810		290	02/11/10	02/19/10
Gross Alpha/Beta	EPA 900			pCi/L	Batch #	0043108	Yld %
Gross Alpha	6.9		1.9	3.0	1.6	02/10/10	02/19/10
Gross Beta	8.1		1.3	4.0	1.2	02/10/10	02/19/10
SR-90 BY GFPC E	PA-905 MOD			pCi/L	Batch #	0041162	Yld % 47
Strontium 90	-0.24	ū	0.34	3.00	0.64	02/10/10	02/19/10
TRITIUM (Distill) by EPA 906.0	MOD		pCi/L	Batch #	0049035	Yld %
Tritium	65	Ü	65	500	96	02/18/10	02/18/10
Total Uranium by	KPA ASTM 5174	-91		pCi/L	Batch #	0053280	Yld %
Total Uranium	0,369	J	0.042	0.693	0.21	02/23/10	02/26/10
Radium 226 by E	PA 903.0 MOD			pCi/L	Batch #	0041160	Yld % 73
Radium (226)	0.06	Ü	0.12	1.00	0.21	02/10/10	02/26/10
Radium 228 by GF	PC EPA 904 MOD	(-		pCi/L	Batch #	0060257	Yld % 89
Radium 228		U	0.25	1.00	0.41	03/01/10	03/05/10

Data are incomplete without the case narrative.

METHOD BLANK REPORT

Radiochemistry

Client Lot ID: F0B090486

Matrix:

WATER

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDC		Prep Date	Lab Sample ID Analysis Date
Radium 228 by G	FPC EPA 904 MC	OD	pCi/L	Batch	# 0060257	Yld %	88 1	F0C010000-257B
Radium 228	0.08	U	0.23	1.00	0.39		03/01/10	03/05/10
Radium 226 by	EPA 903.0 MOD		pCi/L	Batch	# 0041160	Yld %	95 1	F0B100000-160B
Radium (226)	0.092	U	0.095	1.00	0.14		02/10/10	02/26/10
SR-90 BY GFPC	EPA-905 MOD		pCi/L	Batch	# 0041162	Yld %	80 1	F0B100000-162B
Strontium 90	-0.15	u	0.20	3.00	0.38		02/10/10	02/19/10
Gamma Cs-137 &	Hits by EPA 90	01.1 MOD	pCi/L	Batch	# 0042136	Yld %	1	F0B110000-136B
Cesium 137	1.8	U	7.7	20.0	14		02/11/10	02/19/10
Potassium 40	-80	U	620		210		02/11/10	02/19/10
Gross Alpha/Bet	a EPA 900		pCi/L	Batch	# 0043108	Yld %	1	F0B120000-108B
Gross Alpha	-0.28	U	0.35	2.00	0.87		02/10/10	02/19/10
Gross Beta	-0.23	U	0.62	4.00	1.1		02/10/10	02/19/10
TRITIUM (Distil	1) by EPA 906.	0 MOD	pCi/L	Batch	# 0049035	Yld %	1	F0B180000-035B
Tritium	165	J	85	500	95		02/18/10	02/18/10
Total Uranium b	y KPA ASTM 517	4-91	pCi/L	Batch	# 0053280	Yld %	1	F0B220000-280B
Total Uranium	0.0460	U	0.0057	0.693	0.21		02/23/10	02/26/10

NOTE (S)

Data are incomplete without the case narrative.

MDC is determined using instrument performance only

Laboratory Control Sample Report

Radiochemistry

Client Lot ID: F0B090486

Matrix:

WATER

			Total			Lab	Sample ID
Parameter	Spike Amount	Result	Uncert. (2 σ +/-)	MDC	% Yld	% Rec	QC Control Limits
Radium 226 by E	PA 903.0 MOD		pCi/L	903.0 MOD		F0B1	.00000-160C
Radium (226)	11.3	10.4	1.1	0.2	97	93	(68 - 136)
	Batch #:	0041160		Analysis Date	02/2	6/10	
SR-90 BY GFPC E	PA-905 MOD		pCi/L	905 MOD		F0B1	.00000-162C
Strontium 90	6.80	6.82	0.77	0.34	83	100	(80 - 130)
	Batch #:	0041162		Analysis Date	02/1	9/10	
Gamma Cs-137 & H	its by EPA 901.1	MOD	pCi/L	901.1 MOD		F0B1	.10000-136C
Americium 241	141000	140000	11000	500		99	(87 - 110)
Cesium 137	53100	52900	3000	200		100	(90 - 110)
Cobalt 60	87900	88000	5000	200		100	(89 - 110)
	Batch #:	0042136		Analysis Date	02/1	9/10	
Gross Alpha/Beta	EPA 900		pCi/L	900.0 MOD		F0B1	20000-108C
Gross Beta	68.0	71.6	6.0	1		105	(58 - 133)
	Batch #:	0043108		Analysis Date	02/1	9/10	
Gross Alpha/Beta	EPA 900	174.01	pCi/L	900.0 MOD		F0B1	20000-108C
Gross Alpha	49.4	34.8	4.3	1.2		70	(62 - 134)
	Batch #:	0043108		Analysis Date:	02/1	9/10	
TRITIUM (Distill)	by EPA 906.0 M	OD	pCi/L	906.0 MOD		F0B1	80000-035C
Tritium	4530	4440	460	90		98	(85 - 112)
	Batch #:	0049035		Analysis Date:	02/18	3/10	
Total Uranium by	KPA ASTM 5174-9	1	pCi/L	5174-91		F0B2	20000-280C
Total Uranium	27.7	30.2	3.6	0.2		109	(90 - 120)
	Batch #:	0053280		Analysis Date:	02/2	6/10	
Total Uranium by	KPA ASTM 5174-9	1	pCi/L	5174-91		F0B2	20000-280C
Total Uranium	5.54	5.97	0.61	0.21		108	(90 - 120)
	Batch #:	0053280		Analysis Date:	02/2	5/10	

Laboratory Control Sample/LCS Duplicate Report

Radiochemistry

Client Lot ID: FOB090486

Matrix:

WATER

				Total			Lab	Sample ID
Parameter		Spike Amount	Result	Undert. (2 g+/-)	* Yld	% Rec	QC Control Limits	Precision
Radium 228 b	y GFPC	EPA 904 MOD	pC	21/L 904 MOI)		F0C0	10000-257C
Radium 228	Spk 2	6.40 6.40	6,23 6,35	0.74 0.77	87 84	97 99	(60 = 142) (60 = 142)	2 %RPD
		Batch #:	0060257		Analysi	s Date:	03/05/10	

MATRIX SPIKE REPORT

Radiochemistry

Client Lot Id:

F0B090473

Matrix: V

WATER

Date Sampled:

02/05/10

Date Received:

02/09/10

					573.5	QC Sample	e ID
Parameter	Spike Amount	Spike Result	Total Uncert. (2c+/-)	Spike Samp Yld. Resu	DIRECT	tyld trec	QC Control Limits
TRITIUM (Distill) by EPA	906.0	MOD	pCi/L	906.0	MOD	F0B090473	3-001
Tritium	4530	4650	470	122	77	100	(62 - 147)
	Batch	#: 0049035	An	alysis Date:	02/18/10		
Gross Alpha/Beta EPA 900)		pCi/L	900.0	MOD	F0B090470	0-001
Gross Alpha	49.4	47.2	5.2	2.00	0.88	91	(35 - 150)
	Batch	#: 0043108	An	alysis Date:	02/18/10		
Gross Alpha/Beta EPA 900)		pCi/L	900.0	MOD	F0B090470	0-001
Gross Beta	68.0	79.0	6.6	3.9	1.2	110	(54 - 150)
	Batch	#: 0043108	An	alysis Date:	02/18/10		

Calculations are performed before rounding to avoid round-off errors in calculated results.

Data are incomplete without the case narrative,

MATRIX SPIKE/MATRIX SPIKE DUPLICATE REPORT

Radiochemistry

Client Lot ID:

F0B090470

Matrix: WATER Date Sampled:

02/07/10 1143

Date Received: 02/09/10 1100

				Total				Total		QC Sampl	e ID
Parameter		Spike Amount	SPIKE Result	Uncert. (2 o+/-)	Spike Yld	SAMPLE Result		Uncert. (2 or +/-) *	Yld	*Rec	QC Control Limits
Total Uranium	by KPA	ASTM 5		pCi/L		174-91			FO	B09047	0-001
Total Uranium		27.7	29.7	3,1		0.566	J	0.068		105	(62 - 150
TOTAL STATE	Spk2	27.7	30,0	3.1		0.566	J	0.068 Precision	.:	106 1	(62 - 150 %RPD
		Batch	# : 0053280	Ana	lysis d	ate:	02/2	6/10			

DUPLICATE EVALUATION REPORT

Radiochemistry

Client Lot ID: FOB090486

Matrix:

WATER

Date Sampled: 02/05/10

Date Received: 02/09/10

			Total				Total		QC Sample ID	
Parameter	SAMPLE Result		Uncert. (2σ+/-)	% Yld	DUPLICA Result	TE	Uncert. (2 g+/-)	% Y1d	Precisi	on
Radium 226 by EPA	903.0 MOD			pCi/L	903.	O MOD			F0B090467-00)1
Radium (226)	0.089	U	0.098	92	0.07	U	0.16	92	31	%RPD
	Bato	h #:	0041160	(Sample)	0041	160 (D	uplicate)			
Gamma Cs-137 & Hit	s by EPA 90	01.1	MOD	pCi/L	901.	1 MOD			F0B090470-00)1
Cesium 137	-2.9	U	9.0		1.2	U	7.8		479	%RPD
Potassium 40	-100	U	43000		-50	U	230		93	%RPD
	Bato	h #:	0042136	(Sample)	0042	136 (D	uplicate)			
Gross Alpha/Beta E	PA 900			pCi/L	900.	0 MOD			F0B090470-00)1
Gross Alpha	2.00	J	0.88		0.84	U	0.66		82	%RPD
Gross Beta	3.9	J	1.2		3.2	J	1.1		20	%RPD
	Bato	h #:	0043108	(Sample)	0043	108 (D	uplicate)			
TRITIUM (Distill)	by EPA 906	. 0 MO	D	pCi/L	906.	0 MOD			F0B090470-00	1
Tritium	114	J	75		80	U	66		35	%RPD
	Bato	h #:	0049035	(Sample)	0049	035 (D	uplicate;			
SR-90 BY GFPC EPA	-905 MOD			pCi/L	905	MOD			F0B090475-00	1
Strontium 90	-0.05	U	0.23	72	-0.15	U	0.23	69	97	%RPD
	Bato	h #:	0041162	(Sample)	0041	162 /1	uplicate)			

SUBCONTRACT ORDER TestAmerica Irvine

ITB0887

987726

SENDING LABORATORY:

TestAmerica Irvine 17461 Derian Avenue. Suite 100

Irvine, CA 92614 Phone: (949) 261-1022 Fax: (949) 260-3297

Project Manager: Joseph Doak

RECEIVING LABORATORY:

Truesdail Laboratories-SUB 14201 Franklin Avenue Tustin, CA 92680

Phone: (714) 730-6239 Fax: (714) 730-6462

Project Location: CA - CALIFORNIA

°C

Receipt Temperature:

Rec'd 02/08/10

Ice: Y / N

Standard TAT is reque	sted unless specific due d	late is requested. => Due Date:	Initials:
Analysis	Units	Expires	Comments
Sample ID: ITB0887-04 (Outfall 001 (Composite)	- Water) Sampled: 02/06/10 06:40	
Hydrazine-OUT	ug/l	02/09/10 06:40	Sub Truesdail for Monomethylhydrazine, J flags
Containers Supplied:			Level 4 Data Package 2
1 L Amber (W)	1 L Amber (X)		1111



For Sample Condition See Form Attached

Magutta	lalor.	d. Straken	ure 2/8,	10 16:00
Released By	Date/Tirne	Received By	Date/Time	70.00
Released By	Date/Time	Received By	Date/Time	Page 1 of 1

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EXCELLENCE IN INDEPENDENT TESTING



14201 FRANKLIN AVENUE · TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 · FAX (714) 730-6462 · www.truesdail.com

Client: Test America - Irvine

17461 Derian Avenue, Suite 100

Irvine, CA 92614-5817

Attention: Joseph Doak
Sample: Water / 1 Sample

Project Name: ITB0887
Project Number: ITB0887

Method Number: EPA 8315 (Modified)
Investigation: Hydrazines

REPORT

Report Date: February 11, 2010

Sampling Date: February 6, 2010

Receiving Date: February 8, 2010
Extraction Date: February 8, 2010
Analysis Date: February 9, 2010

Units: µg/L

Reported By: JS

Analytical Results

Sample ID	Sample Description	Sample Amount (mL)	Dilution Factor	Monomethył Hydrazine	u-Dimethyl Hydrazine	Hydrazine	
708690-MB	Method Blank	100	1	ND	ND	ND	- 18
987726	ITB0887-04	100	1	N	R	S	- 1
MDL				0.857	1.42	0.452	
PQL				5.0	5.0	1.00	- 1
Sample Reporting Limits	ng Limits			5.0	5.0	1.00	1

Note: Results based on detector #1 (UV=365nm) data.

Linda Saetern, Project Manager Analytical Services, Truesdail Laboratories, Inc.

This report applies only to the sample, or samples, investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a mutual protection to clients, the public, and these laboratories, this report is submitted and accepted for the exclusive use of the client to whom it is addressed and upon the condition that it is not to be used, in whole or in part, in any advertising or publicity matter without prior written authorization from Truesdail Laboratories.

TRUESDAIL LABORATORIES, INC.

EXCELLENCE IN INDEPENDENT TESTING

Client:

Test America - Irvine

Irvine, CA 92614-5817

17461 Derian Avenue, Suite 100

Project Number: Method Number:

EPA 8315 (Modified) Hydrazines Client Contact:

Sample:

Joseph Doak Water / 1 Sample

Run Batch No.:

Extraction: 5138; Analysis: 678

Investigation:

Established 1931

14201 FRANKLIN AVENUE - TUSTIN, CALIFORNIA 92780-7008 (714) 730-6239 - FAX (714) 730-6462 - www.truesdail.com

QC Lab. No.: 708690 Project Lab. No.: 987726

Project Lab. No.: 987726 Spiked Sample ID: 987712

Report Date: February 1

Sampling Date: February 6, 2010
Receiving Date: February 8, 2010

Extraction Date: February 8, 2010
Analysis Date: February 9, 2010
Reported By: JS

Quality Control/Quality Assurance Calibration Report

QCS

	ICV				
Parameter	Theoretical Value (ug/L)	Measured Value (ug/L)	Percent	Control	Flag
Monomethyl Hydrazine	25.0	25.1	100	85-115	PASS
u-Dimethyl Hydrazine	25.0	25.7	103	85-115	PASS
Hydrazine	5.0	4.76	95.2	85-115	PASS

Hydrazine u-Dimethyl Hydrazine Monomethyl Hydrazine **Parameter** Theoretical Value (ug/L) 50.0 50.0 10.0 Value (ug/L) Measured 48.0 10.2 46.4 Recovery Percent 96.0 92.7 102 Control 85-115 85-115 Limits 85-115 PASS PASS PASS Flag

Quality Control/Quality Assurance Spikes Report

MS/MSD

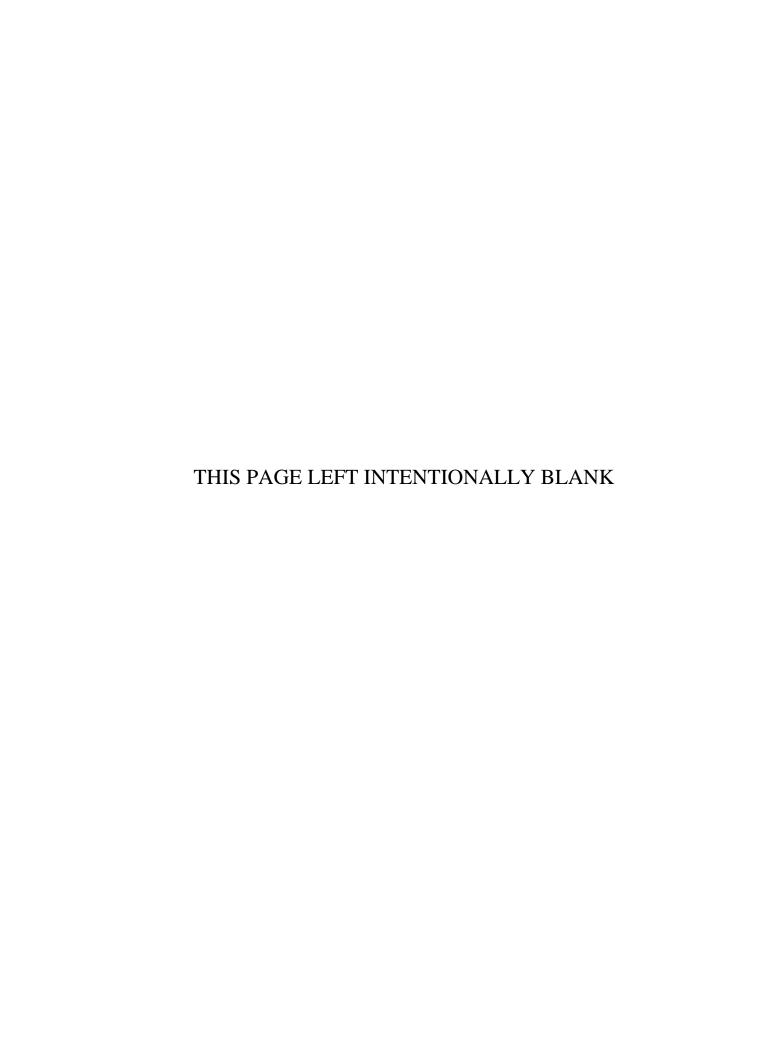
		LCS/LCSI	CSD							
	Spiked		Recovered		Per	Percent	LCS/		င္ပ	Control
	Conc.	č	Concentration	2	Recov	Recovery (%)	LCSD	Flag	Ē	Limits
Parameter	ug/L	LCS	LCSD	MB		LCSD	RPD		%D	% Rec.
Monomethyl Hydrazine	50.0	52.3	50.8	0.0	105	102	2.93%	PASS	20	50-150
u-Dimethyl Hydrazine	50.0	53.4	51.6	0.0	107	103	3.30%	PASS	20	50-150
Hydrazine	10.0	11.3	11.0	0.0	113	110	2.77% PASS	PASS	20	20 50-150

გ _	Recovered Concentration	tion a	Recov	Percent Recovery (%)	MSD	Flag	Acc	Accuracy Control Limits
NS	MSD	Sample	NS	MSD	RPD		% D	% Rec
41.5	40.8	0.00	83.0	81.7	1.55%	PASS	20	50-150
44.9	45.7	0.00	89.7	91.4	1.91%	PASS	20	50-150
10.3	10.7	0.00	103	107	3.33%	PASS	20	50-150

Note: Results based on detector #1 (UV=365nm) data.

Linda Saetern, Project Manager
Analytical Services, Truesdail Laboratories, Inc.

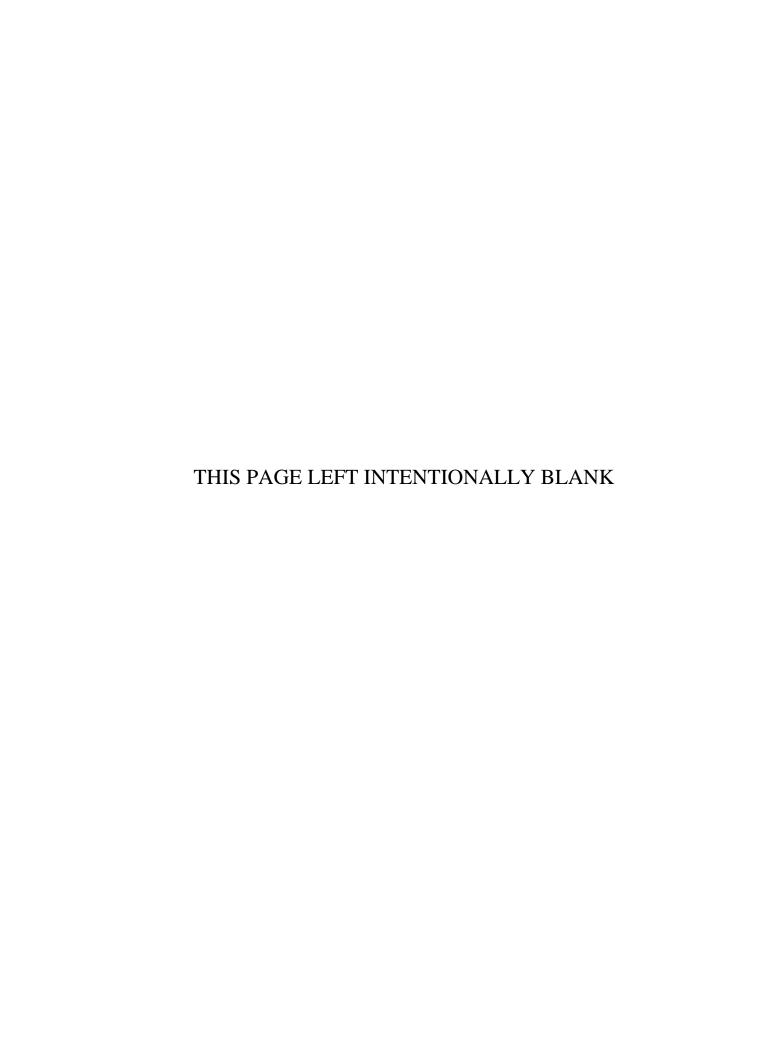
This report applies only to the sample, or samples, investigated and is not necessarily indicative of the quality or condition of apparently identical or similar products. As a mutual protection to clients, the public, and these laboratories, this report is submitted and accepted for the exclusive use of the client to whom it is addressed and upon the condition that it is not to be used, in whole or in part, in any advertising or publicity matter without prior written authorization from Truesdail Laboratories.



APPENDIX G

Section 5

Outfall 002 - January 18 & 19, 2010 $\label{eq:mecx} \mbox{MECX Data Validation Report}$





DATA VALIDATION REPORT

Boeing SSFL NPDES

SAMPLE DELIVERY GROUP: ITA1330

Prepared by

MEC^X, LP 12269 East Vassar Drive Aurora, CO 80014

I. INTRODUCTION

Task Order Title: Boeing SSFL NPDES

Contract Task Order: 1261.100D.00

Sample Delivery Group: ITA1330 Project Manager: B. Kelly

Matrix: Water
QC Level: IV

No. of Samples: 2
No. of Reanalyses/Dilutions: 1

Laboratory: TestAmerica-Irvine

Table 1. Sample Identification

Client ID	Laboratory ID	Sub- Laboratory ID	Matrix	Collected	Method
Outfall 002 (Composite)	ITA1330-02	F0A210540- 001, G0A210526- 001	Water	1	ASTM 5174-91, 180.1, 200.7, 200.7 (Diss), 200.8, 200.8 (Diss), 245.1, 245.1 (Diss), 1613B, 900.0 MOD, EPA 901.1 MOD, 903.0 MOD, 904 MOD, 905 MOD, 906.0 MOD, 1613B, SM 2540D
Outfall 002 (Composite)	ITA1330-02RE1	G0A210526- 001	WATER	1/19/2010 11:56:00 AM	1613B
Outfall 002 (Grab)	ITA1330-01	N/A	Water	1/18/2010 1:00:00 PM	120.1, SM2540F

II. Sample Management

No anomalies were observed regarding sample management. The sample receipt temperature was not noted by TestAmerica-St Louis; however, due to the nonvolatile nature of the analytes, no qualifications were required. The samples in this SDG were received at the remaining laboratories within the temperature limits of 4°C ±2°C. According to the case narrative for this SDG, the samples were received intact, on ice, and properly preserved, if applicable. The COCs were appropriately signed and dated by field and/or laboratory personnel. Custody seals were present upon receipt at TestAmerica-West Sacramento and TestAmerica-St. Louis. As the samples were delivered to the remaining laboratories by courier, no custody seals were necessary. If necessary, the client ID was added to the sample result summary by the reviewer.

Data Qualifier Reference Table

Qualifie	r 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 or PCB congeners.	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
Н	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
С	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.
В	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.
1	Internal standard performance was unsatisfactory.	ICP ICS results were unsatisfactory.
Α	Not applicable.	ICP Serial Dilution %D were not within control limits.
M	Tuning (BFB or DFTPP) was noncompliant.	Not applicable.
Т	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 The analysis with this flag should not be used because another more be used because another more technically sound analysis is technically sound analysis is available. available. Ρ Instrument performance for Post Digestion Spike recovery was pesticides was poor. not within control limits. **DNQ** The reported result is above the The reported result is above the method detection limit but is less than method detection limit but is less than the reporting limit. the reporting limit. *||, *||| Unusual problems found with the Unusual problems found with the data that have been described in data that have been described in Section II, "Sample Management," or Section II, "Sample Management," Section III, "Method Analyses." The or Section III, "Method Analyses." number following the asterisk (*) will The number following the asterisk indicate the report section where a (*) will indicate the report section description of the problem can be where a description of the problem found. can be found.

DATA VALIDATION REPORT SDG: ITA1330

III. Method Analyses

A. EPA METHOD 1613—Dioxin/Furans

Reviewed By: L. Calvin

Date Reviewed: February 25, 2010

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.
 - o GC Column Performance: A Windows Defining Mix (WDM) containing the first and last eluting congeners of each descriptor and isomer specificity compounds was analyzed with the initial calibration sequence and at the beginning of each analytical sequence. 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.
 - o Initial Calibration: Initial calibration criteria were met. The initial calibration was acceptable with %RSDs ≤20% for the 16 native compounds (calibration by isotope dilution) and ≤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 detects between the EDL and the RL for all compounds except 2,3,7,8-TCDF, total TCDF, all of the HxCDD isomers, and total HxCDD. Any sample detects for individual target compound isomers present at concentrations less than five times the method blank concentrations were qualified as nondetected, "U," at the RL. Results for totals were qualified as nondetected, "U," if all peaks comprising the total were

present in the method blank at less than five times the blank concentrations. Several detects in the method blank did not meet ratio criteria and were reported as EMPCs; however, due to the extent of contamination present in the method blank, it was the reviewer's professional opinion that those results be utilized to qualify applicable sample results. Results for totals that included peaks meeting ratio criteria that were not present in the method blank were qualified as estimated, "J," as only a portion of the total was considered method blank contamination.

- 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. A confirmation analysis was performed for 2,3,7,8-TCDF. The confirmation result was rejected, "R," in favor of the original result.
- Compound Quantification and Reported Detection Limits: Compound quantitation was verified by recalculating a representative number of reportable sample detects. The laboratory calculated and reported compound-specific detection limits. Any reported totals not qualified as nondetects for method blank contamination that included EMPCs were qualified as estimated, "J." 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 EDL.

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

Reviewed By: P. Meeks

Date Reviewed: February 25, 2010

The sample listed in Table 1 for these analyses were 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 200.7, 200.8, 245.1, and the National Functional Guidelines for Inorganic Data Review (7/02).

- Holding Times: Analytical holding times, six months 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 ≤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 r² values were ≥0.995 and all initial and continuing calibration recoveries were within 90-110% for the ICP and ICP-MS metals and 85-115% for mercury. CRDL/CRI recoveries were within the control limits of 70-130%.
- Blanks: Nickel was detected in the dissolved method blank; therefore, nickel detected in the dissolved fraction was qualified as nondetected, "U," at the reporting limit. Cadmium was detected in a CCB bracketing the dissolved fraction; therefore, cadmium detected in the dissolved fraction was qualified as nondetected, "U," at the reporting limit. Method blanks and CCBs had no other applicable detects.
- Interference Check Samples: Recoveries were within the method- (6010B) or laboratory-(6020) established control limits. Most analytes were detected in the ICP-MS ICSA but the reviewer was not able to determine if the detects in the sample were due to method interference. There were no target compounds present in the ICP ICSA solution at concentrations indicative of matrix interference.
- Blank Spikes and Laboratory Control Samples: Recoveries were within laboratoryestablished 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.
- Serial Dilution: No serial dilution analyses were performed on the sample in this SDG.

Internal Standards Performance: All sample internal standard intensities were within 30-120% of the internal standard intensities measured in the initial calibration. All CCV and CCB internal standard intensities were within 80-120% of the internal standard intensities measured in the initial calibration. Chromium, manganese, nickel, copper, and zinc were not bracketed by an internal standard of lower mass; therefore, the results for these analytes were qualified as estimated, "J," for detects or, "UJ," for nondetects.

• 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. When the sample results were qualified and the reviewer was able to clearly determine bias, detected results were qualified as either "J+" or "J-"; otherwise, bias was not indicated in the qualification. Any detects between the method detection limit and 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.

Cadmium and selenium were detected marginally above the control limit in the dissolved fraction but were not detected in the total fraction.

- 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.

C. VARIOUS EPA METHODS — Radionuclides

Reviewed By: P. Meeks

Date Reviewed: February 25, 2010

The sample listed in Table 1 for these analyses were 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
aliquot for total uranium was prepared one day beyond 3x the five-day holding time for
unpreserved samples; therefore, total uranium detected in the sample was qualified as
estimated, "J." Aliquots for gross alpha and gross beta were prepared beyond the fiveday analytical holding time for unpreserved samples; therefore, results for these analytes
were qualified as estimated, "J," for detects and, "UJ," for nondetects. Aliquots for

radium-226, radium-228, strontium-90, and gamma spectroscopy were prepared within the five-day holding time for unpreserved aqueous 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, gross alpha detected in the sample was qualified as an estimated detect, "J." All remaining detector efficiencies were greater than 20%.

The tritium aliquot was spiked for efficiency determination; therefore, no calibration was necessary. All chemical yield were at least 40% and 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: Tritium was detected in the method blank but was not detected in the site sample.
 There were no other analytes detected in the method blanks or KPA CCBs.
- Blank Spikes and Laboratory Control Samples: The recoveries and RPDs (radium-226, radium-228, strontium-90) 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 MS/MSD analyses were performed for the sample in this SDG. Method accuracy was evaluated based on the 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. Any
 detects between the MDA and 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.

D. VARIOUS EPA METHODS—General Minerals

Reviewed By: P. Meeks

Date Reviewed: February 25, 2010

The samples listed in Table 1 for this analysis were validated based on the guidelines outlined in the MEC^X Data Validation Procedure for General Minerals (DVP-6, Rev. 0), EPA Methods 120.1 and 180.1, and SM2540D, SM2540F and the National Functional Guidelines for Inorganic Data Review (7/02).

- Holding Times: Analytical holding times were met.
- Calibration: Calibration criteria were met. The conductivity and turbidity check standard recoveries were considered acceptable.
- Blanks: Method blanks and CCBs had no detects.
- Blank Spikes and Laboratory Control Samples: Recoveries were within laboratoryestablished QC limits.
- Laboratory Duplicates: A laboratory duplicate analysis was performed for TSS. The RPD was within the laboratory-established control limit.
- Matrix Spike/Matrix Spike Duplicate: Not applicable to these analyses.
- 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. Turbidity was analyzed at a 5× dilution in order to report the analyte within the linear range of the calibration. When the sample results were qualified and the reviewer was able to clearly determine bias, detected results were qualified as either "J+" or "J-"; otherwise, bias was not indicated in the qualification. Any detects between the method detection limit and 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 reporting limit.
- 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.
 - o Field Duplicates: There were no field duplicate samples identified for this SDG.

Validated Sample Result Forms: ITA1330

Analysis Metho	od ASTM	5174-	91					
Sample Name	Outfall 002 (C	omposite)) Matri	іх Туре:	WATER	V	alidation Le	vel: IV
Lab Sample Name:	ITA1330-02	Sam	ple Date:	1/19/2010) 11:56:00 AM	М		
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Total Uranium	7440-61-1	0.218	0.693	0.21	pCi/L	Jb	J	H, DNQ
Analysis Metho	od EPA 1	20.1						
Sample Name	Outfall 002 (G	rab)	Matri	іх Туре:	Water	V	alidation Le	vel: IV
Lab Sample Name:	ITA1330-01	Sam	ple Date:	1/18/2010	0 1:00:00 PM			
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Specific Conductance	NA	91	1.0	1.0	umhos/c			
Analysis Metho	od EPA 1	80.1						
Sample Name	Outfall 002 (C	omposite)) Matri	іх Туре:	Water	V	alidation Le	vel: IV
Lab Sample Name:	ITA1330-02	Sam	ple Date:	1/19/2010) 11:56:00 AM	М		
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Turbidity	Turb	110	5.0	0.20	NTU			
Analysis Metho	od EPA 2	00.7						
Sample Name	Outfall 002 (C	omposite)) Matri	іх Туре:	Water	7	alidation Le	vel: IV
Lab Sample Name:	ITA1330-02	Sam	ple Date:	1/19/2010) 11:56:00 AM	М		
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Barium	7440-39-3	0.056	0.010	0.0060	mg/l			
Iron	7439-89-6	2.0	0.040	0.015	mg/l			
Zinc	7440-66-6	14	20	6.0	ug/l	Ja	J	*III, DNQ

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Analysis Method EPA 200.7-Diss

Sample Name	Outfall 002 (C	omposite)	Matri	x Type:	Water	7	alidation Le	vel: IV
Lab Sample Name:	ITA1330-02	Samj	ple Date:	1/19/201	0 11:56:00 A	M		
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Barium, dissolved	7440-39-3	0.039	0.010	0.0060	mg/l			
Iron, dissolved	7439-89-6	0.069	0.040	0.015	mg/l			
Zinc, dissolved	7440-66-6	ND	20	6.0	ug/l		UJ	*III
Analysis Method	d EPA 2	200.8						
Sample Name	Outfall 002 (C	omposite)	Matri	x Type:	Water	V	alidation Le	vel: IV
Lab Sample Name:	ITA1330-02	Samj	ple Date:	1/19/201	0 11:56:00 A	M		
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Arsenic	7440-38-2	1.9	1.0	0.90	ug/l			
Beryllium	7440-41-7	0.14	0.50	0.10	ug/l	Ja	J	DNQ
Cadmium	7440-43-9	ND	1.0	0.10	ug/l		U	
Chromium	7440-47-3	3.3	2.0	0.90	ug/l		J	*III
Copper	7440-50-8	4.4	2.0	0.50	ug/l		J	*III
Lead	7439-92-1	2.0	1.0	0.20	ug/l			
Manganese	7439-96-5	86	1.0	0.70	ug/l		J	*III
Nickel	7440-02-0	3.3	2.0	0.50	ug/l		J	*III
Selenium	7782-49-2	ND	2.0	0.50	ug/l		U	
Analysis Method	d EPA 2	200.8-D	iss					
Sample Name	Outfall 002 (C	omposite)	Matri	x Type:	Water	Validation Level: IV		
Lab Sample Name:	ITA1330-02	Samj	ple Date:	1/19/201	0 11:56:00 A	M		
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Arsenic, dissolved	7440-38-2	ND	1.0	0.90	ug/l		U	
Beryllium, dissolved	7440-41-7	ND	0.50	0.10	ug/l		U	
Cadmium, dissolved	7440-43-9	ND	1.0	0.10	ug/l	Ja	U	В
Chromium, dissolved	7440-47-3	ND	2.0	0.90	ug/l		UJ	*III
Copper, dissolved	7440-50-8	2.6	2.0	0.50	ug/l		J	*III
Lead, dissolved	7439-92-1	0.26	1.0	0.20	ug/l	Ja	J	DNQ
Manganese, dissolved	7439-96-5	20	1.0	0.70	ug/l		J	*III
Nickel, dissolved	7440-02-0	ND	2.0	0.50	ug/l	Ja	UJ	*III, B
Selenium, dissolved	7782-49-2	0.65	2.0	0.50	ug/l	Ja	J	DNQ

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Analysis Method EPA 245.1

Sample Name	Outfall 002 (Co	omposite)) Matri	x Type:	Water	7	Validation Le	vel: IV
Lab Sample Name:	ITA1330-02	Samj	ple Date:	1/19/2010	11:56:00 A	M		
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Mercury	7439-97-6	ND	0.00020	0.00010	mg/l		U	
Analysis Metho	od EPA 2	45.1-D	iss					
Sample Name	Outfall 002 (Co	omposite)) Matri	х Туре:	Water	7	Validation Le	vel: IV
Lab Sample Name:	ITA1330-02	Samj	ple Date:	1/19/2010	11:56:00 A	M		
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Mercury, dissolved	7439-97-6	ND	0.00020	0.00010	mg/l	С	U	
Analysis Metho	od EPA 9	00.0 M	IOD					
Sample Name	Outfall 002 (Co	omposite)) Matri	x Type:	WATER	7	Validation Le	vel: IV
Lab Sample Name:	ITA1330-02	Samp	ple Date:	1/19/2010	11:56:00 A	M		
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Gross Alpha	12587-46-1	3.9	3	2.3	pCi/L		J	H, C
Gross Beta	12587-47-2	9.5	4	1.8	pCi/L		J	Н
Analysis Metho	od EPA 9	01.1 M	10D					
Sample Name	Outfall 002 (Co	omposite)) Matri	x Type:	WATER	7	Validation Le	vel: IV
Lab Sample Name:	ITA1330-02	Samj	ple Date:	1/19/2010	11:56:00 A	M		
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Cesium 137	10045-97-3	0	20	6.3	pCi/L	U	U	
Potassium 40	13966-00-2	-60	0	290	pCi/L	U	U	
Analysis Metho	od EPA 9	03.0 M	IOD					
Sample Name	Outfall 002 (Co	omposite)) Matri	х Туре:	WATER	1	Validation Le	vel: IV
Lab Sample Name:	ITA1330-02	Samj	ple Date:	1/19/2010	11:56:00 A	M		
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Radium (226)	13982-63-3	0.017	1	0.19	pCi/L	U	U	

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Analysis Method EPA 904 MOD

Sample Name	Outfall 002 (Co	omposite)	Matri	іх Туре:	WATER	7	Validation Le	vel: IV
Lab Sample Name:	ITA1330-02	Samp	ole Date:	1/19/201	0 11:56:00 A	M		
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Radium 228	15262-20-1	0.62	1	0.95	pCi/L	U	U	
Analysis Metho	od EPA 9	05 MO	D					
Sample Name	Outfall 002 (Co	omposite)	Matri	іх Туре:	WATER	V	Validation Le	vel: IV
Lab Sample Name:	ITA1330-02	Samp	ole Date:	1/19/201	0 11:56:00 A	M		
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Strontium-90	10098-97-2	0.09	3	0.7	pCi/L	U	U	
Analysis Metho	od EPA 9	06.0 M	OD					
Sample Name	Outfall 002 (Co	omposite)	Matri	іх Туре:	WATER	V	Validation Le	vel: IV
Lab Sample Name:	ITA1330-02	Samp	ole Date:	1/19/201	0 11:56:00 A	M		
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Tritium	10028-17-8	36	500	140	pCi/L	U	U	

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Analysis Method EPA-5 1613B

Sample Name	Outfall 002 (Co	omposite)	Matrix	Type:	WATER	7	alidation Le	vel: IV
Lab Sample Name:	ITA1330-02	Samp	le Date:	1/19/2010	11:56:00 A	M		
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,2,3,4,6,7,8-HpCDD	35822-46-9	5.7e-005	0.000048	0.00001	ug/L	Ba		
1,2,3,4,6,7,8-HpCDF	67562-39-4	ND	0.000048	0.000001	ug/L	J, Ba	U	В
1,2,3,4,7,8,9-HpCDF	55673-89-7	ND	0.000048	0.000002	ug/L	J, Ba	U	В
1,2,3,4,7,8-HxCDD	39227-28-6	ND	0.000048	0.000008	ug/L		U	
1,2,3,4,7,8-HxCDF	70648-26-9	ND	0.000048	0.000000	ug/L	J, Ba	U	В
1,2,3,6,7,8-HxCDD	57653-85-7	ND	0.000048	0.000008	ug/L		U	
1,2,3,6,7,8-HxCDF	57117-44-9	ND	0.000048	0.000000	ug/L	J, Ba	U	В
1,2,3,7,8,9-HxCDD	19408-74-3	ND	0.000048	0.000007	ug/L		U	
1,2,3,7,8,9-HxCDF	72918-21-9	ND	0.000048	0.000000	ug/L	J, Ba	U	В
1,2,3,7,8-PeCDD	40321-76-4	ND	2.5e-006	0.000003	ug/L	J, Q, Ba	U	В
1,2,3,7,8-PeCDF	57117-41-6	ND	1.4e-006	0.000000	ug/L	J, Q, Ba	U	В
2,3,4,6,7,8-HxCDF	60851-34-5	ND	0.000048	0.000000	ug/L	J, Ba	U	В
2,3,4,7,8-PeCDF	57117-31-4	ND	1.9e-006	0.000000	ug/L	J, Q, Ba	U	В
2,3,7,8-TCDD	1746-01-6	ND	0.0000096	0.000001	ug/L		U	
2,3,7,8-TCDF	51207-31-9	ND	4.4e-007	0.000000	ug/L	J, Q, Ba	U	В
2,3,7,8-TCDF	51207-31-9	ND	0.0000096	0.000005	ug/L		R	D
OCDD	3268-87-9	0.00072	0.000096	0.000006	ug/L	Ba		
OCDF	39001-02-0	ND	0.000096	0.000001	ug/L	J, Ba	U	В
Total HpCDD	37871-00-4	0.00011	0.000048	0.00001	ug/L	Ba	J	В
Total HpCDF	38998-75-3	4e-005	0.000048	0.000001	ug/L	J, Ba	J	B, DNQ
Total HxCDD	34465-46-8	ND	0.000048	0.000007	ug/L		U	
Total HxCDF	55684-94-1	2.1e-005	2.1e-005	0.000000	ug/L	J, Q, Ba	J	B, *III, DNQ
Total PeCDD	36088-22-9	ND	2.5e-006	0.000003	ug/L	J, Q, Ba	U	В
Total PeCDF	30402-15-4	ND	3.3e-006	0.000000	ug/L	J, Q, Ba	U	В
Total TCDD	41903-57-5	ND	0.0000096	0.000001	ug/L		U	
Total TCDF	55722-27-5	ND	4.4e-007	0.000000	ug/L	J, Q, Ba	U	В
Analysis Metho	od SM 25	40D						
Sample Name	Outfall 002 (Co	omposite)	Matrix	Type:	Water	V	alidation Le	vel: IV
Lab Sample Name:	ITA1330-02	Samp	le Date:	1/19/2010	11:56:00 A	M		
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Total Suspended Solids	TSS	49	10	1.0	mg/l			

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Analysis Method SM2540F

Sample Name	Outfall 002 (G	Matri	Matrix Type: Water			Validation Level: IV		
Lab Sample Name:	ITA1330-01	Samj	ole Date:	1/18/2010	1:00:00 PM			
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Total Settleable Solids	Set Solids	0.30	0.10	0.10	ml/l			

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