

SAMPLE LOG-IN CHECKLIST

Alta Project #: 27308

Samples Arrival:	Date/Time 2/21/06 0910	Initials: BMB	Location: WR-2			
Logged In:	Date/Time 2/21/06 1501	Initials: BMB	Location: WR-2			
Delivered By:	<u>FedEx</u>	UPS	Cal	DHL	Hand Delivered	Other
Preservation:	<u>Ice</u>	Blue Ice	Dry Ice	None		
Temp °C	0.6	Time: 0950	Thermometer ID: DT-20			

	YES	NO	NA
Adequate Sample Volume Received?	✓		
Holding Time Acceptable?	✓		
Shipping Container(s) Intact?	✓		
Shipping Custody Seals Intact?	✓		
Shipping Documentation Present?	✓		
Airbill			
Trk #	7918 6646 8875		
Sample Container Intact?	✓		
Sample Custody Seals Intact?			✓
Chain of Custody / Sample Documentation Present?	✓		
COC Anomaly/Sample Acceptance Form completed?			✓
If Chlorinated or Drinking Water Samples, Acceptable Preservation?			✓
Na ₂ S ₂ O ₃ Preservation Documented?		COC	Sample Container
			<u>None</u>
Shipping Container	Alta	<u>Client</u>	Retain
			<u>Return</u>
			Dispose

Comments:

LABORATORY REPORT



"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

Date: February 23, 2006
Client: Del Mar Analytical, Irvine
17461 Derian Ave., Suite 100
Irvine, CA 92614
Attn: Michele Chamberlin

Laboratory No.: A-06021802-001
Sample ID.: IPB1810-01

Sample Control: The sample was received by ATL within the recommended hold time, in a chilled state, and with the chain of custody record attached.

Date Sampled: 02/18/06
Date Received: 02/18/06
Temp. Received: 4°C
Chlorine (TRC): 0.0 mg/l
Date Tested: 02/18/06 to 02/22/06

Sample Analysis: The following analyses were performed on your sample:

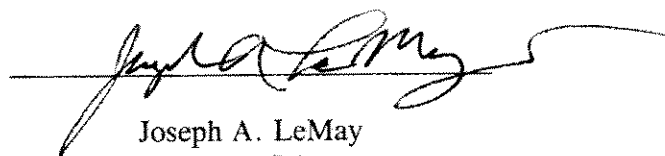
Fathead Minnow 96hr Percent Survival Bioassay (EPA Method 2000.0).

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

Result Summary:

<u>Sample ID.</u>	<u>Results</u>
IPB1810-01	100% Survival (TU _a = 0.0)

Quality Control: Reviewed and approved by:



Joseph A. LeMay
Laboratory Director

**FATHEAD MINNOW PERCENT SURVIVAL TEST
EPA Method 2000.0**



Lab No.: A-06021802-001
Client/ID: Del Mar - Outfall 004

Start Date: 02/18/2006

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-060202.

TEST DATA

		°C	DO	pH	# Dead		Analyst & Time of Readings
					A	B	
INITIAL	Control	19.6	9.2	7.8	0	0	RW 1530
	100%	19.8	10.1	7.2	0	0	
24 Hr	Control	19.4	7.9	7.8	0	0	RW 1430
	100%	19.3	7.7	7.5	0	0	
48 Hr	Control	19.2	7.7	7.9	0	0	RW 1500
	100%	19.2	7.7	7.6	0	0	
Renewal	Control	19.3	8.5	7.8	0	0	RW 1500
	100%	19.4	9.0	7.3	0	0	
72 Hr	Control	19.1	7.7	7.5	0	0	RW 1400
	100%	19.0	7.7	7.2	0	0	
96 Hr	Control	19.7	6.8	7.4	0	0	RW 1500
	100%	19.6	7.0	7.1	0	0	

Comments:

Sample as received: Chlorine: 0.0 mg/l; pH: 7.2; Conductivity: 245 umho; Temp: 4°C;
DO: 10.1 mg/l; Alkalinity: 31 mg/l; Hardness: 41 mg/l; NH₃-N: 0.7 mg/l.
Sample aerated moderately (approx. 500 ml/min) to raise or lower DO? Yes / No.
Control: Alkalinity: 54 mg/l; Hardness: 94 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.

RESULTS

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

SUBCONTRACT ORDER - PROJECT # IPB1810

SENDING LABORATORY:
 Del Mar Analytical, Irvine
 17461 Derian Avenue, Suite 100
 Irvine, CA 92614
 Phone: (949) 261-1022
 Fax: (949) 261-1228
 Project Manager: Michele Chamberlin

RECEIVING LABORATORY:
 Aquatic Testing Laboratories-SUB
 4350 Transport Street, Unit 107
 Ventura, CA 93003
 Phone: (805) 650-0546
 Fax: (805) 650-0756

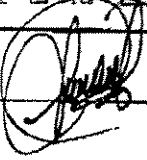
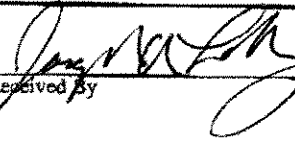
FACED

Standard TAT is requested unless specific due date is requested ⇒ Due Date: _____ Initials: _____

Analysis	Expiration	Comments
Sample ID: IPB1810-01 Water Bioassay-Acute 96hr	Sampled: 02/18/06 09:45 02/19/06 21:45	Instant Notification FH minnow, EPA/821-R02-012, Sub to AqTox Labs
Containers Supplied: 1 gal Poly (IPB1810-01Y)		

SAMPLE INTEGRITY:

All containers intact: Yes No
 Sample labels/COC agree: Yes No
 Custody Seals Present: Yes No
 Samples Preserved Properly: Yes No
 Samples Received On Ice: Yes No
 Samples Received at (temp): 4°C

Released By:  Date: 2/18/06 Time: _____
 Received By:  Date: 2-18-06 Time: _____

Released By: _____ Date: _____ Time: _____
 Received By: _____ Date: _____ Time: _____



EBERLINE
SERVICES

March 20, 2006

Ms. Michele Chamberlin
Project Manager
Del Mar Analytical
17461 Derian Avenue, Suite 100
Irvine, CA 92614

Reference: Del Mar Analytical Project No. IPB1810
Eberline Services NELAP Cert #01120CA (exp. 01/31/07)
Eberline Services Report R602144-8650

Dear Ms. Chamberlin:

Enclosed are results from the analysis of one water sample received at Eberline Services on February 21, 2006. The sample was analyzed according to the accompanying Del Mar Analytical Subcontract Order Form. The requested analysis was gross alpha/gross beta (EPA900.0). The batch QC LCS, blank analysis, duplicate analysis, and matrix spike results were within the limits defined in Eberline Services Quality Control Procedures Manual. No problems were encountered during the requested analysis.

Please call me if you have any questions concerning this report.

Regards,

Melissa Mannion
Senior Program Manager

MCM/njy

Enclosure: Report
Subcontract Form
Receipt checklist
Invoice


Analytical Services
2030 Wright Avenue
P.O. Box 4040
Richmond, California 94804-0040
(510) 235-2633 Fax (510) 235-0438
Toll Free (800) 841-5487
www.eberlineservices.com

Eberline Services

ANALYSIS RESULTS

SDG <u>8650</u>	Client <u>DEL MAR ANAL</u>
Work Order <u>R602144-01</u>	Contract <u>PROJECT# IPB1810</u>
Received Date <u>02/21/06</u>	Matrix <u>WATER</u>

<u>Client</u>	<u>Lab</u>	<u>Collected</u>	<u>Analyzed</u>	<u>Nuclide</u>	<u>Results ± 2σ</u>	<u>Units</u>	<u>MDA</u>
<u>Sample ID</u>	<u>sample ID</u>						
IPB1810-01	8650-001	02/18/06	03/14/06	GrossAlpha	0.526 ± 0.63	pCi/L	0.916
			03/14/06	Gross Beta	21.4 ± 1.0	pCi/L	0.873

Certified by <u></u>
Report Date <u>03/20/06</u>
Page 1

Eberline Services

QC RESULTS

SDG <u>8650</u> Work Order <u>R602144-01</u> Received Date <u>02/21/06</u>	Client <u>DEL MAR ANAL</u> Contract <u>PROJECT# IPB1810</u> Matrix <u>WATER</u>
--	---

Lab	Sample ID	Nuclide	Results	Units	Amount Added	MDA	Evaluation
<u>LCS</u>							
	8653-002	GrossAlpha	9.32 ± 0.63	pCi/Smpl	10.2	0.306	91% recovery
		Gross Beta	9.96 ± 0.37	pCi/Smpl	9.83	0.271	101% recovery
<u>BLANK</u>							
	8653-003	GrossAlpha	-0.408 ± 0.18	pCi/Smpl	NA	0.376	<MDA
		Gross Beta	0.080 ± 0.24	pCi/Smpl	NA	0.414	<MDA

<u>DUPLICATES</u>			
Sample ID	Nuclide	Results ± 2σ	MDA
8653-004	GrossAlpha	0.122 ± 0.53	0.893
	Gross Beta	6.92 ± 0.71	0.869

<u>ORIGINALS</u>						
Sample ID	Results ± 2σ	MDA	RPD (Tot)	Eval	3σ	
8653-001	0.735 ± 0.45	0.587	143	249	satis.	
	7.03 ± 0.74	0.906	2	48	satis.	

<u>SPIKED SAMPLE</u>			
Sample ID	Nuclide	Results ± 2σ	MDA
8653-005	GrossAlpha	74.0 ± 2.9	0.626
	Gross Beta	66.0 ± 1.7	0.891

<u>ORIGINAL SAMPLE</u>					
Sample ID	Results ± 2σ	MDA	Added	%Recv	
8653-001	0.735 ± 0.45	0.587	71.4	103	
	7.03 ± 0.74	0.906	65.5	90	

Certified by
Report Date <u>03/20/06</u>
Page 2



17461 Derian Ave. Suite 100, Irvine, CA 92614 Ph (949) 261-1022 Fax (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 Ph (909) 370-4867 Fax (909) 370-1048
 9484 Chesapeake Drive, Suite 805, San Diego, CA 92123 Ph (619) 505-9586 Fax (619) 505-9689
 9630 South 51st Street, Suite B-120, Phoenix, AZ 85044 Ph (480) 785-0043 Fax (480) 785-0651
 2520 E. Sunset Rd., Suite #3, Las Vegas, NV 89120 Ph (702) 798-3620 Fax (702) 798-3621

SUBCONTRACT ORDER - PROJECT # IPB1810

SENDING LABORATORY:
 Del Mar Analytical, Irvine
 17461 Derian Avenue, Suite 100
 Irvine, CA 92614
 Phone: (949) 261-1022
 Fax: (949) 261-1228
 Project Manager: Michele Chamberlin

RECEIVING LABORATORY:
 Eberline Services
 2030 Wright Avenue
 Richmond, CA 94804
 Phone: (510) 235-2633
 Fax: (510) 235-0438

Standard TAT is requested unless specific due date is requested => Due Date: 4 weeks Initials: _____

Analysis	Expiration	Comments
Sample ID: IPB1810-01 Water	Sampled: 02/18/06 09:45	Instant Notification
EDD + Level 4	03/18/06 09:45	900.0, IF RESULT > 15 pCi/L, run Radium 226 & 228
Gross Alpha-O	02/18/07 09:45	900.0, IF RESULT > 50 pCi/L, run Radium 226 & 228
Gross Beta-O	02/18/07 09:45	HOLD for Gross A&B results; EPA 903.1 & 904.0
Radium, Combined-O	02/18/07 09:45	HOLD for Ra 226+Ra 228 results, EPA 905.0
Strontium 90-O	02/18/07 09:45	HOLD for Ra 226+Ra 228 results, EPA 906.0
Tritium-O	02/18/07 09:45	

Containers Supplied:
 2.5 gal Poly (IPB1810-01S) HNO3
 40 ml Amber Voa Vial (IPB1810-01T)
 40 ml Amber Voa Vial (IPB1810-01U)
 40 ml Amber Voa Vial (IPB1810-01V)

SAMPLE INTEGRITY:

All containers intact: Yes No Sample labels/COC agree: Yes No Samples Received On Ice: Yes No
 Custody Seals Present: Yes No Samples Preserved Properly: Yes No Samples Received at (temp): _____

Released By: [Signature] Date: 2-20-06 Time: 1700 Received By: Alex Kelly Date: 2/21/06 Time: 10:00

Released By: _____ Date: _____ Time: _____ Received By: _____ Date: _____ Time: _____

APPENDIX G

Section 52

Outfall 004, February 18, 2006

AMEC Data Validation Reports



DATA VALIDATION REPORT

NPDES Monitoring Program
Annual Outfall 004

ANALYSIS: DIOXINS/FURANS
SAMPLE DELIVERY GROUP: IPB1810

Prepared by

MECX, LLC
12269 East Vassar Drive
Aurora, CO 80014

1. INTRODUCTION

Task Order Title: NPDES
Contract Task Order: 1261.001.01
Sample Delivery Group: IPB1810
Project Manager: P. Costa
Matrix: Water
Analysis: Dioxins/Furans
QC Level: Level IV
No. of Samples: 1
No. of Reanalyses/Dilutions: 0
Reviewer: K. Shadowlight
Date of Review: April 2, 2006

The samples listed in Table 1 were 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 for Chlorinated Dioxin/Furan Data Review (8/02)*. Any deviations from these procedures and guidelines are documented herein. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.

Table 1. Sample Identification

Client ID	Laboratory ID (Dei Mar)	Laboratory ID (Alta)	Matrix	COC Method
Outfall 004	IPB1810-01	27308-001	Water	1613

2. DATA VALIDATION FINDINGS

2.1 SAMPLE MANAGEMENT

Following are findings associated with sample management:

2.1.1 Sample Preservation, Handling, and Transport

The sample in this SDG was received at Del Mar Analytical within the temperature limits of 4°C ±2°C. The sample was shipped to Alta for dioxin/furan analysis and was received below the temperature limits at 1°C. As the sample was not noted to be damaged or frozen, no qualifications were required. According to the case narrative and laboratory login sheet, the sample was received intact and in good condition at both laboratories. No qualifications were required.

2.1.2 Chain of Custody

The COC and transfer COC were legible and signed by the appropriate field and laboratory personnel, and accounted for the analysis presented in this SDG. As the sample was couriered directly to Del Mar Analytical-Irvine, custody seals were not required. The Client ID was added to the sample result summary by the reviewer. No qualifications were required.

2.1.3 Holding Times

The sample was extracted and analyzed within one year of collection. No qualifications were required.

2.2 INSTRUMENT PERFORMANCE

Following are findings associated with instrument performance:

2.2.1 GC Column Performance

A Windows Defining Mix (WDM) containing the first and last eluting congeners of each descriptor and isomer specificity compounds was not analyzed prior to the initial calibration sequence or at the beginning of each analytical sequence; however, the first and last eluting congeners and isomer specificity compounds were added to the midpoint of the initial calibration and to the continuing calibration standards (see section 2.3.2). 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%. No qualifications were required.

2.2.2 Mass Spectrometer Performance

The mass spectrometer performance was acceptable with the static resolving power greater than 10,000. No qualifications were required.

2.3 CALIBRATION

2.3.1 Initial Calibration

The initial calibration was analyzed 01/12/2006 on instrument VG-7. The calibration consisted of six concentration level standards (CS0 through CS5) analyzed to verify instrument linearity. The initial calibrations were acceptable with %RSDs $\leq 20\%$ for the 16 native compounds (calibration by isotope dilution) and $\leq 35\%$ for the one native and all labeled compounds (calibration by internal standard). The relative retention times and ion abundance ratios were within the QC limits listed in Method 1613 for all standards. A representative number of %RSDs were verified from the raw data, and no calculation or transcription errors were noted. No qualifications were required.

2.3.2 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. A representative number of %Ds were verified from the raw data, and no calculation or transcription errors were noted. No qualifications were required.

WDM and isomer specificity compounds were added to the VER standard instead of being analyzed separately, as noted in section 2.2.1 of this report. No adverse effect was observed with this practice.

2.4 BLANKS

One method blank (0-7782-MB001) was extracted and analyzed with the sample in this SDG. Target compound OCDD was reported at a concentration below the laboratory lower calibration level in the method blank. The concentration of OCDD in the sample exceeded five times the concentration in the method blank and required no qualification. OCDF was reported as an EMPC in the method blank. A review of the method blank raw data and chromatograms indicated no false negatives or false positives. No qualifications were required.

2.5 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

One blank spike (0-7782-OPR001) was extracted and analyzed with the sample in this SDG. All recoveries were within the acceptance criteria listed in Table 6 of Method 1613. A review of the raw data and chromatograms indicated no transcription or calculation errors. No qualifications were required.

2.6 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

MS/MSD analyses were not performed in this SDG. Evaluation of method accuracy was based on the OPR results. No qualifications were required.

2.7 FIELD QC SAMPLES

Following are findings associated with field QC:

2.7.1 Field Blanks and Equipment Rinsates

The sample in this SDG had no field blank or equipment rinsate identified. No qualifications of the site samples were required.

2.7.2 Field Duplicates

No field duplicates were identified in association with the sample in this SDG.

2.8 INTERNAL STANDARDS

The labeled standard recoveries were within the acceptance criteria listed in Table 7 of Method 1613. No qualifications were required.

2.9 COMPOUND IDENTIFICATION

The laboratory analyzed for polychlorinated dioxins/furans by EPA Method 1613. The compound identifications were verified from the raw data and no false negatives or positives were noted. No qualifications were required.

2.10 COMPOUND QUANTIFICATION AND REPORTED DETECTION LIMITS

Compound quantitation was verified from the raw data. The laboratory calculated and reported compound-specific detection limits. Any detects below the laboratory lower calibration level were qualified as estimated, "J." These "J" values were annotated with the qualification code of "DNQ" to comply with the reporting requirements of the NPDES permit. No further qualifications were required.



Client Data		Sample Data		Laboratory Data	
Sample ID: IPB1810-01	Del Mar Analytical, Irvine	Matrix: Aqueous	Lab Sample: 27308-001	Date Received: 21-Feb-06	EPA Method 1613
Project: IPB1810	IPB1810	Sample Size: 1.01 L	QC Batch No.: 7782	Date Extracted: 23-Feb-06	
Date Collected: 18-Feb-06	18-Feb-06		Date Analyzed DB-5: 25-Feb-06	Date Analyzed DB-225: NA	
Time Collected: 0945	0945				
Analyte	Conc. (ug/L)	DL ^a	EMPC ^b	Labeled Standard	%R LCL-UCL ^d Qualifiers
2,3,7,8-TCDD	ND	0.00000246		13C-2,3,7,8-TCDD	63.7 25 - 164
1,2,3,7,8-PeCDD	ND	0.00000658		13C-1,2,3,7,8-PeCDD	62.5 25 - 181
1,2,3,4,7,8-HxCDD	ND	0.00000402		13C-1,2,3,4,7,8-HxCDD	53.8 32 - 141
1,2,3,6,7,8-HxCDD	ND	0.00000386		13C-1,2,3,6,7,8-HxCDD	64.3 28 - 130
1,2,3,7,8,9-HxCDD	ND	0.00000379		13C-1,2,3,4,6,7,8-HpCDD	66.6 23 - 140
1,2,3,4,6,7,8-HpCDD	0.0000265			13C-OCDD	40.8 17 - 157
OCDD	0.000334			13C-2,3,7,8-TCDF	52.8 24 - 169
2,3,7,8-TCDF	ND	0.00000270		13C-1,2,3,7,8-PeCDF	59.4 24 - 185
1,2,3,7,8-PeCDF	ND	0.00000470		13C-2,3,4,7,8-PeCDF	58.1 21 - 178
2,3,4,7,8-PeCDF	ND	0.00000478		13C-1,2,3,4,7,8-HxCDF	61.2 26 - 152
1,2,3,4,7,8-HxCDF	ND	0.00000130		13C-1,2,3,6,7,8-HxCDF	61.1 26 - 123
1,2,3,6,7,8-HxCDF	ND	0.00000129		13C-2,3,4,6,7,8-HxCDF	61.8 28 - 136
2,3,4,6,7,8-HxCDF	ND	0.00000137		13C-1,2,3,7,8,9-HxCDF	63.7 29 - 147
1,2,3,7,8,9-HxCDF	ND	0.00000227		13C-1,2,3,4,6,7,8-HpCDF	63.8 28 - 143
1,2,3,4,6,7,8-HpCDF	0.00000314			13C-1,2,3,4,7,8,9-HpCDF	68.1 26 - 138
1,2,3,4,7,8,9-HpCDF	ND	0.00000160		13C-OCDF	48.1 17 - 157
OCDF	0.00000977			CRS 37Cl-2,3,7,8-TCDD	93.7 35 - 197
Totals					
Total TCDD	ND	0.00000246			
Total PeCDD	ND	0.00000658			
Total HxCDD	ND	0.00000387			
Total HpCDD	0.0000540				
Total TCDF	ND	0.00000270			
Total PeCDF	ND	0.00000474			
Total HxCDF	0.00000133				
Total HpCDF	0.0000129				

Footnotes

- a. Sample specific estimated detection limit.
- b. Estimated maximum possible concentration.
- c. Method detection limit.
- d. Lower control limit - upper control limit.

Analyst: RAS
 Approved By: William J. Luksemburg 02-Mar-2006 11:07


CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

MEC^x
 12269 East Vassar Drive
 Aurora, CO 80014

Package ID: B4MT38
 Task Order: 1261.001D.01
 SDG No.: IPB1810

No. of Analyses: 1

Laboratory: Del Mar Analytical
 Reviewer: P. Meeks
 Analysis/Method: Metals

Date: April 4, 2006
 Reviewer's Signature


ACTION ITEMS^a	
Case Narrative	
Deficiencies	
2. Out of Scope Analyses	
3. Analyses Not Conducted	
4. Missing Hardcopy Deliverables	
5. Incorrect Hardcopy Deliverables	
6. Deviations from Analysis Protocol, e.g.,	Qualifications applied for blank results and detects below the reporting limit.
Holding Times	
GC/MS Tune/Inst. Performance	
Calibration	
Method blanks	
Surrogates	
Matrix Spike/Dup LCS	
Field QC	
Internal Standard Performance	
Compound Identification	
Quantitation	
System Performance	
COMMENTS^b	
^a Subcontracted analytical laboratory is not meeting contract and/or method requirements. ^b Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.	



DATA VALIDATION REPORT

NPDES Sampling
Outfall 004

ANALYSIS: METALS

SAMPLE DELIVERY GROUP IPB1810

Prepared by

MECX, LLC
12269 East Vassar Drive
Aurora, CO 80014

1. INTRODUCTION

Task Order Title: NPDES Sampling
MEC^x Project Number: 1261.001D.01
Sample Delivery Group: IPB1810
Project Manager: P. Costa
Matrix: Water
Analysis: Metals
QC Level: Level IV
No. of Samples: 1
No. of Reanalyses/Dilutions: 0
Reviewer: P. Meeks
Date of Review: April 4, 2006

The samples listed in Table 1 were validated based on the guidelines outlined in the MEC^x *Data Validation Procedure for ICP and ICP-MS Metals (DVP-5, Rev. 0)*, EPA Methods 200.7 and 200.8, and validation guidelines outlined in the USEPA CLP *National Functional Guidelines for Inorganic Data Review (2/94)*. Any deviations from these procedures and guidelines are documented herein. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.

Table 1. Sample Identification

Client ID	Laboratory ID	Matrix	COC Method
Outfall 004	IPB1810-01	Water	200.7, 200.8

2. DATA VALIDATION FINDINGS

2.1 SAMPLE MANAGEMENT

Following are findings associated with sample management:

2.1.1 Sample Preservation, Handling, and Transport

The sample in this SDG was received at the laboratory within the temperature limits of 4°C ±2°C. No sample preservation, handling, or transport problems were noted, and no qualifications were necessary.

2.1.2 Chain of Custody

The COC was signed and dated by field and laboratory personnel and accounted for the sample and analyses presented in this SDG. No sample qualifications were required.

2.1.3 Holding Times

The date of collection recorded on the COC and the dates of analyses recorded in the raw data documented that the sample analyses were performed within the specified holding times of six months for the ICP and ICP-MS metals. No qualifications were required.

2.2 ICP-MS TUNING

The method-specified tune criteria were met and no qualifications were required.

2.3 CALIBRATION

The ICV and CCV results showed acceptable recoveries, 90-110% for ICP and ICP-MS metals. The laboratory analyzed reporting limit check standards in association with the sample in this SDG and the recoveries were considered to be acceptable. No qualifications were required.

2.4 BLANKS

Zinc was detected in method blank 6B20080-BLK1 at 15.6 µg/L; therefore, zinc detected in Outfall 004 was qualified as an estimated nondetect, "UJ." Silver was reported in a bracketing CCB at -3.3 µg/L; therefore, nondetected silver in Outfall 004 was qualified as an estimated nondetect, "UJ." No further qualifications were required.

2.5 ICP INTERFERENCE CHECK SAMPLE (ICS A/AB)

ICSA and ICSAB analyses were performed in association with the sample in this SDG for the ICP metals. Silver, boron, and chromium were detected in the ICSA above the respective reporting limits. The reviewer checked the raw data for the sample and determined that the level of interferents in Outfall 004 were not of sufficient concentrations to qualify the sample results. No qualifications were required.

2.6 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

The ICP and ICP-MS were within the laboratory-established control limits of 85-115%. No qualifications were required.

2.7 LABORATORY DUPLICATES

No MS/MSD or laboratory duplicate analyses were performed in association with the sample in this SDG; therefore, no assessment was made with respect to this criterion.

2.8 MATRIX SPIKES

No matrix spike analyses were performed in association with the sample in this SDG; therefore, no assessment was made with respect to this criterion. Method accuracy was evaluated based on LCS results. No qualifications were required.

2.9 ICP/MS AND ICP SERIAL DILUTION

No serial dilution analyses were performed in association with the sample in this SDG; therefore, no assessment was made with respect to this criterion.

2.10 INTERNAL STANDARDS PERFORMANCE

For the target analytes analyzed by ICP-MS, the internal standards were within the method-specified control limits of 60-125%. No qualifications were required.

2.11 SAMPLE RESULT VERIFICATION

A Level IV review was performed for the sample in this data package. Calculations were verified and the sample results reported on the Form Is were verified against the raw data. No

transcription errors or calculation errors were noted. Analytes detected below the reporting limit were qualified as estimated, "J," and denoted with "DNQ," in accordance with the NPDES permit. No further qualifications were required.

2.12 FIELD QC SAMPLES

Field QC samples are evaluated, and if necessary, qualified based only on laboratory blanks. Any remaining detects are used to evaluate the associated samples.

2.12.1 Field Blanks and Equipment Rinsates

The sample in this SDG had no associated field QC samples. No qualifications were required.

2.12.2 Field Duplicates

There were no field duplicate analyses performed in association with the site sample.



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 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 004

Report Number: IPB1810

Sampled: 02/18/06
 Received: 02/18/06

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers	
									Rev Qual	Qual Code
Sample ID: IPB1810-01 (Outfall 004 - Water) - cont.										
Reporting Units: mg/l										
Boron	EPA 200.7	6B20080	0.0080	0.050	ND	1	02/20/06	02/27/06	U	

Del Mar Analytical - Irvine
 Michele Chamberlin
 Project Manager

LEVEL IV

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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 004
 Report Number: IPB1810

Sampled: 02/18/06
 Received: 02/18/06

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers	
									Res Qual	Qual Code
Sample ID: IPB1810-01 (Outfall 004 - Water) - cont.										
Reporting Units: ug/l										
Aluminium	EPA 200.7	6B20080	40	50	1700	1	02/20/06	02/28/06		
Antimony	EPA 200.8	6B21089	0.050	2.0	1.1	1	02/21/06	02/22/06	J J	DNQ
Arsenic	EPA 200.7	6B20080	4.4	5.0	11	1	02/20/06	02/25/06	U	
Beryllium	EPA 200.7	6B20080	0.90	2.0	ND	1	02/20/06	02/25/06	J J	DNQ
Cadmium	EPA 200.8	6B21089	0.025	1.0	0.10	1	02/21/06	02/22/06	J J	↓
Chromium	EPA 200.7	6B20080	2.0	5.0	3.4	1	02/20/06	02/25/06	↓ J	↓
Copper	EPA 200.8	6B21089	0.25	2.0	3.8	1	02/21/06	02/22/06		
Lead	EPA 200.8	6B21089	0.040	1.0	1.5	1	02/21/06	02/22/06		
Mercury	EPA 245.1	6B21083	0.050	0.20	ND	1	02/21/06	02/21/06	U	
Nickel	EPA 200.7	6B20080	2.0	10	4.1	1	02/20/06	02/25/06	J J	DNQ
Selenium	EPA 200.7	6B20080	8.0	10	ND	1	02/20/06	02/25/06	U	
Silver	EPA 200.7	6B20080	3.0	10	ND	1	02/20/06	02/25/06	UJ	B
Thallium	EPA 200.8	6B21089	0.15	1.0	ND	1	02/21/06	02/22/06	U	
Vanadium	EPA 200.7	6B20080	3.0	10	5.7	1	02/20/06	02/25/06	J J	DNQ
Zinc	EPA 200.7	6B20080	15	20	18	1	02/20/06	02/25/06	UJ B, J	B

Del Mar Analytical - Irvine
 Michele Chamberlin
 Project Manager

LEVEL IV

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CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

MEC^x
 12269 East Vassar Drive
 Aurora, CO 80014

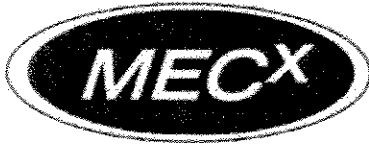
Package ID: B4PP6
 Task Order: 1261.001D.01
 SDG No.: IPB1810

No. of Analyses: 1

Laboratory: Del Mar Analytical
 Reviewer: L. Calvin
 Analysis/Method: Pesticides/PCBs by Method 608

Date: April 6, 2006
 Reviewer's Signature: *L. Calvin*

ACTION ITEMS^a	
1. Case Narrative Deficiencies	
2. Out of Scope Analyses	
3. Analyses Not Conducted	
4. Missing Hardcopy Deliverables	
5. Incorrect Hardcopy Deliverables	
6. Deviations from Analysis Protocol, e.g.,	Qualifications were assigned for the following:
Holding Times	--surrogate recovery below the QC limits
GC/MS Tune/Inst. Performance	
Calibration	
Method blanks	
Surrogates	
Matrix Spike/Dup LCS	
Field QC	
Internal Standard Performance	
Compound Identification	
Quantitation	
System Performance	
COMMENTS^b	
^a Subcontracted analytical laboratory is not meeting contract and/or method requirements. ^b Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.	



DATA VALIDATION REPORT

NPDES Monitoring Program
Annual Outfall 004

ANALYSIS: PESTICIDES / PCBs

SAMPLE DELIVERY GROUP: IPB1810

Prepared by

MEC^x, LLC
12269 East Vassar Drive
Aurora, CO 80014

1. INTRODUCTION

Task Order Title: NPDES
MEC^X Project Number: 1261.001D.01
Sample Delivery Group: IPB1810
Project Manager: P. Costa
Matrix: Water
Analysis: Pesticides
QC Level: Level IV
No. of Samples: 1
No. of Reanalyses/Dilutions: 0
Reviewer: L. Calvin
Date of Review: April 6, 2006

The samples listed in Table 1 were validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for Organochlorine Pesticides and PCBs (DVP-4, Rev. 0)*, *EPA Method 608*, and the *National Functional Guidelines for Organic Data Review (2/94)*. Any deviations from these procedures are documented herein. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.

Table 1. Sample Identification

Client ID	Laboratory ID	Matrix	COC Method
Outfall 004	IPB1810-01	Water	608

2. DATA VALIDATION FINDINGS

2.1 SAMPLE MANAGEMENT

The sample in this SDG was received at the laboratory within the temperature limits of $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$, at 3°C . According to the case narrative for this SDG, the sample was received intact and on ice. No qualifications were required.

2.1.2 Chain of Custody

The COC was signed and dated by both field and laboratory personnel. As the sample was couriered directly to the laboratory, custody seals were not required. No qualifications were required.

2.1.3 Holding Times

The water sample was extracted within seven days of sample collection and analyzed within 40 days of extraction. No qualifications were required.

2.2 PESTICIDES INSTRUMENT PERFORMANCE

No resolution check standards or breakdown check standards are required by Method 608 for pesticides, and according to the raw data provided, a resolution check standard was not analyzed by the laboratory. The laboratory did analyze a breakdown check standard with the breakdown for individual components (4,4-DDT and endrin) $\leq 20\%$ and $\leq 30\%$ for the total, as suggested in the National Functional Guidelines. A review of the raw data indicated that the analytical run time was of sufficient length to provide adequate standard separation. The two analytical columns used in the analyses were within the guidelines specified in the methods.

According to the laboratory SOP and the initial calibration raw data, the retention time windows are ± 0.10 minutes for both surrogates and target compound calibration standards. A review of the raw data indicated that the laboratory retention time criteria were met for the surrogates and pesticide calibration standards. No qualifications were required.

2.3 CALIBRATION

2.3.1 Analytical Sequence

Based on the data provided, the analytical sequences were in accordance with the requirements of Method 608. No qualifications were required.

DATA VALIDATION REPORT

2.3.2 Initial Calibration

There was one initial calibration dated 02/26/06 associated with the Aroclor analysis of the site sample and one dated 01/30/06 associated with the pesticide analysis. The initial calibrations consisted of six point calibrations for Aroclors 1016 and 1260 and five or six point calibrations for all pesticide target compounds on two analytical columns. The average %RSDs of the individual Aroclor peaks were within the QC limit of $\leq 10\%$ or r^2 values ≥ 0.995 on the primary analytical column (Channel A). The %RSDs were $\leq 10\%$ or r^2 values ≥ 0.995 on the primary column (Channel A) for all pesticide target compounds. The pesticide and average Aroclor %RSDs were also $\leq 10\%$ or r^2 values ≥ 0.995 on the secondary column.

An ICV was analyzed immediately following each initial calibration, and the %Ds for all pesticide target compounds and Aroclors 1016 and 1260 were within the QC limit of $\leq 15\%$ on both analytical columns. No qualifications were required.

2.3.3 Continuing Calibration

The pesticide and Aroclor analyses of the sample were each bracketed by two continuing calibrations. The %Ds for all pesticide target compounds and Aroclors 1016 and 1260 were within the Method QC limit of $\leq 15\%$ for all calibrations on both columns, with the exception of a high response for endrin on the secondary column in the ending pesticide CCV and a low response for Aroclor 1260 in the ending Aroclor CCV. As any detects would be reported from the primary column, no qualifications were required.

2.4 BLANKS

2.4.1 Instrument Blanks

An instrument blank was analyzed at the beginning of each analytical sequence. Cross-contamination was not evident in the instrument blanks or the sample. No qualifications were necessary.

2.4.2 Method Blanks

Two water method blanks (6B24053-BLK1 for pesticides and 6B24053-BLK1 for Aroclors) were extracted and analyzed with this SDG. No pesticide target compounds or Aroclors were detected in the method blank analyses. Review of the chromatograms from both channels showed no false negatives. No qualifications were required.

2.5 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

Two blank spike/blank spike duplicate pairs (6B24053-BS1/BSD1 for pesticides and 6B24053-BS2/BSD2 for Aroclors) were analyzed with this SDG. The recoveries for all pesticide compounds

DATA VALIDATION REPORT

and Aroclors 1016 and 1260 were within the laboratory-established QC limits, and all RPDs were within the QC limit of $\leq 30\%$ or $\leq 20\%$ (Aroclor 1260 only). A representative number of recoveries and RPDs were calculated from the raw data and no calculation or transcription errors were found. No qualifications were required.

2.6 SURROGATE RECOVERY

The surrogate decachlorobiphenyl was recovered below the QC limits in the Aroclor analysis of sample Outfall 004. The laboratory benchsheet indicated a heavy emulsion in the extraction process. All Aroclor results were qualified as estimated nondetects, "UJ." Surrogate recoveries were within the laboratory-established QC limits for the pesticide analysis of the sample. The recoveries were calculated from the raw data, and no transcription or calculation errors were noted. No qualifications were required.

2.7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

MS/MSD analyses were not performed on the sample of this SDG. Evaluation of method accuracy and precision were based on the blank spike/blank spike duplicate results. No qualifications were required.

2.8 SAMPLE CLEANUP PERFORMANCE

According to the laboratory extraction benchsheets, no cleanups were performed on the water sample. No qualifications were required.

2.9 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:

2.9.1 Field Blanks and Equipment Rinsates

There were no field blank or equipment rinsate samples identified for this SDG. No qualifications were required.

2.9.2 Field Duplicates

There were no field duplicate samples identified for this SDG.

2.10 COMPOUND IDENTIFICATION

The laboratory analyzed for pesticide target compounds and seven Aroclors by EPA Method 608. Compound identification is verified at a Level IV validation. The laboratory provided an overlay of the pesticide sample chromatogram and the pesticide standard for identification purposes. Review of chromatograms and retention times indicated no problems with compound identification for the sample in this SDG. No qualifications were required.

2.11 COMPOUND QUANTIFICATION AND REPORTED DETECTION LIMITS

Compound quantification is verified at a Level IV data validation. No calculation or transcription errors were found. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. No qualifications were required.



Del Mar Analytical

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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 004

Report Number: IPB1810

Sampled: 02/18/06

Received: 02/18/06

TOTAL PCBS (EPA 608)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB1810-01 (Outfall 004 - Water) - cont.									
Reporting Units: ug/l									
Aroclor 1016	EPA 608	6B24053	0.19	0.95	ND	0.952	02/24/06	02/28/06	<i>val qual</i> <i>qual</i> <i>code</i> ↓ ↓ WT S ↓ ↓ ZX
Aroclor 1221	EPA 608	6B24053	0.095	0.95	ND	0.952	02/24/06	02/28/06	
Aroclor 1232	EPA 608	6B24053	0.24	0.95	ND	0.952	02/24/06	02/28/06	
Aroclor 1242	EPA 608	6B24053	0.24	0.95	ND	0.952	02/24/06	02/28/06	
Aroclor 1248	EPA 608	6B24053	0.24	0.95	ND	0.952	02/24/06	02/28/06	
Aroclor 1254	EPA 608	6B24053	0.24	0.95	ND	0.952	02/24/06	02/28/06	
Aroclor 1260	EPA 608	6B24053	0.38	0.95	ND	0.952	02/24/06	02/28/06	
Surrogate: Decachlorobiphenyl (45-120%)					39 %				

Del Mar Analytical - Irvine
 Michele Chamberlin
 Project Manager

Level III

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DATA VALIDATION REPORT

NPDES Sampling
Multiple Outfalls

ANALYSIS: RADIONUCLIDES

SAMPLE DELIVERY GROUPS: IPB1810, IPB1811, IPB1817,
IPB1818

Prepared by

MECX, LLC
12269 East Vassar Drive
Aurora, CO 80014

1. INTRODUCTION

Task Order Title: NPDES Sampling
MEC^x Project Number: 1261.001D.01
Sample Delivery Group: IPB1810, IPB1811, IPB1817, IPB1818
Project Manager: P. Costa
Matrix: Water
Analysis: Radionuclides
QC Level: Level IV
No. of Samples: 1
No. of Reanalyses/Dilutions: 0
Reviewer: P. Meeks
Date of Review: April 1, 2006

The samples listed in Table 1 were validated based on the guidelines outlined in the USEPA CLP National Functional Guidelines for Inorganic Data Review (2/94). Any deviations from these procedures and guidelines are documented herein. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.

Table 1. Sample identification

Client ID	Del Mar ID	Eberline ID	Matrix	COC Method
Outfall 004	IPB1810-01	8650-001	water	900.0
Outfall 009	IPB1811-01	8651-001	water	900.0
Outfall 006	IPB1817-01	8652-001	water	900.0
Outfall 003	IPB1818-01	8653-001	water	900.0, 905.0

2. DATA VALIDATION FINDINGS

2.1 SAMPLE MANAGEMENT

Following are findings associated with sample management:

2.1.1 Sample Preservation, Handling, and Transport

All the samples in these SDGs were received at Del Mar Analytical within the temperature limits of $4 \pm 2^\circ\text{C}$. No temperature information was provided by Eberline, the subcontract laboratory; however, as it is not necessary to chill radiological samples, no qualifications were required. The samples were noted to have been received intact and in good condition.

According to the Los Angeles Regional Water Quality Control Board's (LARWQCB) guidance letter dated 01/12/05, unfiltered samples should not be preserved and filtered aliquots should be preserved after filtration. The samples in these SDGs were preserved but were not filtered. As the requirements of the permit were not met, all results were qualified as estimated, "J," for detects and, "UJ," for nondetects. No further qualifications were required.

2.1.2 Chain of Custody

The original COCs were signed and dated by field and laboratory personnel and the transfer COCs were signed by personnel from both laboratories. Eberline did not list the MWH IDs on the Form Is; therefore, the reviewer edited the Form Is to reflect these IDs. The strontium analysis for Outfall 003 was requested in a memo from MWH personnel dated 2/20/06. No qualifications were required.

2.1.3 Holding Times

All samples were analyzed within the 180-day analytical holding time for preserved samples. No qualifications were required.

2.2 CALIBRATION

The laboratory calibration information included the standard certificates and applicable preparation/dilutions logs for NIST-traceability. All gross alpha detector efficiencies were less than 20%; therefore, all gross alpha results were qualified as estimated, "J," for detects and, "UJ," for nondetects. All strontium chemical yields were at least 75% and were considered acceptable. The strontium continuing calibration results were within the laboratory control limits. No further qualifications were required.

2.3 BLANKS

No measurable activities were detected in the method blanks, therefore, no qualifications were necessary.

2.4 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

Aqueous blank spikes were analyzed in association with the samples in these SDGs. The blank spike results were within the 3-sigma limits. No qualifications were necessary.

2.5 LABORATORY DUPLICATES

The laboratory performed duplicate analyses on Outfall 003. All results were within the 3-sigma limit limits. No qualifications were necessary.

2.6 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

The laboratory performed matrix spike analyses on Outfall 003 for gross alpha and gross beta. Both recoveries were within the 3-sigma limits. Analyses that involve the yielding of an analytical tracer do not require matrix spike analyses; therefore, no strontium matrix spike was performed. No qualifications were required.

2.7 SAMPLE RESULT VERIFICATION

An EPA Level IV review was performed for the samples in these SDGs. 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. No qualifications were necessary.

2.8 FIELD QC SAMPLES

Field QC samples were evaluated, and if necessary, qualified based only on laboratory blanks. Any remaining detects are used to evaluate the associated samples.

2.8.1 Field Blanks and Equipment Rinsates

The samples in these SDGs had no associated field QC samples. No qualifications were required.

2.8.2 Field Duplicates

There were no field duplicate samples in these SDGs.

Eberline Services
ANALYSIS RESULTS

SDG <u>8650</u>	Client <u>DEL MAR ANAL</u>
Work Order <u>8602144-01</u>	Contract <u>PROJECT# IPB1810</u>
Received Date <u>02/21/06</u>	Matrix <u>WATER</u>

Client	Lab	Sample ID	Collected	Analyzed	Nuclide	Results ± 2σ	Units	MOA	Rev Qual	Qual Code
Sample ID <u>Outfall 004</u> IPB1810-01		8650-001	02/18/06	03/14/06	GrossAlpha	0.526 ± 0.63	pCi/L	0.916	UJ	R, #1
				03/14/06	Gross Beta	21.4 ± 1.0	pCi/L	0.873	J	↓

LEVEL IV

Certified by <u>[Signature]</u>
Report Date <u>02/20/06</u>
Page 1

Eberline Services
ANALYSIS RESULTS

SIX 8651	Client DEL MAR ANAL
Work Order 8692145-01	Contract PROJECT# IPB1811
Received Date 02/21/06	Matrix WATER

Client	Lab	Sample ID	Collected	Analyzed	Nuclide	Results ± 2σ	Units	MDA	Rev Dwd	Qual Code
IPB1811-01	B651-001		02/18/06	03/14/06	Gross Alpha	16.3 ± 2.2	pCi/L	1.30	J	R, #1
				03/14/06	Gross Beta	21.8 ± 1.4	pCi/L	1.43	J	↓

Outfall 009

LEVEL IV

Certified by <u>[Signature]</u>
Report Date 03/20/06
Page 1

Eberline Services

ANALYSIS RESULTS

SDG <u>8652</u>	Client <u>DEL MAR ANAL</u>
Work Order <u>R602146-01</u>	Contract <u>PROJECT# IPB1817</u>
Received Date <u>02/21/06</u>	Matrix <u>WATER</u>

Client	Lab	Sample ID	Collected	Analysed	Nuclide	Results ± 2σ	Units	MDA
Client <u>Sample ID</u> <i>Outfall 006</i> IPB1817-01	6652-001		02/19/06	03/14/06	GrossAlpha	-0.117 ± 0.44	pCi/L	0.798
				03/14/06	Gross Beta	4.33 ± 0.66	pCi/L	0.865

Raw Qual	Qual Code
US	R, XI
J	↓

LEVEL IV

Certified by <u>[Signature]</u>
Report Date <u>03/20/06</u>
Page 1

Eberline Services

ANALYSIS RESULTS

SDG <u>8651</u>	Client <u>DEL MAR ANAL</u>
Work Order <u>R602147-01</u>	Contract <u>PROJECTS IPB1818</u>
Received Date <u>02/21/06</u>	Matrix <u>WATER</u>

Client	Lab	Sample ID	Collected	Analyzed	Nuclide	Results ± 2σ	Units	MDA
		<u>Outfall 003</u>						
IPB1818-01	8653-001	02/19/06	03/14/06	Gross Alpha	0.735 ± 0.45	pCi/L	0.587	
			03/14/06	Gross Beta	7.03 ± 0.74	pCi/L	0.906	
			03/08/06	Sr-90	0.317 ± 0.31	pCi/L	0.594	

REV	QTY
549	R X 1

LEVEL IV

Certified by <u>[Signature]</u>
Report Date <u>03/20/06</u>
Page 1



DATA VALIDATION REPORT

NPDES Monitoring Program
Annual Outfall 004

ANALYSIS: SEMIVOLATILES

SAMPLE DELIVERY GROUP IPB1810

Prepared by

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

1. INTRODUCTION

Task Order Title: NPDES
MEC^X Project Number: 1261.001D.01
Sample Delivery Group: IPB1810
Project Manager: P. Costa
Matrix: Water
Analysis: Semivolatiles
QC Level: Level IV
No. of Samples: 1
No. of Reanalyses/Dilutions: 0
Reviewer: L. Calvin
Date of Review: April 6, 2006

The samples listed in Table 1 were validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for Levels C and D Semivolatile Organics (DVP-3, Rev. 0)*, *EPA Method 625*, and the *National Functional Guidelines For Organic Data Review (2/94)*. Any deviations from these procedures and guidelines are documented herein. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.

Table 1. Sample Identification

Client ID	Laboratory ID	Matrix	COC Method
Outfall 004	IPB1810-01	Water	625

2. DATA VALIDATION FINDINGS

2.1 SAMPLE MANAGEMENT

Following are findings associated with sample management:

2.1.1 Sample Preservation, Handling, and Transport

The sample in this SDG was received at the laboratory within the temperature limits of 4°C ±2°C at 3°C. No sample preservation, handling, or transport problems were noted, and no qualifications were necessary.

2.1.2 Chain of Custody

The COC was signed and dated by field and laboratory personnel. The COC accounted for the analysis presented in this SDG. As the sample was couriered directly from the field to the laboratory, custody seals were not necessary. No qualifications were required.

2.1.3 Holding Times

The water sample was extracted within seven days of collection and analyzed within 40 days of extraction. No qualifications were required.

2.2 GC/MS TUNING

The DFTPP tunes analyzed at the beginning of each daily analytical sequence met the abundance criteria specified in EPA Method 625. No qualifications were required.

2.3 CALIBRATION

One initial calibration analyzed 02/27/06 was associated with the sample in this SDG. The %RSDs for all target compounds were ≤35%. An initial calibration verification (ICV) was analyzed following the initial calibration, with %Ds for all target compounds within the QC limits of ≤20%. Sample Outfall 004 was analyzed in the same analytical sequence as the initial calibration and ICV; therefore a continuing calibration was not necessary. No qualifications were required.

2.4 BLANKS

One method blank (6B19029-BLK1) was extracted and analyzed with this SDG. Target compounds were not detected above the MDLs in the method blank. Review of the method blank raw data indicated no false negatives. No qualifications were required.

2.5 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

One blank spike/blank spike duplicate pair (6B19029-BS1/BSD1) was extracted and analyzed with this SDG. All recoveries and RPDs were within the laboratory-established QC limits, with the exception of the RPDs for benzoic acid and dimethylphthalate. Nondetect results for both compounds were qualified as estimated, "UJ," in sample Outfall 004. No further qualifications were required.

2.6 SURROGATE RECOVERY

Surrogate recoveries for the sample were within the laboratory QC limits. No qualifications were required.

2.7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

MS/MSD analyses were not performed on the sample of this SDG. Evaluation of method accuracy and precision was based on the blank spike/blank spike duplicate results. No qualifications were required.

2.8 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:

2.8.1 Field Blanks and Equipment Rinsates

There were no field blank or equipment rinsate samples identified for this SDG. No qualifications were required.

2.8.2 Field Duplicates

There were no field duplicate samples identified for this SDG.

2.9 INTERNAL STANDARDS PERFORMANCE

The internal standard area counts and retention times for the sample were within the control limits established by the continuing calibration standard: -50%/+100% for internal standard areas and ± 30 seconds for retention times. The recoveries were checked from the raw data, and no transcription or calculation errors were noted. No qualifications were required.

2.10 COMPOUND IDENTIFICATION

The laboratory analyzed for semivolatile target compounds by EPA Method 625. Review of the sample chromatogram, retention times, and spectra indicated no problems with target compound identification. No qualifications were required.

2.11 COMPOUND QUANTIFICATION AND REPORTED DETECTION LIMITS

Compound quantification is verified at a Level IV data validation. No calculation or transcription errors were found. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. Results were reported in $\mu\text{g/L}$ (ppb). No qualifications were required.

2.12 TENTATIVELY IDENTIFIED COMPOUNDS

TICs were not reported by the laboratory for this SDG. No qualifications were required.

2.13 SYSTEM PERFORMANCE

Review of the raw data indicated no problems with system performance. No qualifications were required.



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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 004

Report Number: IPB1810

Sampled: 02/18/06

Received: 02/18/06

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

Analyte	Method	Batch	MBL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB1810-01 (Outfall 004 - Water)									
Reporting Units: ug/l									
Acenaphthene	EPA 625	6B19029	4.1	9.5	ND	0.952	02/19/06	02/28/06	see qual code
Acenaphthylene	EPA 625	6B19029	3.0	9.5	ND	0.952	02/19/06	02/28/06	
Aniline	EPA 625	6B19029	2.8	9.5	ND	0.952	02/19/06	02/28/06	
Anthracene	EPA 625	6B19029	3.0	9.5	ND	0.952	02/19/06	02/28/06	
Benzidine	EPA 625	6B19029	5.0	19	ND	0.952	02/19/06	02/28/06	
Benzoic acid	EPA 625	6B19029	2.5	19	ND	0.952	02/19/06	02/28/06	
Benzo(a)anthracene	EPA 625	6B19029	3.5	9.5	ND	0.952	02/19/06	02/28/06	
Benzo(b)fluoranthene	EPA 625	6B19029	2.6	9.5	ND	0.952	02/19/06	02/28/06	
Benzo(k)fluoranthene	EPA 625	6B19029	3.2	9.5	ND	0.952	02/19/06	02/28/06	
Benzo(g,h,i)perylene	EPA 625	6B19029	5.0	9.5	ND	0.952	02/19/06	02/28/06	
Benzo(a)pyrene	EPA 625	6B19029	3.3	9.5	ND	0.952	02/19/06	02/28/06	
Benzyl alcohol	EPA 625	6B19029	2.4	19	ND	0.952	02/19/06	02/28/06	
Bis(2-chloroethoxy)methane	EPA 625	6B19029	3.7	9.5	ND	0.952	02/19/06	02/28/06	
Bis(2-chloroethyl)ether	EPA 625	6B19029	4.2	9.5	ND	0.952	02/19/06	02/28/06	
Bis(2-chloroisopropyl)ether	EPA 625	6B19029	4.4	9.5	ND	0.952	02/19/06	02/28/06	
Bis(2-ethylhexyl)phthalate	EPA 625	6B19029	5.0	48	ND	0.952	02/19/06	02/28/06	
4-Bromophenyl phenyl ether	EPA 625	6B19029	4.4	9.5	ND	0.952	02/19/06	02/28/06	
Butyl benzyl phthalate	EPA 625	6B19029	3.3	19	ND	0.952	02/19/06	02/28/06	
4-Chloroaniline	EPA 625	6B19029	5.7	9.5	ND	0.952	02/19/06	02/28/06	
2-Chloronaphthalene	EPA 625	6B19029	3.8	9.5	ND	0.952	02/19/06	02/28/06	
4-Chloro-3-methylphenol	EPA 625	6B19029	3.3	19	ND	0.952	02/19/06	02/28/06	
2-Chlorophenol	EPA 625	6B19029	4.0	9.5	ND	0.952	02/19/06	02/28/06	
4-Chlorophenyl phenyl ether	EPA 625	6B19029	2.9	9.5	ND	0.952	02/19/06	02/28/06	
Chrysene	EPA 625	6B19029	2.7	9.5	ND	0.952	02/19/06	02/28/06	
Dibenz(a,h)anthracene	EPA 625	6B19029	4.5	19	ND	0.952	02/19/06	02/28/06	
Dibenzofuran	EPA 625	6B19029	2.5	9.5	ND	0.952	02/19/06	02/28/06	
Di-n-butyl phthalate	EPA 625	6B19029	2.7	19	ND	0.952	02/19/06	02/28/06	
1,3-Dichlorobenzene	EPA 625	6B19029	3.9	9.5	ND	0.952	02/19/06	02/28/06	
1,4-Dichlorobenzene	EPA 625	6B19029	3.7	9.5	ND	0.952	02/19/06	02/28/06	
1,2-Dichlorobenzene	EPA 625	6B19029	4.3	9.5	ND	0.952	02/19/06	02/28/06	
3,3-Dichlorobenzidine	EPA 625	6B19029	10	19	ND	0.952	02/19/06	02/28/06	
2,4-Dichlorophenol	EPA 625	6B19029	3.9	9.5	ND	0.952	02/19/06	02/28/06	
Diethyl phthalate	EPA 625	6B19029	3.0	9.5	ND	0.952	02/19/06	02/28/06	
2,4-Dimethylphenol	EPA 625	6B19029	4.2	19	ND	0.952	02/19/06	02/28/06	
Dimethyl phthalate	EPA 625	6B19029	3.4	9.5	ND	0.952	02/19/06	02/28/06	
4,6-Dinitro-2-methylphenol	EPA 625	6B19029	4.9	19	ND	0.952	02/19/06	02/28/06	
2,4-Dinitrophenol	EPA 625	6B19029	5.0	19	ND	0.952	02/19/06	02/28/06	
2,4-Dinitrotoluene	EPA 625	6B19029	4.0	9.5	ND	0.952	02/19/06	02/28/06	
2,6-Dinitrotoluene	EPA 625	6B19029	3.0	9.5	ND	0.952	02/19/06	02/28/06	
Di-n-octyl phthalate	EPA 625	6B19029	4.5	19	ND	0.952	02/19/06	02/28/06	
Fluoranthene	EPA 625	6B19029	4.0	9.5	ND	0.952	02/19/06	02/28/06	

Del Mar Analytical - Irvine
 Michele Chamberlin
 Project Manager

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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 004

Report Number: IPB1810

Sampled: 02/18/06

Received: 02/18/06

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: IPB1810-01 (Outfall 004 - Water) - cont.									
Reporting Units: ug/l									
Fluorene	EPA 625	6B19029	3.7	9.5	ND	0.952	02/19/06	02/28/06	rel. qual. Code
Hexachlorobenzene	EPA 625	6B19029	4.6	9.5	ND	0.952	02/19/06	02/28/06	
Hexachlorobutadiene	EPA 625	6B19029	4.0	9.5	ND	0.952	02/19/06	02/28/06	
Hexachlorocyclopentadiene	EPA 625	6B19029	3.2	19	ND	0.952	02/19/06	02/28/06	
Hexachloroethane	EPA 625	6B19029	4.0	9.5	ND	0.952	02/19/06	02/28/06	
Indeno(1,2,3-cd)pyrene	EPA 625	6B19029	5.1	19	ND	0.952	02/19/06	02/28/06	
Isophorone	EPA 625	6B19029	3.5	9.5	ND	0.952	02/19/06	02/28/06	
2-Methylnaphthalene	EPA 625	6B19029	2.9	9.5	ND	0.952	02/19/06	02/28/06	
2-Methylphenol	EPA 625	6B19029	3.5	9.5	ND	0.952	02/19/06	02/28/06	
4-Methylphenol	EPA 625	6B19029	3.6	9.5	ND	0.952	02/19/06	02/28/06	
Naphthalene	EPA 625	6B19029	4.3	9.5	ND	0.952	02/19/06	02/28/06	
2-Nitroaniline	EPA 625	6B19029	3.7	19	ND	0.952	02/19/06	02/28/06	
3-Nitroaniline	EPA 625	6B19029	4.3	19	ND	0.952	02/19/06	02/28/06	
4-Nitroaniline	EPA 625	6B19029	4.7	19	ND	0.952	02/19/06	02/28/06	
Nitrobenzene	EPA 625	6B19029	4.0	19	ND	0.952	02/19/06	02/28/06	
2-Nitrophenol	EPA 625	6B19029	4.0	9.5	ND	0.952	02/19/06	02/28/06	
4-Nitrophenol	EPA 625	6B19029	6.3	19	ND	0.952	02/19/06	02/28/06	
N-Nitrosodiphenylamine	EPA 625	6B19029	3.8	9.5	ND	0.952	02/19/06	02/28/06	
N-Nitroso-di-n-propylamine	EPA 625	6B19029	3.4	9.5	ND	0.952	02/19/06	02/28/06	
Pentachlorophenol	EPA 625	6B19029	3.8	19	ND	0.952	02/19/06	02/28/06	
Phenanthrene	EPA 625	6B19029	3.1	9.5	ND	0.952	02/19/06	02/28/06	
Phenol	EPA 625	6B19029	3.8	9.5	ND	0.952	02/19/06	02/28/06	
Pyrene	EPA 625	6B19029	3.7	9.5	ND	0.952	02/19/06	02/28/06	
1,2,4-Trichlorobenzene	EPA 625	6B19029	4.2	9.5	ND	0.952	02/19/06	02/28/06	
2,4,5-Trichlorophenol	EPA 625	6B19029	3.4	19	ND	0.952	02/19/06	02/28/06	
2,4,6-Trichlorophenol	EPA 625	6B19029	3.9	19	ND	0.952	02/19/06	02/28/06	
1,2-Diphenylhydrazine/Azobenzene	EPA 625	6B19029	4.8	19	ND	0.952	02/19/06	02/28/06	
N-Nitrosodimethylamine	EPA 625	6B19029	3.5	19	ND	0.952	02/19/06	02/28/06	
Surrogate: 2-Fluorophenol (30-120%)									57%
Surrogate: Phenol-d6 (35-120%)									66%
Surrogate: 2,4,6-Tribromophenol (45-120%)									55%
Surrogate: Nitrobenzene-d5 (45-120%)									67%
Surrogate: 2-Fluorobiphenyl (45-120%)									68%
Surrogate: Terphenyl-d14 (45-120%)									83%

MC
02-06-06

Level IV

Del Mar Analytical - Irvine
 Michele Chamberlin
 Project Manager

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CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

MEC^x
 12269 East Vassar Drive
 Aurora, CO 80014

Package ID: B4VO26
 Task Order: 1261.001D.01
 SDG No.: IPB1810

No. of Analyses: 2

Laboratory: Del Mar Analytical
 Reviewer: L. Calvin
 Analysis/Method: Volatiles by Method 624

Date: April 6, 2006
 Reviewer's Signature: 

ACTION ITEMS ^a	
1. Case Narrative Deficiencies	
2. Out of Scope Analyses	
3. Analyses Not Conducted	
4. Missing Hardcopy Deliverables	
5. Incorrect Hardcopy Deliverables	
6. Deviations from Analysis Protocol, e.g., Holding Times GC/MS Tune/Inst. Performance Calibration Method blanks Surrogates Matrix Spike/Dup LCS Field QC Internal Standard Performance Compound Identification Quantitation System Performance	Qualifications were assigned for the following: --RRFs <0.05 in initial and continuing calibrations -- continuing calibration %D >20%
COMMENTS ^b	
^a Subcontracted analytical laboratory is not meeting contract and/or method requirements. ^b Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.	



DATA VALIDATION REPORT

NPDES Monitoring Program
Annual Outfall 004

ANALYSIS: VOLATILES

SAMPLE DELIVERY GROUP: IPB1810

Prepared by

MEC^x, LLC
12269 East Vassar Drive
Aurora, CO 80014

1. INTRODUCTION

Task Order Title: NPDES
MEC^x Project Number: 1261.001D.01
Sample Delivery Group: IPB1810
Project Manager: P. Costa
Matrix: Water
Analysis: Volatiles
QC Level: Level IV
No. of Samples: 2
No. of Reanalyses/Dilutions: 0
Reviewer: L. Calvin
Date of Review: April 6, 2006

The samples listed in Table 1 were validated based on the guidelines outlined in the MEC^x *Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0)*, EPA Method 624, and the *National Functional Guidelines for Organic Data Review (2/94)*. Any deviations from these procedures are documented herein. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.

Table 1. Sample Identification

Client ID	Laboratory ID	Matrix	COC Method
Outfall 004	IPB1810-01	Water	624
Trip Blank	IPB1810-02	Water	624

2. DATA VALIDATION FINDINGS

2.1 SAMPLE MANAGEMENT

The samples in this SDG were received at the laboratory within the temperature limits of 4°C ±2°C, at 3°C. According to the case narrative for this SDG, the samples were received intact, on ice, and properly preserved. An unpreserved aliquot of each sample was also provided. Information regarding lack of headspace in the VOA vials was not provided. No qualifications were required.

2.1.2 Chain of Custody

The COC was signed and dated by both field and laboratory personnel. As the samples were couriered directly to the laboratory, custody seals were not required. No qualifications were required.

2.1.3 Holding Times

The unpreserved aliquots of the water samples were analyzed for all target compounds within seven days of collection. No qualifications were required.

2.2 GC/MS TUNING

The BFB tune performed at the beginning of each daily analytical sequence met the abundance criteria specified in EPA Method 624. No qualifications were required.

2.3 CALIBRATION

Two initial calibrations were associated with the samples in this SDG, dated 10/19/05 (acrolein and acrylonitrile only) and 02/18/06 (all remaining target compounds). The average RRF for acrolein was less than 0.05. The nondetect results for acrolein were rejected, "R," in both samples of this SDG. The remaining average RRFs were ≥0.05, and the %RSDs were ≤35% or r^2 ≥0.995 for the target compounds listed on the sample result summary forms.

The continuing calibrations associated with the sample analyses were dated 02/19/06. The RRF for acrolein was less than 0.05. The nondetect results for acrolein were rejected, "R," in both samples of this SDG. The remaining RRFs for were ≥0.05 and all %Ds were within the QC limit of ≤20%, with the exception of the %Ds for acrolein and 2-chloroethyl vinyl ether. The nondetect result for 2-chloroethyl vinyl ether was qualified as estimated, "UJ," in sample Outfall 004. Sample Trip Blank was a field QC sample and required no qualification. As acrolein was previously rejected for RRFs <0.05, the results were not further qualified. No further qualifications were required.

2.4 BLANKS

One method blank (6B19012-BLK1) was analyzed with this SDG. No target compounds were detected in the method blank. Review of the method blank raw data indicated no false negatives. No qualifications were required.

2.5 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

One blank spike (6B19012-BS1) was analyzed with this SDG. Target compounds acrolein and acrylonitrile were not included in the spike. All recoveries were within the laboratory-established QC limits. No qualifications were required.

2.6 SURROGATE RECOVERY

Surrogate recoveries were within the laboratory QC limits of 80-120% for this SDG. No qualifications were required.

2.7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

MS/MSD analyses were not performed on the site sample in this SDG. Evaluation of method accuracy was based on the blank spike results. No qualifications were required.

2.8 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:

2.8.1 Trip Blanks

Sample Trip Blank was the trip blank associated with site sample Outfall 004. No target compounds were detected in the trip blank. No qualifications were required.

2.8.2 Field Blanks and Equipment Rinsates

There were no field blank or equipment rinsate samples identified for this SDG. No qualifications were required.

2.8.3 Field Duplicates

There were no field duplicate samples identified for this SDG.

2.9 INTERNAL STANDARDS PERFORMANCE

The internal standard area counts and retention times were within the control limits established by the continuing calibration standard: -50%/+100% for internal standard areas and ± 30 seconds for retention times. The recoveries were checked from the raw data, and no transcription or calculation errors were noted. No qualifications were required.

2.10 COMPOUND IDENTIFICATION

The laboratory analyzed for volatile target compounds by EPA Method 624. Review of the sample chromatograms, retention times, and spectra indicated no problems with target compound identification. No qualifications were required.

2.11 COMPOUND QUANTIFICATION AND REPORTED DETECTION LIMITS

Compound quantification is verified at a Level IV data validation. No calculation or transcription errors were found. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. No qualifications were required.

2.12 TENTATIVELY IDENTIFIED COMPOUNDS

TICs were not reported by the laboratory for this SDG. No qualifications were required.

2.13 SYSTEM PERFORMANCE

Review of the raw data indicated no problems with system performance. No qualifications were required.



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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 004

Report Number: IPB1810

Sampled: 02/18/06
 Received: 02/18/06

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: IPB1810-01 (Outfall 004 - Water)									
Reporting Units: ug/l									
Benzene	EPA 624	6B19012	0.28	1.0	ND	1	02/19/06	02/19/06	<div style="font-size: small;"> new qual code u ↓ </div>
Bromodichloromethane	EPA 624	6B19012	0.30	2.0	ND	1	02/19/06	02/19/06	
Bromoform	EPA 624	6B19012	0.32	5.0	ND	1	02/19/06	02/19/06	
Bromomethane	EPA 624	6B19012	0.42	5.0	ND	1	02/19/06	02/19/06	
Carbon tetrachloride	EPA 624	6B19012	0.28	0.50	ND	1	02/19/06	02/19/06	
Chlorobenzene	EPA 624	6B19012	0.36	2.0	ND	1	02/19/06	02/19/06	
Chloroethane	EPA 624	6B19012	0.40	5.0	ND	1	02/19/06	02/19/06	
Chloroform	EPA 624	6B19012	0.33	2.0	ND	1	02/19/06	02/19/06	
Chloromethane	EPA 624	6B19012	0.30	5.0	ND	1	02/19/06	02/19/06	
Dibromochloromethane	EPA 624	6B19012	0.28	2.0	ND	1	02/19/06	02/19/06	
1,2-Dichlorobenzene	EPA 624	6B19012	0.32	2.0	ND	1	02/19/06	02/19/06	
1,3-Dichlorobenzene	EPA 624	6B19012	0.35	2.0	ND	1	02/19/06	02/19/06	
1,4-Dichlorobenzene	EPA 624	6B19012	0.37	2.0	ND	1	02/19/06	02/19/06	
1,1-Dichloroethane	EPA 624	6B19012	0.27	2.0	ND	1	02/19/06	02/19/06	
1,2-Dichloroethane	EPA 624	6B19012	0.28	0.50	ND	1	02/19/06	02/19/06	
1,1-Dichloroethene	EPA 624	6B19012	0.42	5.0	ND	1	02/19/06	02/19/06	
trans-1,2-Dichloroethene	EPA 624	6B19012	0.27	2.0	ND	1	02/19/06	02/19/06	
1,2-Dichloropropane	EPA 624	6B19012	0.35	2.0	ND	1	02/19/06	02/19/06	
cis-1,3-Dichloropropene	EPA 624	6B19012	0.22	2.0	ND	1	02/19/06	02/19/06	
trans-1,3-Dichloropropene	EPA 624	6B19012	0.32	2.0	ND	1	02/19/06	02/19/06	
Ethylbenzene	EPA 624	6B19012	0.25	2.0	ND	1	02/19/06	02/19/06	
Methylene chloride	EPA 624	6B19012	0.70	5.0	ND	1	02/19/06	02/19/06	
1,1,2,2-Tetrachloroethane	EPA 624	6B19012	0.24	2.0	ND	1	02/19/06	02/19/06	
Tetrachloroethene	EPA 624	6B19012	0.32	2.0	ND	1	02/19/06	02/19/06	
Toluene	EPA 624	6B19012	0.36	2.0	ND	1	02/19/06	02/19/06	
1,1,1-Trichloroethane	EPA 624	6B19012	0.30	2.0	ND	1	02/19/06	02/19/06	
1,1,2-Trichloroethane	EPA 624	6B19012	0.30	2.0	ND	1	02/19/06	02/19/06	
Trichloroethene	EPA 624	6B19012	0.26	2.0	ND	1	02/19/06	02/19/06	
Trichlorofluoromethane	EPA 624	6B19012	0.34	5.0	ND	1	02/19/06	02/19/06	
Vinyl chloride	EPA 624	6B19012	0.26	0.50	ND	1	02/19/06	02/19/06	
Xylenes, Total	EPA 624	6B19012	0.90	4.0	ND	1	02/19/06	02/19/06	
Trichlorotrifluoroethane (Freon 113)	EPA 624	6B19012	1.2	5.0	ND	1	02/19/06	02/19/06	
Surrogate: Dibromofluoromethane (80-120%)					114 %				
Surrogate: Toluene-d8 (80-120%)					110 %				
Surrogate: 4-Bromofluorobenzene (80-120%)					106 %				

Del Mar Analytical - Irvine
 Michele Chamberlin
 Project Manager

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Level IV

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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 004

Report Number: IPB1810

Sampled: 02/18/06
 Received: 02/18/06

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: IPB1810-02 (Trip Blanks - Water)									
Reporting Units: ug/l									
Benzene	EPA 624	6B19012	0.28	1.0	ND	1	02/19/06	02/19/06	<i>Handwritten:</i> qual qual code ↓
Bromodichloromethane	EPA 624	6B19012	0.30	2.0	ND	1	02/19/06	02/19/06	
Bromoform	EPA 624	6B19012	0.32	5.0	ND	1	02/19/06	02/19/06	
Bromomethane	EPA 624	6B19012	0.42	5.0	ND	1	02/19/06	02/19/06	
Carbon tetrachloride	EPA 624	6B19012	0.28	0.50	ND	1	02/19/06	02/19/06	
Chlorobenzene	EPA 624	6B19012	0.36	2.0	ND	1	02/19/06	02/19/06	
Chloroethane	EPA 624	6B19012	0.40	5.0	ND	1	02/19/06	02/19/06	
Chloroform	EPA 624	6B19012	0.33	2.0	ND	1	02/19/06	02/19/06	
Chloromethane	EPA 624	6B19012	0.30	5.0	ND	1	02/19/06	02/19/06	
Dibromochloromethane	EPA 624	6B19012	0.28	2.0	ND	1	02/19/06	02/19/06	
1,2-Dichlorobenzene	EPA 624	6B19012	0.32	2.0	ND	1	02/19/06	02/19/06	
1,3-Dichlorobenzene	EPA 624	6B19012	0.35	2.0	ND	1	02/19/06	02/19/06	
1,4-Dichlorobenzene	EPA 624	6B19012	0.37	2.0	ND	1	02/19/06	02/19/06	
1,1-Dichloroethane	EPA 624	6B19012	0.27	2.0	ND	1	02/19/06	02/19/06	
1,2-Dichloroethane	EPA 624	6B19012	0.28	0.50	ND	1	02/19/06	02/19/06	
1,1-Dichloroethene	EPA 624	6B19012	0.42	5.0	ND	1	02/19/06	02/19/06	
trans-1,2-Dichloroethene	EPA 624	6B19012	0.27	2.0	ND	1	02/19/06	02/19/06	
1,2-Dichloropropane	EPA 624	6B19012	0.35	2.0	ND	1	02/19/06	02/19/06	
cis-1,3-Dichloropropene	EPA 624	6B19012	0.22	2.0	ND	1	02/19/06	02/19/06	
trans-1,3-Dichloropropene	EPA 624	6B19012	0.32	2.0	ND	1	02/19/06	02/19/06	
Ethylbenzene	EPA 624	6B19012	0.25	2.0	ND	1	02/19/06	02/19/06	
Methylene chloride	EPA 624	6B19012	0.70	5.0	ND	1	02/19/06	02/19/06	
1,1,2,2-Tetrachloroethane	EPA 624	6B19012	0.24	2.0	ND	1	02/19/06	02/19/06	
Tetrachloroethene	EPA 624	6B19012	0.32	2.0	ND	1	02/19/06	02/19/06	
Toluene	EPA 624	6B19012	0.36	2.0	ND	1	02/19/06	02/19/06	
1,1,1-Trichloroethane	EPA 624	6B19012	0.30	2.0	ND	1	02/19/06	02/19/06	
1,1,2-Trichloroethane	EPA 624	6B19012	0.30	2.0	ND	1	02/19/06	02/19/06	
Trichloroethane	EPA 624	6B19012	0.26	2.0	ND	1	02/19/06	02/19/06	
Trichlorofluoromethane	EPA 624	6B19012	0.34	5.0	ND	1	02/19/06	02/19/06	
Vinyl chloride	EPA 624	6B19012	0.26	0.50	ND	1	02/19/06	02/19/06	
Xylenes, Total	EPA 624	6B19012	0.90	4.0	ND	1	02/19/06	02/19/06	
Trichlorotrifluoroethane (Freon 113)	EPA 624	6B19012	1.2	5.0	ND	1	02/19/06	02/19/06	
Surrogate: Dibromofluoromethane (80-120%)					111 %				
Surrogate: Toluene-d8 (80-120%)					110 %				
Surrogate: 4-Bromofluorobenzene (80-120%)					105 %				

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 Michele Chamberlin
 Project Manager

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 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0643 FAX (480) 785-0658
 7020 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-0620 FAX (702) 798-1621

MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 004

Report Number: IPB1810

Sampled: 02/18/06
 Received: 02/18/06

PURGEABLES-- GC/MS (EPA 624)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB1810-01 (Outfall 004 - Water)									
Reporting Units: ug/l									
Acrolein	EPA 624	6B19012	4.6	50	ND	1	02/19/06	02/19/06	R R
Acrylonitrile	EPA 624	6B19012	0.70	50	ND	1	02/19/06	02/19/06	U R
2-Chloroethyl vinyl ether	EPA 624	6B19012	1.8	5.0	ND	1	02/19/06	02/19/06	U/C
Surrogate: Dibromofluoromethane (80-120%)					114 %				
Surrogate: Toluene-d8 (80-120%)					110 %				
Surrogate: 4-Bromofluorobenzene (80-120%)					106 %				
Sample ID: IPB1810-02 (Trip Blanks - Water)									
Reporting Units: ug/l									
Acrolein	EPA 624	6B19012	4.6	50	ND	1	02/19/06	02/19/06	R R
Acrylonitrile	EPA 624	6B19012	0.70	50	ND	1	02/19/06	02/19/06	U R
2-Chloroethyl vinyl ether	EPA 624	6B19012	1.8	5.0	ND	1	02/19/06	02/19/06	U/C
Surrogate: Dibromofluoromethane (80-120%)					111 %				
Surrogate: Toluene-d8 (80-120%)					110 %				
Surrogate: 4-Bromofluorobenzene (80-120%)					105 %				

*W/C
04-06-05*

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CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

MEC^x
 12269 East Vassar Drive
 Aurora, CO 80014

Package ID: B4WC26
 Task Order: 1261.001D.01
 SDG No.: IPB1810

No. of Analyses: 1

Laboratory: Del Mar Analytical
 Reviewer: P. Meeks
 Analysis/Method: General Minerals

Date: April 3, 2006
 Reviewer's Signature


ACTION ITEMS^a	
Case Narrative	
Deficiencies	
2. Out of Scope Analyses	
3. Analyses Not Conducted	
4. Missing Hardcopy Deliverables	
5. Incorrect Hardcopy Deliverables	
6. Deviations from Analysis Protocol, e.g.,	
Holding Times	
GC/MS Tune/Inst. Performance	
Calibration	
Method blanks	
Surrogates	
Matrix Spike/Dup LCS	
Field QC	
Internal Standard Performance	
Compound Identification	
Quantitation	
System Performance	
COMMENTS^b	<u>Acceptable as reviewed.</u>
^a Subcontracted analytical laboratory is not meeting contract and/or method requirements. ^b Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.	



DATA VALIDATION REPORT

NPDES Sampling
Outfall 004

ANALYSIS: GENERAL MINERALS

SAMPLE DELIVERY GROUP: IPB1810

Prepared by

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

1. INTRODUCTION

Task Order Title: NPDES Sampling
MEC^X Project Number: 1261.001D.01
Sample Delivery Group: IPB1810
Project Manager: P. Costa
Matrix: Water
Analysis: General Minerals
QC Level: Level IV
No. of Samples: 1
No. of Reanalyses/Dilutions: 0
Reviewer: P. Meeks
Date of Review: April 3, 2006

The sample listed in Table 1 was validated based on the guidelines outlined in the MEC^X *Data Validation Procedure for General Minerals (DVP-6, Rev. 0)*, *USEPA Methods for Chemical Analysis of Water and Wastes Methods 160.2 and 335.2*, and validation guidelines outlined in the *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (2/94)*. Any deviations from these procedures and guidelines are documented herein. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form Is as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.

Table 1. Sample Identification

Client ID	Laboratory ID	Matrix	COC Method
Outfall 004	IPB1810-01	Water	General Minerals

2. DATA VALIDATION FINDINGS

2.1 SAMPLE MANAGEMENT

Following are findings associated with sample management:

2.1.1 Sample Preservation, Handling, and Transport

The sample in this SDG was received at the laboratory within the temperature limits of $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$, at 3°C . No preservation problems were noted by the laboratory. No qualifications were required.

2.1.2 Chain of Custody

The COC was signed and dated by field and laboratory personnel and accounted for the sample and analyses presented in this SDG. As the sample was couriered directly from the field to the laboratory, custody seals were not necessary. No qualifications were required.

2.1.3 Holding Times

The holding times were assessed by comparing the date of collection with the dates of analysis. All analyses were performed within the method-specified holding times. No qualifications were required.

2.2 CALIBRATION

For cyanide, the initial calibration correlation coefficients were ≥ 0.995 and the ICV and CCV recoveries were within the control limits of 90-110%. For TSS, balance calibration logs were reviewed and found to be acceptable. No qualifications were required.

2.3 BLANKS

There were no detects in the method blanks or CCBs associated with the sample analyses. Raw data was reviewed to verify the blank data. No qualifications were required.

2.4 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

The reported LCS recoveries were within the laboratory-established control limits. No qualifications were required.

DATA VALIDATION REPORT

2.5 LABORATORY DUPLICATES

No MS/MSD or duplicate analyses were performed in association with this SDG; therefore, no assessment was made with respect to this criterion.

2.6 MATRIX SPIKES

No MS/MSD analyses were performed in association with this SDG; therefore, no assessment was made with respect to this criterion. Evaluation of method accuracy was based on LCS results. No qualifications were required.

2.7 SAMPLE RESULT VERIFICATION

A Level IV review was performed for the sample in this data package. Calculations were verified, and the sample results reported on the Form Is were verified against the raw data. No qualifications were required.

2.8 FIELD QC SAMPLES

Field QC samples are evaluated, and if necessary, qualified based only on laboratory blanks. Any remaining defects are used to evaluate the associated sample. The following are findings associated with field QC samples:

2.8.1 Field Blanks and Equipment Rinsates

The sample in this SDG had no associated field QC samples. No qualifications were required.

2.8.2 Field Duplicates

There were no field duplicate pairs associated with this SDG.



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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Brouwyn Kelly

Project ID: Annual Outfall 004

Report Number: IPB1810

Sampled: 02/18/06
 Received: 02/18/06

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data	
									Qualifiers	
Sample ID: IPB1810-01 (Outfall 004 - Water) - cont.										
Reporting Units: mg/l										
Chloride	EPA 300.0	6B19038	0.75	2.5	39	5	02/19/06	02/19/06		*
Nitrate/Nitrite-N	EPA 300.0	6B19038	0.080	0.15	0.59	1	02/19/06	02/19/06		
Oil & Grease	EPA 413.1	6B22047	0.90	4.8	ND	1	02/22/06	02/22/06		
Sulfate	EPA 300.0	6B19038	0.45	0.50	6.3	1	02/19/06	02/19/06		
Total Dissolved Solids	SM2540C	6B22069	10	10	190	1	02/22/06	02/22/06		
Total Suspended Solids	EPA 160.2	6B22101	10	10	43	1	02/22/06	02/22/06		

Rev
Qual

Qual
Code

↓

* Analysis not validated

Del Mar Analytical - Irvine
 Michele Chamberlin
 Project Manager

LEVEL IV

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 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 004

Report Number: IPB1810

Sampled: 02/18/06

Received: 02/18/06

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB1810-01 (Outfall 004 - Water) - cont.									
Reporting Units: ug/l									
Total Cyanide	EPA 335.2	6B22127	2.2	5.0	ND	1	02/22/06	02/22/06	U
Perchlorate	EPA 314.0	6B23071	0.80	4.0	ND	1	02/23/06	02/23/06	*

Raw Qual Code

* Analysis not validated

Del Mar Analytical - Irvine
 Michele Chamberlin
 Project Manager

LEVEL IV

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APPENDIX G

Section 53

Outfall 005, February 28, 2006

Del Mar Analytical Laboratory Report



LABORATORY REPORT

Prepared For: MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project: Annual Outfall 005

Sampled: 02/28/06
Received: 02/28/06
Issued: 03/27/06 08:12

NELAP #01108CA California ELAP#1197 CSDLAC #10117

*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 Del Mar Analytical and its client. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical. The Chain of Custody, 1 page, is included and is 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.

LABORATORY ID	CLIENT ID	MATRIX
IPB2645-01	Outfall 005	Water
IPB2645-02	Trip Blank	Water

Reviewed By:

Michele Chamberlin

Del Mar Analytical - Irvine
Michele Chamberlin
Project Manager



MWH-Pasadena/Boeing 300 North Lake Avenue, Suite 1200 Pasadena, CA 91101 Attention: Bronwyn Kelly	Project ID: Annual Outfall 005 Report Number: IPB2645	Sampled: 02/28/06 Received: 02/28/06
--	--	---

CORRECTIVE ACTION REPORT

Department: Extractions
Method: EPA 625
QC Batch: 6C06054

Date: 03/09/2006
Matrix: Water

Identification and Definition of Problem:

- 1) The percent recoveries for dimethylphthalate and diethylphthalate in the LCSD were below laboratory acceptance limits.
- 2) The RPD between the LCS and LCSD exceeded laboratory acceptance limits for dimethylphthalate and diethylphthalate.

Determination of the Cause of the Problem:

- 1) A definitive cause for the QC failure has not been determined.
- 2) The RPDs failed due to the difference between the low LCSD recoveries and the acceptable LCS recoveries.

Corrective Action Taken:

Although the LCS recoveries for these two analytes were within acceptance limits, all results reported for dimethylphthalate and diethylphthalate must still be considered potentially biased low and can be used as estimates only.

Michele Chamberlin

Quality Assurance Approval: _____ Date: 03/16/2006 09:57 AM
Michele Chamberlin

Del Mar Analytical - Irvine
Michele Chamberlin
Project Manager



MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06
Received: 02/28/06

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: IPB2645-01 (Outfall 005 - Water)									
Reporting Units: ug/l									
Benzene	EPA 624	6C09004	0.28	1.0	ND	1	03/09/06	03/09/06	
Bromodichloromethane	EPA 624	6C09004	0.30	2.0	ND	1	03/09/06	03/09/06	
Bromoform	EPA 624	6C09004	0.32	5.0	ND	1	03/09/06	03/09/06	
Bromomethane	EPA 624	6C09004	0.42	5.0	ND	1	03/09/06	03/09/06	
Carbon tetrachloride	EPA 624	6C09004	0.28	0.50	ND	1	03/09/06	03/09/06	
Chlorobenzene	EPA 624	6C09004	0.36	2.0	ND	1	03/09/06	03/09/06	
Chloroethane	EPA 624	6C09004	0.40	5.0	ND	1	03/09/06	03/09/06	
Chloroform	EPA 624	6C09004	0.33	2.0	ND	1	03/09/06	03/09/06	
Chloromethane	EPA 624	6C09004	0.30	5.0	ND	1	03/09/06	03/09/06	
Dibromochloromethane	EPA 624	6C09004	0.28	2.0	ND	1	03/09/06	03/09/06	
1,2-Dichlorobenzene	EPA 624	6C09004	0.32	2.0	ND	1	03/09/06	03/09/06	
1,3-Dichlorobenzene	EPA 624	6C09004	0.35	2.0	ND	1	03/09/06	03/09/06	
1,4-Dichlorobenzene	EPA 624	6C09004	0.37	2.0	ND	1	03/09/06	03/09/06	
1,1-Dichloroethane	EPA 624	6C09004	0.27	2.0	ND	1	03/09/06	03/09/06	
1,2-Dichloroethane	EPA 624	6C09004	0.28	0.50	ND	1	03/09/06	03/09/06	
1,1-Dichloroethene	EPA 624	6C09004	0.42	5.0	ND	1	03/09/06	03/09/06	
trans-1,2-Dichloroethene	EPA 624	6C09004	0.27	2.0	ND	1	03/09/06	03/09/06	
1,2-Dichloropropane	EPA 624	6C09004	0.35	2.0	ND	1	03/09/06	03/09/06	
cis-1,3-Dichloropropene	EPA 624	6C09004	0.22	2.0	ND	1	03/09/06	03/09/06	
trans-1,3-Dichloropropene	EPA 624	6C09004	0.32	2.0	ND	1	03/09/06	03/09/06	
Ethylbenzene	EPA 624	6C09004	0.25	2.0	ND	1	03/09/06	03/09/06	
Methylene chloride	EPA 624	6C09004	0.70	5.0	ND	1	03/09/06	03/09/06	
1,1,2,2-Tetrachloroethane	EPA 624	6C09004	0.24	2.0	ND	1	03/09/06	03/09/06	
Tetrachloroethene	EPA 624	6C09004	0.32	2.0	ND	1	03/09/06	03/09/06	
Toluene	EPA 624	6C09004	0.36	2.0	ND	1	03/09/06	03/09/06	
1,1,1-Trichloroethane	EPA 624	6C09004	0.30	2.0	ND	1	03/09/06	03/09/06	
1,1,2-Trichloroethane	EPA 624	6C09004	0.30	2.0	ND	1	03/09/06	03/09/06	
Trichloroethene	EPA 624	6C09004	0.26	2.0	ND	1	03/09/06	03/09/06	
Trichlorofluoromethane	EPA 624	6C09004	0.34	5.0	ND	1	03/09/06	03/09/06	
Vinyl chloride	EPA 624	6C09004	0.26	0.50	ND	1	03/09/06	03/09/06	
Xylenes, Total	EPA 624	6C09004	0.90	4.0	ND	1	03/09/06	03/09/06	
Trichlorotrifluoroethane (Freon 113)	EPA 624	6C09004	1.2	5.0	ND	1	03/09/06	03/09/06	
Surrogate: Dibromofluoromethane (80-120%)					117 %				
Surrogate: Toluene-d8 (80-120%)					109 %				
Surrogate: 4-Bromofluorobenzene (80-120%)					109 %				

Del Mar Analytical - Irvine
Michele Chamberlin
Project Manager

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MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06
Received: 02/28/06

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: IPB2645-02 (Trip Blank - Water)									
Reporting Units: ug/l									
Benzene	EPA 624	6C02019	0.28	1.0	ND	1	03/02/06	03/03/06	
Bromodichloromethane	EPA 624	6C02019	0.30	2.0	ND	1	03/02/06	03/03/06	
Bromoform	EPA 624	6C02019	0.32	5.0	ND	1	03/02/06	03/03/06	
Bromomethane	EPA 624	6C02019	0.42	5.0	ND	1	03/02/06	03/03/06	
Carbon tetrachloride	EPA 624	6C02019	0.28	0.50	ND	1	03/02/06	03/03/06	
Chlorobenzene	EPA 624	6C02019	0.36	2.0	ND	1	03/02/06	03/03/06	
Chloroethane	EPA 624	6C02019	0.40	5.0	ND	1	03/02/06	03/03/06	
Chloroform	EPA 624	6C02019	0.33	2.0	ND	1	03/02/06	03/03/06	
Chloromethane	EPA 624	6C02019	0.30	5.0	ND	1	03/02/06	03/03/06	
Dibromochloromethane	EPA 624	6C02019	0.28	2.0	ND	1	03/02/06	03/03/06	
1,2-Dichlorobenzene	EPA 624	6C02019	0.32	2.0	ND	1	03/02/06	03/03/06	
1,3-Dichlorobenzene	EPA 624	6C02019	0.35	2.0	ND	1	03/02/06	03/03/06	
1,4-Dichlorobenzene	EPA 624	6C02019	0.37	2.0	ND	1	03/02/06	03/03/06	
1,1-Dichloroethane	EPA 624	6C02019	0.27	2.0	ND	1	03/02/06	03/03/06	
1,2-Dichloroethane	EPA 624	6C02019	0.28	0.50	ND	1	03/02/06	03/03/06	
1,1-Dichloroethene	EPA 624	6C02019	0.42	5.0	ND	1	03/02/06	03/03/06	
trans-1,2-Dichloroethene	EPA 624	6C02019	0.27	2.0	ND	1	03/02/06	03/03/06	
1,2-Dichloropropane	EPA 624	6C02019	0.35	2.0	ND	1	03/02/06	03/03/06	
cis-1,3-Dichloropropene	EPA 624	6C02019	0.22	2.0	ND	1	03/02/06	03/03/06	
trans-1,3-Dichloropropene	EPA 624	6C02019	0.32	2.0	ND	1	03/02/06	03/03/06	
Ethylbenzene	EPA 624	6C02019	0.25	2.0	ND	1	03/02/06	03/03/06	
Methylene chloride	EPA 624	6C02019	0.70	5.0	ND	1	03/02/06	03/03/06	
1,1,2,2-Tetrachloroethane	EPA 624	6C02019	0.24	2.0	ND	1	03/02/06	03/03/06	L
Tetrachloroethene	EPA 624	6C02019	0.32	2.0	ND	1	03/02/06	03/03/06	
Toluene	EPA 624	6C02019	0.36	2.0	ND	1	03/02/06	03/03/06	
1,1,1-Trichloroethane	EPA 624	6C02019	0.30	2.0	ND	1	03/02/06	03/03/06	
1,1,2-Trichloroethane	EPA 624	6C02019	0.30	2.0	ND	1	03/02/06	03/03/06	
Trichloroethene	EPA 624	6C02019	0.26	2.0	ND	1	03/02/06	03/03/06	
Trichlorofluoromethane	EPA 624	6C02019	0.34	5.0	ND	1	03/02/06	03/03/06	
Vinyl chloride	EPA 624	6C02019	0.26	0.50	ND	1	03/02/06	03/03/06	
Xylenes, Total	EPA 624	6C02019	0.90	4.0	ND	1	03/02/06	03/03/06	
Trichlorotrifluoroethane (Freon 113)	EPA 624	6C02019	1.2	5.0	ND	1	03/02/06	03/03/06	
Surrogate: Dibromofluoromethane (80-120%)					107 %				
Surrogate: Toluene-d8 (80-120%)					110 %				
Surrogate: 4-Bromofluorobenzene (80-120%)					92 %				

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Michele Chamberlin
Project Manager

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MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 005
Report Number: IPB2645

Sampled: 02/28/06
Received: 02/28/06

PURGEABLES-- GC/MS (EPA 624)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB2645-01 (Outfall 005 - Water)									
Reporting Units: ug/l									
Acrolein	EPA 624	6C02019	4.6	50	ND	1	03/02/06	03/03/06	
Acrylonitrile	EPA 624	6C02019	0.70	50	ND	1	03/02/06	03/03/06	
2-Chloroethyl vinyl ether	EPA 624	6C02019	1.8	5.0	ND	1	03/02/06	03/03/06	
Surrogate: Dibromofluoromethane (80-120%)					111 %				
Surrogate: Toluene-d8 (80-120%)					108 %				
Surrogate: 4-Bromofluorobenzene (80-120%)					91 %				
Sample ID: IPB2645-02 (Trip Blank - Water)									
Reporting Units: ug/l									
Acrolein	EPA 624	6C02019	4.6	50	ND	1	03/02/06	03/03/06	
Acrylonitrile	EPA 624	6C02019	0.70	50	ND	1	03/02/06	03/03/06	
2-Chloroethyl vinyl ether	EPA 624	6C02019	1.8	5.0	ND	1	03/02/06	03/03/06	
Surrogate: Dibromofluoromethane (80-120%)					107 %				
Surrogate: Toluene-d8 (80-120%)					110 %				
Surrogate: 4-Bromofluorobenzene (80-120%)					92 %				

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Michele Chamberlin
Project Manager

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MWH-Pasadena/Boeing Project ID: Annual Outfall 005
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101 Report Number: IPB2645
Attention: Bronwyn Kelly Sampled: 02/28/06
Received: 02/28/06

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

Table with 10 columns: Analyte, Method, Batch, MDL Limit, Reporting Limit, Sample Result, Dilution Factor, Date Extracted, Date Analyzed, Data Qualifiers. Includes sample ID IPB2645-01 and reporting units of ug/l.

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Project Manager

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MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06
Received: 02/28/06

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: IPB2645-01 (Outfall 005 - Water) - cont.									
Reporting Units: ug/l									
Fluorene	EPA 625	6C06054	3.7	9.4	ND	0.943	03/06/06	03/09/06	
Hexachlorobenzene	EPA 625	6C06054	4.5	9.4	ND	0.943	03/06/06	03/09/06	
Hexachlorobutadiene	EPA 625	6C06054	4.0	9.4	ND	0.943	03/06/06	03/09/06	
Hexachlorocyclopentadiene	EPA 625	6C06054	3.2	19	ND	0.943	03/06/06	03/09/06	
Hexachloroethane	EPA 625	6C06054	4.0	9.4	ND	0.943	03/06/06	03/09/06	
Indeno(1,2,3-cd)pyrene	EPA 625	6C06054	5.1	19	ND	0.943	03/06/06	03/09/06	
Isophorone	EPA 625	6C06054	3.5	9.4	ND	0.943	03/06/06	03/09/06	
2-Methylnaphthalene	EPA 625	6C06054	2.8	9.4	ND	0.943	03/06/06	03/09/06	
2-Methylphenol	EPA 625	6C06054	3.5	9.4	ND	0.943	03/06/06	03/09/06	
4-Methylphenol	EPA 625	6C06054	3.6	9.4	ND	0.943	03/06/06	03/09/06	
Naphthalene	EPA 625	6C06054	4.2	9.4	ND	0.943	03/06/06	03/09/06	
2-Nitroaniline	EPA 625	6C06054	3.7	19	ND	0.943	03/06/06	03/09/06	
3-Nitroaniline	EPA 625	6C06054	4.2	19	ND	0.943	03/06/06	03/09/06	
4-Nitroaniline	EPA 625	6C06054	4.6	19	ND	0.943	03/06/06	03/09/06	
Nitrobenzene	EPA 625	6C06054	4.0	19	ND	0.943	03/06/06	03/09/06	
2-Nitrophenol	EPA 625	6C06054	4.0	9.4	ND	0.943	03/06/06	03/09/06	
4-Nitrophenol	EPA 625	6C06054	6.2	19	ND	0.943	03/06/06	03/09/06	
N-Nitrosodiphenylamine	EPA 625	6C06054	3.8	9.4	ND	0.943	03/06/06	03/09/06	
N-Nitroso-di-n-propylamine	EPA 625	6C06054	3.4	9.4	ND	0.943	03/06/06	03/09/06	
Pentachlorophenol	EPA 625	6C06054	3.8	19	ND	0.943	03/06/06	03/09/06	
Phenanthrene	EPA 625	6C06054	3.1	9.4	ND	0.943	03/06/06	03/09/06	
Phenol	EPA 625	6C06054	3.8	9.4	ND	0.943	03/06/06	03/09/06	
Pyrene	EPA 625	6C06054	3.7	9.4	ND	0.943	03/06/06	03/09/06	
1,2,4-Trichlorobenzene	EPA 625	6C06054	4.2	9.4	ND	0.943	03/06/06	03/09/06	
2,4,5-Trichlorophenol	EPA 625	6C06054	3.4	19	ND	0.943	03/06/06	03/09/06	
2,4,6-Trichlorophenol	EPA 625	6C06054	3.9	19	ND	0.943	03/06/06	03/09/06	
1,2-Diphenylhydrazine/Azobenzene	EPA 625	6C06054	4.7	19	ND	0.943	03/06/06	03/09/06	
N-Nitrosodimethylamine	EPA 625	6C06054	3.5	19	ND	0.943	03/06/06	03/09/06	
Surrogate: 2-Fluorophenol (30-120%)					65 %				
Surrogate: Phenol-d6 (35-120%)					68 %				
Surrogate: 2,4,6-Tribromophenol (45-120%)					78 %				
Surrogate: Nitrobenzene-d5 (45-120%)					67 %				
Surrogate: 2-Fluorobiphenyl (45-120%)					66 %				
Surrogate: Terphenyl-d14 (45-120%)					89 %				

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Michele Chamberlin
Project Manager

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 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06
 Received: 02/28/06

ORGANOCHLORINE PESTICIDES (EPA 608)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB2645-01 (Outfall 005 - Water) - cont.									
Reporting Units: ug/l									
Aldrin	EPA 608	6C05031	0.028	0.094	ND	0.943	03/05/06	03/07/06	
alpha-BHC	EPA 608	6C05031	0.019	0.094	ND	0.943	03/05/06	03/07/06	
beta-BHC	EPA 608	6C05031	0.014	0.094	ND	0.943	03/05/06	03/07/06	
delta-BHC	EPA 608	6C05031	0.019	0.19	ND	0.943	03/05/06	03/07/06	
gamma-BHC (Lindane)	EPA 608	6C05031	0.019	0.094	ND	0.943	03/05/06	03/07/06	
Chlordane	EPA 608	6C05031	0.19	0.94	ND	0.943	03/05/06	03/07/06	
4,4'-DDD	EPA 608	6C05031	0.019	0.094	ND	0.943	03/05/06	03/07/06	
4,4'-DDE	EPA 608	6C05031	0.024	0.094	ND	0.943	03/05/06	03/07/06	
4,4'-DDT	EPA 608	6C05031	0.033	0.094	ND	0.943	03/05/06	03/07/06	
Dieldrin	EPA 608	6C05031	0.014	0.094	ND	0.943	03/05/06	03/07/06	
Endosulfan I	EPA 608	6C05031	0.014	0.094	ND	0.943	03/05/06	03/07/06	
Endosulfan II	EPA 608	6C05031	0.038	0.094	ND	0.943	03/05/06	03/07/06	
Endosulfan sulfate	EPA 608	6C05031	0.019	0.19	ND	0.943	03/05/06	03/07/06	
Endrin	EPA 608	6C05031	0.019	0.094	ND	0.943	03/05/06	03/07/06	
Endrin aldehyde	EPA 608	6C05031	0.042	0.094	ND	0.943	03/05/06	03/07/06	
Endrin ketone	EPA 608	6C05031	0.019	0.094	ND	0.943	03/05/06	03/07/06	
Heptachlor	EPA 608	6C05031	0.028	0.094	ND	0.943	03/05/06	03/07/06	
Heptachlor epoxide	EPA 608	6C05031	0.028	0.094	ND	0.943	03/05/06	03/07/06	
Methoxychlor	EPA 608	6C05031	0.033	0.094	ND	0.943	03/05/06	03/07/06	
Toxaphene	EPA 608	6C05031	1.4	4.7	ND	0.943	03/05/06	03/07/06	
<i>Surrogate: Tetrachloro-m-xylene (35-115%)</i>					49 %				
<i>Surrogate: Decachlorobiphenyl (45-120%)</i>					59 %				

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 Project Manager

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 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06
 Received: 02/28/06

TOTAL PCBS (EPA 608)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB2645-01 (Outfall 005 - Water) - cont.									
Reporting Units: ug/l									
Aroclor 1016	EPA 608	6C05031	0.19	0.94	ND	0.943	03/05/06	03/06/06	
Aroclor 1221	EPA 608	6C05031	0.094	0.94	ND	0.943	03/05/06	03/06/06	
Aroclor 1232	EPA 608	6C05031	0.24	0.94	ND	0.943	03/05/06	03/06/06	
Aroclor 1242	EPA 608	6C05031	0.24	0.94	ND	0.943	03/05/06	03/06/06	
Aroclor 1248	EPA 608	6C05031	0.24	0.94	ND	0.943	03/05/06	03/06/06	
Aroclor 1254	EPA 608	6C05031	0.24	0.94	ND	0.943	03/05/06	03/06/06	
Aroclor 1260	EPA 608	6C05031	0.38	0.94	ND	0.943	03/05/06	03/06/06	
<i>Surrogate: Decachlorobiphenyl (45-120%)</i>					83 %				

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 Michele Chamberlin
 Project Manager

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 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06
 Received: 02/28/06

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB2645-01 (Outfall 005 - Water) - cont.									
Reporting Units: mg/l									
Boron	EPA 200.7	6C03084	0.0080	0.050	0.016	1	03/03/06	03/07/06	J

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 Project Manager

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 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06
 Received: 02/28/06

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB2645-01 (Outfall 005 - Water) - cont.									
Reporting Units: ug/l									
Aluminum	EPA 200.7	6C03084	40	50	780	1	03/03/06	03/04/06	
Antimony	EPA 200.8	6C02098	0.050	2.0	0.46	1	03/02/06	03/02/06	J
Arsenic	EPA 200.7	6C03084	4.4	5.0	6.5	1	03/03/06	03/04/06	
Beryllium	EPA 200.7	6C03084	0.90	2.0	ND	1	03/03/06	03/04/06	
Cadmium	EPA 200.8	6C02098	0.025	1.0	0.077	1	03/02/06	03/02/06	J, B
Chromium	EPA 200.7	6C03084	2.0	5.0	2.0	1	03/03/06	03/04/06	J, B
Copper	EPA 200.8	6C02098	0.25	2.0	2.3	1	03/02/06	03/02/06	
Lead	EPA 200.8	6C02098	0.040	1.0	0.50	1	03/02/06	03/02/06	J
Mercury	EPA 245.1	6C02097	0.050	0.20	ND	1	03/02/06	03/02/06	
Nickel	EPA 200.7	6C03084	2.0	10	ND	1	03/03/06	03/04/06	
Selenium	EPA 200.7	6C03084	8.0	10	ND	1	03/03/06	03/04/06	
Silver	EPA 200.7	6C03084	3.0	10	4.1	1	03/03/06	03/04/06	J
Thallium	EPA 200.8	6C02098	0.15	1.0	0.53	1	03/02/06	03/02/06	J
Vanadium	EPA 200.7	6C03084	3.0	10	3.6	1	03/03/06	03/04/06	J
Zinc	EPA 200.7	6C03084	15	20	ND	1	03/03/06	03/04/06	

Del Mar Analytical - Irvine
 Michele Chamberlin
 Project Manager

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MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06
Received: 02/28/06

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB2645-01 (Outfall 005 - Water) - cont.									
Reporting Units: mg/l									
Chloride	EPA 300.0	6B28141	1.5	5.0	43	10	02/28/06	03/01/06	
Nitrate/Nitrite-N	EPA 300.0	6B28141	0.80	1.5	40	10	02/28/06	03/01/06	
Oil & Grease	EPA 413.1	6C08046	0.90	4.8	ND	1	03/08/06	03/08/06	
Sulfate	EPA 300.0	6B28141	0.45	0.50	37	1	02/28/06	03/01/06	
Total Dissolved Solids	SM2540C	6C03069	10	10	500	1	03/03/06	03/03/06	
Total Suspended Solids	EPA 160.2	6C03103	10	10	ND	1	03/03/06	03/03/06	

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Michele Chamberlin
Project Manager

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MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06
Received: 02/28/06

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB2645-01 (Outfall 005 - Water) - cont.									
Reporting Units: ug/l									
Total Cyanide	EPA 335.2	6C02125	2.2	5.0	2.8	1	03/02/06	03/02/06	J
Perchlorate	EPA 314.0	6C03066	0.80	4.0	ND	1	03/03/06	03/03/06	

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Project Manager

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MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06
Received: 02/28/06

SHORT HOLD TIME DETAIL REPORT

	Hold Time (in days)	Date/Time Sampled	Date/Time Received	Date/Time Extracted	Date/Time Analyzed
Sample ID: Outfall 005 (IPB2645-01) - Water					
EPA 300.0	2	02/28/2006 07:25	02/28/2006 18:35	02/28/2006 23:30	03/01/2006 03:40
EPA 624	3	02/28/2006 07:25	02/28/2006 18:35	03/02/2006 00:00	03/03/2006 04:39
Sample ID: Trip Blank (IPB2645-02) - Water					
EPA 624	3	02/28/2006 15:45	02/28/2006 18:35	03/02/2006 00:00	03/03/2006 05:09

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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005
 Report Number: IPB2645

Sampled: 02/28/06
 Received: 02/28/06

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	Limit	RPD	RPD Limit	Data Qualifiers
Batch: 6C02019 Extracted: 03/02/06											
Blank Analyzed: 03/02/2006 (6C02019-BLK1)											
Benzene	ND	1.0	0.28	ug/l							
Bromodichloromethane	ND	2.0	0.30	ug/l							
Bromoform	ND	5.0	0.32	ug/l							
Bromomethane	ND	5.0	0.42	ug/l							
Carbon tetrachloride	ND	0.50	0.28	ug/l							
Chlorobenzene	ND	2.0	0.36	ug/l							
Chloroethane	ND	5.0	0.40	ug/l							
Chloroform	ND	2.0	0.33	ug/l							
Chloromethane	ND	5.0	0.30	ug/l							
Dibromochloromethane	ND	2.0	0.28	ug/l							
1,2-Dichlorobenzene	ND	2.0	0.32	ug/l							
1,3-Dichlorobenzene	ND	2.0	0.35	ug/l							
1,4-Dichlorobenzene	ND	2.0	0.37	ug/l							
1,1-Dichloroethane	ND	2.0	0.27	ug/l							
1,2-Dichloroethane	ND	0.50	0.28	ug/l							
1,1-Dichloroethene	ND	5.0	0.42	ug/l							
trans-1,2-Dichloroethene	ND	2.0	0.27	ug/l							
1,2-Dichloropropane	ND	2.0	0.35	ug/l							
cis-1,3-Dichloropropene	ND	2.0	0.22	ug/l							
trans-1,3-Dichloropropene	ND	2.0	0.32	ug/l							
Ethylbenzene	ND	2.0	0.25	ug/l							
Methylene chloride	1.16	5.0	0.70	ug/l							J
1,1,2,2-Tetrachloroethane	ND	2.0	0.24	ug/l							
Tetrachloroethene	ND	2.0	0.32	ug/l							
Toluene	ND	2.0	0.36	ug/l							
1,1,1-Trichloroethane	ND	2.0	0.30	ug/l							
1,1,2-Trichloroethane	ND	2.0	0.30	ug/l							
Trichloroethene	ND	2.0	0.26	ug/l							
Trichlorofluoromethane	ND	5.0	0.34	ug/l							
Vinyl chloride	ND	0.50	0.26	ug/l							
Xylenes, Total	ND	4.0	0.90	ug/l							
Trichlorotrifluoroethane (Freon 113)	ND	5.0	1.2	ug/l							
Surrogate: Dibromofluoromethane	27.6			ug/l	25.0		110	80-120			
Surrogate: Toluene-d8	27.2			ug/l	25.0		109	80-120			
Surrogate: 4-Bromofluorobenzene	24.1			ug/l	25.0		96	80-120			

Del Mar Analytical - Irvine
 Michele Chamberlin
 Project Manager

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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06

Received: 02/28/06

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 6C02019 Extracted: 03/02/06											
LCS Analyzed: 03/02/2006 (6C02019-BS1)											
Benzene	26.3	1.0	0.28	ug/l	25.0		105	65-120			
Bromodichloromethane	25.5	2.0	0.30	ug/l	25.0		102	65-135			
Bromoform	21.8	5.0	0.32	ug/l	25.0		87	50-130			
Bromomethane	23.1	5.0	0.42	ug/l	25.0		92	60-140			
Carbon tetrachloride	24.8	0.50	0.28	ug/l	25.0		99	65-140			
Chlorobenzene	26.0	2.0	0.36	ug/l	25.0		104	70-125			
Chloroethane	26.1	5.0	0.40	ug/l	25.0		104	55-140			
Chloroform	26.0	2.0	0.33	ug/l	25.0		104	65-130			
Chloromethane	23.7	5.0	0.30	ug/l	25.0		95	40-140			
Dibromochloromethane	25.8	2.0	0.28	ug/l	25.0		103	65-140			
1,2-Dichlorobenzene	27.1	2.0	0.32	ug/l	25.0		108	70-120			
1,3-Dichlorobenzene	24.9	2.0	0.35	ug/l	25.0		100	70-125			
1,4-Dichlorobenzene	24.3	2.0	0.37	ug/l	25.0		97	70-125			
1,1-Dichloroethane	26.0	2.0	0.27	ug/l	25.0		104	65-130			
1,2-Dichloroethane	26.0	0.50	0.28	ug/l	25.0		104	60-140			
1,1-Dichloroethene	28.5	5.0	0.42	ug/l	25.0		114	70-130			
trans-1,2-Dichloroethene	27.9	2.0	0.27	ug/l	25.0		112	65-130			
1,2-Dichloropropane	26.7	2.0	0.35	ug/l	25.0		107	65-125			
cis-1,3-Dichloropropene	26.2	2.0	0.22	ug/l	25.0		105	70-130			
trans-1,3-Dichloropropene	26.9	2.0	0.32	ug/l	25.0		108	65-130			
Ethylbenzene	26.1	2.0	0.25	ug/l	25.0		104	70-125			
Methylene chloride	28.2	5.0	0.70	ug/l	25.0		113	60-130			
1,1,2,2-Tetrachloroethane	36.9	2.0	0.24	ug/l	25.0		148	55-130			L
Tetrachloroethene	25.7	2.0	0.32	ug/l	25.0		103	65-125			
Toluene	25.6	2.0	0.36	ug/l	25.0		102	70-125			
1,1,1-Trichloroethane	23.6	2.0	0.30	ug/l	25.0		94	65-135			
1,1,2-Trichloroethane	29.4	2.0	0.30	ug/l	25.0		118	65-125			
Trichloroethene	26.7	2.0	0.26	ug/l	25.0		107	70-125			
Trichlorofluoromethane	23.0	5.0	0.34	ug/l	25.0		92	60-140			
Vinyl chloride	25.2	0.50	0.26	ug/l	25.0		101	50-130			
Surrogate: Dibromofluoromethane	27.8			ug/l	25.0		111	80-120			
Surrogate: Toluene-d8	27.5			ug/l	25.0		110	80-120			
Surrogate: 4-Bromofluorobenzene	27.0			ug/l	25.0		108	80-120			

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 Michele Chamberlin
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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06

Received: 02/28/06

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 6C02019 Extracted: 03/02/06											
Matrix Spike Analyzed: 03/02/2006 (6C02019-MS1)						Source: IPB2639-01					
Benzene	26.1	1.0	0.28	ug/l	25.0	ND	104	60-125			
Bromodichloromethane	25.1	2.0	0.30	ug/l	25.0	ND	100	65-135			
Bromoform	18.2	5.0	0.32	ug/l	25.0	ND	73	50-135			
Bromomethane	21.9	5.0	0.42	ug/l	25.0	ND	88	50-145			
Carbon tetrachloride	24.9	0.50	0.28	ug/l	25.0	ND	100	65-140			
Chlorobenzene	25.7	2.0	0.36	ug/l	25.0	ND	103	70-125			
Chloroethane	25.6	5.0	0.40	ug/l	25.0	ND	102	50-140			
Chloroform	25.6	2.0	0.33	ug/l	25.0	ND	102	65-135			
Chloromethane	23.5	5.0	0.30	ug/l	25.0	ND	94	35-140			
Dibromochloromethane	24.0	2.0	0.28	ug/l	25.0	ND	96	60-140			
1,2-Dichlorobenzene	25.9	2.0	0.32	ug/l	25.0	ND	104	70-125			
1,3-Dichlorobenzene	24.0	2.0	0.35	ug/l	25.0	ND	96	70-125			
1,4-Dichlorobenzene	23.4	2.0	0.37	ug/l	25.0	ND	94	70-125			
1,1-Dichloroethane	25.6	2.0	0.27	ug/l	25.0	ND	102	60-130			
1,2-Dichloroethane	25.8	0.50	0.28	ug/l	25.0	ND	103	60-140			
1,1-Dichloroethene	27.2	5.0	0.42	ug/l	25.0	ND	109	60-135			
trans-1,2-Dichloroethene	26.6	2.0	0.27	ug/l	25.0	ND	106	60-135			
1,2-Dichloropropane	26.6	2.0	0.35	ug/l	25.0	ND	106	60-125			
cis-1,3-Dichloropropene	25.8	2.0	0.22	ug/l	25.0	ND	103	65-135			
trans-1,3-Dichloropropene	26.4	2.0	0.32	ug/l	25.0	ND	106	65-140			
Ethylbenzene	25.7	2.0	0.25	ug/l	25.0	ND	103	65-130			
Methylene chloride	25.9	5.0	0.70	ug/l	25.0	ND	104	55-130			
1,1,2,2-Tetrachloroethane	35.2	2.0	0.24	ug/l	25.0	ND	141	55-140			MI
Tetrachloroethene	25.1	2.0	0.32	ug/l	25.0	ND	100	60-130			
Toluene	25.5	2.0	0.36	ug/l	25.0	ND	102	65-125			
1,1,1-Trichloroethane	23.2	2.0	0.30	ug/l	25.0	ND	93	65-140			
1,1,2-Trichloroethane	28.0	2.0	0.30	ug/l	25.0	ND	112	60-130			
Trichloroethene	28.2	2.0	0.26	ug/l	25.0	2.4	103	60-125			
Trichlorofluoromethane	22.3	5.0	0.34	ug/l	25.0	ND	89	55-145			
Vinyl chloride	23.9	0.50	0.26	ug/l	25.0	ND	96	40-135			
Surrogate: Dibromofluoromethane	28.1			ug/l	25.0		112	80-120			
Surrogate: Toluene-d8	28.1			ug/l	25.0		112	80-120			
Surrogate: 4-Bromofluorobenzene	26.7			ug/l	25.0		107	80-120			

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 Michele Chamberlin
 Project Manager

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MWH-Pasadena/Boeing 300 North Lake Avenue, Suite 1200 Pasadena, CA 91101 Attention: Bronwyn Kelly	Project ID: Annual Outfall 005 Report Number: IPB2645	Sampled: 02/28/06 Received: 02/28/06
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METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 6C02019 Extracted: 03/02/06											
Matrix Spike Dup Analyzed: 03/02/2006 (6C02019-MSD1)						Source: IPB2639-01					
Benzene	26.7	1.0	0.28	ug/l	25.0	ND	107	60-125	2	20	
Bromodichloromethane	24.9	2.0	0.30	ug/l	25.0	ND	100	65-135	1	20	
Bromoform	16.4	5.0	0.32	ug/l	25.0	ND	66	50-135	10	25	
Bromomethane	25.1	5.0	0.42	ug/l	25.0	ND	100	50-145	14	25	
Carbon tetrachloride	26.4	0.50	0.28	ug/l	25.0	ND	106	65-140	6	25	
Chlorobenzene	26.2	2.0	0.36	ug/l	25.0	ND	105	70-125	2	20	
Chloroethane	28.5	5.0	0.40	ug/l	25.0	ND	114	50-140	11	25	
Chloroform	26.8	2.0	0.33	ug/l	25.0	ND	107	65-135	5	20	
Chloromethane	25.4	5.0	0.30	ug/l	25.0	ND	102	35-140	8	25	
Dibromochloromethane	22.0	2.0	0.28	ug/l	25.0	ND	88	60-140	9	25	
1,2-Dichlorobenzene	25.9	2.0	0.32	ug/l	25.0	ND	104	70-125	0	20	
1,3-Dichlorobenzene	25.2	2.0	0.35	ug/l	25.0	ND	101	70-125	5	20	
1,4-Dichlorobenzene	24.6	2.0	0.37	ug/l	25.0	ND	98	70-125	5	20	
1,1-Dichloroethane	26.6	2.0	0.27	ug/l	25.0	ND	106	60-130	4	20	
1,2-Dichloroethane	23.0	0.50	0.28	ug/l	25.0	ND	92	60-140	11	20	
1,1-Dichloroethene	29.2	5.0	0.42	ug/l	25.0	ND	117	60-135	7	20	
trans-1,2-Dichloroethene	28.2	2.0	0.27	ug/l	25.0	ND	113	60-135	6	20	
1,2-Dichloropropane	26.0	2.0	0.35	ug/l	25.0	ND	104	60-125	2	20	
cis-1,3-Dichloropropene	24.5	2.0	0.22	ug/l	25.0	ND	98	65-135	5	20	
trans-1,3-Dichloropropene	23.0	2.0	0.32	ug/l	25.0	ND	92	65-140	14	25	
Ethylbenzene	27.0	2.0	0.25	ug/l	25.0	ND	108	65-130	5	20	
Methylene chloride	26.8	5.0	0.70	ug/l	25.0	ND	107	55-130	3	20	
1,1,2,2-Tetrachloroethane	25.7	2.0	0.24	ug/l	25.0	ND	103	55-140	31	30	R-3
Tetrachloroethene	26.4	2.0	0.32	ug/l	25.0	ND	106	60-130	5	20	
Toluene	26.5	2.0	0.36	ug/l	25.0	ND	106	65-125	4	20	
1,1,1-Trichloroethane	24.3	2.0	0.30	ug/l	25.0	ND	97	65-140	5	20	
1,1,2-Trichloroethane	23.6	2.0	0.30	ug/l	25.0	ND	94	60-130	17	25	
Trichloroethene	29.1	2.0	0.26	ug/l	25.0	2.4	107	60-125	3	20	
Trichlorofluoromethane	24.3	5.0	0.34	ug/l	25.0	ND	97	55-145	9	25	
Vinyl chloride	25.6	0.50	0.26	ug/l	25.0	ND	102	40-135	7	30	
Surrogate: Dibromofluoromethane	27.7			ug/l	25.0		111	80-120			
Surrogate: Toluene-d8	27.5			ug/l	25.0		110	80-120			
Surrogate: 4-Bromofluorobenzene	26.4			ug/l	25.0		106	80-120			

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 Michele Chamberlin
 Project Manager



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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06

Received: 02/28/06

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 6C09004 Extracted: 03/09/06											
Blank Analyzed: 03/09/2006 (6C09004-BLK1)											
Benzene	ND	1.0	0.28	ug/l							
Bromodichloromethane	ND	2.0	0.30	ug/l							
Bromoform	ND	5.0	0.32	ug/l							
Bromomethane	ND	5.0	0.42	ug/l							
Carbon tetrachloride	ND	0.50	0.28	ug/l							
Chlorobenzene	ND	2.0	0.36	ug/l							
Chloroethane	ND	5.0	0.40	ug/l							
Chloroform	ND	2.0	0.33	ug/l							
Chloromethane	ND	5.0	0.30	ug/l							
Dibromochloromethane	ND	2.0	0.28	ug/l							
1,2-Dichlorobenzene	ND	2.0	0.32	ug/l							
1,3-Dichlorobenzene	ND	2.0	0.35	ug/l							
1,4-Dichlorobenzene	ND	2.0	0.37	ug/l							
1,1-Dichloroethane	ND	2.0	0.27	ug/l							
1,2-Dichloroethane	ND	0.50	0.28	ug/l							
1,1-Dichloroethene	ND	5.0	0.42	ug/l							
trans-1,2-Dichloroethene	ND	2.0	0.27	ug/l							
1,2-Dichloropropane	ND	2.0	0.35	ug/l							
cis-1,3-Dichloropropene	ND	2.0	0.22	ug/l							
trans-1,3-Dichloropropene	ND	2.0	0.32	ug/l							
Ethylbenzene	ND	2.0	0.25	ug/l							
Methylene chloride	ND	5.0	0.70	ug/l							
1,1,2,2-Tetrachloroethane	ND	2.0	0.24	ug/l							
Tetrachloroethene	ND	2.0	0.32	ug/l							
Toluene	ND	2.0	0.36	ug/l							
1,1,1-Trichloroethane	ND	2.0	0.30	ug/l							
1,1,2-Trichloroethane	ND	2.0	0.30	ug/l							
Trichloroethene	ND	2.0	0.26	ug/l							
Trichlorofluoromethane	ND	5.0	0.34	ug/l							
Vinyl chloride	ND	0.50	0.26	ug/l							
Xylenes, Total	ND	4.0	0.90	ug/l							
Trichlorotrifluoroethane (Freon 113)	ND	5.0	1.2	ug/l							
Surrogate: Dibromofluoromethane	29.0			ug/l	25.0		116	80-120			
Surrogate: Toluene-d8	27.1			ug/l	25.0		108	80-120			
Surrogate: 4-Bromofluorobenzene	27.0			ug/l	25.0		108	80-120			

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 Michele Chamberlin
 Project Manager

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MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06
Received: 02/28/06

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 6C09004 Extracted: 03/09/06											
LCS Analyzed: 03/09/2006 (6C09004-BS1)											
Benzene	25.0	1.0	0.28	ug/l	25.0		100	65-120			
Bromodichloromethane	26.7	2.0	0.30	ug/l	25.0		107	65-135			
Bromoform	23.3	5.0	0.32	ug/l	25.0		93	50-130			
Bromomethane	28.1	5.0	0.42	ug/l	25.0		112	60-140			
Carbon tetrachloride	26.2	0.50	0.28	ug/l	25.0		105	65-140			
Chlorobenzene	25.2	2.0	0.36	ug/l	25.0		101	70-125			
Chloroethane	26.8	5.0	0.40	ug/l	25.0		107	55-140			
Chloroform	26.1	2.0	0.33	ug/l	25.0		104	65-130			
Chloromethane	24.0	5.0	0.30	ug/l	25.0		96	40-140			
Dibromochloromethane	25.8	2.0	0.28	ug/l	25.0		103	65-140			
1,2-Dichlorobenzene	25.3	2.0	0.32	ug/l	25.0		101	70-120			
1,3-Dichlorobenzene	24.6	2.0	0.35	ug/l	25.0		98	70-125			
1,4-Dichlorobenzene	24.1	2.0	0.37	ug/l	25.0		96	70-125			
1,1-Dichloroethane	26.1	2.0	0.27	ug/l	25.0		104	65-130			
1,2-Dichloroethane	26.8	0.50	0.28	ug/l	25.0		107	60-140			
1,1-Dichloroethene	26.5	5.0	0.42	ug/l	25.0		106	70-130			
trans-1,2-Dichloroethene	26.6	2.0	0.27	ug/l	25.0		106	65-130			
1,2-Dichloropropane	25.3	2.0	0.35	ug/l	25.0		101	65-125			
cis-1,3-Dichloropropene	27.0	2.0	0.22	ug/l	25.0		108	70-130			
trans-1,3-Dichloropropene	27.6	2.0	0.32	ug/l	25.0		110	65-130			
Ethylbenzene	25.5	2.0	0.25	ug/l	25.0		102	70-125			
Methylene chloride	24.5	5.0	0.70	ug/l	25.0		98	60-130			
1,1,2,2-Tetrachloroethane	25.2	2.0	0.24	ug/l	25.0		101	55-130			
Tetrachloroethene	26.6	2.0	0.32	ug/l	25.0		106	65-125			
Toluene	25.4	2.0	0.36	ug/l	25.0		102	70-125			
1,1,1-Trichloroethane	26.3	2.0	0.30	ug/l	25.0		105	65-135			
1,1,2-Trichloroethane	26.0	2.0	0.30	ug/l	25.0		104	65-125			
Trichloroethene	25.3	2.0	0.26	ug/l	25.0		101	70-125			
Trichlorofluoromethane	25.4	5.0	0.34	ug/l	25.0		102	60-140			
Vinyl chloride	24.3	0.50	0.26	ug/l	25.0		97	50-130			
Surrogate: Dibromofluoromethane	28.3			ug/l	25.0		113	80-120			
Surrogate: Toluene-d8	27.5			ug/l	25.0		110	80-120			
Surrogate: 4-Bromofluorobenzene	27.6			ug/l	25.0		110	80-120			

Del Mar Analytical - Irvine
Michele Chamberlin
Project Manager

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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06

Received: 02/28/06

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 6C09004 Extracted: 03/09/06											
Matrix Spike Analyzed: 03/09/2006 (6C09004-MS1)						Source: IPC0267-10					
Benzene	37.4	1.0	0.28	ug/l	25.0	16	86	60-125			
Bromodichloromethane	25.2	2.0	0.30	ug/l	25.0	ND	101	65-135			
Bromoform	15.8	5.0	0.32	ug/l	25.0	ND	63	50-135			
Bromomethane	30.3	5.0	0.42	ug/l	25.0	ND	121	50-145			
Carbon tetrachloride	28.7	0.50	0.28	ug/l	25.0	ND	115	65-140			
Chlorobenzene	27.7	2.0	0.36	ug/l	25.0	ND	111	70-125			
Chloroethane	29.2	5.0	0.40	ug/l	25.0	ND	117	50-140			
Chloroform	27.6	2.0	0.33	ug/l	25.0	ND	110	65-135			
Chloromethane	25.6	5.0	0.30	ug/l	25.0	ND	102	35-140			
Dibromochloromethane	21.5	2.0	0.28	ug/l	25.0	ND	86	60-140			
1,2-Dichlorobenzene	25.8	2.0	0.32	ug/l	25.0	ND	103	70-125			
1,3-Dichlorobenzene	27.8	2.0	0.35	ug/l	25.0	ND	111	70-125			
1,4-Dichlorobenzene	26.8	2.0	0.37	ug/l	25.0	ND	107	70-125			
1,1-Dichloroethane	27.9	2.0	0.27	ug/l	25.0	ND	112	60-130			
1,2-Dichloroethane	22.0	0.50	0.28	ug/l	25.0	ND	88	60-140			
1,1-Dichloroethene	26.7	5.0	0.42	ug/l	25.0	ND	107	60-135			
trans-1,2-Dichloroethene	25.3	2.0	0.27	ug/l	25.0	ND	101	60-135			
1,2-Dichloropropane	25.3	2.0	0.35	ug/l	25.0	ND	101	60-125			
cis-1,3-Dichloropropene	24.3	2.0	0.22	ug/l	25.0	ND	97	65-135			
trans-1,3-Dichloropropene	20.8	2.0	0.32	ug/l	25.0	ND	83	65-140			
Ethylbenzene	30.8	2.0	0.25	ug/l	25.0	1.4	118	65-130			
Methylene chloride	23.4	5.0	0.70	ug/l	25.0	ND	94	55-130			
1,1,2,2-Tetrachloroethane	19.3	2.0	0.24	ug/l	25.0	ND	77	55-140			
Tetrachloroethene	31.2	2.0	0.32	ug/l	25.0	ND	125	60-130			
Toluene	29.6	2.0	0.36	ug/l	25.0	2.5	108	65-125			
1,1,1-Trichloroethane	29.8	2.0	0.30	ug/l	25.0	ND	119	65-140			
1,1,2-Trichloroethane	20.7	2.0	0.30	ug/l	25.0	ND	83	60-130			
Trichloroethene	27.1	2.0	0.26	ug/l	25.0	ND	108	60-125			
Trichlorofluoromethane	28.2	5.0	0.34	ug/l	25.0	ND	113	55-145			
Vinyl chloride	28.4	0.50	0.26	ug/l	25.0	ND	114	40-135			
Surrogate: Dibromofluoromethane	25.8			ug/l	25.0		103	80-120			
Surrogate: Toluene-d8	27.2			ug/l	25.0		109	80-120			
Surrogate: 4-Bromofluorobenzene	25.7			ug/l	25.0		103	80-120			

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 Project Manager



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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06
 Received: 02/28/06

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 6C09004 Extracted: 03/09/06											
Matrix Spike Dup Analyzed: 03/09/2006 (6C09004-MSD1)						Source: IPC0267-10					
Benzene	38.7	1.0	0.28	ug/l	25.0	16	91	60-125	3	20	
Bromodichloromethane	29.6	2.0	0.30	ug/l	25.0	ND	118	65-135	16	20	
Bromoform	26.1	5.0	0.32	ug/l	25.0	ND	104	50-135	49	25	R
Bromomethane	31.7	5.0	0.42	ug/l	25.0	ND	127	50-145	5	25	
Carbon tetrachloride	27.7	0.50	0.28	ug/l	25.0	ND	111	65-140	4	25	
Chlorobenzene	28.5	2.0	0.36	ug/l	25.0	ND	114	70-125	3	20	
Chloroethane	30.8	5.0	0.40	ug/l	25.0	ND	123	50-140	5	25	
Chloroform	29.6	2.0	0.33	ug/l	25.0	ND	118	65-135	7	20	
Chloromethane	27.3	5.0	0.30	ug/l	25.0	ND	109	35-140	6	25	
Dibromochloromethane	28.8	2.0	0.28	ug/l	25.0	ND	115	60-140	29	25	R
1,2-Dichlorobenzene	28.5	2.0	0.32	ug/l	25.0	ND	114	70-125	10	20	
1,3-Dichlorobenzene	27.6	2.0	0.35	ug/l	25.0	ND	110	70-125	1	20	
1,4-Dichlorobenzene	27.2	2.0	0.37	ug/l	25.0	ND	109	70-125	1	20	
1,1-Dichloroethane	29.9	2.0	0.27	ug/l	25.0	ND	120	60-130	7	20	
1,2-Dichloroethane	29.5	0.50	0.28	ug/l	25.0	ND	118	60-140	29	20	R
1,1-Dichloroethene	28.7	5.0	0.42	ug/l	25.0	ND	115	60-135	7	20	
trans-1,2-Dichloroethene	26.4	2.0	0.27	ug/l	25.0	ND	106	60-135	4	20	
1,2-Dichloropropane	29.1	2.0	0.35	ug/l	25.0	ND	116	60-125	14	20	
cis-1,3-Dichloropropene	30.3	2.0	0.22	ug/l	25.0	ND	121	65-135	22	20	R
trans-1,3-Dichloropropene	29.8	2.0	0.32	ug/l	25.0	ND	119	65-140	36	25	R
Ethylbenzene	29.7	2.0	0.25	ug/l	25.0	1.4	113	65-130	4	20	
Methylene chloride	29.4	5.0	0.70	ug/l	25.0	ND	118	55-130	23	20	R
1,1,2,2-Tetrachloroethane	30.8	2.0	0.24	ug/l	25.0	ND	123	55-140	46	30	R
Tetrachloroethene	29.3	2.0	0.32	ug/l	25.0	ND	117	60-130	6	20	
Toluene	30.6	2.0	0.36	ug/l	25.0	2.5	112	65-125	3	20	
1,1,1-Trichloroethane	29.7	2.0	0.30	ug/l	25.0	ND	119	65-140	0	20	
1,1,2-Trichloroethane	31.3	2.0	0.30	ug/l	25.0	ND	125	60-130	41	25	R
Trichloroethene	27.4	2.0	0.26	ug/l	25.0	ND	110	60-125	1	20	
Trichlorofluoromethane	27.9	5.0	0.34	ug/l	25.0	ND	112	55-145	1	25	
Vinyl chloride	29.6	0.50	0.26	ug/l	25.0	ND	118	40-135	4	30	
Surrogate: Dibromofluoromethane	28.6			ug/l	25.0		114	80-120			
Surrogate: Toluene-d8	27.2			ug/l	25.0		109	80-120			
Surrogate: 4-Bromofluorobenzene	27.6			ug/l	25.0		110	80-120			

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MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 005
Report Number: IPB2645

Sampled: 02/28/06
Received: 02/28/06

METHOD BLANK/QC DATA

PURGEABLES-- GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 6C02019 Extracted: 03/02/06											
Blank Analyzed: 03/02/2006 (6C02019-BLK1)											
Acrolein	ND	50	4.6	ug/l							
Acrylonitrile	ND	50	0.70	ug/l							
2-Chloroethyl vinyl ether	ND	5.0	1.8	ug/l							
Surrogate: Dibromofluoromethane	27.6			ug/l	25.0		110	80-120			
Surrogate: Toluene-d8	27.2			ug/l	25.0		109	80-120			
Surrogate: 4-Bromofluorobenzene	24.1			ug/l	25.0		96	80-120			
LCS Analyzed: 03/02/2006 (6C02019-BS1)											
2-Chloroethyl vinyl ether	17.8	5.0	1.8	ug/l	25.0		71	25-170			
Surrogate: Dibromofluoromethane	27.8			ug/l	25.0		111	80-120			
Surrogate: Toluene-d8	27.5			ug/l	25.0		110	80-120			
Surrogate: 4-Bromofluorobenzene	27.0			ug/l	25.0		108	80-120			
Matrix Spike Analyzed: 03/02/2006 (6C02019-MS1)						Source: IPB2639-01					
2-Chloroethyl vinyl ether	21.2	5.0	1.8	ug/l	25.0	ND	85	25-170			
Surrogate: Dibromofluoromethane	28.1			ug/l	25.0		112	80-120			
Surrogate: Toluene-d8	28.1			ug/l	25.0		112	80-120			
Surrogate: 4-Bromofluorobenzene	26.7			ug/l	25.0		107	80-120			
Matrix Spike Dup Analyzed: 03/02/2006 (6C02019-MSD1)						Source: IPB2639-01					
2-Chloroethyl vinyl ether	8.66	5.0	1.8	ug/l	25.0	ND	35	25-170	84	25	R
Surrogate: Dibromofluoromethane	27.7			ug/l	25.0		111	80-120			
Surrogate: Toluene-d8	27.5			ug/l	25.0		110	80-120			
Surrogate: 4-Bromofluorobenzene	26.4			ug/l	25.0		106	80-120			

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Michele Chamberlin
Project Manager

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MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 005
Report Number: IPB2645

Sampled: 02/28/06
Received: 02/28/06

METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Data Qualifiers
Batch: 6C06054 Extracted: 03/06/06											
Blank Analyzed: 03/08/2006 (6C06054-BLK1)											
Acenaphthene	ND	10	4.3	ug/l							
Acenaphthylene	ND	10	3.2	ug/l							
Aniline	ND	10	2.9	ug/l							
Anthracene	ND	10	3.2	ug/l							
Benzidine	ND	20	5.2	ug/l							
Benzoic acid	ND	20	2.6	ug/l							
Benzo(a)anthracene	ND	10	3.7	ug/l							
Benzo(b)fluoranthene	ND	10	2.7	ug/l							
Benzo(k)fluoranthene	ND	10	3.4	ug/l							
Benzo(g,h,i)perylene	ND	10	5.3	ug/l							
Benzo(a)pyrene	ND	10	3.5	ug/l							
Benzyl alcohol	ND	20	2.5	ug/l							
Bis(2-chloroethoxy)methane	ND	10	3.9	ug/l							
Bis(2-chloroethyl)ether	ND	10	4.4	ug/l							
Bis(2-chloroisopropyl)ether	ND	10	4.6	ug/l							
Bis(2-ethylhexyl)phthalate	ND	50	5.2	ug/l							
4-Bromophenyl phenyl ether	ND	10	4.6	ug/l							
Butyl benzyl phthalate	ND	20	3.5	ug/l							
4-Chloroaniline	ND	10	6.0	ug/l							
2-Chloronaphthalene	ND	10	4.0	ug/l							
4-Chloro-3-methylphenol	ND	20	3.5	ug/l							
2-Chlorophenol	ND	10	4.2	ug/l							
4-Chlorophenyl phenyl ether	ND	10	3.0	ug/l							
Chrysene	ND	10	2.8	ug/l							
Dibenz(a,h)anthracene	ND	20	4.7	ug/l							
Dibenzofuran	ND	10	2.6	ug/l							
Di-n-butyl phthalate	ND	20	2.8	ug/l							
1,3-Dichlorobenzene	ND	10	4.1	ug/l							
1,4-Dichlorobenzene	ND	10	3.9	ug/l							
1,2-Dichlorobenzene	ND	10	4.5	ug/l							
3,3-Dichlorobenzidine	ND	20	11	ug/l							
2,4-Dichlorophenol	ND	10	4.1	ug/l							
Diethyl phthalate	ND	10	3.1	ug/l							
2,4-Dimethylphenol	ND	20	4.4	ug/l							
Dimethyl phthalate	ND	10	3.6	ug/l							

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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06
 Received: 02/28/06

METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 6C06054 Extracted: 03/06/06											
Blank Analyzed: 03/08/2006 (6C06054-BLK1)											
4,6-Dinitro-2-methylphenol	ND	20	5.1	ug/l							
2,4-Dinitrophenol	ND	20	5.3	ug/l							
2,4-Dinitrotoluene	ND	10	4.2	ug/l							
2,6-Dinitrotoluene	ND	10	3.2	ug/l							
Di-n-octyl phthalate	ND	20	4.7	ug/l							
Fluoranthene	ND	10	4.2	ug/l							
Fluorene	ND	10	3.9	ug/l							
Hexachlorobenzene	ND	10	4.8	ug/l							
Hexachlorobutadiene	ND	10	4.2	ug/l							
Hexachlorocyclopentadiene	ND	20	3.4	ug/l							
Hexachloroethane	ND	10	4.2	ug/l							
Indeno(1,2,3-cd)pyrene	ND	20	5.4	ug/l							
Isophorone	ND	10	3.7	ug/l							
2-Methylnaphthalene	ND	10	3.0	ug/l							
2-Methylphenol	ND	10	3.7	ug/l							
4-Methylphenol	ND	10	3.8	ug/l							
Naphthalene	ND	10	4.5	ug/l							
2-Nitroaniline	ND	20	3.9	ug/l							
3-Nitroaniline	ND	20	4.5	ug/l							
4-Nitroaniline	ND	20	4.9	ug/l							
Nitrobenzene	ND	20	4.2	ug/l							
2-Nitrophenol	ND	10	4.2	ug/l							
4-Nitrophenol	ND	20	6.6	ug/l							
N-Nitrosodiphenylamine	ND	10	4.0	ug/l							
N-Nitroso-di-n-propylamine	ND	10	3.6	ug/l							
Pentachlorophenol	ND	20	4.0	ug/l							
Phenanthrene	ND	10	3.3	ug/l							
Phenol	ND	10	4.0	ug/l							
Pyrene	ND	10	3.9	ug/l							
1,2,4-Trichlorobenzene	ND	10	4.4	ug/l							
2,4,5-Trichlorophenol	ND	20	3.6	ug/l							
2,4,6-Trichlorophenol	ND	20	4.1	ug/l							
1,2-Diphenylhydrazine/Azobenzene	ND	20	5.0	ug/l							
N-Nitrosodimethylamine	ND	20	3.7	ug/l							
Surrogate: 2-Fluorophenol	127			ug/l	200		64	30-120			

Del Mar Analytical - Irvine
 Michele Chamberlin
 Project Manager

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2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06
Received: 02/28/06

METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 6C06054 Extracted: 03/06/06											
Blank Analyzed: 03/08/2006 (6C06054-BLK1)											
Surrogate: Phenol-d6	137			ug/l	200		68	35-120			
Surrogate: 2,4,6-Tribromophenol	173			ug/l	200		86	45-120			
Surrogate: Nitrobenzene-d5	67.6			ug/l	100		68	45-120			
Surrogate: 2-Fluorobiphenyl	70.6			ug/l	100		71	45-120			
Surrogate: Terphenyl-d14	87.7			ug/l	100		88	45-120			
LCS Analyzed: 03/08/2006 (6C06054-BS1)											
Acenaphthene	81.1	10	4.3	ug/l	100		81	55-120			M-NR1
Acenaphthylene	85.5	10	3.2	ug/l	100		86	55-120			
Aniline	73.2	10	2.9	ug/l	100		73	35-120			
Anthracene	89.9	10	3.2	ug/l	100		90	55-120			
Benzidine	134	20	5.2	ug/l	100		134	20-160			
Benzoic acid	69.1	20	2.6	ug/l	100		69	35-120			
Benzo(a)anthracene	88.6	10	3.7	ug/l	100		89	60-120			
Benzo(b)fluoranthene	101	10	2.7	ug/l	100		101	50-120			
Benzo(k)fluoranthene	101	10	3.4	ug/l	100		101	50-120			
Benzo(g,h,i)perylene	112	10	5.3	ug/l	100		112	40-125			
Benzo(a)pyrene	101	10	3.5	ug/l	100		101	55-120			
Benzyl alcohol	74.1	20	2.5	ug/l	100		74	45-120			
Bis(2-chloroethoxy)methane	75.3	10	3.9	ug/l	100		75	55-120			
Bis(2-chloroethyl)ether	70.4	10	4.4	ug/l	100		70	50-120			
Bis(2-chloroisopropyl)ether	70.1	10	4.6	ug/l	100		70	45-120			
Bis(2-ethylhexyl)phthalate	87.5	50	5.2	ug/l	100		88	60-130			
4-Bromophenyl phenyl ether	87.5	10	4.6	ug/l	100		88	50-120			
Butyl benzyl phthalate	83.1	20	3.5	ug/l	100		83	55-125			
4-Chloroaniline	78.9	10	6.0	ug/l	100		79	50-120			
2-Chloronaphthalene	81.7	10	4.0	ug/l	100		82	55-120			
4-Chloro-3-methylphenol	77.1	20	3.5	ug/l	100		77	60-120			
2-Chlorophenol	71.6	10	4.2	ug/l	100		72	45-120			
4-Chlorophenyl phenyl ether	86.9	10	3.0	ug/l	100		87	55-120			
Chrysene	90.5	10	2.8	ug/l	100		90	60-120			
Dibenz(a,h)anthracene	112	20	4.7	ug/l	100		112	45-130			
Dibenzofuran	80.6	10	2.6	ug/l	100		81	60-120			
Di-n-butyl phthalate	88.2	20	2.8	ug/l	100		88	55-125			
1,3-Dichlorobenzene	55.9	10	4.1	ug/l	100		56	35-120			
1,4-Dichlorobenzene	57.1	10	3.9	ug/l	100		57	35-120			

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Project Manager

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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005
 Report Number: IPB2645

Sampled: 02/28/06
 Received: 02/28/06

METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Data Qualifiers
Batch: 6C06054 Extracted: 03/06/06											
LCS Analyzed: 03/08/2006 (6C06054-BS1)											
1,2-Dichlorobenzene	61.1	10	4.5	ug/l	100	61	35-120				M-NR1
3,3-Dichlorobenzidine	105	20	11	ug/l	100	105	45-130				
2,4-Dichlorophenol	78.4	10	4.1	ug/l	100	78	55-120				
Diethyl phthalate	80.7	10	3.1	ug/l	100	81	55-120				
2,4-Dimethylphenol	60.1	20	4.4	ug/l	100	60	30-120				
Dimethyl phthalate	51.4	10	3.6	ug/l	100	51	30-120				
4,6-Dinitro-2-methylphenol	83.2	20	5.1	ug/l	100	83	50-120				
2,4-Dinitrophenol	75.0	20	5.3	ug/l	100	75	40-120				
2,4-Dinitrotoluene	82.5	10	4.2	ug/l	100	82	60-120				
2,6-Dinitrotoluene	81.0	10	3.2	ug/l	100	81	60-120				
Di-n-octyl phthalate	76.5	20	4.7	ug/l	100	76	60-130				
Fluoranthene	88.2	10	4.2	ug/l	100	88	55-120				
Fluorene	81.1	10	3.9	ug/l	100	81	60-120				
Hexachlorobenzene	96.4	10	4.8	ug/l	100	96	50-120				
Hexachlorobutadiene	71.6	10	4.2	ug/l	100	72	40-120				
Hexachlorocyclopentadiene	79.5	20	3.4	ug/l	100	80	15-120				
Hexachloroethane	57.1	10	4.2	ug/l	100	57	35-120				
Indeno(1,2,3-cd)pyrene	104	20	5.4	ug/l	100	104	40-130				
Isophorone	71.9	10	3.7	ug/l	100	72	50-120				
2-Methylnaphthalene	76.2	10	3.0	ug/l	100	76	50-120				
2-Methylphenol	72.8	10	3.7	ug/l	100	73	45-120				
4-Methylphenol	75.4	10	3.8	ug/l	100	75	45-120				
Naphthalene	74.5	10	4.5	ug/l	100	74	50-120				
2-Nitroaniline	80.0	20	3.9	ug/l	100	80	60-120				
3-Nitroaniline	81.3	20	4.5	ug/l	100	81	55-120				
4-Nitroaniline	85.4	20	4.9	ug/l	100	85	50-125				
Nitrobenzene	70.7	20	4.2	ug/l	100	71	50-120				
2-Nitrophenol	74.0	10	4.2	ug/l	100	74	55-120				
4-Nitrophenol	80.1	20	6.6	ug/l	100	80	45-120				
N-Nitrosodiphenylamine	82.7	10	4.0	ug/l	100	83	55-120				
N-Nitroso-di-n-propylamine	74.1	10	3.6	ug/l	100	74	45-120				
Pentachlorophenol	99.9	20	4.0	ug/l	100	100	50-120				
Phenanthrene	88.0	10	3.3	ug/l	100	88	55-120				
Phenol	69.7	10	4.0	ug/l	100	70	45-120				
Pyrene	88.2	10	3.9	ug/l	100	88	50-120				

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 Project Manager

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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06

Received: 02/28/06

METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 6C06054 Extracted: 03/06/06											
LCS Analyzed: 03/08/2006 (6C06054-BS1)											M-NR1
1,2,4-Trichlorobenzene	70.2	10	4.4	ug/l	100		70	45-120			
2,4,5-Trichlorophenol	82.2	20	3.6	ug/l	100		82	60-120			
2,4,6-Trichlorophenol	84.5	20	4.1	ug/l	100		84	60-120			
1,2-Diphenylhydrazine/Azobenzene	76.8	20	5.0	ug/l	100		77	60-120			
N-Nitrosodimethylamine	66.7	20	3.7	ug/l	100		67	40-120			
Surrogate: 2-Fluorophenol	120			ug/l	200		60	30-120			
Surrogate: Phenol-d6	136			ug/l	200		68	35-120			
Surrogate: 2,4,6-Tribromophenol	188			ug/l	200		94	45-120			
Surrogate: Nitrobenzene-d5	69.1			ug/l	100		69	45-120			
Surrogate: 2-Fluorobiphenyl	80.3			ug/l	100		80	45-120			
Surrogate: Terphenyl-d14	86.9			ug/l	100		87	45-120			
LCS Dup Analyzed: 03/08/2006 (6C06054-BSD1)											
Acenaphthene	69.9	10	4.3	ug/l	100		70	55-120	15	20	
Acenaphthylene	73.7	10	3.2	ug/l	100		74	55-120	15	20	
Aniline	59.9	10	2.9	ug/l	100		60	35-120	20	25	
Anthracene	75.2	10	3.2	ug/l	100		75	55-120	18	20	
Benzidine	73.2	20	5.2	ug/l	100		73	20-160	59	35	R-7
Benzoic acid	85.7	20	2.6	ug/l	100		86	35-120	21	30	
Benzo(a)anthracene	75.5	10	3.7	ug/l	100		76	60-120	16	20	
Benzo(b)fluoranthene	89.7	10	2.7	ug/l	100		90	50-120	12	25	
Benzo(k)fluoranthene	86.4	10	3.4	ug/l	100		86	50-120	16	20	
Benzo(g,h,i)perylene	88.0	10	5.3	ug/l	100		88	40-125	24	25	
Benzo(a)pyrene	87.5	10	3.5	ug/l	100		88	55-120	14	25	
Benzyl alcohol	61.0	20	2.5	ug/l	100		61	45-120	19	20	
Bis(2-chloroethoxy)methane	62.7	10	3.9	ug/l	100		63	55-120	18	20	
Bis(2-chloroethyl)ether	57.5	10	4.4	ug/l	100		58	50-120	20	20	
Bis(2-chloroisopropyl)ether	58.8	10	4.6	ug/l	100		59	45-120	18	20	
Bis(2-ethylhexyl)phthalate	70.7	50	5.2	ug/l	100		71	60-130	21	20	R-7
4-Bromophenyl phenyl ether	72.0	10	4.6	ug/l	100		72	50-120	19	25	
Butyl benzyl phthalate	65.7	20	3.5	ug/l	100		66	55-125	23	20	R-7
4-Chloroaniline	65.1	10	6.0	ug/l	100		65	50-120	19	25	
2-Chloronaphthalene	70.4	10	4.0	ug/l	100		70	55-120	15	20	
4-Chloro-3-methylphenol	68.0	20	3.5	ug/l	100		68	60-120	13	25	
2-Chlorophenol	71.7	10	4.2	ug/l	100		72	45-120	0	25	
4-Chlorophenyl phenyl ether	73.8	10	3.0	ug/l	100		74	55-120	16	20	

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 Michele Chamberlin
 Project Manager

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MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06

Received: 02/28/06

METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 6C06054 Extracted: 03/06/06											
LCS Dup Analyzed: 03/08/2006 (6C06054-BSD1)											
Chrysene	76.1	10	2.8	ug/l	100		76	60-120	17	20	
Dibenz(a,h)anthracene	91.5	20	4.7	ug/l	100		92	45-130	20	25	
Dibenzofuran	70.0	10	2.6	ug/l	100		70	60-120	14	20	
Di-n-butyl phthalate	69.0	20	2.8	ug/l	100		69	55-125	24	20	R-7
1,3-Dichlorobenzene	53.2	10	4.1	ug/l	100		53	35-120	5	25	
1,4-Dichlorobenzene	52.3	10	3.9	ug/l	100		52	35-120	9	25	
1,2-Dichlorobenzene	54.8	10	4.5	ug/l	100		55	35-120	11	25	
3,3-Dichlorobenzidine	85.4	20	11	ug/l	100		85	45-130	21	25	
2,4-Dichlorophenol	76.3	10	4.1	ug/l	100		76	55-120	3	20	
Diethyl phthalate	21.0	10	3.1	ug/l	100		21	55-120	117	20	L2, N-2
2,4-Dimethylphenol	53.8	20	4.4	ug/l	100		54	30-120	11	25	
Dimethyl phthalate	14.3	10	3.6	ug/l	100		14	30-120	113	20	L2, N-2
4,6-Dinitro-2-methylphenol	88.7	20	5.1	ug/l	100		89	50-120	6	25	
2,4-Dinitrophenol	84.5	20	5.3	ug/l	100		84	40-120	12	25	
2,4-Dinitrotoluene	69.9	10	4.2	ug/l	100		70	60-120	17	20	
2,6-Dinitrotoluene	71.5	10	3.2	ug/l	100		72	60-120	12	20	
Di-n-octyl phthalate	62.1	20	4.7	ug/l	100		62	60-130	21	20	R-7
Fluoranthene	76.2	10	4.2	ug/l	100		76	55-120	15	20	
Fluorene	69.7	10	3.9	ug/l	100		70	60-120	15	20	
Hexachlorobenzene	79.2	10	4.8	ug/l	100		79	50-120	20	20	
Hexachlorobutadiene	52.8	10	4.2	ug/l	100		53	40-120	30	25	R-7
Hexachlorocyclopentadiene	57.1	20	3.4	ug/l	100		57	15-120	33	30	R-7
Hexachloroethane	48.5	10	4.2	ug/l	100		48	35-120	16	25	
Indeno(1,2,3-cd)pyrene	84.4	20	5.4	ug/l	100		84	40-130	21	25	
Isophorone	58.9	10	3.7	ug/l	100		59	50-120	20	20	
2-Methylnaphthalene	63.2	10	3.0	ug/l	100		63	50-120	19	20	
2-Methylphenol	61.7	10	3.7	ug/l	100		62	45-120	17	20	
4-Methylphenol	63.8	10	3.8	ug/l	100		64	45-120	17	20	
Naphthalene	62.3	10	4.5	ug/l	100		62	50-120	18	20	
2-Nitroaniline	69.6	20	3.9	ug/l	100		70	60-120	14	20	
3-Nitroaniline	69.2	20	4.5	ug/l	100		69	55-120	16	25	
4-Nitroaniline	70.8	20	4.9	ug/l	100		71	50-125	19	20	
Nitrobenzene	57.9	20	4.2	ug/l	100		58	50-120	20	25	
2-Nitrophenol	76.8	10	4.2	ug/l	100		77	55-120	4	25	
4-Nitrophenol	86.7	20	6.6	ug/l	100		87	45-120	8	25	

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Project Manager

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NPDES - 2100



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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06

Received: 02/28/06

METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 6C06054 Extracted: 03/06/06											
LCS Dup Analyzed: 03/08/2006 (6C06054-BSD1)											
N-Nitrosodiphenylamine	69.7	10	4.0	ug/l	100		70	55-120	17	20	
N-Nitroso-di-n-propylamine	60.4	10	3.6	ug/l	100		60	45-120	20	20	
Pentachlorophenol	106	20	4.0	ug/l	100		106	50-120	6	25	
Phenanthrene	73.1	10	3.3	ug/l	100		73	55-120	18	20	
Phenol	65.0	10	4.0	ug/l	100		65	45-120	7	25	
Pyrene	70.7	10	3.9	ug/l	100		71	50-120	22	25	
1,2,4-Trichlorobenzene	57.9	10	4.4	ug/l	100		58	45-120	19	20	
2,4,5-Trichlorophenol	87.2	20	3.6	ug/l	100		87	60-120	6	20	
2,4,6-Trichlorophenol	89.5	20	4.1	ug/l	100		90	60-120	6	20	
1,2-Diphenylhydrazine/Azobenzene	65.9	20	5.0	ug/l	100		66	60-120	15	25	
N-Nitrosodimethylamine	55.7	20	3.7	ug/l	100		56	40-120	18	20	
Surrogate: 2-Fluorophenol	126			ug/l	200		63	30-120			
Surrogate: Phenol-d6	131			ug/l	200		66	35-120			
Surrogate: 2,4,6-Tribromophenol	190			ug/l	200		95	45-120			
Surrogate: Nitrobenzene-d5	58.5			ug/l	100		58	45-120			
Surrogate: 2-Fluorobiphenyl	71.2			ug/l	100		71	45-120			
Surrogate: Terphenyl-d14	71.7			ug/l	100		72	45-120			

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 Project Manager

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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005
 Report Number: IPB2645

Sampled: 02/28/06
 Received: 02/28/06

METHOD BLANK/QC DATA

ORGANOCHLORINE PESTICIDES (EPA 608)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD	Data Limit	Qualifiers
Batch: 6C05031 Extracted: 03/05/06										
Blank Analyzed: 03/06/2006 (6C05031-BLK1)										
Aldrin	ND	0.10	0.030	ug/l						
alpha-BHC	ND	0.10	0.020	ug/l						
beta-BHC	ND	0.10	0.015	ug/l						
delta-BHC	ND	0.20	0.020	ug/l						
gamma-BHC (Lindane)	ND	0.10	0.020	ug/l						
Chlordane	ND	1.0	0.20	ug/l						
4,4'-DDD	ND	0.10	0.020	ug/l						
4,4'-DDE	ND	0.10	0.025	ug/l						
4,4'-DDT	ND	0.10	0.035	ug/l						
Dieldrin	ND	0.10	0.015	ug/l						
Endosulfan I	ND	0.10	0.015	ug/l						
Endosulfan II	ND	0.10	0.040	ug/l						
Endosulfan sulfate	ND	0.20	0.020	ug/l						
Endrin	ND	0.10	0.020	ug/l						
Endrin aldehyde	ND	0.10	0.045	ug/l						
Endrin ketone	ND	0.10	0.020	ug/l						
Heptachlor	ND	0.10	0.030	ug/l						
Heptachlor epoxide	ND	0.10	0.030	ug/l						
Methoxychlor	ND	0.10	0.035	ug/l						
Toxaphene	ND	5.0	1.5	ug/l						
Surrogate: Tetrachloro-m-xylene	0.350			ug/l	0.500		70	35-115		
Surrogate: Decachlorobiphenyl	0.455			ug/l	0.500		91	45-120		

LCS Analyzed: 03/06/2006 (6C05031-BS1)

Aldrin	0.389	0.10	0.030	ug/l	0.500		78	35-120		
alpha-BHC	0.434	0.10	0.020	ug/l	0.500		87	45-120		
beta-BHC	0.426	0.10	0.015	ug/l	0.500		85	50-120		
delta-BHC	0.435	0.20	0.020	ug/l	0.500		87	50-120		
gamma-BHC (Lindane)	0.423	0.10	0.020	ug/l	0.500		85	40-120		
4,4'-DDD	0.438	0.10	0.020	ug/l	0.500		88	55-120		
4,4'-DDE	0.419	0.10	0.025	ug/l	0.500		84	50-120		
4,4'-DDT	0.458	0.10	0.035	ug/l	0.500		92	55-120		
Dieldrin	0.431	0.10	0.015	ug/l	0.500		86	50-120		
Endosulfan I	0.406	0.10	0.015	ug/l	0.500		81	50-120		
Endosulfan II	0.421	0.10	0.040	ug/l	0.500		84	55-120		
Endosulfan sulfate	0.429	0.20	0.020	ug/l	0.500		86	60-120		

M-NRI

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 Michele Chamberlin
 Project Manager



MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005
 Report Number: IPB2645

Sampled: 02/28/06
 Received: 02/28/06

METHOD BLANK/QC DATA

ORGANOCHLORINE PESTICIDES (EPA 608)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 6C05031 Extracted: 03/05/06											
LCS Analyzed: 03/06/2006 (6C05031-BS1)											M-NR1
Endrin	0.449	0.10	0.020	ug/l	0.500		90	55-120			
Endrin aldehyde	0.410	0.10	0.045	ug/l	0.500		82	55-120			
Endrin ketone	0.429	0.10	0.020	ug/l	0.500		86	55-120			
Heptachlor	0.393	0.10	0.030	ug/l	0.500		79	40-115			
Heptachlor epoxide	0.409	0.10	0.030	ug/l	0.500		82	50-120			
Methoxychlor	0.435	0.10	0.035	ug/l	0.500		87	55-120			
Surrogate: Tetrachloro-m-xylene	0.361			ug/l	0.500		72	35-115			
Surrogate: Decachlorobiphenyl	0.412			ug/l	0.500		82	45-120			
LCS Dup Analyzed: 03/06/2006 (6C05031-BSD1)											
Aldrin	0.372	0.10	0.030	ug/l	0.500		74	35-120	4	30	
alpha-BHC	0.413	0.10	0.020	ug/l	0.500		83	45-120	5	30	
beta-BHC	0.413	0.10	0.015	ug/l	0.500		83	50-120	3	30	
delta-BHC	0.425	0.20	0.020	ug/l	0.500		85	50-120	2	30	
gamma-BHC (Lindane)	0.406	0.10	0.020	ug/l	0.500		81	40-120	4	30	
4,4'-DDD	0.422	0.10	0.020	ug/l	0.500		84	55-120	4	30	
4,4'-DDE	0.411	0.10	0.025	ug/l	0.500		82	50-120	2	30	
4,4'-DDT	0.450	0.10	0.035	ug/l	0.500		90	55-120	2	30	
Dieldrin	0.424	0.10	0.015	ug/l	0.500		85	50-120	2	30	
Endosulfan I	0.397	0.10	0.015	ug/l	0.500		79	50-120	2	30	
Endosulfan II	0.415	0.10	0.040	ug/l	0.500		83	55-120	1	30	
Endosulfan sulfate	0.426	0.20	0.020	ug/l	0.500		85	60-120	1	30	
Endrin	0.434	0.10	0.020	ug/l	0.500		87	55-120	3	30	
Endrin aldehyde	0.404	0.10	0.045	ug/l	0.500		81	55-120	1	30	
Endrin ketone	0.424	0.10	0.020	ug/l	0.500		85	55-120	1	30	
Heptachlor	0.377	0.10	0.030	ug/l	0.500		75	40-115	4	30	
Heptachlor epoxide	0.398	0.10	0.030	ug/l	0.500		80	50-120	3	30	
Methoxychlor	0.434	0.10	0.035	ug/l	0.500		87	55-120	0	30	
Surrogate: Tetrachloro-m-xylene	0.339			ug/l	0.500		68	35-115			
Surrogate: Decachlorobiphenyl	0.407			ug/l	0.500		81	45-120			

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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06
 Received: 02/28/06

METHOD BLANK/QC DATA

TOTAL PCBS (EPA 608)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	RPD RPD	RPD Limit	Data Qualifiers
Batch: 6C05031 Extracted: 03/05/06										
Blank Analyzed: 03/06/2006 (6C05031-BLK1)										
Aroclor 1016	ND	1.0	0.20	ug/l						
Aroclor 1221	ND	1.0	0.10	ug/l						
Aroclor 1232	ND	1.0	0.25	ug/l						
Aroclor 1242	ND	1.0	0.25	ug/l						
Aroclor 1248	ND	1.0	0.25	ug/l						
Aroclor 1254	ND	1.0	0.25	ug/l						
Aroclor 1260	ND	1.0	0.40	ug/l						
Surrogate: Decachlorobiphenyl	0.512			ug/l	0.500		102		45-120	
LCS Analyzed: 03/06/2006 (6C05031-BS2)										
Aroclor 1016	3.60	1.0	0.20	ug/l	4.00		90		45-115	M-NR1
Aroclor 1260	3.91	1.0	0.40	ug/l	4.00		98		55-115	
Surrogate: Decachlorobiphenyl	0.458			ug/l	0.500		92		45-120	
LCS Dup Analyzed: 03/06/2006 (6C05031-BSD2)										
Aroclor 1016	3.74	1.0	0.20	ug/l	4.00		94		45-115	4 30
Aroclor 1260	3.99	1.0	0.40	ug/l	4.00		100		55-115	2 25
Surrogate: Decachlorobiphenyl	0.550			ug/l	0.500		110		45-120	

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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

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Sampled: 02/28/06

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METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 6C02097 Extracted: 03/02/06											
Blank Analyzed: 03/02/2006 (6C02097-BLK1)											
Mercury	ND	0.20	0.050	ug/l							
LCS Analyzed: 03/02/2006 (6C02097-BS1)											
Mercury	7.88	0.20	0.050	ug/l	8.00		98	85-115			
Matrix Spike Analyzed: 03/02/2006 (6C02097-MS1)											
						Source: IPB2608-01					
Mercury	7.84	0.20	0.050	ug/l	8.00	ND	98	70-130			
Matrix Spike Dup Analyzed: 03/02/2006 (6C02097-MSD1)											
						Source: IPB2608-01					
Mercury	7.88	0.20	0.050	ug/l	8.00	ND	98	70-130	1	20	
Batch: 6C02098 Extracted: 03/02/06											
Blank Analyzed: 03/02/2006 (6C02098-BLK1)											
Antimony	ND	2.0	0.18	ug/l							
Cadmium	0.0179	1.0	0.015	ug/l							J
Copper	ND	2.0	0.49	ug/l							
Lead	ND	1.0	0.13	ug/l							
Thallium	ND	1.0	0.075	ug/l							
LCS Analyzed: 03/02/2006 (6C02098-BS1)											
Antimony	86.5	2.0	0.18	ug/l	80.0		108	85-115			
Cadmium	86.9	1.0	0.015	ug/l	80.0		109	85-115			
Copper	89.3	2.0	0.49	ug/l	80.0		112	85-115			
Lead	85.6	1.0	0.13	ug/l	80.0		107	85-115			
Thallium	84.8	1.0	0.075	ug/l	80.0		106	85-115			

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MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 005
Report Number: IPB2645

Sampled: 02/28/06
Received: 02/28/06

METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	Limit	RPD	RPD Limit	Data Qualifiers
Batch: 6C02098 Extracted: 03/02/06											
Matrix Spike Analyzed: 03/02/2006 (6C02098-MS1)						Source: IPB2651-01					
Antimony	84.3	2.0	0.18	ug/l	80.0	ND	105	70-130			
Cadmium	83.6	1.0	0.015	ug/l	80.0	ND	104	70-130			
Copper	81.5	2.0	0.49	ug/l	80.0	0.49	101	70-130			
Lead	83.1	1.0	0.13	ug/l	80.0	0.19	104	70-130			
Thallium	81.3	1.0	0.075	ug/l	80.0	0.31	101	70-130			
Matrix Spike Analyzed: 03/02/2006 (6C02098-MS2)						Source: IPB2645-01					
Antimony	85.1	2.0	0.18	ug/l	80.0	0.46	106	70-130			
Cadmium	82.7	1.0	0.015	ug/l	80.0	0.077	103	70-130			
Copper	78.9	2.0	0.49	ug/l	80.0	2.3	96	70-130			
Lead	82.4	1.0	0.13	ug/l	80.0	0.50	102	70-130			
Thallium	81.6	1.0	0.075	ug/l	80.0	0.53	101	70-130			
Matrix Spike Dup Analyzed: 03/02/2006 (6C02098-MSD1)						Source: IPB2651-01					
Antimony	82.9	2.0	0.18	ug/l	80.0	ND	104	70-130	2	20	
Cadmium	81.4	1.0	0.015	ug/l	80.0	ND	102	70-130	3	20	
Copper	78.3	2.0	0.49	ug/l	80.0	0.49	97	70-130	4	20	
Lead	80.8	1.0	0.13	ug/l	80.0	0.19	101	70-130	3	20	
Thallium	80.7	1.0	0.075	ug/l	80.0	0.31	100	70-130	1	20	
Batch: 6C03084 Extracted: 03/03/06											
Blank Analyzed: 03/04/2006-03/07/2006 (6C03084-BLK1)											
Aluminum	ND	50	40	ug/l							
Arsenic	ND	5.0	3.8	ug/l							
Beryllium	ND	2.0	0.62	ug/l							
Boron	ND	0.050	0.0074	mg/l							
Chromium	1.10	5.0	0.68	ug/l							J
Nickel	ND	10	2.0	ug/l							
Selenium	ND	10	8.0	ug/l							
Silver	ND	10	3.0	ug/l							
Vanadium	ND	10	3.0	ug/l							
Zinc	ND	20	3.7	ug/l							

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MWH-Pasadena/Boeing
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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06

Received: 02/28/06

METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 6C03084 Extracted: 03/03/06											
LCS Analyzed: 03/04/2006-03/07/2006 (6C03084-BS1)											
Aluminum	495	50	40	ug/l	500		99	85-115			
Arsenic	519	5.0	3.8	ug/l	500		104	85-115			
Beryllium	524	2.0	0.62	ug/l	500		105	85-115			
Boron	0.501	0.050	0.0074	mg/l	0.500		100	85-115			
Chromium	518	5.0	0.68	ug/l	500		104	85-115			
Nickel	513	10	2.0	ug/l	500		103	85-115			
Selenium	493	10	8.0	ug/l	500		99	85-115			
Silver	263	10	3.0	ug/l	250		105	85-115			
Vanadium	517	10	3.0	ug/l	500		103	85-115			
Zinc	499	20	3.7	ug/l	500		100	85-115			
Matrix Spike Analyzed: 03/04/2006-03/07/2006 (6C03084-MS1) Source: IPB2463-01											
Aluminum	490	50	40	ug/l	500	ND	98	70-130			
Arsenic	544	5.0	3.8	ug/l	500	8.8	107	70-130			
Beryllium	520	2.0	0.62	ug/l	500	ND	104	70-130			
Boron	0.609	0.050	0.0074	mg/l	0.500	0.064	109	70-130			
Chromium	520	5.0	0.68	ug/l	500	ND	104	70-130			
Nickel	503	10	2.0	ug/l	500	ND	101	70-130			
Selenium	508	10	8.0	ug/l	500	ND	102	70-130			
Silver	273	10	3.0	ug/l	250	4.9	107	70-130			
Vanadium	522	10	3.0	ug/l	500	ND	104	70-130			
Zinc	732	20	3.7	ug/l	500	480	50	70-130			M2
Matrix Spike Analyzed: 03/04/2006-03/07/2006 (6C03084-MS2) Source: IPB2463-02											
Aluminum	1200	50	40	ug/l	500	560	128	70-130			
Arsenic	527	5.0	3.8	ug/l	500	4.9	104	70-130			
Beryllium	508	2.0	0.62	ug/l	500	ND	102	70-130			
Boron	0.554	0.050	0.0074	mg/l	0.500	0.037	103	70-130			
Chromium	511	5.0	0.68	ug/l	500	2.3	102	70-130			
Nickel	493	10	2.0	ug/l	500	ND	99	70-130			
Selenium	494	10	8.0	ug/l	500	ND	99	70-130			
Silver	263	10	3.0	ug/l	250	4.0	104	70-130			
Vanadium	511	10	3.0	ug/l	500	ND	102	70-130			
Zinc	497	20	3.7	ug/l	500	ND	99	70-130			

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MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06

Received: 02/28/06

METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 6C03084 Extracted: 03/03/06											
Matrix Spike Dup Analyzed: 03/04/2006-03/07/2006 (6C03084-MSD1)						Source: IPB2463-01					
Aluminum	461	50	40	ug/l	500	ND	92	70-130	6	20	
Arsenic	532	5.0	3.8	ug/l	500	8.8	105	70-130	2	20	
Beryllium	504	2.0	0.62	ug/l	500	ND	101	70-130	3	20	
Boron	0.593	0.050	0.0074	mg/l	0.500	0.064	106	70-130	3	20	
Chromium	510	5.0	0.68	ug/l	500	ND	102	70-130	2	20	
Nickel	492	10	2.0	ug/l	500	ND	98	70-130	2	20	
Selenium	488	10	8.0	ug/l	500	ND	98	70-130	4	20	
Silver	262	10	3.0	ug/l	250	4.9	103	70-130	4	20	
Vanadium	504	10	3.0	ug/l	500	ND	101	70-130	4	20	
Zinc	722	20	3.7	ug/l	500	480	48	70-130	1	20	M2

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METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 6B28141 Extracted: 02/28/06											
Blank Analyzed: 02/28/2006 (6B28141-BLK1)											
Chloride	ND	0.50	0.26	mg/l							
Nitrate/Nitrite-N	ND	0.26	0.072	mg/l							
Sulfate	ND	0.50	0.18	mg/l							
LCS Analyzed: 02/28/2006 (6B28141-BS1)											
Chloride	5.00	0.50	0.26	mg/l	5.00		100	90-110			
Sulfate	10.5	0.50	0.18	mg/l	10.0		105	90-110			
Matrix Spike Analyzed: 02/28/2006 (6B28141-MS1) Source: IPB2607-01											
Chloride	30.4	1.0	0.52	mg/l	5.00	26	88	80-120			
Sulfate	36.5	1.0	0.36	mg/l	10.0	27	95	80-120			
Matrix Spike Dup Analyzed: 02/28/2006 (6B28141-MSD1) Source: IPB2607-01											
Chloride	30.3	1.0	0.52	mg/l	5.00	26	86	80-120	0	20	
Sulfate	36.9	1.0	0.36	mg/l	10.0	27	99	80-120	1	20	
Batch: 6C02125 Extracted: 03/02/06											
Blank Analyzed: 03/02/2006 (6C02125-BLK1)											
Total Cyanide	ND	5.0	2.2	ug/l							
LCS Analyzed: 03/02/2006 (6C02125-BS1)											
Total Cyanide	194	5.0	2.2	ug/l	200		97	90-110			
Matrix Spike Analyzed: 03/02/2006 (6C02125-MS1) Source: IPB2379-01											
Total Cyanide	193	5.0	2.2	ug/l	200	2.5	95	70-115			

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MWH-Pasadena/Boeing
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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06
 Received: 02/28/06

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<u>Batch: 6C02125 Extracted: 03/02/06</u>											
Matrix Spike Dup Analyzed: 03/02/2006 (6C02125-MSD1)						Source: IPB2379-01					
Total Cyanide	205	5.0	2.2	ug/l	200	2.5	101	70-115	6	15	
<u>Batch: 6C03066 Extracted: 03/03/06</u>											
Blank Analyzed: 03/03/2006 (6C03066-BLK1)											
Perchlorate	ND	4.0	2.0	ug/l							
LCS Analyzed: 03/03/2006 (6C03066-BS1)											
Perchlorate	50.4	4.0	2.0	ug/l	50.0		101	85-115			
Matrix Spike Analyzed: 03/03/2006 (6C03066-MS1)						Source: IPC0361-01					
Perchlorate	62.8	4.0	2.0	ug/l	50.0	15	96	80-120			
Matrix Spike Dup Analyzed: 03/03/2006 (6C03066-MSD1)						Source: IPC0361-01					
Perchlorate	61.7	4.0	2.0	ug/l	50.0	15	93	80-120	2	20	
<u>Batch: 6C03069 Extracted: 03/03/06</u>											
Blank Analyzed: 03/03/2006 (6C03069-BLK1)											
Total Dissolved Solids	ND	10	10	mg/l							
LCS Analyzed: 03/03/2006 (6C03069-BS1)											
Total Dissolved Solids	1000	10	10	mg/l	1000		100	90-110			
Duplicate Analyzed: 03/03/2006 (6C03069-DUP1)						Source: IPC0153-03					
Total Dissolved Solids	285	10	10	mg/l		280			2	10	

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 Michele Chamberlin
 Project Manager

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MWH-Pasadena/Boeing 300 North Lake Avenue, Suite 1200 Pasadena, CA 91101 Attention: Bronwyn Kelly	Project ID: Annual Outfall 005 Report Number: IPB2645	Sampled: 02/28/06 Received: 02/28/06
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METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 6C03103 Extracted: 03/03/06											
Blank Analyzed: 03/03/2006 (6C03103-BLK1)											
Total Suspended Solids	ND	10	10	mg/l							
LCS Analyzed: 03/03/2006 (6C03103-BS1)											
Total Suspended Solids	979	10	10	mg/l	1000		98	85-115			
Duplicate Analyzed: 03/03/2006 (6C03103-DUP1)											
Total Suspended Solids	26.0	10	10	mg/l		27			4	10	
Batch: 6C08046 Extracted: 03/08/06											
Blank Analyzed: 03/08/2006 (6C08046-BLK1)											
Oil & Grease	ND	5.0	0.94	mg/l							
LCS Analyzed: 03/08/2006 (6C08046-BS1)											
Oil & Grease	15.7	5.0	0.94	mg/l	20.0		78	65-120			M-NRI
LCS Dup Analyzed: 03/08/2006 (6C08046-BSD1)											
Oil & Grease	16.2	5.0	0.94	mg/l	20.0		81	65-120	3	20	

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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06
 Received: 02/28/06

Compliance Check

The results obtained from the analytical testing of this data set were checked against compliance limits received from the client. Any results at or above the compliance limits appear in bold on this page.

LabNumber	Analysis	Analyte	Units	Result	MRL	Compliance Limit
IPB2645-01	413.1 Oil and Grease	Oil & Grease	mg/l	0.38	4.8	15
IPB2645-01	Antimony-200.8	Antimony	ug/l	0.46	2.0	6.00
IPB2645-01	Boron-200.7	Boron	mg/l	0.016	0.050	1.00
IPB2645-01	Cadmium-200.8	Cadmium	ug/l	0.077	1.0	4.00
IPB2645-01	Chloride - 300.0	Chloride	mg/l	43	5.0	150
IPB2645-01	Copper-200.8	Copper	ug/l	2.30	2.0	14
IPB2645-01	Mercury - 245.1	Mercury	ug/l	0	0.20	0.20
IPB2645-01	Nitrogen, NO3+NO2 -N	Nitrate/Nitrite-N	mg/l	40	1.5	10.00
IPB2645-01	Perchlorate 314.0	Perchlorate	ug/l	0	4.0	6.00
IPB2645-01	Sulfate-300.0	Sulfate	mg/l	37	0.50	250
IPB2645-01	TDS - SM 2540C	Total Dissolved Solids	mg/l	500	10	850
IPB2645-01	Thallium-200.8	Thallium	ug/l	0.53	1.0	2.00

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 Project Manager

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MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06
Received: 02/28/06

DATA QUALIFIERS AND DEFINITIONS

- B** Analyte was detected in the associated Method Blank.
- J** 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.
- L** Laboratory Control Sample recovery was above the method control limits. Analyte not detected, data not impacted.
- L2** Laboratory Control Sample recovery was below method control limits.
- 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).
- M-NR1** There was no MS/MSD analyzed with this batch due to insufficient sample volume. See Blank Spike/Blank Spike Duplicate.
- N-2** See corrective action report.
- 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 method control limit due to sample matrix effects.
- R-7** LFB/LFBD RPD exceeded the method control limit. Recovery met acceptance criteria.
- 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.

Del Mar Analytical - Irvine
Michele Chamberlin
Project Manager



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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06

Received: 02/28/06

Certification Summary

Del Mar Analytical - Irvine

Method	Matrix	Nelac	California
1613A/1613B	Water		
Calculation	Water	X	X
EDD + Level 4	Water		
EPA 160.2	Water	X	X
EPA 200.7	Water	X	X
EPA 200.8	Water	X	X
EPA 245.1	Water	X	X
EPA 300.0	Water	X	X
EPA 314.0	Water	N/A	X
EPA 335.2	Water	X	X
EPA 413.1	Water	X	X
EPA 608	Water	X	X
EPA 624	Water	X	X
EPA 625	Water	X	X
EPA 900.0	Water		
EPA 905.0	Water		
EPA 906.0	Water		
Haz Waste Scree	Water		
SM2540C	Water	X	X

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

Subcontracted Laboratories

Alta Analytical NELAC Cert #02102CA, California Cert #1640, Nevada Cert #CA-413

1104 Windfield Way - El Dorado Hills, CA 95762

Analysis Performed: 1613-Dioxin-HR-Alta

Samples: IPB2645-01

Analysis Performed: Level 4 + EDD

Samples: IPB2645-01

Aquatic Testing Laboratories-SUB California Cert #1775

4350 Transport Street, Unit 107 - Ventura, CA 93003

Analysis Performed: Bioassay-Acute 96hr

Samples: IPB2645-01

Eberline Services

2030 Wright Avenue - Richmond, CA 94804

Analysis Performed: EDD + Level 4

Samples: IPB2645-01

Analysis Performed: Gross Alpha

Samples: IPB2645-01

Del Mar Analytical - Irvine

Michele Chamberlin

Project Manager

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MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06

Received: 02/28/06

Eberline Services

2030 Wright Avenue - Richmond, CA 94804

Analysis Performed: Gross Beta
Samples: IPB2645-01

Analysis Performed: Radium, Combined
Samples: IPB2645-01

Analysis Performed: Strontium 90
Samples: IPB2645-01

Analysis Performed: Tritium
Samples: IPB2645-01

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Michele Chamberlin
Project Manager

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NPDES - 2115

IPB2645

CHAIN OF CUSTODY FORM

Del Mar Analytical Version 01/24/06

Client Name/Address:		Project:		ANALYSIS REQUIRED										Field readings:				
MWH-Pasadena 300 North Lake Avenue, Suite 1200 Pasadena, CA 91101		Boeing-SSFL NPDES Annual Outfall 005 Stormwater at FSDF-1		Total Recoverable Metals: Al, + PP	TCDD (and all congeners)	Oil & Grease (EPA 413.1)	Cl ₂ , SO ₄ , NO ₃ +NO ₂ -N, Perchlorate	TDS, TSS	VOCs (624), NPDES + PP	VOCs A+A+2CVE	Pesticides/PCBs - PP	Gross Alpha, Gross Beta, Tritium (906.0*, Sr-90 (905.) Total Combined Radium 226 & 228	SVOCs - PP	Acute Toxicity	Cyanide	Temp = 55.6° PH = 4.8		
Sample Description	Sample Matrix	Container Type	# of Cont.	Preservative	Bottle #	Sampling Date/Time	Al, Cd, Cu, Pb, Hg, B, V, Total Recoverable Metals	Oil & Grease (EPA 413.1)	Cl ₂ , SO ₄ , NO ₃ +NO ₂ -N, Perchlorate	TDS, TSS	VOCs (624), NPDES + PP	VOCs A+A+2CVE	Pesticides/PCBs - PP	Gross Alpha, Gross Beta, Tritium (906.0*, Sr-90 (905.) Total Combined Radium 226 & 228	SVOCs - PP	Acute Toxicity	Cyanide	Comments
Outfall 005	W	1L Poly	1	HNO3	1A	2-28-06 17:45	X											
Outfall 005-Dup	W	1L Poly	1	HNO3	1B		X											
Outfall 005	W	1L Amber	2	None	2A, 2B													
Outfall 005	W	1L Amber	2	HCl	3A, 3B			X										
Outfall 005	W	Poly-500 ml	2	None	4A, 4B			X										
Outfall 005	W	Poly-500 ml	2	None	5A, 5B				X									
Outfall 005	W	VOAs	3	HCl	6A, 6B, 6C					X								
Outfall 005	W	VOAs	3	None	7A, 7B, 7C						X							
Outfall 005	W	1L Amber	2	None	8A, 8B							X						
Outfall 005	W	2.5 Gal Cube Amber VOAs	3	None	9A, 15A, 15B, 15C								X					Analyze for Total Combined RA-228 & RA-226 only if Gross Alpha/Beta > 15pCi/L. Preserve 2.5 Gal Cube with HNO3 at lab.
Outfall 005	W	1L Amber	2	None	10A, 10B									X				
Outfall 005	W	1 Gal Poly	1	None	11A										X			
Outfall 005	W	500ml Poly	1	NaOH	12													
Trip Blanks	W	VOAs	3	None	13A, 13B, 13C							X						
Trip Blank	W	VOAs	3	HCl	14A, 14B, 14C					X								
Relinquished By	Date/Time: 2/28/06 1545			Received By	Date/Time: 2/28/06 1545													
Relinquished By	Date/Time: 2/28/06 1835			Received By	Date/Time: 2-28-06 1835													
Relinquished By	Date/Time:			Received By	Date/Time:													



March 08, 2006

Alta Project I.D.: 27354

Ms. Michele Chamberlin
Del Mar Analytical, Irvine
17461 Derian Avenue, Suite 100
Irvine, CA 92614

Dear Ms. Chamberlin,

Enclosed are the results for the one aqueous sample received at Alta Analytical Laboratory on March 02, 2006 under your Project Name "IPB2645". This sample was extracted and analyzed using EPA Method 1613 for tetra-through-octa chlorinated dioxins and furans. A standard turnaround time was provided for this work.

The following report consists of a Sample Inventory (Section I), Analytical Results (Section II) and the Appendix, which contains the chain-of-custody, a list of data qualifiers and abbreviations, Alta's current certifications, and copies of the raw data (if requested).

Alta Analytical Laboratory is committed to serving you effectively. If you require additional information, please contact me at 916-933-1640 or by email at mmaier@altalab.com. Thank you for choosing Alta as part of your analytical support team.

Sincerely,

Martha M. Maier
Director of HRMS Services



Section I: Sample Inventory Report

Date Received: 3/2/2006

Alta Lab. ID

Client Sample ID

27354-001

IPB2645-01

SECTION II

EPA Method 1613

Method Blank		Lab Sample: 0-MB001		Date Analyzed DB-5: 7-Mar-06		Date Analyzed DB-225: NA	
Matrix:	Aqueous	QC Batch No.:	7807	Date Analyzed DB-5:	7-Mar-06	Date Analyzed DB-225:	NA
Sample Size:	1.00 L	Date Extracted:	5-Mar-06				
Analyte	Conc. (ug/L)	DL ^a	EMPC ^b	%R	LCL-UCL ^d	Qualifiers	Qualifiers
2,3,7,8-TCDD	ND	0.00000119		82.1	25 - 164		
1,2,3,7,8-PeCDD	ND	0.00000130		84.5	25 - 181		
1,2,3,4,7,8-HxCDD	ND	0.00000161		82.1	32 - 141		
1,2,3,6,7,8-HxCDD	ND	0.00000170		81.9	28 - 130		
1,2,3,7,8,9-HxCDD	ND	0.00000161		79.4	23 - 140		
1,2,3,4,6,7,8-HpCDD	ND	0.00000167		54.4	17 - 157		
OCDD	ND	0.00000485		85.8	24 - 169		
2,3,7,8-TCDF	ND	0.00000138		89.7	24 - 185		
1,2,3,7,8-PeCDF	ND	0.00000126		92.9	21 - 178		
2,3,4,7,8-PeCDF	ND	0.00000115		82.7	26 - 152		
1,2,3,4,7,8-HxCDF	ND	0.00000677		82.0	26 - 123		
1,2,3,6,7,8-HxCDF	ND	0.00000623		83.9	28 - 136		
2,3,4,6,7,8-HxCDF	ND	0.00000697		77.1	29 - 147		
1,2,3,7,8,9-HxCDF	ND	0.00000951		71.7	28 - 143		
1,2,3,4,6,7,8-HpCDF	ND	0.00000890		80.8	26 - 138		
1,2,3,4,7,8,9-HpCDF	ND	0.00000780		59.4	17 - 157		
OCDF	ND	0.00000335		90.3	35 - 197		
Totals							
Total TCDD	ND	0.00000119					
Total PeCDD	ND	0.00000130					
Total HxCDD	ND	0.00000164					
Total HpCDD	ND	0.00000167					
Total TCDF	ND	0.00000138					
Total PeCDF	ND	0.00000120					
Total HxCDF	ND	0.00000725					
Total HpCDF	ND	0.00000836					

Footnotes

- a. Sample specific estimated detection limit
- b. Estimated maximum possible concentration.
- c. Method detection limit
- d. Lower control limit - upper control limit.

Analyst: JMH
 Approved By: Martha M. Maier 08-Mar-2006 14:19

OPR Results		EPA Method 1613				
Matrix:	Aqueous	QC Batch No.:	7807	Lab Sample:	0-OPR001	
Sample Size:	1.00 L	Date Extracted:	5-Mar-06	Date Analyzed DB-5:	7-Mar-06	
				Date Analyzed DB-225:	NA	
Analyte	Spike Conc.	Conc. (ng/mL)	OPR Limits	Labeled Standard	%R	LCL-UCL
2,3,7,8-TCDD	10.0	11.1	6.7 - 15.8	IS 13C-2,3,7,8-TCDD	77.8	25 - 164
1,2,3,7,8-PeCDD	50.0	56.7	35 - 71	13C-1,2,3,7,8-PeCDD	81.0	25 - 181
1,2,3,4,7,8-HxCDD	50.0	54.3	35 - 82	13C-1,2,3,4,7,8-HxCDD	74.4	32 - 141
1,2,3,6,7,8-HxCDD	50.0	53.3	38 - 67	13C-1,2,3,6,7,8-HxCDD	76.6	28 - 130
1,2,3,7,8,9-HxCDD	50.0	52.4	32 - 81	13C-1,2,3,4,6,7,8-HpCDD	74.2	23 - 140
1,2,3,4,6,7,8-HpCDD	50.0	55.2	35 - 70	13C-OCDD	52.1	17 - 157
OCDD	100	109	78 - 144	13C-2,3,7,8-TCDF	78.6	24 - 169
2,3,7,8-TCDF	10.0	11.2	7.5 - 15.8	13C-1,2,3,7,8-PeCDF	84.3	24 - 185
1,2,3,7,8-PeCDF	50.0	55.2	40 - 67	13C-2,3,4,7,8-PeCDF	87.3	21 - 178
2,3,4,7,8-PeCDF	50.0	56.1	34 - 80	13C-1,2,3,4,7,8-HxCDF	76.8	26 - 152
1,2,3,4,7,8-HxCDF	50.0	55.2	36 - 67	13C-1,2,3,6,7,8-HxCDF	76.9	26 - 123
1,2,3,6,7,8-HxCDF	50.0	56.7	42 - 65	13C-2,3,4,6,7,8-HxCDF	76.3	28 - 136
2,3,4,6,7,8-HxCDF	50.0	56.4	35 - 78	13C-1,2,3,7,8,9-HxCDF	69.6	29 - 147
1,2,3,7,8,9-HxCDF	50.0	54.9	39 - 65	13C-1,2,3,4,6,7,8-HpCDF	70.6	28 - 143
1,2,3,4,6,7,8-HpCDF	50.0	55.1	41 - 61	13C-1,2,3,4,7,8,9-HpCDF	74.0	26 - 138
1,2,3,4,7,8,9-HpCDF	50.0	55.0	39 - 69	13C-OCDF	57.0	17 - 157
OCDF	100	105	63 - 170	CRS 37Cl-2,3,7,8-TCDD	94.1	35 - 197

Analyst: JMH
Approved By: Martha M. Maier
08-Mar-2006 14:19

Sample ID: IPB2645-01

EPA Method 1613

Client Data		Sample Data		Laboratory Data	
Name	Del Mar Analytical, Irvine	Matrix	Aqueous	Lab Sample:	27354-001
Project	IPB2645	Sample Size:	1.01 L	QC Batch No.:	7807
Date Collected:	28-Feb-06			Date Analyzed DB-5:	8-Mar-06
Time Collected:	0725			Date Analyzed DB-225:	NA

Analyte	Conc. (ug/L)	DL ^a	EMPC ^b	Qualifiers	Labeled Standard	%R	LCL	UCL ^d	Qualifiers
2,3,7,8-TCDD	ND	0.00000130			13C-2,3,7,8-TCDD	74.0	25	164	
1,2,3,7,8-PeCDD	ND	0.00000116			13C-1,2,3,7,8-PeCDD	77.5	25	181	
1,2,3,4,7,8-HxCDD	ND	0.00000274			13C-1,2,3,4,7,8-HxCDD	70.2	32	141	
1,2,3,6,7,8-HxCDD	ND	0.00000264			13C-1,2,3,6,7,8-HxCDD	72.0	28	130	
1,2,3,7,8,9-HxCDD	ND	0.00000260			13C-1,2,3,4,6,7,8-HpCDD	76.5	23	140	
1,2,3,4,6,7,8-HpCDD	0.0000119			J	13C-OCDD	55.9	17	157	
OCDD	0.000163				13C-2,3,7,8-TCDF	74.6	24	169	
2,3,7,8-TCDF	ND	0.00000106			13C-1,2,3,7,8-PeCDF	82.9	24	185	
1,2,3,7,8-PeCDF	ND	0.00000105			13C-2,3,4,7,8-PeCDF	83.5	21	178	
2,3,4,7,8-PeCDF	ND	0.00000105			13C-1,2,3,4,7,8-HxCDF	68.4	26	152	
1,2,3,4,7,8-HxCDF	ND	0.000000605			13C-1,2,3,6,7,8-HxCDF	70.1	26	123	
1,2,3,6,7,8-HxCDF	ND	0.000000542			13C-2,3,4,6,7,8-HxCDF	68.3	28	136	
2,3,4,6,7,8-HxCDF	ND	0.000000610			13C-1,2,3,7,8,9-HxCDF	72.0	29	147	
1,2,3,7,8,9-HxCDF	ND	0.000000748			13C-1,2,3,4,6,7,8-HpCDF	70.6	28	143	
1,2,3,4,6,7,8-HpCDF	ND	0.00000130			13C-1,2,3,4,7,8,9-HpCDF	74.1	26	138	
1,2,3,4,7,8,9-HpCDF	ND	0.00000127			13C-OCDF	59.9	17	157	
OCDF	ND	0.00000276			CRS 37Cl-2,3,7,8-TCDD	84.7	35	197	

Totals		Footnotes	
Total TCDD	ND	a. Sample specific estimated detection limit.	
Total PeCDD	ND	b. Estimated maximum possible concentration.	
Total HxCDD	ND	c. Method detection limit.	
Total HpCDD	0.0000200	d. Lower control limit - upper control limit.	
Total TCDF	ND		
Total PeCDF	ND		
Total HxCDF	ND		
Total HpCDF	ND		

Analyst: JMH

Approved By: Martha M. Maier

08-Mar-2006 14:19

APPENDIX

DATA QUALIFIERS & ABBREVIATIONS

B	This compound was also detected in the method blank.
D	The amount reported is the maximum possible concentration due to possible chlorinated diphenylether interference.
E	The reported value exceeds the calibration range of the instrument.
H	The signal-to-noise ratio is greater than 10:1.
I	Chemical interference
J	The amount detected is below the Lower Calibration Limit of the instrument.
*	See Cover Letter
Conc.	Concentration
DL	Sample-specific estimated Detection Limit
MDL	The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero in the matrix tested.
EMPC	Estimated Maximum Possible Concentration
NA	Not applicable
RL	Reporting Limit -- concentrations that corresponds to low calibration point
ND	Not Detected
TEQ	Toxic Equivalency

Unless otherwise noted, solid sample results are reported in dry weight. Tissue samples are reported in wet weight.

CERTIFICATIONS

Accrediting Authority	Certificate Number
State of Alaska, DEC	CA413-02
State of Arizona	AZ0639
State of Arkansas, DEQ	05-013-0
State of Arkansas, DOH	Reciprocity through CA
State of California – NELAP Primary AA	02102CA
State of Colorado	
State of Connecticut	PH-0182
State of Florida, DEP	E87777
Commonwealth of Kentucky	90063
State of Louisiana, Health and Hospitals	LA050001
State of Louisiana, DEQ	01977
State of Maine	CA0413
State of Michigan	81178087
State of Mississippi	Reciprocity through CA
Naval Facilities Engineering Service Center	
State of Nevada	CA413
State of New Jersey	CA003
State of New Mexico	Reciprocity through CA
State of New York, DOH	11411
State of North Carolina	06700
State of North Dakota, DOH	R-078
State of Oklahoma	D9919
State of Oregon	CA200001-002
State of Pennsylvania	68-00490
State of South Carolina	87002001
State of Tennessee	02996
State of Texas	TX247-2005A
U.S. Army Corps of Engineers	
State of Utah	9169330940
Commonwealth of Virginia	00013
State of Washington	C1285
State of Wisconsin	998036160
State of Wyoming	8TMS-Q



1014 E. Cooley Dr., Suite A, Colton, CA 92324 Ph (909) 370-4667 Fax (909) 370-1046
 9484 Chesapeake Drive, Suite 805, San Diego, CA 92123 Ph (619) 505-8586 Fax (619) 505-8689
 9830 South 51st Street, Suite B-120, Phoenix, AZ 85044 Ph (480) 785-0043 Fax (480) 785-0851
 2520 E. Sunset Rd., Suite #3, Las Vegas, NV 89120 Ph (702) 798-3820 Fax (702) 798-3821

SUBCONTRACT ORDER - PROJECT # IPB2645

SENDING LABORATORY:	RECEIVING LABORATORY:
Del Mar Analytical, Irvine 17461 Derian Avenue, Suite 100 Irvine, CA 92614 Phone: (949) 261-1022 Fax: (949) 261-1228 Project Manager: Michele Chamberlin	Alta Analytical 1104 Windfield Way El Dorado Hills, CA 95762 Phone: (916) 933-1640 Fax: (916) 673-0106 <div style="text-align: right; font-size: 2em; font-family: cursive;"> 27354 0.2°C </div>

Standard TAT is requested unless specific due date is requested => Due Date: _____ Initials: _____

Analysis	Expiration	Sampled:	Comments
Sample ID: IPB2645-01	Water	02/28/06 07:25	Instant Notification
1613-Dioxin-HR-Alta	03/07/06 07:25		J flags, 17 congeners, no TEQ, ug/L, sub=Alta
Level 4 + EDD-OUT	03/28/06 07:25		Excel EDD email to pm, Include Std logs for Lvl IV
Containers Supplied:			
1 L Amber (IPB2645-01C)			
1 L Amber (IPB2645-01D)			

SAMPLE INTEGRITY:					
All containers intact:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Sample labels/COC agree:	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Custody Seals Present:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Samples Preserved Properly:	<input type="checkbox"/> Yes	<input type="checkbox"/> No
				Samples Received On Ice:	<input type="checkbox"/> Yes <input type="checkbox"/> No
				Samples Received at (temp):	_____

Released By	Date	Time	Received By	Date	Time
			<i>Bettina L. Benedict</i>	Feb - Ex 3.01.06 3/2/06	0850
Released By	Date	Time	Received By	Date	Time

SAMPLE LOG-IN CHECKLIST

Alta Project #: 27354

Samples Arrival:	Date/Time 3/2/06 0850	Initials: CBB	Location: WR-2
Logged In: <u>3/3/06</u> <u>1345</u>	Date/Time 3/3/06 0650	Initials: CBB	Location: WR-2
Delivered By:	<input checked="" type="checkbox"/> FedEx	<input type="checkbox"/> UPS	<input type="checkbox"/> Cal
	<input type="checkbox"/> DHL	<input type="checkbox"/> Hand Delivered	<input type="checkbox"/> Other
Preservation:	<input checked="" type="checkbox"/> Ice	<input type="checkbox"/> Blue Ice	<input type="checkbox"/> Dry Ice
	<input type="checkbox"/> None		
Temp °C 0.2°C	Time: 1015	Thermometer ID: DT-20	

	YES	NO	NA
Adequate Sample Volume Received?	✓		
Holding Time Acceptable?	✓		
Shipping Container(s) Intact?	✓		
Shipping Custody Seals Intact?	✓		
Shipping Documentation Present?	✓		
Airbill			
Trk #	798031078338		
Sample Container Intact?	✓		
Sample Custody Seals Intact?			✓
Chain of Custody / Sample Documentation Present?	✓		
COC Anomaly/Sample Acceptance Form completed?		✓	
If Chlorinated or Drinking Water Samples, Acceptable Preservation?			✓
Na ₂ S ₂ O ₃ Preservation Documented?		COC	Sample Container
			None
Shipping Container	Alta	Client	Retain
			Return
			Dispose

Comments:

LABORATORY REPORT



"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

Date: March 5, 2006

Client: Del Mar Analytical, Irvine
17461 Derian Ave., Suite 100
Irvine, CA 92614
Attn: Michele Chamberlin

Laboratory No.: A-06030115-001
Sample ID.: IPB2645-01

Sample Control: The sample was received by ATL within the recommended hold time, in a chilled state, and with the chain of custody record attached.

Date Sampled: 02/28/06
Date Received: 03/01/06
Temp. Received: 2°C
Chlorine (TRC): 0.0 mg/l
Date Tested: 03/01/06 to 03/05/06

Sample Analysis: The following analyses were performed on your sample:

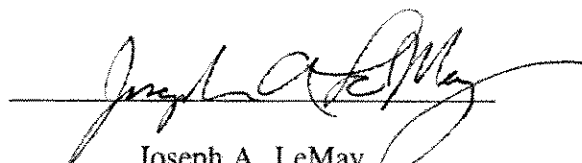
Fathead Minnow 96hr Percent Survival Bioassay (EPA Method 2000.0).

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

Result Summary:

<u>Sample ID.</u>	<u>Results</u>
IPB2645-01	100% Survival (TU _a = 0.0)

Quality Control: Reviewed and approved by:


Joseph A. LeMay
Laboratory Director

FATHEAD MINNOW PERCENT SURVIVAL TEST
EPA Method 2000.0



Lab No.: A-06030115-001

Client/ID: Del Mar - IPB2645-01

Start Date: 03/01/2006

TEST SUMMARY

Species: *Pimephales promelas*.

Age: 13 (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-060301.

TEST DATA

		°C	DO	pH	# Dead		Analyst & Time of Readings
					A	B	
INITIAL	Control	20.4	8.9	7.9	0	0	R 1200
	100%	19.7	8.7	7.3	0	0	
24 Hr	Control	19.2	8.0	7.7	0	0	R 1100
	100%	19.3	8.3	7.6	0	0	
48 Hr	Control	19.3	7.4	7.6	0	0	R 1230
	100%	19.3	7.8	7.4	0	0	
Renewal	Control	19.5	8.4	7.8	0	0	R 1300
	100%	19.4	9.4	7.2	0	0	
72 Hr	Control	19.4	8.0	7.6	0	0	R 1100
	100%	19.2	8.2	7.6	0	0	
96 Hr	Control	19.4	7.9	7.4	0	0	R 1130
	100%	19.5	8.2	7.6	0	0	

Comments:

Sample as received: Chlorine: 0.0 mg/l; pH: 7.3; Conductivity: 700 umho; Temp: 2°C;

DO: 8.7 mg/l; Alkalinity: 60 mg/l; Hardness: 250 mg/l; NH₃-N: 0.4 mg/l.

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

Control: Alkalinity: 54 mg/l; Hardness: 94 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.

RESULTS

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



1014 E. Cooley Dr., Suite A, Colton, CA 92324 Ph (909) 370-4667 Fax (909) 370-1046
 9484 Chesapeake Drive, Suite 205, San Diego, CA 92123 Ph (619) 505-9596 Fax (619) 505-9689
 9830 South 51st Street, Suite B-120, Phoenix, AZ 85044 Ph (480) 785-0043 Fax (480) 785-0851
 2520 E. Sunset Rd., Suite #3, Las Vegas, NV 89120 Ph (702) 796-3620 Fax (702) 796-3621

SUBCONTRACT ORDER - PROJECT # IPB2645

SENDING LABORATORY:	RECEIVING LABORATORY:
Del Mar Analytical, Irvine 17461 Derian Avenue, Suite 100 Irvine, CA 92614 Phone: (949) 261-1022 Fax: (949) 261-1228 Project Manager: Michele Chamberlin	Aquatic Testing Laboratories-SUB 4350 Transport Street, Unit 107 Ventura, CA 93003 Phone : (805) 650-0546 Fax: (805) 650-0756

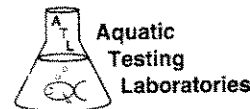
Standard TAT is requested unless specific due date is requested => Due Date: _____ Initials: _____

Analysis	Expiration	Comments
Sample ID: IPB2645-01 Water	Sampled: 02/28/06 07:25	Instant Notification
Bioassay-Acute 96hr	03/01/06 19:25	FH minnow, EPA/821-R02-012, Sub to AqTox Labs
Containers Supplied:		
1 gal Poly (IPB2645-01Y)		

SAMPLE INTEGRITY:			
All containers intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Sample labels/COC agree: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Samples Received On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Custom Seals Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Samples Preserved Properly: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Samples Received at (temp): <u>3°C</u>	

Released By:	Date: 3-1-06	Time: 10:20	Received By:	Date: 3-1-6	Time: 7:00
Released By:	Date: 3-1-06	Time: 10:20	Received By:	Date: 3-1-6	Time: 10:20

FATHEAD MINNOW ACUTE
Method 2000.0
Reference Toxicant - SDS



QA/QC Batch No.: RT-060301

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 glass beakers.
 Aeration: None.
 Number of organisms per chamber: 10.
 Photoperiod: 16/8 hrs light/dark.

TEST DATA

Date/Time: Analyst:	INITIAL			24 Hr					48 Hr				
	<u>3-1-06 1200</u>			<u>3-2-06 1100</u>					<u>3-3-06 1300</u>				
	<u>Ru</u>			<u>Ru</u>					<u>Ru</u>				
	°C	DO	pH	°C	DO	pH	# Dead		°C	DO	pH	# Dead	
A							B	A				B	
Control	<u>20.4</u>	<u>8.9</u>	<u>7.9</u>	<u>19.8</u>	<u>7.8</u>	<u>7.5</u>	<u>0</u>	<u>0</u>	<u>20.0</u>	<u>7.1</u>	<u>7.6</u>	<u>0</u>	<u>0</u>
1.0 mg/l	<u>20.4</u>	<u>8.9</u>	<u>7.9</u>	<u>19.7</u>	<u>7.7</u>	<u>7.5</u>	<u>0</u>	<u>0</u>	<u>20.0</u>	<u>7.0</u>	<u>7.6</u>	<u>0</u>	<u>0</u>
2.0 mg/l	<u>20.5</u>	<u>9.0</u>	<u>7.9</u>	<u>19.7</u>	<u>7.4</u>	<u>7.4</u>	<u>0</u>	<u>0</u>	<u>20.0</u>	<u>6.9</u>	<u>7.5</u>	<u>0</u>	<u>0</u>
4.0 mg/l	<u>20.5</u>	<u>9.1</u>	<u>7.9</u>	<u>19.7</u>	<u>7.7</u>	<u>7.4</u>	<u>0</u>	<u>0</u>	<u>20.0</u>	<u>6.6</u>	<u>7.5</u>	<u>0</u>	<u>0</u>
8.0 mg/l	<u>20.5</u>	<u>9.1</u>	<u>7.9</u>	<u>19.7</u>	<u>5.3</u>	<u>7.2</u>	<u>10</u>	<u>10</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>

Date/Time: Analyst:	RENEWAL			72 Hr					96 Hr				
	<u>3-3-06 1200</u>			<u>3-4-06 1100</u>					<u>3-5-06 1130</u>				
	<u>Ru</u>			<u>Ru</u>					<u>Ru</u>				
	°C	DO	pH	°C	DO	pH	# Dead		°C	DO	pH	# Dead	
A							B	A				B	
Control	<u>19.8</u>	<u>9.0</u>	<u>7.8</u>	<u>19.5</u>	<u>7.9</u>	<u>7.6</u>	<u>0</u>	<u>0</u>	<u>19.9</u>	<u>7.5</u>	<u>7.4</u>	<u>0</u>	<u>0</u>
1.0 mg/l	<u>19.8</u>	<u>9.0</u>	<u>7.8</u>	<u>19.6</u>	<u>8.3</u>	<u>7.6</u>	<u>0</u>	<u>0</u>	<u>19.9</u>	<u>7.6</u>	<u>7.4</u>	<u>0</u>	<u>0</u>
2.0 mg/l	<u>19.8</u>	<u>9.1</u>	<u>7.8</u>	<u>19.6</u>	<u>8.3</u>	<u>7.6</u>	<u>0</u>	<u>0</u>	<u>19.8</u>	<u>7.6</u>	<u>7.4</u>	<u>0</u>	<u>0</u>
4.0 mg/l	<u>19.9</u>	<u>9.1</u>	<u>7.8</u>	<u>19.6</u>	<u>7.7</u>	<u>7.5</u>	<u>0</u>	<u>0</u>	<u>19.8</u>	<u>7.6</u>	<u>7.4</u>	<u>0</u>	<u>0</u>
8.0 mg/l	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>

Comments:

Control: Alkalinity: 54 mg/l; Hardness: 94 mg/l; Conductivity: 325 umho.
 SDS: Alkalinity: 53 mg/l; Hardness: 94 mg/l; Conductivity: 330 umho.

Acute Fish Test-96 Hr Survival

Start Date: 01 Mar-06 12:00	Test ID: RT-060301f	Sample ID: REF-Ref Toxicant
End Date: 05 Mar-06 11:30	Lab ID: CAATL-Aquatic Testing Labs	Sample Type: SDS-Sodium dodecyl sulfate
Sample Date: 01 Mar-06 00:00	Protocol: EPAA 91-EPA Acute	Test Species: PP-Pimephales promelas

Comments:

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

Conc-mg/L	Transform: Arcsin Square Root						N	Number Resp	Total Number
	Mean	N-Mean	Mean	Min	Max	CV%			
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

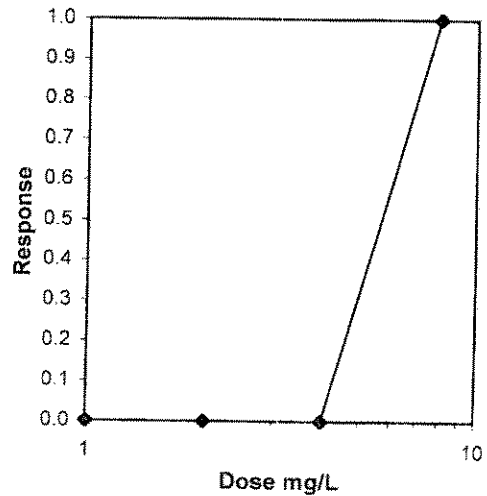
Auxiliary Tests

Normality of the data set cannot be confirmed
 Equality of variance cannot be confirmed

Statistic	Critical	Skew	Kurt
-----------	----------	------	------

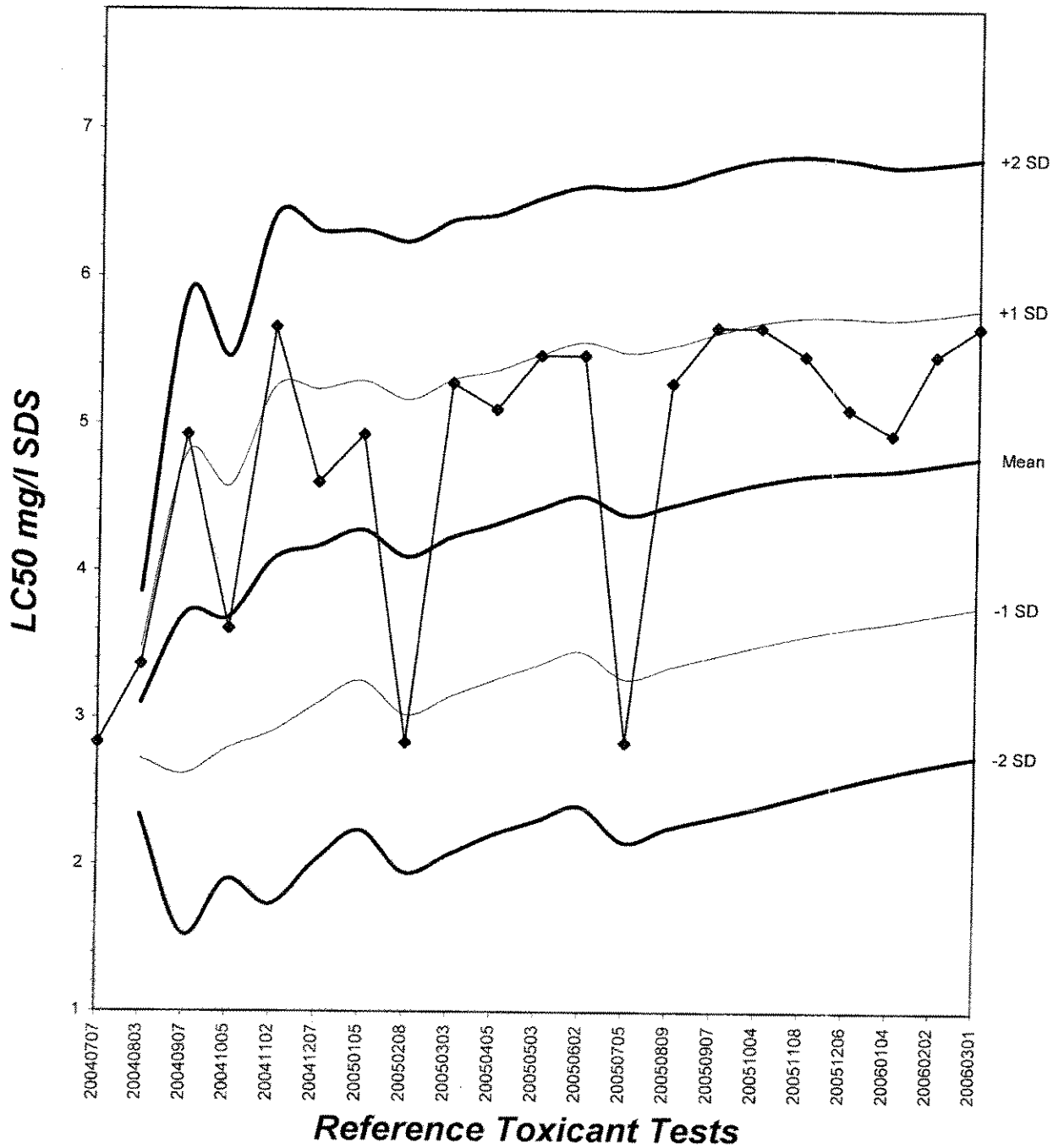
Graphical Method

Trim Level	EC50
0.0%	5.6569



Fathead Minnow Acute Laboratory Control Chart

CV% = 21.3



TEST ORGANISM LOG



FATHEAD MINNOW - LARVAL
(*Pimephales promelas*)

QA/QC BATCH NO.: RT-060301

SOURCE: In-Lab Culture

DATE HATCHED: 2-16-06

APPROXIMATE QUANTITY: 400

GENERAL APPEARANCE: good

MORTALITIES 48 HOURS PRIOR TO
TO USE IN TESTING: 0

DATES USED IN LAB: 3/1/0
to
1/1

AVERAGE FISH WEIGHT: 0.006 gm

TEST LOADING LIMITS: 0.65 gm/liter

200 ml test solution volume = 0.013 gm mean fish weight limit

250 ml test solution volume = 0.016 gm mean fish weight limit

ACCLIMATION WATER QUALITY:

Temp.: 20.4 °C

pH: 7.7

Ammonia: 0.2 mg/l NH₃-N

DO: 2.8 mg/l

Alkalinity: 54 mg/l

Hardness: 50 mg/l

READINGS RECORDED BY: _____

DATE: 3-5-06

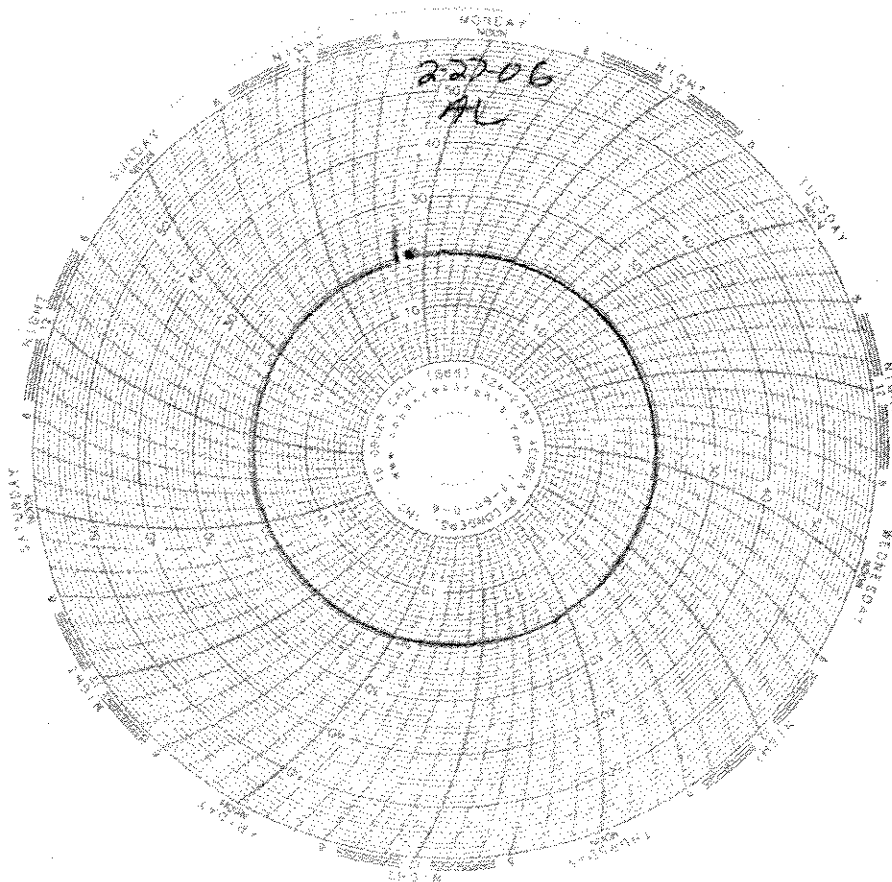


Laboratory Temperature Chart

QA/QC Batch No: RT-060301

Date Tested: 03/01/06 to 03/05/06

Acceptable Range: 20+/- 1°C





EBERLINE
SERVICES

March 13, 2006

Ms. Michele Chamberlin
Project Manager
Del Mar Analytical
17461 Derian Avenue, Suite 100
Irvine, CA 92614

Reference: Del Mar Analytical Project No. IPB2645
Eberline Services NELAP Cert #01120CA (exp. 01/31/07)
Eberline Services Report R603020-8664

Dear Ms. Chamberlin:

Enclosed are results from the analysis of one water sample received at Eberline Services on March 2, 2006. The sample was analyzed according to the accompanying Del Mar Analytical Subcontract Order Form. The requested analysis was gross alpha/gross beta (EPA900.0). The batch QC LCS, blank analysis, duplicate analysis, and matrix spike results were within the limits defined in Eberline Services Quality Control Procedures Manual. No problems were encountered during the requested analysis.

Please call me if you have any questions concerning this report.

Regards,

Melissa Mannion
Senior Program Manager

MCM/njv

Enclosure: Report
Subcontract Form
Receipt checklist
Invoice

Analytical Services
2030 Wright Avenue
P.O. Box 4040
Richmond, California 94804-0040
(510) 235-2633 Fax (510) 235-0438
Toll Free (800) 841-5487
www.eberlineservices.com

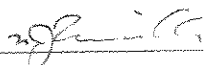
NPDES - 2136

Eberline Services

ANALYSIS RESULTS

SDG <u>8664</u>	Client <u>DEL MAR ANAL</u>
Work Order <u>R603020-01</u>	Contract <u>PROJECT# IPB2645</u>
Received Date <u>03/02/06</u>	Matrix <u>WATER</u>

Client	Lab						
<u>Sample ID</u>	<u>Sample ID</u>	<u>Collected</u>	<u>Analyzed</u>	<u>Nuclide</u>	<u>Results ± 2σ</u>	<u>Units</u>	<u>MDA</u>
IPB2645-01	8664-001	02/28/06	03/06/06	GrossAlpha	1.30 ± 1.0	pCi/L	1.45
			03/06/06	Gross Beta	6.96 ± 1.4	pCi/L	1.98

Certified by <u></u>
Report Date <u>03/12/06</u>
Page 1

Eberline Services

QC RESULTS

SDG <u>8664</u>	Client <u>DEL MAR ANAL</u>
Work Order <u>R603020-01</u>	Contract <u>PROJECT# IPB2645</u>
Received Date <u>03/02/06</u>	Matrix <u>WATER</u>

Lab

Sample ID	Nuclide	Results	Units	Amount Added	MDA	Evaluation
<u>LCS</u>						
8660-002	GrossAlpha	9.57 ± 1.3	pCi/Smpl	10.2	0.635	94% recovery
	Gross Beta	9.53 ± 0.77	pCi/Smpl	9.84	0.609	97% recovery
<u>BLANK</u>						
8660-003	GrossAlpha	-0.067 ± 0.23	pCi/Smpl	NA	0.513	<MDA
	Gross Beta	-0.136 ± 0.31	pCi/Smpl	NA	0.548	<MDA

DUPLICATES

Sample ID	Nuclide	Results ± 2σ	MDA
8660-004	GrossAlpha	1.33 ± 1.5	2.25
	Gross Beta	7.77 ± 1.8	2.37

ORIGINALS

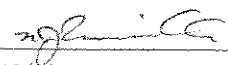
Sample ID	Results ± 2σ	MDA	RPD (Tot)	Eval
8660-001	2.64 ± 1.7	1.95	66	177 satis.
	7.69 ± 1.6	2.06	1	63 satis.

SPIKED SAMPLE

Sample ID	Nuclide	Results ± 2σ	MDA
8660-005	GrossAlpha	92.9 ± 7.9	1.88
	Gross Beta	79.8 ± 3.9	1.99

ORIGINAL SAMPLE

Sample ID	Results ± 2σ	MDA	Added	%Recv
8660-001	2.64 ± 1.7	1.95	76.5	118
	7.69 ± 1.6	2.06	70.3	103

Certified by 
 Report Date 03/12/06
 Page 2



17461 Derian Ave. Suite 100, Irvine, CA 92614 Ph (949) 261-1022 Fax (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 Ph (909) 370-4667 Fax (909) 370-1046
 9484 Chesapeake Drive, Suite 805, San Diego, CA 92123 Ph (619) 505-9596 Fax (619) 505-9689
 9830 South 51st Street, Suite B-120, Phoenix, AZ 85044 Ph (480) 785-0043 Fax (480) 785-0851
 2520 E. Sunset Rd., Suite #3, Las Vegas, NV 89120 Ph (702) 798-3620 Fax (702) 798-3621

SUBCONTRACT ORDER - PROJECT # IPB2645

SENDING LABORATORY:

Del Mar Analytical, Irvine
 17461 Derian Avenue, Suite 100
 Irvine, CA 92614
 Phone: (949) 261-1022
 Fax: (949) 261-1228
 Project Manager: Michele Chamberlin

RECEIVING LABORATORY:

Eberline Services
 2030 Wright Avenue
 Richmond, CA 94804
 Phone: (510) 235-2633
 Fax: (510) 235-0438

Standard TAT is requested unless specific due date is requested => **Due Date:** _____ **Initials:** _____

Analysis	Expiration	Comments
Sample ID: IPB2645-01 Water	Sampled: 02/28/06 07:25	Instant Notification
608-Pesticides	03/07/06 07:25	J flags, Boeing, annual
EDD + Level 4	03/28/06 07:25	
Gross Alpha-O	02/28/07 07:25	900.0, IF RESULT>15 pCi/L, run Radium 226 & 228
Gross Beta-O	02/28/07 07:25	900.0, IF RESULT>50 pCi/L, run Radium 226 & 228
Radium, Combined-O	02/28/07 07:25	HOLD for Gross A&B results; EPA 903.1 & 904.0
Strontium 90-O	02/28/07 07:25	EPA 905.0
Tritium-O	02/28/07 07:25	EPA 906.0

Containers Supplied:

- 2.5 gal Poly (IPB2645-01S)
- 40 ml Amber Voa Vial (IPB2645-01T)
- 40 ml Amber Voa Vial (IPB2645-01U)
- 40 ml Amber Voa Vial (IPB2645-01V)

SAMPLE INTEGRITY:

All containers intact: Yes No Sample labels/COC agree: Yes No Samples Received On Ice: Yes No
 Custody Seals Present: Yes No Samples Preserved Properly: Yes No Samples Received at (temp): _____

Released By: [Signature] Date: 3/1/06 Time: 1700 Received By: [Signature] Date: 03/02/06 Time: 9:30

Released By: _____ Date: _____ Time: _____ Received By: _____ Date: _____ Time: _____



RICHMOND, CA LABORATORY

SAMPLE RECEIPT CHECKLIST

Client: DEL MAR City IRVINE State CA
 Date/Time received 03/02/06 9:30 CoC No. 1PB2645
 Container I.D. No. KE CAEST Requested TAT (Days) MUST P.O. Received Yes [] No []

INSPECTION

1. Custody seals on shipping container intact? Yes [y] No [] N/A []
2. Custody seals on shipping container dated & signed? Yes [x] No [] N/A []
3. Custody seals on sample containers intact? Yes [] No [] N/A [x]
4. Custody seals on sample containers dated & signed? Yes [] No [] N/A [x]
5. Packing material is: Wet [] Dry [x]
6. Number of samples in shipping container: 1 Sample Matrix W
7. Number of containers per sample: 4 (Or see CoC _____)
8. Samples are in correct container Yes [x] No []
9. Paperwork agrees with samples? Yes [x] No []
10. Samples have: Tape [] Hazard labels [] Rad labels [] Appropriate sample labels [x]
11. Samples are: In good condition [x] Leaking [] Broken Container [] Missing []
12. Samples are: Preserved [] Not preserved [x] pH _____ Preservative _____
13. Describe any anomalies: _____

14. Was P.M. notified of any anomalies? Yes [] No [] Date _____
 15. Inspected by MFW Date: 03/02/06 Time: 10:00

Customer Sample No.	cpm	mR/hr	Wipe	Customer Sample No.	cpm	mR/hr	wipe

Ion Chamber Ser. No. _____ Calibration date _____
 Alpha Meter Ser. No. _____ Calibration date _____
 Beta/Gamma Meter Ser. No. _____ Calibration date _____

APPENDIX G

Section 54

Outfall 005, February 28, 2006
AMEC Data Validation Reports

CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

MEC^x
 12269 East Vassar Drive
 Aurora, CO 80014

Package ID B4DF50
 Task Order 1261.001D.01
 SDG No. IPB2645
 No. of Analyses 1

Laboratory Alta
 Reviewer K. Shadowlight
 Analysis/Method Dioxin/Furan by Method 1613

Date: April 4, 2006
 Reviewer's Signature
K Shadowlight

ACTION ITEMS^a	
1. Case Narrative Deficiencies	
2. Out of Scope Analyses	
3. Analyses Not Conducted	
4. Missing Hardcopy Deliverables	
5. Incorrect Hardcopy Deliverables	
6. Deviations from Analysis Protocol, e.g.,	Detects below the laboratory lower calibration level were qualified as estimated.
Holding Times	
GC/MS Tune/Inst. Performance	
Calibration	
Method blanks	
Surrogates	
Matrix Spike/Dup LCS	
Field QC	
Internal Standard Performance	
Compound Identification	
Quantitation	
System Performance	
COMMENTS^b	

^a Subcontracted analytical laboratory is not meeting contract and/or method requirements.
^b Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.



DATA VALIDATION REPORT

NPDES Monitoring Program
Annual Outfall 005

ANALYSIS: DIOXINS/FURANS
SAMPLE DELIVERY GROUP: IPB2645

Prepared by
MECX, LLC
12269 East Vassar Drive
Aurora, CO 80014

1. INTRODUCTION

Task Order Title: NPDES
Contract Task Order: 1261.001.01
Sample Delivery Group: IPB2645
Project Manager: P. Costa
Matrix: Water
Analysis: Dioxins/Furans
QC Level: Level IV
No. of Samples: 1
No. of Reanalyses/Dilutions: 0
Reviewer: K. Shadowlight
Date of Review: April 4, 2006

The samples listed in Table 1 were 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 for Chlorinated Dioxin/Furan Data Review (8/02)*. Any deviations from these procedures and guidelines are documented herein. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.

Table 1. Sample Identification

Client ID	Laboratory ID (Del Mar)	Laboratory ID (Alta)	Matrix	COC Method
Outfall 005	IPB2645-01	27354-001	Water	1613

2. DATA VALIDATION FINDINGS

2.1 SAMPLE MANAGEMENT

Following are findings associated with sample management:

2.1.1 Sample Preservation, Handling, and Transport

The sample in this SDG was received at Del Mar Analytical within the temperature limits of 4°C \pm 2°C. The sample was shipped to Alta for dioxin/furan analysis and was received below the temperature limits at 0°C. As the sample was not noted to be damaged or frozen, no qualifications were required. According to the case narrative and laboratory login sheet, the sample was received intact and in good condition at both laboratories. No qualifications were required.

2.1.2 Chain of Custody

The COC and transfer COC were legible and signed by the appropriate field and laboratory personnel, and accounted for the analysis presented in this SDG. As the sample was couriered directly to Del Mar Analytical-Irvine, custody seals were not required. The Client ID was added to the sample result summary by the reviewer. No qualifications were required.

2.1.3 Holding Times

The sample was extracted and analyzed within one year of collection. No qualifications were required.

2.2 INSTRUMENT PERFORMANCE

Following are findings associated with instrument performance:

2.2.1 GC Column Performance

A Windows Defining Mix (WDM) containing the first and last eluting congeners of each descriptor and isomer specificity compounds was not analyzed prior to the initial calibration sequence or at the beginning of each analytical sequence; however, the first and last eluting congeners and isomer specificity compounds were added to the midpoint of the initial calibration and to the continuing calibration standards (see section 2.3.2). 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%. No qualifications were required.

2.2.2 Mass Spectrometer Performance

The mass spectrometer performance was acceptable with the static resolving power greater than 10,000. No qualifications were required.

2.3 CALIBRATION

2.3.1 Initial Calibration

The initial calibration was analyzed 01/12/2006 on instrument VG-7. The calibration consisted of six concentration level standards (CS0 through CS5) analyzed to verify instrument linearity. The initial calibrations were acceptable with %RSDs $\leq 20\%$ for the 16 native compounds (calibration by isotope dilution) and $\leq 35\%$ for the one native and all labeled compounds (calibration by internal standard). The relative retention times and ion abundance ratios were within the QC limits listed in Method 1613 for all standards. A representative number of %RSDs were verified from the raw data, and no calculation or transcription errors were noted. No qualifications were required.

2.3.2 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. A representative number of %Ds were verified from the raw data, and no calculation or transcription errors were noted. No qualifications were required.

WDM and isomer specificity compounds were added to the VER standard instead of being analyzed separately, as noted in section 2.2.1 of this report. No adverse effect was observed with this practice.

2.4 BLANKS

One method blank (0-7807-MB001) was extracted and analyzed with the sample in this SDG. There were no target compounds detected in the method blank. A review of the method blank raw data and chromatograms indicated no false negatives. No qualifications were required.

2.5 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

One blank spike (0-7807-OPR001) was extracted and analyzed with the sample in this SDG. All recoveries were within the acceptance criteria listed in Table 6 of Method 1613. A review of the raw data and chromatograms indicated no transcription or calculation errors. No qualifications were required.

2.6 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

MS/MSD analyses were not performed in this SDG. Evaluation of method accuracy was based on the OPR results. No qualifications were required.

2.7 FIELD QC SAMPLES

Following are findings associated with field QC:

2.7.1 Field Blanks and Equipment Rinsates

The sample in this SDG had no field blank or equipment rinsate identified. No qualifications of the site samples were required.

2.7.2 Field Duplicates

No field duplicates were identified in association with the sample in this SDG.

2.8 INTERNAL STANDARDS

The labeled standard recoveries were within the acceptance criteria listed in Table 7 of Method 1613. No qualifications were required.

2.9 COMPOUND IDENTIFICATION

The laboratory analyzed for polychlorinated dioxins/furans by EPA Method 1613. The compound identifications were verified from the raw data and no false negatives or positives were noted. No qualifications were required.

2.10 COMPOUND QUANTIFICATION AND REPORTED DETECTION LIMITS

Compound quantitation was verified from the raw data. The laboratory calculated and reported compound-specific detection limits. Any detects below the laboratory lower calibration level were qualified as estimated, "J." These "J" values were annotated with the qualification code of "DNQ" to comply with the reporting requirements of the NPDES permit. No further qualifications were required.

Sample ID: **IPB2645-01**

Outfall 005

EPA Method 1613

Client Data		Sample Data		Laboratory Data	
Name:	Del Mar Analytical, Irvine	Matrix:	Aqueous	Lab Sample:	27354-001
Project:	IPB2645	Sample Size:	1.01 L	QC Batch No.:	7807
Date Collected:	28-Feb-06			Date Analyzed DB-5:	8-Mar-06
Time Collected:	0725			Date Analyzed DB-225:	NA
Analyte	Conc. (ug/L)	DL^a	EMPC^b	Labeled Standard	%R
2,3,7,8-TCDD	ND	0.00000130		IS 13C-2,3,7,8-TCDD	74.0
1,2,3,7,8-PeCDD	ND	0.00000116		13C-1,2,3,7,8-PeCDD	77.5
1,2,3,4,7,8-HxCDD	ND	0.00000274		13C-1,2,3,4,7,8-HxCDD	70.2
1,2,3,6,7,8-HxCDD	ND	0.00000264		13C-1,2,3,6,7,8-HxCDD	72.0
1,2,3,7,8,9-HxCDD	ND	0.00000260		13C-1,2,3,4,6,7,8-HpCDD	76.5
1,2,3,4,6,7,8-HpCDD	0.0000119			13C-OCDD	55.9
OCDD	0.000163		J	13C-2,3,7,8-TCDF	74.6
2,3,7,8-TCDF	ND	0.00000106		13C-1,2,3,7,8-PeCDF	82.9
1,2,3,7,8-PeCDF	ND	0.00000105		13C-2,3,4,7,8-PeCDF	83.5
2,3,4,7,8-PeCDF	ND	0.00000105		13C-1,2,3,4,7,8-HxCDF	68.4
1,2,3,4,7,8-HxCDF	ND	0.00000605		13C-1,2,3,6,7,8-HxCDF	70.1
1,2,3,6,7,8-HxCDF	ND	0.00000542		13C-2,3,4,6,7,8-HxCDF	68.3
2,3,4,6,7,8-HxCDF	ND	0.00000610		13C-1,2,3,7,8,9-HxCDF	72.0
1,2,3,7,8,9-HxCDF	ND	0.00000748		13C-1,2,3,4,6,7,8-HpCDF	70.6
1,2,3,4,6,7,8-HpCDF	ND	0.00000130		13C-1,2,3,4,7,8,9-HpCDF	74.1
1,2,3,4,7,8,9-HpCDF	ND	0.00000127		13C-OCDF	59.9
OCDF	ND	0.00000276		CRS 37Cl-2,3,7,8-TCDD	84.7
Totals					
Total TCDD	ND	0.00000130			
Total PeCDD	ND	0.00000116			
Total HxCDD	ND	0.00000265			
Total HpCDD	0.0000200				
Total TCDF	ND	0.00000106			
Total PeCDF	ND	0.00000105			
Total HxCDF	ND	0.00000621			
Total HpCDF	ND	0.00000128			

Footnotes

- a. Sample specific estimated detection limit.
- b. Estimated maximum possible concentration.
- c. Method detection limit.
- d. Lower control limit - upper control limit.

Analyst: JMH

level II

Approved By: Martha M. Maier 08-Mar-2006 14:19

CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

MEC^X
 12269 East Vassar Drive
 Aurora, CO 80014

Package ID: B4MT50
 Task Order: 1261.001D.01
 SDG No.: IPB2645

No. of Analyses: 1

Laboratory: Del Mar Analytical
 Reviewer: P. Meeks
 Analysis/Method: Metals

Date: <u>April 6, 2006</u>
Reviewer's Signature <i>P. Meeks</i>

ACTION ITEMS^a	
1. Case Narrative Deficiencies	_____ _____
2. Out of Scope Analyses	_____ _____
3. Analyses Not Conducted	_____ _____
4. Missing Hardcopy Deliverables	_____ _____
5. Incorrect Hardcopy Deliverables	_____ _____
6. Deviations from Analysis Protocol, e.g., Holding Times GC/MS Tune/Inst. Performance Calibration Method blanks Surrogates Matrix Spike/Dup LCS Field QC Internal Standard Performance Compound Identification Quantitation System Performance	Qualification applied for a blank detects and detects below the reporting limit. _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____
COMMENTS^b	_____ _____ _____
<p>^a Subcontracted analytical laboratory is not meeting contract and/or method requirements.</p> <p>^b Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.</p>	



DATA VALIDATION REPORT

NPDES Sampling
Outfall 005

ANALYSIS: METALS

SAMPLE DELIVERY GROUP IPB2645

Prepared by

MECX, LLC
12269 East Vassar Drive
Aurora, CO 80014

1. INTRODUCTION

Task Order Title: NPDES Sampling
MEC^X Project Number: 1261.001D.01
Sample Delivery Group: IPB2645
Project Manager: P. Costa
Matrix: Water
Analysis: Metals
QC Level: Level IV
No. of Samples: 1
No. of Reanalyses/Dilutions: 0
Reviewer: P. Meeks
Date of Review: April 6, 2006

The samples listed in Table 1 were validated based on the guidelines outlined in the MEC^X Data Validation Procedure for ICP and ICP-MS Metals (DVP-5, Rev. 0), EPA Methods 200.7 and 200.8, and validation guidelines outlined in the USEPA CLP National Functional Guidelines for Inorganic Data Review (2/94). Any deviations from these procedures and guidelines are documented herein. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.

Table 1. Sample Identification

Client ID	Laboratory ID	Matrix	COC Method
Outfall 005	IPB2645-01	Water	200.7, 200.8

2. DATA VALIDATION FINDINGS

2.1 SAMPLE MANAGEMENT

Following are findings associated with sample management:

2.1.1 Sample Preservation, Handling, and Transport

The sample in this SDG was received at the laboratory within the temperature limits of 4°C ±2°C. No sample preservation, handling, or transport problems were noted, and no qualifications were necessary.

2.1.2 Chain of Custody

The COC was signed and dated by field and laboratory personnel and accounted for the sample and analyses presented in this SDG. No sample qualifications were required.

2.1.3 Holding Times

The date of collection recorded on the COC and the dates of analyses recorded in the raw data documented that the sample analyses were performed within the specified holding times of six months for the ICP and ICP-MS metals. No qualifications were required.

2.2 ICP-MS TUNING

The method-specified tune criteria were met and no qualifications were required.

2.3 CALIBRATION

The ICV and CCV results showed acceptable recoveries, 90-110% for ICP and ICP-MS metals. The laboratory analyzed reporting limit check standards in association with the sample in this SDG and the recoveries were considered to be acceptable. No qualifications were required.

2.4 BLANKS

Chromium and cadmium were detected in method blank 6C03084-BLK1 at 1.1 and 0.0179 µg/L, respectively; therefore, chromium and cadmium detected in Outfall 005 were qualified as estimated nondetects, "UJ." Antimony and thallium were detected in a bracketing CCB at 0.45

and 0.27 µg/L, respectively; therefore, antimony and thallium detected in Outfall 005 were qualified as estimated nondetects, "UJ." No further qualifications were required.

2.5 ICP INTERFERENCE CHECK SAMPLE (ICS A/AB)

ICSA and ICSAB analyses were performed in association with the sample in this SDG for the ICP metals. Silver and chromium were detected in the ICSA above the respective reporting limits. The reviewer checked the raw data for the sample and determined that the level of interferents in Outfall 011 were not of sufficient concentrations to qualify the sample results. No qualifications were required.

2.6 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

The ICP and ICP-MS were within the laboratory-established control limits of 85-115%. No qualifications were required.

2.7 LABORATORY DUPLICATES

No MS/MSD or laboratory duplicate analyses were performed in association with the sample in this SDG; therefore, no assessment was made with respect to this criterion.

2.8 MATRIX SPIKES

A matrix spike analysis was performed on Outfall 005 for the ICP-MS analytes only. All recoveries were within the laboratory established control limits. No ICP MS or MS/MSD analyses were performed; therefore, no assessment was made with respect to this criterion. ICP method accuracy was evaluated based on LCS results. No qualifications were required.

2.9 ICP/MS AND ICP SERIAL DILUTION

No serial dilution analyses were performed in association with the sample in this SDG; therefore, no assessment was made with respect to this criterion.

2.10 INTERNAL STANDARDS PERFORMANCE

For the target analytes analyzed by ICP-MS, the internal standards were within the method-specified control limits of 60-125%. No qualifications were required.

2.11 SAMPLE RESULT VERIFICATION

A Level IV review was performed for the sample in this data package. Calculations were verified and the sample results reported on the Form Is were verified against the raw data. No transcription errors or calculation errors were noted. Analytes detected below the reporting limit were qualified as estimated, "J," and denoted with "DNQ," in accordance with the NPDES permit. No further qualifications were required.

2.12 FIELD QC SAMPLES

Field QC samples are evaluated, and if necessary, qualified based only on laboratory blanks. Any remaining detects are used to evaluate the associated samples.

2.12.1 Field Blanks and Equipment Rinsates

The sample in this SDG had no associated field QC samples. No qualifications were required.

2.12.2 Field Duplicates

There were no field duplicate analyses performed in association with the site sample.



17461 Derian Ave., Suite 100, Irvine, CA 92614 (949) 261-1022 FAX (949) 268-1297
 1014 E. Cookley Dr., Suite A, Colton, CA 92324 (909) 378-4667 FAX (909) 378-1046
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0841 FAX (480) 785-0854
 2520 E. Sunset Rd., #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-1621

MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06
 Received: 02/28/06

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers	
									Raw Qual	Qual Code
Sample ID: IPB2645-01 (Outfall 005 - Water) - cont.										
Reporting Units: ug/l										
Aluminum	EPA 200.7	6C03084	40	50	780	1	03/03/06	03/04/06		
Antimony	EPA 200.8	6C02098	0.050	2.0	0.46	1	03/02/06	03/02/06	U J	B
Arsenic	EPA 200.7	6C03084	4.4	5.0	6.5	1	03/03/06	03/04/06		
Beryllium	EPA 200.7	6C03084	0.90	2.0	ND	1	03/03/06	03/04/06	U	
Cadmium	EPA 200.8	6C02098	0.025	1.0	0.077	1	03/02/06	03/02/06	U J, B	B
Chromium	EPA 200.7	6C03084	2.0	5.0	2.0	1	03/03/06	03/04/06	U J, B	B
Copper	EPA 200.8	6C02098	0.25	2.0	2.3	1	03/02/06	03/02/06		
Lead	EPA 200.8	6C02098	0.040	1.0	0.50	1	03/02/06	03/02/06	J J	DNQ
Mercury	EPA 245.1	6C02097	0.050	0.20	ND	1	03/02/06	03/02/06	*	
Nickel	EPA 200.7	6C03084	2.0	10	ND	1	03/03/06	03/04/06	U	
Selenium	EPA 200.7	6C03084	8.0	10	ND	1	03/03/06	03/04/06	U	
Silver	EPA 200.7	6C03084	3.0	10	4.1	1	03/03/06	03/04/06	J J	DNQ
Thallium	EPA 200.8	6C02098	0.15	1.0	0.53	1	03/02/06	03/02/06	U J	B
Vanadium	EPA 200.7	6C03084	3.0	10	3.6	1	03/03/06	03/04/06	J J	DNQ
Zinc	EPA 200.7	6C03084	15	20	ND	1	03/03/06	03/04/06	U	

* Analysis not performed

Del Mar Analytical - Irvine
 Michele Chamberlin
 Project Manager

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

LEVEL IV

IPB2645 <Page 11 of 44>

NPDES - 2158



Del Mar Analytical

17461 Dorian Ave., Suite 100, Irvine, CA 92614 (949) 261-1022 FAX (949) 260-3297
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06

Received: 02/28/06

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB2645-01 (Outfall 005 - Water) - cont.									
Reporting Units: mg/l									
Boron	EPA 200.7	6C03084	0.0080	0.050	0.016	1	03/03/06	03/07/06	* J

Row Qual
 Qual Code

* Analysis not validated

Del Mar Analytical - Irvine
 Michele Chamberlin
 Project Manager

LEVEL IV

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

IPB2645 <Page 10 of 44>

CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

MEC^x
 12269 East Vassar Drive
 Aurora, CO 80014

Package ID: B4PP14
 Task Order: 1261.001D.01
 SDG No.: IPB2645

No. of Analyses: 1
 Date: April 7, 2006
 Reviewer's Signature: P. Meeks

Laboratory: Del Mar Analytical
 Reviewer: P. Meeks
 Analysis/Method: Pesticide/PCBs

ACTION ITEMS ^a	
Case Narrative	
Deficiencies	
2. Out of Scope Analyses	
3. Analyses Not Conducted	
4. Missing Hardcopy Deliverables	
5. Incorrect Hardcopy Deliverables	
6. Deviations from Analysis Protocol, e.g.,	Qualifications applied for initial calibration %RSD and continuing calibration %Ds.
Holding Times	
GC/MS Tune/Inst. Performance	
Calibration	
Method blanks	
Surrogates	
Matrix Spike/Dup LCS	
Field QC	
Internal Standard Performance	
Compound Identification	
Quantitation	
System Performance	
COMMENTS ^b	
^a Subcontracted analytical laboratory is not meeting contract and/or method requirements. ^b Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.	



DATA VALIDATION REPORT

NPDES Monitoring Program
Annual Outfall 005

ANALYSIS: PESTICIDES / PCBs

SAMPLE DELIVERY GROUP: IPB2645

Prepared by

MECX, LLC
12269 East Vassar Drive
Aurora, CO 80014

1. INTRODUCTION

Task Order Title: NPDES
MEC^X Project Number: 1261.001D.01
Sample Delivery Group: IPB2645
Project Manager: P. Costa
Matrix: Water
Analysis: Pesticides
QC Level: Level IV
No. of Samples: 1
No. of Reanalyses/Dilutions: 0
Reviewer: P. Meeks
Date of Review: April 7, 2006

The samples listed in Table 1 were validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for Organochlorine Pesticides and PCBs (DVP-4, Rev. 0)*, *EPA Method 608*, and the *National Functional Guidelines for Organic Data Review (2/94)*. Any deviations from these procedures are documented herein. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.

Table 1. Sample Identification

Client ID	Laboratory ID	Matrix	COC Method
Outfall 005	IPB2645-01	Water	608

2. DATA VALIDATION FINDINGS

2.1 SAMPLE MANAGEMENT

The sample in this SDG was received at the laboratory within the temperature limits of $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$, at 5°C . According to the case narrative for this SDG, the sample was received intact and on ice. No qualifications were required.

2.1.2 Chain of Custody

The COC was signed and dated by both field and laboratory personnel. As the sample was couriered directly to the laboratory, custody seals were not required. No qualifications were required.

2.1.3 Holding Times

The water sample was extracted within seven days of sample collection and analyzed within 40 days of extraction. No qualifications were required.

2.2 PESTICIDES INSTRUMENT PERFORMANCE

No resolution check standards or breakdown check standards are required by Method 608 for pesticides, and according to the raw data provided, a resolution check standard was not analyzed by the laboratory. The laboratory did analyze a breakdown check standard with the breakdown for individual components (4,4-DDT and endrin) $\leq 20\%$ and $\leq 30\%$ for the total, as suggested in the National Functional Guidelines. A review of the raw data indicated that the analytical run time was of sufficient length to provide adequate standard separation. The two analytical columns used in the analyses were within the guidelines specified in the methods.

According to the laboratory SOP and the initial calibration raw data, the retention time windows are ± 0.10 minutes for both surrogates and target compound calibration standards. A review of the raw data indicated that the laboratory retention time criteria were met for the surrogates and pesticide calibration standards. No qualifications were required.

2.3 CALIBRATION

2.3.1 Analytical Sequence

Based on the data provided, the analytical sequences were in accordance with the requirements of Method 608. No qualifications were required.

2.3.2 Initial Calibration

There was one initial calibration dated 03/02/06 associated with the Aroclor analysis of the site sample and one dated 03/06/06 associated with the pesticide analysis. The initial calibrations consisted of six point calibrations for Aroclors 1016 and 1260 and all pesticide target compounds on two analytical columns. The average %RSDs of the individual Aroclor peaks were within the EPA Method 608 QC limit of $\leq 10\%$ on the primary analytical column (Channel A) or the r^2 values were ≥ 0.995 , except for the average %RSD for Aroclor 1260. The nondetects for Aroclors 1248, 1254, and 1260 were qualified as estimated, "UJ." The %RSDs for all pesticide target compounds were $\leq 10\%$ on the primary column or r^2 values ≥ 0.995 , with the exception of the %RSD for heptachlor. The nondetect for heptachlor was qualified as estimated, "UJ," in Outfall 005.

The pesticide and average Aroclor %RSDs were $\leq 10\%$ or r^2 values ≥ 0.995 on the secondary column (Channel B).

An ICV was analyzed immediately following each initial calibration, and the %Ds for all pesticide target compounds and Aroclors 1016 and 1260 were within the QC limit of $\leq 15\%$ on the primary column. No further qualifications were required.

2.3.3 Continuing Calibration

The pesticide and Aroclor analyses of Outfall 005 were each bracketed by two continuing calibrations. The %Ds for all pesticide target compounds and Aroclors 1016 and 1260 were within the Method QC limit of $\leq 15\%$ for all calibrations on the primary column, with the exception of 4,4-DDT and methoxychlor on the primary column in the ending pesticide CCV. As the responses were low, the nondetects for 4,4-DDT and methoxychlor in Outfall 005 were qualified as estimated, "UJ." No further qualifications were required.

2.4 BLANKS

2.4.1 Instrument Blanks

An instrument blank was analyzed at the beginning of the analytical sequence. Cross-contamination was not evident in the instrument blank or the sample. No qualifications were necessary.

2.4.2 Method Blanks

One water method blank (6C05031-BLK1) was extracted and analyzed with this SDG. No pesticide target compounds or Aroclors were detected in the method blank. Review of the chromatograms from both channels showed no false negatives. No qualifications were required.

2.5 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

One blank spike/blank spike duplicate pair (6C05031-BS1/BSD1 for pesticides and Aroclors) was analyzed with this SDG. The recoveries for all pesticide compounds and Aroclors 1016 and 1260 were within the laboratory-established QC limits, and all RPDs were within the QC limit of $\leq 30\%$. A representative number of recoveries and RPDs were calculated from the raw data and no calculation or transcription errors were found. No qualifications were required.

2.6 SURROGATE RECOVERY

Surrogate recoveries were within the laboratory-established QC limits for the sample in this SDG. The recoveries were calculated from the raw data, and no transcription or calculation errors were noted. No qualifications were required.

2.7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

MS/MSD analyses were not performed on the sample of this SDG. Evaluation of method accuracy and precision were based on the blank spike/blank spike duplicate results. No qualifications were required.

2.8 SAMPLE CLEANUP PERFORMANCE

According to the laboratory extraction benchsheets, no cleanups were performed on the water sample. No qualifications were required.

2.9 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 sample. Following are findings associated with field QC samples:

2.9.1 Field Blanks and Equipment Rinsates

There were no field blank or equipment rinsate samples identified for this SDG. No qualifications were required.

2.9.2 Field Duplicates

There were no field duplicate samples identified for this SDG.

2.10 COMPOUND IDENTIFICATION

The laboratory analyzed for pesticide target compounds and seven Aroclors by EPA Method 608. Compound identification is verified at a Level IV validation. The laboratory provided an overlay of the pesticide sample chromatogram and the pesticide standard for identification purposes. Review of chromatograms and retention times indicated no problems with compound identification for the sample in this SDG. No qualifications were required.

2.11 COMPOUND QUANTIFICATION AND REPORTED DETECTION LIMITS

Compound quantification is verified at a Level IV data validation. No calculation or transcription errors were found. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. No qualifications were required.



17461 Dorian Ave., Suite 100, Irvine, CA 92614 (949) 261-1022 FAX (949) 260-3297
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 9830 South 31st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-Pasadena/Boeing Project ID: Annual Outfall 005
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101 Report Number: IPB2645
 Attention: Bronwyn Kelly
 Sampled: 02/28/06
 Received: 02/28/06

TOTAL PCBS (EPA 608)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB2645-01 (Outfall 005 - Water) - cont.									
Reporting Units: ug/l									
Aroclor 1016	EPA 608	6C05031	0.19	0.94	ND	0.943	03/05/06	03/06/06	U
Aroclor 1221	EPA 608	6C05031	0.094	0.94	ND	0.943	03/05/06	03/06/06	U
Aroclor 1232	EPA 608	6C05031	0.24	0.94	ND	0.943	03/05/06	03/06/06	U
Aroclor 1242	EPA 608	6C05031	0.24	0.94	ND	0.943	03/05/06	03/06/06	U
Aroclor 1248	EPA 608	6C05031	0.24	0.94	ND	0.943	03/05/06	03/06/06	U
Aroclor 1254	EPA 608	6C05031	0.24	0.94	ND	0.943	03/05/06	03/06/06	U
Aroclor 1260	EPA 608	6C05031	0.38	0.94	ND	0.943	03/05/06	03/06/06	U
Surrogate: Decachlorobiphenyl (45-120%)					83 %				

pm 4/10/06

Del Mar Analytical - Irvine
 Michele Chamberlin
 Project Manager

LEVEL IV

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Del Mar Analytical

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 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 9830 South 57th St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3630 FAX (702) 798-3621

MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06
 Received: 02/28/06

ORGANOCHLORINE PESTICIDES (EPA 608)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB2645-01 (Outfall 005 - Water) - cont.									
Reporting Units: ug/l									
Aldrin	EPA 608	6C05031	0.028	0.094	ND	0.943	03/05/06	03/07/06	Raw Qual ↓ U.S.C.
alpha-BHC	EPA 608	6C05031	0.019	0.094	ND	0.943	03/05/06	03/07/06	↓ U.S.C.
beta-BHC	EPA 608	6C05031	0.014	0.094	ND	0.943	03/05/06	03/07/06	↓ U.S.C.
delta-BHC	EPA 608	6C05031	0.019	0.19	ND	0.943	03/05/06	03/07/06	↓ U.S.C.
gamma-BHC (Lindane)	EPA 608	6C05031	0.019	0.094	ND	0.943	03/05/06	03/07/06	↓ U.S.C.
Chlordane	EPA 608	6C05031	0.19	0.94	ND	0.943	03/05/06	03/07/06	↓ U.S.C.
4,4'-DDD	EPA 608	6C05031	0.019	0.094	ND	0.943	03/05/06	03/07/06	↓ U.S.C.
4,4'-DDE	EPA 608	6C05031	0.024	0.094	ND	0.943	03/05/06	03/07/06	↓ U.S.C.
4,4'-DDT	EPA 608	6C05031	0.033	0.094	ND	0.943	03/05/06	03/07/06	↓ U.S.C.
Dieldrin	EPA 608	6C05031	0.014	0.094	ND	0.943	03/05/06	03/07/06	↓ U.S.C.
Endosulfan I	EPA 608	6C05031	0.014	0.094	ND	0.943	03/05/06	03/07/06	↓ U.S.C.
Endosulfan II	EPA 608	6C05031	0.038	0.094	ND	0.943	03/05/06	03/07/06	↓ U.S.C.
Endosulfan sulfate	EPA 608	6C05031	0.019	0.19	ND	0.943	03/05/06	03/07/06	↓ U.S.C.
Endrin	EPA 608	6C05031	0.019	0.094	ND	0.943	03/05/06	03/07/06	↓ U.S.C.
Endrin aldehyde	EPA 608	6C05031	0.042	0.094	ND	0.943	03/05/06	03/07/06	↓ U.S.C.
Endrin ketone	EPA 608	6C05031	0.019	0.094	ND	0.943	03/05/06	03/07/06	↓ U.S.C.
Heptachlor	EPA 608	6C05031	0.028	0.094	ND	0.943	03/05/06	03/07/06	↓ U.S.C.
Heptachlor epoxide	EPA 608	6C05031	0.028	0.094	ND	0.943	03/05/06	03/07/06	↓ U.S.C.
Methoxychlor	EPA 608	6C05031	0.033	0.094	ND	0.943	03/05/06	03/07/06	↓ U.S.C.
Toxaphene	EPA 608	6C05031	1.4	4.7	ND	0.943	03/05/06	03/07/06	↓ U.S.C.
Surrogate: Tetrachloro-m-xylene (35-115%)					49 %				
Surrogate: Decachlorobiphenyl (45-120%)					59 %				

LEVEL IV

Del Mar Analytical - Irvine
 Michele Chamberlin
 Project Manager

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CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

MEC^x
 12269 East Vassar Drive
 Aurora, CO 80014

Package ID: B4RA3
 Task Order: 1261.001D.05
 SDG No.: Multiple

No. of Analyses: 8
 Date: April 1, 2006
 Reviewer's Signature
P. Meeks

Laboratory: Ebeline
 Reviewer: P. Meeks
 Analysis/Method: Radionuclides

ACTION ITEMS ^a	
Case Narrative	
Deficiencies	
2. Out of Scope Analyses	
3. Analyses Not Conducted	
4. Missing Hardcopy Deliverables	
5. Incorrect Hardcopy Deliverables	
6. Deviations from Analysis Protocol, e.g.,	
Holding Times	Qualifications were applied for exceeded holding times and low detector efficiencies.
GC/MS Tune/Inst. Performance	
Calibration	
Method blanks	
Surrogates	
Matrix Spike/Dup LCS	
Field QC	
Internal Standard Performance	
Compound Identification	
Quantitation	
System Performance	
COMMENTS ^b	
^a Subcontracted analytical laboratory is not meeting contract and/or method requirements. ^b Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.	



DATA VALIDATION REPORT

NPDES Sampling
Multiple Outfalls

ANALYSIS: RADIONUCLIDES

SAMPLE DELIVERY GROUPS: IPB2637, IPB2639, IPB2641,
IPB2643, IPB2645, IPB2647, IPB2648, IPB2650

Prepared by

MEC^x, LLC
12269 East Vassar Drive
Aurora, CO 80014

1. INTRODUCTION

Task Order Title: NPDES Sampling
MEC^x Project Number: 1261.001D.01
Sample Delivery Group: IPB2637, IPB2639, IPB2641, IPB2643, IPB2645,
IPB2647, IPB2648, IPB2650
Project Manager: P. Costa
Matrix: Water
Analysis: Radionuclides
QC Level: Level IV
No. of Samples: 1
No. of Reanalyses/Dilutions: 0
Reviewer: P. Meeks
Date of Review: April 1, 2006

The samples listed in Table 1 were validated based on the guidelines outlined in the USEPA CLP National Functional Guidelines for Inorganic Data Review (2/94). Any deviations from these procedures and guidelines are documented herein. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.

Table 1. Sample Identification

Client ID	Del Mar ID	Eberline ID	Matrix	COC Method
Outfall 001	IPB2637-01	8660-001	water	900.0
Outfall 002	IPB2639-01	8661-001	water	900.0
Outfall 011	IPB2641-01	8662-001	water	900.0
Outfall 018	IPB2643-01	8663-001	water	900.0
Outfall 005	IPB2645-01	8664-001	water	900.0
Outfall 007	IPB2647-01	8665-001	water	900.0
Outfall 008	IPB2648-01	8666-001	water	900.0
Outfall 010	IPB2650-01	8667-001	water	900.0

2. DATA VALIDATION FINDINGS

2.1 SAMPLE MANAGEMENT

Following are findings associated with sample management:

2.1.1 Sample Preservation, Handling, and Transport

All the samples in these SDGs were received at Del Mar Analytical within the temperature limits of $4 \pm 2^\circ\text{C}$. No temperature information was provided by Eberline, the subcontract laboratory; however, as it is not necessary to chill radiological samples, no qualifications were required. The samples were noted to have been received intact and in good condition.

According to the Los Angeles Regional Water Quality Control Board's (LARWQCB) guidance letter dated 01/12/05, unfiltered samples should not be preserved and filtered aliquots should be preserved after filtration. The samples in these SDGs were not preserved or filtered. No qualifications were required.

2.1.2 Chain of Custody

The original COCs were signed and dated by field and laboratory personnel and the transfer COCs were signed by personnel from both laboratories. Eberline did not list the MWH IDs on the Form Is; therefore, the reviewer edited the Form Is to reflect these IDs. The original COCs requested strontium and tritium analyses; however, in accordance with the NPDES permit, these analyses per not performed as the gross alpha and gross beta results did not exceed the permit requirements. No qualifications were required.

2.1.3 Holding Times

All samples were analyzed beyond the five day holding time for unpreserved samples; therefore, all results were qualified as estimated, "J," for detects and, "UJ," for nondetects. No further qualifications were required.

2.2 CALIBRATION

The laboratory calibration information included the standard certificates and applicable preparation/dilutions logs for NIST-traceability. All gross alpha detector efficiencies were less than 20%; therefore, all gross alpha results were qualified as estimated, "J," for detects and, "UJ," for nondetects. No further qualifications were required.

2.3 BLANKS

No measurable activities were detected in the method blanks, therefore, no qualifications were necessary.

2.4 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

Aqueous blank spikes were analyzed in association with the samples in these SDGs. The blank spike results were within the 3-sigma limits. No qualifications were necessary.

2.5 LABORATORY DUPLICATES

The laboratory performed duplicate analyses on Outfall 001. Both results were within the 3-sigma limit limits. No qualifications were necessary.

2.6 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

The laboratory performed MS/MSD analyses on Outfall 001. Both recoveries were within the 3-sigma limits and no qualifications were required.

2.7 SAMPLE RESULT VERIFICATION

An EPA Level IV review was performed for the samples in these SDGs. 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. No qualifications were necessary.

2.8 FIELD QC SAMPLES

Field QC samples were evaluated, and if necessary, qualified based only on laboratory blanks. Any remaining detects are used to evaluate the associated samples.

2.8.1 Field Blanks and Equipment Rinsates

The samples in these SDGs had no associated field QC samples. No qualifications were required.

2.8.2 Field Duplicates

There were no field duplicate samples in these SDGs.


Eberline Services

ANALYSIS RESULTS

SDC <u>8650</u> Work Order <u>865014-01</u> Received Date <u>03/02/06</u>	Client <u>DEL MAR ANAL</u> Contract <u>PROJECTS IPB2637</u> Matrix <u>WATER</u>
---	---

Client	Lab	Sample ID	Collected	Analyzed	Nuclide	Results ± 2σ	Units	MOA	Rev Qual	Qual Code
Outfall 001 IPB2637-01	8650-001	02/28/06	03/06/06	Gross Alpha	2.64 ± 1.7	pCi/L	1.95		JJ	R, H ↓
			03/06/06	Gross Beta	7.63 ± 1.6	pCi/L	2.06			

LEVEL IV

Certified by <u></u> Report Date <u>03/16/06</u> Page 1
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Eberline Services
ANALYSIS RESULTS

SDG <u>8661</u>	Client <u>DEL MAR AREA</u>
Work Order <u>8603017-01</u>	Contract <u>PROJECT IPB2619</u>
Received Date <u>03/02/06</u>	Matrix <u>WATER</u>

Client	Lab						
<u>Sample ID</u>	<u>Sample ID</u>	<u>Collected</u>	<u>Analyzed</u>	<u>Nuclide</u>	<u>Results ± 2σ</u>	<u>Units</u>	<u>MDA</u>
Outfall 002 IPB2639-01	8661-001	02/28/06	03/06/06	GrossAlpha	3.58 ± 1.6	pCi/L	1.93
			03/06/06	Gross Beta	4.60 ± 1.4	pCi/L	1.85

Rev Qual	Qual Code
J	R, H
J	↓

LEVEL IV

Certified by <u><i>[Signature]</i></u>
Report Date <u>03/13/06</u>
Page 1

Eberline Services

ANALYSIS RESULTS

SDG <u>8662</u> Work Order <u>KE23018-01</u> Received Date <u>01/02/06</u>	Client <u>DEL MAR ANAL</u> Contract <u>PROJECT# IPB2641</u> Matrix <u>WATER</u>
--	---

Client	Lab	Sample ID	Collected	Analyzed	Nuclide	Results ± 2σ	Units	MCA
Client Sample ID Outfall 011 IPB2641-01		8662-001	02/22/06	03/06/06	Gross Alpha	5.24 ± 2.0	pCi/L	1.86
				03/06/06	Gross Beta	7.59 ± 1.7	pCi/L	2.18

Rev Qual	Qual Code
J ↓	R, H ↓

LEVEL IV

Certified by <u>[Signature]</u> Report Date <u>03/12/06</u> Page 1
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Eberline Services

ANALYSIS RESULTS

SDG <u>8663</u> Work Order <u>R603019-01</u> Received Date <u>03/03/06</u>	Client <u>DEL MAR ANAL</u> Contract <u>PROJECT# IPB2643</u> Matrix <u>WATER</u>
--	---

Client	Lab									
Sample ID	Sample ID	Collected	Analyzed	Nuclide	Results ± 2σ	Units	MDA	Rev Goal	Qual Code	
outfall 018 IPB2643-01	8663-001	02/28/06	03/06/06	GrossAlpha	1.58 ± 1.1	pCi/L	1.40	J ↓	R, H ↓	
			03/06/06	Gross Beta	5.59 ± 1.4	pCi/L	1.81			

LEVEL IV

Certified by <u>[Signature]</u> Report Date <u>03/12/06</u> Page 1
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Eberline Services
ANALYSIS RESULTS

SDG <u>8664</u>	Client <u>DEL MAR ANAL</u>
Work Order <u>R601020-01</u>	Contract <u>PROJECT# IPB2645</u>
Received Date <u>03/02/06</u>	Matrix <u>WATER</u>

Client	Lab	Sample ID	Collected	Analyzed	Equide	Results ± Sd	Units	MSA	Rev	Qual
Sample ID									Qual	Code
Outfall 005		8664-001	02/28/06	03/06/06	Gross Alpha	1.30 ± 1.0	pCi/L	1.45	UJ	R, H
IPB2645-01				03/06/06	Gross Beta	6.96 ± 1.4	pCi/L	1.98	J	↓

LEVEL IV

Certified by <u>[Signature]</u>
Report Date <u>03/12/06</u>
Page 1

Eberline Services
ANALYSIS RESULTS

SOG <u>8665</u> Work Order <u>862821-01</u> Received Date <u>03/02/06</u>	Client <u>DEL MAR ANAL</u> Contract <u>PROJECT# IPB2647</u> Matrix <u>WATER</u>
---	---

Client	Lab									
Sample ID	Sample ID	Collected	Analyzed	Nuclide	Results ± 2σ	Units	MDA	Rev Qual	Qual Code	
Client Outfall 007 IPB2647-01	8665-001	02/28/06	03/06/06	Gross Alpha	2.56 ± 1.2	pCi/L	1.09	J	R, H	
			03/06/06	Gross Beta	5.35 ± 1.8	pCi/L	2.56	↓	E	

LEVEL IV

Certified by <u>[Signature]</u> Report Date <u>03/13/06</u> Page 1
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Eberline Services
ANALYSIS RESULTS

SDG <u>8666</u>	Client <u>DEL. MAR. ANAL.</u>
Work Order <u>8603022-01</u>	Contract <u>PROJECT# IPB2648</u>
Received Date <u>03/02/06</u>	Matrix <u>WATER</u>

Client	Lab	Sample ID	Collected	Analyzed	Nuclide	Results ± 2σ	Units	MOA	Rev Qual	QW Code
Client <u>Sample ID</u> Out-fall 008 IPB2648-01	8666-001		02/28/06	03/06/06	Gross Alpha	1.01 ± 1.6	pCi/L	2.02	UI J	R, H ↓
			03/06/06		Gross Beta	23.7 ± 2.2	pCi/L	1.92		

LEVEL IV

Certified by <u>[Signature]</u>
Report Date <u>03/12/06</u>
Page 1

Eberline Services

ANALYSIS RESULTS

SDS <u>6657</u>	Client <u>DEL MAR ANSL</u>
Work Order <u>866923-01</u>	Contract <u>PROJECT# IPB2650</u>
Received Date <u>03/02/06</u>	Matrix <u>WATER</u>

Client	Lab	Sample ID	Collected	Analyzed	Nuclide	Results ± 2σ	Units	MDA	Rel Qual	Qual Code
outfall 010 IPB2650-01	8667-001	02/28/06	03/06/06	Gross Alpha	0.532 ± 0.90	pCi/L	1.98		03	R, H
			03/06/06	Gross Beta	4.02 ± 1.1	pCi/L	1.83		J	↓

LEVEL IV

Certified by <u>[Signature]</u>
Report Date <u>03/13/06</u>
Page 1

CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

MEC^x
 12269 East Vassar Drive
 Aurora, CO 80014

Package ID: B4SV29
 Task Order: 1261.001D.01
 SDG No.: IPB2645

Laboratory: Del Mar Analytical
 Reviewer: L. Calvin
 Analysis/Method: Semivolatiles by Method 625

No. of Analyses: 1
 Date: April 10, 2006
 Reviewer's Signature: *L. Calvin*

ACTION ITEMS^a

1. **Case Narrative Deficiencies** _____
2. **Out of Scope Analyses** _____
3. **Analyses Not Conducted** _____
4. **Missing Hardcopy Deliverables** _____
5. **Incorrect Hardcopy Deliverables** _____
6. **Deviations from Analysis Protocol, e.g.,**

Holding Times	_____
GC/MS Tune/Inst. Performance	_____
Calibration	_____
Method blanks	_____
Surrogates	_____
Matrix Spike/Dup LCS	_____
Field QC	_____
Internal Standard Performance	_____
Compound Identification	_____
Quantitation	_____
System Performance	_____

Qualifications were assigned for the following:
 -BS/BSD RPDs above the QC limits

COMMENTS^b

^a Subcontracted analytical laboratory is not meeting contract and/or method requirements.
^b Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.



DATA VALIDATION REPORT

NPDES Monitoring Program
Annual Outfall 005

ANALYSIS: SEMIVOLATILES

SAMPLE DELIVERY GROUP IPB2645

Prepared by

MECX, LLC
12269 East Vassar Drive
Aurora, CO 80014

1. INTRODUCTION

Task Order Title: NPDES
MEC^X Project Number: 1261.001D.01
Sample Delivery Group: IPB2645
Project Manager: P. Costa
Matrix: Water
Analysis: Semivolatiles
QC Level: Level IV
No. of Samples: 1
No. of Reanalyses/Dilutions: 0
Reviewer: L. Calvin
Date of Review: April 10, 2006

The samples listed in Table 1 were validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for Semivolatile Organics (DVP-3, Rev. 0)*, *EPA Method 625*, and the *National Functional Guidelines For Organic Data Review (2/94)*. Any deviations from these procedures and guidelines are documented herein. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.

Table 1. Sample Identification

Client ID	Laboratory ID	Matrix	COC Method
Outfall 005	IPB2645-01	Water	625

2. DATA VALIDATION FINDINGS

2.1 SAMPLE MANAGEMENT

Following are findings associated with sample management:

2.1.1 Sample Preservation, Handling, and Transport

The sample in this SDG was received at the laboratory within the temperature limits of $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$ at 5°C . No sample preservation, handling, or transport problems were noted, and no qualifications were necessary.

2.1.2 Chain of Custody

The COC was signed and dated by field and laboratory personnel. The COC accounted for the analysis presented in this SDG. As the sample was couriered directly from the field to the laboratory, custody seals were not necessary. No qualifications were required.

2.1.3 Holding Times

The water sample was extracted within seven days of collection and analyzed within 40 days of extraction. No qualifications were required.

2.2 GC/MS TUNING

The DFTPP tunes analyzed at the beginning of each daily analytical sequence met the abundance criteria specified in EPA Method 625. No qualifications were required.

2.3 CALIBRATION

One initial calibration was associated with the sample, analyzed 02/27/06. The %RSDs for all target compounds were $\leq 35\%$ or r^2 values ≥ 0.995 in the initial calibration. The continuing calibration associated with the sample analysis was analyzed 03/09/06. The %Ds for all target compounds were $\leq 20\%$ in the continuing calibration. No qualifications were required.

2.4 BLANKS

One method blank (6C06054-BLK1) was extracted and analyzed with this SDG. Target compounds were not detected above the MDLs in the method blank. Review of the method blank raw data indicated no false negatives. No qualifications were required.

2.5 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

One blank spike/blank spike duplicate pair (6C06054-BS1/BSD1) was extracted and analyzed with this SDG. Diethyl phthalate and dimethyl phthalate were recovered below the QC limits but $\geq 10\%$ in the BSD only. RPDs exceeded the QC limits for benzidine, bis(2-ethylhexyl)phthalate, butyl benzyl phthalate, di-n-butyl phthalate, diethyl phthalate, dimethyl phthalate, di-n-octyl phthalate, hexachlorocyclopentadiene, and hexachloroethane. Nondetect results for the RPD outliers were qualified as estimated, "UJ," in sample Outfall 005. All remaining recoveries and RPDs were within the laboratory-established QC limits. No further qualifications were required.

2.6 SURROGATE RECOVERY

Surrogate recoveries for the sample were within the laboratory QC limits. No qualifications were required.

2.7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

MS/MSD analyses were not performed on the sample of this SDG. Evaluation of method accuracy and precision was based on the blank spike/blank spike duplicate results. No qualifications were required.

2.8 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:

2.8.1 Field Blanks and Equipment Rinsates

There were no field blank or equipment rinsate samples identified for this SDG. No qualifications were required.

2.8.2 Field Duplicates

There were no field duplicate samples identified for this SDG.

2.9 INTERNAL STANDARDS PERFORMANCE

The internal standard area counts and retention times for the sample were within the control limits established by the continuing calibration standard: -50%/+100% for internal standard areas and ± 30 seconds for retention times. The areas were checked from the raw data, and no transcription or calculation errors were noted. No qualifications were required.

2.10 COMPOUND IDENTIFICATION

The laboratory analyzed for semivolatile target compounds by EPA Method 625. Review of the sample chromatogram, retention times, and spectra indicated no problems with target compound identification. No qualifications were required.

2.11 COMPOUND QUANTIFICATION AND REPORTED DETECTION LIMITS

Compound quantification is verified at a Level IV data validation. No calculation or transcription errors were found. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. Results were reported in $\mu\text{g/L}$ (ppb). No qualifications were required.

2.12 TENTATIVELY IDENTIFIED COMPOUNDS

TICs were not reported by the laboratory for this SDG. No qualifications were required.

2.13 SYSTEM PERFORMANCE

Review of the raw data indicated no problems with system performance. No qualifications were required.



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MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06
Received: 02/28/06

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: IPB2645-01 (Outfall 005 - Water)									
Reporting Units: ug/l									
Acenaphthene	EPA 625	6C06054	4.1	9.4	ND	0.943	03/06/06	03/09/06	u
Acenaphthylene	EPA 625	6C06054	3.0	9.4	ND	0.943	03/06/06	03/09/06	u
Aniline	EPA 625	6C06054	2.7	9.4	ND	0.943	03/06/06	03/09/06	u
Anthracene	EPA 625	6C06054	3.0	9.4	ND	0.943	03/06/06	03/09/06	u
Benzidine	EPA 625	6C06054	4.9	19	ND	0.943	03/06/06	03/09/06	u
Benzoic acid	EPA 625	6C06054	2.5	19	ND	0.943	03/06/06	03/09/06	u
Benzo(a)anthracene	EPA 625	6C06054	3.5	9.4	ND	0.943	03/06/06	03/09/06	u
Benzo(b)fluoranthene	EPA 625	6C06054	2.5	9.4	ND	0.943	03/06/06	03/09/06	u
Benzo(k)fluoranthene	EPA 625	6C06054	3.2	9.4	ND	0.943	03/06/06	03/09/06	u
Benzo(g,h,i)perylene	EPA 625	6C06054	5.0	9.4	ND	0.943	03/06/06	03/09/06	u
Benzo(a)pyrene	EPA 625	6C06054	3.3	9.4	ND	0.943	03/06/06	03/09/06	u
Benzyl alcohol	EPA 625	6C06054	2.4	19	ND	0.943	03/06/06	03/09/06	u
Bis(2-chloroethoxy)methane	EPA 625	6C06054	3.7	9.4	ND	0.943	03/06/06	03/09/06	u
Bis(2-chloroethyl)ether	EPA 625	6C06054	4.2	9.4	ND	0.943	03/06/06	03/09/06	u
Bis(2-chloroisopropyl)ether	EPA 625	6C06054	4.3	9.4	ND	0.943	03/06/06	03/09/06	u
Bis(2-ethylhexyl)phthalate	EPA 625	6C06054	4.9	47	ND	0.943	03/06/06	03/09/06	u
4-Bromophenyl phenyl ether	EPA 625	6C06054	4.3	9.4	ND	0.943	03/06/06	03/09/06	u
Butyl benzyl phthalate	EPA 625	6C06054	3.3	19	ND	0.943	03/06/06	03/09/06	u
4-Chloroaniline	EPA 625	6C06054	5.7	9.4	ND	0.943	03/06/06	03/09/06	u
2-Chloronaphthalene	EPA 625	6C06054	3.8	9.4	ND	0.943	03/06/06	03/09/06	u
4-Chloro-3-methylphenol	EPA 625	6C06054	3.3	19	ND	0.943	03/06/06	03/09/06	u
2-Chlorophenol	EPA 625	6C06054	4.0	9.4	ND	0.943	03/06/06	03/09/06	u
4-Chlorophenyl phenyl ether	EPA 625	6C06054	2.8	9.4	ND	0.943	03/06/06	03/09/06	u
Chrysene	EPA 625	6C06054	2.6	9.4	ND	0.943	03/06/06	03/09/06	u
Dibenz(a,h)anthracene	EPA 625	6C06054	4.4	19	ND	0.943	03/06/06	03/09/06	u
Dibenzofuran	EPA 625	6C06054	2.5	9.4	ND	0.943	03/06/06	03/09/06	u
Di-n-butyl phthalate	EPA 625	6C06054	2.6	19	ND	0.943	03/06/06	03/09/06	u
1,3-Dichlorobenzene	EPA 625	6C06054	3.9	9.4	ND	0.943	03/06/06	03/09/06	u
1,4-Dichlorobenzene	EPA 625	6C06054	3.7	9.4	ND	0.943	03/06/06	03/09/06	u
1,2-Dichlorobenzene	EPA 625	6C06054	4.2	9.4	ND	0.943	03/06/06	03/09/06	u
3,3-Dichlorobenzidine	EPA 625	6C06054	10	19	ND	0.943	03/06/06	03/09/06	u
2,4-Dichlorophenol	EPA 625	6C06054	3.9	9.4	ND	0.943	03/06/06	03/09/06	u
Diethyl phthalate	EPA 625	6C06054	2.9	9.4	ND	0.943	03/06/06	03/09/06	u
2,4-Dimethylphenol	EPA 625	6C06054	4.2	19	ND	0.943	03/06/06	03/09/06	u
Dimethyl phthalate	EPA 625	6C06054	3.4	9.4	ND	0.943	03/06/06	03/09/06	u
4,6-Dinitro-2-methylphenol	EPA 625	6C06054	4.8	19	ND	0.943	03/06/06	03/09/06	u
2,4-Dinitrophenol	EPA 625	6C06054	5.0	19	ND	0.943	03/06/06	03/09/06	u
2,4-Dinitrotoluene	EPA 625	6C06054	4.0	9.4	ND	0.943	03/06/06	03/09/06	u
2,6-Dinitrotoluene	EPA 625	6C06054	3.0	9.4	ND	0.943	03/06/06	03/09/06	u
Di-n-octyl phthalate	EPA 625	6C06054	4.4	19	ND	0.943	03/06/06	03/09/06	u
Fluoranthene	EPA 625	6C06054	4.0	9.4	ND	0.943	03/06/06	03/09/06	u

real qual codes

*5

*5

*5

*5

*5

*5

*5

Del Mar Analytical - Irvine
Michele Chamberlin
Project Manager

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Level III



Del Mar Analytical

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MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06
Received: 02/28/06

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

Table with columns: Analyte, Method, Batch, MDL Limit, Reporting Limit, Sample Result, Dilution Factor, Date Extracted, Date Analyzed, Data Qualifiers. Includes handwritten notes like 'very good quality' and 'OC code'.

Del Mar Analytical - Irvine
Michele Chamberlin
Project Manager

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Handwritten signature and 'IPB2645 <Page 7 of 44>'

CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

MEC^x
 12269 East Vassar Drive
 Aurora, CO 80014

Package ID: B4V034
 Task Order: 1261.001D.01
 SDG No.: IPB2645

Laboratory: Del Mar Analytical
 Reviewer: L. Calvin
 Analysis/Method: Volatiles by Method 624

No. of Analyses: 2
 Date: April 10, 2006
 Reviewer's Signature: *L. Calvin*

ACTION ITEMS^a

- 1. Case Narrative Deficiencies _____
- 2. Out of Scope Analyses _____
- 3. Analyses Not Conducted _____
- 4. Missing Hardcopy Deliverables _____
- 5. Incorrect Hardcopy Deliverables _____
- 6. Deviations from Analysis Protocol, e.g.,
 - Holding Times _____
 - GC/MS Tune/Inst. Performance _____
 - Calibration _____
 - Method blanks _____
 - Surrogates _____
 - Matrix Spike/Dup LCS _____
 - Field QC _____
 - Internal Standard Performance _____
 - Compound Identification _____
 - Quantitation _____
 - System Performance _____

Qualifications were assigned for the following:
 --continuing calibration RRF <0.05

COMMENTS^b

^a Subcontracted analytical laboratory is not meeting contract and/or method requirements.

^b Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.



DATA VALIDATION REPORT

NPDES Monitoring Program
Annual Outfall 005

ANALYSIS: VOLATILES

SAMPLE DELIVERY GROUP: IPB2645

Prepared by

MECX, LLC
12269 East Vassar Drive
Aurora, CO 80014

1. INTRODUCTION

Task Order Title: NPDES
MEC^X Project Number: 1261.001D.01
Sample Delivery Group: IPB2645
Project Manager: P. Costa
Matrix: Water
Analysis: Volatiles
QC Level: Level IV
No. of Samples: 2
No. of Reanalyses/Dilutions: 0
Reviewer: L. Calvin
Date of Review: April 10, 2006

The samples listed in Table 1 were validated based on the guidelines outlined in the MEC^X Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0), EPA Method 624, and the National Functional Guidelines for Organic Data Review (2/94). Any deviations from these procedures are documented herein. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.

Table 1. Sample Identification

Client ID	Laboratory ID	Matrix	COC Method
Outfall 005	IPB2645-01	Water	624
Trip Blank	IPB2645-02	Water	624

2. DATA VALIDATION FINDINGS

2.1 SAMPLE MANAGEMENT

The samples in this SDG were received at the laboratory within the temperature limits of 4°C ±2°C, at 5°C. According to the case narrative for this SDG, the samples were received intact, on ice, and properly preserved. Unpreserved aliquots of the samples were also provided. Information regarding lack of headspace in the VOA vials was not provided. No qualifications were required.

2.1.2 Chain of Custody

The COC was signed and dated by both field and laboratory personnel. As the samples were couriered directly to the laboratory, custody seals were not required. No qualifications were required.

2.1.3 Holding Times

The unpreserved aliquots of the water samples were analyzed for a portion of the target compounds within seven days of collection, and the preserved aliquots were analyzed for the remaining target compounds within 14 days of collection. No qualifications were required.

2.2 GC/MS TUNING

The BFB tune performed at the beginning of each daily analytical sequence met the abundance criteria specified in EPA Method 624. No qualifications were required.

2.3 CALIBRATION

Three initial calibrations were associated with the sample analyses, dated 03/01/06 (acrolein and acrylonitrile only), 02/06/06 (2-chloroethyl vinyl ether only) and 02/28/06 (all remaining target compounds). The average RRFs for all target compounds were ≥ 0.05 . The %RSDs were $\leq 35\%$ or $r^2 \geq 0.995$ for the target compounds listed on the sample result summary forms, with the exception of the $r^2 < 0.995$ for 2-chloroethyl vinyl ether. As the nondetect results for 2-chloroethyl vinyl ether were subsequently rejected for the CCV RRF in both samples of this SDG, the site sample result was not further qualified for the r^2 outlier.

Three continuing calibrations were associated with the sample analyses, two dated 03/02/06 (one for 2-chloroethyl vinyl ether and one for acrolein and acrylonitrile), and one dated 03/09/06 (all remaining target compounds). The RRF for was less than 0.05 for 2-chloroethyl vinyl ether. The nondetect results for 2-chloroethyl vinyl ether were rejected, "R," in both samples of this SDG. The remaining RRFs for were ≥ 0.05 and all %Ds were within the QC limit of $\leq 20\%$, with the

exception of the %D for 2-chloroethyl vinyl ether; however, as the site sample result for 2-chloroethyl vinyl ether was previously rejected for the RRF <0.05, the result was not further qualified for the %D outlier. No further qualifications were required.

2.4 BLANKS

Two method blanks (6C02019-BLK1 and 6C09004-BLK1) were analyzed with this SDG. Methylene chloride was detected in 6C02019-BLK1 at a concentration of 1.16 µg/L; however, methylene chloride was not detected in the associated sample. No other target compounds were detected above the MDLs in the method blanks. Review of the method blank raw data indicated no false positives or false negatives. No qualifications were required.

2.5 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

Two blank spikes (6C02019-BS1 and 6C09004-BS1) were analyzed with this SDG. Target compounds acrolein and acrylonitrile were not included in associated blank spike 6C02019-BS1. The recovery for 1,1,2,2-tetrachloroethane was above the QC limits in 6C02019-BS1; however, the compound was not detected in the site sample of this SDG. The remaining recoveries were within the laboratory-established QC limits. A representative number of recoveries were calculated from the raw data and no calculation or transcription errors were found. No qualifications were required.

2.6 SURROGATE RECOVERY

Surrogate recoveries were within the laboratory QC limits of 80-120% for this SDG. A representative number of recoveries were calculated from the raw data, and no transcription or calculation errors were noted. No qualifications were required.

2.7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

MS/MSD analyses were not performed on the site sample in this SDG. Evaluation of method accuracy was based on the blank spike results. No qualifications were required.

2.8 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:

2.8.1 Trip Blanks

Sample Trip Blank was the trip blank associated with site sample Outfall 005. No target compounds were detected in the trip blank. No qualifications were required.

2.8.2 Field Blanks and Equipment Rinsates

There were no field blank or equipment rinsate samples identified for this SDG. No qualifications were required.

2.8.3 Field Duplicates

There were no field duplicate samples identified for this SDG.

2.9 INTERNAL STANDARDS PERFORMANCE

The internal standard area counts and retention times were within the control limits established by the continuing calibration standard: -50%/+100% for internal standard areas and ± 30 seconds for retention times. The internal standard areas were checked from the raw data, and no transcription or calculation errors were noted. No qualifications were required.

2.10 COMPOUND IDENTIFICATION

The laboratory analyzed for volatile target compounds by EPA Method 624. Review of the sample chromatograms, retention times, and spectra indicated no problems with target compound identification. No qualifications were required.

2.11 COMPOUND QUANTIFICATION AND REPORTED DETECTION LIMITS

Compound quantification is verified at a Level IV data validation. No calculation or transcription errors were found. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. No qualifications were required.

2.12 TENTATIVELY IDENTIFIED COMPOUNDS

TICs were not reported by the laboratory for this SDG. No qualifications were required.

2.13 SYSTEM PERFORMANCE

Review of the raw data indicated no problems with system performance. No qualifications were required.



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MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06
Received: 02/28/06

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: IPB2645-01 (Outfall 005 - Water)									
Reporting Units: ug/l									
Benzene	EPA 624	6C09004	0.28	1.0	ND	1	03/09/06	03/09/06	<i>rel qual</i> <i>qual</i> <i>code</i> ↓
Bromodichloromethane	EPA 624	6C09004	0.30	2.0	ND	1	03/09/06	03/09/06	
Bromoform	EPA 624	6C09004	0.32	5.0	ND	1	03/09/06	03/09/06	
Bromomethane	EPA 624	6C09004	0.42	5.0	ND	1	03/09/06	03/09/06	
Carbon tetrachloride	EPA 624	6C09004	0.28	0.50	ND	1	03/09/06	03/09/06	
Chlorobenzene	EPA 624	6C09004	0.36	2.0	ND	1	03/09/06	03/09/06	
Chloroethane	EPA 624	6C09004	0.40	5.0	ND	1	03/09/06	03/09/06	
Chloroform	EPA 624	6C09004	0.33	2.0	ND	1	03/09/06	03/09/06	
Chloromethane	EPA 624	6C09004	0.30	5.0	ND	1	03/09/06	03/09/06	
Dibromochloromethane	EPA 624	6C09004	0.28	2.0	ND	1	03/09/06	03/09/06	
1,2-Dichlorobenzene	EPA 624	6C09004	0.32	2.0	ND	1	03/09/06	03/09/06	
1,3-Dichlorobenzene	EPA 624	6C09004	0.35	2.0	ND	1	03/09/06	03/09/06	
1,4-Dichlorobenzene	EPA 624	6C09004	0.37	2.0	ND	1	03/09/06	03/09/06	
1,1-Dichloroethane	EPA 624	6C09004	0.27	2.0	ND	1	03/09/06	03/09/06	
1,2-Dichloroethane	EPA 624	6C09004	0.28	0.50	ND	1	03/09/06	03/09/06	
1,1-Dichloroethene	EPA 624	6C09004	0.42	5.0	ND	1	03/09/06	03/09/06	
trans-1,2-Dichloroethene	EPA 624	6C09004	0.27	2.0	ND	1	03/09/06	03/09/06	
1,2-Dichloropropane	EPA 624	6C09004	0.35	2.0	ND	1	03/09/06	03/09/06	
cis-1,3-Dichloropropene	EPA 624	6C09004	0.22	2.0	ND	1	03/09/06	03/09/06	
trans-1,3-Dichloropropene	EPA 624	6C09004	0.32	2.0	ND	1	03/09/06	03/09/06	
Ethylbenzene	EPA 624	6C09004	0.25	2.0	ND	1	03/09/06	03/09/06	
Methylene chloride	EPA 624	6C09004	0.70	5.0	ND	1	03/09/06	03/09/06	
1,1,2,2-Tetrachloroethane	EPA 624	6C09004	0.24	2.0	ND	1	03/09/06	03/09/06	
Tetrachloroethene	EPA 624	6C09004	0.32	2.0	ND	1	03/09/06	03/09/06	
Toluene	EPA 624	6C09004	0.36	2.0	ND	1	03/09/06	03/09/06	
1,1,1-Trichloroethane	EPA 624	6C09004	0.30	2.0	ND	1	03/09/06	03/09/06	
1,1,2-Trichloroethane	EPA 624	6C09004	0.30	2.0	ND	1	03/09/06	03/09/06	
Trichloroethene	EPA 624	6C09004	0.26	2.0	ND	1	03/09/06	03/09/06	
Trichlorofluoromethane	EPA 624	6C09004	0.34	5.0	ND	1	03/09/06	03/09/06	
Vinyl chloride	EPA 624	6C09004	0.26	0.50	ND	1	03/09/06	03/09/06	
Xylenes, Total	EPA 624	6C09004	0.90	4.0	ND	1	03/09/06	03/09/06	
Trichlorotrifluoroethane (Freon 113)	EPA 624	6C09004	1.2	5.0	ND	1	03/09/06	03/09/06	
Surrogate: Dibromofluoromethane (80-120%)									117 %
Surrogate: Toluene-d8 (80-120%)									109 %
Surrogate: 4-Bromofluorobenzene (80-120%)									109 %

Del Mar Analytical - Irvine
Michele Chamberlin
Project Manager

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Level IV
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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06
 Received: 02/28/06

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: IPB2645-02 (Trip Blank - Water)									
Reporting Units: ug/l									
Benzene	EPA 624	6C02019	0.28	1.0	ND	1	03/02/06	03/03/06	see qual code u
Bromodichloromethane	EPA 624	6C02019	0.30	2.0	ND	1	03/02/06	03/03/06	
Bromoform	EPA 624	6C02019	0.32	5.0	ND	1	03/02/06	03/03/06	
Bromomethane	EPA 624	6C02019	0.42	5.0	ND	1	03/02/06	03/03/06	
Carbon tetrachloride	EPA 624	6C02019	0.28	0.50	ND	1	03/02/06	03/03/06	
Chlorobenzene	EPA 624	6C02019	0.36	2.0	ND	1	03/02/06	03/03/06	
Chloroethane	EPA 624	6C02019	0.40	5.0	ND	1	03/02/06	03/03/06	
Chloroform	EPA 624	6C02019	0.33	2.0	ND	1	03/02/06	03/03/06	
Chloromethane	EPA 624	6C02019	0.30	5.0	ND	1	03/02/06	03/03/06	
Dibromochloromethane	EPA 624	6C02019	0.28	2.0	ND	1	03/02/06	03/03/06	
1,2-Dichlorobenzene	EPA 624	6C02019	0.32	2.0	ND	1	03/02/06	03/03/06	
1,3-Dichlorobenzene	EPA 624	6C02019	0.35	2.0	ND	1	03/02/06	03/03/06	
1,4-Dichlorobenzene	EPA 624	6C02019	0.37	2.0	ND	1	03/02/06	03/03/06	
1,1-Dichloroethane	EPA 624	6C02019	0.27	2.0	ND	1	03/02/06	03/03/06	
1,2-Dichloroethane	EPA 624	6C02019	0.28	0.50	ND	1	03/02/06	03/03/06	
1,1-Dichloroethene	EPA 624	6C02019	0.42	5.0	ND	1	03/02/06	03/03/06	
trans-1,2-Dichloroethene	EPA 624	6C02019	0.27	2.0	ND	1	03/02/06	03/03/06	
1,2-Dichloropropane	EPA 624	6C02019	0.35	2.0	ND	1	03/02/06	03/03/06	
cis-1,3-Dichloropropene	EPA 624	6C02019	0.22	2.0	ND	1	03/02/06	03/03/06	
trans-1,3-Dichloropropene	EPA 624	6C02019	0.32	2.0	ND	1	03/02/06	03/03/06	
Ethylbenzene	EPA 624	6C02019	0.25	2.0	ND	1	03/02/06	03/03/06	
Methylene chloride	EPA 624	6C02019	0.70	5.0	ND	1	03/02/06	03/03/06	
1,1,2,2-Tetrachloroethane	EPA 624	6C02019	0.24	2.0	ND	1	03/02/06	03/03/06	
Tetrachloroethene	EPA 624	6C02019	0.32	2.0	ND	1	03/02/06	03/03/06	
Toluene	EPA 624	6C02019	0.36	2.0	ND	1	03/02/06	03/03/06	
1,1,1-Trichloroethane	EPA 624	6C02019	0.30	2.0	ND	1	03/02/06	03/03/06	
1,1,2-Trichloroethane	EPA 624	6C02019	0.30	2.0	ND	1	03/02/06	03/03/06	
Trichloroethene	EPA 624	6C02019	0.26	2.0	ND	1	03/02/06	03/03/06	
Trichlorofluoromethane	EPA 624	6C02019	0.34	5.0	ND	1	03/02/06	03/03/06	
Vinyl chloride	EPA 624	6C02019	0.26	0.50	ND	1	03/02/06	03/03/06	
Xylenes, Total	EPA 624	6C02019	0.90	4.0	ND	1	03/02/06	03/03/06	
Trichlorotrifluoroethane (Freon 113)	EPA 624	6C02019	1.2	5.0	ND	1	03/02/06	03/03/06	
Surrogate: Dibromofluoromethane (80-120%)					107 %				
Surrogate: Toluene-d8 (80-120%)					110 %				
Surrogate: 4-Bromofluorobenzene (80-120%)					92 %				

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 Project Manager

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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06
 Received: 02/28/06

PURGEABLES- GC/MS (EPA 624)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB2645-01 (Outfall 005 - Water)									
Reporting Units: ug/l									
Acrolein	EPA 624	6C02019	4.6	50	ND	1	03/02/06	03/03/06	u
Acrylonitrile	EPA 624	6C02019	0.70	50	ND	1	03/02/06	03/03/06	u
2-Chloroethyl vinyl ether	EPA 624	6C02019	1.8	5.0	ND	1	03/02/06	03/03/06	R
Surrogate: Dibromofluoromethane (80-120%)					111 %				
Surrogate: Toluene-d8 (80-120%)					108 %				
Surrogate: 4-Bromofluorobenzene (80-120%)					91 %				
Sample ID: IPB2645-02 (Trip Blank - Water)									
Reporting Units: ug/l									
Acrolein	EPA 624	6C02019	4.6	50	ND	1	03/02/06	03/03/06	u
Acrylonitrile	EPA 624	6C02019	0.70	50	ND	1	03/02/06	03/03/06	u
2-Chloroethyl vinyl ether	EPA 624	6C02019	1.8	5.0	ND	1	03/02/06	03/03/06	R
Surrogate: Dibromofluoromethane (80-120%)					107 %				
Surrogate: Toluene-d8 (80-120%)					110 %				
Surrogate: 4-Bromofluorobenzene (80-120%)					92 %				

rel qual
qual Code

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 Project Manager

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CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

MEC^x
 12269 East Vassar Drive
 Aurora, CO 80014

Package ID: B4WC45

Task Order: 1261.001D.01

SDG No.: IPB2645


No. of Analyses: 1

Laboratory: Del Mar Analytical

Reviewer: P. Meeks

Analysis/Method: General Minerals

Date: April 4, 2006

Reviewer's Signature


ACTION ITEMS^a

1. **Case Narrative
 Deficiencies**

2. **Out of Scope Analyses**

3. **Analyses Not Conducted**

4. **Missing Hardcopy
 Deliverables**

5. **Incorrect Hardcopy
 Deliverables**

6. **Deviations from Analysis
 Protocol, e.g.,**

Qualification applied for a detect below the reporting limit.

- Holding Times
- GC/MS Tune/Inst. Performance
- Calibration
- Method blanks
- Surrogates
- Matrix Spike/Dup LCS
- Field QC
- Internal Standard Performance
- Compound Identification
- Quantitation
- System Performance

COMMENTS^b

^a Subcontracted analytical laboratory is not meeting contract and/or method requirements.

^b Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.



DATA VALIDATION REPORT

NPDES Sampling
Outfall 005

ANALYSIS: GENERAL MINERALS

SAMPLE DELIVERY GROUP: IPB2645

Prepared by

MECX, LLC
12269 East Vassar Drive
Aurora, CO 80014

1. INTRODUCTION

Task Order Title: NPDES Sampling
MEC^X Project Number: 1261.001D.01
Sample Delivery Group: IPB2645
Project Manager: P. Costa
Matrix: Water
Analysis: General Minerals
QC Level: Level IV
No. of Samples: 1
No. of Reanalyses/Dilutions: 0
Reviewer: P. Meeks
Date of Review: April 4, 2006

The sample listed in Table 1 was validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for General Minerals (DVP-6, Rev. 0)*, *USEPA Methods for Chemical Analysis of Water and Wastes Methods 160.2 and, 335.2*, and validation guidelines outlined in the *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (2/94)*. Any deviations from these procedures and guidelines are documented herein. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form Is as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.

Table 1. Sample Identification

Client ID	Laboratory ID	Matrix	COC Method
Outfall 005	IPB2645-01	Water	General Minerals

2. DATA VALIDATION FINDINGS

2.1 SAMPLE MANAGEMENT

Following are findings associated with sample management:

2.1.1 Sample Preservation, Handling, and Transport

The sample in this SDG was received at the laboratory within the temperature limits of $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$. No preservation problems were noted by the laboratory. No qualifications were required.

2.1.2 Chain of Custody

The COC was signed and dated by field and laboratory personnel and accounted for the sample and analyses presented in this SDG. As the sample was couriered directly from the field to the laboratory, custody seals were not necessary. No qualifications were required.

2.1.3 Holding Times

The holding times were assessed by comparing the date of collection with the dates of analysis. All analyses were performed within the method specified holding times. No qualifications were required.

2.2 CALIBRATION

For cyanide, the initial calibration correlation coefficient was ≥ 0.995 and the ICV and CCV recoveries were within the control limits of 90-110%. For TSS, balance calibration logs were reviewed and found to be acceptable. No qualifications were required.

2.3 BLANKS

There were no detects in the method blanks or CCBs associated with the sample analyses. Raw data was reviewed to verify the blank data. No qualifications were required.

2.4 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

The reported LCS recoveries were within the laboratory-established control limits. No qualifications were required.

2.5 LABORATORY DUPLICATES

No MS/MSD or duplicate analyses were performed in association with this SDG; therefore, no assessment was made with respect to this criterion.

2.6 MATRIX SPIKES

No MS/MSD analyses were performed in association with this SDG; therefore, no assessment was made with respect to this criterion. Evaluation of method accuracy was based on LCS results. No qualifications were required.

2.7 SAMPLE RESULT VERIFICATION

A Level IV review was performed for the sample in this data package. Calculations were verified, and the sample results reported on the Form Is were verified against the raw data. Cyanide detected below the reporting limit was qualified as estimated, "J," and denoted with "DNQ," in accordance with the NPDES permit. No further qualifications were required.

2.8 FIELD QC SAMPLES

Field QC samples are evaluated, and if necessary, qualified based only on laboratory blanks. Any remaining detects are used to evaluate the associated sample. The following are findings associated with field QC samples:

2.8.1 Field Blanks and Equipment Rinsates

The sample in this SDG had no associated field QC samples. No qualifications were required.

2.8.2 Field Duplicates

There were no field duplicate pairs associated with this SDG.



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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06
 Received: 02/28/06

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB2645-01 (Outfall 005 - Water) - cont. Reporting Units: mg/l									
Chloride	EPA 300.0	6B28141	1.5	5.0	43	10	02/28/06	03/01/06	* ↓ U
Nitrate/Nitrite-N	EPA 300.0	6B28141	0.80	1.5	40	10	02/28/06	03/01/06	
Oil & Grease	EPA 413.1	6C08046	0.90	4.8	ND	1	03/08/06	03/08/06	
Sulfate	EPA 300.0	6B28141	0.45	0.50	37	1	02/28/06	03/01/06	
Total Dissolved Solids	SM2540C	6C03069	10	10	500	1	03/03/06	03/03/06	
Total Suspended Solids	EPA 160.2	6C03103	10	10	ND	1	03/03/06	03/03/06	

Rev Qual | Qual Code

* Analysis not validated

Del Mar Analytical - Irvine
 Michele Chamberlin
 Project Manager

Level IV

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 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 005

Report Number: IPB2645

Sampled: 02/28/06
 Received: 02/28/06

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB2645-01 (Outfall 005 - Water) - cont.									
Reporting Units: ug/l									
Total Cyanide	EPA 335.2	6C02125	2.2	5.0	2.8	1	03/02/06	03/02/06	J J
Perchlorate	EPA 314.0	6C03066	0.80	4.0	ND	1	03/03/06	03/03/06	*

Raw Qual
 Code
 DNR

* Analysis not validated

Del Mar Analytical - Irvine
 Michele Chamberlin
 Project Manager

LEVEL IV

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APPENDIX G

Section 55

Outfall 006, February 19, 2006

Del Mar Analytical Laboratory Report



LABORATORY REPORT

Prepared For: MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project: Annual Outfall 006

Sampled: 02/19/06
Received: 02/19/06
Revised: 03/28/06 17:17

NELAP #01108CA California ELAP#1197 CSDLAC #10117

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 Del Mar Analytical and its client. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical. The Chain(s) of Custody, 2 pages, are included and are an integral part of this report. This entire report was reviewed and approved for release.

CASE NARRATIVE

- SAMPLE RECEIPT: Samples were received intact, at 3°C, on ice and with chain of custody documentation.
- HOLDING TIMES: All samples were analyzed within prescribed holding times and/or in accordance with the Del Mar Analytical Sample Acceptance Policy unless otherwise noted in the report.
- PRESERVATION: Samples requiring preservation were verified prior to sample analysis.
- QA/QC CRITERIA: All analyses met method criteria, except as noted in the report with data qualifiers.
- COMMENTS: Results that fall between the MDL and RL are 'J' flagged.
- SUBCONTRACTED: Refer to the last page for specific subcontract laboratory information included in this report.
- ADDITIONAL INFORMATION: The report was revised to correct the analyzed date for the EPA 608 PCB blank.

LABORATORY ID	CLIENT ID	MATRIX
IPB1817-01	Outfall 006	Water
IPB1817-02	Trip Blanks	Water

Reviewed By:

Michele Chamberlin

Del Mar Analytical - Irvine
Michele Chamberlin
Project Manager



Del Mar Analytical

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2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: IPB1817

Sampled: 02/19/06

Received: 02/19/06

CORRECTIVE ACTION REPORT

Department: Extractions

Date: 02/28/2006

Method: EPA 625

Matrix: Water

QC Batch: 6B24064

Identification and Definition of Problem:

The percent recovery for dimethylphthalate in the LCS was below method acceptance limits.

Determination of the Cause of the Problem:

A definitive cause for the QC failure has not been determined.

Corrective Action Taken:

All results reported for dimethylphthalate are potentially biased low and can be considered estimates only.

Quality Assurance Approval:

Dave Dawes

Date: 03/14/2006 06:04 PM

Del Mar Analytical - Irvine
Michele Chamberlin
Project Manager

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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: IPB1817

Sampled: 02/19/06

Received: 02/19/06

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: IPB1817-01 (Outfall 006 - Water)									
Reporting Units: ug/l									
Benzene	EPA 624	6C02009	0.28	1.0	ND	1	03/02/06	03/02/06	
Bromodichloromethane	EPA 624	6C02009	0.30	2.0	ND	1	03/02/06	03/02/06	
Bromoform	EPA 624	6C02009	0.32	5.0	ND	1	03/02/06	03/02/06	
Bromomethane	EPA 624	6C02009	0.42	5.0	ND	1	03/02/06	03/02/06	
Carbon tetrachloride	EPA 624	6C02009	0.28	0.50	ND	1	03/02/06	03/02/06	
Chlorobenzene	EPA 624	6C02009	0.36	2.0	ND	1	03/02/06	03/02/06	
Chloroethane	EPA 624	6C02009	0.40	5.0	ND	1	03/02/06	03/02/06	
Chloroform	EPA 624	6C02009	0.33	2.0	ND	1	03/02/06	03/02/06	
Chloromethane	EPA 624	6C02009	0.30	5.0	ND	1	03/02/06	03/02/06	
Dibromochloromethane	EPA 624	6C02009	0.28	2.0	ND	1	03/02/06	03/02/06	
1,2-Dichlorobenzene	EPA 624	6C02009	0.32	2.0	ND	1	03/02/06	03/02/06	
1,3-Dichlorobenzene	EPA 624	6C02009	0.35	2.0	ND	1	03/02/06	03/02/06	
1,4-Dichlorobenzene	EPA 624	6C02009	0.37	2.0	ND	1	03/02/06	03/02/06	
1,1-Dichloroethane	EPA 624	6C02009	0.27	2.0	ND	1	03/02/06	03/02/06	
1,2-Dichloroethane	EPA 624	6C02009	0.28	0.50	ND	1	03/02/06	03/02/06	
1,1-Dichloroethene	EPA 624	6C02009	0.42	5.0	ND	1	03/02/06	03/02/06	
trans-1,2-Dichloroethene	EPA 624	6C02009	0.27	2.0	ND	1	03/02/06	03/02/06	
1,2-Dichloropropane	EPA 624	6C02009	0.35	2.0	ND	1	03/02/06	03/02/06	
cis-1,3-Dichloropropene	EPA 624	6C02009	0.22	2.0	ND	1	03/02/06	03/02/06	
trans-1,3-Dichloropropene	EPA 624	6C02009	0.32	2.0	ND	1	03/02/06	03/02/06	
Ethylbenzene	EPA 624	6C02009	0.25	2.0	ND	1	03/02/06	03/02/06	
Methylene chloride	EPA 624	6C02009	0.70	5.0	ND	1	03/02/06	03/02/06	
1,1,2,2-Tetrachloroethane	EPA 624	6C02009	0.24	2.0	ND	1	03/02/06	03/02/06	
Tetrachloroethene	EPA 624	6C02009	0.32	2.0	ND	1	03/02/06	03/02/06	L
Toluene	EPA 624	6C02009	0.36	2.0	ND	1	03/02/06	03/02/06	
1,1,1-Trichloroethane	EPA 624	6C02009	0.30	2.0	ND	1	03/02/06	03/02/06	
1,1,2-Trichloroethane	EPA 624	6C02009	0.30	2.0	ND	1	03/02/06	03/02/06	
Trichloroethene	EPA 624	6C02009	0.26	2.0	ND	1	03/02/06	03/02/06	
Trichlorofluoromethane	EPA 624	6C02009	0.34	5.0	ND	1	03/02/06	03/02/06	
Vinyl chloride	EPA 624	6C02009	0.26	0.50	ND	1	03/02/06	03/02/06	
Xylenes, Total	EPA 624	6C02009	0.90	4.0	ND	1	03/02/06	03/02/06	
Trichlorotrifluoroethane (Freon 113)	EPA 624	6C02009	1.2	5.0	ND	1	03/02/06	03/02/06	
Surrogate: Dibromofluoromethane (80-120%)									108 %
Surrogate: Toluene-d8 (80-120%)									107 %
Surrogate: 4-Bromofluorobenzene (80-120%)									98 %

Del Mar Analytical - Irvine
 Michele Chamberlin
 Project Manager

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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: IPB1817

Sampled: 02/19/06
 Received: 02/19/06

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: IPB1817-02 (Trip Blanks - Water)									
Reporting Units: ug/l									
Benzene	EPA 624	6C02009	0.28	1.0	ND	1	03/02/06	03/02/06	
Bromodichloromethane	EPA 624	6C02009	0.30	2.0	ND	1	03/02/06	03/02/06	
Bromoform	EPA 624	6C02009	0.32	5.0	ND	1	03/02/06	03/02/06	
Bromomethane	EPA 624	6C02009	0.42	5.0	ND	1	03/02/06	03/02/06	
Carbon tetrachloride	EPA 624	6C02009	0.28	0.50	ND	1	03/02/06	03/02/06	
Chlorobenzene	EPA 624	6C02009	0.36	2.0	ND	1	03/02/06	03/02/06	
Chloroethane	EPA 624	6C02009	0.40	5.0	ND	1	03/02/06	03/02/06	
Chloroform	EPA 624	6C02009	0.33	2.0	ND	1	03/02/06	03/02/06	
Chloromethane	EPA 624	6C02009	0.30	5.0	ND	1	03/02/06	03/02/06	
Dibromochloromethane	EPA 624	6C02009	0.28	2.0	ND	1	03/02/06	03/02/06	
1,2-Dichlorobenzene	EPA 624	6C02009	0.32	2.0	ND	1	03/02/06	03/02/06	
1,3-Dichlorobenzene	EPA 624	6C02009	0.35	2.0	ND	1	03/02/06	03/02/06	
1,4-Dichlorobenzene	EPA 624	6C02009	0.37	2.0	ND	1	03/02/06	03/02/06	
1,1-Dichloroethane	EPA 624	6C02009	0.27	2.0	ND	1	03/02/06	03/02/06	
1,2-Dichloroethane	EPA 624	6C02009	0.28	0.50	ND	1	03/02/06	03/02/06	
1,1-Dichloroethene	EPA 624	6C02009	0.42	5.0	ND	1	03/02/06	03/02/06	
trans-1,2-Dichloroethene	EPA 624	6C02009	0.27	2.0	ND	1	03/02/06	03/02/06	
1,2-Dichloropropane	EPA 624	6C02009	0.35	2.0	ND	1	03/02/06	03/02/06	
cis-1,3-Dichloropropene	EPA 624	6C02009	0.22	2.0	ND	1	03/02/06	03/02/06	
trans-1,3-Dichloropropene	EPA 624	6C02009	0.32	2.0	ND	1	03/02/06	03/02/06	
Ethylbenzene	EPA 624	6C02009	0.25	2.0	ND	1	03/02/06	03/02/06	
Methylene chloride	EPA 624	6C02009	0.70	5.0	ND	1	03/02/06	03/02/06	
1,1,2,2-Tetrachloroethane	EPA 624	6C02009	0.24	2.0	ND	1	03/02/06	03/02/06	
Tetrachloroethene	EPA 624	6C02009	0.32	2.0	ND	1	03/02/06	03/02/06	L
Toluene	EPA 624	6C02009	0.36	2.0	ND	1	03/02/06	03/02/06	
1,1,1-Trichloroethane	EPA 624	6C02009	0.30	2.0	ND	1	03/02/06	03/02/06	
1,1,2-Trichloroethane	EPA 624	6C02009	0.30	2.0	ND	1	03/02/06	03/02/06	
Trichloroethene	EPA 624	6C02009	0.26	2.0	ND	1	03/02/06	03/02/06	
Trichlorofluoromethane	EPA 624	6C02009	0.34	5.0	ND	1	03/02/06	03/02/06	
Vinyl chloride	EPA 624	6C02009	0.26	0.50	ND	1	03/02/06	03/02/06	
Xylenes, Total	EPA 624	6C02009	0.90	4.0	ND	1	03/02/06	03/02/06	
Trichlorotrifluoroethane (Freon 113)	EPA 624	6C02009	1.2	5.0	ND	1	03/02/06	03/02/06	
Surrogate: Dibromofluoromethane (80-120%)									112 %
Surrogate: Toluene-d8 (80-120%)									110 %
Surrogate: 4-Bromofluorobenzene (80-120%)									102 %

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 Michele Chamberlin
 Project Manager

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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: IPB1817

Sampled: 02/19/06
 Received: 02/19/06

PURGEABLES-- GC/MS (EPA 624)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB1817-01 (Outfall 006 - Water)									
Reporting Units: ug/l									
Acrolein	EPA 624	6B20035	4.6	50	ND	1	02/20/06	02/20/06	
Acrylonitrile	EPA 624	6B20035	0.70	50	ND	1	02/20/06	02/20/06	
2-Chloroethyl vinyl ether	EPA 624	6B20035	1.8	5.0	ND	1	02/20/06	02/20/06	R
Surrogate: Dibromofluoromethane (80-120%)					106 %				
Surrogate: Toluene-d8 (80-120%)					110 %				
Surrogate: 4-Bromofluorobenzene (80-120%)					105 %				
Sample ID: IPB1817-02 (Trip Blanks - Water)									
Reporting Units: ug/l									
Acrolein	EPA 624	6B20035	4.6	50	ND	1	02/20/06	02/20/06	
Acrylonitrile	EPA 624	6B20035	0.70	50	ND	1	02/20/06	02/20/06	
2-Chloroethyl vinyl ether	EPA 624	6B20035	1.8	5.0	ND	1	02/20/06	02/20/06	
Surrogate: Dibromofluoromethane (80-120%)					110 %				
Surrogate: Toluene-d8 (80-120%)					111 %				
Surrogate: 4-Bromofluorobenzene (80-120%)					108 %				

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 Project Manager

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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: IPB1817

Sampled: 02/19/06

Received: 02/19/06

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: IPB1817-01 (Outfall 006 - Water)									
Reporting Units: ug/l									
Acenaphthene	EPA 625	6B24064	4.1	9.5	ND	0.952	02/24/06	02/28/06	
Acenaphthylene	EPA 625	6B24064	3.0	9.5	ND	0.952	02/24/06	02/28/06	
Aniline	EPA 625	6B24064	2.8	9.5	ND	0.952	02/24/06	02/28/06	
Anthracene	EPA 625	6B24064	3.0	9.5	ND	0.952	02/24/06	02/28/06	
Benzidine	EPA 625	6B24064	5.0	19	ND	0.952	02/24/06	02/28/06	
Benzoic acid	EPA 625	6B24064	2.5	19	ND	0.952	02/24/06	02/28/06	
Benzo(a)anthracene	EPA 625	6B24064	3.5	9.5	ND	0.952	02/24/06	02/28/06	
Benzo(b)fluoranthene	EPA 625	6B24064	2.6	9.5	ND	0.952	02/24/06	02/28/06	
Benzo(k)fluoranthene	EPA 625	6B24064	3.2	9.5	ND	0.952	02/24/06	02/28/06	
Benzo(g,h,i)perylene	EPA 625	6B24064	5.0	9.5	ND	0.952	02/24/06	02/28/06	
Benzo(a)pyrene	EPA 625	6B24064	3.3	9.5	ND	0.952	02/24/06	02/28/06	
Benzyl alcohol	EPA 625	6B24064	2.4	19	ND	0.952	02/24/06	02/28/06	
Bis(2-chloroethoxy)methane	EPA 625	6B24064	3.7	9.5	ND	0.952	02/24/06	02/28/06	
Bis(2-chloroethyl)ether	EPA 625	6B24064	4.2	9.5	ND	0.952	02/24/06	02/28/06	
Bis(2-chloroisopropyl)ether	EPA 625	6B24064	4.4	9.5	ND	0.952	02/24/06	02/28/06	
Bis(2-ethylhexyl)phthalate	EPA 625	6B24064	5.0	48	ND	0.952	02/24/06	02/28/06	
4-Bromophenyl phenyl ether	EPA 625	6B24064	4.4	9.5	ND	0.952	02/24/06	02/28/06	
Butyl benzyl phthalate	EPA 625	6B24064	3.3	19	ND	0.952	02/24/06	02/28/06	
4-Chloroaniline	EPA 625	6B24064	5.7	9.5	ND	0.952	02/24/06	02/28/06	
2-Chloronaphthalene	EPA 625	6B24064	3.8	9.5	ND	0.952	02/24/06	02/28/06	
4-Chloro-3-methylphenol	EPA 625	6B24064	3.3	19	ND	0.952	02/24/06	02/28/06	
2-Chlorophenol	EPA 625	6B24064	4.0	9.5	ND	0.952	02/24/06	02/28/06	
4-Chlorophenyl phenyl ether	EPA 625	6B24064	2.9	9.5	ND	0.952	02/24/06	02/28/06	
Chrysene	EPA 625	6B24064	2.7	9.5	ND	0.952	02/24/06	02/28/06	
Dibenz(a,h)anthracene	EPA 625	6B24064	4.5	19	ND	0.952	02/24/06	02/28/06	
Dibenzofuran	EPA 625	6B24064	2.5	9.5	ND	0.952	02/24/06	02/28/06	
Di-n-butyl phthalate	EPA 625	6B24064	2.7	19	ND	0.952	02/24/06	02/28/06	
1,3-Dichlorobenzene	EPA 625	6B24064	3.9	9.5	ND	0.952	02/24/06	02/28/06	
1,4-Dichlorobenzene	EPA 625	6B24064	3.7	9.5	ND	0.952	02/24/06	02/28/06	
1,2-Dichlorobenzene	EPA 625	6B24064	4.3	9.5	ND	0.952	02/24/06	02/28/06	
3,3-Dichlorobenzidine	EPA 625	6B24064	10	19	ND	0.952	02/24/06	02/28/06	
2,4-Dichlorophenol	EPA 625	6B24064	3.9	9.5	ND	0.952	02/24/06	02/28/06	
Diethyl phthalate	EPA 625	6B24064	3.0	9.5	ND	0.952	02/24/06	02/28/06	
2,4-Dimethylphenol	EPA 625	6B24064	4.2	19	ND	0.952	02/24/06	02/28/06	
Dimethyl phthalate	EPA 625	6B24064	3.4	9.5	ND	0.952	02/24/06	02/28/06	
4,6-Dinitro-2-methylphenol	EPA 625	6B24064	4.9	19	ND	0.952	02/24/06	02/28/06	L2
2,4-Dinitrophenol	EPA 625	6B24064	5.0	19	ND	0.952	02/24/06	02/28/06	
2,4-Dinitrotoluene	EPA 625	6B24064	4.0	9.5	ND	0.952	02/24/06	02/28/06	
2,6-Dinitrotoluene	EPA 625	6B24064	3.0	9.5	ND	0.952	02/24/06	02/28/06	
Di-n-octyl phthalate	EPA 625	6B24064	4.5	19	ND	0.952	02/24/06	02/28/06	
Fluoranthene	EPA 625	6B24064	4.0	9.5	ND	0.952	02/24/06	02/28/06	

Del Mar Analytical - Irvine
 Michele Chamberlin
 Project Manager

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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: IPB1817

Sampled: 02/19/06
 Received: 02/19/06

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: IPB1817-01 (Outfall 006 - Water) - cont.									
Reporting Units: ug/l									
Fluorene	EPA 625	6B24064	3.7	9.5	ND	0.952	02/24/06	02/28/06	
Hexachlorobenzene	EPA 625	6B24064	4.6	9.5	ND	0.952	02/24/06	02/28/06	
Hexachlorobutadiene	EPA 625	6B24064	4.0	9.5	ND	0.952	02/24/06	02/28/06	
Hexachlorocyclopentadiene	EPA 625	6B24064	3.2	19	ND	0.952	02/24/06	02/28/06	
Hexachloroethane	EPA 625	6B24064	4.0	9.5	ND	0.952	02/24/06	02/28/06	
Indeno(1,2,3-cd)pyrene	EPA 625	6B24064	5.1	19	ND	0.952	02/24/06	02/28/06	
Isophorone	EPA 625	6B24064	3.5	9.5	ND	0.952	02/24/06	02/28/06	
2-Methylnaphthalene	EPA 625	6B24064	2.9	9.5	ND	0.952	02/24/06	02/28/06	
2-Methylphenol	EPA 625	6B24064	3.5	9.5	ND	0.952	02/24/06	02/28/06	
4-Methylphenol	EPA 625	6B24064	3.6	9.5	ND	0.952	02/24/06	02/28/06	
Naphthalene	EPA 625	6B24064	4.3	9.5	ND	0.952	02/24/06	02/28/06	
2-Nitroaniline	EPA 625	6B24064	3.7	19	ND	0.952	02/24/06	02/28/06	
3-Nitroaniline	EPA 625	6B24064	4.3	19	ND	0.952	02/24/06	02/28/06	
4-Nitroaniline	EPA 625	6B24064	4.7	19	ND	0.952	02/24/06	02/28/06	
Nitrobenzene	EPA 625	6B24064	4.0	19	ND	0.952	02/24/06	02/28/06	
2-Nitrophenol	EPA 625	6B24064	4.0	9.5	ND	0.952	02/24/06	02/28/06	
4-Nitrophenol	EPA 625	6B24064	6.3	19	ND	0.952	02/24/06	02/28/06	
N-Nitrosodiphenylamine	EPA 625	6B24064	3.8	9.5	ND	0.952	02/24/06	02/28/06	
N-Nitroso-di-n-propylamine	EPA 625	6B24064	3.4	9.5	ND	0.952	02/24/06	02/28/06	
Pentachlorophenol	EPA 625	6B24064	3.8	19	ND	0.952	02/24/06	02/28/06	
Phenanthrene	EPA 625	6B24064	3.1	9.5	ND	0.952	02/24/06	02/28/06	
Phenol	EPA 625	6B24064	3.8	9.5	ND	0.952	02/24/06	02/28/06	
Pyrene	EPA 625	6B24064	3.7	9.5	ND	0.952	02/24/06	02/28/06	
1,2,4-Trichlorobenzene	EPA 625	6B24064	4.2	9.5	ND	0.952	02/24/06	02/28/06	
2,4,5-Trichlorophenol	EPA 625	6B24064	3.4	19	ND	0.952	02/24/06	02/28/06	
2,4,6-Trichlorophenol	EPA 625	6B24064	3.9	19	ND	0.952	02/24/06	02/28/06	
1,2-Diphenylhydrazine/Azobenzene	EPA 625	6B24064	4.8	19	ND	0.952	02/24/06	02/28/06	
N-Nitrosodimethylamine	EPA 625	6B24064	3.5	19	ND	0.952	02/24/06	02/28/06	
Surrogate: 2-Fluorophenol (30-120%)									57 %
Surrogate: Phenol-d6 (35-120%)									66 %
Surrogate: 2,4,6-Tribromophenol (45-120%)									64 %
Surrogate: Nitrobenzene-d5 (45-120%)									67 %
Surrogate: 2-Fluorobiphenyl (45-120%)									74 %
Surrogate: Terphenyl-d14 (45-120%)									99 %

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 Michele Chamberlin
 Project Manager

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MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: IPB1817

Sampled: 02/19/06

Received: 02/19/06

ORGANOCHLORINE PESTICIDES (EPA 608)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB1817-01 (Outfall 006 - Water) - cont.									
Reporting Units: ug/l									
Aldrin	EPA 608	6B24053	0.029	0.095	ND	0.952	02/24/06	02/24/06	
alpha-BHC	EPA 608	6B24053	0.019	0.095	ND	0.952	02/24/06	02/24/06	
beta-BHC	EPA 608	6B24053	0.014	0.095	ND	0.952	02/24/06	02/24/06	
delta-BHC	EPA 608	6B24053	0.019	0.19	ND	0.952	02/24/06	02/24/06	
gamma-BHC (Lindane)	EPA 608	6B24053	0.019	0.095	ND	0.952	02/24/06	02/24/06	
Chlordane	EPA 608	6B24053	0.19	0.95	ND	0.952	02/24/06	02/24/06	
4,4'-DDD	EPA 608	6B24053	0.019	0.095	ND	0.952	02/24/06	02/24/06	
4,4'-DDE	EPA 608	6B24053	0.024	0.095	ND	0.952	02/24/06	02/24/06	
4,4'-DDT	EPA 608	6B24053	0.033	0.095	ND	0.952	02/24/06	02/24/06	
Dieldrin	EPA 608	6B24053	0.014	0.095	ND	0.952	02/24/06	02/24/06	
Endosulfan I	EPA 608	6B24053	0.014	0.095	ND	0.952	02/24/06	02/24/06	
Endosulfan II	EPA 608	6B24053	0.038	0.095	ND	0.952	02/24/06	02/24/06	
Endosulfan sulfate	EPA 608	6B24053	0.019	0.19	ND	0.952	02/24/06	02/24/06	
Endrin	EPA 608	6B24053	0.019	0.095	ND	0.952	02/24/06	02/24/06	
Endrin aldehyde	EPA 608	6B24053	0.043	0.095	ND	0.952	02/24/06	02/24/06	
Endrin ketone	EPA 608	6B24053	0.019	0.095	ND	0.952	02/24/06	02/24/06	
Heptachlor	EPA 608	6B24053	0.029	0.095	ND	0.952	02/24/06	02/24/06	
Heptachlor epoxide	EPA 608	6B24053	0.029	0.095	ND	0.952	02/24/06	02/24/06	
Methoxychlor	EPA 608	6B24053	0.033	0.095	ND	0.952	02/24/06	02/24/06	
Toxaphene	EPA 608	6B24053	1.4	4.8	ND	0.952	02/24/06	02/24/06	
Surrogate: Tetrachloro-m-xylene (35-115%)									77 %
Surrogate: Decachlorobiphenyl (45-120%)									76 %

Del Mar Analytical - Irvine
Michele Chamberlin
Project Manager

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MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 006
Report Number: IPB1817

Sampled: 02/19/06
Received: 02/19/06

TOTAL PCBS (EPA 608)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB1817-01 (Outfall 006 - Water) - cont.									
Reporting Units: ug/l									
Aroclor 1016	EPA 608	6B24053	0.19	0.95	ND	0.952	02/24/06	02/28/06	
Aroclor 1221	EPA 608	6B24053	0.095	0.95	ND	0.952	02/24/06	02/28/06	
Aroclor 1232	EPA 608	6B24053	0.24	0.95	ND	0.952	02/24/06	02/28/06	
Aroclor 1242	EPA 608	6B24053	0.24	0.95	ND	0.952	02/24/06	02/28/06	
Aroclor 1248	EPA 608	6B24053	0.24	0.95	ND	0.952	02/24/06	02/28/06	
Aroclor 1254	EPA 608	6B24053	0.24	0.95	ND	0.952	02/24/06	02/28/06	
Aroclor 1260	EPA 608	6B24053	0.38	0.95	ND	0.952	02/24/06	02/28/06	
Surrogate: Decachlorobiphenyl (45-120%)					85 %				

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Michele Chamberlin
Project Manager

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MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: IPB1817

Sampled: 02/19/06
Received: 02/19/06

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB1817-01 (Outfall 006 - Water) - cont.									
Reporting Units: mg/l									
Boron	EPA 200.7	6B20080	0.0074	0.050	ND	1	02/20/06	02/27/06	

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Sampled: 02/19/06
 Received: 02/19/06

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB1817-01 (Outfall 006 - Water) - cont.									
Reporting Units: ug/l									
Aluminum	EPA 200.7	6B20080	40	50	300	1	02/20/06	02/28/06	
Antimony	EPA 200.8	6B21089	0.18	2.0	2.6	1	02/21/06	02/22/06	
Arsenic	EPA 200.7	6B20080	4.4	5.0	27	1	02/20/06	02/25/06	
Beryllium	EPA 200.7	6B20080	0.90	2.0	ND	1	02/20/06	02/25/06	
Cadmium	EPA 200.8	6B21089	0.015	1.0	0.023	1	02/21/06	02/22/06	J
Chromium	EPA 200.7	6B20080	2.0	5.0	ND	1	02/20/06	02/25/06	
Copper	EPA 200.8	6B21089	0.49	2.0	0.96	1	02/21/06	02/22/06	B, J
Lead	EPA 200.8	6B21089	0.040	1.0	0.35	1	02/21/06	02/22/06	J
Mercury	EPA 245.1	6B21083	0.063	0.20	ND	1	02/21/06	02/21/06	
Nickel	EPA 200.7	6B20080	2.0	10	ND	1	02/20/06	02/25/06	
Selenium	EPA 200.7	6B20080	8.0	10	ND	1	02/20/06	02/25/06	
Silver	EPA 200.7	6B20080	3.0	10	ND	1	02/20/06	02/25/06	
Thallium	EPA 200.8	6B21089	0.075	1.0	ND	1	02/21/06	02/22/06	
Vanadium	EPA 200.7	6B20080	3.0	10	ND	1	02/20/06	02/25/06	
Zinc	EPA 200.7	6B20080	15	20	15	1	02/20/06	02/25/06	B, J

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 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: IPB1817

Sampled: 02/19/06

Received: 02/19/06

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB1817-01 (Outfall 006 - Water) - cont.									
Reporting Units: mg/l									
Chloride	EPA 300.0	6B20053	0.26	0.50	18	1	02/20/06	02/20/06	
Nitrate/Nitrite-N	EPA 300.0	6B20053	0.072	0.26	0.88	1	02/20/06	02/20/06	
Oil & Grease	EPA 413.1	6B28050	0.90	4.8	ND	1	02/28/06	02/28/06	
Sulfate	EPA 300.0	6B20053	0.18	0.50	14	1	02/20/06	02/20/06	
Total Dissolved Solids	SM2540C	6B22069	10	10	200	1	02/22/06	02/22/06	
Total Suspended Solids	EPA 160.2	6B23099	10	10	ND	1	02/23/06	02/23/06	

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INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB1817-01 (Outfall 006 - Water) - cont.									
Reporting Units: ug/l									
Total Cyanide	EPA 335.2	6B22127	2.2	5.0	2.9	1	02/22/06	02/22/06	J
Perchlorate	EPA 314.0	6B23071	0.80	4.0	ND	1	02/23/06	02/23/06	

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Sampled: 02/19/06
Received: 02/19/06

SHORT HOLD TIME DETAIL REPORT

	Hold Time (in days)	Date/Time Sampled	Date/Time Received	Date/Time Extracted	Date/Time Analyzed
Sample ID: Outfall 006 (IPB1817-01) - Water					
EPA 300.0	2	02/19/2006 08:45	02/19/2006 13:25	02/20/2006 07:00	02/20/2006 10:18
EPA 624	3	02/19/2006 08:45	02/19/2006 13:25	02/20/2006 00:00	02/20/2006 19:45
Sample ID: Trip Blanks (IPB1817-02) - Water					
EPA 624	3	02/19/2006 08:45	02/19/2006 13:25	02/20/2006 00:00	02/20/2006 21:30

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Project ID: Annual Outfall 006

Report Number: IPB1817

Sampled: 02/19/06

Received: 02/19/06

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 6C02009 Extracted: 03/02/06										
Blank Analyzed: 03/02/2006 (6C02009-BLK1)										
Benzene	ND	1.0	0.28	ug/l						
Bromodichloromethane	ND	2.0	0.30	ug/l						
Bromoform	ND	5.0	0.32	ug/l						
Bromomethane	ND	5.0	0.42	ug/l						
Carbon tetrachloride	ND	0.50	0.28	ug/l						
Chlorobenzene	ND	2.0	0.36	ug/l						
Chloroethane	ND	5.0	0.40	ug/l						
Chloroform	ND	2.0	0.33	ug/l						
Chloromethane	ND	5.0	0.30	ug/l						
Dibromochloromethane	ND	2.0	0.28	ug/l						
1,2-Dichlorobenzene	ND	2.0	0.32	ug/l						
1,3-Dichlorobenzene	ND	2.0	0.35	ug/l						
1,4-Dichlorobenzene	ND	2.0	0.37	ug/l						
1,1-Dichloroethane	ND	2.0	0.27	ug/l						
1,2-Dichloroethane	ND	0.50	0.28	ug/l						
1,1-Dichloroethene	ND	5.0	0.42	ug/l						
trans-1,2-Dichloroethene	ND	2.0	0.27	ug/l						
1,2-Dichloropropane	ND	2.0	0.35	ug/l						
cis-1,3-Dichloropropene	ND	2.0	0.22	ug/l						
trans-1,3-Dichloropropene	ND	2.0	0.32	ug/l						
Ethylbenzene	ND	2.0	0.25	ug/l						
Methylene chloride	ND	5.0	0.70	ug/l						
1,1,2,2-Tetrachloroethane	ND	2.0	0.24	ug/l						
Tetrachloroethene	ND	2.0	0.32	ug/l						
Toluene	ND	2.0	0.36	ug/l						
1,1,1-Trichloroethane	ND	2.0	0.30	ug/l						
1,1,2-Trichloroethane	ND	2.0	0.30	ug/l						
Trichloroethene	ND	2.0	0.26	ug/l						
Trichlorofluoromethane	ND	5.0	0.34	ug/l						
Vinyl chloride	ND	0.50	0.26	ug/l						
Xylenes, Total	ND	4.0	0.90	ug/l						
Trichlorotrifluoroethane (Freon 113)	ND	5.0	1.2	ug/l						
Surrogate: Dibromofluoromethane	27.1			ug/l	25.0	108	80-120			
Surrogate: Toluene-d8	27.4			ug/l	25.0	110	80-120			
Surrogate: 4-Bromofluorobenzene	25.7			ug/l	25.0	103	80-120			

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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: IPB1817

Sampled: 02/19/06
 Received: 02/19/06

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 6C02009 Extracted: 03/02/06										
LCS Analyzed: 03/02/2006 (6C02009-BS1)										
Benzene	27.0	1.0	0.28	ug/l	25.0		108 65-120			
Bromodichloromethane	28.0	2.0	0.30	ug/l	25.0		112 65-135			
Bromoform	22.8	5.0	0.32	ug/l	25.0		91 50-130			
Bromomethane	24.0	5.0	0.42	ug/l	25.0		96 60-140			
Carbon tetrachloride	28.7	0.50	0.28	ug/l	25.0		115 65-140			
Chlorobenzene	27.1	2.0	0.36	ug/l	25.0		108 70-125			
Chloroethane	27.6	5.0	0.40	ug/l	25.0		110 55-140			
Chloroform	27.5	2.0	0.33	ug/l	25.0		110 65-130			
Chloromethane	25.1	5.0	0.30	ug/l	25.0		100 40-140			
Dibromochloromethane	27.5	2.0	0.28	ug/l	25.0		110 65-140			
1,2-Dichlorobenzene	27.6	2.0	0.32	ug/l	25.0		110 70-120			
1,3-Dichlorobenzene	25.9	2.0	0.35	ug/l	25.0		104 70-125			
1,4-Dichlorobenzene	25.2	2.0	0.37	ug/l	25.0		101 70-125			
1,1-Dichloroethane	26.9	2.0	0.27	ug/l	25.0		108 65-130			
1,2-Dichloroethane	28.6	0.50	0.28	ug/l	25.0		114 60-140			
1,1-Dichloroethene	29.4	5.0	0.42	ug/l	25.0		118 70-130			
trans-1,2-Dichloroethene	28.4	2.0	0.27	ug/l	25.0		114 65-130			
1,2-Dichloropropane	27.5	2.0	0.35	ug/l	25.0		110 65-125			
cis-1,3-Dichloropropene	28.5	2.0	0.22	ug/l	25.0		114 70-130			
trans-1,3-Dichloropropene	28.9	2.0	0.32	ug/l	25.0		116 65-130			
Ethylbenzene	27.4	2.0	0.25	ug/l	25.0		110 70-125			
Methylene chloride	28.7	5.0	0.70	ug/l	25.0		115 60-130			
1,1,2,2-Tetrachloroethane	35.8	2.0	0.24	ug/l	25.0		143 55-130			
Tetrachloroethene	27.1	2.0	0.32	ug/l	25.0		108 65-125			L
Toluene	26.9	2.0	0.36	ug/l	25.0		108 70-125			
1,1,1-Trichloroethane	25.5	2.0	0.30	ug/l	25.0		102 65-135			
1,1,2-Trichloroethane	29.5	2.0	0.30	ug/l	25.0		118 65-125			
Trichloroethene	27.2	2.0	0.26	ug/l	25.0		109 70-125			
Trichlorofluoromethane	24.8	5.0	0.34	ug/l	25.0		99 60-140			
Vinyl chloride	25.4	0.50	0.26	ug/l	25.0		102 50-130			
Surrogate: Dibromofluoromethane	28.2			ug/l	25.0		113 80-120			
Surrogate: Toluene-d8	28.2			ug/l	25.0		113 80-120			
Surrogate: 4-Bromofluorobenzene	27.7			ug/l	25.0		111 80-120			

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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: IPB1817

 Sampled: 02/19/06
 Received: 02/19/06

METHOD BLANK/QC DATA
PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
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Batch: 6C02009 Extracted: 03/02/06

Matrix Spike Analyzed: 03/02/2006 (6C02009-MS1)
Source: IPB2085-01

Benzene	26.4	1.0	0.28	ug/l	25.0	ND	106	60-125			
Bromodichloromethane	25.1	2.0	0.30	ug/l	25.0	ND	100	65-135			
Bromoform	16.8	5.0	0.32	ug/l	25.0	ND	67	50-135			
Bromomethane	23.8	5.0	0.42	ug/l	25.0	ND	95	50-145			
Carbon tetrachloride	25.5	0.50	0.28	ug/l	25.0	ND	102	65-140			
Chlorobenzene	25.9	2.0	0.36	ug/l	25.0	ND	104	70-125			
Chloroethane	28.2	5.0	0.40	ug/l	25.0	ND	113	50-140			
Chloroform	26.4	2.0	0.33	ug/l	25.0	ND	106	65-135			
Chloromethane	24.8	5.0	0.30	ug/l	25.0	ND	99	35-140			
Dibromochloromethane	22.5	2.0	0.28	ug/l	25.0	ND	90	60-140			
1,2-Dichlorobenzene	26.1	2.0	0.32	ug/l	25.0	ND	104	70-125			
1,3-Dichlorobenzene	25.2	2.0	0.35	ug/l	25.0	ND	101	70-125			
1,4-Dichlorobenzene	24.2	2.0	0.37	ug/l	25.0	ND	97	70-125			
1,1-Dichloroethane	26.1	2.0	0.27	ug/l	25.0	ND	104	60-130			
1,2-Dichloroethane	24.4	0.50	0.28	ug/l	25.0	ND	98	60-140			
1,1-Dichloroethene	28.5	5.0	0.42	ug/l	25.0	0.49	112	60-135			
trans-1,2-Dichloroethene	27.4	2.0	0.27	ug/l	25.0	ND	110	60-135			
1,2-Dichloropropane	26.2	2.0	0.35	ug/l	25.0	ND	105	60-125			
cis-1,3-Dichloropropene	25.0	2.0	0.22	ug/l	25.0	ND	100	65-135			
trans-1,3-Dichloropropene	24.3	2.0	0.32	ug/l	25.0	ND	97	65-140			
Ethylbenzene	26.6	2.0	0.25	ug/l	25.0	ND	106	65-130			
Methylene chloride	27.0	5.0	0.70	ug/l	25.0	ND	108	55-130			
1,1,2,2-Tetrachloroethane	28.0	2.0	0.24	ug/l	25.0	ND	112	55-140			
Tetrachloroethene	26.2	2.0	0.32	ug/l	25.0	0.43	103	60-130			
Toluene	25.9	2.0	0.36	ug/l	25.0	ND	104	65-125			
1,1,1-Trichloroethane	24.1	2.0	0.30	ug/l	25.0	ND	96	65-140			
1,1,2-Trichloroethane	25.4	2.0	0.30	ug/l	25.0	ND	102	60-130			
Trichloroethene	28.7	2.0	0.26	ug/l	25.0	2.5	105	60-125			
Trichlorofluoromethane	22.8	5.0	0.34	ug/l	25.0	ND	91	55-145			
Vinyl chloride	27.0	0.50	0.26	ug/l	25.0	ND	108	40-135			
Surrogate: Dibromofluoromethane	28.2			ug/l	25.0		113	80-120			
Surrogate: Toluene-d8	27.5			ug/l	25.0		110	80-120			
Surrogate: 4-Bromofluorobenzene	27.3			ug/l	25.0		109	80-120			

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Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: IPB1817

Sampled: 02/19/06
Received: 02/19/06

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 6C02009 Extracted: 03/02/06											
Matrix Spike Dup Analyzed: 03/02/2006 (6C02009-MSD1)						Source: IPB2085-01					
Benzene	26.0	1.0	0.28	ug/l	25.0	ND	104	60-125	2	20	
Bromodichloromethane	26.0	2.0	0.30	ug/l	25.0	ND	104	65-135	4	20	
Bromoform	20.1	5.0	0.32	ug/l	25.0	ND	80	50-135	18	25	
Bromomethane	22.4	5.0	0.42	ug/l	25.0	ND	90	50-145	6	25	
Carbon tetrachloride	25.8	0.50	0.28	ug/l	25.0	ND	103	65-140	1	25	
Chlorobenzene	26.0	2.0	0.36	ug/l	25.0	ND	104	70-125	0	20	
Chloroethane	26.5	5.0	0.40	ug/l	25.0	ND	106	50-140	6	25	
Chloroform	26.4	2.0	0.33	ug/l	25.0	ND	106	65-135	0	20	
Chloromethane	23.6	5.0	0.30	ug/l	25.0	ND	94	35-140	5	25	
Dibromochloromethane	25.4	2.0	0.28	ug/l	25.0	ND	102	60-140	12	25	
1,2-Dichlorobenzene	26.9	2.0	0.32	ug/l	25.0	ND	108	70-125	3	20	
1,3-Dichlorobenzene	24.9	2.0	0.35	ug/l	25.0	ND	100	70-125	1	20	
1,4-Dichlorobenzene	24.2	2.0	0.37	ug/l	25.0	ND	97	70-125	0	20	
1,1-Dichloroethane	25.9	2.0	0.27	ug/l	25.0	ND	104	60-130	1	20	
1,2-Dichloroethane	26.6	0.50	0.28	ug/l	25.0	ND	106	60-140	9	20	
1,1-Dichloroethene	28.7	5.0	0.42	ug/l	25.0	0.49	113	60-135	1	20	
trans-1,2-Dichloroethene	27.5	2.0	0.27	ug/l	25.0	ND	110	60-135	0	20	
1,2-Dichloropropane	26.4	2.0	0.35	ug/l	25.0	ND	106	60-125	1	20	
cis-1,3-Dichloropropene	25.8	2.0	0.22	ug/l	25.0	ND	103	65-135	3	20	
trans-1,3-Dichloropropene	26.6	2.0	0.32	ug/l	25.0	ND	106	65-140	9	25	
Ethylbenzene	26.4	2.0	0.25	ug/l	25.0	ND	106	65-130	1	20	
Methylene chloride	27.4	5.0	0.70	ug/l	25.0	ND	110	55-130	1	20	
1,1,2,2-Tetrachloroethane	35.6	2.0	0.24	ug/l	25.0	ND	142	55-140	24	30	M7
Tetrachloroethene	26.3	2.0	0.32	ug/l	25.0	0.43	103	60-130	0	20	
Toluene	25.7	2.0	0.36	ug/l	25.0	ND	103	65-125	1	20	
1,1,1-Trichloroethane	24.2	2.0	0.30	ug/l	25.0	ND	97	65-140	0	20	
1,1,2-Trichloroethane	28.5	2.0	0.30	ug/l	25.0	ND	114	60-130	12	25	
Trichloroethene	28.3	2.0	0.26	ug/l	25.0	2.5	103	60-125	1	20	
Trichlorofluoromethane	23.3	5.0	0.34	ug/l	25.0	ND	93	55-145	2	25	
Vinyl chloride	23.9	0.50	0.26	ug/l	25.0	ND	96	40-135	12	30	
Surrogate: Dibromofluoromethane	28.1			ug/l	25.0		112	80-120			
Surrogate: Toluene-d8	27.5			ug/l	25.0		110	80-120			
Surrogate: 4-Bromofluorobenzene	27.6			ug/l	25.0		110	80-120			

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Michele Chamberlin
Project Manager

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2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: IPB1817

Sampled: 02/19/06
Received: 02/19/06

METHOD BLANK/QC DATA

PURGEABLES-- GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 6B20035 Extracted: 02/20/06										
Blank Analyzed: 02/20/2006 (6B20035-BLK1)										
Acrolein	ND	50	4.6	ug/l						
Acrylonitrile	ND	50	0.70	ug/l						
2-Chloroethyl vinyl ether	ND	5.0	1.8	ug/l						
Surrogate: Dibromofluoromethane	26.4			ug/l	25.0		106	80-120		
Surrogate: Toluene-d8	27.7			ug/l	25.0		111	80-120		
Surrogate: 4-Bromofluorobenzene	26.4			ug/l	25.0		106	80-120		
LCS Analyzed: 02/20/2006 (6B20035-BS1)										
2-Chloroethyl vinyl ether	38.8	5.0	1.8	ug/l	25.0		155	25-170		
Surrogate: Dibromofluoromethane	28.0			ug/l	25.0		112	80-120		
Surrogate: Toluene-d8	28.0			ug/l	25.0		112	80-120		
Surrogate: 4-Bromofluorobenzene	28.9			ug/l	25.0		116	80-120		
Matrix Spike Analyzed: 02/20/2006 (6B20035-MS1)										
					Source: IPB1817-01					
2-Chloroethyl vinyl ether	34.2	5.0	1.8	ug/l	25.0	ND	137	25-170		
Surrogate: Dibromofluoromethane	27.4			ug/l	25.0		110	80-120		
Surrogate: Toluene-d8	28.2			ug/l	25.0		113	80-120		
Surrogate: 4-Bromofluorobenzene	27.8			ug/l	25.0		111	80-120		
Matrix Spike Dup Analyzed: 02/20/2006 (6B20035-MSD1)										
					Source: IPB1817-01					
2-Chloroethyl vinyl ether	21.8	5.0	1.8	ug/l	25.0	ND	87	25-170	44	25
Surrogate: Dibromofluoromethane	24.0			ug/l	25.0		96	80-120		R
Surrogate: Toluene-d8	27.3			ug/l	25.0		109	80-120		
Surrogate: 4-Bromofluorobenzene	25.9			ug/l	25.0		104	80-120		

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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 006
 Report Number: IPB1817

Sampled: 02/19/06
 Received: 02/19/06

METHOD BLANK/QC DATA

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

Analyte	Result	Reporting		Spike	Source	%REC		RPD	RPD	Data
		Limit	MDL			Units	Level			
Batch: 6B24064 Extracted: 02/24/06										
Blank Analyzed: 02/27/2006 (6B24064-BLK1)										
Acenaphthene	ND	10	4.3	ug/l						
Acenaphthylene	ND	10	3.2	ug/l						
Aniline	ND	10	2.9	ug/l						
Anthracene	ND	10	3.2	ug/l						
Benzidine	ND	20	5.2	ug/l						
Benzoic acid	ND	20	2.6	ug/l						
Benzo(a)anthracene	ND	10	3.7	ug/l						
Benzo(b)fluoranthene	ND	10	2.7	ug/l						
Benzo(k)fluoranthene	ND	10	3.4	ug/l						
Benzo(g,h,i)perylene	ND	10	5.3	ug/l						
Benzo(a)pyrene	ND	10	3.5	ug/l						
Benzyl alcohol	ND	20	2.5	ug/l						
Bis(2-chloroethoxy)methane	ND	10	3.9	ug/l						
Bis(2-chloroethyl)ether	ND	10	4.4	ug/l						
Bis(2-chloroisopropyl)ether	ND	10	4.6	ug/l						
Bis(2-ethylhexyl)phthalate	ND	50	5.2	ug/l						
4-Bromophenyl phenyl ether	ND	10	4.6	ug/l						
Butyl benzyl phthalate	ND	20	3.5	ug/l						
4-Chloroaniline	ND	10	6.0	ug/l						
2-Chloronaphthalene	ND	10	4.0	ug/l						
4-Chloro-3-methylphenol	ND	20	3.5	ug/l						
2-Chlorophenol	ND	10	4.2	ug/l						
4-Chlorophenyl phenyl ether	ND	10	3.0	ug/l						
Chrysene	ND	10	2.8	ug/l						
Dibenz(a,h)anthracene	ND	20	4.7	ug/l						
Dibenzofuran	ND	10	2.6	ug/l						
Di-n-butyl phthalate	ND	20	2.8	ug/l						
1,3-Dichlorobenzene	ND	10	4.1	ug/l						
1,4-Dichlorobenzene	ND	10	3.9	ug/l						
1,2-Dichlorobenzene	ND	10	4.5	ug/l						
3,3-Dichlorobenzidine	ND	20	11	ug/l						
2,4-Dichlorophenol	ND	10	4.1	ug/l						
Diethyl phthalate	ND	10	3.1	ug/l						
2,4-Dimethylphenol	ND	20	4.4	ug/l						
Dimethyl phthalate	ND	10	3.6	ug/l						

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Report Number: IPB1817

Sampled: 02/19/06
 Received: 02/19/06

METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Data Qualifiers
Batch: 6B24064 Extracted: 02/24/06											
Blank Analyzed: 02/27/2006 (6B24064-BLK1)											
4,6-Dinitro-2-methylphenol	ND	20	5.1	ug/l							
2,4-Dinitrophenol	ND	20	5.3	ug/l							
2,4-Dinitrotoluene	ND	10	4.2	ug/l							
2,6-Dinitrotoluene	ND	10	3.2	ug/l							
Di-n-octyl phthalate	ND	20	4.7	ug/l							
Fluoranthene	ND	10	4.2	ug/l							
Fluorene	ND	10	3.9	ug/l							
Hexachlorobenzene	ND	10	4.8	ug/l							
Hexachlorobutadiene	ND	10	4.2	ug/l							
Hexachlorocyclopentadiene	ND	20	3.4	ug/l							
Hexachloroethane	ND	10	4.2	ug/l							
Indeno(1,2,3-cd)pyrene	ND	20	5.4	ug/l							
Isophorone	ND	10	3.7	ug/l							
2-Methylnaphthalene	ND	10	3.0	ug/l							
2-Methylphenol	ND	10	3.7	ug/l							
4-Methylphenol	ND	10	3.8	ug/l							
Naphthalene	ND	10	4.5	ug/l							
2-Nitroaniline	ND	20	3.9	ug/l							
3-Nitroaniline	ND	20	4.5	ug/l							
4-Nitroaniline	ND	20	4.9	ug/l							
Nitrobenzene	ND	20	4.2	ug/l							
2-Nitrophenol	ND	10	4.2	ug/l							
4-Nitrophenol	ND	20	6.6	ug/l							
N-Nitrosodiphenylamine	ND	10	4.0	ug/l							
N-Nitroso-di-n-propylamine	ND	10	3.6	ug/l							
Pentachlorophenol	ND	20	4.0	ug/l							
Phenanthrene	ND	10	3.3	ug/l							
Phenol	ND	10	4.0	ug/l							
Pyrene	ND	10	3.9	ug/l							
1,2,4-Trichlorobenzene	ND	10	4.4	ug/l							
2,4,5-Trichlorophenol	ND	20	3.6	ug/l							
2,4,6-Trichlorophenol	ND	20	4.1	ug/l							
1,2-Diphenylhydrazine/Azobenzene	ND	20	5.0	ug/l							
N-Nitrosodimethylamine	ND	20	3.7	ug/l							
Surrogate: 2-Fluorophenol	114			ug/l	200		57	30-120			

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MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 006
Report Number: IPB1817

Sampled: 02/19/06
Received: 02/19/06

METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD Limit	Data Qualifiers
Batch: 6B24064 Extracted: 02/24/06									
Blank Analyzed: 02/27/2006 (6B24064-BLK1)									
Surrogate: Phenol-d6	132			ug/l	200		66 35-120		
Surrogate: 2,4,6-Tribromophenol	150			ug/l	200		75 45-120		
Surrogate: Nitrobenzene-d5	53.3			ug/l	100		53 45-120		
Surrogate: 2-Fluorobiphenyl	56.1			ug/l	100		56 45-120		
Surrogate: Terphenyl-d14	81.8			ug/l	100		82 45-120		
LCS Analyzed: 02/27/2006 (6B24064-BS1)									
Acenaphthene	79.6	10	4.3	ug/l	100		80 55-120		M-NR1
Acenaphthylene	87.8	10	3.2	ug/l	100		88 55-120		
Aniline	73.9	10	2.9	ug/l	100		74 35-120		
Anthracene	90.3	10	3.2	ug/l	100		90 55-120		
Benzidine	94.5	20	5.2	ug/l	100		94 20-160		
Benzoic acid	80.6	20	2.6	ug/l	100		81 35-120		
Benzo(a)anthracene	90.6	10	3.7	ug/l	100		91 60-120		
Benzo(b)fluoranthene	86.4	10	2.7	ug/l	100		86 50-120		
Benzo(k)fluoranthene	87.7	10	3.4	ug/l	100		88 50-120		
Benzo(g,h,i)perylene	91.5	10	5.3	ug/l	100		92 40-125		
Benzo(a)pyrene	87.5	10	3.5	ug/l	100		88 55-120		
Benzyl alcohol	73.8	20	2.5	ug/l	100		74 45-120		
Bis(2-chloroethoxy)methane	73.2	10	3.9	ug/l	100		73 55-120		
Bis(2-chloroethyl)ether	71.6	10	4.4	ug/l	100		72 50-120		
Bis(2-chloroisopropyl)ether	75.5	10	4.6	ug/l	100		76 45-120		
Bis(2-ethylhexyl)phthalate	89.3	50	5.2	ug/l	100		89 60-130		
4-Bromophenyl phenyl ether	79.6	10	4.6	ug/l	100		80 50-120		
Butyl benzyl phthalate	87.4	20	3.5	ug/l	100		87 55-125		
4-Chloroaniline	75.1	10	6.0	ug/l	100		75 50-120		
2-Chloronaphthalene	76.6	10	4.0	ug/l	100		77 55-120		
4-Chloro-3-methylphenol	78.9	20	3.5	ug/l	100		79 60-120		
2-Chlorophenol	71.5	10	4.2	ug/l	100		72 45-120		
4-Chlorophenyl phenyl ether	87.4	10	3.0	ug/l	100		87 55-120		
Chrysene	94.1	10	2.8	ug/l	100		94 60-120		
Dibenz(a,h)anthracene	96.7	20	4.7	ug/l	100		97 45-130		
Dibenzofuran	81.4	10	2.6	ug/l	100		81 60-120		
Di-n-butyl phthalate	87.1	20	2.8	ug/l	100		87 55-125		
1,3-Dichlorobenzene	43.4	10	4.1	ug/l	100		43 35-120		
1,4-Dichlorobenzene	48.0	10	3.9	ug/l	100		48 35-120		

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 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 006
 Report Number: IPB1817

Sampled: 02/19/06
 Received: 02/19/06

METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 6B24064 Extracted: 02/24/06										
LCS Analyzed: 02/27/2006 (6B24064-BS1)										
1,2-Dichlorobenzene	49.7	10	4.5	ug/l	100		50 35-120			M-NR1
3,3-Dichlorobenzidine	103	20	11	ug/l	100		103 45-130			
2,4-Dichlorophenol	71.1	10	4.1	ug/l	100		71 55-120			
Diethyl phthalate	62.2	10	3.1	ug/l	100		62 55-120			
2,4-Dimethylphenol	63.6	20	4.4	ug/l	100		64 30-120			
Dimethyl phthalate	28.8	10	3.6	ug/l	100		29 30-120			
4,6-Dinitro-2-methylphenol	82.9	20	5.1	ug/l	100		83 50-120			L2
2,4-Dinitrophenol	87.6	20	5.3	ug/l	100		88 40-120			
2,4-Dinitrotoluene	87.8	10	4.2	ug/l	100		88 60-120			
2,6-Dinitrotoluene	81.6	10	3.2	ug/l	100		82 60-120			
Di-n-octyl phthalate	81.7	20	4.7	ug/l	100		82 60-130			
Fluoranthene	92.2	10	4.2	ug/l	100		92 55-120			
Fluorene	86.5	10	3.9	ug/l	100		86 60-120			
Hexachlorobenzene	87.4	10	4.8	ug/l	100		87 50-120			
Hexachlorobutadiene	50.0	10	4.2	ug/l	100		50 40-120			
Hexachlorocyclopentadiene	69.2	20	3.4	ug/l	100		69 15-120			
Hexachloroethane	42.1	10	4.2	ug/l	100		42 35-120			
Indeno(1,2,3-cd)pyrene	89.1	20	5.4	ug/l	100		89 40-130			
Isophorone	67.7	10	3.7	ug/l	100		68 50-120			
2-Methylnaphthalene	69.4	10	3.0	ug/l	100		69 50-120			
2-Methylphenol	74.0	10	3.7	ug/l	100		74 45-120			
4-Methylphenol	77.3	10	3.8	ug/l	100		77 45-120			
Naphthalene	65.9	10	4.5	ug/l	100		66 50-120			
2-Nitroaniline	89.4	20	3.9	ug/l	100		89 60-120			
3-Nitroaniline	94.0	20	4.5	ug/l	100		94 55-120			
4-Nitroaniline	98.6	20	4.9	ug/l	100		99 50-125			
Nitrobenzene	68.0	20	4.2	ug/l	100		68 50-120			
2-Nitrophenol	72.7	10	4.2	ug/l	100		73 55-120			
4-Nitrophenol	91.3	20	6.6	ug/l	100		91 45-120			
N-Nitrosodiphenylamine	82.7	10	4.0	ug/l	100		83 55-120			
N-Nitroso-di-n-propylamine	79.2	10	3.6	ug/l	100		79 45-120			
Pentachlorophenol	97.1	20	4.0	ug/l	100		97 50-120			
Phenanthrene	88.3	10	3.3	ug/l	100		88 55-120			
Phenol	73.6	10	4.0	ug/l	100		74 45-120			
Pyrene	89.7	10	3.9	ug/l	100		90 50-120			

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 Michele Chamberlin
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Attention: Bronwyn Kelly

Project ID: Annual Outfall 006
Report Number: IPB1817

Sampled: 02/19/06
Received: 02/19/06

METHOD BLANK/QC DATA

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

Table with columns: Analyte, Result, Reporting Limit, MDL, Units, Spike Level, Source Result, %REC, %REC Limits, RPD, RPD Limit, Data Qualifiers. Includes sections for LCS Analyzed and LCS Dup Analyzed.

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METHOD BLANK/QC DATA

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

Analyte	Result	Reporting		Spike	Source	%REC		RPD	Data	
		Limit	MDL			Units	Level			Result
Batch: 6B24064 Extracted: 02/24/06										
LCS Dup Analyzed: 02/27/2006 (6B24064-BSD1)										
Chrysene	102	10	2.8	ug/l	100	102	60-120	8	20	
Dibenz(a,h)anthracene	109	20	4.7	ug/l	100	109	45-130	12	25	
Dibenzofuran	92.6	10	2.6	ug/l	100	93	60-120	13	20	
Di-n-butyl phthalate	96.4	20	2.8	ug/l	100	96	55-125	10	20	
1,3-Dichlorobenzene	46.7	10	4.1	ug/l	100	47	35-120	7	25	
1,4-Dichlorobenzene	48.9	10	3.9	ug/l	100	49	35-120	2	25	
1,2-Dichlorobenzene	52.2	10	4.5	ug/l	100	52	35-120	5	25	
3,3-Dichlorobenzidine	114	20	11	ug/l	100	114	45-130	10	25	
2,4-Dichlorophenol	78.6	10	4.1	ug/l	100	79	55-120	10	20	
Diethyl phthalate	74.0	10	3.1	ug/l	100	74	55-120	17	20	
2,4-Dimethylphenol	70.0	20	4.4	ug/l	100	70	30-120	10	25	
Dimethyl phthalate	31.1	10	3.6	ug/l	100	31	30-120	8	20	
4,6-Dinitro-2-methylphenol	87.3	20	5.1	ug/l	100	87	50-120	5	25	
2,4-Dinitrophenol	89.0	20	5.3	ug/l	100	89	40-120	2	25	
2,4-Dinitrotoluene	97.7	10	4.2	ug/l	100	98	60-120	11	20	
2,6-Dinitrotoluene	95.7	10	3.2	ug/l	100	96	60-120	16	20	
Di-n-octyl phthalate	91.3	20	4.7	ug/l	100	91	60-130	11	20	
Fluoranthene	101	10	4.2	ug/l	100	101	55-120	9	20	
Fluorene	94.5	10	3.9	ug/l	100	94	60-120	9	20	
Hexachlorobenzene	94.6	10	4.8	ug/l	100	95	50-120	8	20	
Hexachlorobutadiene	57.0	10	4.2	ug/l	100	57	40-120	13	25	
Hexachlorocyclopentadiene	79.8	20	3.4	ug/l	100	80	15-120	14	30	
Hexachloroethane	43.6	10	4.2	ug/l	100	44	35-120	4	25	
Indeno(1,2,3-cd)pyrene	102	20	5.4	ug/l	100	102	40-130	14	25	
Isophorone	75.5	10	3.7	ug/l	100	76	50-120	11	20	
2-Methylnaphthalene	79.5	10	3.0	ug/l	100	80	50-120	14	20	
2-Methylphenol	79.0	10	3.7	ug/l	100	79	45-120	7	20	
4-Methylphenol	82.8	10	3.8	ug/l	100	83	45-120	7	20	
Naphthalene	72.8	10	4.5	ug/l	100	73	50-120	10	20	
2-Nitroaniline	99.2	20	3.9	ug/l	100	99	60-120	10	20	
3-Nitroaniline	103	20	4.5	ug/l	100	103	55-120	9	25	
4-Nitroaniline	111	20	4.9	ug/l	100	111	50-125	12	20	
Nitrobenzene	75.0	20	4.2	ug/l	100	75	50-120	10	25	
2-Nitrophenol	77.3	10	4.2	ug/l	100	77	55-120	6	25	
4-Nitrophenol	90.5	20	6.6	ug/l	100	90	45-120	1	25	

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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 006
 Report Number: IPB1817

Sampled: 02/19/06
 Received: 02/19/06

METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 6B24064 Extracted: 02/24/06										
LCS Dup Analyzed: 02/27/2006 (6B24064-BSD1)										
N-Nitrosodiphenylamine	93.2	10	4.0	ug/l	100		93 55-120	12	20	
N-Nitroso-di-n-propylamine	80.0	10	3.6	ug/l	100		80 45-120	1	20	
Pentachlorophenol	95.4	20	4.0	ug/l	100		95 50-120	2	25	
Phenanthrene	99.3	10	3.3	ug/l	100		99 55-120	12	20	
Phenol	78.3	10	4.0	ug/l	100		78 45-120	6	25	
Pyrene	94.8	10	3.9	ug/l	100		95 50-120	6	25	
1,2,4-Trichlorobenzene	60.1	10	4.4	ug/l	100		60 45-120	13	20	
2,4,5-Trichlorophenol	89.0	20	3.6	ug/l	100		89 60-120	7	20	
2,4,6-Trichlorophenol	86.6	20	4.1	ug/l	100		87 60-120	6	20	
1,2-Diphenylhydrazine/Azobenzene	95.6	20	5.0	ug/l	100		96 60-120	7	25	
N-Nitrosodimethylamine	66.8	20	3.7	ug/l	100		67 40-120	1	20	
Surrogate: 2-Fluorophenol	129			ug/l	200		64 30-120			
Surrogate: Phenol-d6	150			ug/l	200		75 35-120			
Surrogate: 2,4,6-Tribromophenol	170			ug/l	200		85 45-120			
Surrogate: Nitrobenzene-d5	71.8			ug/l	100		72 45-120			
Surrogate: 2-Fluorobiphenyl	86.0			ug/l	100		86 45-120			
Surrogate: Terphenyl-d14	92.4			ug/l	100		92 45-120			

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METHOD BLANK/QC DATA

ORGANOCHLORINE PESTICIDES (EPA 608)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD	RPD Limit	Data Qualifiers
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Batch: 6B24053 Extracted: 02/24/06

Blank Analyzed: 02/24/2006 (6B24053-BLK1)

Aldrin	ND	0.10	0.030	ug/l						
alpha-BHC	ND	0.10	0.020	ug/l						
beta-BHC	ND	0.10	0.015	ug/l						
delta-BHC	ND	0.20	0.020	ug/l						
gamma-BHC (Lindane)	ND	0.10	0.020	ug/l						
Chlordane	ND	1.0	0.20	ug/l						
4,4'-DDD	ND	0.10	0.020	ug/l						
4,4'-DDE	ND	0.10	0.025	ug/l						
4,4'-DDT	ND	0.10	0.035	ug/l						
Dieldrin	ND	0.10	0.015	ug/l						
Endosulfan I	ND	0.10	0.015	ug/l						
Endosulfan II	ND	0.10	0.040	ug/l						
Endosulfan sulfate	ND	0.20	0.020	ug/l						
Endrin	ND	0.10	0.020	ug/l						
Endrin aldehyde	ND	0.10	0.045	ug/l						
Endrin ketone	ND	0.10	0.020	ug/l						
Heptachlor	ND	0.10	0.030	ug/l						
Heptachlor epoxide	ND	0.10	0.030	ug/l						
Methoxychlor	ND	0.10	0.035	ug/l						
Toxaphene	ND	5.0	1.5	ug/l						
Surrogate: Tetrachloro-m-xylene	0.376			ug/l	0.500		75		35-115	
Surrogate: Decachlorobiphenyl	0.480			ug/l	0.500		96		45-120	

LCS Analyzed: 02/24/2006 (6B24053-BS1)

Aldrin	0.470	0.10	0.030	ug/l	0.500		94		35-120	
alpha-BHC	0.506	0.10	0.020	ug/l	0.500		101		45-120	
beta-BHC	0.495	0.10	0.015	ug/l	0.500		99		50-120	
delta-BHC	0.558	0.20	0.020	ug/l	0.500		112		50-120	
gamma-BHC (Lindane)	0.510	0.10	0.020	ug/l	0.500		102		40-120	
4,4'-DDD	0.540	0.10	0.020	ug/l	0.500		108		55-120	
4,4'-DDE	0.531	0.10	0.025	ug/l	0.500		106		50-120	
4,4'-DDT	0.554	0.10	0.035	ug/l	0.500		111		55-120	
Dieldrin	0.525	0.10	0.015	ug/l	0.500		105		50-120	
Endosulfan I	0.457	0.10	0.015	ug/l	0.500		91		50-120	
Endosulfan II	0.528	0.10	0.040	ug/l	0.500		106		55-120	
Endosulfan sulfate	0.559	0.20	0.020	ug/l	0.500		112		60-120	

M-NRI

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METHOD BLANK/QC DATA

ORGANOCHLORINE PESTICIDES (EPA 608)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 6B24053 Extracted: 02/24/06											
LCS Analyzed: 02/24/2006 (6B24053-BS1)											
Endrin	0.547	0.10	0.020	ug/l	0.500		109	55-120			M-NR1
Endrin aldehyde	0.538	0.10	0.045	ug/l	0.500		108	55-120			
Endrin ketone	0.550	0.10	0.020	ug/l	0.500		110	55-120			
Heptachlor	0.481	0.10	0.030	ug/l	0.500		96	40-115			
Heptachlor epoxide	0.502	0.10	0.030	ug/l	0.500		100	50-120			
Methoxychlor	0.587	0.10	0.035	ug/l	0.500		117	55-120			
Surrogate: Tetrachloro-m-xylene	0.399			ug/l	0.500		80	35-115			
Surrogate: Decachlorobiphenyl	0.519			ug/l	0.500		104	45-120			
LCS Dup Analyzed: 02/24/2006 (6B24053-BSD1)											
Aldrin	0.439	0.10	0.030	ug/l	0.500		88	35-120	7	30	
alpha-BHC	0.465	0.10	0.020	ug/l	0.500		93	45-120	8	30	
beta-BHC	0.464	0.10	0.015	ug/l	0.500		93	50-120	6	30	
delta-BHC	0.521	0.20	0.020	ug/l	0.500		104	50-120	7	30	
gamma-BHC (Lindane)	0.472	0.10	0.020	ug/l	0.500		94	40-120	8	30	
4,4'-DDD	0.514	0.10	0.020	ug/l	0.500		103	55-120	5	30	
4,4'-DDE	0.493	0.10	0.025	ug/l	0.500		99	50-120	7	30	
4,4'-DDT	0.524	0.10	0.035	ug/l	0.500		105	55-120	6	30	
Dieldrin	0.497	0.10	0.015	ug/l	0.500		99	50-120	5	30	
Endosulfan I	0.432	0.10	0.015	ug/l	0.500		86	50-120	6	30	
Endosulfan II	0.505	0.10	0.040	ug/l	0.500		101	55-120	4	30	
Endosulfan sulfate	0.532	0.20	0.020	ug/l	0.500		106	60-120	5	30	
Endrin	0.516	0.10	0.020	ug/l	0.500		103	55-120	6	30	
Endrin aldehyde	0.503	0.10	0.045	ug/l	0.500		101	55-120	7	30	
Endrin ketone	0.523	0.10	0.020	ug/l	0.500		105	55-120	5	30	
Heptachlor	0.444	0.10	0.030	ug/l	0.500		89	40-115	8	30	
Heptachlor epoxide	0.464	0.10	0.030	ug/l	0.500		93	50-120	8	30	
Methoxychlor	0.551	0.10	0.035	ug/l	0.500		110	55-120	6	30	
Surrogate: Tetrachloro-m-xylene	0.364			ug/l	0.500		73	35-115			
Surrogate: Decachlorobiphenyl	0.492			ug/l	0.500		98	45-120			

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 Received: 02/19/06

METHOD BLANK/QC DATA

TOTAL PCBS (EPA 608)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	Limit	RPD	RPD Limit	Data Qualifiers
Batch: 6B24053 Extracted: 02/24/06											
Blank Analyzed: 02/26/2006 (6B24053-BLK1)											
Aroclor 1016	ND	1.0	0.20	ug/l							
Aroclor 1221	ND	1.0	0.10	ug/l							
Aroclor 1232	ND	1.0	0.25	ug/l							
Aroclor 1242	ND	1.0	0.25	ug/l							
Aroclor 1248	ND	1.0	0.25	ug/l							
Aroclor 1254	ND	1.0	0.25	ug/l							
Aroclor 1260	ND	1.0	0.40	ug/l							
Surrogate: Decachlorobiphenyl	0.473			ug/l	0.500		95	45-120			
LCS Analyzed: 02/26/2006 (6B24053-BS2)											
Aroclor 1016	4.07	1.0	0.20	ug/l	4.00		102	45-115			M-NR1
Aroclor 1260	4.15	1.0	0.40	ug/l	4.00		104	55-115			
Surrogate: Decachlorobiphenyl	0.459			ug/l	0.500		92	45-120			
LCS Dup Analyzed: 02/26/2006 (6B24053-BSD2)											
Aroclor 1016	3.93	1.0	0.20	ug/l	4.00		98	45-115	4	30	
Aroclor 1260	4.01	1.0	0.40	ug/l	4.00		100	55-115	3	25	
Surrogate: Decachlorobiphenyl	0.449			ug/l	0.500		90	45-120			

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METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Data Qualifiers
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Batch: 6B20080 Extracted: 02/20/06

Blank Analyzed: 02/25/2006-02/27/2006 (6B20080-BLK1)

Aluminum	ND	50	40	ug/l						
Arsenic	ND	5.0	4.4	ug/l						
Beryllium	ND	2.0	0.90	ug/l						
Boron	ND	0.050	0.0080	mg/l						
Chromium	ND	5.0	2.0	ug/l						
Nickel	ND	10	2.0	ug/l						
Selenium	ND	10	8.0	ug/l						
Silver	ND	10	3.0	ug/l						
Vanadium	ND	10	3.0	ug/l						
Zinc	15.6	20	15	ug/l						

LCS Analyzed: 02/25/2006-02/27/2006 (6B20080-BS1)

Aluminum	531	50	40	ug/l	500		106	85-115		
Arsenic	535	5.0	4.4	ug/l	500		107	85-115		
Beryllium	548	2.0	0.90	ug/l	500		110	85-115		
Boron	0.481	0.050	0.0080	mg/l	0.500		96	85-115		
Chromium	537	5.0	2.0	ug/l	500		107	85-115		
Nickel	528	10	2.0	ug/l	500		106	85-115		
Selenium	517	10	8.0	ug/l	500		103	85-115		
Silver	275	10	3.0	ug/l	250		110	85-115		
Vanadium	547	10	3.0	ug/l	500		109	85-115		
Zinc	572	20	15	ug/l	500		114	85-115		

Matrix Spike Analyzed: 02/25/2006-02/27/2006 (6B20080-MS1)

					Source: IPB1673-01					
Aluminum	591	50	40	ug/l	500	ND	118	70-130		
Arsenic	558	5.0	4.4	ug/l	500	ND	112	70-130		
Beryllium	560	2.0	0.90	ug/l	500	ND	112	70-130		
Boron	0.487	0.050	0.0080	mg/l	0.500	ND	97	70-130		
Chromium	561	5.0	2.0	ug/l	500	ND	112	70-130		
Nickel	545	10	2.0	ug/l	500	3.6	108	70-130		
Selenium	537	10	8.0	ug/l	500	ND	107	70-130		
Silver	285	10	3.0	ug/l	250	ND	114	70-130		
Vanadium	566	10	3.0	ug/l	500	ND	113	70-130		
Zinc	634	20	15	ug/l	500	150	97	70-130		

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METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Data Qualifiers
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Batch: 6B20080 Extracted: 02/20/06

Matrix Spike Analyzed: 02/25/2006-02/27/2006 (6B20080-MS2)

Source: IPB1673-02

Aluminum	526	50	40	ug/l	500	ND	105	70-130		
Arsenic	529	5.0	4.4	ug/l	500	ND	106	70-130		
Beryllium	536	2.0	0.90	ug/l	500	ND	107	70-130		
Boron	0.488	0.050	0.0080	mg/l	0.500	ND	98	70-130		
Chromium	533	5.0	2.0	ug/l	500	2.9	106	70-130		
Nickel	519	10	2.0	ug/l	500	2.9	103	70-130		
Selenium	517	10	8.0	ug/l	500	ND	103	70-130		
Silver	272	10	3.0	ug/l	250	ND	109	70-130		
Vanadium	538	10	3.0	ug/l	500	ND	108	70-130		
Zinc	662	20	15	ug/l	500	190	94	70-130		

Matrix Spike Dup Analyzed: 02/25/2006-02/27/2006 (6B20080-MSD1)

Source: IPB1673-01

Aluminum	540	50	40	ug/l	500	ND	108	70-130	9	20
Arsenic	532	5.0	4.4	ug/l	500	ND	106	70-130	5	20
Beryllium	544	2.0	0.90	ug/l	500	ND	109	70-130	3	20
Boron	0.500	0.050	0.0080	mg/l	0.500	ND	100	70-130	3	20
Chromium	534	5.0	2.0	ug/l	500	ND	107	70-130	5	20
Nickel	520	10	2.0	ug/l	500	3.6	103	70-130	5	20
Selenium	507	10	8.0	ug/l	500	ND	101	70-130	6	20
Silver	272	10	3.0	ug/l	250	ND	109	70-130	5	20
Vanadium	540	10	3.0	ug/l	500	ND	108	70-130	5	20
Zinc	893	20	15	ug/l	500	150	149	70-130	34	20

MI

Batch: 6B21083 Extracted: 02/21/06

Blank Analyzed: 02/21/2006 (6B21083-BLK1)

Mercury	ND	0.20	0.050	ug/l						
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METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	Limits	RPD	RPD Limit	Data Qualifiers
Batch: 6B21083 Extracted: 02/21/06											
LCS Analyzed: 02/21/2006 (6B21083-BS1)											
Mercury	8.63	0.20	0.050	ug/l	8.00		108	85-115			
Matrix Spike Analyzed: 02/21/2006 (6B21083-MS1)											
Mercury	8.06	0.20	0.050	ug/l	8.00	ND	101	70-130			
Matrix Spike Dup Analyzed: 02/21/2006 (6B21083-MSD1)											
Mercury	8.48	0.20	0.050	ug/l	8.00	ND	106	70-130	5	20	
Batch: 6B21089 Extracted: 02/21/06											
Blank Analyzed: 02/22/2006 (6B21089-BLK1)											
Antimony	ND	2.0	0.050	ug/l							
Cadmium	ND	1.0	0.025	ug/l							
Copper	0.281	2.0	0.25	ug/l							
Lead	ND	1.0	0.040	ug/l							J
Thallium	ND	1.0	0.075	ug/l							
LCS Analyzed: 02/22/2006 (6B21089-BS1)											
Antimony	81.3	2.0	0.050	ug/l	80.0		102	85-115			
Cadmium	81.7	1.0	0.025	ug/l	80.0		102	85-115			
Copper	79.2	2.0	0.25	ug/l	80.0		99	85-115			
Lead	80.3	1.0	0.040	ug/l	80.0		100	85-115			
Thallium	80.4	1.0	0.075	ug/l	80.0		100	85-115			
Matrix Spike Analyzed: 02/22/2006 (6B21089-MS1)											
Antimony	82.7	2.0	0.050	ug/l	80.0	0.089	103	70-130			
Cadmium	79.4	1.0	0.025	ug/l	80.0	ND	99	70-130			
Copper	132	2.0	0.25	ug/l	80.0	62	88	70-130			
Lead	84.8	1.0	0.040	ug/l	80.0	6.8	98	70-130			
Thallium	79.5	1.0	0.075	ug/l	80.0	ND	99	70-130			

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 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: IPB1817

Sampled: 02/19/06
 Received: 02/19/06

METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	Limits	RPD	RPD Limit	Data Qualifiers
Batch: 6B21089 Extracted: 02/21/06											
Matrix Spike Analyzed: 02/22/2006 (6B21089-MS2)						Source: IPB1597-02					
Antimony	82.9	2.0	0.050	ug/l	80.0	0.071	104	70-130			
Cadmium	79.6	1.0	0.025	ug/l	80.0	ND	100	70-130			
Copper	95.6	2.0	0.25	ug/l	80.0	22	92	70-130			
Lead	82.3	1.0	0.040	ug/l	80.0	2.4	100	70-130			
Thallium	80.9	1.0	0.075	ug/l	80.0	ND	101	70-130			
Matrix Spike Dup Analyzed: 02/22/2006 (6B21089-MSD1)						Source: IPB1597-01					
Antimony	83.9	2.0	0.050	ug/l	80.0	0.089	105	70-130	1	20	
Cadmium	80.4	1.0	0.025	ug/l	80.0	ND	100	70-130	1	20	
Copper	134	2.0	0.25	ug/l	80.0	62	90	70-130	2	20	
Lead	87.4	1.0	0.040	ug/l	80.0	6.8	101	70-130	3	20	
Thallium	81.4	1.0	0.075	ug/l	80.0	ND	102	70-130	2	20	

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 Michele Chamberlin
 Project Manager

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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 006
 Report Number: IPB1817

Sampled: 02/19/06
 Received: 02/19/06

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 6B20053 Extracted: 02/20/06											
Blank Analyzed: 02/20/2006 (6B20053-BLK1)											
Chloride	ND	0.50	0.26	mg/l							
Nitrate/Nitrite-N	ND	0.26	0.072	mg/l							
Sulfate	ND	0.50	0.18	mg/l							
LCS Analyzed: 02/20/2006 (6B20053-BS1)											
Chloride	4.91	0.50	0.26	mg/l	5.00		98	90-110			
Sulfate	9.96	0.50	0.18	mg/l	10.0		100	90-110			
Matrix Spike Analyzed: 02/20/2006 (6B20053-MS1)											
						Source: IPB1817-01					
Chloride	22.7	0.50	0.26	mg/l	5.00	18	94	80-120			
Sulfate	24.5	0.50	0.18	mg/l	10.0	14	105	80-120			
Matrix Spike Dup Analyzed: 02/20/2006 (6B20053-MSD1)											
						Source: IPB1817-01					
Chloride	22.6	0.50	0.26	mg/l	5.00	18	92	80-120	0	20	
Sulfate	24.4	0.50	0.18	mg/l	10.0	14	104	80-120	0	20	
Batch: 6B22069 Extracted: 02/22/06											
Blank Analyzed: 02/22/2006 (6B22069-BLK1)											
Total Dissolved Solids	ND	10	10	mg/l							
LCS Analyzed: 02/22/2006 (6B22069-BS1)											
Total Dissolved Solids	982	10	10	mg/l	1000		98	90-110			
Duplicate Analyzed: 02/22/2006 (6B22069-DUP1)											
						Source: IPB1656-01					
Total Dissolved Solids	500	10	10	mg/l		490			2	10	

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 Project Manager

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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 006
 Report Number: IPB1817

Sampled: 02/19/06
 Received: 02/19/06

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 6B22127 Extracted: 02/22/06											
Blank Analyzed: 02/22/2006 (6B22127-BLK1)											
Total Cyanide	ND	5.0	2.2	ug/l							
LCS Analyzed: 02/22/2006 (6B22127-BS1)											
Total Cyanide	194	5.0	2.2	ug/l	200		97	90-110			
Matrix Spike Analyzed: 02/22/2006 (6B22127-MS1)											
Total Cyanide	177	5.0	2.2	ug/l	200	2.5	87	70-115			
Matrix Spike Dup Analyzed: 02/22/2006 (6B22127-MSD1)											
Total Cyanide	175	5.0	2.2	ug/l	200	2.5	86	70-115	1	15	
Batch: 6B23071 Extracted: 02/23/06											
Blank Analyzed: 02/23/2006 (6B23071-BLK1)											
Perchlorate	ND	4.0	0.80	ug/l							
LCS Analyzed: 02/23/2006 (6B23071-BS1)											
Perchlorate	50.9	4.0	0.80	ug/l	50.0		102	85-115			
Matrix Spike Analyzed: 02/23/2006 (6B23071-MS1)											
Perchlorate	61.6	4.0	0.80	ug/l	50.0	13	97	80-120			
Matrix Spike Dup Analyzed: 02/23/2006 (6B23071-MSD1)											
Perchlorate	63.5	4.0	0.80	ug/l	50.0	13	101	80-120	3	20	
Batch: 6B23099 Extracted: 02/23/06											
Blank Analyzed: 02/23/2006 (6B23099-BLK1)											
Total Suspended Solids	ND	10	10	mg/l							

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 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: IPB1817

Sampled: 02/19/06

Received: 02/19/06

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 6B23099 Extracted: 02/23/06										
LCS Analyzed: 02/23/2006 (6B23099-BS1)										
Total Suspended Solids	1020	10	10	mg/l	1000		102 85-115			
Duplicate Analyzed: 02/23/2006 (6B23099-DUP1)										
Total Suspended Solids	640	10	10	mg/l		Source: IPB1805-01 600		6	10	
Batch: 6B28050 Extracted: 02/28/06										
Blank Analyzed: 02/28/2006 (6B28050-BLK1)										
Oil & Grease	ND	5.0	0.94	mg/l						
LCS Analyzed: 02/28/2006 (6B28050-BS1)										
Oil & Grease	17.0	5.0	0.94	mg/l	20.0		85 65-120			M-NR1
LCS Dup Analyzed: 02/28/2006 (6B28050-BSD1)										
Oil & Grease	17.2	5.0	0.94	mg/l	20.0		86 65-120	1	20	

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 Michele Chamberlin
 Project Manager

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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: IPB1817

Sampled: 02/19/06
 Received: 02/19/06

Compliance Check

The results obtained from the analytical testing of this data set were checked against compliance limits received from the client. Any results at or above the compliance limits appear in bold on this page.

LabNumber	Analysis	Analyte	Units	Result	MRL	Compliance Limit
IPB1817-01	413.1 Oil and Grease	Oil & Grease	mg/l	0.38	4.8	15
IPB1817-01	Antimony-200.8	Antimony	ug/l	2.60	2.0	6.00
IPB1817-01	Boron-200.7	Boron	mg/l	0	0.050	1.00
IPB1817-01	Cadmium-200.8	Cadmium	ug/l	0.023	1.0	4.00
IPB1817-01	Chloride - 300.0	Chloride	mg/l	18	0.50	150
IPB1817-01	Copper-200.8	Copper	ug/l	0.96	2.0	14
IPB1817-01	Mercury - 245.1	Mercury	ug/l	0	0.20	0.20
IPB1817-01	Nitrogen, NO3+NO2 -N	Nitrate/Nitrite-N	mg/l	0.88	0.26	10.00
IPB1817-01	Perchlorate 314.0	Perchlorate	ug/l	0.50	4.0	6.00
IPB1817-01	Sulfate-300.0	Sulfate	mg/l	14	0.50	250
IPB1817-01	TDS - SM 2540C	Total Dissolved Solids	mg/l	200	10	850
IPB1817-01	Thallium-200.8	Thallium	ug/l	0.0044	1.0	2.00

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 Michele Chamberlin
 Project Manager

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MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: IPB1817

Sampled: 02/19/06
Received: 02/19/06

DATA QUALIFIERS AND DEFINITIONS

- B** Analyte was detected in the associated Method Blank.
- J** 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.
- L** Laboratory Control Sample recovery was above the method control limits. Analyte not detected, data not impacted.
- L2** Laboratory Control Sample recovery was below method control limits.
- M1** The MS and/or MSD were above the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
- M7** The MS and/or MSD were above the acceptance limits. See Blank Spike (LCS).
- M-NR1** There was no MS/MSD analyzed with this batch due to insufficient sample volume. See Blank Spike/Blank Spike Duplicate.
- R** The RPD exceeded the method control limit due to sample matrix effects. The individual analyte QA/QC recoveries, however, were within acceptance limits.
- 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.

Del Mar Analytical - Irvine
Michele Chamberlin
Project Manager



Del Mar Analytical

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300 North Lake Avenue, Suite 1200
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Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: IPB1817

Sampled: 02/19/06
Received: 02/19/06

Certification Summary

Del Mar Analytical - Irvine

Method	Matrix	Nelac	California
1613A/1613B	Water		
EDD + Level 4	Water		
EPA 160.2	Water	X	X
EPA 200.7	Water	X	X
EPA 200.8	Water	X	X
EPA 245.1	Water	X	X
EPA 300.0	Water	X	X
EPA 314.0	Water	N/A	X
EPA 335.2	Water	X	X
EPA 413.1	Water	X	X
EPA 608	Water	X	X
EPA 624	Water	X	X
EPA 625	Water	X	X
EPA 900.0	Water		
Haz Waste Scree	Water		
SM2540C	Water	X	X

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

Subcontracted Laboratories

Alta Analytical NELAC Cert #02102CA, California Cert #1640, Nevada Cert #CA-413

1104 Windfield Way - El Dorado Hills, CA 95762

Analysis Performed: 1613-Dioxin-HR-Alta

Samples: IPB1817-01

Analysis Performed: Level 4 + EDD

Samples: IPB1817-01

Aquatic Testing Laboratories-SUB California Cert #1775

4350 Transport Street, Unit 107 - Ventura, CA 93003

Analysis Performed: Bioassay-Acute 96hr

Samples: IPB1817-01

Eberline Services

2030 Wright Avenue - Richmond, CA 94804

Analysis Performed: EDD + Level 4

Samples: IPB1817-01

Analysis Performed: Gross Alpha

Samples: IPB1817-01

Analysis Performed: Gross Beta

Samples: IPB1817-01

Del Mar Analytical - Irvine

Michele Chamberlin

Project Manager

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MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

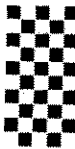
Project ID: Annual Outfall 006

Report Number: IPB1817

Sampled: 02/19/06
Received: 02/19/06

Del Mar Analytical - Irvine
Michele Chamberlin
Project Manager

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F A X



300 N. Lake Ave., Suite 1200
Pasadena, California 91101
Tel: 626-568-6691
Fax: 626-568-6515

Date: 02/20/06

To: Michele Harper / Del Mar Analytical
Krissi McIlvanna / MWH

Fax No: 949-260-3297
925-975-3412

From: Bronwyn K. Kelly

sign:

Subject: Chain-of-Custody Form Analytical Request Change

No. of Pages: 1
(including cover)

Per Request:

Please make the changes listed below to the chain-of-custody analytical request form. Include this form with the final deliverables for these samples.

Del Mar Work Order #	Sample ID	Date Collected	Change(s) Requested, Not Completed	Change(s) and Method (s) Now Requested
IPB1818	Annual Outfall 003	02/19/06		Gross Alpha, Gross Beta, Sr-90 as part of the 13267 study.
IPB1818 IPB1817 IPB1811 IPB1810	Annual Outfall 003, 004, 006 & 009	02/19/06		Analyze for Total combined RA-226 & 228 only if Gross Alpha and Gross Beta exceed a permit limit (15 & 50 pCi/L respectively).
IPB1818	Annual Outfall 003	02/19/06		Analyze for Tritium only if RA-226 & 228 exceed a permit limit (5 pCi/L).
IPB1817 IPB1811 IPB1810	Annual Outfall 004, 006 & 009	2/19/06		Analyze for Tritium & Sr-90 only if RA-226 & 228 exceed a permit limit (5 pCi/L).

The reason for these changes:

Incorrectly marked on COC form

Lack of sample volume

MWH office personnel require this change

Other: Containers mislabeled

_____ X _____

This Change Order supersedes all previous change orders submitted.

Thank you

Client Name/Address:			Project:			ANALYSIS REQUIRED										Field Readings:																			
MVWH-Pasadena 300 North Lake Avenue, Suite 1200 Pasadena, CA 91101 Project Manager: Bronwyn Kelly Sampler: <i>Berres, Gary</i>			Boeing-SSFL NPDES Annual Outfall 006 Stormwater at FSDf-2 Phone Number: (626) 568-6691 Fax Number: (626) 568-6515			Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservative	Bottle #	Al + PP	TCDD (and all congeners)	Oil & Grease (EPA 413.1)	Cl ₂ , SO ₄ , NO ₃ +NO ₂ -N, Perchlorate	TDS, TSS	VOCs (624), NPDES + PP	VOCs A+A+ZCVE	Pesticides/PCBs - PP	Gross Alpha, Gross Beta, Tritium (906.0*, Sr-90 (905) Total Combined Radium 226 & 228	SVOCs - PP	Acute Toxicity	Cyanide											
Outfall 006	W	1L Poly	1	2/19/06 07:45	HNO3	1A	X																		Temp = 48.7 pH = 7.8										
Outfall 006-DUP	W	1L Poly	1		HNO3	1B	X																												
Outfall 006	W	1L Amber	2		None	2A, 2B																													
Outfall 006	W	1L Amber	2		HCl	3A, 3B			X																										
Outfall 006	W	Poly-500 ml	2		None	4A, 4B					X																								
Outfall 006	W	Poly-500 ml	2		None	5A, 5B							X																						
Outfall 006	W	VOAs	3		HCl	6A, 6B, 6C										X																			
Outfall 006	W	VOAs	3		None	7A, 7B, 7C											X																		
Outfall 006	W	1L Amber	2		None	8A, 8B													X																
Outfall 006	W	2.5 Gal Cube Amber VOAs	1 3		None None	9A 15A, 15B, 15C														X						Analyze for Total Combined RA-226 & RA-228 only if Gross Alpha/Beta > 15pCi/L. Preserve 2.5 Gal Cube with HNO3 at lab.									
Outfall 006	W	1L Amber	2		None	10A, 10B															X														
Outfall 006	W	1 Gal Poly	1		None	11A																X													
Outfall 006	W	500ml Poly	1		NaOH	12																													
Trip Blanks	W	VOAs	3		None	13A, 13B, 13C																													
Trip Blanks	W	VOAs	3		HCl	14A, 14B, 14C																													
Relinquished By			Date/Time:			Received By			Date/Time:			Turn around Time: (check)			24 Hours			48 Hours			72 Hours			Perchlorate Only 72 Hours			Metals Only 72 Hours			Sample Integrity: (Check) Intact					
<i>Paul Brown</i>			2/19/06 1325			<i>Tommy</i>			04/19/08			1325																							
Relinquished By			Date/Time:			Received By			Date/Time:			Turn around Time: (check)			24 Hours			48 Hours			72 Hours			Perchlorate Only 72 Hours			Metals Only 72 Hours			Sample Integrity: (Check) Intact					
<i>Paul Brown</i>			2/19/06 1325			<i>Tommy</i>			04/19/08			1325																							
Relinquished By			Date/Time:			Received By			Date/Time:			Turn around Time: (check)			24 Hours			48 Hours			72 Hours			Perchlorate Only 72 Hours			Metals Only 72 Hours			Sample Integrity: (Check) Intact					
<i>Paul Brown</i>			2/19/06 1325			<i>Tommy</i>			04/19/08			1325																							
Relinquished By			Date/Time:			Received By			Date/Time:			Turn around Time: (check)			24 Hours			48 Hours			72 Hours			Perchlorate Only 72 Hours			Metals Only 72 Hours			Sample Integrity: (Check) Intact					
<i>Paul Brown</i>			2/19/06 1325			<i>Tommy</i>			04/19/08			1325																							
Relinquished By			Date/Time:			Received By			Date/Time:			Turn around Time: (check)			24 Hours			48 Hours			72 Hours			Perchlorate Only 72 Hours			Metals Only 72 Hours			Sample Integrity: (Check) Intact					
<i>Paul Brown</i>			2/19/06 1325			<i>Tommy</i>			04/19/08			1325																							



March 02, 2006

Alta Project I.D.: 27310

Ms. Michele Chamberlin
Del Mar Analytical, Irvine
17461 Derian Avenue, Suite 100
Irvine, CA 92614

Dear Ms. Chamberlin,

Enclosed are the results for the one aqueous sample received at Alta Analytical Laboratory on February 21, 2006 under your Project Name "IPB1817". This sample was extracted and analyzed using EPA Method 1613 for tetra-through-octa chlorinated dioxins and furans. A standard turnaround time was provided for this work.

The following report consists of a Sample Inventory (Section I), Analytical Results (Section II) and the Appendix, which contains the chain-of-custody, a list of data qualifiers and abbreviations, Alta's current certifications, and copies of the raw data (if requested).

Alta Analytical Laboratory is committed to serving you effectively. If you require additional information, please contact me at 916-933-1640 or by email at mmaier@altalab.com. Thank you for choosing Alta as part of your analytical support team.

Sincerely,

A handwritten signature in cursive script that reads "Martha M. Maier".

Martha M. Maier
Director of HRMS Services





Section I: Sample Inventory Report

Date Received: 2/21/2006

Alta Lab. ID

Client Sample ID

27310-001

IPB1817-01

SECTION II



Method Blank		EPA Method 1613			
Matrix:	Aqueous	QC Batch No.:	7782	Lab Sample:	0-MB001
Sample Size:	1.00 L	Date Extracted:	23-Feb-06	Date Analyzed DB-5:	25-Feb-06
Date Analyzed DB-225:	NA				
Analyte	Conc. (ug/L)	DL ^a	EMPC ^b	%R	LCL-UCL ^d Qualifiers
2,3,7,8-TCDD	ND	0.00000121		77.9	25 - 164
1,2,3,7,8-PeCDD	ND	0.00000169		79.6	25 - 181
1,2,3,4,7,8-HxCDD	ND	0.00000158		71.3	32 - 141
1,2,3,6,7,8-HxCDD	ND	0.00000166		77.6	28 - 130
1,2,3,7,8,9-HxCDD	ND	0.00000157		65.5	23 - 140
1,2,3,4,6,7,8-HpCDD	ND	0.00000137		35.1	17 - 157
OCDD	0.00000377			85.3	24 - 169
2,3,7,8-TCDF	ND	0.00000151	J	92.7	24 - 185
1,2,3,7,8-PeCDF	ND	0.00000212		97.9	21 - 178
2,3,4,7,8-PeCDF	ND	0.00000198		76.4	26 - 152
1,2,3,4,7,8-HxCDF	ND	0.00000509		66.4	26 - 123
1,2,3,6,7,8-HxCDF	ND	0.00000514		79.6	28 - 136
2,3,4,6,7,8-HxCDF	ND	0.00000550		75.0	29 - 147
1,2,3,7,8,9-HxCDF	ND	0.00000908		62.0	28 - 143
1,2,3,4,6,7,8-HpCDF	ND	0.00000130		70.3	26 - 138
1,2,3,4,7,8,9-HpCDF	ND	0.00000125		44.2	17 - 157
OCDF	ND			95.0	35 - 197
Totals			0.00000518		
Total TCDD	ND	0.00000121			
Total PeCDD	ND	0.00000169			
Total HxCDD	ND	0.00000160			
Total HpCDD	ND	0.00000137			
Total TCDF	ND	0.00000151			
Total PeCDF	ND	0.00000205			
Total HxCDF	ND	0.00000611			
Total HpCDF	ND	0.00000128			
Footnotes					
a. Sample specific estimated detection limit.					
b. Estimated maximum possible concentration.					
c. Method detection limit.					
d. Lower control limit - upper control limit.					

Analyst: RAS

Approved By: William J. Luksemburg 02-Mar-2006 11:06

Project 27310



OPR Results		EPA Method 1613				
Matrix:	Aqueous	QC Batch No.:	7782	Lab Sample:	0-OPR001	
Sample Size:	1.00 L	Date Extracted:	23-Feb-06	Date Analyzed DB-5:	24-Feb-06	
				Date Analyzed DB-225:	NA	
Analyte	Spike Conc.	Conc. (ng/mL)	OPR Limits	Labeled Standard	%R	LCL-UCL
2,3,7,8-TCDD	10.0	10.0	6.7 - 15.8	IS 13C-2,3,7,8-TCDD	70.1	25 - 164
1,2,3,7,8-PeCDD	50.0	57.5	35 - 71	13C-1,2,3,7,8-PeCDD	73.4	25 - 181
1,2,3,4,7,8-HxCDD	50.0	53.3	35 - 82	13C-1,2,3,4,7,8-HxCDD	63.8	32 - 141
1,2,3,6,7,8-HxCDD	50.0	53.1	38 - 67	13C-1,2,3,6,7,8-HxCDD	69.0	28 - 130
1,2,3,7,8,9-HxCDD	50.0	52.8	32 - 81	13C-1,2,3,4,6,7,8-HpCDD	58.3	23 - 140
1,2,3,4,6,7,8-HpCDD	50.0	53.1	35 - 70	13C-OCDD	34.1	17 - 157
OCDD	100	106	78 - 144	13C-2,3,7,8-TCDF	75.7	24 - 169
2,3,7,8-TCDF	10.0	10.3	7.5 - 15.8	13C-1,2,3,7,8-PeCDF	81.7	24 - 185
1,2,3,7,8-PeCDF	50.0	50.0	40 - 67	13C-2,3,4,7,8-PeCDF	85.2	21 - 178
2,3,4,7,8-PeCDF	50.0	51.3	34 - 80	13C-1,2,3,4,7,8-HxCDF	68.1	26 - 152
1,2,3,4,7,8-HxCDF	50.0	51.4	36 - 67	13C-1,2,3,4,7,8-HxCDF	66.4	26 - 123
1,2,3,6,7,8-HxCDF	50.0	52.1	42 - 65	13C-2,3,4,6,7,8-HxCDF	69.5	28 - 136
2,3,4,6,7,8-HxCDF	50.0	51.5	35 - 78	13C-1,2,3,7,8,9-HxCDF	70.1	29 - 147
1,2,3,7,8,9-HxCDF	50.0	50.1	39 - 65	13C-1,2,3,4,6,7,8-HpCDF	55.0	28 - 143
1,2,3,4,6,7,8-HpCDF	50.0	50.3	41 - 61	13C-1,2,3,4,7,8,9-HpCDF	62.6	26 - 138
1,2,3,4,7,8,9-HpCDF	50.0	52.7	39 - 69	13C-OCDF	42.4	17 - 157
OCDF	100	97.3	63 - 170	CRS 37Cl-2,3,7,8-TCDD	83.6	35 - 197

Analyst: RAS

Approved By: William J. Luksemburg 02-Mar-2006 11:06



Sample ID: IPB1817-01		EPA Method 1613					
Client Data		Sample Data		Laboratory Data			
Name:	Del Mar Analytical, Irvine	Matrix:	Aqueous	Lab Sample:	27310-001		
Project:	IPB1817	Sample Size:	1.01 L	QC Batch No.:	7782		
Date Collected:	19-Feb-06			Date Analyzed DB-5:	25-Feb-06		
Time Collected:	0845			Date Analyzed DB-225:	NA		
Analyte	Conc. (ug/L)	DL ^a	EMPC ^b	Labeled Standard	%R	LCL-UCL ^d	Qualifiers
2,3,7,8-TCDD	ND	0.00000171		13C-2,3,7,8-TCDD	69.8	25 - 164	
1,2,3,7,8-PeCDD	ND	0.00000324		13C-1,2,3,7,8-PeCDD	70.0	25 - 181	
1,2,3,4,7,8-HxCDD	ND	0.00000259		13C-1,2,3,4,7,8-HxCDD	59.9	32 - 141	
1,2,3,6,7,8-HxCDD	ND	0.00000244		13C-1,2,3,6,7,8-HxCDD	66.7	28 - 130	
1,2,3,7,8,9-HxCDD	ND	0.00000242	0.00000572	13C-1,2,3,4,6,7,8-HpCDD	57.1	23 - 140	
1,2,3,4,6,7,8-HpCDD	ND			13C-OCDD	34.4	17 - 157	
OCDD	0.0000720			13C-2,3,7,8-TCDF	80.9	24 - 169	
2,3,7,8-TCDF	ND	0.00000163		13C-1,2,3,7,8-PeCDF	78.5	24 - 185	
1,2,3,7,8-PeCDF	ND	0.00000235		13C-2,3,4,7,8-PeCDF	81.6	21 - 178	
2,3,4,7,8-PeCDF	ND	0.00000224		13C-1,2,3,4,7,8-HxCDF	62.7	26 - 152	
1,2,3,4,7,8-HxCDF	ND	0.00000605		13C-1,2,3,6,7,8-HxCDF	63.3	26 - 123	
1,2,3,6,7,8-HxCDF	ND	0.00000579		13C-2,3,4,6,7,8-HxCDF	67.2	28 - 136	
2,3,4,6,7,8-HxCDF	ND	0.00000607		13C-1,2,3,7,8,9-HxCDF	67.7	29 - 147	
1,2,3,7,8,9-HxCDF	ND	0.00000897		13C-1,2,3,4,6,7,8-HpCDF	53.5	28 - 143	
1,2,3,4,6,7,8-HpCDF	ND	0.000000784		13C-1,2,3,4,7,8,9-HpCDF	61.3	26 - 138	
1,2,3,4,7,8,9-HpCDF	ND	0.000000778		13C-OCDF	42.3	17 - 157	
OCDF	ND	0.00000402		CRS 37Cl-2,3,7,8-TCDD	94.5	35 - 197	
Totals				Footnotes			
Total TCDD	ND	0.00000171		a. Sample specific estimated detection limit.			
Total PeCDD	ND		0.00000216	b. Estimated maximum possible concentration.			
Total HxCDD	ND	0.00000247		c. Method detection limit.			
Total HpCDD	0.0000111		0.0000168	d. Lower control limit - upper control limit.			
Total TCDF	ND						
Total PeCDF	ND	0.00000163					
Total HxCDF	ND	0.00000230					
Total HpCDF	ND	0.000000666					
Total HpCDF	ND		0.00000165				

Analyst: RAS

Approved By: William J. Luksemburg 02-Mar-2006 11:06

Project 27310

APPENDIX

DATA QUALIFIERS & ABBREVIATIONS

B	This compound was also detected in the method blank.
D	The amount reported is the maximum possible concentration due to possible chlorinated diphenylether interference.
E	The reported value exceeds the calibration range of the instrument.
H	The signal-to-noise ratio is greater than 10:1.
I	Chemical interference
J	The amount detected is below the Lower Calibration Limit of the instrument.
*	See Cover Letter
Conc.	Concentration
DL	Sample-specific estimated Detection Limit
MDL	The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero in the matrix tested.
EMPC	Estimated Maximum Possible Concentration
NA	Not applicable
RL	Reporting Limit – concentrations that corresponds to low calibration point
ND	Not Detected
TEQ	Toxic Equivalency

Unless otherwise noted, solid sample results are reported in dry weight. Tissue samples are reported in wet weight.

CERTIFICATIONS

Accrediting Authority	Certificate Number
State of Alaska, DEC	CA413-02
State of Arizona	AZ0639
State of Arkansas, DEQ	05-013-0
State of Arkansas, DOH	Reciprocity through CA
State of California – NELAP Primary AA	02102CA
State of Colorado	
State of Connecticut	PH-0182
State of Florida, DEP	E87777
Commonwealth of Kentucky	90063
State of Louisiana, Health and Hospitals	LA050001
State of Louisiana, DEQ	01977
State of Maine	CA0413
State of Michigan	81178087
State of Mississippi	Reciprocity through CA
Naval Facilities Engineering Service Center	
State of Nevada	CA413
State of New Jersey	CA003
State of New Mexico	Reciprocity through CA
State of New York, DOH	11411
State of North Carolina	06700
State of North Dakota, DOH	R-078
State of Oklahoma	D9919
State of Oregon	CA200001-002
State of Pennsylvania	68-00490
State of South Carolina	87002001
State of Tennessee	02996
State of Texas	TX247-2005A
U.S. Army Corps of Engineers	
State of Utah	9169330940
Commonwealth of Virginia	00013
State of Washington	C1285
State of Wisconsin	998036160
State of Wyoming	8TMS-Q



17461 Derian Ave. Suite 100, Irvine, CA 92614 Ph (949) 261-1022 Fax (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 Ph (909) 370-4667 Fax (909) 370-1046
 9484 Chesapeake Drive, Suite 805, San Diego, CA 92123 Ph (619) 505-9596 Fax (619) 505-9689
 9630 South 51st Street, Suite B-120, Phoenix, AZ 85044 Ph (480) 785-0043 Fax (480) 785-0851
 2520 E. Sunset Rd., Suite #3, Las Vegas, NV 89120 Ph (702) 798-3620 Fax (702) 798-3621

SUBCONTRACT ORDER - PROJECT # IPB1817

SENDING LABORATORY:	RECEIVING LABORATORY:
Del Mar Analytical, Irvine 17461 Derian Avenue, Suite 100 Irvine, CA 92614 Phone: (949) 261-1022 Fax: (949) 261-1228 Project Manager: Michele Chamberlin	Alta Analytical 1104 Windfield Way El Dorado Hills, CA 95762 Phone: (916) 933-1640 Fax: (916) 673-0106 <div style="text-align: right; font-size: 2em; margin-top: 10px;">27310</div> <div style="text-align: right; font-size: 2em; margin-top: 10px;">0.2°C</div>

Standard TAT is requested unless specific due date is requested => Due Date: _____ Initials: _____

Analysis	Expiration	Sampled:	Comments
Sample ID: IPB1817-01	Water	02/19/06 08:45	Instant Notification
1613-Dioxin-HR-Alta	02/26/06 08:45		J flags, 17 congeners, no TEQ, ug/L, sub=Alta
Level 4 + EDD-OUT	03/19/06 08:45		Excel EDD email to pm, Include Std logs for Lvl IV
Containers Supplied:			
1 L Amber (IPB1817-01C)			
1 L Amber (IPB1817-01D)			

SAMPLE INTEGRITY:

All containers intact: <input type="checkbox"/> Yes <input type="checkbox"/> No	Sample labels/COC agree: <input type="checkbox"/> Yes <input type="checkbox"/> No	Samples Received On Ice: <input type="checkbox"/> Yes <input type="checkbox"/> No
Custody Seals Present: <input type="checkbox"/> Yes <input type="checkbox"/> No	Samples Preserved Properly: <input type="checkbox"/> Yes <input type="checkbox"/> No	Samples Received at (temp): _____

Released By: C. R. 2/20/06 1700 Received By: Bethmaria Bonediet 2/21/06 0910

Released By: _____ Date: _____ Time: _____ Received By: _____ Date: _____ Time: _____

Project 27310

SAMPLE LOG-IN CHECKLIST

Alta Project #: 27310

Samples Arrival:	Date/Time <u>2/21/06 0910</u>	Initials: <u>JSB</u>	Location: <u>WR-2</u>
Logged In:	Date/Time <u>2/21/06 1543</u>	Initials: <u>JSB</u>	Location: <u>WR-2</u>
Delivered By:	<input checked="" type="checkbox"/> FedEx	<input type="checkbox"/> UPS	<input type="checkbox"/> Cal
	<input type="checkbox"/> DHL	<input type="checkbox"/> Hand Delivered	<input type="checkbox"/> Other
Preservation:	<input checked="" type="checkbox"/> Ice	<input type="checkbox"/> Blue Ice	<input type="checkbox"/> Dry Ice
	<input type="checkbox"/> None		
Temp °C <u>0.2°C</u>	Time: <u>1000</u>	Thermometer ID: DT-20	

	YES	NO	NA
Adequate Sample Volume Received?	✓		
Holding Time Acceptable?	✓		
Shipping Container(s) Intact?	✓		
Shipping Custody Seals Intact?	✓		
Shipping Documentation Present?	✓		
Airbill			
Trk # <u>7913 8038 2475</u>	✓		
Sample Container Intact?	✓		
Sample Custody Seals Intact?			✓
Chain of Custody / Sample Documentation Present?	✓		
COC Anomaly/Sample Acceptance Form completed?		✓	
If Chlorinated or Drinking Water Samples, Acceptable Preservation?			✓
Na ₂ S ₂ O ₃ Preservation Documented?			None
Shipping Container	<input type="checkbox"/> Alta	<input checked="" type="checkbox"/> Client	<input type="checkbox"/> Retain
			<input checked="" type="checkbox"/> Return
			<input type="checkbox"/> Dispose

Comments:

LABORATORY REPORT



**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

Date: February 26, 2006

Client: Del Mar Analytical, Irvine
17461 Derian Ave., Suite 100
Irvine, CA 92614
Attn: Michele Chamberlin

Laboratory No.: A-06022001-001
Sample ID.: IPB1817-01

Sample Control: The sample was received by ATL within the recommended hold time, in a chilled state, and with the chain of custody record attached.

Date Sampled: 02/19/06
Date Received: 02/20/06
Temp. Received: 4°C
Chlorine (TRC): 0.0 mg/l
Date Tested: 02/20/06 to 02/24/06

Sample Analysis: The following analyses were performed on your sample:
Fathead Minnow 96hr Percent Survival Bioassay (EPA Method 2000.0).
Attached are the test data generated from the analysis of your sample.

Result Summary:

<u>Sample ID.</u>	<u>Results</u>
IPB1817-01	100% Survival (TU _a = 0.0)

Quality Control: Reviewed and approved by:

Joseph A. LeMay
Laboratory Director

FATHEAD MINNOW PERCENT SURVIVAL TEST

EPA Method 2000.0



Lab No.: A-06022001-001
 Client/ID: Del Mar - IPB1817-01

Start Date: 02/20/2006

TEST SUMMARY

Species: *Pimephales promelas*.
 Age: 14 (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-060202.

TEST DATA

		°C	DO	pH	# Dead		Analyst & Time of Readings
					A	B	
INITIAL	Control	19.5	8.6	7.8	0	0	JM 1100
	100%	20.0	10.2	7.7	0	0	
24 Hr	Control	19.3	8.0	7.5	0	0	LM 1030
	100%	19.5	7.9	7.8	0	0	
48 Hr	Control	19.5	7.3	7.4	0	0	LM 1130
	100%	19.5	7.5	7.7	0	0	
Renewal	Control	19.8	8.8	7.8	0	0	LM 1130
	100%	19.3	10.9	7.7	0	0	
72 Hr	Control	19.8	7.6	7.5	0	0	LM 1130
	100%	19.7	8.0	7.8	0	0	
96 Hr	Control	19.9	7.7	7.6	0	0	LM 1130
	100%	19.9	7.7	7.7	0	0	

Comments:

Sample as received: Chlorine: 0.0 mg/l; pH: 7.7; Conductivity: 304 umho; Temp: 4°C;
 DO: 10.2 mg/l; Alkalinity: 86 mg/l; Hardness: 120 mg/l; NH₃-N: 0.2 mg/l.
 Sample aerated moderately (approx. 500 ml/min) to raise or lower DO? Yes No
 Control: Alkalinity: 54 mg/l; Hardness: 94 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.

RESULTS

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



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 2520 E. Sunset Rd., Suite #3, Las Vegas, NV 89120 Ph (702) 798-3620 Fax (702) 798-3621

SUBCONTRACT ORDER - PROJECT # IPB1817

SENDING LABORATORY:
 Del Mar Analytical, Irvine
 17461 Derian Avenue, Suite 100
 Irvine, CA 92614
 Phone: (949) 261-1022
 Fax: (949) 261-1228
 Project Manager: Michele Chamberlin

RECEIVING LABORATORY:
 Aquatic Testing Laboratories-SUB
 4350 Transport Street, Unit 107
 Ventura, CA 93003
 Phone : (805) 650-0546
 Fax: (805) 650-0756

Standard TAT is requested unless specific due date is requested => Due Date: _____ Initials: _____

Analysis	Expiration	Comments
Sample ID: IPB1817-01 Water Bioassay-Acute 96hr	Sampled: 02/19/06 08:45 02/20/06 20:45	Instant Notification FH minnow, EPA/821-R02-012, Sub to AqTox Labs
Containers Supplied: 1 gal Poly (IPB1817-01Y)		

SAMPLE INTEGRITY:

All containers intact: Yes No Sample labels/COC agree: Yes No Samples Received On Ice: Yes No
 Custody Seals Present: Yes No Samples Preserved Properly: Yes No Samples Received at (temp): 4°C

Released By: [Signature] Date: 02/20/06 Time: 08:10 Received By: [Signature] Date: 02/20/06 Time: 08:15
 Released By: [Signature] Date: 02/20/06 Time: 10:23 Received By: [Signature] Date: 2-20-06 Time: 10:23

FATHEAD MINNOW ACUTE
Method 2000.0
Reference Toxicant - SDS



QA/QC Batch No.: RT-060202

TEST SUMMARY

Species: *Pimephales promelas*.
 Age: 10 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 glass beakers.
 Aeration: None.
 Number of organisms per chamber: 10.
 Photoperiod: 16/8 hrs light/dark.

TEST DATA

Date/Time: Analyst:	INITIAL			24 Hr					48 Hr				
	<u>2-2-06 Lm</u>			<u>2-3-06 1100</u>					<u>2-4-06 1130</u>				
	<u>1200 Lm</u>			<u>Lm</u>					<u>Lm</u>				
	°C	DO	pH	°C	DO	pH	# Dead		°C	DO	pH	# Dead	
A							B	A				B	
Control	20.9	8.7	7.8	20.8	5.5	7.5	0	0	20.9	5.5	7.5	0	0
1.0 mg/l	20.9	8.8	7.8	20.8	5.2	7.4	0	0	20.8	5.1	7.4	0	0
2.0 mg/l	21.0	8.8	7.8	20.7	5.4	7.2	0	0	20.8	5.0	7.4	0	0
4.0 mg/l	21.0	8.9	7.8	20.7	5.1	7.2	0	0	20.9	5.1	7.3	0	1
8.0 mg/l	21.0	8.9	7.8	20.8	4.3	7.0	10	10	-	-	-	-	-

Date/Time: Analyst:	RENEWAL			72 Hr					96 Hr				
	<u>2-4-06 1130</u>			<u>2-5-06 1100</u>					<u>2-6-06 1100</u>				
	<u>Lm</u>			<u>Lm</u>					<u>Lm</u>				
	°C	DO	pH	°C	DO	pH	# Dead		°C	DO	pH	# Dead	
A							B	A				B	
Control	21.0	8.6	7.8	20.8	6.5	7.4	0	0	20.2	7.0	7.4	0	0
1.0 mg/l	20.9	8.7	7.8	20.8	6.6	7.4	0	0	20.2	7.0	7.4	0	0
2.0 mg/l	20.9	8.8	7.8	20.7	5.9	7.4	0	0	20.1	6.8	7.4	0	0
4.0 mg/l	20.9	8.8	7.8	20.7	6.2	7.4	0	0	20.2	6.9	7.4	0	0
8.0 mg/l	-	-	-	-	-	-	-	-	-	-	-	-	-

Comments:

Control: Alkalinity: 54 mg/l; Hardness: 94 mg/l; Conductivity: 325 umho.
 SDS: Alkalinity: 53 mg/l; Hardness: 95 mg/l; Conductivity: 330 umho.

Acute Fish Test-96 Hr Survival

Start Date: 02 Feb-06 12:00 Test ID: RT-060202 Sample ID: REF-Ref Toxicant
 End Date: 06 Feb-06 11:00 Lab ID: CAATL-Aquatic Testing Labs Sample Type: SDS-Sodium dodecyl sulfate
 Sample Date: 02 Feb-06 00:00 Protocol: EPAA 91-EPA Acute Test Species: PP-Pimephales promelas
 Comments:

Conc-mg/L	1	2
D-Control	1.0000	1.0000
1	1.0000	1.0000
2	1.0000	1.0000
4	1.0000	0.9000
8	0.0000	0.0000

Conc-mg/L	Mean	N-Mean	Transform: Arcsin Square Root					N	Number Resp	Total Number
			Mean	Min	Max	CV%				
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	0.9500	0.9500	1.3305	1.2490	1.4120	8.661	2	0	20	
8	0.0000	0.0000	0.1588	0.1588	0.1588	0.000	2	1	20	
								20	20	

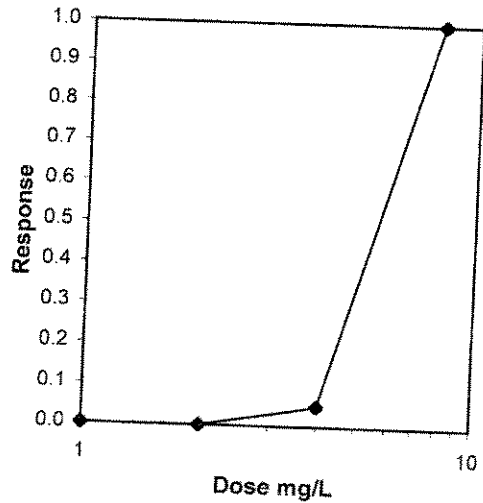
Auxiliary Tests

Normality of the data set cannot be confirmed
 Equality of variance cannot be confirmed

Statistic	Critical	Skew	Kurt
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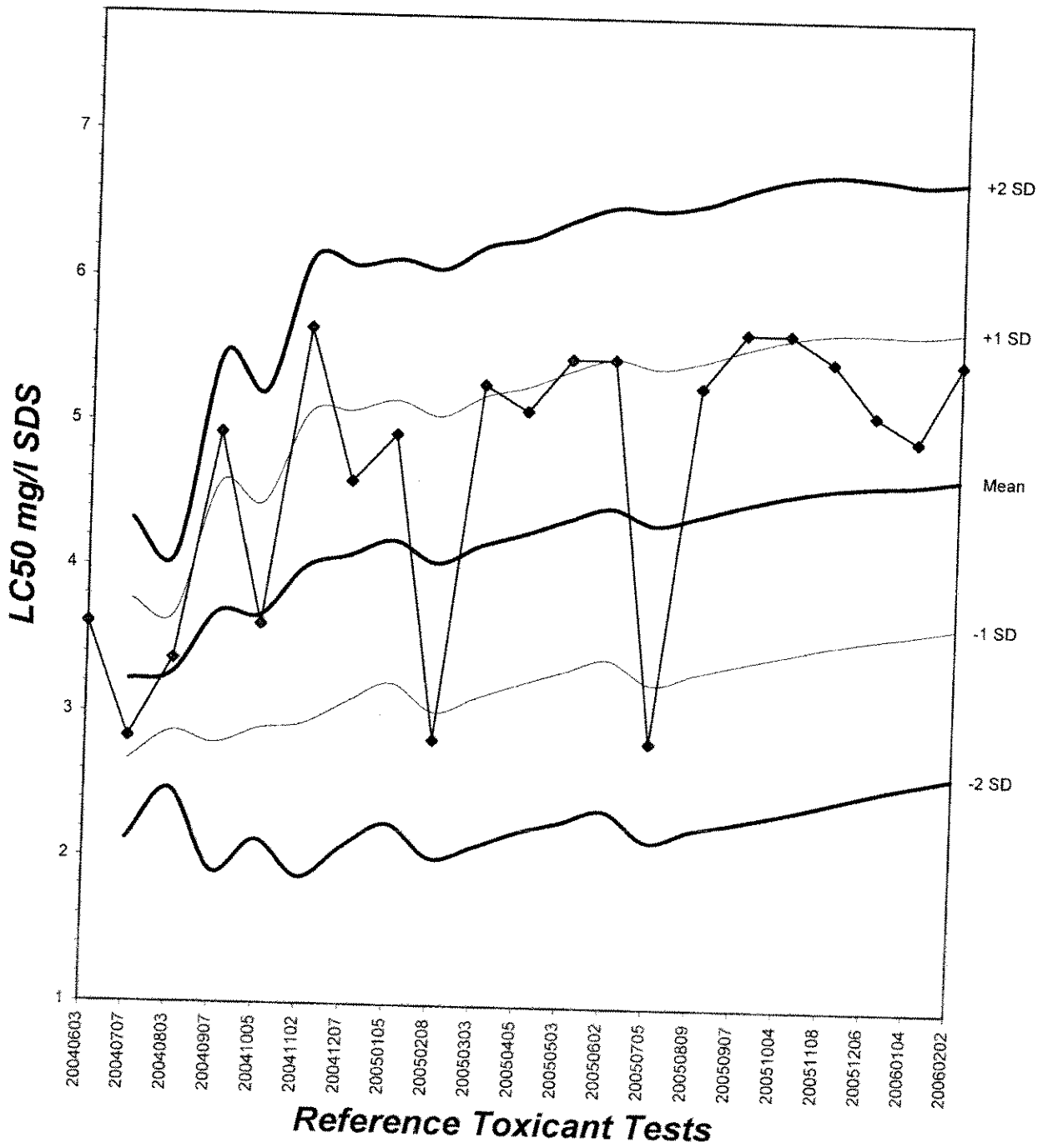
Trimmed Spearman-Kärber

Trim Level	EC50	95% CL	
0.0%	5.4642	5.1072	5.8461
5.0%	5.5546	5.3505	5.7664
10.0%	5.5546	5.3505	5.7664
20.0%	5.5546	5.3505	5.7664
Auto-0.0%	5.4642	5.1072	5.8461



Fathead Minnow Acute Laboratory Control Chart

CV% = 21.9



TEST ORGANISM LOG

FATHEAD MINNOW - LARVAL
(*Pimephales promelas*)



QA/QC BATCH NO.: RT-060202

SOURCE: In-Lab Culture

DATE HATCHED: 1-23-06

APPROXIMATE QUANTITY: 400

GENERAL APPEARANCE: good

MORTALITIES 48 HOURS PRIOR TO
TO USE IN TESTING: 0

DATES USED IN LAB: 2/2/6
to
-1-1-

AVERAGE FISH WEIGHT: 0.006 gm

TEST LOADING LIMITS: 0.65 gm/liter

200 ml test solution volume = 0.013 gm mean fish weight limit
250 ml test solution volume = 0.016 gm mean fish weight limit

ACCLIMATION WATER QUALITY:

Temp.: 20.9 °C pH: 7.8 Ammonia: 0.2 mg/l NH₃-N
DO: 8.7 mg/l Alkalinity: 53 mg/l Hardness: 94 mg/l

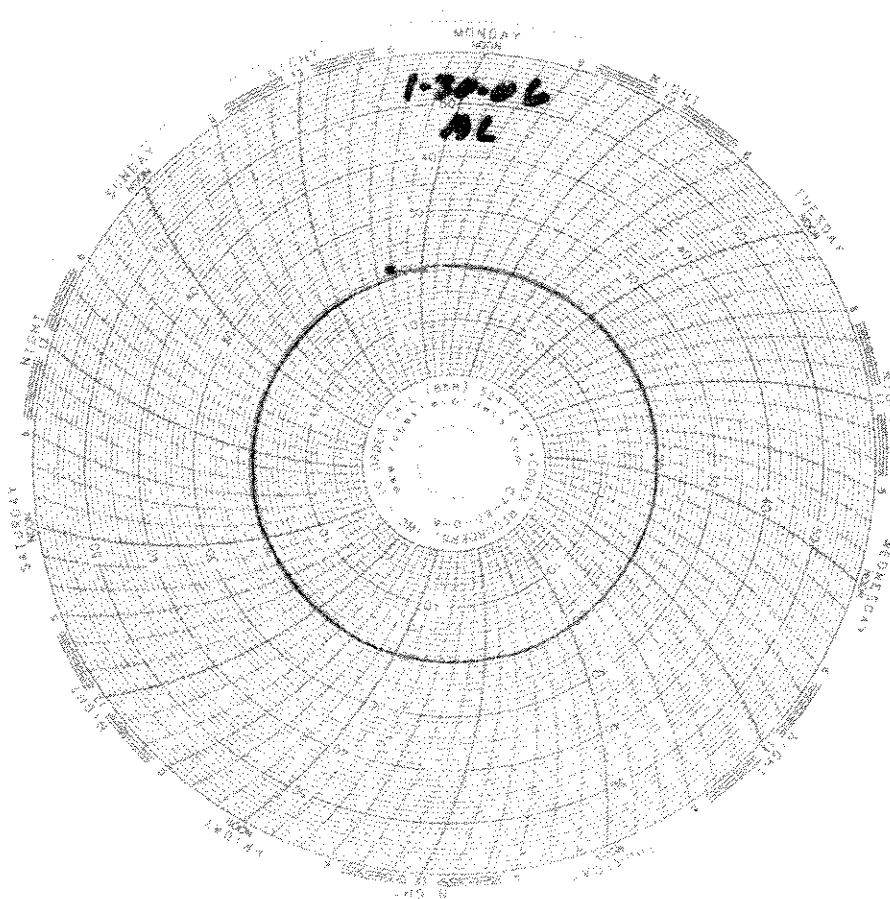
READINGS RECORDED BY: [Signature] DATE: 2-6-06

Laboratory Temperature Chart

QA/QC Batch No: RT-060202

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

Acceptable Range: 20 \pm 1 $^{\circ}$ C





EBERLINE
SERVICES

March 20, 2006

Ms. Michele Chamberlin
Project Manager
Del Mar Analytical
17461 Derian Avenue, Suite 100
Irvine, CA 92614

Reference: Del Mar Analytical Project No. IPB1817
Eberline Services NELAP Cert #01120CA (exp. 01/31/07)
Eberline Services Report R602146-8652

Dear Ms. Chamberlin:

Enclosed are results from the analysis of one water sample received at Eberline Services on February 21, 2006. The sample was analyzed according to the accompanying Del Mar Analytical Subcontract Order Form. The requested analysis was gross alpha/gross beta (EPA900.0). The batch QC LCS, blank analysis, duplicate analysis, and matrix spike results were within the limits defined in Eberline Services Quality Control Procedures Manual. No problems were encountered during the requested analysis.

Please call me if you have any questions concerning this report.

Regards,

Melissa Mannion
Senior Program Manager

MCM/njv

*Enclosure: Report
Subcontract Form
Receipt checklist
Invoice*


Analytical Services
2030 Wright Avenue
P.O. Box 4040
Richmond, California 94804-0040
(510) 235-2633 Fax (510) 235-0438
Toll Free (800) 841-5487
www.eberlineservices.com

Eberline Services

ANALYSIS RESULTS

SDG <u>8652</u>	Client <u>DEL MAR ANAL</u>
Work Order <u>R602146-01</u>	Contract <u>PROJECT# IPB1817</u>
Received Date <u>02/21/06</u>	Matrix <u>WATER</u>

Client	Lab						
<u>Sample ID</u>	<u>Sample ID</u>	<u>Collected</u>	<u>Analyzed</u>	<u>Nuclide</u>	<u>Results ± 2σ</u>	<u>Units</u>	<u>MDA</u>
IPB1817-01	8652-001	02/19/06	03/14/06	GrossAlpha	-0.117 ± 0.44	pCi/L	0.798
			03/14/06	Gross Beta	4.33 ± 0.66	pCi/L	0.885

Certified by <u></u>
Report Date <u>03/20/06</u>
Page 1

Eberline Services

QC RESULTS

SDG <u>8652</u>	Client <u>DEL MAR ANAL</u>
Work Order <u>R602146-01</u>	Contract <u>PROJECT# IPB1817</u>
Received Date <u>02/21/06</u>	Matrix <u>WATER</u>

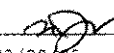
Lab	Sample ID	Nuclide	Results	Units	Amount Added	MDA	Evaluation
<u>LCS</u>							
	8653-002	GrossAlpha	9.32 ± 0.63	pCi/Smpl	10.2	0.306	91% recovery
		Gross Beta	9.96 ± 0.37	pCi/Smpl	9.83	0.271	101% recovery
<u>BLANK</u>							
	8653-003	GrossAlpha	-0.408 ± 0.18	pCi/Smpl	NA	0.376	<MDA
		Gross Beta	0.080 ± 0.24	pCi/Smpl	NA	0.414	<MDA

<u>DUPLICATES</u>			
Sample ID	Nuclide	Results ± 2σ	MDA
8653-004	GrossAlpha	0.122 ± 0.53	0.893
	Gross Beta	6.92 ± 0.71	0.869

<u>ORIGINALS</u>				3σ	
Sample ID	Results ± 2σ	MDA	RPD (Tot)	Eval	
8653-001	0.735 ± 0.45	0.587	143	249	satis.
	7.03 ± 0.74	0.906	2	48	satis.

<u>SPIKED SAMPLE</u>			
Sample ID	Nuclide	Results ± 2σ	MDA
8653-005	GrossAlpha	74.0 ± 2.9	0.626
	Gross Beta	66.0 ± 1.7	0.891

<u>ORIGINAL SAMPLE</u>					
Sample ID	Results ± 2σ	MDA	Added	%Recv	
8653-001	0.735 ± 0.45	0.587	71.4	103	
	7.03 ± 0.74	0.906	65.5	90	

Certified by 
Report Date <u>03/20/06</u>
Page 2



17461 Derian Ave. Suite 100, Irvine, CA 92614 Ph (949) 261-1022 Fax (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 Ph (909) 370-4687 Fax (909) 370-1046
 9484 Chesapeake Drive, Suite 805, San Diego, CA 92123 Ph (619) 505-9596 Fax (619) 505-9680
 9830 South 51st Street, Suite B-120, Phoenix, AZ 85044 Ph (480) 785-0043 Fax (480) 785-0851
 2520 E. Summit Rd., Suite #3, Las Vegas, NV 89120 Ph (702) 798-3820 Fax (702) 798-3821

SUBCONTRACT ORDER - PROJECT # IPB1817

SENDING LABORATORY:
 Del Mar Analytical, Irvine
 17461 Derian Avenue, Suite 100
 Irvine, CA 92614
 Phone: (949) 261-1022
 Fax: (949) 261-1228
 Project Manager: Michele Chamberlin

RECEIVING LABORATORY:
 Eberline Services
 2030 Wright Avenue
 Richmond, CA 94804
 Phone : (510) 235-2633
 Fax: (510) 235-0438

Standard TAT is requested unless specific due date is requested => **Due Date:** 4 weeks **Initials:** _____

Analysis	Expiration	Comments
Sample ID: IPB1817-01 Water	Sampled: 02/19/06 08:45	Instant Notification
EDD + Level 4	03/19/06 08:45	900.0, IF RESULT>15 pCi/L, run Radium 226 & 228
Gross Alpha-O	02/19/07 08:45	900.0, IF RESULT>50 pCi/L, run Radium 226 & 228
Gross Beta-O	02/19/07 08:45	HOLD for Gross A&B results; EPA 903.1 & 904.0
Radium, Combined-O	02/19/07 08:45	HOLD for Ra 226+Ra 228 results, EPA 905.0
Strontium 90-O	02/19/07 08:45	HOLD for Ra 226+Ra 228 results, EPA 906.0
Tritium-O	02/19/07 08:45	

Containers Supplied:

- 2.5 gal Poly (IPB1817-01S) *HND₃*
- 40 ml Amber Voa Vial (IPB1817-01P)
- 40 ml Amber Voa Vial (IPB1817-01U)
- 40 ml Amber Voa Vial (IPB1817-01V)

SAMPLE INTEGRITY:

All containers intact: Yes No Sample labels/COC agree: Yes No Samples Received On Ice: Yes No
 Custody Seals Present: Yes No Samples Preserved Properly: Yes No Samples Received at (temp): _____

Released By *[Signature]* Date 2-20-06 Time 1700 Received By *[Signature]* Date 2/21/06 Time 10:00

Released By _____ Date _____ Time _____ Received By _____ Date _____ Time _____



RICHMOND, CA LABORATORY

SAMPLE RECEIPT CHECKLIST

Client: DEL. MAR ANALYT. City IRVINE State CA

Date/Time received 2/21/06 10:00 CoC No. 1PB 1817

Container I.D. No. BOX Requested TAT (Days) STAND P.O. Received Yes No

INSPECTION

1. Custody seals on shipping container intact? Yes No N/A
2. Custody seals on shipping container dated & signed? Yes No N/A
3. Custody seals on sample containers intact? Yes No N/A
4. Custody seals on sample containers dated & signed? Yes No N/A
5. Packing material is: Wet Dry N/A
6. Number of samples in shipping container: 1 Sample Matrix WATER
7. Number of containers per sample: 4 (Or see CoC)
8. Samples are in correct container Yes No
9. Paperwork agrees with samples? Yes No
10. Samples have: Tape Hazard labels Rad labels Appropriate sample labels
11. Samples are: In good condition Leaking Broken Container Missing
12. Samples are: Preserved Not preserved pH 2 Preservative
13. Describe any anomalies:

14. Was P.M. notified of any anomalies? Yes No Date

15. Inspected by AK Date: 2/21/06 Time: 10:50

Customer Sample No.	cpm	mR/hr	Wipe	Customer Sample No.	cpm	mR/hr	wipe

Ion Chamber Ser. No. Calibration date
 Alpha Meter Ser. No. Calibration date
 Beta/Gamma Meter Ser. No. Calibration date

APPENDIX G

Section 56

Outfall 006, February 19, 2006
AMEC Data Validation Reports



DATA VALIDATION REPORT

NPDES Monitoring Program
Annual Outfall 006

ANALYSIS: DIOXINS/FURANS
SAMPLE DELIVERY GROUP: IPB1817

Prepared by

MECX, LLC
12269 East Vassar Drive
Aurora, CO 80014

1. INTRODUCTION

Task Order Title: NPDES
Contract Task Order: 1261.001.01
Sample Delivery Group: IPB1817
Project Manager: P. Costa
Matrix: Water
Analysis: Dioxins/Furans
QC Level: Level IV
No. of Samples: 1
No. of Reanalyses/Dilutions: 0
Reviewer: K. Shadowlight
Date of Review: April 2, 2006

The samples listed in Table 1 were 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 for Chlorinated Dioxin/Furan Data Review (8/02)*. Any deviations from these procedures and guidelines are documented herein. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.

Table 1. Sample Identification

Client ID	Laboratory ID (Del Mar)	Laboratory ID (Alta)	Matrix	COC Method
Outfall 006	IPB1817-01	27310-001	Water	1613

2. DATA VALIDATION FINDINGS

2.1 SAMPLE MANAGEMENT

Following are findings associated with sample management:

2.1.1 Sample Preservation, Handling, and Transport

The sample in this SDG was received at Del Mar Analytical within the temperature limits of 4°C ±2°C. The sample was shipped to Alta for dioxin/furan analysis and was received below the temperature limits at 0°C. As the sample was not noted to be damaged or frozen, no qualifications were required. According to the case narrative and laboratory login sheet, the sample was received intact and in good condition at both laboratories. No qualifications were required.

2.1.2 Chain of Custody

The COC and transfer COC were legible and signed by the appropriate field and laboratory personnel, and accounted for the analysis presented in this SDG. As the sample was couriered directly to Del Mar Analytical-Irvine, custody seals were not required. The Client ID was added to the sample result summary by the reviewer. No qualifications were required.

2.1.3 Holding Times

The sample was extracted and analyzed within one year of collection. No qualifications were required.

2.2 INSTRUMENT PERFORMANCE

Following are findings associated with instrument performance:

2.2.1 GC Column Performance

A Windows Defining Mix (WDM) containing the first and last eluting congeners of each descriptor and isomer specificity compounds was not analyzed prior to the initial calibration sequence or at the beginning of each analytical sequence; however, the first and last eluting congeners and isomer specificity compounds were added to the midpoint of the initial calibration and to the continuing calibration standards (see section 2.3.2). 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%. No qualifications were required.

2.2.2 Mass Spectrometer Performance

The mass spectrometer performance was acceptable with the static resolving power greater than 10,000. No qualifications were required.

2.3 CALIBRATION

2.3.1 Initial Calibration

The initial calibration was analyzed 01/12/2006 on instrument VG-7. The calibration consisted of six concentration level standards (CS0 through CS5) analyzed to verify instrument linearity. The initial calibrations were acceptable with %RSDs $\leq 20\%$ for the 16 native compounds (calibration by isotope dilution) and $\leq 35\%$ for the one native and all labeled compounds (calibration by internal standard). The relative retention times and ion abundance ratios were within the QC limits listed in Method 1613 for all standards. A representative number of %RSDs were verified from the raw data, and no calculation or transcription errors were noted. No qualifications were required.

2.3.2 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. A representative number of %Ds were verified from the raw data, and no calculation or transcription errors were noted. No qualifications were required.

WDM and isomer specificity compounds were added to the VER standard instead of being analyzed separately, as noted in section 2.2.1 of this report. No adverse effect was observed with this practice.

2.4 BLANKS

One method blank (0-7782-MB001) was extracted and analyzed with the sample in this SDG. Target compound OCDD was reported at a concentration below the laboratory lower calibration level in the method blank. The concentration of OCDD in the sample exceeded five times the concentration in the method blank and required no qualification. OCDF was reported as an EMPC in the method blank. A review of the method blank raw data and chromatograms indicated no false negatives or false positives. No qualifications were required.

2.5 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

One blank spike (0-7782-OPR001) was extracted and analyzed with the sample in this SDG. All recoveries were within the acceptance criteria listed in Table 6 of Method 1613. A review of the raw data and chromatograms indicated no transcription or calculation errors. No qualifications were required.

2.6 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

MS/MSD analyses were not performed in this SDG. Evaluation of method accuracy was based on the OPR results. No qualifications were required.

2.7 FIELD QC SAMPLES

Following are findings associated with field QC:

2.7.1 Field Blanks and Equipment Rinsates

The sample in this SDG had no field blank or equipment rinsate identified. No qualifications of the site samples were required.

2.7.2 Field Duplicates

No field duplicates were identified in association with the sample in this SDG.

2.8 INTERNAL STANDARDS

The labeled standard recoveries were within the acceptance criteria listed in Table 7 of Method 1613. No qualifications were required.

2.9 COMPOUND IDENTIFICATION

The laboratory analyzed for polychlorinated dioxins/furans by EPA Method 1613. The compound identifications were verified from the raw data and no false negatives or positives were noted. No qualifications were required.

2.10 COMPOUND QUANTIFICATION AND REPORTED DETECTION LIMITS

Compound quantitation was verified from the raw data. The laboratory calculated and reported compound-specific detection limits. Any reported estimated maximum possible concentration (EMPC) was qualified as an estimated nondetect, "UJ." No further qualifications were required.



Sample ID: **IPB1817-01** *Outfall 006* EPA Method 1613

Client Data
 Name: Del Mar Analytical, Irvine
 Project: IPB1817
 Date Collected: 19-Feb-06
 Time Collected: 0845

Sample Data
 Matrix: Aqueous
 Sample Size: 1.01 L

Laboratory Data
 Lab Sample: 27310-001
 QC Batch No.: 7782
 Date Analyzed DB-5: 25-Feb-06
 Date Received: 21-Feb-06
 Date Extracted: 23-Feb-06
 Date Analyzed DB-225: NA

Analyte	Conc. (ug/L)	DL ^a	EMPC ^b	Qualifiers	Labeled Standard	%R	LCL-UCL ^d	Qualifiers
2,3,7,8-TCDD	ND	0.00000171			13C-2,3,7,8-TCDD	69.8	25 - 164	
1,2,3,7,8-PeCDD	ND	0.00000324			13C-1,2,3,7,8-PeCDD	70.0	25 - 181	
1,2,3,4,7,8-HxCDD	ND	0.00000259			13C-1,2,3,4,7,8-HxCDD	59.9	32 - 141	
1,2,3,6,7,8-HxCDD	ND	0.00000244			13C-1,2,3,6,7,8-HxCDD	66.7	28 - 130	
1,2,3,7,8,9-HxCDD	ND	0.00000242			13C-1,2,3,7,8,9-HxCDD	57.1	23 - 140	
1,2,3,4,6,7,8-HpCDD	ND	0.00000572			13C-OCDD	34.4	17 - 157	
OCDD	0.0000720			B	13C-2,3,7,8-TCDF	80.9	24 - 169	
2,3,7,8-TCDF	ND	0.00000163			13C-1,2,3,7,8-PeCDF	78.5	24 - 185	
1,2,3,7,8-PeCDF	ND	0.00000235			13C-2,3,4,7,8-PeCDF	81.6	21 - 178	
2,3,4,7,8-PeCDF	ND	0.00000224			13C-1,2,3,4,7,8-HxCDF	62.7	26 - 152	
1,2,3,4,7,8-HxCDF	ND	0.00000605			13C-1,2,3,6,7,8-HxCDF	63.3	26 - 123	
1,2,3,6,7,8-HxCDF	ND	0.00000579			13C-2,3,4,6,7,8-HxCDF	67.2	28 - 136	
2,3,4,6,7,8-HxCDF	ND	0.00000607			13C-1,2,3,7,8,9-HxCDF	67.7	29 - 147	
1,2,3,7,8,9-HxCDF	ND	0.00000897			13C-1,2,3,4,6,7,8-HpCDF	53.5	28 - 143	
1,2,3,4,6,7,8-HpCDF	ND	0.00000784			13C-1,2,3,4,7,8,9-HpCDF	61.3	26 - 138	
1,2,3,4,7,8,9-HpCDF	ND	0.00000778			13C-OCDF	42.3	17 - 157	
OCDF	ND	0.00000402			CRS 37Cl ₂ ,3,7,8-TCDD	94.5	35 - 197	

Totals

Total TCDD	ND	0.00000171						
Total PeCDD	ND		0.00000216					
Total HxCDD	ND	0.00000247						
Total HpCDD	0.0000111		0.0000168					
Total TCDF	ND	0.00000163						
Total PeCDF	ND	0.00000230						
Total HxCDF	ND	0.00000666						
Total HpCDF	ND		0.00000165					

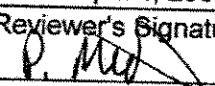
Footnotes
 a. Sample specific estimated detection limit.
 b. Estimated maximum possible concentration.
 c. Method detection limit.
 d. Lower control limit - upper control limit.

Analyst: RAS
 Approved By: William J. Luksemburg 02-Mar-2006 11:06

CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

MEC^x
 12269 East Vassar Drive
 Aurora, CO 80014

Package ID: B4MT40
 Task Order: 1261.001D.01
 SDG No.: IPB1817

No. of Analyses: 1
 Date: April 4, 2006
 Reviewer's Signature


Laboratory: Del Mar Analytical
 Reviewer: P. Meeks
 Analysis/Method: Metals

ACTION ITEMS^a	
1. Case Narrative Deficiencies	
2. Out of Scope Analyses	
3. Analyses Not Conducted	
4. Missing Hardcopy Deliverables	
5. Incorrect Hardcopy Deliverables	
6. Deviations from Analysis Protocol, e.g.,	Qualifications applied for blank results and detects below the reporting limit.
Holding Times	
GC/MS Tune/Inst. Performance	
Calibration	
Method blanks	
Surrogates	
Matrix Spike/Dup LCS	
Field QC	
Internal Standard Performance	
Compound Identification	
Quantitation	
System Performance	
COMMENTS^b	
^a Subcontracted analytical laboratory is not meeting contract and/or method requirements. ^b Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.	



DATA VALIDATION REPORT

NPDES Sampling
Outfall 006

ANALYSIS: METALS

SAMPLE DELIVERY GROUP IPB1817

Prepared by

MECX, LLC
12269 East Vassar Drive
Aurora, CO 80014

1. INTRODUCTION

Task Order Title: NPDES Sampling
MEC^X Project Number: 1261.001D.01
Sample Delivery Group: IPB1817
Project Manager: P. Costa
Matrix: Water
Analysis: Metals
QC Level: Level IV
No. of Samples: 1
No. of Reanalyses/Dilutions: 0
Reviewer: P. Meeks
Date of Review: April 4, 2006

The samples listed in Table 1 were validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for ICP and ICP-MS Metals (DVP-5, Rev. 0)*, *EPA Methods 200.7 and 200.8*, and validation guidelines outlined in the *USEPA CLP National Functional Guidelines for Inorganic Data Review (2/94)*. Any deviations from these procedures and guidelines are documented herein. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.

Table 1. Sample Identification

Client ID	Laboratory ID	Matrix	COC Method
Outfall 006	IPB1817-01	Water	200.7, 200.8

2. DATA VALIDATION FINDINGS

2.1 SAMPLE MANAGEMENT

Following are findings associated with sample management:

2.1.1 Sample Preservation, Handling, and Transport

The sample in this SDG was received at the laboratory within the temperature limits of 4°C ±2°C. No sample preservation, handling, or transport problems were noted, and no qualifications were necessary.

2.1.2 Chain of Custody

The COC was signed and dated by field and laboratory personnel and accounted for the sample and analyses presented in this SDG. No sample qualifications were required.

2.1.3 Holding Times

The date of collection recorded on the COC and the dates of analyses recorded in the raw data documented that the sample analyses were performed within the specified holding times of six months for the ICP and ICP-MS metals. No qualifications were required.

2.2 ICP-MS TUNING

The method-specified tune criteria were met and no qualifications were required.

2.3 CALIBRATION

The ICV and CCV results showed acceptable recoveries, 90-110% for ICP and ICP-MS metals. The laboratory analyzed reporting limit check standards in association with the sample in this SDG and the recoveries were considered to be acceptable. No qualifications were required.

2.4 BLANKS

Copper was detected in method blank 6B21089-BLK1 and zinc was detected in method blank 6B20080-BLK-1 at 15.6 µg/L; therefore, copper and zinc detected in outfall 006 were qualified as estimated nondetects, "UJ." Silver was reported in a bracketing CCB at -3.3 µg/L; therefore,

nondetected silver in Outfall 006 was qualified as an estimated nondetect, "UJ." No further qualifications were required.

2.5 ICP INTERFERENCE CHECK SAMPLE (ICS A/AB)

ICSA and ICSAB analyses were performed in association with the sample in this SDG for the ICP metals. Silver, boron, and chromium were detected in the ICSA above the respective reporting limits. The reviewer checked the raw data for the sample and determined that the level of interferents in Outfall 006 were not of sufficient concentrations to qualify the sample results. No qualifications were required.

2.6 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

The ICP and ICP-MS were within the laboratory-established control limits of 85-115%. No qualifications were required.

2.7 LABORATORY DUPLICATES

No MS/MSD or laboratory duplicate analyses were performed in association with the sample in this SDG; therefore, no assessment was made with respect to this criterion.

2.8 MATRIX SPIKES

No matrix spike analyses were performed in association with the sample in this SDG; therefore, no assessment was made with respect to this criterion. Method accuracy was evaluated based on LCS results. No qualifications were required.

2.9 ICP/MS AND ICP SERIAL DILUTION

No serial dilution analyses were performed in association with the sample in this SDG; therefore, no assessment was made with respect to this criterion.

2.10 INTERNAL STANDARDS PERFORMANCE

For the target analytes analyzed by ICP-MS, the internal standards were within the method-specified control limits of 60-125%. No qualifications were required.

2.11 SAMPLE RESULT VERIFICATION

A Level IV review was performed for the sample in this data package. Calculations were verified and the sample results reported on the Form Is were verified against the raw data. No transcription errors or calculation errors were noted. Analytes detected below the reporting limit were qualified as estimated, "J," and denoted with "DNQ," in accordance with the NPDES permit. No further qualifications were required.

2.12 FIELD QC SAMPLES

Field QC samples are evaluated, and if necessary, qualified based only on laboratory blanks. Any remaining detects are used to evaluate the associated samples.

2.12.1 Field Blanks and Equipment Rinsates

The sample in this SDG had no associated field QC samples. No qualifications were required.

2.12.2 Field Duplicates

There were no field duplicate analyses performed in association with the site sample.



Del Mar Analytical

17461 Derian Ave., Suite 100, Irvine, CA 92614 (949) 261-1022 FAX (949) 260-3297
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
 2520 E. Sunset Rd., #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: IPB1817

Sampled: 02/19/06
 Received: 02/19/06

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB1817-01 (Outfall 006 - Water) - cont.									
Reporting Units: mg/l									
Boron	EPA 200.7	6B20080	0.0074	0.050	ND	1	02/20/06	02/27/06	U

Rev	Qual
Qual	Code

Del Mar Analytical - Irvine
 Michele Chamberlin
 Project Manager

LEVEL IV

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 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 006
 Report Number: IPB1817

Sampled: 02/19/06
 Received: 02/19/06

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB1817-01 (Outfall 006 - Water) - cont.									
Reporting Units: ug/l									
Aluminum	EPA 200.7	6B20080	40	50	300	1	02/20/06	02/28/06	Rev Qual
Antimony	EPA 200.8	6B21089	0.18	2.0	2.6	1	02/21/06	02/22/06	
Arsenic	EPA 200.7	6B20080	4.4	5.0	27	1	02/20/06	02/25/06	
Beryllium	EPA 200.7	6B20080	0.90	2.0	ND	1	02/20/06	02/25/06	U
Cadmium	EPA 200.8	6B21089	0.015	1.0	0.023	1	02/21/06	02/22/06	J J
Chromium	EPA 200.7	6B20080	2.0	5.0	ND	1	02/20/06	02/25/06	U
Copper	EPA 200.8	6B21089	0.49	2.0	0.96	1	02/21/06	02/22/06	U J B, J J
Lead	EPA 200.8	6B21089	0.040	1.0	0.35	1	02/21/06	02/22/06	J J
Mercury	EPA 245.1	6B21083	0.063	0.20	ND	1	02/21/06	02/21/06	U
Nickel	EPA 200.7	6B20080	2.0	10	ND	1	02/20/06	02/25/06	U
Selenium	EPA 200.7	6B20080	8.0	10	ND	1	02/20/06	02/25/06	U
Silver	EPA 200.7	6B20080	3.0	10	ND	1	02/20/06	02/25/06	U
Thallium	EPA 200.8	6B21089	0.075	1.0	ND	1	02/21/06	02/22/06	U
Vanadium	EPA 200.7	6B20080	3.0	10	ND	1	02/20/06	02/25/06	U
Zinc	EPA 200.7	6B20080	15	20	15	1	02/20/06	02/25/06	U J B, J

Del Mar Analytical - Irvine
 Michele Chamberlin
 Project Manager

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LEVEL IV

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CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

MEC^x
 12269 East Vassar Drive
 Aurora, CO 80014

Package ID: B4PP8
 Task Order: 1261.001D.01
 SDG No.: IPB1817

No. of Analyses: 1

Laboratory: Del Mar Analytical

Reviewer: L. Calvin

Analysis/Method: Pesticides/PCBs by Method 608

Date: April 6, 2006

Reviewer's Signature: *L. Calvin*

ACTION ITEMS ^a	
1. Case Narrative Deficiencies	
2. Out of Scope Analyses	
3. Analyses Not Conducted	
4. Missing Hardcopy Deliverables	
5. Incorrect Hardcopy Deliverables	
6. Deviations from Analysis Protocol, e.g.,	
Holding Times	
GC/MS Tune/Inst. Performance	
Calibration	
Method blanks	
Surrogates	
Matrix Spike/Dup LCS	
Field QC	
Internal Standard Performance	
Compound Identification	
Quantitation	
System Performance	
COMMENTS ^b	Acceptable as reviewed.
^a Subcontracted analytical laboratory is not meeting contract and/or method requirements. ^b Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.	



DATA VALIDATION REPORT

NPDES Monitoring Program
Annual Outfall 006

ANALYSIS: PESTICIDES / PCBs

SAMPLE DELIVERY GROUP: IPB1817

Prepared by

MECX, LLC
12269 East Vassar Drive
Aurora, CO 80014

1. INTRODUCTION

Task Order Title: NPDES
MEC^X Project Number: 1261.001D.01
Sample Delivery Group: IPB1817
Project Manager: P. Costa
Matrix: Water
Analysis: Pesticides
QC Level: Level IV
No. of Samples: 1
No. of Reanalyses/Dilutions: 0
Reviewer: L. Calvin
Date of Review: April 6, 2006

The samples listed in Table 1 were validated based on the guidelines outlined in the MEC^X *Data Validation Procedure for Organochlorine Pesticides and PCBs (DVP-4, Rev. 0)*, EPA Method 608, and the *National Functional Guidelines for Organic Data Review (2/94)*. Any deviations from these procedures are documented herein. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.

Table 1. Sample Identification

Client ID	Laboratory ID	Matrix	COC Method
Outfall 006	IPB1817-01	Water	608

2. DATA VALIDATION FINDINGS

2.1 SAMPLE MANAGEMENT

The sample in this SDG was received at the laboratory within the temperature limits of $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$, at 3°C . According to the case narrative for this SDG, the sample was received intact and on ice. No qualifications were required.

2.1.2 Chain of Custody

The COC was signed and dated by both field and laboratory personnel. As the sample was couriered directly to the laboratory, custody seals were not required. No qualifications were required.

2.1.3 Holding Times

The water sample was extracted within seven days of sample collection and analyzed within 40 days of extraction. No qualifications were required.

2.2 PESTICIDES INSTRUMENT PERFORMANCE

No resolution check standards or breakdown check standards are required by Method 608 for pesticides, and according to the raw data provided, a resolution check standard was not analyzed by the laboratory. The laboratory did analyze a breakdown check standard with the breakdown for individual components (4,4-DDT and endrin) $\leq 20\%$ and $\leq 30\%$ for the total, as suggested in the National Functional Guidelines. A review of the raw data indicated that the analytical run time was of sufficient length to provide adequate standard separation. The two analytical columns used in the analyses were within the guidelines specified in the methods.

According to the laboratory SOP and the initial calibration raw data, the retention time windows are ± 0.10 minutes for both surrogates and target compound calibration standards. A review of the raw data indicated that the laboratory retention time criteria were met for the surrogates and pesticide calibration standards. No qualifications were required.

2.3 CALIBRATION

2.3.1 Analytical Sequence

Based on the data provided, the analytical sequences were in accordance with the requirements of Method 608. No qualifications were required.

2.3.2 Initial Calibration

There was one initial calibration dated 02/26/06 associated with the Aroclor analysis of the site sample and one dated 01/30/06 associated with the pesticide analysis. The initial calibrations consisted of six point calibrations for Aroclors 1016 and 1260 and five or six point calibrations for all pesticide target compounds on two analytical columns. The average %RSDs of the individual Aroclor peaks were within the QC limit of $\leq 10\%$ or r^2 values ≥ 0.995 on the primary analytical column (Channel A). The %RSDs were $\leq 10\%$ or r^2 values ≥ 0.995 on the primary column (Channel A) for all pesticide target compounds. The pesticide and average Aroclor %RSDs were also $\leq 10\%$ or r^2 values ≥ 0.995 on the secondary column.

An ICV was analyzed immediately following each initial calibration, and the %Ds for all pesticide target compounds and Aroclors 1016 and 1260 were within the QC limit of $\leq 15\%$ on both analytical columns. No qualifications were required.

2.3.3 Continuing Calibration

The pesticide and Aroclor analyses of the sample were each bracketed by two continuing calibrations. The %Ds for all pesticide target compounds and Aroclors 1016 and 1260 were within the Method QC limit of $\leq 15\%$ for all calibrations on both columns, with the exception of a high response for endrin on the secondary column in the ending pesticide CCV and a low response for Aroclor 1260 in the ending Aroclor CCV. As any detects would be reported from the primary column, no qualifications were required.

2.4 BLANKS

2.4.1 Instrument Blanks

An instrument blank was analyzed at the beginning of each analytical sequence. Cross-contamination was not evident in the instrument blanks or the sample. No qualifications were necessary.

2.4.2 Method Blanks

Two water method blanks (6B24053-BLK1 for pesticides and 6B24053-BLK1 for Aroclors) were extracted and analyzed with this SDG. No pesticide target compounds or Aroclors were detected in the method blank analyses. Review of the chromatograms from both channels showed no false negatives. No qualifications were required.

2.5 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

Two blank spike/blank spike duplicate pairs (6B24053-BS1/BSD1 for pesticides and 6B24053-BS2/BSD2 for Aroclors) were analyzed with this SDG. The recoveries for all pesticide compounds

DATA VALIDATION REPORT

and Aroclors 1016 and 1260 were within the laboratory-established QC limits, and all RPDs were within the QC limit of $\leq 30\%$ or $\leq 20\%$ (Aroclor 1260 only). A representative number of recoveries and RPDs were calculated from the raw data and no calculation or transcription errors were found. No qualifications were required.

2.6 SURROGATE RECOVERY

Surrogate recoveries were within the laboratory-established QC limits for the Aroclor and pesticide analyses of the sample. The recoveries were calculated from the raw data, and no transcription or calculation errors were noted. No qualifications were required.

2.7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

MS/MSD analyses were not performed on the sample of this SDG. Evaluation of method accuracy and precision were based on the blank spike/blank spike duplicate results. No qualifications were required.

2.8 SAMPLE CLEANUP PERFORMANCE

According to the laboratory extraction benchesheets, no cleanups were performed on the water sample. No qualifications were required.

2.9 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:

2.9.1 Field Blanks and Equipment Rinsates

There were no field blank or equipment rinsate samples identified for this SDG. No qualifications were required.

2.9.2 Field Duplicates

There were no field duplicate samples identified for this SDG.

2.10 COMPOUND IDENTIFICATION

The laboratory analyzed for pesticide target compounds and seven Aroclors by EPA Method 608. Compound identification is verified at a Level IV validation. The laboratory provided an overlay of the pesticide sample chromatogram and the pesticide standard for identification purposes. Review of chromatograms and retention times indicated no problems with compound identification for the sample in this SDG. No qualifications were required.

2.11 COMPOUND QUANTIFICATION AND REPORTED DETECTION LIMITS

Compound quantification is verified at a Level IV data validation. No calculation or transcription errors were found. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. No qualifications were required.



Del Mar Analytical

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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Brownyn Kelly

Project ID: Annual Outfall 006

Report Number: IPB1817

Sampled: 02/19/06

Received: 02/19/06

ORGANOCHLORINE PESTICIDES (EPA 608)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB1817-01 (Outfall 006 - Water) - cont.									
Reporting Units: ug/l									
Aldrin	EPA 608	6B24053	0.029	0.095	ND	0.952	02/24/06	02/24/06	<i>Real 35 Final Node</i> ↓
alpha-BHC	EPA 608	6B24053	0.019	0.095	ND	0.952	02/24/06	02/24/06	
beta-BHC	EPA 608	6B24053	0.014	0.095	ND	0.952	02/24/06	02/24/06	
delta-BHC	EPA 608	6B24053	0.019	0.19	ND	0.952	02/24/06	02/24/06	
gamma-BHC (Lindane)	EPA 608	6B24053	0.019	0.095	ND	0.952	02/24/06	02/24/06	
Chlordane	EPA 608	6B24053	0.19	0.95	ND	0.952	02/24/06	02/24/06	
4,4'-DDD	EPA 608	6B24053	0.019	0.095	ND	0.952	02/24/06	02/24/06	
4,4'-DDE	EPA 608	6B24053	0.024	0.095	ND	0.952	02/24/06	02/24/06	
4,4'-DDT	EPA 608	6B24053	0.033	0.095	ND	0.952	02/24/06	02/24/06	
Dieldrin	EPA 608	6B24053	0.014	0.095	ND	0.952	02/24/06	02/24/06	
Endosulfan I	EPA 608	6B24053	0.014	0.095	ND	0.952	02/24/06	02/24/06	
Endosulfan II	EPA 608	6B24053	0.038	0.095	ND	0.952	02/24/06	02/24/06	
Endosulfan sulfate	EPA 608	6B24053	0.019	0.19	ND	0.952	02/24/06	02/24/06	
Endrin	EPA 608	6B24053	0.019	0.095	ND	0.952	02/24/06	02/24/06	
Endrin aldehyde	EPA 608	6B24053	0.043	0.095	ND	0.952	02/24/06	02/24/06	
Endrin ketone	EPA 608	6B24053	0.019	0.095	ND	0.952	02/24/06	02/24/06	
Heptachlor	EPA 608	6B24053	0.029	0.095	ND	0.952	02/24/06	02/24/06	
Heptachlor epoxide	EPA 608	6B24053	0.029	0.095	ND	0.952	02/24/06	02/24/06	
Methoxychlor	EPA 608	6B24053	0.033	0.095	ND	0.952	02/24/06	02/24/06	
Toxaphene	EPA 608	6B24053	1.4	4.8	ND	0.952	02/24/06	02/24/06	
Surrogate: Tetrachloro-m-xylene (35-115%)					77 %				
Surrogate: Decachlorobiphenyl (45-120%)					76 %				

Del Mar Analytical - Irvine
 Michele Chamberlin
 Project Manager

Level III

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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: IPB1817

Sampled: 02/19/06
 Received: 02/19/06

TOTAL PCBS (EPA 608)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB1817-01 (Outfall 006 - Water) - cont.									
Reporting Units: ug/l									
Aroclor 1016	EPA 608	6B24053	0.19	0.95	ND	0.952	02/24/06	02/28/06	<i>rel. sig. anal. code</i>
Aroclor 1221	EPA 608	6B24053	0.095	0.95	ND	0.952	02/24/06	02/28/06	
Aroclor 1232	EPA 608	6B24053	0.24	0.95	ND	0.952	02/24/06	02/28/06	
Aroclor 1242	EPA 608	6B24053	0.24	0.95	ND	0.952	02/24/06	02/28/06	
Aroclor 1248	EPA 608	6B24053	0.24	0.95	ND	0.952	02/24/06	02/28/06	
Aroclor 1254	EPA 608	6B24053	0.24	0.95	ND	0.952	02/24/06	02/28/06	
Aroclor 1260	EPA 608	6B24053	0.38	0.95	ND	0.952	02/24/06	02/28/06	
Surrogate: Decachlorobiphenyl (45-120%)					85 %				

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 Michele Chamberlin
 Project Manager

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CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

MEC^x
 12269 East Vassar Drive
 Aurora, CO 80014

Package ID: B4RA2
 Task Order: 1261.001D.05
 SDG No.: Multiple

No. of Analyses: 4

Laboratory: Ebeline
 Reviewer: P. Meeks
 Analysis/Method: Radionuclides

Date: April 1, 2006
 Reviewer's Signature


ACTION ITEMS ^a	
1. Case Narrative Deficiencies	_____
2. Out of Scope Analyses	_____
3. Analyses Not Conducted	_____
4. Missing Hardcopy Deliverables	_____
5. Incorrect Hardcopy Deliverables	_____
6. Deviations from Analysis Protocol, e.g.,	Qualifications were applied for preservation and low detector efficiencies.
Holding Times	_____
GC/MS Tune/Inst. Performance	_____
Calibration	_____
Method blanks	_____
Surrogates	_____
Matrix Spike/Dup LCS	_____
Field QC	_____
Internal Standard Performance	_____
Compound Identification	_____
Quantitation	_____
System Performance	_____
COMMENTS^b	

^a Subcontracted analytical laboratory is not meeting contract and/or method requirements.
^b Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.



DATA VALIDATION REPORT

NPDES Sampling
Multiple Outfalls

ANALYSIS: RADIONUCLIDES

SAMPLE DELIVERY GROUPS: IPB1810, IPB1811, IPB1817,
IPB1818

Prepared by

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

1. INTRODUCTION

Task Order Title: NPDES Sampling
MEC^X Project Number: 1261.001D.01
Sample Delivery Group: IPB1810, IPB1811, IPB1817, IPB1818
Project Manager: P. Costa
Matrix: Water
Analysis: Radionuclides
QC Level: Level IV
No. of Samples: 1
No. of Reanalyses/Dilutions: 0
Reviewer: P. Meeks
Date of Review: April 1, 2006

The samples listed in Table 1 were validated based on the guidelines outlined in the USEPA CLP National Functional Guidelines for Inorganic Data Review (2/94). Any deviations from these procedures and guidelines are documented herein. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.

Table 1. Sample identification

Client ID	Del Mar ID	Eberline ID	Matrix	COC Method
Outfall 004	IPB1810-01	8650-001	water	900.0
Outfall 009	IPB1811-01	8651-001	water	900.0
Outfall 006	IPB1817-01	8652-001	water	900.0
Outfall 003	IPB1818-01	8653-001	water	900.0; 905.0

2. DATA VALIDATION FINDINGS

2.1 SAMPLE MANAGEMENT

Following are findings associated with sample management:

2.1.1 Sample Preservation, Handling, and Transport

All the samples in these SDGs were received at Del Mar Analytical within the temperature limits of $4\pm 2^{\circ}\text{C}$. No temperature information was provided by Eberline, the subcontract laboratory; however, as it is not necessary to chill radiological samples, no qualifications were required. The samples were noted to have been received intact and in good condition.

According to the Los Angeles Regional Water Quality Control Board's (LARWQCB) guidance letter dated 01/12/05, unfiltered samples should not be preserved and filtered aliquots should be preserved after filtration. The samples in these SDGs were preserved but were not filtered. As the requirements of the permit were not met, all results were qualified as estimated, "J," for detects and, "UJ," for nondetects. No further qualifications were required.

2.1.2 Chain of Custody

The original COCs were signed and dated by field and laboratory personnel and the transfer COCs were signed by personnel from both laboratories. Eberline did not list the MWH IDs on the Form Is; therefore, the reviewer edited the Form Is to reflect these IDs. The strontium analysis for Outfall 003 was requested in a memo from MWH personnel dated 2/20/06. No qualifications were required.

2.1.3 Holding Times

All samples were analyzed within the 180-day analytical holding time for preserved samples. No qualifications were required.

2.2 CALIBRATION

The laboratory calibration information included the standard certificates and applicable preparation/dilutions logs for NIST-traceability. All gross alpha detector efficiencies were less than 20%; therefore, all gross alpha results were qualified as estimated, "J," for detects and, "UJ," for nondetects. All strontium chemical yields were at least 75% and were considered acceptable. The strontium continuing calibration results were within the laboratory control limits. No further qualifications were required.

2.3 BLANKS

No measurable activities were detected in the method blanks, therefore, no qualifications were necessary.

2.4 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

Aqueous blank spikes were analyzed in association with the samples in these SDGs. The blank spike results were within the 3-sigma limits. No qualifications were necessary.

2.5 LABORATORY DUPLICATES

The laboratory performed duplicate analyses on Outfall 003. All results were within the 3-sigma limit limits. No qualifications were necessary.

2.6 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

The laboratory performed matrix spike analyses on Outfall 003 for gross alpha and gross beta. Both recoveries were within the 3-sigma limits. Analyses that involve the yielding of an analytical tracer do not require matrix spike analyses; therefore, no strontium matrix spike was performed. No qualifications were required.

2.7 SAMPLE RESULT VERIFICATION

An EPA Level IV review was performed for the samples in these SDGs. 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. No qualifications were necessary.

2.8 FIELD QC SAMPLES

Field QC samples were evaluated, and if necessary, qualified based only on laboratory blanks. Any remaining detects are used to evaluate the associated samples.

2.8.1 Field Blanks and Equipment Rinsates

The samples in these SDGs had no associated field QC samples. No qualifications were required.

2.8.2 Field Duplicates

There were no field duplicate samples in these SDGs.

CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

MEC^x
 12269 East Vassar Drive
 Aurora, CO 80014

Package ID B4DF41
 Task Order 1261.001D.01
 SDG No. IPB1817

No. of Analyses 1

Laboratory Alta
 Reviewer K. Shadowlight
 Analysis/Method Dioxin/Furan by Method 1613

Date: April 2, 2006
 Reviewer's Signature


ACTION ITEMS^a	
1. Case Narrative Deficiencies	
2. Out of Scope Analyses	
3. Analyses Not Conducted	
4. Missing Hardcopy Deliverables	
5. Incorrect Hardcopy Deliverables	
6. Deviations from Analysis Protocol, e.g.,	Any EMPC was qualified as an estimated nondetect.
Holding Times	
GC/MS Tune/Inst. Performance	
Calibration	
Method blanks	
Surrogates	
Matrix Spike/Dup LCS	
Field QC	
Internal Standard Performance	
Compound Identification	
Quantitation	
System Performance	
COMMENTS^b	
^a Subcontracted analytical laboratory is not meeting contract and/or method requirements. ^b Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.	

Eberline Services

ANALYSIS RESULTS

SDG <u>8650</u>	Client <u>DEL MAR ANAL</u>
Work Order <u>8602144-01</u>	Contract <u>PROJECT# IPB1810</u>
Received Date <u>02/21/06</u>	Matrix <u>WATER</u>

Client	Lab	Sample ID	Collected	Analyzed	Meclids	Results ± 2σ	Units	MCA	Raw Data	Qual Code
Outfall 004										
IPB1810-01	8650-001		02/19/06	03/14/06	Gross Alpha	0.526 ± 0.63	pCi/L	0.916	UJ	R, XI
				03/14/06	Gross Beta	21.4 ± 1.0	pCi/L	0.873	J	↓

LEVEL IV

Certified by <u>[Signature]</u>
Report Date <u>03/20/06</u>
Page 1

Eberline Services

ANALYSIS RESULTS

SDO <u>8551</u>	Client <u>DEL MAR ANAL</u>
Work Order <u>R602185-01</u>	Contract <u>PROJECTS IPB1811</u>
Received Date <u>02/21/06</u>	Matrix <u>WATER</u>

Client	Lab	Collected	Analyzed	Nuclide	Results ± SD	Units	MCA	Rev QW	Qual Code
Sample ID <i>cutfall 009</i> IPB1811-01	Sample ID 8551-001	02/18/06	03/14/06	Gross Alpha	16.3 ± 2.2	pCi/L	1.30	J	R, #1
			03/14/06	Gross Beta	21.8 ± 1.4	pCi/L	1.43	J	↓

LEVEL IV

Certified by <u><i>[Signature]</i></u>
Report Date <u>03/20/06</u>
Page 1

Eberline Services

ANALYSIS RESULTS

SDG <u>8652</u>	Client <u>DEL MAR ANAL</u>
Work Order <u>8602146-01</u>	Contract <u>PROJECT# IPB1817</u>
Received Date <u>02/21/06</u>	Matrix <u>WATER</u>

Client	Lab	Collected	Analyzed	Nuclide	Results ± 2σ	Units	MDA	Raw Qual	Qual Code
<u>Sample ID</u> <i>Outfall 006</i> IPB1817-01	<u>Sample ID</u> 8652-001	02/19/06	03/14/06	Gross Alpha	-0.117 ± 0.44	pCi/L	0.756	UJ	R, #1
			03/14/06	Gross Beta	4.33 ± 0.66	pCi/L	0.885	J	↓

LEVEL IV

Certified by <u>[Signature]</u>
Report Date <u>03/20/06</u>
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Eberline Services

ANALYSIS RESULTS

SDG <u>8653</u>	Client <u>DEL MAR ANAL</u>
Work Order <u>8502147-01</u>	Contract <u>PROJECT# IPB1818</u>
Received Date <u>02/21/06</u>	Matrix <u>WATER</u>

Client	Lab	Sample ID	Collected	Analyzed	Nuclide	Result ± 2σ	Units	MDA	Rev Gon	Quc/ Code
IPB1818-01	8653-001	02/19/06	03/14/06	Gross Alpha	0.738 ± 0.45	pCi/L	0.587	UJ	R #1	
			03/14/06	Gross Beta	7.03 ± 0.74	pCi/L	0.906	UT	↓	
			03/08/06	Sr-90	0.317 ± 0.31	pCi/L	0.594			

Outfall 003

LEVEL II

Certified By <u>[Signature]</u>
Report Date <u>03/20/06</u>
Page 1

CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

MEC^x
 12269 East Vassar Drive
 Aurora, CO 80014

Package ID: B4SV23
 Task Order: 1261.001D.01
 SDG No.: IPB1817

No. of Analyses: 1

Laboratory: Del Mar Analytical
 Reviewer: L. Calvin
 Analysis/Method: Semivolatiles by Method 625

Date: April 6, 2006
 Reviewer's Signature:


ACTION ITEMS^a	
1. Case Narrative Deficiencies	
2. Out of Scope Analyses	
3. Analyses Not Conducted	
4. Missing Hardcopy Deliverables	
5. Incorrect Hardcopy Deliverables	
6. Deviations from Analysis Protocol, e.g., Holding Times GC/MS Tune/Inst. Performance Calibration Method blanks Surrogates Matrix Spike/Dup LCS Field QC Internal Standard Performance Compound Identification Quantitation System Performance	
COMMENTS^b	Acceptable as reviewed.

^a Subcontracted analytical laboratory is not meeting contract and/or method requirements.
^b Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.



DATA VALIDATION REPORT

NPDES Monitoring Program
Annual Outfall 006

ANALYSIS: SEMIVOLATILES

SAMPLE DELIVERY GROUP IPB1817

Prepared by

MECX, LLC
12269 East Vassar Drive
Aurora, CO 80014

1. INTRODUCTION

Task Order Title: NPDES
MEC^X Project Number: 1261.001D.01
Sample Delivery Group: IPB1817
Project Manager: P. Costa
Matrix: Water
Analysis: Semivolatiles
QC Level: Level IV
No. of Samples: 1
No. of Reanalyses/Dilutions: 0
Reviewer: L. Calvin
Date of Review: April 6, 2006

The samples listed in Table 1 were validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for Levels C and D Semivolatile Organics (DVP-3, Rev. 0)*, *EPA Method 625*, and the *National Functional Guidelines For Organic Data Review (2/94)*. Any deviations from these procedures and guidelines are documented herein. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.

Table 1. Sample Identification

Client ID	Laboratory ID	Matrix	COC Method
Outfall 006	IPB1817-01	Water	625

2. DATA VALIDATION FINDINGS

2.1 SAMPLE MANAGEMENT

Following are findings associated with sample management:

2.1.1 Sample Preservation, Handling, and Transport

The sample in this SDG was received at the laboratory within the temperature limits of 4°C ±2°C at 3°C. No sample preservation, handling, or transport problems were noted, and no qualifications were necessary.

2.1.2 Chain of Custody

The COC was signed and dated by field and laboratory personnel. The COC accounted for the analysis presented in this SDG. As the sample was couriered directly from the field to the laboratory, custody seals were not necessary. No qualifications were required.

2.1.3 Holding Times

The water sample was extracted within seven days of collection and analyzed within 40 days of extraction. No qualifications were required.

2.2 GC/MS TUNING

The DFTPP tunes analyzed at the beginning of each daily analytical sequence met the abundance criteria specified in EPA Method 625. No qualifications were required.

2.3 CALIBRATION

One initial calibration analyzed 02/27/06 was associated with the sample in this SDG. The %RSDs for all target compounds were ≤35%. An initial calibration verification (ICV) was analyzed following the initial calibration, with %Ds for all target compounds within the QC limits of ≤20%. Sample Outfall 006 was analyzed in the same analytical sequence as the initial calibration and ICV; therefore a continuing calibration was not necessary. No qualifications were required.

DATA VALIDATION REPORT

2.4 BLANKS

One method blank (6B24064-BLK1) was extracted and analyzed with this SDG. Target compounds were not detected above the MDLs in the method blank. Review of the method blank raw data indicated no false negatives. No qualifications were required.

2.5 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

One blank spike/blank spike duplicate pair (6B24064-BS1/BSD1) was extracted and analyzed with this SDG. All recoveries and RPDs were within the laboratory-established QC limits, with the exception of the recovery below the QC limits but $\geq 10\%$ for dimethylphthalate in the blank spike only. No qualifications were required.

2.6 SURROGATE RECOVERY

Surrogate recoveries for the sample were within the laboratory QC limits. No qualifications were required.

2.7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

MS/MSD analyses were not performed on the sample of this SDG. Evaluation of method accuracy and precision was based on the blank spike/blank spike duplicate results. No qualifications were required.

2.8 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:

2.8.1 Field Blanks and Equipment Rinsates

There were no field blank or equipment rinse samples identified for this SDG. No qualifications were required.

2.8.2 Field Duplicates

There were no field duplicate samples identified for this SDG.

2.9 INTERNAL STANDARDS PERFORMANCE

The internal standard area counts and retention times for the sample were within the control limits established by the continuing calibration standard: -50%/+100% for internal standard areas and ± 30 seconds for retention times. The recoveries were checked from the raw data, and no transcription or calculation errors were noted. No qualifications were required.

2.10 COMPOUND IDENTIFICATION

The laboratory analyzed for semivolatile target compounds by EPA Method 625. Review of the sample chromatogram, retention times, and spectra indicated no problems with target compound identification. No qualifications were required.

2.11 COMPOUND QUANTIFICATION AND REPORTED DETECTION LIMITS

Compound quantification is verified at a Level IV data validation. No calculation or transcription errors were found. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. Results were reported in $\mu\text{g/L}$ (ppb). No qualifications were required.

2.12 TENTATIVELY IDENTIFIED COMPOUNDS

TICs were not reported by the laboratory for this SDG. No qualifications were required.

2.13 SYSTEM PERFORMANCE

Review of the raw data indicated no problems with system performance. No qualifications were required.



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7320 E. Sunset Rd., #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3625

MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: IPB1817

Sampled: 02/19/06
Received: 02/19/06

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

Table with columns: Analyte, Method, Batch, MDL Limit, Reporting Limit, Sample Result, Dilution Factor, Date Extracted, Date Analyzed, Data Qualifiers. Includes handwritten notes 'new final qual code' and 'L2'.

Del Mar Analytical - Irvine
Michele Chamberlin
Project Manager

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Level IV
IPB1817 <Page 6 of 40>



Del Mar Analytical

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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: IPB1817

Sampled: 02/19/06
 Received: 02/19/06

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: IPB1817-01 (Outfall 006 - Water) - cont.									
Reporting Units: ug/l									
Fluorene	EPA 625	6B24064	3.7	9.5	ND	0.952	02/24/06	02/28/06	u
Hexachlorobenzene	EPA 625	6B24064	4.6	9.5	ND	0.952	02/24/06	02/28/06	u
Hexachlorobutadiene	EPA 625	6B24064	4.0	9.5	ND	0.952	02/24/06	02/28/06	u
Hexachlorocyclopentadiene	EPA 625	6B24064	3.2	19	ND	0.952	02/24/06	02/28/06	u
Hexachloroethane	EPA 625	6B24064	4.0	9.5	ND	0.952	02/24/06	02/28/06	u
Indeno(1,2,3-cd)pyrene	EPA 625	6B24064	5.1	19	ND	0.952	02/24/06	02/28/06	u
Isophorone	EPA 625	6B24064	3.5	9.5	ND	0.952	02/24/06	02/28/06	u
2-Methylnaphthalene	EPA 625	6B24064	2.9	9.5	ND	0.952	02/24/06	02/28/06	u
2-Methylphenol	EPA 625	6B24064	3.5	9.5	ND	0.952	02/24/06	02/28/06	u
4-Methylphenol	EPA 625	6B24064	3.6	9.5	ND	0.952	02/24/06	02/28/06	u
Naphthalene	EPA 625	6B24064	4.3	9.5	ND	0.952	02/24/06	02/28/06	u
2-Nitroaniline	EPA 625	6B24064	3.7	19	ND	0.952	02/24/06	02/28/06	u
3-Nitroaniline	EPA 625	6B24064	4.3	19	ND	0.952	02/24/06	02/28/06	u
4-Nitroaniline	EPA 625	6B24064	4.7	19	ND	0.952	02/24/06	02/28/06	u
Nitrobenzene	EPA 625	6B24064	4.0	19	ND	0.952	02/24/06	02/28/06	u
2-Nitrophenol	EPA 625	6B24064	4.0	9.5	ND	0.952	02/24/06	02/28/06	u
4-Nitrophenol	EPA 625	6B24064	6.3	19	ND	0.952	02/24/06	02/28/06	u
N-Nitrosodiphenylamine	EPA 625	6B24064	3.8	9.5	ND	0.952	02/24/06	02/28/06	u
N-Nitroso-di-n-propylamine	EPA 625	6B24064	3.4	9.5	ND	0.952	02/24/06	02/28/06	u
Pentachlorophenol	EPA 625	6B24064	3.8	19	ND	0.952	02/24/06	02/28/06	u
Phenanthrene	EPA 625	6B24064	3.1	9.5	ND	0.952	02/24/06	02/28/06	u
Phenol	EPA 625	6B24064	3.8	9.5	ND	0.952	02/24/06	02/28/06	u
Pyrene	EPA 625	6B24064	3.7	9.5	ND	0.952	02/24/06	02/28/06	u
1,2,4-Trichlorobenzene	EPA 625	6B24064	4.2	9.5	ND	0.952	02/24/06	02/28/06	u
2,4,5-Trichlorophenol	EPA 625	6B24064	3.4	19	ND	0.952	02/24/06	02/28/06	u
2,4,6-Trichlorophenol	EPA 625	6B24064	3.9	19	ND	0.952	02/24/06	02/28/06	u
1,2-Diphenylhydrazine/Azobenzene	EPA 625	6B24064	4.8	19	ND	0.952	02/24/06	02/28/06	u
N-Nitrosodimethylamine	EPA 625	6B24064	3.5	19	ND	0.952	02/24/06	02/28/06	u
Surrogate: 2-Fluorophenol (30-120%)					57 %				
Surrogate: Phenol-d6 (35-120%)					66 %				
Surrogate: 2,4,6-Tribromophenol (45-120%)					64 %				
Surrogate: Nitrobenzene-d3 (45-120%)					67 %				
Surrogate: 2-Fluorobiphenyl (45-120%)					74 %				
Surrogate: Terphenyl-d14 (45-120%)					99 %				

rel
 final
 results

u

OK
 02-06-06

Del Mar Analytical - Irvine
 Michele Chamberlin
 Project Manager

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Level IV

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CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

MEC^x
 12269 East Vassar Drive
 Aurora, CO 80014

Package ID: B4VO28
 Task Order: 1261.001D.01
 SDG No.: IPB1817

No. of Analyses: 2

Laboratory: Del Mar Analytical
 Reviewer: L. Calvin
 Analysis/Method: Volatiles by Method 624

Date: April 6, 2006
 Reviewer's Signature


ACTION ITEMS ^a	
Case Narrative	_____
Deficiencies	_____
2. Out of Scope Analyses	_____
3. Analyses Not Conducted	_____
4. Missing Hardcopy Deliverables	_____
5. Incorrect Hardcopy Deliverables	_____
6. Deviations from Analysis Protocol, e.g.,	Qualifications were assigned for the following:
Holding Times	-RRFs <0.05 in initial and continuing calibrations
GC/MS Tune/Inst. Performance	- continuing calibration %Ds >20%
Calibration	_____
Method blanks	_____
Surrogates	_____
Matrix Spike/Dup LCS	_____
Field QC	_____
Internal Standard Performance	_____
Compound Identification	_____
Quantitation	_____
System Performance	_____
COMMENTS^b	
^a Subcontracted analytical laboratory is not meeting contract and/or method requirements. ^b Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.	



DATA VALIDATION REPORT

NPDES Monitoring Program
Annual Outfall 006

ANALYSIS: VOLATILES

SAMPLE DELIVERY GROUP: IPB1817

Prepared by

MECX, LLC
12269 East Vassar Drive
Aurora, CO 80014

1. INTRODUCTION

Task Order Title: NPDES
MEC^X Project Number: 1261.001D.01
Sample Delivery Group: IPB1817
Project Manager: P. Costa
Matrix: Water
Analysis: Volatiles
QC Level: Level IV
No. of Samples: 2
No. of Reanalyses/Dilutions: 0
Reviewer: L. Calvin
Date of Review: April 6, 2006

The samples listed in Table 1 were validated based on the guidelines outlined in the MEC^X *Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0)*, EPA Method 624, and the *National Functional Guidelines for Organic Data Review (2194)*. Any deviations from these procedures are documented herein. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.

Table 1. Sample Identification

Client ID	Laboratory ID	Matrix	COC Method
Outfall 006	IPB1817-01	Water	624
Trip Blank	IPB1817-02	Water	624

2. DATA VALIDATION FINDINGS

2.1 SAMPLE MANAGEMENT

The samples in this SDG were received at the laboratory within the temperature limits of 4°C ±2°C, at 3°C. According to the case narrative for this SDG, the samples were received intact, on ice, and properly preserved. Information regarding lack of headspace in the VOA vials was not provided. No qualifications were required.

2.1.2 Chain of Custody

The COC was signed and dated by both field and laboratory personnel. As the samples were couriered directly to the laboratory, custody seals were not required. No qualifications were required.

2.1.3 Holding Times

The unpreserved aliquots of the water samples were analyzed for a portion of the target compounds within seven days of collection, and the preserved aliquots were analyzed for the remaining target compounds within 14 days. No qualifications were required.

2.2 GC/MS TUNING

The BFB tune performed at the beginning of each daily analytical sequence met the abundance criteria specified in EPA Method 624. No qualifications were required.

2.3 CALIBRATION

Three initial calibrations were associated with the sample analyses, dated 10/19/05 (acrolein and acrylonitrile only), 02/06/06 (2-chloroethyl vinyl ether only) and 02/18/06 (all remaining target compounds). The average RRF for acrolein was less than 0.05. The nondetect results for acrolein were rejected, "R," in both samples of this SDG. The remaining average RRFs were ≥0.05, and the %RSDs were ≤35% or $r^2 \geq 0.995$ for the target compounds listed on the sample result summary forms.

Three continuing calibrations were associated with the sample analyses, two dated 02/20/06 (one for 2-chloroethyl vinyl ether and one for acrolein and acrylonitrile), and one dated 03/02/06 (all remaining target compounds). The RRF for acrolein was less than 0.05. The nondetect results for acrolein were rejected, "R," in both samples of this SDG. The remaining RRFs for were ≥0.05 and all %Ds were within the QC limit of ≤20%, with the exception of the %Ds for acrolein and 2-chloroethyl vinyl ether. The nondetect result for 2-chloroethyl vinyl ether was qualified as estimated, "UJ," in sample Outfall 006. Sample Trip Blank was a field QC sample and required no

qualification. As acrolein was previously rejected for RRFs <0.05, the results were not further qualified. No further qualifications were required.

2.4 BLANKS

Two method blanks (6B20035-BLK1 and 6C02009-BLK1) were analyzed with this SDG. No target compounds were detected in the method blanks. Review of the method blank raw data indicated no false negatives. No qualifications were required.

2.5 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

Two blank spikes (6B20035-BS1 and 6C02009-BS1) were analyzed with this SDG. Target compounds acrolein and acrylonitrile were not included in associated blank spike 6B20035-BS1. The recovery for 1,1,2,2-tetrachloroethane was above the QC limits in 6C02009-BS1; however, the compound was not detected in the site sample of this SDG. The remaining recoveries were within the laboratory-established QC limits. A representative number of recoveries were calculated from the raw data and no calculation or transcription errors were found. No qualifications were required.

2.6 SURROGATE RECOVERY

Surrogate recoveries were within the laboratory QC limits of 80-120% for this SDG. A representative number of recoveries were calculated from the raw data, and no transcription or calculation errors were noted. No qualifications were required.

2.7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

MS/MSD analyses were performed on the unpreserved aliquot of the site sample in this SDG, analyzed only for 2-chloroethyl vinyl ether, acrolein, and acrylonitrile. Only 2-chloroethyl vinyl ether was included in the spike mix. The recoveries and RPD for 2-chloroethyl vinyl ether were within the laboratory-established QC limits. No qualifications were required.

2.8 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:

2.8.1 Trip Blanks

Sample Trip Blank was the trip blank associated with site sample Outfall 006. No target compounds were detected in the trip blank. No qualifications were required.

2.8.2 Field Blanks and Equipment Rinsates

There were no field blank or equipment rinsate samples identified for this SDG. No qualifications were required.

2.8.3 Field Duplicates

There were no field duplicate samples identified for this SDG.

2.9 INTERNAL STANDARDS PERFORMANCE

The internal standard area counts and retention times were within the control limits established by the continuing calibration standard: -50%/+100% for internal standard areas and ± 30 seconds for retention times. The recoveries were checked from the raw data, and no transcription or calculation errors were noted. No qualifications were required.

2.10 COMPOUND IDENTIFICATION

The laboratory analyzed for volatile target compounds by EPA Method 624. Review of the sample chromatograms, retention times, and spectra indicated no problems with target compound identification. No qualifications were required.

2.11 COMPOUND QUANTIFICATION AND REPORTED DETECTION LIMITS

Compound quantification is verified at a Level IV data validation. No calculation or transcription errors were found. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. No qualifications were required.

2.12 TENTATIVELY IDENTIFIED COMPOUNDS

TICs were not reported by the laboratory for this SDG. No qualifications were required.

Project: NPDES
SDG: IPB1817
Analysis: VOCs

DATA VALIDATION REPORT

2.13 SYSTEM PERFORMANCE

Review of the raw data indicated no problems with system performance. No qualifications were required.



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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: IPB1817

Sampled: 02/19/06
 Received: 02/19/06

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: IPB1817-01 (Outfall 006 - Water)									
Reporting Units: ug/l									
Benzene	EPA 624	6C02009	0.28	1.0	ND	1	03/02/06	03/02/06	<i>red qual code</i> ↓
Bromodichloromethane	EPA 624	6C02009	0.30	2.0	ND	1	03/02/06	03/02/06	
Bromoform	EPA 624	6C02009	0.32	5.0	ND	1	03/02/06	03/02/06	
Bromomethane	EPA 624	6C02009	0.42	5.0	ND	1	03/02/06	03/02/06	
Carbon tetrachloride	EPA 624	6C02009	0.28	0.50	ND	1	03/02/06	03/02/06	
Chlorobenzene	EPA 624	6C02009	0.36	2.0	ND	1	03/02/06	03/02/06	
Chloroethane	EPA 624	6C02009	0.40	5.0	ND	1	03/02/06	03/02/06	
Chloroform	EPA 624	6C02009	0.33	2.0	ND	1	03/02/06	03/02/06	
Chloromethane	EPA 624	6C02009	0.30	5.0	ND	1	03/02/06	03/02/06	
Dibromochloromethane	EPA 624	6C02009	0.28	2.0	ND	1	03/02/06	03/02/06	
1,2-Dichlorobenzene	EPA 624	6C02009	0.32	2.0	ND	1	03/02/06	03/02/06	
1,3-Dichlorobenzene	EPA 624	6C02009	0.35	2.0	ND	1	03/02/06	03/02/06	
1,4-Dichlorobenzene	EPA 624	6C02009	0.37	2.0	ND	1	03/02/06	03/02/06	
1,1-Dichloroethane	EPA 624	6C02009	0.27	2.0	ND	1	03/02/06	03/02/06	
1,2-Dichloroethane	EPA 624	6C02009	0.28	0.50	ND	1	03/02/06	03/02/06	
1,1-Dichloroethane	EPA 624	6C02009	0.42	5.0	ND	1	03/02/06	03/02/06	
trans-1,2-Dichloroethene	EPA 624	6C02009	0.27	2.0	ND	1	03/02/06	03/02/06	
1,2-Dichloropropane	EPA 624	6C02009	0.35	2.0	ND	1	03/02/06	03/02/06	
cis-1,3-Dichloropropene	EPA 624	6C02009	0.22	2.0	ND	1	03/02/06	03/02/06	
trans-1,3-Dichloropropene	EPA 624	6C02009	0.32	2.0	ND	1	03/02/06	03/02/06	
Ethylbenzene	EPA 624	6C02009	0.25	2.0	ND	1	03/02/06	03/02/06	
Methylene chloride	EPA 624	6C02009	0.70	5.0	ND	1	03/02/06	03/02/06	
1,1,2,2-Tetrachloroethane	EPA 624	6C02009	0.24	2.0	ND	1	03/02/06	03/02/06	
Tetrachloroethene	EPA 624	6C02009	0.32	2.0	ND	1	03/02/06	03/02/06	
Toluene	EPA 624	6C02009	0.36	2.0	ND	1	03/02/06	03/02/06	
1,1,1-Trichloroethane	EPA 624	6C02009	0.30	2.0	ND	1	03/02/06	03/02/06	
1,1,2-Trichloroethane	EPA 624	6C02009	0.30	2.0	ND	1	03/02/06	03/02/06	
Trichloroethene	EPA 624	6C02009	0.26	2.0	ND	1	03/02/06	03/02/06	
Trichlorofluoromethane	EPA 624	6C02009	0.34	5.0	ND	1	03/02/06	03/02/06	
Vinyl chloride	EPA 624	6C02009	0.26	0.50	ND	1	03/02/06	03/02/06	
Xylenes, Total	EPA 624	6C02009	0.90	4.0	ND	1	03/02/06	03/02/06	
Trichlorotrifluoroethane (Freon 113)	EPA 624	6C02009	1.2	5.0	ND	1	03/02/06	03/02/06	
Surrogate: Dibromofluoromethane (80-120%)					106 %				
Surrogate: Toluene-d8 (80-120%)					107 %				
Surrogate: 4-Bromofluorobenzene (80-120%)					98 %				

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 Michele Chamberlin
 Project Manager

Level III

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 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 783-3044 FAX (480) 783-0831
 3520 E. Sunset Rd., #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3625

MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: IPB1817

Sampled: 02/19/06
 Received: 02/19/06

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: IPB1817-02 (Trip Blanks - Water)									
Reporting Units: ug/l									
Benzene	EPA 624	6C02009	0.28	1.0	ND	1	03/02/06	03/02/06	<i>See qual code</i> ↓
Bromodichloromethane	EPA 624	6C02009	0.30	2.0	ND	1	03/02/06	03/02/06	
Bromoform	EPA 624	6C02009	0.32	5.0	ND	1	03/02/06	03/02/06	
Bromomethane	EPA 624	6C02009	0.42	5.0	ND	1	03/02/06	03/02/06	
Carbon tetrachloride	EPA 624	6C02009	0.28	0.50	ND	1	03/02/06	03/02/06	
Chlorobenzene	EPA 624	6C02009	0.36	2.0	ND	1	03/02/06	03/02/06	
Chloroethane	EPA 624	6C02009	0.40	5.0	ND	1	03/02/06	03/02/06	
Chloroform	EPA 624	6C02009	0.33	2.0	ND	1	03/02/06	03/02/06	
Chloromethane	EPA 624	6C02009	0.30	5.0	ND	1	03/02/06	03/02/06	
Dibromochloromethane	EPA 624	6C02009	0.28	2.0	ND	1	03/02/06	03/02/06	
1,2-Dichlorobenzene	EPA 624	6C02009	0.32	2.0	ND	1	03/02/06	03/02/06	
1,3-Dichlorobenzene	EPA 624	6C02009	0.35	2.0	ND	1	03/02/06	03/02/06	
1,4-Dichlorobenzene	EPA 624	6C02009	0.37	2.0	ND	1	03/02/06	03/02/06	
1,1-Dichloroethane	EPA 624	6C02009	0.27	2.0	ND	1	03/02/06	03/02/06	
1,2-Dichloroethane	EPA 624	6C02009	0.28	0.50	ND	1	03/02/06	03/02/06	
1,1-Dichloroethene	EPA 624	6C02009	0.42	5.0	ND	1	03/02/06	03/02/06	
trans-1,2-Dichloroethene	EPA 624	6C02009	0.27	2.0	ND	1	03/02/06	03/02/06	
1,2-Dichloropropane	EPA 624	6C02009	0.35	2.0	ND	1	03/02/06	03/02/06	
cis-1,3-Dichloropropene	EPA 624	6C02009	0.22	2.0	ND	1	03/02/06	03/02/06	
trans-1,3-Dichloropropene	EPA 624	6C02009	0.32	2.0	ND	1	03/02/06	03/02/06	
Ethylbenzene	EPA 624	6C02009	0.25	2.0	ND	1	03/02/06	03/02/06	
Methylene chloride	EPA 624	6C02009	0.70	5.0	ND	1	03/02/06	03/02/06	
1,1,2,2-Tetrachloroethane	EPA 624	6C02009	0.24	2.0	ND	1	03/02/06	03/02/06	
Tetrachloroethene	EPA 624	6C02009	0.32	2.0	ND	1	03/02/06	03/02/06	
Toluene	EPA 624	6C02009	0.36	2.0	ND	1	03/02/06	03/02/06	
1,1,1-Trichloroethane	EPA 624	6C02009	0.30	2.0	ND	1	03/02/06	03/02/06	
1,1,2-Trichloroethane	EPA 624	6C02009	0.30	2.0	ND	1	03/02/06	03/02/06	
Trichloroethene	EPA 624	6C02009	0.26	2.0	ND	1	03/02/06	03/02/06	
Trichlorofluoromethane	EPA 624	6C02009	0.34	5.0	ND	1	03/02/06	03/02/06	
Vinyl chloride	EPA 624	6C02009	0.26	0.50	ND	1	03/02/06	03/02/06	
Xylenes, Total	EPA 624	6C02009	0.90	4.0	ND	1	03/02/06	03/02/06	
Trichlorotrifluoroethane (Freon 113)	EPA 624	6C02009	1.2	5.0	ND	1	03/02/06	03/02/06	
Surrogate: Dibromofluoromethane (80-120%)					112 %				
Surrogate: Toluene-d8 (80-120%)					110 %				
Surrogate: 4-Bromofluorobenzene (80-120%)					102 %				

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 Michele Chamberlin
 Project Manager

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Level III
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 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 796-3630 FAX (702) 796-3621

MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: IPB1817

Sampled: 02/19/06

Received: 02/19/06

PURGEABLES-- GC/MS (EPA 624)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB1817-01 (Outfall 006 - Water)									
Reporting Units: ug/l									
Acrolein	EPA 624	6B20035	4.6	50	ND	1	02/20/06	02/20/06	R R
Acrylonitrile	EPA 624	6B20035	0.70	50	ND	1	02/20/06	02/20/06	U U
2-Chloroethyl vinyl ether	EPA 624	6B20035	1.8	5.0	ND	1	02/20/06	02/20/06	U R C
Surrogate: Dibromofluoromethane (80-120%)					106 %				
Surrogate: Toluene-d8 (80-120%)					110 %				
Surrogate: 4-Bromofluorobenzene (80-120%)					105 %				
Sample ID: IPB1817-02 (Trip Blanks - Water)									
Reporting Units: ug/l									
Acrolein	EPA 624	6B20035	4.6	50	ND	1	02/20/06	02/20/06	R R
Acrylonitrile	EPA 624	6B20035	0.70	50	ND	1	02/20/06	02/20/06	U U
2-Chloroethyl vinyl ether	EPA 624	6B20035	1.8	5.0	ND	1	02/20/06	02/20/06	U ↓
Surrogate: Dibromofluoromethane (80-120%)					110 %				
Surrogate: Toluene-d8 (80-120%)					111 %				
Surrogate: 4-Bromofluorobenzene (80-120%)					108 %				

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 Project Manager

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CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

MEC^x
 12269 East Vassar Drive
 Aurora, CO 80014

Package ID: B4WC28
 Task Order: 1261.001D.01
 SDG No.: IPB1817

No. of Analyses: 1

Laboratory: Del Mar Analytical
 Reviewer: P. Meeks
 Analysis/Method: General Minerals

Date: April 3, 2006
 Reviewer's Signature


ACTION ITEMS ^a	
1. Case Narrative Deficiencies	
2. Out of Scope Analyses	
3. Analyses Not Conducted	
4. Missing Hardcopy Deliverables	
5. Incorrect Hardcopy Deliverables	
6. Deviations from Analysis Protocol, e.g.,	Qualification applied for a detect below the reporting limit.
Holding Times	
GC/MS Tune/Inst. Performance	
Calibration	
Method blanks	
Surrogates	
Matrix Spike/Dup LCS	
Field QC	
Internal Standard Performance	
Compound Identification	
Quantitation	
System Performance	
COMMENTS ^b	
^a Subcontracted analytical laboratory is not meeting contract and/or method requirements. ^b Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.	



DATA VALIDATION REPORT

NPDES Sampling
Outfall 006

ANALYSIS: GENERAL MINERALS

SAMPLE DELIVERY GROUP: IPB1817

Prepared by

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

1. INTRODUCTION

Task Order Title: NPDES Sampling
MEC^x Project Number: 1261.001D.01
Sample Delivery Group: IPB1817
Project Manager: P. Costa
Matrix: Water
Analysis: General Minerals
QC Level: Level IV
No. of Samples: 1
No. of Reanalyses/Dilutions: 0
Reviewer: P. Meeks
Date of Review: April 3, 2006

The sample listed in Table 1 was validated based on the guidelines outlined in the MEC^x Data Validation Procedure for General Minerals (DVP-6, Rev. 0), USEPA Methods for Chemical Analysis of Water and Wastes Methods 160.2 and, 335.2, and validation guidelines outlined in the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (2/94). Any deviations from these procedures and guidelines are documented herein. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form Is as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.

Table 1. Sample Identification

Client ID	Laboratory ID	Matrix	COC Method
Outfall 006	IPB1817-01	Water	General Minerals

2. DATA VALIDATION FINDINGS

2.1 SAMPLE MANAGEMENT

Following are findings associated with sample management:

2.1.1 Sample Preservation, Handling, and Transport

The sample in this SDG was received at the laboratory within the temperature limits of $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$, at 3°C . No preservation problems were noted by the laboratory. No qualifications were required.

2.1.2 Chain of Custody

The COC was signed and dated by field and laboratory personnel and accounted for the sample and analyses presented in this SDG. As the sample was couriered directly from the field to the laboratory, custody seals were not necessary. No qualifications were required.

2.1.3 Holding Times

The holding times were assessed by comparing the date of collection with the dates of analysis. All analyses were performed within the method-specified holding times. No qualifications were required.

2.2 CALIBRATION

For cyanide, the initial calibration correlation coefficients were ≥ 0.995 and the ICV and CCV recoveries were within the control limits of 90-110%. For TSS, balance calibration logs were reviewed and found to be acceptable. No qualifications were required.

2.3 BLANKS

There were no detects in the method blanks or CCBs associated with the sample analyses. Raw data was reviewed to verify the blank data. No qualifications were required.

2.4 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

The reported LCS recoveries were within the laboratory-established control limits. No qualifications were required.

DATA VALIDATION REPORT

2.5 LABORATORY DUPLICATES

No MS/MSD or duplicate analyses were performed in association with this SDG; therefore, no assessment was made with respect to this criterion.

2.6 MATRIX SPIKES

No MS/MSD analyses were performed in association with this SDG; therefore, no assessment was made with respect to this criterion. Evaluation of method accuracy was based on LCS results. No qualifications were required.

2.7 SAMPLE RESULT VERIFICATION

A Level IV review was performed for the sample in this data package. Calculations were verified, and the sample results reported on the Form Is were verified against the raw data. Cyanide detected below the reporting limit in Outfall 006 was qualified as estimated, "J," and annotated with the qualification code of "DNQ" to comply with the reporting requirements of the NPDES permit. No further qualifications were required.

2.8 FIELD QC SAMPLES

Field QC samples are evaluated, and if necessary, qualified based only on laboratory blanks. Any remaining detects are used to evaluate the associated sample. The following are findings associated with field QC samples:

2.8.1 Field Blanks and Equipment Rinsates

The sample in this SDG had no associated field QC samples. No qualifications were required.

2.8.2 Field Duplicates

There were no field duplicate pairs associated with this SDG.



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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Brouwyn Kelly

Project ID: Annual Outfall 006

Sampled: 02/19/06
 Received: 02/19/06

Report Number: IPB1817

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB1817-01 (Outfall 006 - Water) - cont.									
Reporting Units: mg/l									
Chloride	EPA 300.0	6B20053	0.26	0.50	18	1	02/20/06	02/20/06	* ↓
Nitrate/Nitrite-N	EPA 300.0	6B20053	0.072	0.26	0.88	1	02/20/06	02/20/06	
Oil & Grease	EPA 413.1	6B28050	0.90	4.8	ND	1	02/28/06	02/28/06	
Sulfate	EPA 300.0	6B20053	0.18	0.50	14	1	02/20/06	02/20/06	
Total Dissolved Solids	SM2540C	6B22069	10	10	200	1	02/22/06	02/22/06	
Total Suspended Solids	EPA 160.2	6B23099	10	10	ND	1	02/23/06	02/23/06	U

*Analysis not validated

Del Mar Analytical - Irvine
 Michele Chamberlin
 Project Manager

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 2528 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 006

Report Number: IPB1817

Sampled: 02/19/06

Received: 02/19/06

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB1817-01 (Outfall 006 - Water) - cont.									
Reporting Units: ug/l									
Total Cyanide	EPA 335.2	6B22127	2.2	5.0	2.9	1	02/22/06	02/22/06	J J
Perchlorate	EPA 314.0	6B23071	0.80	4.0	ND	1	02/23/06	02/23/06	*
* Analysis not validated									

Row
Col
Code
J J
J J J

Del Mar Analytical - Irvine
 Michele Chamberlin
 Project Manager

LEVEL IV

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APPENDIX G

Section 57

Outfall 007, February 28, 2006

Del Mar Analytical Laboratory Report



LABORATORY REPORT

Prepared For: MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project: Annual Outfall 007

Sampled: 02/28/06
Received: 02/28/06
Issued: 03/30/06 10:29

NELAP #01108CA California ELAP#1197 CSDLAC #10117

*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 Del Mar Analytical and its client. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical. The Chain of Custody, 1 page, is included and is 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.

LABORATORY ID	CLIENT ID	MATRIX
IPB2647-01	Outfall 007	Water
IPB2647-02	Trip Blank	Water

Reviewed By:

Michele Chamberlin

Del Mar Analytical - Irvine
Michele Chamberlin
Project Manager



MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 007

Report Number: IPB2647

Sampled: 02/28/06
Received: 02/28/06

CORRECTIVE ACTION REPORT

Department: Extractions

Date: 03/09/2006

Method: EPA 625

Matrix: Water

QC Batch: 6C06054

Identification and Definition of Problem:

- 1) The percent recoveries for dimethylphthalate and diethylphthalate in the LCSD were below laboratory acceptance limits.
- 2) The RPD between the LCS and LCSD exceeded laboratory acceptance limits for dimethylphthalate and diethylphthalate.

Determination of the Cause of the Problem:

- 1) A definitive cause for the QC failure has not been determined.
- 2) The RPDs failed due to the difference between the low LCSD recoveries and the acceptable LCS recoveries.

Corrective Action Taken:

Although the LCS recoveries for these two analytes were within acceptance limits, all results reported for dimethylphthalate and diethylphthalate must still be considered potentially biased low and can be used as estimates only.

Quality Assurance Approval: _____

Michele Chamberlin

Date: 03/16/2006 09:57 AM

Del Mar Analytical - Irvine
Michele Chamberlin
Project Manager



MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 007

Report Number: IPB2647

Sampled: 02/28/06
 Received: 02/28/06

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: IPB2647-01 (Outfall 007 - Water)									
Reporting Units: ug/l									
Benzene	EPA 624	6C03009	0.28	1.0	ND	1	03/03/06	03/03/06	
Bromodichloromethane	EPA 624	6C03009	0.30	2.0	ND	1	03/03/06	03/03/06	
Bromoform	EPA 624	6C03009	0.32	5.0	ND	1	03/03/06	03/03/06	
Bromomethane	EPA 624	6C03009	0.42	5.0	ND	1	03/03/06	03/03/06	
Carbon tetrachloride	EPA 624	6C03009	0.28	0.50	ND	1	03/03/06	03/03/06	
Chlorobenzene	EPA 624	6C03009	0.36	2.0	ND	1	03/03/06	03/03/06	
Chloroethane	EPA 624	6C03009	0.40	5.0	ND	1	03/03/06	03/03/06	
Chloroform	EPA 624	6C03009	0.33	2.0	ND	1	03/03/06	03/03/06	
Chloromethane	EPA 624	6C03009	0.30	5.0	0.43	1	03/03/06	03/03/06	J
Dibromochloromethane	EPA 624	6C03009	0.28	2.0	ND	1	03/03/06	03/03/06	
1,2-Dichlorobenzene	EPA 624	6C03009	0.32	2.0	ND	1	03/03/06	03/03/06	
1,3-Dichlorobenzene	EPA 624	6C03009	0.35	2.0	ND	1	03/03/06	03/03/06	
1,4-Dichlorobenzene	EPA 624	6C03009	0.37	2.0	ND	1	03/03/06	03/03/06	
1,1-Dichloroethane	EPA 624	6C03009	0.27	2.0	ND	1	03/03/06	03/03/06	
1,2-Dichloroethane	EPA 624	6C03009	0.28	0.50	ND	1	03/03/06	03/03/06	
1,1-Dichloroethene	EPA 624	6C03009	0.42	5.0	ND	1	03/03/06	03/03/06	
trans-1,2-Dichloroethene	EPA 624	6C03009	0.27	2.0	ND	1	03/03/06	03/03/06	
1,2-Dichloropropane	EPA 624	6C03009	0.35	2.0	ND	1	03/03/06	03/03/06	
cis-1,3-Dichloropropene	EPA 624	6C03009	0.22	2.0	ND	1	03/03/06	03/03/06	
trans-1,3-Dichloropropene	EPA 624	6C03009	0.32	2.0	ND	1	03/03/06	03/03/06	
Ethylbenzene	EPA 624	6C03009	0.25	2.0	ND	1	03/03/06	03/03/06	
Methylene chloride	EPA 624	6C03009	0.70	5.0	ND	1	03/03/06	03/03/06	
1,1,2,2-Tetrachloroethane	EPA 624	6C03009	0.24	2.0	ND	1	03/03/06	03/03/06	
Tetrachloroethene	EPA 624	6C03009	0.32	2.0	ND	1	03/03/06	03/03/06	
Toluene	EPA 624	6C03009	0.36	2.0	ND	1	03/03/06	03/03/06	
1,1,1-Trichloroethane	EPA 624	6C03009	0.30	2.0	ND	1	03/03/06	03/03/06	
1,1,2-Trichloroethane	EPA 624	6C03009	0.30	2.0	ND	1	03/03/06	03/03/06	
Trichloroethene	EPA 624	6C03009	0.26	2.0	ND	1	03/03/06	03/03/06	
Trichlorofluoromethane	EPA 624	6C03009	0.34	5.0	ND	1	03/03/06	03/03/06	
Vinyl chloride	EPA 624	6C03009	0.26	0.50	ND	1	03/03/06	03/03/06	
Xylenes, Total	EPA 624	6C03009	0.90	4.0	ND	1	03/03/06	03/03/06	
Trichlorotrifluoroethane (Freon 113)	EPA 624	6C03009	1.2	5.0	ND	1	03/03/06	03/03/06	
Surrogate: Dibromofluoromethane (80-120%)					111 %				
Surrogate: Toluene-d8 (80-120%)					108 %				
Surrogate: 4-Bromofluorobenzene (80-120%)					95 %				

Del Mar Analytical - Irvine
 Michele Chamberlin
 Project Manager

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MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 007

Report Number: IPB2647

Sampled: 02/28/06
Received: 02/28/06

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: IPB2647-02 (Trip Blank - Water)									
Reporting Units: ug/l									
Benzene	EPA 624	6C03009	0.28	1.0	ND	1	03/03/06	03/03/06	
Bromodichloromethane	EPA 624	6C03009	0.30	2.0	ND	1	03/03/06	03/03/06	
Bromoform	EPA 624	6C03009	0.32	5.0	ND	1	03/03/06	03/03/06	
Bromomethane	EPA 624	6C03009	0.42	5.0	ND	1	03/03/06	03/03/06	
Carbon tetrachloride	EPA 624	6C03009	0.28	0.50	ND	1	03/03/06	03/03/06	
Chlorobenzene	EPA 624	6C03009	0.36	2.0	ND	1	03/03/06	03/03/06	
Chloroethane	EPA 624	6C03009	0.40	5.0	ND	1	03/03/06	03/03/06	
Chloroform	EPA 624	6C03009	0.33	2.0	ND	1	03/03/06	03/03/06	
Chloromethane	EPA 624	6C03009	0.30	5.0	ND	1	03/03/06	03/03/06	
Dibromochloromethane	EPA 624	6C03009	0.28	2.0	ND	1	03/03/06	03/03/06	
1,2-Dichlorobenzene	EPA 624	6C03009	0.32	2.0	ND	1	03/03/06	03/03/06	
1,3-Dichlorobenzene	EPA 624	6C03009	0.35	2.0	ND	1	03/03/06	03/03/06	
1,4-Dichlorobenzene	EPA 624	6C03009	0.37	2.0	ND	1	03/03/06	03/03/06	
1,1-Dichloroethane	EPA 624	6C03009	0.27	2.0	ND	1	03/03/06	03/03/06	
1,2-Dichloroethane	EPA 624	6C03009	0.28	0.50	ND	1	03/03/06	03/03/06	
1,1-Dichloroethene	EPA 624	6C03009	0.42	5.0	ND	1	03/03/06	03/03/06	
trans-1,2-Dichloroethene	EPA 624	6C03009	0.27	2.0	ND	1	03/03/06	03/03/06	
1,2-Dichloropropane	EPA 624	6C03009	0.35	2.0	ND	1	03/03/06	03/03/06	
cis-1,3-Dichloropropene	EPA 624	6C03009	0.22	2.0	ND	1	03/03/06	03/03/06	
trans-1,3-Dichloropropene	EPA 624	6C03009	0.32	2.0	ND	1	03/03/06	03/03/06	
Ethylbenzene	EPA 624	6C03009	0.25	2.0	ND	1	03/03/06	03/03/06	
Methylene chloride	EPA 624	6C03009	0.70	5.0	ND	1	03/03/06	03/03/06	
1,1,2,2-Tetrachloroethane	EPA 624	6C03009	0.24	2.0	ND	1	03/03/06	03/03/06	
Tetrachloroethene	EPA 624	6C03009	0.32	2.0	ND	1	03/03/06	03/03/06	
Toluene	EPA 624	6C03009	0.36	2.0	ND	1	03/03/06	03/03/06	
1,1,1-Trichloroethane	EPA 624	6C03009	0.30	2.0	ND	1	03/03/06	03/03/06	
1,1,2-Trichloroethane	EPA 624	6C03009	0.30	2.0	ND	1	03/03/06	03/03/06	
Trichloroethene	EPA 624	6C03009	0.26	2.0	ND	1	03/03/06	03/03/06	
Trichlorofluoromethane	EPA 624	6C03009	0.34	5.0	ND	1	03/03/06	03/03/06	
Vinyl chloride	EPA 624	6C03009	0.26	0.50	ND	1	03/03/06	03/03/06	
Xylenes, Total	EPA 624	6C03009	0.90	4.0	ND	1	03/03/06	03/03/06	
Trichlorotrifluoroethane (Freon 113)	EPA 624	6C03009	1.2	5.0	ND	1	03/03/06	03/03/06	
Surrogate: Dibromofluoromethane (80-120%)									110 %
Surrogate: Toluene-d8 (80-120%)									108 %
Surrogate: 4-Bromofluorobenzene (80-120%)									96 %

Del Mar Analytical - Irvine
Michele Chamberlin
Project Manager

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MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 007

Report Number: IPB2647

Sampled: 02/28/06
Received: 02/28/06

PURGEABLES-- GC/MS (EPA 624)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB2647-01 (Outfall 007 - Water)									
Reporting Units: ug/l									
Acrolein	EPA 624	6C03009	4.6	50	ND	1	03/03/06	03/03/06	
Acrylonitrile	EPA 624	6C03009	0.70	50	ND	1	03/03/06	03/03/06	
2-Chloroethyl vinyl ether	EPA 624	6C03009	1.8	5.0	ND	1	03/03/06	03/03/06	
Surrogate: Dibromofluoromethane (80-120%)					111 %				
Surrogate: Toluene-d8 (80-120%)					108 %				
Surrogate: 4-Bromofluorobenzene (80-120%)					95 %				
Sample ID: IPB2647-02 (Trip Blank - Water)									
Reporting Units: ug/l									
Acrolein	EPA 624	6C03009	4.6	50	ND	1	03/03/06	03/03/06	
Acrylonitrile	EPA 624	6C03009	0.70	50	ND	1	03/03/06	03/03/06	
2-Chloroethyl vinyl ether	EPA 624	6C03009	1.8	5.0	ND	1	03/03/06	03/03/06	
Surrogate: Dibromofluoromethane (80-120%)					110 %				
Surrogate: Toluene-d8 (80-120%)					108 %				
Surrogate: 4-Bromofluorobenzene (80-120%)					96 %				

Del Mar Analytical - Irvine
Michele Chamberlin
Project Manager

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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 007

Report Number: IPB2647

Sampled: 02/28/06
 Received: 02/28/06

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: IPB2647-01 (Outfall 007 - Water)									
Reporting Units: ug/l									
Acenaphthene	EPA 625	6C06054	4.1	9.4	ND	0.943	03/06/06	03/09/06	
Acenaphthylene	EPA 625	6C06054	3.0	9.4	ND	0.943	03/06/06	03/09/06	
Aniline	EPA 625	6C06054	2.7	9.4	ND	0.943	03/06/06	03/09/06	
Anthracene	EPA 625	6C06054	3.0	9.4	ND	0.943	03/06/06	03/09/06	
Benzidine	EPA 625	6C06054	4.9	19	ND	0.943	03/06/06	03/09/06	
Benzoic acid	EPA 625	6C06054	2.5	19	ND	0.943	03/06/06	03/09/06	
Benzo(a)anthracene	EPA 625	6C06054	3.5	9.4	ND	0.943	03/06/06	03/09/06	
Benzo(b)fluoranthene	EPA 625	6C06054	2.5	9.4	ND	0.943	03/06/06	03/09/06	
Benzo(k)fluoranthene	EPA 625	6C06054	3.2	9.4	ND	0.943	03/06/06	03/09/06	
Benzo(g,h,i)perylene	EPA 625	6C06054	5.0	9.4	ND	0.943	03/06/06	03/09/06	
Benzo(a)pyrene	EPA 625	6C06054	3.3	9.4	ND	0.943	03/06/06	03/09/06	
Benzyl alcohol	EPA 625	6C06054	2.4	19	ND	0.943	03/06/06	03/09/06	
Bis(2-chloroethoxy)methane	EPA 625	6C06054	3.7	9.4	ND	0.943	03/06/06	03/09/06	
Bis(2-chloroethyl)ether	EPA 625	6C06054	4.2	9.4	ND	0.943	03/06/06	03/09/06	
Bis(2-chloroisopropyl)ether	EPA 625	6C06054	4.3	9.4	ND	0.943	03/06/06	03/09/06	
Bis(2-ethylhexyl)phthalate	EPA 625	6C06054	4.9	47	ND	0.943	03/06/06	03/09/06	
4-Bromophenyl phenyl ether	EPA 625	6C06054	4.3	9.4	ND	0.943	03/06/06	03/09/06	
Butyl benzyl phthalate	EPA 625	6C06054	3.3	19	ND	0.943	03/06/06	03/09/06	
4-Chloroaniline	EPA 625	6C06054	5.7	9.4	ND	0.943	03/06/06	03/09/06	
2-Chloronaphthalene	EPA 625	6C06054	3.8	9.4	ND	0.943	03/06/06	03/09/06	
4-Chloro-3-methylphenol	EPA 625	6C06054	3.3	19	ND	0.943	03/06/06	03/09/06	
2-Chlorophenol	EPA 625	6C06054	4.0	9.4	ND	0.943	03/06/06	03/09/06	
4-Chlorophenyl phenyl ether	EPA 625	6C06054	2.8	9.4	ND	0.943	03/06/06	03/09/06	
Chrysene	EPA 625	6C06054	2.6	9.4	ND	0.943	03/06/06	03/09/06	
Dibenz(a,h)anthracene	EPA 625	6C06054	4.4	19	ND	0.943	03/06/06	03/09/06	
Dibenzofuran	EPA 625	6C06054	2.5	9.4	ND	0.943	03/06/06	03/09/06	
Di-n-butyl phthalate	EPA 625	6C06054	2.6	19	ND	0.943	03/06/06	03/09/06	
1,3-Dichlorobenzene	EPA 625	6C06054	3.9	9.4	ND	0.943	03/06/06	03/09/06	
1,4-Dichlorobenzene	EPA 625	6C06054	3.7	9.4	ND	0.943	03/06/06	03/09/06	
1,2-Dichlorobenzene	EPA 625	6C06054	4.2	9.4	ND	0.943	03/06/06	03/09/06	
3,3-Dichlorobenzidine	EPA 625	6C06054	10	19	ND	0.943	03/06/06	03/09/06	
2,4-Dichlorophenol	EPA 625	6C06054	3.9	9.4	ND	0.943	03/06/06	03/09/06	
Diethyl phthalate	EPA 625	6C06054	2.9	9.4	ND	0.943	03/06/06	03/09/06	L2
2,4-Dimethylphenol	EPA 625	6C06054	4.2	19	ND	0.943	03/06/06	03/09/06	
Dimethyl phthalate	EPA 625	6C06054	3.4	9.4	ND	0.943	03/06/06	03/09/06	L2
4,6-Dinitro-2-methylphenol	EPA 625	6C06054	4.8	19	ND	0.943	03/06/06	03/09/06	
2,4-Dinitrophenol	EPA 625	6C06054	5.0	19	ND	0.943	03/06/06	03/09/06	
2,4-Dinitrotoluene	EPA 625	6C06054	4.0	9.4	ND	0.943	03/06/06	03/09/06	
2,6-Dinitrotoluene	EPA 625	6C06054	3.0	9.4	ND	0.943	03/06/06	03/09/06	
Di-n-octyl phthalate	EPA 625	6C06054	4.4	19	ND	0.943	03/06/06	03/09/06	
Fluoranthene	EPA 625	6C06054	4.0	9.4	ND	0.943	03/06/06	03/09/06	

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 Michele Chamberlin
 Project Manager

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MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 007

Report Number: IPB2647

Sampled: 02/28/06
Received: 02/28/06

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: IPB2647-01 (Outfall 007 - Water) - cont.									
Reporting Units: ug/l									
Fluorene	EPA 625	6C06054	3.7	9.4	ND	0.943	03/06/06	03/09/06	
Hexachlorobenzene	EPA 625	6C06054	4.5	9.4	ND	0.943	03/06/06	03/09/06	
Hexachlorobutadiene	EPA 625	6C06054	4.0	9.4	ND	0.943	03/06/06	03/09/06	
Hexachlorocyclopentadiene	EPA 625	6C06054	3.2	19	ND	0.943	03/06/06	03/09/06	
Hexachloroethane	EPA 625	6C06054	4.0	9.4	ND	0.943	03/06/06	03/09/06	
Indeno(1,2,3-cd)pyrene	EPA 625	6C06054	5.1	19	ND	0.943	03/06/06	03/09/06	
Isophorone	EPA 625	6C06054	3.5	9.4	ND	0.943	03/06/06	03/09/06	
2-Methylnaphthalene	EPA 625	6C06054	2.8	9.4	ND	0.943	03/06/06	03/09/06	
2-Methylphenol	EPA 625	6C06054	3.5	9.4	ND	0.943	03/06/06	03/09/06	
4-Methylphenol	EPA 625	6C06054	3.6	9.4	ND	0.943	03/06/06	03/09/06	
Naphthalene	EPA 625	6C06054	4.2	9.4	ND	0.943	03/06/06	03/09/06	
2-Nitroaniline	EPA 625	6C06054	3.7	19	ND	0.943	03/06/06	03/09/06	
3-Nitroaniline	EPA 625	6C06054	4.2	19	ND	0.943	03/06/06	03/09/06	
4-Nitroaniline	EPA 625	6C06054	4.6	19	ND	0.943	03/06/06	03/09/06	
Nitrobenzene	EPA 625	6C06054	4.0	19	ND	0.943	03/06/06	03/09/06	
2-Nitrophenol	EPA 625	6C06054	4.0	9.4	ND	0.943	03/06/06	03/09/06	
4-Nitrophenol	EPA 625	6C06054	6.2	19	ND	0.943	03/06/06	03/09/06	
N-Nitrosodiphenylamine	EPA 625	6C06054	3.8	9.4	ND	0.943	03/06/06	03/09/06	
N-Nitroso-di-n-propylamine	EPA 625	6C06054	3.4	9.4	ND	0.943	03/06/06	03/09/06	
Pentachlorophenol	EPA 625	6C06054	3.8	19	ND	0.943	03/06/06	03/09/06	
Phenanthrene	EPA 625	6C06054	3.1	9.4	ND	0.943	03/06/06	03/09/06	
Phenol	EPA 625	6C06054	3.8	9.4	ND	0.943	03/06/06	03/09/06	
Pyrene	EPA 625	6C06054	3.7	9.4	ND	0.943	03/06/06	03/09/06	
1,2,4-Trichlorobenzene	EPA 625	6C06054	4.2	9.4	ND	0.943	03/06/06	03/09/06	
2,4,5-Trichlorophenol	EPA 625	6C06054	3.4	19	ND	0.943	03/06/06	03/09/06	
2,4,6-Trichlorophenol	EPA 625	6C06054	3.9	19	ND	0.943	03/06/06	03/09/06	
1,2-Diphenylhydrazine/Azobenzene	EPA 625	6C06054	4.7	19	ND	0.943	03/06/06	03/09/06	
N-Nitrosodimethylamine	EPA 625	6C06054	3.5	19	ND	0.943	03/06/06	03/09/06	
Surrogate: 2-Fluorophenol (30-120%)									63 %
Surrogate: Phenol-d6 (35-120%)									67 %
Surrogate: 2,4,6-Tribromophenol (45-120%)									84 %
Surrogate: Nitrobenzene-d5 (45-120%)									67 %
Surrogate: 2-Fluorobiphenyl (45-120%)									71 %
Surrogate: Terphenyl-d14 (45-120%)									89 %

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Michele Chamberlin
Project Manager

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MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 007

Report Number: IPB2647

Sampled: 02/28/06
Received: 02/28/06

ORGANOCHLORINE PESTICIDES (EPA 608)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB2647-01 (Outfall 007 - Water) - cont.									
Reporting Units: ug/l									
Aldrin	EPA 608	6C05031	0.028	0.094	ND	0.943	03/05/06	03/07/06	
alpha-BHC	EPA 608	6C05031	0.019	0.094	ND	0.943	03/05/06	03/07/06	
beta-BHC	EPA 608	6C05031	0.014	0.094	ND	0.943	03/05/06	03/07/06	
delta-BHC	EPA 608	6C05031	0.019	0.19	ND	0.943	03/05/06	03/07/06	
gamma-BHC (Lindane)	EPA 608	6C05031	0.019	0.094	ND	0.943	03/05/06	03/07/06	
Chlordane	EPA 608	6C05031	0.19	0.94	ND	0.943	03/05/06	03/07/06	
4,4'-DDD	EPA 608	6C05031	0.019	0.094	ND	0.943	03/05/06	03/07/06	
4,4'-DDE	EPA 608	6C05031	0.024	0.094	ND	0.943	03/05/06	03/07/06	
4,4'-DDT	EPA 608	6C05031	0.033	0.094	ND	0.943	03/05/06	03/07/06	
Dieldrin	EPA 608	6C05031	0.014	0.094	ND	0.943	03/05/06	03/07/06	
Endosulfan I	EPA 608	6C05031	0.014	0.094	ND	0.943	03/05/06	03/07/06	
Endosulfan II	EPA 608	6C05031	0.038	0.094	ND	0.943	03/05/06	03/07/06	
Endosulfan sulfate	EPA 608	6C05031	0.019	0.19	ND	0.943	03/05/06	03/07/06	
Endrin	EPA 608	6C05031	0.019	0.094	ND	0.943	03/05/06	03/07/06	
Endrin aldehyde	EPA 608	6C05031	0.042	0.094	ND	0.943	03/05/06	03/07/06	
Endrin ketone	EPA 608	6C05031	0.019	0.094	ND	0.943	03/05/06	03/07/06	
Heptachlor	EPA 608	6C05031	0.028	0.094	ND	0.943	03/05/06	03/07/06	
Heptachlor epoxide	EPA 608	6C05031	0.028	0.094	ND	0.943	03/05/06	03/07/06	
Methoxychlor	EPA 608	6C05031	0.033	0.094	ND	0.943	03/05/06	03/07/06	
Toxaphene	EPA 608	6C05031	1.4	4.7	ND	0.943	03/05/06	03/07/06	
<i>Surrogate: Tetrachloro-m-xylene (35-115%)</i>					55 %				
<i>Surrogate: Decachlorobiphenyl (45-120%)</i>					61 %				

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Michele Chamberlin
Project Manager

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 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 007

Report Number: IPB2647

Sampled: 02/28/06
 Received: 02/28/06

TOTAL PCBS (EPA 608)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB2647-01 (Outfall 007 - Water) - cont.									
Reporting Units: ug/l									
Aroclor 1016	EPA 608	6C05031	0.19	0.94	ND	0.943	03/05/06	03/06/06	
Aroclor 1221	EPA 608	6C05031	0.094	0.94	ND	0.943	03/05/06	03/06/06	
Aroclor 1232	EPA 608	6C05031	0.24	0.94	ND	0.943	03/05/06	03/06/06	
Aroclor 1242	EPA 608	6C05031	0.24	0.94	ND	0.943	03/05/06	03/06/06	
Aroclor 1248	EPA 608	6C05031	0.24	0.94	ND	0.943	03/05/06	03/06/06	
Aroclor 1254	EPA 608	6C05031	0.24	0.94	ND	0.943	03/05/06	03/06/06	
Aroclor 1260	EPA 608	6C05031	0.38	0.94	ND	0.943	03/05/06	03/06/06	
<i>Surrogate: Decachlorobiphenyl (45-120%)</i>					83 %				

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 Michele Chamberlin
 Project Manager

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 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-Pasadena/Boeing	Project ID: Annual Outfall 007	Sampled: 02/28/06
300 North Lake Avenue, Suite 1200	Report Number: IPB2647	Received: 02/28/06
Pasadena, CA 91101		
Attention: Bronwyn Kelly		

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB2647-01 (Outfall 007 - Water) - cont.									
Reporting Units: mg/l									
Boron	EPA 200.7	6C03084	0.0074	0.050	0.026	1	03/03/06	03/07/06	J

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 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 007

Report Number: IPB2647

Sampled: 02/28/06
 Received: 02/28/06

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB2647-01 (Outfall 007 - Water) - cont.									
Reporting Units: ug/l									
Aluminum	EPA 200.7	6C03084	40	50	2600	1	03/03/06	03/04/06	
Antimony	EPA 200.8	6C02098	0.18	2.0	2.6	1	03/02/06	03/02/06	
Arsenic	EPA 200.7	6C03084	4.4	5.0	ND	1	03/03/06	03/04/06	
Beryllium	EPA 200.7	6C03084	0.90	2.0	ND	1	03/03/06	03/04/06	
Cadmium	EPA 200.8	6C02098	0.015	1.0	0.091	1	03/02/06	03/02/06	B, J
Chromium	EPA 200.7	6C03084	2.0	5.0	4.2	1	03/03/06	03/04/06	B, J
Copper	EPA 200.8	6C02098	0.49	2.0	4.1	1	03/02/06	03/02/06	
Lead	EPA 200.8	6C02098	0.040	1.0	2.6	1	03/02/06	03/02/06	
Mercury	EPA 245.1	6C02097	0.063	0.20	ND	1	03/02/06	03/02/06	
Nickel	EPA 200.7	6C03084	2.0	10	4.5	1	03/03/06	03/04/06	J
Selenium	EPA 200.7	6C03084	8.0	10	ND	1	03/03/06	03/04/06	
Silver	EPA 200.7	6C03084	3.0	10	ND	1	03/03/06	03/04/06	
Thallium	EPA 200.8	6C02098	0.15	1.0	ND	1	03/02/06	03/02/06	
Vanadium	EPA 200.7	6C03084	3.0	10	6.9	1	03/03/06	03/04/06	J
Zinc	EPA 200.7	6C03084	15	20	34	1	03/03/06	03/04/06	

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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 007

Report Number: IPB2647

Sampled: 02/28/06

Received: 02/28/06

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB2647-01 (Outfall 007 - Water) - cont.									
Reporting Units: mg/l									
Chloride	EPA 300.0	6B28141	0.26	0.50	2.9	1	02/28/06	03/01/06	
Nitrate/Nitrite-N	EPA 300.0	6B28141	0.072	0.26	0.53	1	02/28/06	03/01/06	
Oil & Grease	EPA 413.1	6C08046	0.90	4.8	ND	1	03/08/06	03/08/06	
Sulfate	EPA 300.0	6B28141	0.18	0.50	4.8	1	02/28/06	03/01/06	
Total Dissolved Solids	SM2540C	6C03069	N/A	10	110	1	03/03/06	03/03/06	
Total Suspended Solids	EPA 160.2	6C05025	10	10	15	1	03/05/06	03/05/06	

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NPDES - 2357



MWH-Pasadena/Boeing
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Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 007

Report Number: IPB2647

Sampled: 02/28/06

Received: 02/28/06

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB2647-01 (Outfall 007 - Water) - cont.									
Reporting Units: ug/l									
Total Cyanide	EPA 335.2	6C02125	2.2	5.0	2.3	1	03/02/06	03/02/06	J
Perchlorate	EPA 314.0	6C03066	0.80	4.0	ND	1	03/03/06	03/03/06	

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Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 007

Report Number: IPB2647

Sampled: 02/28/06
Received: 02/28/06

SHORT HOLD TIME DETAIL REPORT

	Hold Time (in days)	Date/Time Sampled	Date/Time Received	Date/Time Extracted	Date/Time Analyzed
Sample ID: Outfall 007 (IPB2647-01) - Water					
EPA 300.0	2	02/28/2006 08:25	02/28/2006 18:35	02/28/2006 23:30	03/01/2006 03:52
EPA 624	3	02/28/2006 08:25	02/28/2006 18:35	03/03/2006 00:00	03/03/2006 14:57
Sample ID: Trip Blank (IPB2647-02) - Water					
EPA 624	3	02/28/2006 15:45	02/28/2006 18:35	03/03/2006 00:00	03/03/2006 10:15

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 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 007

Report Number: IPB2647

Sampled: 02/28/06
 Received: 02/28/06

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	RPD Limits	RPD RPD	Data Qualifiers
Batch: 6C03009 Extracted: 03/03/06										
Blank Analyzed: 03/03/2006 (6C03009-BLK1)										
Benzene	ND	1.0	0.28	ug/l						
Bromodichloromethane	ND	2.0	0.30	ug/l						
Bromoform	ND	5.0	0.32	ug/l						
Bromomethane	ND	5.0	0.42	ug/l						
Carbon tetrachloride	ND	0.50	0.28	ug/l						
Chlorobenzene	ND	2.0	0.36	ug/l						
Chloroethane	ND	5.0	0.40	ug/l						
Chloroform	ND	2.0	0.33	ug/l						
Chloromethane	ND	5.0	0.30	ug/l						
Dibromochloromethane	ND	2.0	0.28	ug/l						
1,2-Dichlorobenzene	ND	2.0	0.32	ug/l						
1,3-Dichlorobenzene	ND	2.0	0.35	ug/l						
1,4-Dichlorobenzene	ND	2.0	0.37	ug/l						
1,1-Dichloroethane	ND	2.0	0.27	ug/l						
1,2-Dichloroethane	ND	0.50	0.28	ug/l						
1,1-Dichloroethene	ND	5.0	0.42	ug/l						
trans-1,2-Dichloroethene	ND	2.0	0.27	ug/l						
1,2-Dichloropropane	ND	2.0	0.35	ug/l						
cis-1,3-Dichloropropene	ND	2.0	0.22	ug/l						
trans-1,3-Dichloropropene	ND	2.0	0.32	ug/l						
Ethylbenzene	ND	2.0	0.25	ug/l						
Methylene chloride	ND	5.0	0.70	ug/l						
1,1,2,2-Tetrachloroethane	ND	2.0	0.24	ug/l						
Tetrachloroethene	ND	2.0	0.32	ug/l						
Toluene	ND	2.0	0.36	ug/l						
1,1,1-Trichloroethane	ND	2.0	0.30	ug/l						
1,1,2-Trichloroethane	ND	2.0	0.30	ug/l						
Trichloroethene	ND	2.0	0.26	ug/l						
Trichlorofluoromethane	ND	5.0	0.34	ug/l						
Vinyl chloride	ND	0.50	0.26	ug/l						
Xylenes, Total	ND	4.0	0.90	ug/l						
Trichlorotrifluoroethane (Freon 113)	ND	5.0	1.2	ug/l						
Surrogate: Dibromofluoromethane	26.5			ug/l	25.0		106	80-120		
Surrogate: Toluene-d8	27.3			ug/l	25.0		109	80-120		
Surrogate: 4-Bromofluorobenzene	23.2			ug/l	25.0		93	80-120		

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 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 007

Sampled: 02/28/06
 Received: 02/28/06

Report Number: IPB2647

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	Limit	RPD	RPD Limit	Data Qualifiers
Batch: 6C03009 Extracted: 03/03/06											
LCS Analyzed: 03/03/2006 (6C03009-BS1)											
Benzene	27.4	1.0	0.28	ug/l	25.0		110	65-120			
Bromodichloromethane	27.0	2.0	0.30	ug/l	25.0		108	65-135			
Bromoform	20.1	5.0	0.32	ug/l	25.0		80	50-130			
Bromomethane	26.2	5.0	0.42	ug/l	25.0		105	60-140			
Carbon tetrachloride	25.6	0.50	0.28	ug/l	25.0		102	65-140			
Chlorobenzene	26.9	2.0	0.36	ug/l	25.0		108	70-125			
Chloroethane	28.8	5.0	0.40	ug/l	25.0		115	55-140			
Chloroform	27.6	2.0	0.33	ug/l	25.0		110	65-130			
Chloromethane	24.9	5.0	0.30	ug/l	25.0		100	40-140			
Dibromochloromethane	25.2	2.0	0.28	ug/l	25.0		101	65-140			
1,2-Dichlorobenzene	27.4	2.0	0.32	ug/l	25.0		110	70-120			
1,3-Dichlorobenzene	25.1	2.0	0.35	ug/l	25.0		100	70-125			
1,4-Dichlorobenzene	24.8	2.0	0.37	ug/l	25.0		99	70-125			
1,1-Dichloroethane	27.4	2.0	0.27	ug/l	25.0		110	65-130			
1,2-Dichloroethane	27.2	0.50	0.28	ug/l	25.0		109	60-140			
1,1-Dichloroethene	30.5	5.0	0.42	ug/l	25.0		122	70-130			
trans-1,2-Dichloroethene	28.9	2.0	0.27	ug/l	25.0		116	65-130			
1,2-Dichloropropane	28.4	2.0	0.35	ug/l	25.0		114	65-125			
cis-1,3-Dichloropropene	27.0	2.0	0.22	ug/l	25.0		108	70-130			
trans-1,3-Dichloropropene	26.8	2.0	0.32	ug/l	25.0		107	65-130			
Ethylbenzene	26.6	2.0	0.25	ug/l	25.0		106	70-125			
Methylene chloride	29.6	5.0	0.70	ug/l	25.0		118	60-130			
1,1,2,2-Tetrachloroethane	30.2	2.0	0.24	ug/l	25.0		121	55-130			
Tetrachloroethene	26.0	2.0	0.32	ug/l	25.0		104	65-125			
Toluene	27.1	2.0	0.36	ug/l	25.0		108	70-125			
1,1,1-Trichloroethane	23.4	2.0	0.30	ug/l	25.0		94	65-135			
1,1,2-Trichloroethane	30.4	2.0	0.30	ug/l	25.0		122	65-125			
Trichloroethene	29.5	2.0	0.26	ug/l	25.0		118	70-125			
Trichlorofluoromethane	23.9	5.0	0.34	ug/l	25.0		96	60-140			
Vinyl chloride	27.1	0.50	0.26	ug/l	25.0		108	50-130			
Surrogate: Dibromofluoromethane	28.8			ug/l	25.0		115	80-120			
Surrogate: Toluene-d8	28.0			ug/l	25.0		112	80-120			
Surrogate: 4-Bromofluorobenzene	27.8			ug/l	25.0		111	80-120			

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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 007
 Report Number: IPB2647

Sampled: 02/28/06
 Received: 02/28/06

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 6C03009 Extracted: 03/03/06											
Matrix Spike Analyzed: 03/03/2006 (6C03009-MS1)					Source: IPB2645-01RE1						
Benzene	26.0	1.0	0.28	ug/l	25.0	ND	104	60-125			
Bromodichloromethane	24.7	2.0	0.30	ug/l	25.0	ND	99	65-135			
Bromoform	20.3	5.0	0.32	ug/l	25.0	ND	81	50-135			
Bromomethane	24.8	5.0	0.42	ug/l	25.0	ND	99	50-145			
Carbon tetrachloride	24.6	0.50	0.28	ug/l	25.0	ND	98	65-140			
Chlorobenzene	26.1	2.0	0.36	ug/l	25.0	ND	104	70-125			
Chloroethane	27.7	5.0	0.40	ug/l	25.0	ND	111	50-140			
Chloroform	25.2	2.0	0.33	ug/l	25.0	ND	101	65-135			
Chloromethane	23.6	5.0	0.30	ug/l	25.0	ND	94	35-140			
Dibromochloromethane	24.8	2.0	0.28	ug/l	25.0	ND	99	60-140			
1,2-Dichlorobenzene	26.2	2.0	0.32	ug/l	25.0	ND	105	70-125			
1,3-Dichlorobenzene	24.8	2.0	0.35	ug/l	25.0	ND	99	70-125			
1,4-Dichlorobenzene	24.1	2.0	0.37	ug/l	25.0	ND	96	70-125			
1,1-Dichloroethane	25.7	2.0	0.27	ug/l	25.0	ND	103	60-130			
1,2-Dichloroethane	24.5	0.50	0.28	ug/l	25.0	ND	98	60-140			
1,1-Dichloroethene	28.4	5.0	0.42	ug/l	25.0	ND	114	60-135			
trans-1,2-Dichloroethene	27.2	2.0	0.27	ug/l	25.0	ND	109	60-135			
1,2-Dichloropropane	26.3	2.0	0.35	ug/l	25.0	ND	105	60-125			
cis-1,3-Dichloropropene	24.4	2.0	0.22	ug/l	25.0	ND	98	65-135			
trans-1,3-Dichloropropene	24.1	2.0	0.32	ug/l	25.0	ND	96	65-140			
Ethylbenzene	26.0	2.0	0.25	ug/l	25.0	ND	104	65-130			
Methylene chloride	26.9	5.0	0.70	ug/l	25.0	ND	108	55-130			
1,1,2,2-Tetrachloroethane	30.7	2.0	0.24	ug/l	25.0	ND	123	55-140			
Tetrachloroethene	26.3	2.0	0.32	ug/l	25.0	ND	105	60-130			
Toluene	25.4	2.0	0.36	ug/l	25.0	ND	102	65-125			
1,1,1-Trichloroethane	22.2	2.0	0.30	ug/l	25.0	ND	89	65-140			
1,1,2-Trichloroethane	26.3	2.0	0.30	ug/l	25.0	ND	105	60-130			
Trichloroethene	26.3	2.0	0.26	ug/l	25.0	ND	105	60-125			
Trichlorofluoromethane	22.4	5.0	0.34	ug/l	25.0	ND	90	55-145			
Vinyl chloride	26.1	0.50	0.26	ug/l	25.0	ND	104	40-135			
Surrogate: Dibromofluoromethane	27.9			ug/l	25.0		112	80-120			
Surrogate: Toluene-d8	27.0			ug/l	25.0		108	80-120			
Surrogate: 4-Bromofluorobenzene	26.8			ug/l	25.0		107	80-120			

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Attention: Bronwyn Kelly

Project ID: Annual Outfall 007

Report Number: IPB2647

Sampled: 02/28/06
Received: 02/28/06

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	Limit	RPD	RPD Limit	Data Qualifiers
Batch: 6C03009 Extracted: 03/03/06											
Matrix Spike Dup Analyzed: 03/03/2006 (6C03009-MSD1)						Source: IPB2645-01RE1					
Benzene	26.1	1.0	0.28	ug/l	25.0	ND	104	60-125	0	20	
Bromodichloromethane	25.7	2.0	0.30	ug/l	25.0	ND	103	65-135	4	20	
Bromoform	20.5	5.0	0.32	ug/l	25.0	ND	82	50-135	1	25	
Bromomethane	22.2	5.0	0.42	ug/l	25.0	ND	89	50-145	11	25	
Carbon tetrachloride	25.3	0.50	0.28	ug/l	25.0	ND	101	65-140	3	25	
Chlorobenzene	25.6	2.0	0.36	ug/l	25.0	ND	102	70-125	2	20	
Chloroethane	25.7	5.0	0.40	ug/l	25.0	ND	103	50-140	7	25	
Chloroform	26.0	2.0	0.33	ug/l	25.0	ND	104	65-135	3	20	
Chloromethane	22.7	5.0	0.30	ug/l	25.0	ND	91	35-140	4	25	
Dibromochloromethane	25.4	2.0	0.28	ug/l	25.0	ND	102	60-140	2	25	
1,2-Dichlorobenzene	26.7	2.0	0.32	ug/l	25.0	ND	107	70-125	2	20	
1,3-Dichlorobenzene	24.6	2.0	0.35	ug/l	25.0	ND	98	70-125	1	20	
1,4-Dichlorobenzene	24.0	2.0	0.37	ug/l	25.0	ND	96	70-125	0	20	
1,1-Dichloroethane	26.0	2.0	0.27	ug/l	25.0	ND	104	60-130	1	20	
1,2-Dichloroethane	26.0	0.50	0.28	ug/l	25.0	ND	104	60-140	6	20	
1,1-Dichloroethene	27.9	5.0	0.42	ug/l	25.0	ND	112	60-135	2	20	
trans-1,2-Dichloroethene	27.5	2.0	0.27	ug/l	25.0	ND	110	60-135	1	20	
1,2-Dichloropropane	26.3	2.0	0.35	ug/l	25.0	ND	105	60-125	0	20	
cis-1,3-Dichloropropene	25.2	2.0	0.22	ug/l	25.0	ND	101	65-135	3	20	
trans-1,3-Dichloropropene	25.6	2.0	0.32	ug/l	25.0	ND	102	65-140	6	25	
Ethylbenzene	25.9	2.0	0.25	ug/l	25.0	ND	104	65-130	0	20	
Methylene chloride	27.3	5.0	0.70	ug/l	25.0	ND	109	55-130	1	20	
1,1,2,2-Tetrachloroethane	37.0	2.0	0.24	ug/l	25.0	ND	148	55-140	19	30	MI
Tetrachloroethene	25.4	2.0	0.32	ug/l	25.0	ND	102	60-130	3	20	
Toluene	25.6	2.0	0.36	ug/l	25.0	ND	102	65-125	1	20	
1,1,1-Trichloroethane	23.0	2.0	0.30	ug/l	25.0	ND	92	65-140	4	20	
1,1,2-Trichloroethane	28.8	2.0	0.30	ug/l	25.0	ND	115	60-130	9	25	
Trichloroethene	25.8	2.0	0.26	ug/l	25.0	ND	103	60-125	2	20	
Trichlorofluoromethane	22.6	5.0	0.34	ug/l	25.0	ND	90	55-145	1	25	
Vinyl chloride	23.1	0.50	0.26	ug/l	25.0	ND	92	40-135	12	30	
Surrogate: Dibromofluoromethane	28.2			ug/l	25.0		113	80-120			
Surrogate: Toluene-d8	27.4			ug/l	25.0		110	80-120			
Surrogate: 4-Bromofluorobenzene	26.4			ug/l	25.0		106	80-120			

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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 007

Report Number: IPB2647

Sampled: 02/28/06
 Received: 02/28/06

METHOD BLANK/QC DATA

PURGEABLES-- GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC Limits	RPD RPD	RPD Limit	Data Qualifiers
Batch: 6C03009 Extracted: 03/03/06										
Blank Analyzed: 03/03/2006 (6C03009-BLK1)										
Acrolein	ND	50	4.6	ug/l						
Acrylonitrile	ND	50	0.70	ug/l						
2-Chloroethyl vinyl ether	ND	5.0	1.8	ug/l						
Surrogate: Dibromofluoromethane	26.5			ug/l	25.0		106	80-120		
Surrogate: Toluene-d8	27.3			ug/l	25.0		109	80-120		
Surrogate: 4-Bromofluorobenzene	23.2			ug/l	25.0		93	80-120		
LCS Analyzed: 03/03/2006 (6C03009-BS1)										
2-Chloroethyl vinyl ether	16.0	5.0	1.8	ug/l	25.0		64	25-170		
Surrogate: Dibromofluoromethane	28.8			ug/l	25.0		115	80-120		
Surrogate: Toluene-d8	28.0			ug/l	25.0		112	80-120		
Surrogate: 4-Bromofluorobenzene	27.8			ug/l	25.0		111	80-120		
Matrix Spike Analyzed: 03/03/2006 (6C03009-MS1) Source: IPB2645-01RE1										
2-Chloroethyl vinyl ether	ND	5.0	1.8	ug/l	25.0	ND		25-170		M2
Surrogate: Dibromofluoromethane	27.9			ug/l	25.0		112	80-120		
Surrogate: Toluene-d8	27.0			ug/l	25.0		108	80-120		
Surrogate: 4-Bromofluorobenzene	26.8			ug/l	25.0		107	80-120		
Matrix Spike Dup Analyzed: 03/03/2006 (6C03009-MSD1) Source: IPB2645-01RE1										
2-Chloroethyl vinyl ether	ND	5.0	1.8	ug/l	25.0	ND		25-170	25	M2
Surrogate: Dibromofluoromethane	28.2			ug/l	25.0		113	80-120		
Surrogate: Toluene-d8	27.4			ug/l	25.0		110	80-120		
Surrogate: 4-Bromofluorobenzene	26.4			ug/l	25.0		106	80-120		

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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 007
 Report Number: IPB2647

Sampled: 02/28/06
 Received: 02/28/06

METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Data Qualifiers
Batch: 6C06054 Extracted: 03/06/06											
Blank Analyzed: 03/08/2006 (6C06054-BLK1)											
Acenaphthene	ND	10	4.3	ug/l							
Acenaphthylene	ND	10	3.2	ug/l							
Aniline	ND	10	2.9	ug/l							
Anthracene	ND	10	3.2	ug/l							
Benzidine	ND	20	5.2	ug/l							
Benzoic acid	ND	20	2.6	ug/l							
Benzo(a)anthracene	ND	10	3.7	ug/l							
Benzo(b)fluoranthene	ND	10	2.7	ug/l							
Benzo(k)fluoranthene	ND	10	3.4	ug/l							
Benzo(g,h,i)perylene	ND	10	5.3	ug/l							
Benzo(a)pyrene	ND	10	3.5	ug/l							
Benzyl alcohol	ND	20	2.5	ug/l							
Bis(2-chloroethoxy)methane	ND	10	3.9	ug/l							
Bis(2-chloroethyl)ether	ND	10	4.4	ug/l							
Bis(2-chloroisopropyl)ether	ND	10	4.6	ug/l							
Bis(2-ethylhexyl)phthalate	ND	50	5.2	ug/l							
4-Bromophenyl phenyl ether	ND	10	4.6	ug/l							
Butyl benzyl phthalate	ND	20	3.5	ug/l							
4-Chloroaniline	ND	10	6.0	ug/l							
2-Chloronaphthalene	ND	10	4.0	ug/l							
4-Chloro-3-methylphenol	ND	20	3.5	ug/l							
2-Chlorophenol	ND	10	4.2	ug/l							
4-Chlorophenyl phenyl ether	ND	10	3.0	ug/l							
Chrysene	ND	10	2.8	ug/l							
Dibenz(a,h)anthracene	ND	20	4.7	ug/l							
Dibenzofuran	ND	10	2.6	ug/l							
Di-n-butyl phthalate	ND	20	2.8	ug/l							
1,3-Dichlorobenzene	ND	10	4.1	ug/l							
1,4-Dichlorobenzene	ND	10	3.9	ug/l							
1,2-Dichlorobenzene	ND	10	4.5	ug/l							
3,3-Dichlorobenzidine	ND	20	11	ug/l							
2,4-Dichlorophenol	ND	10	4.1	ug/l							
Diethyl phthalate	ND	10	3.1	ug/l							
2,4-Dimethylphenol	ND	20	4.4	ug/l							
Dimethyl phthalate	ND	10	3.6	ug/l							

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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 007

Report Number: IPB2647

Sampled: 02/28/06
 Received: 02/28/06

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 Limits	RPD RPD	Data Limit	Qualifiers
Batch: 6C06054 Extracted: 03/06/06											
Blank Analyzed: 03/08/2006 (6C06054-BLK1)											
4,6-Dinitro-2-methylphenol	ND	20	5.1	ug/l							
2,4-Dinitrophenol	ND	20	5.3	ug/l							
2,4-Dinitrotoluene	ND	10	4.2	ug/l							
2,6-Dinitrotoluene	ND	10	3.2	ug/l							
Di-n-octyl phthalate	ND	20	4.7	ug/l							
Fluoranthene	ND	10	4.2	ug/l							
Fluorene	ND	10	3.9	ug/l							
Hexachlorobenzene	ND	10	4.8	ug/l							
Hexachlorobutadiene	ND	10	4.2	ug/l							
Hexachlorocyclopentadiene	ND	20	3.4	ug/l							
Hexachloroethane	ND	10	4.2	ug/l							
Indeno(1,2,3-cd)pyrene	ND	20	5.4	ug/l							
Isophorone	ND	10	3.7	ug/l							
2-Methylnaphthalene	ND	10	3.0	ug/l							
2-Methylphenol	ND	10	3.7	ug/l							
4-Methylphenol	ND	10	3.8	ug/l							
Naphthalene	ND	10	4.5	ug/l							
2-Nitroaniline	ND	20	3.9	ug/l							
3-Nitroaniline	ND	20	4.5	ug/l							
4-Nitroaniline	ND	20	4.9	ug/l							
Nitrobenzene	ND	20	4.2	ug/l							
2-Nitrophenol	ND	10	4.2	ug/l							
4-Nitrophenol	ND	20	6.6	ug/l							
N-Nitrosodiphenylamine	ND	10	4.0	ug/l							
N-Nitroso-di-n-propylamine	ND	10	3.6	ug/l							
Pentachlorophenol	ND	20	4.0	ug/l							
Phenanthrene	ND	10	3.3	ug/l							
Phenol	ND	10	4.0	ug/l							
Pyrene	ND	10	3.9	ug/l							
1,2,4-Trichlorobenzene	ND	10	4.4	ug/l							
2,4,5-Trichlorophenol	ND	20	3.6	ug/l							
2,4,6-Trichlorophenol	ND	20	4.1	ug/l							
1,2-Diphenylhydrazine/Azobenzene	ND	20	5.0	ug/l							
N-Nitrosodimethylamine	ND	20	3.7	ug/l							
Surrogate: 2-Fluorophenol	127			ug/l	200		64	30-120			

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MWH-Pasadena/Boeing Project ID: Annual Outfall 007
300 North Lake Avenue, Suite 1200 Report Number: IPB2647
Pasadena, CA 91101
Attention: Bronwyn Kelly
Sampled: 02/28/06
Received: 02/28/06

METHOD BLANK/QC DATA

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

Table with columns: Analyte, Result, Reporting Limit, MDL, Units, Spike Level, Source Result, %REC, %REC Limits, RPD, RPD Limit, Data Qualifiers. Includes sections for Batch: 6C06054, Blank Analyzed: 03/08/2006, and LCS Analyzed: 03/08/2006.

M-NR1

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Project Manager

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MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 007
Report Number: IPB2647

Sampled: 02/28/06
Received: 02/28/06

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 Limits	RPD RPD	RPD Limit	Data Qualifiers
Batch: 6C06054 Extracted: 03/06/06											
LCS Analyzed: 03/08/2006 (6C06054-BS1)											
1,2-Dichlorobenzene	61.1	10	4.5	ug/l	100	61	35-120				M-NR1
3,3-Dichlorobenzidine	105	20	11	ug/l	100	105	45-130				
2,4-Dichlorophenol	78.4	10	4.1	ug/l	100	78	55-120				
Diethyl phthalate	80.7	10	3.1	ug/l	100	81	55-120				
2,4-Dimethylphenol	60.1	20	4.4	ug/l	100	60	30-120				
Dimethyl phthalate	51.4	10	3.6	ug/l	100	51	30-120				
4,6-Dinitro-2-methylphenol	83.2	20	5.1	ug/l	100	83	50-120				
2,4-Dinitrophenol	75.0	20	5.3	ug/l	100	75	40-120				
2,4-Dinitrotoluene	82.5	10	4.2	ug/l	100	82	60-120				
2,6-Dinitrotoluene	81.0	10	3.2	ug/l	100	81	60-120				
Di-n-octyl phthalate	76.5	20	4.7	ug/l	100	76	60-130				
Fluoranthene	88.2	10	4.2	ug/l	100	88	55-120				
Fluorene	81.1	10	3.9	ug/l	100	81	60-120				
Hexachlorobenzene	96.4	10	4.8	ug/l	100	96	50-120				
Hexachlorobutadiene	71.6	10	4.2	ug/l	100	72	40-120				
Hexachlorocyclopentadiene	79.5	20	3.4	ug/l	100	80	15-120				
Hexachloroethane	57.1	10	4.2	ug/l	100	57	35-120				
Indeno(1,2,3-cd)pyrene	104	20	5.4	ug/l	100	104	40-130				
Isophorone	71.9	10	3.7	ug/l	100	72	50-120				
2-Methylnaphthalene	76.2	10	3.0	ug/l	100	76	50-120				
2-Methylphenol	72.8	10	3.7	ug/l	100	73	45-120				
4-Methylphenol	75.4	10	3.8	ug/l	100	75	45-120				
Naphthalene	74.5	10	4.5	ug/l	100	74	50-120				
2-Nitroaniline	80.0	20	3.9	ug/l	100	80	60-120				
3-Nitroaniline	81.3	20	4.5	ug/l	100	81	55-120				
4-Nitroaniline	85.4	20	4.9	ug/l	100	85	50-125				
Nitrobenzene	70.7	20	4.2	ug/l	100	71	50-120				
2-Nitrophenol	74.0	10	4.2	ug/l	100	74	55-120				
4-Nitrophenol	80.1	20	6.6	ug/l	100	80	45-120				
N-Nitrosodiphenylamine	82.7	10	4.0	ug/l	100	83	55-120				
N-Nitroso-di-n-propylamine	74.1	10	3.6	ug/l	100	74	45-120				
Pentachlorophenol	99.9	20	4.0	ug/l	100	100	50-120				
Phenanthrene	88.0	10	3.3	ug/l	100	88	55-120				
Phenol	69.7	10	4.0	ug/l	100	70	45-120				
Pyrene	88.2	10	3.9	ug/l	100	88	50-120				

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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 007
 Report Number: IPB2647

Sampled: 02/28/06
 Received: 02/28/06

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 Limits	RPD RPD	Data Limit	Qualifiers
Batch: 6C06054 Extracted: 03/06/06											
LCS Analyzed: 03/08/2006 (6C06054-BS1)											
1,2,4-Trichlorobenzene	70.2	10	4.4	ug/l	100	70	45-120				
2,4,5-Trichlorophenol	82.2	20	3.6	ug/l	100	82	60-120				
2,4,6-Trichlorophenol	84.5	20	4.1	ug/l	100	84	60-120				
1,2-Diphenylhydrazine/Azobenzene	76.8	20	5.0	ug/l	100	77	60-120				
N-Nitrosodimethylamine	66.7	20	3.7	ug/l	100	67	40-120				
Surrogate: 2-Fluorophenol	120			ug/l	200	60	30-120				
Surrogate: Phenol-d6	136			ug/l	200	68	35-120				
Surrogate: 2,4,6-Tribromophenol	188			ug/l	200	94	45-120				
Surrogate: Nitrobenzene-d5	69.1			ug/l	100	69	45-120				
Surrogate: 2-Fluorobiphenyl	80.3			ug/l	100	80	45-120				
Surrogate: Terphenyl-d14	86.9			ug/l	100	87	45-120				
LCS Dup Analyzed: 03/08/2006 (6C06054-BSD1)											
Acenaphthene	69.9	10	4.3	ug/l	100	70	55-120	15	20		
Acenaphthylene	73.7	10	3.2	ug/l	100	74	55-120	15	20		
Aniline	59.9	10	2.9	ug/l	100	60	35-120	20	25		
Anthracene	75.2	10	3.2	ug/l	100	75	55-120	18	20		
Benzidine	73.2	20	5.2	ug/l	100	73	20-160	59	35		R-7
Benzoic acid	85.7	20	2.6	ug/l	100	86	35-120	21	30		
Benzo(a)anthracene	75.5	10	3.7	ug/l	100	76	60-120	16	20		
Benzo(b)fluoranthene	89.7	10	2.7	ug/l	100	90	50-120	12	25		
Benzo(k)fluoranthene	86.4	10	3.4	ug/l	100	86	50-120	16	20		
Benzo(g,h,i)perylene	88.0	10	5.3	ug/l	100	88	40-125	24	25		
Benzo(a)pyrene	87.5	10	3.5	ug/l	100	88	55-120	14	25		
Benzyl alcohol	61.0	20	2.5	ug/l	100	61	45-120	19	20		
Bis(2-chloroethoxy)methane	62.7	10	3.9	ug/l	100	63	55-120	18	20		
Bis(2-chloroethyl)ether	57.5	10	4.4	ug/l	100	58	50-120	20	20		
Bis(2-chloroisopropyl)ether	58.8	10	4.6	ug/l	100	59	45-120	18	20		
Bis(2-ethylhexyl)phthalate	70.7	50	5.2	ug/l	100	71	60-130	21	20		R-7
4-Bromophenyl phenyl ether	72.0	10	4.6	ug/l	100	72	50-120	19	25		
Butyl benzyl phthalate	65.7	20	3.5	ug/l	100	66	55-125	23	20		R-7
4-Chloroaniline	65.1	10	6.0	ug/l	100	65	50-120	19	25		
2-Chloronaphthalene	70.4	10	4.0	ug/l	100	70	55-120	15	20		
4-Chloro-3-methylphenol	68.0	20	3.5	ug/l	100	68	60-120	13	25		
2-Chlorophenol	71.7	10	4.2	ug/l	100	72	45-120	0	25		
4-Chlorophenyl phenyl ether	73.8	10	3.0	ug/l	100	74	55-120	16	20		

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MWH-Pasadena/Boeing Project ID: Annual Outfall 007
300 North Lake Avenue, Suite 1200 Report Number: IPB2647
Pasadena, CA 91101
Attention: Bronwyn Kelly
Sampled: 02/28/06
Received: 02/28/06

METHOD BLANK/QC DATA

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

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Data Qualifiers
Batch: 6C06054 Extracted: 03/06/06											
LCS Dup Analyzed: 03/08/2006 (6C06054-BSD1)											
Chrysene	76.1	10	2.8	ug/l	100	76	60-120	17	20		
Dibenz(a,h)anthracene	91.5	20	4.7	ug/l	100	92	45-130	20	25		
Dibenzofuran	70.0	10	2.6	ug/l	100	70	60-120	14	20		
Di-n-butyl phthalate	69.0	20	2.8	ug/l	100	69	55-125	24	20		R-7
1,3-Dichlorobenzene	53.2	10	4.1	ug/l	100	53	35-120	5	25		
1,4-Dichlorobenzene	52.3	10	3.9	ug/l	100	52	35-120	9	25		
1,2-Dichlorobenzene	54.8	10	4.5	ug/l	100	55	35-120	11	25		
3,3-Dichlorobenzidine	85.4	20	11	ug/l	100	85	45-130	21	25		
2,4-Dichlorophenol	76.3	10	4.1	ug/l	100	76	55-120	3	20		
Diethyl phthalate	21.0	10	3.1	ug/l	100	21	55-120	117	20		L2, N-2
2,4-Dimethylphenol	53.8	20	4.4	ug/l	100	54	30-120	11	25		
Dimethyl phthalate	14.3	10	3.6	ug/l	100	14	30-120	113	20		L2, N-2
4,6-Dinitro-2-methylphenol	88.7	20	5.1	ug/l	100	89	50-120	6	25		
2,4-Dinitrophenol	84.5	20	5.3	ug/l	100	84	40-120	12	25		
2,4-Dinitrotoluene	69.9	10	4.2	ug/l	100	70	60-120	17	20		
2,6-Dinitrotoluene	71.5	10	3.2	ug/l	100	72	60-120	12	20		
Di-n-octyl phthalate	62.1	20	4.7	ug/l	100	62	60-130	21	20		R-7
Fluoranthene	76.2	10	4.2	ug/l	100	76	55-120	15	20		
Fluorene	69.7	10	3.9	ug/l	100	70	60-120	15	20		
Hexachlorobenzene	79.2	10	4.8	ug/l	100	79	50-120	20	20		
Hexachlorobutadiene	52.8	10	4.2	ug/l	100	53	40-120	30	25		R-7
Hexachlorocyclopentadiene	57.1	20	3.4	ug/l	100	57	15-120	33	30		R-7
Hexachloroethane	48.5	10	4.2	ug/l	100	48	35-120	16	25		
Indeno(1,2,3-cd)pyrene	84.4	20	5.4	ug/l	100	84	40-130	21	25		
Isophorone	58.9	10	3.7	ug/l	100	59	50-120	20	20		
2-Methylnaphthalene	63.2	10	3.0	ug/l	100	63	50-120	19	20		
2-Methylphenol	61.7	10	3.7	ug/l	100	62	45-120	17	20		
4-Methylphenol	63.8	10	3.8	ug/l	100	64	45-120	17	20		
Naphthalene	62.3	10	4.5	ug/l	100	62	50-120	18	20		
2-Nitroaniline	69.6	20	3.9	ug/l	100	70	60-120	14	20		
3-Nitroaniline	69.2	20	4.5	ug/l	100	69	55-120	16	25		
4-Nitroaniline	70.8	20	4.9	ug/l	100	71	50-125	19	20		
Nitrobenzene	57.9	20	4.2	ug/l	100	58	50-120	20	25		
2-Nitrophenol	76.8	10	4.2	ug/l	100	77	55-120	4	25		
4-Nitrophenol	86.7	20	6.6	ug/l	100	87	45-120	8	25		

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Michele Chamberlin
Project Manager

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300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 007
Report Number: IPB2647

Sampled: 02/28/06
Received: 02/28/06

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 Limits	RPD RPD	Data Qualifiers
Batch: 6C06054 Extracted: 03/06/06										
LCS Dup Analyzed: 03/08/2006 (6C06054-BSD1)										
N-Nitrosodiphenylamine	69.7	10	4.0	ug/l	100	70	55-120	17	20	
N-Nitroso-di-n-propylamine	60.4	10	3.6	ug/l	100	60	45-120	20	20	
Pentachlorophenol	106	20	4.0	ug/l	100	106	50-120	6	25	
Phenanthrene	73.1	10	3.3	ug/l	100	73	55-120	18	20	
Phenol	65.0	10	4.0	ug/l	100	65	45-120	7	25	
Pyrene	70.7	10	3.9	ug/l	100	71	50-120	22	25	
1,2,4-Trichlorobenzene	57.9	10	4.4	ug/l	100	58	45-120	19	20	
2,4,5-Trichlorophenol	87.2	20	3.6	ug/l	100	87	60-120	6	20	
2,4,6-Trichlorophenol	89.5	20	4.1	ug/l	100	90	60-120	6	20	
1,2-Diphenylhydrazine/Azobenzene	65.9	20	5.0	ug/l	100	66	60-120	15	25	
N-Nitrosodimethylamine	55.7	20	3.7	ug/l	100	56	40-120	18	20	
Surrogate: 2-Fluorophenol	126			ug/l	200	63	30-120			
Surrogate: Phenol-d6	131			ug/l	200	66	35-120			
Surrogate: 2,4,6-Tribromophenol	190			ug/l	200	95	45-120			
Surrogate: Nitrobenzene-d5	58.5			ug/l	100	58	45-120			
Surrogate: 2-Fluorobiphenyl	71.2			ug/l	100	71	45-120			
Surrogate: Terphenyl-d14	71.7			ug/l	100	72	45-120			

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MWH-Pasadena/Boeing
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 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 007

Report Number: IPB2647

Sampled: 02/28/06

Received: 02/28/06

METHOD BLANK/QC DATA

ORGANOCHLORINE PESTICIDES (EPA 608)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	RPD Limits	RPD RPD	Data Qualifiers
Batch: 6C05031 Extracted: 03/05/06										
Blank Analyzed: 03/06/2006 (6C05031-BLK1)										
Aldrin	ND	0.10	0.030	ug/l						
alpha-BHC	ND	0.10	0.020	ug/l						
beta-BHC	ND	0.10	0.015	ug/l						
delta-BHC	ND	0.20	0.020	ug/l						
gamma-BHC (Lindane)	ND	0.10	0.020	ug/l						
Chlordane	ND	1.0	0.20	ug/l						
4,4'-DDD	ND	0.10	0.020	ug/l						
4,4'-DDE	ND	0.10	0.025	ug/l						
4,4'-DDT	ND	0.10	0.035	ug/l						
Dieldrin	ND	0.10	0.015	ug/l						
Endosulfan I	ND	0.10	0.015	ug/l						
Endosulfan II	ND	0.10	0.040	ug/l						
Endosulfan sulfate	ND	0.20	0.020	ug/l						
Endrin	ND	0.10	0.020	ug/l						
Endrin aldehyde	ND	0.10	0.045	ug/l						
Endrin ketone	ND	0.10	0.020	ug/l						
Heptachlor	ND	0.10	0.030	ug/l						
Heptachlor epoxide	ND	0.10	0.030	ug/l						
Methoxychlor	ND	0.10	0.035	ug/l						
Toxaphene	ND	5.0	1.5	ug/l						
Surrogate: Tetrachloro-m-xylene	0.350			ug/l	0.500		70	35-115		
Surrogate: Decachlorobiphenyl	0.455			ug/l	0.500		91	45-120		
LCS Analyzed: 03/06/2006 (6C05031-BS1)										
Aldrin	0.389	0.10	0.030	ug/l	0.500		78	35-120		
alpha-BHC	0.434	0.10	0.020	ug/l	0.500		87	45-120		
beta-BHC	0.426	0.10	0.015	ug/l	0.500		85	50-120		
delta-BHC	0.435	0.20	0.020	ug/l	0.500		87	50-120		
gamma-BHC (Lindane)	0.423	0.10	0.020	ug/l	0.500		85	40-120		
4,4'-DDD	0.438	0.10	0.020	ug/l	0.500		88	55-120		
4,4'-DDE	0.419	0.10	0.025	ug/l	0.500		84	50-120		
4,4'-DDT	0.458	0.10	0.035	ug/l	0.500		92	55-120		
Dieldrin	0.431	0.10	0.015	ug/l	0.500		86	50-120		
Endosulfan I	0.406	0.10	0.015	ug/l	0.500		81	50-120		
Endosulfan II	0.421	0.10	0.040	ug/l	0.500		84	55-120		
Endosulfan sulfate	0.429	0.20	0.020	ug/l	0.500		86	60-120		

M-NRI

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NPDES - 2372



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MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 007
Report Number: IPB2647

Sampled: 02/28/06
Received: 02/28/06

METHOD BLANK/QC DATA

ORGANOCHLORINE PESTICIDES (EPA 608)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	RPD RPD	RPD Limit	Data Qualifiers
Batch: 6C05031 Extracted: 03/05/06										
LCS Analyzed: 03/06/2006 (6C05031-BS1)										
Endrin	0.449	0.10	0.020	ug/l	0.500		90		55-120	M-NR1
Endrin aldehyde	0.410	0.10	0.045	ug/l	0.500		82		55-120	
Endrin ketone	0.429	0.10	0.020	ug/l	0.500		86		55-120	
Heptachlor	0.393	0.10	0.030	ug/l	0.500		79		40-115	
Heptachlor epoxide	0.409	0.10	0.030	ug/l	0.500		82		50-120	
Methoxychlor	0.435	0.10	0.035	ug/l	0.500		87		55-120	
Surrogate: Tetrachloro-m-xylene	0.361			ug/l	0.500		72		35-115	
Surrogate: Decachlorobiphenyl	0.412			ug/l	0.500		82		45-120	
LCS Dup Analyzed: 03/06/2006 (6C05031-BSD1)										
Aldrin	0.372	0.10	0.030	ug/l	0.500		74	35-120	4 30	
alpha-BHC	0.413	0.10	0.020	ug/l	0.500		83	45-120	5 30	
beta-BHC	0.413	0.10	0.015	ug/l	0.500		83	50-120	3 30	
delta-BHC	0.425	0.20	0.020	ug/l	0.500		85	50-120	2 30	
gamma-BHC (Lindane)	0.406	0.10	0.020	ug/l	0.500		81	40-120	4 30	
4,4'-DDD	0.422	0.10	0.020	ug/l	0.500		84	55-120	4 30	
4,4'-DDE	0.411	0.10	0.025	ug/l	0.500		82	50-120	2 30	
4,4'-DDT	0.450	0.10	0.035	ug/l	0.500		90	55-120	2 30	
Dieldrin	0.424	0.10	0.015	ug/l	0.500		85	50-120	2 30	
Endosulfan I	0.397	0.10	0.015	ug/l	0.500		79	50-120	2 30	
Endosulfan II	0.415	0.10	0.040	ug/l	0.500		83	55-120	1 30	
Endosulfan sulfate	0.426	0.20	0.020	ug/l	0.500		85	60-120	1 30	
Endrin	0.434	0.10	0.020	ug/l	0.500		87	55-120	3 30	
Endrin aldehyde	0.404	0.10	0.045	ug/l	0.500		81	55-120	1 30	
Endrin ketone	0.424	0.10	0.020	ug/l	0.500		85	55-120	1 30	
Heptachlor	0.377	0.10	0.030	ug/l	0.500		75	40-115	4 30	
Heptachlor epoxide	0.398	0.10	0.030	ug/l	0.500		80	50-120	3 30	
Methoxychlor	0.434	0.10	0.035	ug/l	0.500		87	55-120	0 30	
Surrogate: Tetrachloro-m-xylene	0.339			ug/l	0.500		68	35-115		
Surrogate: Decachlorobiphenyl	0.407			ug/l	0.500		81	45-120		

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Received: 02/28/06

METHOD BLANK/QC DATA

TOTAL PCBS (EPA 608)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	RPD Limits	RPD RPD	Data Qualifiers
Batch: 6C05031 Extracted: 03/05/06										
Blank Analyzed: 03/06/2006 (6C05031-BLK1)										
Aroclor 1016	ND	1.0	0.20	ug/l						
Aroclor 1221	ND	1.0	0.10	ug/l						
Aroclor 1232	ND	1.0	0.25	ug/l						
Aroclor 1242	ND	1.0	0.25	ug/l						
Aroclor 1248	ND	1.0	0.25	ug/l						
Aroclor 1254	ND	1.0	0.25	ug/l						
Aroclor 1260	ND	1.0	0.40	ug/l						
Surrogate: Decachlorobiphenyl	0.512			ug/l	0.500		102	45-120		
LCS Analyzed: 03/06/2006 (6C05031-BS2)										
Aroclor 1016	3.60	1.0	0.20	ug/l	4.00		90	45-115		
Aroclor 1260	3.91	1.0	0.40	ug/l	4.00		98	55-115		
Surrogate: Decachlorobiphenyl	0.458			ug/l	0.500		92	45-120		
LCS Dup Analyzed: 03/06/2006 (6C05031-BSD2)										
Aroclor 1016	3.74	1.0	0.20	ug/l	4.00		94	45-115	4	30
Aroclor 1260	3.99	1.0	0.40	ug/l	4.00		100	55-115	2	25
Surrogate: Decachlorobiphenyl	0.550			ug/l	0.500		110	45-120		

M-NR1

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METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	Limits	RPD	RPD Limit	Data Qualifiers
Batch: 6C02097 Extracted: 03/02/06											
Blank Analyzed: 03/02/2006 (6C02097-BLK1)											
Mercury	ND	0.20	0.050	ug/l							
LCS Analyzed: 03/02/2006 (6C02097-BS1)											
Mercury	7.88	0.20	0.050	ug/l	8.00		98	85-115			
Matrix Spike Analyzed: 03/02/2006 (6C02097-MS1)											
Mercury	7.84	0.20	0.050	ug/l	8.00	ND	98	70-130			
Matrix Spike Dup Analyzed: 03/02/2006 (6C02097-MSD1)											
Mercury	7.88	0.20	0.050	ug/l	8.00	ND	98	70-130	1	20	
Batch: 6C02098 Extracted: 03/02/06											
Blank Analyzed: 03/02/2006 (6C02098-BLK1)											
Antimony	ND	2.0	0.18	ug/l							
Cadmium	0.0179	1.0	0.015	ug/l							J
Copper	ND	2.0	0.49	ug/l							
Lead	ND	1.0	0.13	ug/l							
Thallium	ND	1.0	0.075	ug/l							
LCS Analyzed: 03/02/2006 (6C02098-BS1)											
Antimony	86.5	2.0	0.18	ug/l	80.0		108	85-115			
Cadmium	86.9	1.0	0.015	ug/l	80.0		109	85-115			
Copper	89.3	2.0	0.49	ug/l	80.0		112	85-115			
Lead	85.6	1.0	0.13	ug/l	80.0		107	85-115			
Thallium	84.8	1.0	0.075	ug/l	80.0		106	85-115			

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NPDES - 2375



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 Attention: Bronwyn Kelly

Project ID: Annual Outfall 007
 Report Number: IPB2647

Sampled: 02/28/06
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METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	Limit	RPD	RPD Limit	Data Qualifiers
Batch: 6C02098 Extracted: 03/02/06											
Matrix Spike Analyzed: 03/02/2006 (6C02098-MS1)						Source: IPB2651-01					
Antimony	84.3	2.0	0.18	ug/l	80.0	ND	105	70-130			
Cadmium	83.6	1.0	0.015	ug/l	80.0	ND	104	70-130			
Copper	81.5	2.0	0.49	ug/l	80.0	0.49	101	70-130			
Lead	83.1	1.0	0.13	ug/l	80.0	0.19	104	70-130			
Thallium	81.3	1.0	0.075	ug/l	80.0	0.31	101	70-130			
Matrix Spike Analyzed: 03/02/2006 (6C02098-MS2)						Source: IPB2645-01					
Antimony	85.1	2.0	0.18	ug/l	80.0	0.46	106	70-130			
Cadmium	82.7	1.0	0.015	ug/l	80.0	0.077	103	70-130			
Copper	78.9	2.0	0.49	ug/l	80.0	2.3	96	70-130			
Lead	82.4	1.0	0.13	ug/l	80.0	0.50	102	70-130			
Thallium	81.6	1.0	0.075	ug/l	80.0	0.53	101	70-130			
Matrix Spike Dup Analyzed: 03/02/2006 (6C02098-MSD1)						Source: IPB2651-01					
Antimony	82.9	2.0	0.18	ug/l	80.0	ND	104	70-130	2	20	
Cadmium	81.4	1.0	0.015	ug/l	80.0	ND	102	70-130	3	20	
Copper	78.3	2.0	0.49	ug/l	80.0	0.49	97	70-130	4	20	
Lead	80.8	1.0	0.13	ug/l	80.0	0.19	101	70-130	3	20	
Thallium	80.7	1.0	0.075	ug/l	80.0	0.31	100	70-130	1	20	

Batch: 6C03084 Extracted: 03/03/06

Blank Analyzed: 03/04/2006-03/07/2006 (6C03084-BLK1)

Aluminum	ND	50	40	ug/l							
Arsenic	ND	5.0	3.8	ug/l							
Beryllium	ND	2.0	0.62	ug/l							
Boron	ND	0.050	0.0074	mg/l							
Chromium	1.10	5.0	0.68	ug/l							
Nickel	ND	10	2.0	ug/l							
Selenium	ND	10	8.0	ug/l							
Silver	ND	10	3.0	ug/l							
Vanadium	ND	10	3.0	ug/l							
Zinc	ND	20	3.7	ug/l							

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METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	RPD Limits	RPD RPD	Data Limit	Qualifiers
Batch: 6C03084 Extracted: 03/03/06											
LCS Analyzed: 03/04/2006-03/07/2006 (6C03084-BS1)											
Aluminum	495	50	40	ug/l	500		99	85-115			
Arsenic	519	5.0	3.8	ug/l	500		104	85-115			
Beryllium	524	2.0	0.62	ug/l	500		105	85-115			
Boron	0.501	0.050	0.0074	mg/l	0.500		100	85-115			
Chromium	518	5.0	0.68	ug/l	500		104	85-115			
Nickel	513	10	2.0	ug/l	500		103	85-115			
Selenium	493	10	8.0	ug/l	500		99	85-115			
Silver	263	10	3.0	ug/l	250		105	85-115			
Vanadium	517	10	3.0	ug/l	500		103	85-115			
Zinc	499	20	3.7	ug/l	500		100	85-115			

Matrix Spike Analyzed: 03/04/2006-03/07/2006 (6C03084-MS1)						Source: IPB2463-01					
Aluminum	490	50	40	ug/l	500	ND	98	70-130			
Arsenic	544	5.0	3.8	ug/l	500	8.8	107	70-130			
Beryllium	520	2.0	0.62	ug/l	500	ND	104	70-130			
Boron	0.609	0.050	0.0074	mg/l	0.500	0.064	109	70-130			
Chromium	520	5.0	0.68	ug/l	500	ND	104	70-130			
Nickel	503	10	2.0	ug/l	500	ND	101	70-130			
Selenium	508	10	8.0	ug/l	500	ND	102	70-130			
Silver	273	10	3.0	ug/l	250	4.9	107	70-130			
Vanadium	522	10	3.0	ug/l	500	ND	104	70-130			
Zinc	732	20	3.7	ug/l	500	480	50	70-130			M2

Matrix Spike Analyzed: 03/04/2006-03/07/2006 (6C03084-MS2)						Source: IPB2463-02					
Aluminum	1200	50	40	ug/l	500	560	128	70-130			
Arsenic	527	5.0	3.8	ug/l	500	4.9	104	70-130			
Beryllium	508	2.0	0.62	ug/l	500	ND	102	70-130			
Boron	0.554	0.050	0.0074	mg/l	0.500	0.037	103	70-130			
Chromium	511	5.0	0.68	ug/l	500	2.3	102	70-130			
Nickel	493	10	2.0	ug/l	500	ND	99	70-130			
Selenium	494	10	8.0	ug/l	500	ND	99	70-130			
Silver	263	10	3.0	ug/l	250	4.0	104	70-130			
Vanadium	511	10	3.0	ug/l	500	ND	102	70-130			
Zinc	497	20	3.7	ug/l	500	ND	99	70-130			

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Project ID: Annual Outfall 007

Report Number: IPB2647

Sampled: 02/28/06
 Received: 02/28/06

METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	RPD Limits	RPD RPD	RPD Limit	Data Qualifiers
Batch: 6C03084 Extracted: 03/03/06											
Matrix Spike Dup Analyzed: 03/04/2006-03/07/2006 (6C03084-MSD1)						Source: IPB2463-01					
Aluminum	461	50	40	ug/l	500	ND	92	70-130	6	20	
Arsenic	532	5.0	3.8	ug/l	500	8.8	105	70-130	2	20	
Beryllium	504	2.0	0.62	ug/l	500	ND	101	70-130	3	20	
Boron	0.593	0.050	0.0074	mg/l	0.500	0.064	106	70-130	3	20	
Chromium	510	5.0	0.68	ug/l	500	ND	102	70-130	2	20	
Nickel	492	10	2.0	ug/l	500	ND	98	70-130	2	20	
Selenium	488	10	8.0	ug/l	500	ND	98	70-130	4	20	
Silver	262	10	3.0	ug/l	250	4.9	103	70-130	4	20	
Vanadium	504	10	3.0	ug/l	500	ND	101	70-130	4	20	
Zinc	722	20	3.7	ug/l	500	480	48	70-130	1	20	M2

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 Michele Chamberlin
 Project Manager

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NPDES - 2378



Del Mar Analytical

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 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 007
 Report Number: IPB2647

Sampled: 02/28/06
 Received: 02/28/06

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	RPD Limits	RPD RPD	Data Qualifiers
Batch: 6B28141 Extracted: 02/28/06										
Blank Analyzed: 02/28/2006 (6B28141-BLK1)										
Chloride	ND	0.50	0.26	mg/l						
Nitrate/Nitrite-N	ND	0.26	0.072	mg/l						
Sulfate	ND	0.50	0.18	mg/l						
LCS Analyzed: 02/28/2006 (6B28141-BS1)										
Chloride	5.00	0.50	0.26	mg/l	5.00		100	90-110		
Sulfate	10.5	0.50	0.18	mg/l	10.0		105	90-110		
Matrix Spike Analyzed: 02/28/2006 (6B28141-MS1) Source: IPB2607-01										
Chloride	30.4	1.0	0.52	mg/l	5.00	26	88	80-120		
Sulfate	36.5	1.0	0.36	mg/l	10.0	27	95	80-120		
Matrix Spike Dup Analyzed: 02/28/2006 (6B28141-MSD1) Source: IPB2607-01										
Chloride	30.3	1.0	0.52	mg/l	5.00	26	86	80-120	0	20
Sulfate	36.9	1.0	0.36	mg/l	10.0	27	99	80-120	1	20
Batch: 6C02125 Extracted: 03/02/06										
Blank Analyzed: 03/02/2006 (6C02125-BLK1)										
Total Cyanide	ND	5.0	2.2	ug/l						
LCS Analyzed: 03/02/2006 (6C02125-BS1)										
Total Cyanide	194	5.0	2.2	ug/l	200		97	90-110		
Matrix Spike Analyzed: 03/02/2006 (6C02125-MS1) Source: IPB2379-01										
Total Cyanide	193	5.0	2.2	ug/l	200	2.5	95	70-115		

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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 007
 Report Number: IPB2647

Sampled: 02/28/06
 Received: 02/28/06

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 6C02125 Extracted: 03/02/06											
Matrix Spike Dup Analyzed: 03/02/2006 (6C02125-MSD1)					Source: IPB2379-01						
Total Cyanide	205	5.0	2.2	ug/l	200	2.5	101	70-115	6	15	
Batch: 6C03066 Extracted: 03/03/06											
Blank Analyzed: 03/03/2006 (6C03066-BLK1)											
Perchlorate	ND	4.0	2.0	ug/l							
LCS Analyzed: 03/03/2006 (6C03066-BS1)											
Perchlorate	50.4	4.0	2.0	ug/l	50.0		101	85-115			
Matrix Spike Analyzed: 03/03/2006 (6C03066-MS1)					Source: IPC0361-01						
Perchlorate	62.8	4.0	2.0	ug/l	50.0	15	96	80-120			
Matrix Spike Dup Analyzed: 03/03/2006 (6C03066-MSD1)					Source: IPC0361-01						
Perchlorate	61.7	4.0	2.0	ug/l	50.0	15	93	80-120	2	20	
Batch: 6C03069 Extracted: 03/03/06											
Blank Analyzed: 03/03/2006 (6C03069-BLK1)											
Total Dissolved Solids	ND	10	N/A	mg/l							
LCS Analyzed: 03/03/2006 (6C03069-BS1)											
Total Dissolved Solids	1000	10	N/A	mg/l	1000		100	90-110			
Duplicate Analyzed: 03/03/2006 (6C03069-DUP1)					Source: IPC0153-03						
Total Dissolved Solids	285	10	N/A	mg/l		280			2	10	

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300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 007
Report Number: IPB2647

Sampled: 02/28/06
Received: 02/28/06

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	Limit	RPD	RPD Limit	Data Qualifiers
Batch: 6C05025 Extracted: 03/05/06											
Blank Analyzed: 03/05/2006 (6C05025-BLK1)											
Total Suspended Solids	ND	10	10	mg/l							
LCS Analyzed: 03/05/2006 (6C05025-BS1)											
Total Suspended Solids	982	10	10	mg/l	1000		98	85-115			
Duplicate Analyzed: 03/05/2006 (6C05025-DUP1)											
Total Suspended Solids	69.0	10	10	mg/l		Source: IPB2641-01 69			0	10	
Batch: 6C08046 Extracted: 03/08/06											
Blank Analyzed: 03/08/2006 (6C08046-BLK1)											
Oil & Grease	ND	5.0	0.94	mg/l							
LCS Analyzed: 03/08/2006 (6C08046-BS1)											
Oil & Grease	15.7	5.0	0.94	mg/l	20.0		78	65-120			M-NR1
LCS Dup Analyzed: 03/08/2006 (6C08046-BSD1)											
Oil & Grease	16.2	5.0	0.94	mg/l	20.0		81	65-120	3	20	

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MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 007

Report Number: IPB2647

Sampled: 02/28/06

Received: 02/28/06

Compliance Check

The results obtained from the analytical testing of this data set were checked against compliance limits received from the client. Any results at or above the compliance limits appear in bold on this page.

LabNumber	Analysis	Analyte	Units	Result	MRL	Compliance Limit
IPB2647-01	413.1 Oil and Grease	Oil & Grease	mg/l	0	4.8	15
IPB2647-01	Antimony-200.8	Antimony	ug/l	2.60	2.0	6.00
IPB2647-01	Boron-200.7	Boron	mg/l	0.026	0.050	1.00
IPB2647-01	Cadmium-200.8	Cadmium	ug/l	0.091	1.0	4.00
IPB2647-01	Chloride - 300.0	Chloride	mg/l	2.90	0.50	150
IPB2647-01	Copper-200.8	Copper	ug/l	4.10	2.0	14
IPB2647-01	Mercury - 245.1	Mercury	ug/l	0	0.20	0.20
IPB2647-01	Nitrogen, NO3+NO2 -N	Nitrate/Nitrite-N	mg/l	0.53	0.26	10.00
IPB2647-01	Perchlorate 314.0	Perchlorate	ug/l	0	4.0	6.00
IPB2647-01	Sulfate-300.0	Sulfate	mg/l	4.80	0.50	250
IPB2647-01	TDS - SM 2540C	Total Dissolved Solids	mg/l	110	10	850
IPB2647-01	Thallium-200.8	Thallium	ug/l	0.088	1.0	2.00

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Project Manager

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MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 007

Report Number: IPB2647

Sampled: 02/28/06
Received: 02/28/06

DATA QUALIFIERS AND DEFINITIONS

- B** Analyte was detected in the associated Method Blank.
- J** 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.
- L2** Laboratory Control Sample recovery was below method control limits.
- 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).
- M-NR1** There was no MS/MSD analyzed with this batch due to insufficient sample volume. See Blank Spike/Blank Spike Duplicate.
- N-2** See corrective action report.
- R-7** LFB/LFBD RPD exceeded the method control limit. Recovery met acceptance criteria.
- 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.

Del Mar Analytical - Irvine
Michele Chamberlin
Project Manager



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MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 007

Report Number: IPB2647

Sampled: 02/28/06
Received: 02/28/06

Certification Summary

Del Mar Analytical - Irvine

Method	Matrix	Nelac	California
1613A/1613B	Water		
Calculation	Water	X	X
EDD + Level 4	Water		
EPA 160.2	Water	X	X
EPA 200.7	Water	X	X
EPA 200.8	Water	X	X
EPA 245.1	Water	X	X
EPA 300.0	Water	X	X
EPA 314.0	Water	N/A	X
EPA 335.2	Water	X	X
EPA 413.1	Water	X	X
EPA 608	Water	X	X
EPA 624	Water	X	X
EPA 625	Water	X	X
EPA 900.0	Water		
EPA 905.0	Water		
EPA 906.0	Water		
Haz Waste Scree	Water		
SM2540C	Water	X	X

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

Subcontracted Laboratories

Alta Analytical NELAC Cert #02102CA, California Cert #1640, Nevada Cert #CA-413

1104 Windfield Way - El Dorado Hills, CA 95762

Analysis Performed: 1613-Dioxin-HR-Alta

Samples: IPB2647-01

Analysis Performed: Level 4 + EDD

Samples: IPB2647-01

Aquatic Testing Laboratories-SUB California Cert #1775

4350 Transport Street, Unit 107 - Ventura, CA 93003

Analysis Performed: Bioassay-Acute 96hr

Samples: IPB2647-01

Eberline Services

2030 Wright Avenue - Richmond, CA 94804

Analysis Performed: EDD + Level 4

Samples: IPB2647-01

Analysis Performed: Gross Alpha

Samples: IPB2647-01

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MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 007

Report Number: IPB2647

Sampled: 02/28/06

Received: 02/28/06

Eberline Services

2030 Wright Avenue - Richmond, CA 94804

Analysis Performed: Gross Beta

Samples: IPB2647-01

Analysis Performed: Radium, Combined

Samples: IPB2647-01

Analysis Performed: Strontium 90

Samples: IPB2647-01

Analysis Performed: Tritium

Samples: IPB2647-01

Del Mar Analytical - Irvine

Michele Chamberlin

Project Manager

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IPB2647 <Page 40 of 40>

NPDES - 2385

Del Mar Analytical Version 01/24/06 **CHAIN OF CUSTODY FORM**

Client Name/Address: MWH-Pasadena 300 North Lake Avenue, Suite 1200 Pasadena, CA 91101		Project: Boeing-SSFL NPDES Annual Outfall 007 Stormwater at Building 100		ANALYSIS REQUIRED										Field readings: Temp = 55 °F pH = 6.7				
Project Manager: Bromwyn Kelly Phone Number: (626) 568-6691 Fax Number: (626) 568-6515		Total Recoverable Metals: As, Pb, Cu, Ni, Cr, V, Hg, B, P, Se		TCDD (and all congeners) Oil & Grease (EPA 413.1) Cl-, SO4, NO3+NO2-N, Perchlorate TDS, TSS VOCs (624), NPDES + PP VOCs A+A+2CVE Pesticides/PCBs - PP Gross Alpha, Gross Beta, Tritium (906.0*, Sr-90), Radium 226 & 228 SVOCs - PP Acute Toxicity Cyanide										Comments				
Sample Description	Sample Matrix	Container Type	# of Cont.	Preservative	Sampling Date/Time	Bottle #	Al + Pb	TCDD (and all congeners)	Oil & Grease (EPA 413.1)	Cl-, SO4, NO3+NO2-N, Perchlorate	TDS, TSS	VOCs (624), NPDES + PP	VOCs A+A+2CVE	Pesticides/PCBs - PP	Gross Alpha, Gross Beta, Tritium (906.0*, Sr-90), Radium 226 & 228	SVOCs - PP	Acute Toxicity	Cyanide
Outfall 007	W	1L Poly	1	HNO3	2/28/06 5:30	1A	X											
Outfall 007-Dup	W	1L Poly	1	HNO3		1B	X											
Outfall 007	W	1L Amber	2	None		2A, 2B												
Outfall 007	W	1L Amber	2	HCl		3A, 3B		X										
Outfall 007	W	Poly-500 ml	2	None		4A, 4B			X									
Outfall 007	W	Poly-500 ml	2	None		5A, 5B					X							
Outfall 007	W	VOAs	3	HCl		6A, 6B, 6C					X							
Outfall 007	W	VOAs	3	None		7A, 7B, 7C						X						
Outfall 007	W	1L Amber	2	None		8A, 8B								X				
Outfall 007	W	2.5 Gal Cube Amber VOAs	3	None		9A, 15A, 15B, 15C									X			
Outfall 007	W	1L Amber	2	None		10A, 10B												
Outfall 007	W	1 Gal Poly	1	None		11A											X	
Outfall 007	W	Poly-500ml	1	NaOH		12												
Trip Blanks	W	VOAs	3	None		13A, 13B, 13C												
Trip Blank	W	VOAs	3	HCl		14A, 14B, 14C					X							
Relinquished By					Date/Time: 2/15/06													
Relinquished By					Date/Time: 1/31/05													
Relinquished By					Date/Time: 2/28/06 1835													
Received By					Date/Time: 2/28/06 1545													
Received By					Date/Time: 2-27-06													
Received By					Date/Time: 1835													
Turn around Time: (check)										24 Hours _____ 48 Hours _____ 72 Hours _____ Perchlorate Only 72 Hours _____ Metals Only 72 Hours _____								
Sample Integrity: (Check)										Intact _____ On Ice: _____								

LABORATORY REPORT



"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

Date: March 5, 2006
Client: Del Mar Analytical, Irvine
17461 Derian Ave., Suite 100
Irvine, CA 92614
Attn: Michele Chamberlin

Laboratory No.: A-06030116-001
Sample ID.: IPB2647-01

Sample Control: The sample was received by ATL within the recommended hold time, in a chilled state, and with the chain of custody record attached.

Date Sampled: 02/28/06
Date Received: 03/01/06
Temp. Received: 2°C
Chlorine (TRC): 0.0 mg/l
Date Tested: 03/01/06 to 03/05/06

Sample Analysis: The following analyses were performed on your sample:

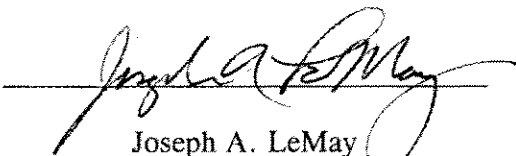
Fathead Minnow 96hr Percent Survival Bioassay (EPA Method 2000.0).

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

Result Summary:

<u>Sample ID.</u>	<u>Results</u>
IPB2647-01	100% Survival (TUa = 0.0)

Quality Control: Reviewed and approved by:


Joseph A. LeMay
Laboratory Director

FATHEAD MINNOW PERCENT SURVIVAL TEST
EPA Method 2000.0



Lab No.: A-06030116-001
 Client/ID: Del Mar - IPB2647-01

Start Date: 03/01/2006

TEST SUMMARY

Species: *Pimephales promelas*.
 Age: 13 (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-060301.

TEST DATA

		°C	DO	pH	# Dead		Analyst & Time of Readings
					A	B	
INITIAL	Control	20.4	8.9	7.9	0	0	Rv
	100%	19.7	8.2	6.9	0	0	1200
24 Hr	Control	19.2	8.0	7.7	0	0	Rv
	100%	19.3	8.1	7.6	0	0	1100
48 Hr	Control	19.3	7.4	7.6	0	0	R
	100%	19.3	7.0	7.4	0	0	1230
Renewal	Control	19.5	8.4	7.8	0	0	R
	100%	19.4	9.2	7.6	0	0	1300
72 Hr	Control	19.4	8.0	7.6	0	0	Rv
	100%	19.3	8.1	7.5	0	0	1100
96 Hr	Control	19.4	7.9	7.6	0	0	R
	100%	19.5	8.2	7.6	0	0	1130

Comments:

Sample as received: Chlorine: 0.0 mg/l; pH: 6.9; Conductivity: 132 umho; Temp: 2°C;
 DO: 8.2 mg/l; Alkalinity: 43 mg/l; Hardness: 48 mg/l; NH₃-N: 0.6 mg/l.
 Sample aerated moderately (approx. 500 ml/min) to raise or lower DO? Yes / No.
 Control: Alkalinity: 54 mg/l; Hardness: 94 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.

RESULTS

Percent Survival In:	Control: <u>100</u> %	100% Sample: <u>100</u> %
----------------------	-----------------------	---------------------------



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 9484 Chesapeake Drive, Suite 805, San Diego, CA 92123 Ph (619) 505-9596 Fax (619) 505-9689
 9830 South 51st Street, Suite B-120, Phoenix, AZ 85044 Ph (480) 785-0043 Fax (480) 785-0851
 2520 E. Sunset Rd., Suite #3, Las Vegas, NV 89120 Ph (702) 798-3620 Fax (702) 798-3621

SUBCONTRACT ORDER - PROJECT # IPB2647

SENDING LABORATORY:

Del Mar Analytical, Irvine
 17461 Derian Avenue, Suite 100
 Irvine, CA 92614
 Phone: (949) 261-1022
 Fax: (949) 261-1228
 Project Manager: Michele Chamberlin

RECEIVING LABORATORY:

Aquatic Testing Laboratories-SUB
 4350 Transport Street, Unit 107
 Ventura, CA 93003
 Phone: (805) 650-0546
 Fax: (805) 650-0756

Standard TAT is requested unless specific due date is requested => **Due Date:** _____ **Initials:** _____

Analysis	Expiration	Comments
Sample ID: IPB2647-01 Water Sampled: 02/28/06 08:25 Bioassay-Acute 96hr 03/01/06 20:25		Instant Notification FH minnow, EPA/821-R02-012, Sub to AqTox Labs
Containers Supplied: 1 gal Poly (IPB2647-01 Y)		

SAMPLE INTEGRITY:

All containers intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Sample labels/COC agree: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Samples Received On Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Custody Seals Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Samples Preserved Properly: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Samples Received at (temp): <u>20C</u>

	Date	Time		Date	Time
	3/06	10:00		3-1-6	10:20

FATHEAD MINNOW ACUTE
Method 2000.0
Reference Toxicant - SDS



QA/QC Batch No.: RT-060301

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 glass beakers.
 Aeration: None.
 Number of organisms per chamber: 10.
 Photoperiod: 16/8 hrs light/dark.

TEST DATA

Date/Time:	INITIAL			24 Hr					48 Hr				
	<u>3-1-06 1200</u>			<u>3-2-06 1100</u>					<u>3-3-06 1300</u>				
	<u>[Signature]</u>			<u>[Signature]</u>					<u>[Signature]</u>				
	°C	DO	pH	°C	DO	pH	# Dead		°C	DO	pH	# Dead	
A							B	A				B	
Control	<u>20.4</u>	<u>8.9</u>	<u>7.9</u>	<u>19.8</u>	<u>7.8</u>	<u>7.5</u>	<u>0</u>	<u>0</u>	<u>20.0</u>	<u>7.1</u>	<u>7.6</u>	<u>0</u>	<u>0</u>
1.0 mg/l	<u>20.4</u>	<u>8.9</u>	<u>7.9</u>	<u>19.7</u>	<u>7.7</u>	<u>7.5</u>	<u>0</u>	<u>0</u>	<u>20.0</u>	<u>7.0</u>	<u>7.6</u>	<u>0</u>	<u>0</u>
2.0 mg/l	<u>20.5</u>	<u>9.0</u>	<u>7.9</u>	<u>19.7</u>	<u>7.4</u>	<u>7.4</u>	<u>0</u>	<u>0</u>	<u>20.0</u>	<u>6.9</u>	<u>7.5</u>	<u>0</u>	<u>0</u>
4.0 mg/l	<u>20.5</u>	<u>9.1</u>	<u>7.9</u>	<u>19.7</u>	<u>7.7</u>	<u>7.4</u>	<u>0</u>	<u>0</u>	<u>20.0</u>	<u>6.6</u>	<u>7.5</u>	<u>0</u>	<u>0</u>
8.0 mg/l	<u>20.5</u>	<u>9.1</u>	<u>7.9</u>	<u>19.7</u>	<u>5.3</u>	<u>7.2</u>	<u>10</u>	<u>10</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>

Date/Time:	RENEWAL			72 Hr					96 Hr				
	<u>3-3-06 1300</u>			<u>3-4-06 1100</u>					<u>3-5-06 1130</u>				
	<u>[Signature]</u>			<u>[Signature]</u>					<u>[Signature]</u>				
	°C	DO	pH	°C	DO	pH	# Dead		°C	DO	pH	# Dead	
A							B	A				B	
Control	<u>19.8</u>	<u>9.0</u>	<u>7.8</u>	<u>19.5</u>	<u>7.9</u>	<u>7.6</u>	<u>0</u>	<u>0</u>	<u>19.9</u>	<u>7.5</u>	<u>7.4</u>	<u>0</u>	<u>0</u>
1.0 mg/l	<u>19.8</u>	<u>9.0</u>	<u>7.8</u>	<u>19.6</u>	<u>8.3</u>	<u>7.6</u>	<u>0</u>	<u>0</u>	<u>19.9</u>	<u>7.6</u>	<u>7.4</u>	<u>0</u>	<u>0</u>
2.0 mg/l	<u>19.8</u>	<u>9.1</u>	<u>7.8</u>	<u>19.6</u>	<u>8.3</u>	<u>7.6</u>	<u>0</u>	<u>0</u>	<u>19.8</u>	<u>7.6</u>	<u>7.4</u>	<u>0</u>	<u>0</u>
4.0 mg/l	<u>19.9</u>	<u>9.1</u>	<u>7.8</u>	<u>19.6</u>	<u>7.7</u>	<u>7.5</u>	<u>0</u>	<u>0</u>	<u>19.8</u>	<u>7.6</u>	<u>7.4</u>	<u>0</u>	<u>0</u>
8.0 mg/l	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>

Comments:

Control: Alkalinity: 54 mg/l; Hardness: 94 mg/l; Conductivity: 325 umho.
 SDS: Alkalinity: 53 mg/l; Hardness: 94 mg/l; Conductivity: 330 umho.

Acute Fish Test-96 Hr Survival

Start Date: 01 Mar-06 12:00 Test ID: RT-060301f Sample ID: REF-Ref Toxicant
 End Date: 05 Mar-06 11:30 Lab ID: CAATL-Aquatic Testing Labs Sample Type: SDS-Sodium dodecyl sulfate
 Sample Date: 01 Mar-06 00:00 Protocol: EPAA 91-EPA Acute Test Species: PP-Pimephales promelas
 Comments:

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

Conc-mg/L	Mean	N-Mean	Transform: Arcsin Square Root				CV%	N	Number Resp	Total Number
			Mean	Min	Max					
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	

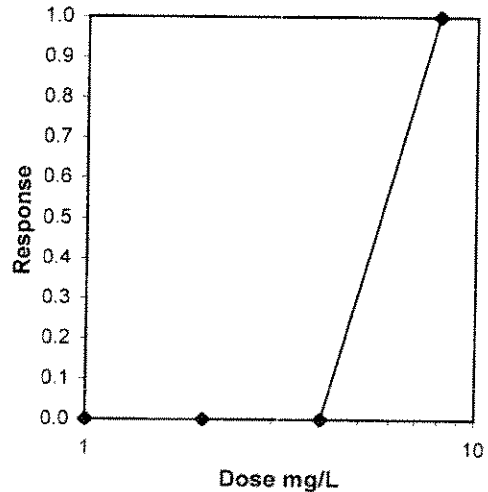
Auxiliary Tests

Normality of the data set cannot be confirmed
 Equality of variance cannot be confirmed

Statistic Critical Skew Kurt

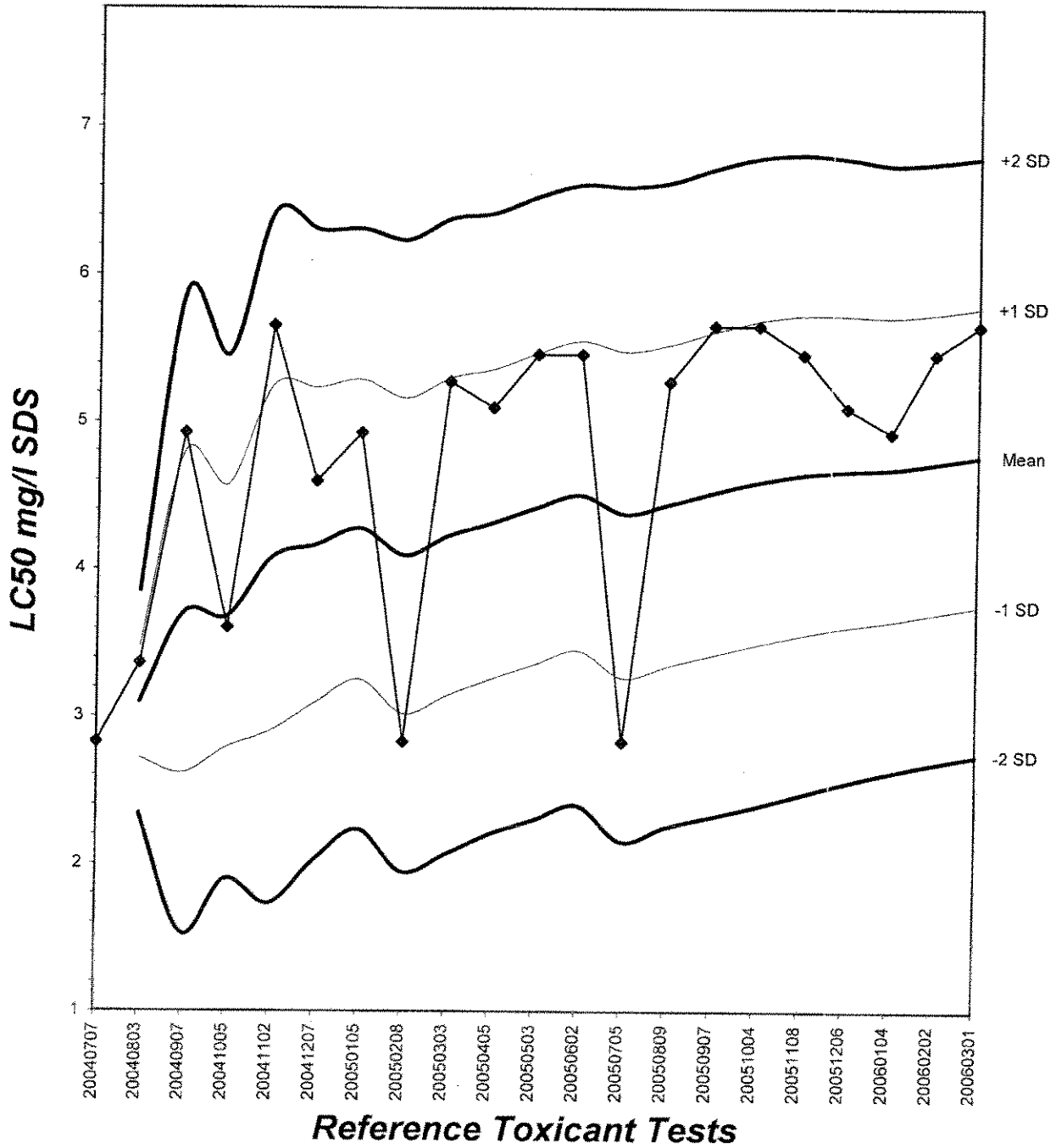
Graphical Method

Trim Level EC50
 0.0% 5.6569



Fathead Minnow Acute Laboratory Control Chart

CV% = 21.3



TEST ORGANISM LOG

FATHEAD MINNOW - LARVAL
(*Pimephales promelas*)



QA/QC BATCH NO.: RT-060301

SOURCE: In-Lab Culture

DATE HATCHED: 2-16-06

APPROXIMATE QUANTITY: 400

GENERAL APPEARANCE: good

MORTALITIES 48 HOURS PRIOR TO
TO USE IN TESTING: 0

DATES USED IN LAB: 3/1/0
to
1/1


AVERAGE FISH WEIGHT: 0.006 gm

TEST LOADING LIMITS: 0.65 gm/liter

200 ml test solution volume = 0.013 gm mean fish weight limit
250 ml test solution volume = 0.016 gm mean fish weight limit

ACCLIMATION WATER QUALITY:

Temp.: 20.4 °C pH: 7.7 Ammonia: 0.2 mg/l NH₃-N
DO: 2.8 mg/l Alkalinity: 54 mg/l Hardness: 94 mg/l

READINGS RECORDED BY:  DATE: 3-5-06

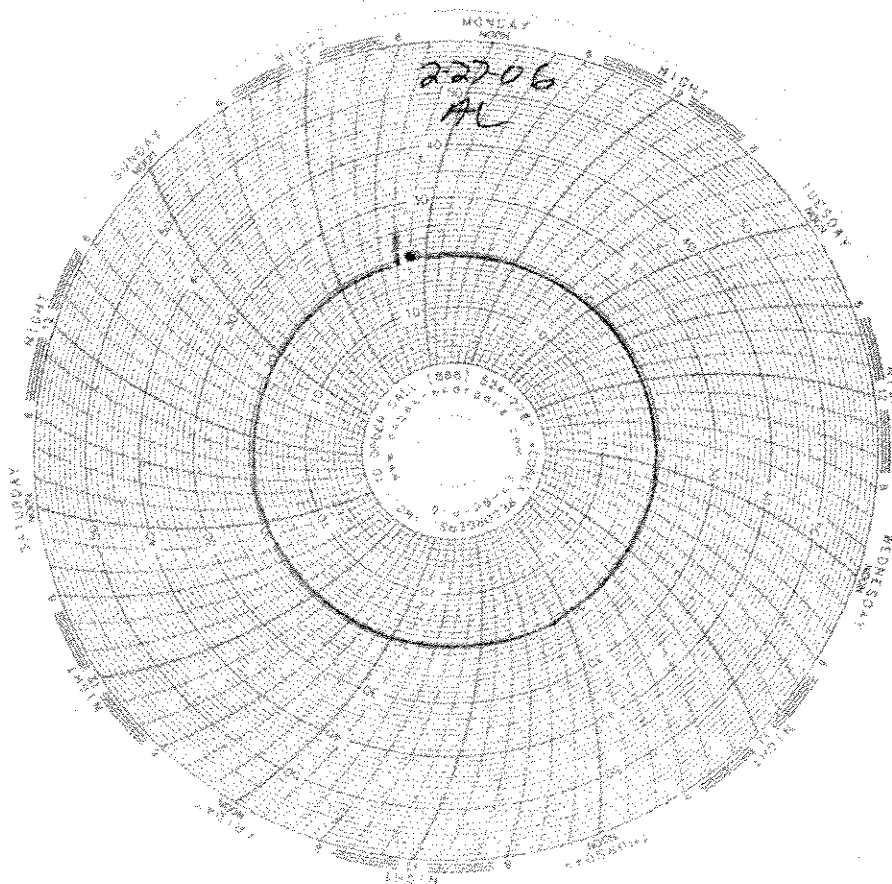


Laboratory Temperature Chart

QA/QC Batch No: RT-060301

Date Tested: 03/01/06 to 03/05/06

Acceptable Range: 20+/- 1°C





EBERLINE

SERVICES

March 13, 2006

Ms. Michele Chamberlin
Project Manager
Del Mar Analytical
17461 Derian Avenue, Suite 100
Irvine, CA 92614

Reference: Del Mar Analytical Project No. IPB2647
Eberline Services NELAP Cert #01120CA (exp. 01/31/07)
Eberline Services Report R603021-8665

Dear Ms. Chamberlin:

Enclosed are results from the analysis of one water sample received at Eberline Services on March 2, 2006. The sample was analyzed according to the accompanying Del Mar Analytical Subcontract Order Form. The requested analysis was gross alpha/gross beta (EPA900.0). The batch QC LCS, blank analysis, duplicate analysis, and matrix spike results were within the limits defined in Eberline Services Quality Control Procedures Manual. No problems were encountered during the requested analysis.

Please call me if you have any questions concerning this report.

Regards,

Melissa Mannion
Senior Program Manager

MCM/njv

Enclosure: Report
Subcontract Form
Receipt checklist
Invoice

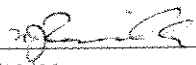
Analytical Services
2030 Wright Avenue
P.O. Box 4040
Richmond, California 94804-0040
(510) 235-2633 Fax (510) 235-0438
Toll Free (800) 841-5487
www.eberlineservices.com
NPDES - 2395

Eberline Services

ANALYSIS RESULTS

SDG <u>8665</u>	Client <u>DEL MAR ANAL</u>
Work Order <u>R603021-01</u>	Contract <u>PROJECT# IPB2647</u>
Received Date <u>03/02/06</u>	Matrix <u>WATER</u>

Client	Lab						
<u>Sample ID</u>	<u>Sample ID</u>	<u>Collected</u>	<u>Analyzed</u>	<u>Nuclide</u>	<u>Results ± 2σ</u>	<u>Units</u>	<u>MDA</u>
IPB2647-01	8665-001	02/28/06	03/06/06	GrossAlpha	2.56 ± 1.2	pCi/L	1.09
			03/06/06	Gross Beta	5.35 ± 1.8	pCi/L	2.56

Certified by 
Report Date <u>03/12/06</u>
Page 1

Eberline Services

QC RESULTS

SDG <u>8565</u>	Client <u>DEL MAR ANAL</u>
Work Order <u>R603021-01</u>	Contract <u>PROJECT# IPB2647</u>
Received Date <u>03/02/06</u>	Matrix <u>WATER</u>


Lab	Sample ID	Nuclide	Results	Units	Amount Added	MDA	Evaluation
<u>LCS</u>							
	8660-002	GrossAlpha	9.57 ± 1.3	pCi/Smpl	10.2	0.635	94% recovery
		Gross Beta	9.53 ± 0.77	pCi/Smpl	9.84	0.609	97% recovery
<u>BLANK</u>							
	8660-003	GrossAlpha	-0.067 ± 0.23	pCi/Smpl	NA	0.513	<MDA
		Gross Beta	0.136 ± 0.31	pCi/Smpl	NA	0.548	<MDA

<u>DUPLICATES</u>			
Sample ID	Nuclide	Results ± 2σ	MDA
8660-004	GrossAlpha	1.33 ± 1.5	2.25
	Gross Beta	7.77 ± 1.8	2.37

<u>ORIGINALS</u>						
Sample ID	Results ± 2σ	MDA	3σ	RPD (Tot)	Eval	
8660-001	2.64 ± 1.7	1.95	66	177	satis.	
	7.69 ± 1.6	2.06	1	63	satis.	

<u>SPIKED SAMPLE</u>			
Sample ID	Nuclide	Results ± 2σ	MDA
8660-005	GrossAlpha	92.9 ± 7.9	1.88
	Gross Beta	79.8 ± 3.9	1.99

<u>ORIGINAL SAMPLE</u>					
Sample ID	Results ± 2σ	MDA	Added	%Recv	
8660-001	2.64 ± 1.7	1.95	76.5	118	
	7.69 ± 1.6	2.06	70.3	103	

Certified by <u></u>
Report Date <u>03/16/06</u>
Page 2



17461 Derian Ave. Suite 100, Irvine, CA 92614 Ph (949) 261-1022 Fax (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 Ph (909) 370-4667 Fax (909) 370-1046
 9484 Chesapeake Drive, Suite 805, San Diego, CA 92123 Ph (619) 505-9596 Fax (619) 505-9689
 9830 South 51st Street, Suite B-120, Phoenix, AZ 85044 Ph (480) 785-0043 Fax (480) 785-0851
 2520 E. Sunset Rd., Suite #3, Las Vegas, NV 89120 Ph (702) 798-3520 Fax (702) 798-3821

SUBCONTRACT ORDER - PROJECT # IPB2647

SENDING LABORATORY:

Del Mar Analytical, Irvine
 17461 Derian Avenue. Suite 100
 Irvine, CA 92614
 Phone: (949) 261-1022
 Fax: (949) 261-1228
 Project Manager: Michele Chamberlin

RECEIVING LABORATORY:

Eberline Services
 2030 Wright Avenue
 Richmond, CA 94804
 Phone : (510) 235-2633
 Fax: (510) 235-0438

Standard TAT is requested unless specific due date is requested => Due Date: _____ Initials: _____

Analysis	Expiration	Comments
Sample ID: IPB2647-01	Water	Sampled: 02/28/06 08:25
608-Pesticides	03/07/06 08:25	Instant Notification J flags, Boeing, annual
EDD + Level 4	03/28/06 08:25	
Gross Alpha-O	02/28/07 08:25	900.0, IF RESULT > 15 pCi/L, run Radium 226 & 228
Gross Beta-O	02/28/07 08:25	900.0, IF RESULT > 50 pCi/L, run Radium 226 & 228
Radium, Combined-O	02/28/07 08:25	HOLD for Gross A&B results; EPA 903.1 & 904.0
Strontium 90-O	02/28/07 08:25	EPA 905.0
Tritium-O	02/28/07 08:25	EPA 906.0

Containers Supplied:

- 2.5 gal Poly (IPB2647-01S)
- 40 ml Amber Voa Vial (IPB2647-01T)
- 40 ml Amber Voa Vial (IPB2647-01U)
- 40 ml Amber Voa Vial (IPB2647-01V)

SAMPLE INTEGRITY:

All containers intact: Yes No
 Sample labels/COC agree: Yes No
 Samples Received On Ice: Yes No
 Custody Seals Present: Yes No
 Samples Preserved Properly: Yes No
 Samples Received at (temp): _____

Released By: [Signature] Date: _____ Time: _____ Received By: [Signature] Date: 03/07/06 Time: 9:30

Released By: _____ Date: _____ Time: _____ Received By: _____ Date: _____ Time: _____



RICHMOND, CA LABORATORY

SAMPLE RECEIPT CHECKLIST

Client: DEL MAR City IRVINE State CA
 Date/Time received 03/02/06 9:30 CoC No. IPB2647
 Container I.D. No. LE CHEST Requested TAT (Days) WUSH P.O. Received Yes [] No []

INSPECTION

1. Custody seals on shipping container intact? Yes [] No [] N/A []
2. Custody seals on shipping container dated & signed? Yes [] No [] N/A []
3. Custody seals on sample containers intact? Yes [] No [] N/A []
4. Custody seals on sample containers dated & signed? Yes [] No [] N/A []
5. Packing material is: Wet [] Dry []
6. Number of samples in shipping container: 1 Sample Matrix W
7. Number of containers per sample: 4 (Or see CoC _____)
8. Samples are in correct container Yes [] No []
9. Paperwork agrees with samples? Yes [] No []
10. Samples have: Tape [] Hazard labels [] Rad labels [] Appropriate sample labels []
11. Samples are: In good condition [] Leaking [] Broken Container [] Missing []
12. Samples are: Preserved [] Not preserved [] pH _____ Preservative _____
13. Describe any anomalies:

14. Was P.M. notified of any anomalies? Yes [] No [] Date _____
 15. Inspected by NFM Date: 03/02/06 Time: 10:00

Customer Sample No.	cpm	mR/hr	Wipe	Customer Sample No.	cpm	mR/hr	wipe

Ion Chamber Ser. No. _____ Calibration date _____
 Alpha Meter Ser. No. _____ Calibration date _____
 Beta/Gamma Meter Ser. No. _____ Calibration date _____



March 08, 2006

Alta Project I.D.: 27346

Ms. Michele Chamberlin
Del Mar Analytical, Irvine
17461 Derian Avenue, Suite 100
Irvine, CA 92614

Dear Ms. Chamberlin,

Enclosed are the results for the one aqueous sample received at Alta Analytical Laboratory on March 02, 2006 under your Project Name "IPB2647". This sample was extracted and analyzed using EPA Method 1613 for tetra-through-octa chlorinated dioxins and furans. A standard turnaround time was provided for this work.

The following report consists of a Sample Inventory (Section I), Analytical Results (Section II) and the Appendix, which contains the chain-of-custody, a list of data qualifiers and abbreviations, Alta's current certifications, and copies of the raw data (if requested).

Alta Analytical Laboratory is committed to serving you effectively. If you require additional information, please contact me at 916-933-1640 or by email at mmaier@altalab.com. Thank you for choosing Alta as part of your analytical support team.

Sincerely,

Martha M. Maier
Director of HRMS Services



Section I: Sample Inventory Report

Date Received: 3/2/2006

Alta Lab. ID

Client Sample ID

27346-001

IPB2647-01

SECTION II

Method Blank

Matrix: Aqueous
 Sample Size: 1.00 L
 QC Batch No.: 7807
 Date Extracted: 5-Mar-06
 Lab Sample: 0-MB001
 Date Analyzed DB-5: 7-Mar-06
 Date Analyzed DB-225: NA

EPA Method 1613

Analyte	Conc. (ug/L)	DL ^a	EMPC ^b	Qualifiers	Labeled Standard	%R	LCL-UCL ^d	Qualifiers
2,3,7,8-TCDD	ND	0.00000119			13C-2,3,7,8-TCDD	82.1	25 - 164	
1,2,3,7,8-PeCDD	ND	0.00000130			13C-1,2,3,7,8-PeCDD	84.5	25 - 181	
1,2,3,4,7,8-HxCDD	ND	0.00000161			13C-1,2,3,4,7,8-HxCDD	82.1	32 - 141	
1,2,3,6,7,8-HxCDD	ND	0.00000170			13C-1,2,3,6,7,8-HxCDD	81.9	28 - 130	
1,2,3,7,8,9-HxCDD	ND	0.00000161			13C-1,2,3,4,6,7,8-HpCDD	79.4	23 - 140	
1,2,3,4,6,7,8-HpCDD	ND	0.00000167			13C-OCDD	54.4	17 - 157	
OCDD	ND	0.00000485			13C-2,3,7,8-TCDF	85.8	24 - 169	
2,3,7,8-TCDF	ND	0.00000138			13C-1,2,3,7,8-PeCDF	89.7	24 - 185	
1,2,3,7,8-PeCDF	ND	0.00000126			13C-2,3,4,7,8-PeCDF	92.9	21 - 178	
2,3,4,7,8-PeCDF	ND	0.00000115			13C-1,2,3,4,7,8-HxCDF	82.7	26 - 152	
1,2,3,4,7,8-HxCDF	ND	0.00000677			13C-1,2,3,6,7,8-HxCDF	82.0	26 - 123	
1,2,3,6,7,8-HxCDF	ND	0.00000623			13C-2,3,4,6,7,8-HxCDF	83.9	28 - 136	
2,3,4,6,7,8-HxCDF	ND	0.00000697			13C-1,2,3,7,8,9-HxCDF	77.1	29 - 147	
1,2,3,7,8,9-HxCDF	ND	0.000000951			13C-1,2,3,4,6,7,8-HpCDF	71.7	28 - 143	
1,2,3,4,6,7,8-HpCDF	ND	0.000000890			13C-1,2,3,4,7,8,9-HpCDF	80.8	26 - 138	
1,2,3,4,7,8,9-HpCDF	ND	0.000000780			13C-OCDF	59.4	17 - 157	
OCDF	ND	0.00000335			<u>CRS</u> 37Cl-2,3,7,8-TCDD	90.3	35 - 197	
Totals								
Total TCDD	ND	0.00000119						
Total PeCDD	ND	0.00000130						
Total HxCDD	ND	0.00000164						
Total HpCDD	ND	0.00000167						
Total TCDF	ND	0.00000138						
Total PeCDF	ND	0.00000120						
Total HxCDF	ND	0.000000725						
Total HpCDF	ND	0.000000836						

Footnotes

- a. Sample specific estimated detection limit.
- b. Estimated maximum possible concentration.
- c. Method detection limit.
- d. Lower control limit - upper control limit.

Analyst: JMH
 Approved By: Martha M. Maier
 08-Mar-2006 10:22

OPR Results		EPA Method 1613				
Matrix:	Aqueous	QC Batch No.	7807	Lab Sample:	0-OPR001	
Sample Size:	1.00 L	Date Extracted:	5-Mar-06	Date Analyzed DB-5:	7-Mar-06	
				Date Analyzed DB-225:	NA	
Analyte	Spike Conc.	Conc. (ng/mL)	OPR Limits	Labeled Standard	%R	LCL-UCL
2,3,7,8-TCDD	10.0	11.1	6.7 - 15.8	IS 13C-2,3,7,8-TCDD	77.8	25 - 164
1,2,3,7,8-PeCDD	50.0	56.7	35 - 71	13C-1,2,3,7,8-PeCDD	81.0	25 - 181
1,2,3,4,7,8-HxCDD	50.0	54.3	35 - 82	13C-1,2,3,4,7,8-HxCDD	74.4	32 - 141
1,2,3,6,7,8-HxCDD	50.0	53.3	38 - 67	13C-1,2,3,6,7,8-HxCDD	76.6	28 - 130
1,2,3,7,8,9-HxCDD	50.0	52.4	32 - 81	13C-1,2,3,4,6,7,8-HpCDD	74.2	23 - 140
1,2,3,4,6,7,8-HpCDD	50.0	55.2	35 - 70	13C-OCDD	52.1	17 - 157
OCDD	100	109	78 - 144	13C-2,3,7,8-TCDF	78.6	24 - 169
2,3,7,8-TCDF	10.0	11.2	7.5 - 15.8	13C-1,2,3,7,8-PeCDF	84.3	24 - 185
1,2,3,7,8-PeCDF	50.0	55.2	40 - 67	13C-2,3,4,7,8-PeCDF	87.3	21 - 178
2,3,4,7,8-PeCDF	50.0	56.1	34 - 80	13C-1,2,3,4,7,8-HxCDF	76.8	26 - 152
1,2,3,4,7,8-HxCDF	50.0	55.2	36 - 67	13C-1,2,3,6,7,8-HxCDF	76.9	26 - 123
1,2,3,6,7,8-HxCDF	50.0	56.7	42 - 65	13C-2,3,4,6,7,8-HxCDF	76.3	28 - 136
2,3,4,6,7,8-HxCDF	50.0	56.4	35 - 78	13C-1,2,3,7,8,9-HxCDF	69.6	29 - 147
1,2,3,7,8,9-HxCDF	50.0	54.9	39 - 65	13C-1,2,3,4,6,7,8-HpCDF	70.6	28 - 143
1,2,3,4,6,7,8-HpCDF	50.0	55.1	41 - 61	13C-1,2,3,4,7,8,9-HpCDF	74.0	26 - 138
1,2,3,4,7,8,9-HpCDF	50.0	55.0	39 - 69	13C-OCDF	57.0	17 - 157
OCDF	100	105	63 - 170	CRS 37Cl-2,3,7,8-TCDD	94.1	35 - 197

Analyst: JMH

Approved By: Martha M. Maier 08-Mar-2006 10:22

Sample ID: IPB2647-01 **EPA Method 1613**

Client Data
 Name: Del Mar Analytical, Irvine
 Project: IPB2647
 Date Collected: 28-Feb-06
 Time Collected: 0825

Sample Data
 Matrix: Aqueous
 Sample Size: 0.997 L

Laboratory Data
 Lab Sample: 27346-001
 QC Batch No: 7807
 Date Analyzed DB-5: 7-Mar-06
 Date Received: 2-Mar-06
 Date Extracted: 5-Mar-06
 Date Analyzed DB-225: NA

Analyte	Conc. (ug/L)	DL ^a	EMPC ^b	Qualifiers	Labeled Standard	%R	LCL-UC ^d	Qualifiers
2,3,7,8-TCDD	ND	0.00000153			13C-2,3,7,8-TCDD	64.5	25 - 164	
1,2,3,7,8-PeCDD	ND	0.00000123			13C-1,2,3,7,8-PeCDD	69.3	25 - 181	
1,2,3,4,7,8-HxCDD	ND	0.00000256			13C-1,2,3,4,7,8-HxCDD	68.9	32 - 141	
1,2,3,6,7,8-HxCDD	ND	0.00000267			13C-1,2,3,6,7,8-HxCDD	70.0	28 - 130	
1,2,3,7,8,9-HxCDD	ND	0.00000253			13C-1,2,3,4,6,7,8-HpCDD	73.7	23 - 140	
1,2,3,4,6,7,8-HpCDD	0.00000958			J	13C-OCDD	51.9	17 - 157	
OCDD	0.0000811				13C-2,3,7,8-TCDF	66.1	24 - 169	
2,3,7,8-TCDF	ND	0.00000164			13C-1,2,3,7,8-PeCDF	72.2	24 - 185	
1,2,3,7,8-PeCDF	ND	0.00000180			13C-2,3,4,7,8-PeCDF	73.6	21 - 178	
2,3,4,7,8-PeCDF	ND	0.00000172			13C-1,2,3,4,7,8-HxCDF	69.6	26 - 152	
1,2,3,4,7,8-HxCDF	ND	0.00000692			13C-1,2,3,6,7,8-HxCDF	69.0	26 - 123	
1,2,3,6,7,8-HxCDF	ND	0.00000648			13C-2,3,4,6,7,8-HxCDF	70.1	28 - 136	
2,3,4,6,7,8-HxCDF	ND	0.00000722			13C-1,2,3,7,8,9-HxCDF	65.1	29 - 147	
1,2,3,7,8,9-HxCDF	ND	0.00000103			13C-1,2,3,4,6,7,8-HpCDF	67.7	28 - 143	
1,2,3,4,6,7,8-HpCDF	ND	0.00000103			13C-1,2,3,4,7,8,9-HpCDF	73.0	26 - 138	
1,2,3,4,7,8,9-HpCDF	ND	0.00000994			13C-OCDF	56.5	17 - 157	
OCDF	0.00000390			J	CRS 37Cl-2,3,7,8-TCDD	82.9	35 - 197	

Totals

Total TCDD	ND	0.00000153		
Total PeCDD	ND	0.00000123		
Total HxCDD	ND	0.00000259		
Total HpCDD	0.0000186			
Total TCDF	ND	0.00000164		
Total PeCDF	ND	0.00000176		
Total HxCDF	ND	0.00000759		
Total HpCDF	ND	0.00000101		

Footnotes
 a. Sample specific estimated detection limit.
 b. Estimated maximum possible concentration.
 c. Method detection limit.
 d. Lower control limit - upper control limit.

Analyst: JMH
 Approved By: Martha M. Maier 08-Mar-2006 10:22

APPENDIX

DATA QUALIFIERS & ABBREVIATIONS

B	This compound was also detected in the method blank.
D	The amount reported is the maximum possible concentration due to possible chlorinated diphenylether interference.
E	The reported value exceeds the calibration range of the instrument.
H	The signal-to-noise ratio is greater than 10:1.
I	Chemical interference
J	The amount detected is below the Lower Calibration Limit of the instrument.
*	See Cover Letter
Conc.	Concentration
DL	Sample-specific estimated Detection Limit
MDL	The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero in the matrix tested.
EMPC	Estimated Maximum Possible Concentration
NA	Not applicable
RL	Reporting Limit – concentrations that corresponds to low calibration point
ND	Not Detected
TEQ	Toxic Equivalency

Unless otherwise noted, solid sample results are reported in dry weight. Tissue samples are reported in wet weight.

CERTIFICATIONS

Accrediting Authority	Certificate Number
State of Alaska, DEC	CA413-02
State of Arizona	AZ0639
State of Arkansas, DEQ	05-013-0
State of Arkansas, DOH	Reciprocity through CA
State of California – NELAP Primary AA	02102CA
State of Colorado	
State of Connecticut	PH-0182
State of Florida, DEP	E87777
Commonwealth of Kentucky	90063
State of Louisiana, Health and Hospitals	LA050001
State of Louisiana, DEQ	01977
State of Maine	CA0413
State of Michigan	81178087
State of Mississippi	Reciprocity through CA
Naval Facilities Engineering Service Center	
State of Nevada	CA413
State of New Jersey	CA003
State of New Mexico	Reciprocity through CA
State of New York, DOH	11411
State of North Carolina	06700
State of North Dakota, DOH	R-078
State of Oklahoma	D9919
State of Oregon	CA200001-002
State of Pennsylvania	68-00490
State of South Carolina	87002001
State of Tennessee	02996
State of Texas	TX247-2005A
U.S. Army Corps of Engineers	
State of Utah	9169330940
Commonwealth of Virginia	00013
State of Washington	C1285
State of Wisconsin	998036160
State of Wyoming	8TMS-Q



17461 Derian Ave. Suite 100, Irvine, CA 92614 Ph (949) 261-1022 Fax (949) 261-1228
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 Ph (909) 370-4667 Fax (909) 370-1046
 9484 Chesapeake Drive, Suite 805, San Diego, CA 92123 Ph (619) 505-9596 Fax (619) 505-8889
 9830 South 51st Street, Suite B-120, Phoenix, AZ 85044 Ph (480) 785-0043 Fax (480) 785-0851
 2520 E. Sunset Rd., Suite 83, Las Vegas, NV 89120 Ph (702) 796-3620 Fax (702) 796-3621

SUBCONTRACT ORDER - PROJECT # IPB2647

SENDING LABORATORY:	RECEIVING LABORATORY:
Del Mar Analytical, Irvine 17461 Derian Avenue, Suite 100 Irvine, CA 92614 Phone: (949) 261-1022 Fax: (949) 261-1228 Project Manager: Michele Chamberlin	Alta Analytical 1104 Windfield Way El Dorado Hills, CA 95762 Phone: (916) 933-1640 Fax: (916) 673-0106 <div style="font-size: 2em; margin-left: 20px;">27346</div> <div style="font-size: 2em; margin-left: 20px;">0.4°C</div>

Standard TAT is requested unless specific due date is requested => Due Date: _____ Initials: _____

Analysis	Expiration	Comments
Sample ID: IPB2647-01 Water	Sampled: 02/28/06 08:25	Instant Notification
1613-Dioxin-HR-Alta	03/07/06 08:25	J flags, 17 congeners, no TEQ, ug/L, sub=Alta
Level 4 + EDD-OUT	03/28/06 08:25	Excel EDD email to pm, Include Std logs for Lvl IV
Containers Supplied:		
1 L Amber (IPB2647-01C)		
1 L Amber (IPB2647-01D)		

SAMPLE INTEGRITY:			
All containers intact:	<input type="checkbox"/> Yes <input type="checkbox"/> No	Sample labels/COC agree:	<input type="checkbox"/> Yes <input type="checkbox"/> No
Custody seals Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No	Samples Preserved Properly:	<input type="checkbox"/> Yes <input type="checkbox"/> No
		Samples Received On Ice:	<input type="checkbox"/> Yes <input type="checkbox"/> No
		Samples Received at (temp):	_____

Fed-EX 03-01-06

Released By <i>[Signature]</i>	Date	Time	Received By <i>Bettina S. Benedict</i>	Date <i>3/2/06</i>	Time <i>0850</i>
Released By	Date	Time	Received By	Date	Time

Project 27346 Page 10 of 26

SAMPLE LOG-IN CHECKLIST

Alta Project #: 27346

Samples Arrival:	Date/Time 3/2/06 0850	Initials: UAB	Location: WR-2			
Logged In:	Date/Time 3/2/06 1304	Initials: UAB	Location: WR-2			
Delivered By:	<u>FedEx</u>	UPS	Cal	DHL	Hand Delivered	Other
Preservation:	<u>Ice</u>	Blue Ice	Dry Ice	None		
Temp °C	0.4°C	Time:	0950	Thermometer ID:	DT-20	

	YES	NO	NA		
Adequate Sample Volume Received?	✓				
Holding Time Acceptable?	✓				
Shipping Container(s) Intact?	✓				
Shipping Custody Seals Intact?			✓		
Shipping Documentation Present?	✓				
Airbill	✓				
Trk #	7908 3243 0340				
Sample Container Intact?	✓				
Sample Custody Seals Intact?			✓		
Chain of Custody / Sample Documentation Present?	✓				
COC Anomaly/Sample Acceptance Form completed?		✓			
If Chlorinated or Drinking Water Samples, Acceptable Preservation?			✓		
Na ₂ S ₂ O ₃ Preservation Documented?		COC	Sample Container	<u>None</u>	
Shipping Container	Alta	<u>Client</u>	Retain	<u>Return</u>	Dispose

Comments:

APPENDIX G

Section 58

Outfall 007, February 28, 2006

AMEC Data Validation Reports

CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

MEC^x
12269 East Vassar Drive
Aurora, CO 80014

Package ID B4DF51
Task Order 1261.001D.01
SDG No. IPB2647
No. of Analyses 1

Laboratory Alta
Reviewer K. Shadowlight
Analysis/Method Dioxin/Furan by Method 1613

Date: April 4, 2006
Reviewer's Signature
K. Shadowlight

ACTION ITEMS^a

- 1. Case Narrative Deficiencies
- 2. Out of Scope Analyses
- 3. Analyses Not Conducted
- 4. Missing Hardcopy Deliverables
- 5. Incorrect Hardcopy Deliverables
- 6. Deviations from Analysis Protocol, e.g.,
 - Holding Times
 - GC/MS Tune/Inst. Performance
 - Calibration
 - Method blanks
 - Surrogates
 - Matrix Spike/Dup LCS
 - Field QC
 - Internal Standard Performance
 - Compound Identification
 - Quantitation
 - System Performance

Detects below the laboratory lower calibration level were qualified as estimated.

COMMENTS^b

^a Subcontracted analytical laboratory is not meeting contract and/or method requirements.
^b Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.



DATA VALIDATION REPORT

NPDES Monitoring Program
Annual Outfall 007

ANALYSIS: DIOXINS/FURANS
SAMPLE DELIVERY GROUP: IPB2647

Prepared by

MECX, LLC
12269 East Vassar Drive
Aurora, CO 80014

1. INTRODUCTION

Task Order Title: NPDES
Contract Task Order: 1261.001.01
Sample Delivery Group: IPB2647
Project Manager: P. Costa
Matrix: Water
Analysis: Dioxins/Furans
QC Level: Level IV
No. of Samples: 1
No. of Reanalyses/Dilutions: 0
Reviewer: K. Shadowlight
Date of Review: April 4, 2006

The samples listed in Table 1 were 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 for Chlorinated Dioxin/Furan Data Review (8/02)*. Any deviations from these procedures and guidelines are documented herein. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.

Table 1. Sample Identification

Client ID	Laboratory ID (Del Mar)	Laboratory ID (Alfa)	Matrix	COC Method
Outfall 007	IPB2647-01	27346-001	Water	1613

2. DATA VALIDATION FINDINGS

2.1 SAMPLE MANAGEMENT

Following are findings associated with sample management:

2.1.1 Sample Preservation, Handling, and Transport

The sample in this SDG was received at Del Mar Analytical within the temperature limits of 4°C ±2°C. The sample was shipped to Alta for dioxin/furan analysis and was received below the temperature limits at 0°C. As the sample was not noted to be damaged or frozen, no qualifications were required. According to the case narrative and laboratory login sheet, the sample was received intact and in good condition at both laboratories. No qualifications were required.

2.1.2 Chain of Custody

The COC and transfer COC were legible and signed by the appropriate field and laboratory personnel, and accounted for the analysis presented in this SDG. As the sample was couriered directly to Del Mar Analytical-Irvine, custody seals were not required. The Client ID was added to the sample result summary by the reviewer. No qualifications were required.

2.1.3 Holding Times

The sample was extracted and analyzed within one year of collection. No qualifications were required.

2.2 INSTRUMENT PERFORMANCE

Following are findings associated with instrument performance:

2.2.1 GC Column Performance

A Windows Defining Mix (WDM) containing the first and last eluting congeners of each descriptor and isomer specificity compounds was not analyzed prior to the initial calibration sequence or at the beginning of each analytical sequence; however, the first and last eluting congeners and isomer specificity compounds were added to the midpoint of the initial calibration and to the continuing calibration standards (see section 2.3.2). 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%. No qualifications were required.

2.2.2 Mass Spectrometer Performance

The mass spectrometer performance was acceptable with the static resolving power greater than 10,000. No qualifications were required.

2.3 CALIBRATION

2.3.1 Initial Calibration

The initial calibration was analyzed 01/12/2006 on instrument VG-7. The calibration consisted of six concentration level standards (CS0 through CS5) analyzed to verify instrument linearity. The initial calibrations were acceptable with %RSDs $\leq 20\%$ for the 16 native compounds (calibration by isotope dilution) and $\leq 35\%$ for the one native and all labeled compounds (calibration by internal standard). The relative retention times and ion abundance ratios were within the QC limits listed in Method 1613 for all standards. A representative number of %RSDs were verified from the raw data, and no calculation or transcription errors were noted. No qualifications were required.

2.3.2 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. A representative number of %Ds were verified from the raw data, and no calculation or transcription errors were noted. No qualifications were required.

WDM and isomer specificity compounds were added to the VER standard instead of being analyzed separately, as noted in section 2.2.1 of this report. No adverse effect was observed with this practice.

2.4 BLANKS

One method blank (0-7807-MB001) was extracted and analyzed with the sample in this SDG. There were no target compounds detected in the method blank. A review of the method blank raw data and chromatograms indicated no false negatives. No qualifications were required.

2.5 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

One blank spike (0-7807-OPR001) was extracted and analyzed with the sample in this SDG. All recoveries were within the acceptance criteria listed in Table 6 of Method 1613. A review of the raw data and chromatograms indicated no transcription or calculation errors. No qualifications were required.

2.6 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

MS/MSD analyses were not performed in this SDG. Evaluation of method accuracy was based on the OPR results. No qualifications were required.

2.7 FIELD QC SAMPLES

Following are findings associated with field QC:

2.7.1 Field Blanks and Equipment Rinsates

The sample in this SDG had no field blank or equipment rinsate identified. No qualifications of the site samples were required.

2.7.2 Field Duplicates

No field duplicates were identified in association with the sample in this SDG.

2.8 INTERNAL STANDARDS

The labeled standard recoveries were within the acceptance criteria listed in Table 7 of Method 1613. No qualifications were required.

2.9 COMPOUND IDENTIFICATION

The laboratory analyzed for polychlorinated dioxins/furans by EPA Method 1613. The compound identifications were verified from the raw data and no false negatives or positives were noted. No qualifications were required.

2.10 COMPOUND QUANTIFICATION AND REPORTED DETECTION LIMITS

Compound quantitation was verified from the raw data. The laboratory calculated and reported compound-specific detection limits. Any detects below the laboratory lower calibration level were qualified as estimated, "J." These "J" values were annotated with the qualification code of "DNQ" to comply with the reporting requirements of the NPDES permit. No further qualifications were required.

Client Data		Sample Data		Laboratory Data		EPA Method 1613		
Sample ID: IPB2647-01	Del Mar Analytical, Irvine	Matrix: Aqueous	Lab Sample: 27346-001	Date Received: 2-Mar-06				
Project: IPB2647	Date Collected: 28-Feb-06	Sample Size: 0.997 L	QC Batch No.: 7807	Date Extracted: 5-Mar-06				
Time Collected: 0825			Date Analyzed DB-5: 7-Mar-06	Date Analyzed DB-225: NA				
Analyte	Conc. (ug/L)	DL ^a	EMPC ^b	Qualifiers	Labeled Standard	%R	LCL-UCL ^d	Qualifiers
2,3,7,8-TCDD	ND	0.00000153			13C-2,3,7,8-TCDD	64.5	25 - 164	
1,2,3,7,8-PeCDD	ND	0.00000123			13C-1,2,3,7,8-PeCDD	69.3	25 - 181	
1,2,3,4,7,8-HxCDD	ND	0.00000256			13C-1,2,3,4,7,8-HxCDD	68.9	32 - 141	
1,2,3,6,7,8-HxCDD	ND	0.00000267			13C-1,2,3,6,7,8-HxCDD	70.0	28 - 130	
1,2,3,7,8,9-HxCDD	ND	0.00000253			13C-1,2,3,4,6,7,8-HpCDD	73.7	23 - 140	
1,2,3,4,6,7,8-HpCDD	0.00000958			J	13C-OCDD	51.9	17 - 157	
OCDD	0.0000811				13C-2,3,7,8-TCDF	66.1	24 - 169	
2,3,7,8-TCDF	ND	0.00000164			13C-1,2,3,7,8-PeCDF	72.2	24 - 185	
1,2,3,7,8-PeCDF	ND	0.00000180			13C-2,3,4,7,8-PeCDF	73.6	21 - 178	
2,3,4,7,8-PeCDF	ND	0.00000172			13C-1,2,3,4,7,8-HxCDF	69.6	26 - 152	
1,2,3,4,7,8-HxCDF	ND	0.00000692			13C-1,2,3,6,7,8-HxCDF	69.0	26 - 123	
1,2,3,6,7,8-HxCDF	ND	0.00000648			13C-2,3,4,6,7,8-HxCDF	70.1	28 - 136	
2,3,4,6,7,8-HxCDF	ND	0.00000722			13C-1,2,3,7,8,9-HxCDF	65.1	29 - 147	
1,2,3,7,8,9-HxCDF	ND	0.00000103			13C-1,2,3,4,6,7,8-HpCDF	67.7	28 - 143	
1,2,3,4,6,7,8-HpCDF	ND	0.00000103			13C-1,2,3,4,7,8,9-HpCDF	73.0	26 - 138	
1,2,3,4,7,8,9-HpCDF	ND	0.00000994			13C-OCDF	56.5	17 - 157	
OCDF	0.00000390			J	CRS 37CJ-2,3,7,8-TCDD	82.9	35 - 197	
Totals								
Total TCDD	ND	0.00000153						
Total PeCDD	ND	0.00000123						
Total HxCDD	ND	0.00000259						
Total HpCDD	0.0000186							
Total TCDF	ND	0.00000164						
Total PeCDF	ND	0.00000176						
Total HxCDF	ND	0.000000759						
Total HpCDF	ND	0.00000101						

Footnotes
a. Sample specific estimated detection limit.
b. Estimated maximum possible concentration.
c. Method detection limit.
d. Lower control limit - upper control limit.

Analyst: JMH

Level IV

Approved By: Martha M. Maier 08-Mar-2006 10:22

Project 27346

CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

MEC^x
 12269 East Vassar Drive
 Aurora, CO 80014

Package ID: B4MT51
 Task Order: 1261.001D.01
 SDG No.: IPB2647

No. of Analyses: 1

Laboratory: Del Mar Analytical
 Reviewer: P. Meeks
 Analysis/Method: Metals

Date: April 6, 2006
 Reviewer's Signature


ACTION ITEMS ^a	
1. Case Narrative Deficiencies	
2. Out of Scope Analyses	
3. Analyses Not Conducted	
4. Missing Hardcopy Deliverables	
5. Incorrect Hardcopy Deliverables	
6. Deviations from Analysis Protocol, e.g.,	Qualification applied for a blank detects and detects below the reporting limit.
Holding Times	
GC/MS Tune/Inst. Performance	
Calibration	
Method blanks	
Surrogates	
Matrix Spike/Dup LCS	
Field QC	
Internal Standard Performance	
Compound Identification	
Quantitation	
System Performance	
COMMENTS ^b	
^a Subcontracted analytical laboratory is not meeting contract and/or method requirements. ^b Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.	



DATA VALIDATION REPORT

NPDES Sampling
Outfall 007

ANALYSIS: METALS

SAMPLE DELIVERY GROUP IPB2647

Prepared by

MEC^x, LLC
12269 East Vassar Drive
Aurora, CO 80014

1. INTRODUCTION

Task Order Title: NPDES Sampling
MEC^X Project Number: 1261.001D.01
Sample Delivery Group: IPB2647
Project Manager: P. Costa
Matrix: Water
Analysis: Metals
QC Level: Level IV
No. of Samples: 1
No. of Reanalyses/Dilutions: 0
Reviewer: P. Meeks
Date of Review: April 6, 2006

The samples listed in Table 1 were validated based on the guidelines outlined in the MEC^X Data Validation Procedure for ICP and ICP-MS Metals (DVP-5, Rev. 0), EPA Methods 200.7 and 200.8, and validation guidelines outlined in the USEPA CLP National Functional Guidelines for Inorganic Data Review (2/94). Any deviations from these procedures and guidelines are documented herein. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.

Table 1. Sample Identification

Client ID	Laboratory ID	Matrix	COC Method
Outfall 007	IPB2647-01	Water	200.7, 200.8

2. DATA VALIDATION FINDINGS

2.1 SAMPLE MANAGEMENT

Following are findings associated with sample management:

2.1.1 Sample Preservation, Handling, and Transport

The sample in this SDG was received at the laboratory within the temperature limits of 4°C ±2°C. No sample preservation, handling, or transport problems were noted, and no qualifications were necessary.

2.1.2 Chain of Custody

The COC was signed and dated by field and laboratory personnel and accounted for the sample and analyses presented in this SDG. No sample qualifications were required.

2.1.3 Holding Times

The date of collection recorded on the COC and the dates of analyses recorded in the raw data documented that the sample analyses were performed within the specified holding times of six months for the ICP and ICP-MS metals. No qualifications were required.

2.2 ICP-MS TUNING

The method-specified tune criteria were met and no qualifications were required.

2.3 CALIBRATION

The ICV and CCV results showed acceptable recoveries, 90-110% for ICP and ICP-MS metals. The laboratory analyzed reporting limit check standards in association with the sample in this SDG and the recoveries were considered to be acceptable. No qualifications were required.

2.4 BLANKS

Chromium was detected in method blank 6C03084-BLK1 at 1.1 µg/L; therefore, chromium detected in Outfall 007 was qualified as an estimated nondetect, "UJ." No further qualifications were required.

2.5 ICP INTERFERENCE CHECK SAMPLE (ICS A/AB)

ICSA and ICSAB analyses were performed in association with the sample in this SDG for the ICP metals. Silver and chromium were detected in the ICSA above the respective reporting limits. The reviewer checked the raw data for the sample and determined that the level of interferents in Outfall 007 were not of sufficient concentrations to qualify the sample results. No qualifications were required.

2.6 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

The ICP and ICP-MS were within the laboratory-established control limits of 85-115%. No qualifications were required.

2.7 LABORATORY DUPLICATES

No MS/MSD or laboratory duplicate analyses were performed in association with the sample in this SDG; therefore, no assessment was made with respect to this criterion.

2.8 MATRIX SPIKES

NO MS/MSD analyses were performed in association with the sample in this SDG; therefore, no assessment was made with respect to this criterion. Method accuracy was evaluated based on LCS results. No qualifications were required.

2.9 ICP/MS AND ICP SERIAL DILUTION

No serial dilution analyses were performed in association with the sample in this SDG; therefore, no assessment was made with respect to this criterion.

2.10 INTERNAL STANDARDS PERFORMANCE

For the target analytes analyzed by ICP-MS, the internal standards were within the method-specified control limits of 60-125%. No qualifications were required.

2.11 SAMPLE RESULT VERIFICATION

A Level IV review was performed for the sample in this data package. Calculations were verified and the sample results reported on the Form Is were verified against the raw data. No

DATA VALIDATION REPORT

transcription errors or calculation errors were noted. Analytes detected below the reporting limit were qualified as estimated, "J," and denoted with "DNQ," in accordance with the NPDES permit. No further qualifications were required.

2.12 FIELD QC SAMPLES

Field QC samples are evaluated, and if necessary, qualified based only on laboratory blanks. Any remaining detects are used to evaluate the associated samples.

2.12.1 Field Blanks and Equipment Rinsates

The sample in this SDG had no associated field QC samples. No qualifications were required.

2.12.2 Field Duplicates

There were no field duplicate analyses performed in association with the site sample.



17461 Derian Ave., Suite 100, Irvine, CA 92614 (949) 261-1022 FAX (949) 265-3297
 1014 E. Cooley Dr., Suite A, Colton, CA 92324 (909) 370-4667 FAX (909) 370-1046
 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-1031
 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 795-3620 FAX (702) 795-3621

MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 007

Report Number: IPB2647

Sampled: 02/28/06
 Received: 02/28/06

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB2647-01 (Outfall 007 - Water) - cont.									
Reporting Units: ug/l									
Aluminum	EPA 200.7	6C03084	40	50	2600	1	03/03/06	03/04/06	Raw Qual
Antimony	EPA 200.8	6C02098	0.18	2.0	2.6	1	03/02/06	03/02/06	Qual Code
Arsenic	EPA 200.7	6C03084	4.4	5.0	ND	1	03/03/06	03/04/06	U
Beryllium	EPA 200.7	6C03084	0.90	2.0	ND	1	03/03/06	03/04/06	U
Cadmium	EPA 200.8	6C02098	0.015	1.0	0.091	1	03/02/06	03/02/06	I, B, J DNA
Chromium	EPA 200.7	6C03084	2.0	5.0	4.2	1	03/03/06	03/04/06	U, B, J B
Copper	EPA 200.8	6C02098	0.49	2.0	4.1	1	03/02/06	03/02/06	
Lead	EPA 200.8	6C02098	0.040	1.0	2.6	1	03/02/06	03/02/06	
Mercury	EPA 245.1	6C02097	0.063	0.20	ND	1	03/02/06	03/02/06	K
Nickel	EPA 200.7	6C03084	2.0	10	4.5	1	03/03/06	03/04/06	J, J DNA
Selenium	EPA 200.7	6C03084	8.0	10	ND	1	03/03/06	03/04/06	U
Silver	EPA 200.7	6C03084	3.0	10	ND	1	03/03/06	03/04/06	↓
Thallium	EPA 200.8	6C02098	0.15	1.0	ND	1	03/02/06	03/02/06	I, J
Vanadium	EPA 200.7	6C03084	3.0	10	6.9	1	03/03/06	03/04/06	I, J DNA
Zinc	EPA 200.7	6C03084	15	20	34	1	03/03/06	03/04/06	

Del Mar Analytical - Irvine
 Michele Chamberlin
 Project Manager

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 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-Pasadena/Boeing 300 North Lake Avenue, Suite 1200 Pasadena, CA 91101 Attention: Bronwyn Kelly	Project ID: Annual Outfall 007 Report Number: IPB2647	Sampled: 02/28/06 Received: 02/28/06
--	--	---

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB2647-01 (Outfall 007 - Water) - cont. Reporting Units: mg/l									
Boron	EPA 200.7	6C03084	0.0074	0.050	0.026	1	03/03/06	03/07/06	* J
* Analysis not validated									

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 Michele Chamberlin
 Project Manager

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CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

MEC^x
 12269 East Vassar Drive
 Aurora, CO 80014

Package ID: B4PP15
 Task Order: 1261.001D.01
 SDG No.: IPB2647

No. of Analyses: 1

Laboratory: Del Mar Analytical
 Reviewer: P. Meeks
 Analysis/Method: Pesticide/PCBs

Date: <u>April 7, 2006</u>
Reviewer's Signature <i>P. Meeks</i>

ACTION ITEMS ^a	
1. Case Narrative Deficiencies	
2. Out of Scope Analyses	
3. Analyses Not Conducted	
4. Missing Hardcopy Deliverables	
5. Incorrect Hardcopy Deliverables	
6. Deviations from Analysis Protocol, e.g.,	Qualifications applied for initial calibration %RSD and continuing calibration %Ds.
Holding Times	
GC/MS Tune/Inst. Performance	
Calibration	
Method blanks	
Surrogates	
Matrix Spike/Dup LCS	
Field QC	
Internal Standard Performance	
Compound Identification	
Quantitation	
System Performance	
COMMENTS ^b	
<p>^a Subcontracted analytical laboratory is not meeting contract and/or method requirements.</p> <p>^b Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.</p>	



DATA VALIDATION REPORT

NPDES Monitoring Program
Annual Outfall 007

ANALYSIS: PESTICIDES / PCBs

SAMPLE DELIVERY GROUP: IPB2647

Prepared by

MECX, LLC
12269 East Vassar Drive
Aurora, CO 80014

1. INTRODUCTION

Task Order Title: NPDES
MEC^x Project Number: 1261.001D.01
Sample Delivery Group: IPB2647
Project Manager: P. Costa
Matrix: Water
Analysis: Pesticides
QC Level: Level IV
No. of Samples: 1
No. of Reanalyses/Dilutions: 0
Reviewer: P. Meeks
Date of Review: April 7, 2006

The samples listed in Table 1 were validated based on the guidelines outlined in the MEC^x Data Validation Procedure for Organochlorine Pesticides and PCBs (DVP-4, Rev. 0), EPA Method 608, and the National Functional Guidelines for Organic Data Review (2/94). Any deviations from these procedures are documented herein. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.

Table 1. Sample Identification

Client ID	Laboratory ID	Matrix	COC Method
Outfall 007	IPB2647-01	Water	608

2. DATA VALIDATION FINDINGS

2.1 SAMPLE MANAGEMENT

The sample in this SDG was received at the laboratory within the temperature limits of $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$, at 5°C . According to the case narrative for this SDG, the sample was received intact and on ice. No qualifications were required.

2.1.2 Chain of Custody

The COC was signed and dated by both field and laboratory personnel. As the sample was couriered directly to the laboratory, custody seals were not required. No qualifications were required.

2.1.3 Holding Times

The water sample was extracted within seven days of sample collection and analyzed within 40 days of extraction. No qualifications were required.

2.2 PESTICIDES INSTRUMENT PERFORMANCE

No resolution check standards or breakdown check standards are required by Method 608 for pesticides, and according to the raw data provided, a resolution check standard was not analyzed by the laboratory. The laboratory did analyze a breakdown check standard with the breakdown for individual components (4,4-DDT and endrin) $\leq 20\%$ and $\leq 30\%$ for the total, as suggested in the National Functional Guidelines. A review of the raw data indicated that the analytical run time was of sufficient length to provide adequate standard separation. The two analytical columns used in the analyses were within the guidelines specified in the methods.

According to the laboratory SOP and the initial calibration raw data, the retention time windows are ± 0.10 minutes for both surrogates and target compound calibration standards. A review of the raw data indicated that the laboratory retention time criteria were met for the surrogates and pesticide calibration standards. No qualifications were required.

2.3 CALIBRATION

2.3.1 Analytical Sequence

Based on the data provided, the analytical sequences were in accordance with the requirements of Method 608. No qualifications were required.

2.3.2 Initial Calibration

There was one initial calibration dated 03/02/06 associated with the Aroclor analysis of the site sample and one dated 03/06/06 associated with the pesticide analysis. The initial calibrations consisted of six point calibrations for Aroclors 1016 and 1260 and all pesticide target compounds on two analytical columns. The average %RSDs of the individual Aroclor peaks were within the EPA Method 608 QC limit of $\leq 10\%$ on the primary analytical column (Channel A) or the r^2 values were ≥ 0.995 , except for the average %RSD for Aroclor 1260. The nondetects for Aroclors 1248, 1254, and 1260 in Outfall 007 were qualified as estimated, "UJ." The %RSDs for all pesticide target compounds were $\leq 10\%$ on the primary column or r^2 values ≥ 0.995 , with the exception of the %RSD for heptachlor. The nondetect for heptachlor was qualified as estimated, "UJ," in Outfall 007.

The pesticide and average Aroclor %RSDs were $\leq 10\%$ or r^2 values ≥ 0.995 on the secondary column (Channel B).

An ICV was analyzed immediately following each initial calibration, and the %Ds for all pesticide target compounds and Aroclors 1016 and 1260 were within the QC limit of $\leq 15\%$ on the primary column. No further qualifications were required.

2.3.3 Continuing Calibration

The pesticide and Aroclor analyses of Outfall 007 were each bracketed by two continuing calibrations. The %Ds for all pesticide target compounds and Aroclors 1016 and 1260 were within the Method QC limit of $\leq 15\%$ for all calibrations on the primary column, with the exception of 4,4-DDT and methoxychlor on the primary column in the ending pesticide CCV. As the responses were low, the nondetects for 4,4-DDT and methoxychlor in Outfall 007 were qualified as estimated, "UJ." No further qualifications were required.

2.4 BLANKS

2.4.1 Instrument Blanks

An instrument blank was analyzed at the beginning of the analytical sequence. Cross-contamination was not evident in the instrument blank or the sample. No qualifications were necessary.

2.4.2 Method Blanks

One water method blank (6C05031-BLK1) was extracted and analyzed with this SDG. No pesticide target compounds or Aroclors were detected in the method blank. Review of the chromatograms from both channels showed no false negatives. No qualifications were required.

2.5 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

One blank spike/blank spike duplicate pair (6C05031-BS1/BSD1 for pesticides and Aroclors) was analyzed with this SDG. The recoveries for all pesticide compounds and Aroclors 1016 and 1260 were within the laboratory-established QC limits, and all RPDs were within the QC limit of $\leq 30\%$. A representative number of recoveries and RPDs were calculated from the raw data and no calculation or transcription errors were found. No qualifications were required.

2.6 SURROGATE RECOVERY

Surrogate recoveries were within the laboratory-established QC limits for the sample in this SDG. The recoveries were calculated from the raw data, and no transcription or calculation errors were noted. No qualifications were required.

2.7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

MS/MSD analyses were not performed on the sample of this SDG. Evaluation of method accuracy and precision were based on the blank spike/blank spike duplicate results. No qualifications were required.

2.8 SAMPLE CLEANUP PERFORMANCE

According to the laboratory extraction benchsheets, no cleanups were performed on the water sample. No qualifications were required.

2.9 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 sample. Following are findings associated with field QC samples:

2.9.1 Field Blanks and Equipment Rinsates

There were no field blank or equipment rinsate samples identified for this SDG. No qualifications were required.

2.9.2 Field Duplicates

There were no field duplicate samples identified for this SDG.

2.10 COMPOUND IDENTIFICATION

The laboratory analyzed for pesticide target compounds and seven Aroclors by EPA Method 608. Compound identification is verified at a Level IV validation. The laboratory provided an overlay of the pesticide sample chromatogram and the pesticide standard for identification purposes. Review of chromatograms and retention times indicated no problems with compound identification for the sample in this SDG. No qualifications were required.

2.11 COMPOUND QUANTIFICATION AND REPORTED DETECTION LIMITS

Compound quantification is verified at a Level IV data validation. No calculation or transcription errors were found. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. No qualifications were required.



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MWH-Pasadena/Boeing 300 North Lake Avenue, Suite 1200 Pasadena, CA 91101 Attention: Bronwyn Kelly	Project ID: Annual Outfall 007 Report Number: IPB2647	Sampled: 02/28/06 Received: 02/28/06
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TOTAL PCBS (EPA 608)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB2647-01 (Outfall 007 - Water) - cont. Reporting Units: ug/l									
Aroclor 1016	EPA 608	6C05031	0.19	0.94	ND	0.943	03/05/06	03/06/06	U
Aroclor 1221	EPA 608	6C05031	0.094	0.94	ND	0.943	03/05/06	03/06/06	U
Aroclor 1232	EPA 608	6C05031	0.24	0.94	ND	0.943	03/05/06	03/06/06	U
Aroclor 1242	EPA 608	6C05031	0.24	0.94	ND	0.943	03/05/06	03/06/06	U
Aroclor 1248	EPA 608	6C05031	0.24	0.94	ND	0.943	03/05/06	03/06/06	U
Aroclor 1254	EPA 608	6C05031	0.24	0.94	ND	0.943	03/05/06	03/06/06	U
Aroclor 1260	EPA 608	6C05031	0.38	0.94	ND	0.943	03/05/06	03/06/06	U
Surrogate: Decachlorobiphenyl (45-120%)					83 %				

PM 4/10/06

Del Mar Analytical - Irvine
 Michele Chamberlin
 Project Manager

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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 007

Report Number: IPB2647

Sampled: 02/28/06

Received: 02/28/06

ORGANOCHLORINE PESTICIDES (EPA 608)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB2647-01 (Outfall 007 - Water) - cont.									
Reporting Units: ug/l									
Aldrin	EPA 608	6C05031	0.028	0.094	ND	0.943	03/05/06	03/07/06	U
alpha-BHC	EPA 608	6C05031	0.019	0.094	ND	0.943	03/05/06	03/07/06	U
beta-BHC	EPA 608	6C05031	0.014	0.094	ND	0.943	03/05/06	03/07/06	U
delta-BHC	EPA 608	6C05031	0.019	0.19	ND	0.943	03/05/06	03/07/06	U
gamma-BHC (Lindane)	EPA 608	6C05031	0.019	0.094	ND	0.943	03/05/06	03/07/06	U
Chlordane	EPA 608	6C05031	0.19	0.94	ND	0.943	03/05/06	03/07/06	U
4,4'-DDD	EPA 608	6C05031	0.019	0.094	ND	0.943	03/05/06	03/07/06	U
4,4'-DDE	EPA 608	6C05031	0.024	0.094	ND	0.943	03/05/06	03/07/06	U
4,4'-DDT	EPA 608	6C05031	0.033	0.094	ND	0.943	03/05/06	03/07/06	U
Dieldrin	EPA 608	6C05031	0.014	0.094	ND	0.943	03/05/06	03/07/06	U
Endosulfan I	EPA 608	6C05031	0.014	0.094	ND	0.943	03/05/06	03/07/06	U
Endosulfan II	EPA 608	6C05031	0.038	0.094	ND	0.943	03/05/06	03/07/06	U
Endosulfan sulfate	EPA 608	6C05031	0.019	0.19	ND	0.943	03/05/06	03/07/06	U
Endrin	EPA 608	6C05031	0.019	0.094	ND	0.943	03/05/06	03/07/06	U
Endrin aldehyde	EPA 608	6C05031	0.042	0.094	ND	0.943	03/05/06	03/07/06	U
Endrin ketone	EPA 608	6C05031	0.019	0.094	ND	0.943	03/05/06	03/07/06	U
Heptachlor	EPA 608	6C05031	0.028	0.094	ND	0.943	03/05/06	03/07/06	U
Heptachlor epoxide	EPA 608	6C05031	0.028	0.094	ND	0.943	03/05/06	03/07/06	U
Methoxychlor	EPA 608	6C05031	0.033	0.094	ND	0.943	03/05/06	03/07/06	U
Toxaphene	EPA 608	6C05031	1.4	4.7	ND	0.943	03/05/06	03/07/06	U
Surrogate: Tetrachloro-m-xylene (35-115%)					55 %				
Surrogate: Decachlorobiphenyl (45-120%)					61 %				

Del Mar Analytical - Irvine
 Michele Chamberlin
 Project Manager

LEVEL IV

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CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

MEC^x
 12269 East Vassar Drive
 Aurora, CO 80014

Package ID: B4RA3
 Task Order: 1261.001D.05
 SDG No.: Multiple

No. of Analyses: 8
 Date: April 1, 2006
 Reviewer's Signature
P. Meeks

Laboratory: Ebeline
 Reviewer: P. Meeks
 Analysis/Method: Radionuclides

ACTION ITEMS^a	
1. Case Narrative Deficiencies	
2. Out of Scope Analyses	
3. Analyses Not Conducted	
4. Missing Hardcopy Deliverables	
5. Incorrect Hardcopy Deliverables	
6. Deviations from Analysis Protocol, e.g.,	Qualifications were applied for exceeded holding times and low detector efficiencies.
Holding Times	
GC/MS Tune/Inst. Performance	
Calibration	
Method blanks	
Surrogates	
Matrix Spike/Dup LCS	
Field QC	
Internal Standard Performance	
Compound Identification	
Quantitation	
System Performance	
COMMENTS^b	
^a Subcontracted analytical laboratory is not meeting contract and/or method requirements. ^b Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.	



DATA VALIDATION REPORT

NPDES Sampling Multiple Outfalls

ANALYSIS: RADIONUCLIDES

SAMPLE DELIVERY GROUPS: IPB2637, IPB2639, IPB2641,
IPB2643, IPB2645, IPB2647, IPB2648, IPB2650

Prepared by

MECX, LLC
12269 East Vassar Drive
Aurora, CO 80014

1. INTRODUCTION

Task Order Title: NPDES Sampling
MEC^X Project Number: 1261.001D.01
Sample Delivery Group: IPB2637, IPB2639, IPB2641, IPB2643, IPB2645,
IPB2647, IPB2648, IPB2650
Project Manager: P. Costa
Matrix: Water
Analysis: Radionuclides
QC Level: Level IV
No. of Samples: 1
No. of Reanalyses/Dilutions: 0
Reviewer: P. Meeks
Date of Review: April 1, 2006

The samples listed in Table 1 were validated based on the guidelines outlined in the USEPA CLP National Functional Guidelines for Inorganic Data Review (2/94). Any deviations from these procedures and guidelines are documented herein. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.

Table 1. Sample Identification

Client ID	Del Mar ID	Eberline ID	Matrix	COC Method
Outfall 001	IPB2637-01	8660-001	water	900.0
Outfall 002	IPB2639-01	8661-001	water	900.0
Outfall 011	IPB2641-01	8662-001	water	900.0
Outfall 018	IPB2643-01	8663-001	water	900.0
Outfall 005	IPB2645-01	8664-001	water	900.0
Outfall 007	IPB2647-01	8665-001	water	900.0
Outfall 008	IPB2648-01	8666-001	water	900.0
Outfall 010	IPB2650-01	8667-001	water	900.0

2. DATA VALIDATION FINDINGS

2.1 SAMPLE MANAGEMENT

Following are findings associated with sample management:

2.1.1 Sample Preservation, Handling, and Transport

All the samples in these SDGs were received at Del Mar Analytical within the temperature limits of $4 \pm 2^\circ\text{C}$. No temperature information was provided by Eberline, the subcontract laboratory; however, as it is not necessary to chill radiological samples, no qualifications were required. The samples were noted to have been received intact and in good condition.

According to the Los Angeles Regional Water Quality Control Board's (LARWQCB) guidance letter dated 01/12/05, unfiltered samples should not be preserved and filtered aliquots should be preserved after filtration. The samples in these SDGs were not preserved or filtered. No qualifications were required.

2.1.2 Chain of Custody

The original COCs were signed and dated by field and laboratory personnel and the transfer COCs were signed by personnel from both laboratories. Eberline did not list the MWH IDs on the Form Is; therefore, the reviewer edited the Form Is to reflect these IDs. The original COCs requested strontium and tritium analyses; however, in accordance with the NPDES permit, these analyses per not performed as the gross alpha and gross beta results did not exceed the permit requirements. No qualifications were required.

2.1.3 Holding Times

All samples were analyzed beyond the five day holding time for unpreserved samples; therefore, all results were qualified as estimated, "J," for detects and, "UJ," for nondetects. No further qualifications were required.

2.2 CALIBRATION

The laboratory calibration information included the standard certificates and applicable preparation/dilutions logs for NIST-traceability. All gross alpha detector efficiencies were less than 20%; therefore, all gross alpha results were qualified as estimated, "J," for detects and, "UJ," for nondetects. No further qualifications were required.

2.3 BLANKS

No measurable activities were detected in the method blanks, therefore, no qualifications were necessary.

2.4 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

Aqueous blank spikes were analyzed in association with the samples in these SDGs. The blank spike results were within the 3-sigma limits. No qualifications were necessary.

2.5 LABORATORY DUPLICATES

The laboratory performed duplicate analyses on Outfall 001. Both results were within the 3-sigma limit limits. No qualifications were necessary.

2.6 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

The laboratory performed MS/MSD analyses on Outfall 001. Both recoveries were within the 3-sigma limits and no qualifications were required.

2.7 SAMPLE RESULT VERIFICATION

An EPA Level IV review was performed for the samples in these SDGs. 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. No qualifications were necessary.

2.8 FIELD QC SAMPLES

Field QC samples were evaluated, and if necessary, qualified based only on laboratory blanks. Any remaining detects are used to evaluate the associated samples.

2.8.1 Field Blanks and Equipment Rinsates

The samples in these SDGs had no associated field QC samples. No qualifications were required.

2.8.2 Field Duplicates

There were no field duplicate samples in these SDGs.

Eberline Services

ANALYSIS RESULTS

SDG <u>8660</u>	Client <u>DEL MAR ANSL</u>
Work Order <u>R603014-01</u>	Contract <u>PROJECTE IPB2637</u>
Received Date <u>03/02/06</u>	Matrix <u>WATER</u>

Client	Lab	Collected	Analyzed	Nuclide	Results ± 2σ	Units	MDA	Rel Qual	Qual Code
Sample ID <u>Outfall 001</u> IPB2637-01	Sample ID 8660-001	02/28/06	03/06/06	Gross Alpha	2.64 ± 1.7	pCi/L	1.95	J	R, H
			03/06/06	Gross Beta	7.69 ± 1.6	pCi/L	2.06	J	↓

LEVEL IV

Certified by <u>[Signature]</u>
Report Date <u>03/13/06</u>
Page 1

Eberline Services

ANALYSIS RESULTS

SNO <u>8661</u> Work Order <u>R693017-01</u> Received Date <u>03/02/06</u>	Client <u>DEL MAR ANAL</u> Contract <u>PROJECT# IPB2639</u> Matrix <u>WATER</u>
--	---

Client	Lab	Sample ID	Collected	Analyzed	Nuclide	Results ± 3σ	Units	MDA
Sample ID								
<i>Outfall 002</i>								
IPB2639-01	8661-001	02/28/06	03/06/06		Gross Alpha	2.58 ± 1.6	pCi/L	1.93
			03/06/06		Gross Beta	4.60 ± 1.4	pCi/L	1.85

Rev	Qual
Paul	Code
J	R/H
J	↓

LEVEL IV

Certified by <i>[Signature]</i> Report Date <u>03/13/06</u> Page 1
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Eberline Services

ANALYSIS RESULTS

SDO <u>8662</u> Work Order <u>R603018-01</u> Received Date <u>03/02/06</u>	Client <u>DEL MAR ANAL</u> Contract <u>PROJECT# IPB2641</u> Matrix <u>WATER</u>
--	---

Client	Lab								
Sample ID	Sample ID	Collected	Analyzed	Nuclide	Results ± 2σ	Units	MDA	Raw	C/C
Outfall 011 IPB2641-01	8662-001	02/28/06	03/06/06	Gross Alpha	5.24 ± 2.0	pCi/L	1.86	J	P
			03/06/06	Gross Beta	7.59 ± 1.7	pCi/L	2.18	↓	I

LEVEL IV

Certified by <u>[Signature]</u> Report Date <u>03/12/06</u> Page <u>1</u>

Eberline Services

ANALYSIS RESULTS

SDG 8663	Client DEL MAR AREA
Work Order R603019-01	Contract PROJECT# IPB2643
Received Date 03/02/06	Matrix WATER

Client	Lab	Sample ID	Collected	Analyzed	Noclide	Results ± 3σ	Units	MOA	Rev Qual	Qual Code
IPB2643-01	8663-001	02/28/06	03/06/06	GrossAlpha	1.98 ± 1.1	pCi/L	1.40	J ↓	R, H ↓	
			03/05/06	Gross Beta	5.99 ± 1.4	pCi/L	1.81			

outfall 01B

LEVEL IV

Certified by <u>[Signature]</u>
Report Date 03/13/06
Page 1

Eberline Services

ANALYSIS RESULTS

SDG <u>8664</u>	Client <u>DEL MAR ANAL</u>
Work Order <u>R593020-01</u>	Contract <u>PROJECT# IPB2645</u>
Received Date <u>03/02/06</u>	Matrix <u>WATER</u>

Client	Lab	Sample ID	Collected	Analyzed	Nuclide	Results ± 2σ	Units	MDA	Rev Qual	Qual Code
		<u>outfall 005</u>								
<u>IPB2645-01</u>	<u>8664-001</u>	<u>02/28/06</u>	<u>03/06/06</u>	<u>Gross Alpha</u>	<u>1.30 ± 1.0</u>	<u>pCi/L</u>	<u>1.45</u>		<u>UJ</u>	<u>R, H</u>
			<u>03/05/06</u>	<u>Gross Beta</u>	<u>6.96 ± 1.4</u>	<u>pCi/L</u>	<u>1.98</u>		<u>J</u>	<u>↓</u>

LEVEL IV

Certified by <u>[Signature]</u>
Report Date <u>03/12/06</u>
Page 1

Eberline Services

ANALYSIS RESULTS

SDG <u>8665</u>	Client <u>DEL MAR ABAL</u>
Work Order <u>R603021-01</u>	Contract <u>PROJECT# IPN2647</u>
Received Date <u>03/03/06</u>	Matrix <u>WATER</u>

Client	Lab									
Sample ID	Sample ID	Collected	Analyzed	Nuclide	Results ± 2σ	Units	MDA	Rev Qual	Qual Code	
Outfall 007 IPN2647-01	8665-001	02/28/06	03/06/06	Gross Alpha	2.56 ± 1.2	pCi/L	1.09	J	R, H	
			03/06/06	Gross Beta	5.35 ± 1.8	pCi/L	2.56	↓	↓	

LEVEL IV

Certified by <u>[Signature]</u>
Report Date <u>03/12/06</u>
Page 1

Eberline Services

ANALYSIS RESULTS

SDG <u>8666</u> Work Order <u>8603022-01</u> Received Date <u>03/02/06</u>	Client <u>DEL MAR ANAL</u> Contract <u>PROJECT# IPB2648</u> Matrix <u>WATER</u>
--	---

Client	Lab							Rev	Qual
Sample ID	Sample ID	Collected	Analyzed	Nuclide	Results ± 2σ	Units	MDA	Qual	Code
<i>Outfall 08</i> IPB2648-01	8666-001	02/28/06	03/06/06	Gross Alpha	1.01 ± 1.6	pCi/L	2.02	UI	R, H
			03/06/06	Gross Beta	23.7 ± 2.3	pCi/L	1.92	J	↓

LEVEL IV

Certified by <i>[Signature]</i> Report Date <u>03/12/06</u> Page 1
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Eberline Services

ANALYSIS RESULTS

SDG <u>8667</u>	Client <u>DEL MAR ANAL</u>
Work Order <u>8663023-01</u>	Contract <u>PROJECT# IPB2650</u>
Received Date <u>03/02/06</u>	Matrix <u>WATER</u>

Client	Lab	Sample ID	Collected	Analyzed	Method	Results ± SD	Units	MDA	Rev Qual	Qual Code
IPB2650-01		8667-001	02/28/06	03/06/06	Gross Alpha	0.532 ± 0.90	pCi/L	1.55	UI	R, H
				03/06/06	Gross Beta	4.02 ± 1.3	pCi/L	1.81	J	↓

Outfall 010

LEVEL IV

Certified by <i>[Signature]</i>
Report Date <u>03/12/06</u>
Page 1

CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

MEC^x
12269 East Vassar Drive
Aurora, CO 80014

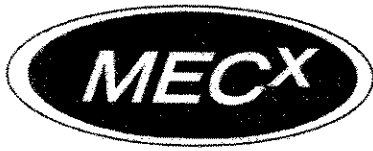
Package ID: B4SV30
Task Order: 1261.001D.01
SDG No.: IPB2647

No. of Analyses: 1

Laboratory: Del Mar Analytical
Reviewer: L. Calvin
Analysis/Method: Semivolatiles by Method 625

Date: April 10, 2006
Reviewer's Signature:
L. Calvin

ACTION ITEMS^a	
1. Case Narrative Deficiencies	
2. Out of Scope Analyses	
3. Analyses Not Conducted	
4. Missing Hardcopy Deliverables	
5. Incorrect Hardcopy Deliverables	
6. Deviations from Analysis Protocol, e.g.,	Qualifications were assigned for the following:
Holding Times	-BS/BSD RPDs above the QC limits
GC/MS Tune/Inst. Performance	
Calibration	
Method blanks	
Surrogates	
Matrix Spike/Dup LCS	
Field QC	
Internal Standard Performance	
Compound Identification	
Quantitation	
System Performance	
COMMENTS^b	
* Subcontracted analytical laboratory is not meeting contract and/or method requirements.	
* Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.	



DATA VALIDATION REPORT

NPDES Monitoring Program
Annual Outfall 007

ANALYSIS: SEMIVOLATILES

SAMPLE DELIVERY GROUP IPB2647

Prepared by

MECX, LLC
12269 East Vassar Drive
Aurora, CO 80014

1. INTRODUCTION

Task Order Title: NPDES
MEC^X Project Number: 1261.001D.01
Sample Delivery Group: IPB2647
Project Manager: P. Costa
Matrix: Water
Analysis: Semivolatiles
QC Level: Level IV
No. of Samples: 1
No. of Reanalyses/Dilutions: 0
Reviewer: L. Calvin
Date of Review: April 10, 2006

The samples listed in Table 1 were validated based on the guidelines outlined in *the MEC^X Data Validation Procedure for Semivolatile Organics (DVP-3, Rev. 0)*, *EPA Method 625*, and the *National Functional Guidelines For Organic Data Review (2/94)*. Any deviations from these procedures and guidelines are documented herein. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.

Table 1. Sample Identification

Client ID	Laboratory ID	Matrix	COC Method
Outfall 007	IPB2647-01	Water	625

2. DATA VALIDATION FINDINGS

2.1 SAMPLE MANAGEMENT

Following are findings associated with sample management:

2.1.1 Sample Preservation, Handling, and Transport

The sample in this SDG was received at the laboratory within the temperature limits of 4°C ±2°C at 5°C. No sample preservation, handling, or transport problems were noted, and no qualifications were necessary.

2.1.2 Chain of Custody

The COC was signed and dated by field and laboratory personnel. The COC accounted for the analysis presented in this SDG. As the sample was couriered directly from the field to the laboratory, custody seals were not necessary. No qualifications were required.

2.1.3 Holding Times

The water sample was extracted within seven days of collection and analyzed within 40 days of extraction. No qualifications were required.

2.2 GC/MS TUNING

The DFTPP tunes analyzed at the beginning of each daily analytical sequence met the abundance criteria specified in EPA Method 625. No qualifications were required.

2.3 CALIBRATION

One initial calibration was associated with the sample, analyzed 02/27/06. The %RSDs for all target compounds were ≤35% or r^2 values ≥0.995 in the initial calibration. The continuing calibration associated with the sample analysis was analyzed 03/09/06. The %Ds for all target compounds were ≤20% in the continuing calibration. No qualifications were required.

2.4 BLANKS

One method blank (6C06054-BLK1) was extracted and analyzed with this SDG. Target compounds were not detected above the MDLs in the method blank. Review of the method blank raw data indicated no false negatives. No qualifications were required.

2.5 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

One blank spike/blank spike duplicate pair (6C06054-BS1/BSD1) was extracted and analyzed with this SDG. Diethyl phthalate and dimethyl phthalate were recovered below the QC limits but $\geq 10\%$ in the BSD only. RPDs exceeded the QC limits for benzidine, bis(2-ethylhexyl)phthalate, butyl benzyl phthalate, di-n-butyl phthalate, diethyl phthalate, dimethyl phthalate, di-n-octyl phthalate, hexachlorocyclopentadiene, and hexachloroethane. Nondetect results for the RPD outliers were qualified as estimated, "UJ," in sample Outfall 007. All remaining recoveries and RPDs were within the laboratory-established QC limits. No further qualifications were required.

2.6 SURROGATE RECOVERY

Surrogate recoveries for the sample were within the laboratory QC limits. No qualifications were required.

2.7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

MS/MSD analyses were not performed on the sample of this SDG. Evaluation of method accuracy and precision was based on the blank spike/blank spike duplicate results. No qualifications were required.

2.8 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:

2.8.1 Field Blanks and Equipment Rinsates

There were no field blank or equipment rinsate samples identified for this SDG. No qualifications were required.

2.8.2 Field Duplicates

There were no field duplicate samples identified for this SDG.

2.9 INTERNAL STANDARDS PERFORMANCE

The internal standard area counts and retention times for the sample were within the control limits established by the continuing calibration standard: -50%/+100% for internal standard areas and ± 30 seconds for retention times. The areas were checked from the raw data, and no transcription or calculation errors were noted. No qualifications were required.

2.10 COMPOUND IDENTIFICATION

The laboratory analyzed for semivolatile target compounds by EPA Method 625. Review of the sample chromatogram, retention times, and spectra indicated no problems with target compound identification. No qualifications were required.

2.11 COMPOUND QUANTIFICATION AND REPORTED DETECTION LIMITS

Compound quantification is verified at a Level IV data validation. No calculation or transcription errors were found. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. Results were reported in $\mu\text{g/L}$ (ppb). No qualifications were required.

2.12 TENTATIVELY IDENTIFIED COMPOUNDS

TICs were not reported by the laboratory for this SDG. No qualifications were required.

2.13 SYSTEM PERFORMANCE

Review of the raw data indicated no problems with system performance. No qualifications were required.



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 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0831
 2320 E. Sunset Rd., #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Brouwyn Kelly

Project ID: Annual Outfall 007

Report Number: IPB2647

Sampled: 02/28/06
 Received: 02/28/06

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: IPB2647-01 (Outfall 007 - Water)									
Reporting Units: ug/l									
Acenaphthene	EPA 625	6C06054	4.1	9.4	ND	0.943	03/06/06	03/09/06	u
Acenaphthylene	EPA 625	6C06054	3.0	9.4	ND	0.943	03/06/06	03/09/06	u
Aniline	EPA 625	6C06054	2.7	9.4	ND	0.943	03/06/06	03/09/06	u
Anthracene	EPA 625	6C06054	3.0	9.4	ND	0.943	03/06/06	03/09/06	u
Benzidine	EPA 625	6C06054	4.9	19	ND	0.943	03/06/06	03/09/06	u
Benzoic acid	EPA 625	6C06054	2.5	19	ND	0.943	03/06/06	03/09/06	u
Benzo(a)anthracene	EPA 625	6C06054	3.5	9.4	ND	0.943	03/06/06	03/09/06	u
Benzo(b)fluoranthene	EPA 625	6C06054	2.5	9.4	ND	0.943	03/06/06	03/09/06	u
Benzo(k)fluoranthene	EPA 625	6C06054	3.2	9.4	ND	0.943	03/06/06	03/09/06	u
Benzo(g,h,i)perylene	EPA 625	6C06054	5.0	9.4	ND	0.943	03/06/06	03/09/06	u
Benzo(a)pyrene	EPA 625	6C06054	3.3	9.4	ND	0.943	03/06/06	03/09/06	u
Benzyl alcohol	EPA 625	6C06054	2.4	19	ND	0.943	03/06/06	03/09/06	u
Bis(2-chloroethoxy)methane	EPA 625	6C06054	3.7	9.4	ND	0.943	03/06/06	03/09/06	u
Bis(2-chloroethyl)ether	EPA 625	6C06054	4.2	9.4	ND	0.943	03/06/06	03/09/06	u
Bis(2-chloroisopropyl)ether	EPA 625	6C06054	4.3	9.4	ND	0.943	03/06/06	03/09/06	u
Bis(2-ethylhexyl)phthalate	EPA 625	6C06054	4.9	47	ND	0.943	03/06/06	03/09/06	u
4-Bromophenyl phenyl ether	EPA 625	6C06054	4.3	9.4	ND	0.943	03/06/06	03/09/06	u
Butyl benzyl phthalate	EPA 625	6C06054	3.3	19	ND	0.943	03/06/06	03/09/06	u
4-Chloroaniline	EPA 625	6C06054	5.7	9.4	ND	0.943	03/06/06	03/09/06	u
2-Chloronaphthalene	EPA 625	6C06054	3.8	9.4	ND	0.943	03/06/06	03/09/06	u
4-Chloro-3-methylphenol	EPA 625	6C06054	3.3	19	ND	0.943	03/06/06	03/09/06	u
2-Chlorophenol	EPA 625	6C06054	4.0	9.4	ND	0.943	03/06/06	03/09/06	u
4-Chlorophenyl phenyl ether	EPA 625	6C06054	2.8	9.4	ND	0.943	03/06/06	03/09/06	u
Chrysene	EPA 625	6C06054	2.6	9.4	ND	0.943	03/06/06	03/09/06	u
Dibenz(a,h)anthracene	EPA 625	6C06054	4.4	19	ND	0.943	03/06/06	03/09/06	u
Dibenzofuran	EPA 625	6C06054	2.5	9.4	ND	0.943	03/06/06	03/09/06	u
Di-n-butyl phthalate	EPA 625	6C06054	2.6	19	ND	0.943	03/06/06	03/09/06	u
1,3-Dichlorobenzene	EPA 625	6C06054	3.9	9.4	ND	0.943	03/06/06	03/09/06	u
1,4-Dichlorobenzene	EPA 625	6C06054	3.7	9.4	ND	0.943	03/06/06	03/09/06	u
1,2-Dichlorobenzene	EPA 625	6C06054	4.2	9.4	ND	0.943	03/06/06	03/09/06	u
3,3-Dichlorobenzidine	EPA 625	6C06054	10	19	ND	0.943	03/06/06	03/09/06	u
2,4-Dichlorophenol	EPA 625	6C06054	3.9	9.4	ND	0.943	03/06/06	03/09/06	u
Diethyl phthalate	EPA 625	6C06054	2.9	9.4	ND	0.943	03/06/06	03/09/06	u
2,4-Dimethylphenol	EPA 625	6C06054	4.2	19	ND	0.943	03/06/06	03/09/06	u
Dimethyl phthalate	EPA 625	6C06054	3.4	9.4	ND	0.943	03/06/06	03/09/06	u
4,6-Dinitro-2-methylphenol	EPA 625	6C06054	4.8	19	ND	0.943	03/06/06	03/09/06	u
2,4-Dinitrophenol	EPA 625	6C06054	5.0	19	ND	0.943	03/06/06	03/09/06	u
2,4-Dinitrotoluene	EPA 625	6C06054	4.0	9.4	ND	0.943	03/06/06	03/09/06	u
2,6-Dinitrotoluene	EPA 625	6C06054	3.0	9.4	ND	0.943	03/06/06	03/09/06	u
Di-n-octyl phthalate	EPA 625	6C06054	4.4	19	ND	0.943	03/06/06	03/09/06	u
Fluoranthene	EPA 625	6C06054	4.0	9.4	ND	0.943	03/06/06	03/09/06	u

new qual code

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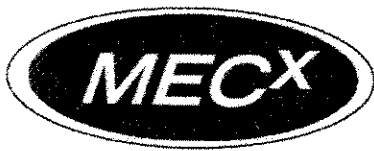
u

Del Mar Analytical - Irvine
 Michele Chamberlin
 Project Manager

Level IV

The results pertain only to the samples tested in the laboratory. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical.

IPB2647 <Page 6 of 40>



DATA VALIDATION REPORT

NPDES Monitoring Program
Annual Outfall 007

ANALYSIS: VOLATILES

SAMPLE DELIVERY GROUP: IPB2647

Prepared by

MECX, LLC
12269 East Vassar Drive
Aurora, CO 80014

1. INTRODUCTION

Task Order Title: NPDES
MEC^x Project Number: 1261.001D.01
Sample Delivery Group: IPB2647
Project Manager: P. Costa
Matrix: Water
Analysis: Volatiles
QC Level: Level IV
No. of Samples: 2
No. of Reanalyses/Dilutions: 0
Reviewer: L. Calvin
Date of Review: April 10, 2006

The samples listed in Table 1 were validated based on the guidelines outlined in the *MEC^x Data Validation Procedure for Volatile Organics (DVP-2, Rev. 0)*, *EPA Method 624*, and the *National Functional Guidelines for Organic Data Review (2/94)*. Any deviations from these procedures are documented herein. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form I as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.

Table 1. Sample Identification

Client ID	Laboratory ID	Matrix	COC Method
Outfall 007	IPB2647-01	Water	624
Trip Blank	IPB2647-02	Water	624

2. DATA VALIDATION FINDINGS

2.1 SAMPLE MANAGEMENT

The samples in this SDG were received at the laboratory within the temperature limits of 4°C ±2°C, at 5°C. According to the case narrative for this SDG, the samples were received intact, on ice, and properly preserved. Unpreserved aliquots of the samples were also provided. Information regarding lack of headspace in the VOA vials was not provided. No qualifications were required.

2.1.2 Chain of Custody

The COC was signed and dated by both field and laboratory personnel. As the samples were couriered directly to the laboratory, custody seals were not required. No qualifications were required.

2.1.3 Holding Times

The unpreserved aliquots of the water samples were analyzed for all target compounds within seven days of collection. No qualifications were required.

2.2 GC/MS TUNING

The BFB tune performed at the beginning of each daily analytical sequence met the abundance criteria specified in EPA Method 624. No qualifications were required.

2.3 CALIBRATION

Two initial calibrations were associated with the sample analyses, dated 03/01/06 (acrolein and acrylonitrile only), 02/06/06 (all remaining target compounds). The average RRFs were ≥0.05 for all target compounds. The r^2 value was <0.995 for 2-chloroethyl vinyl ether. The nondetect result for 2-chloroethyl vinyl ether was qualified as estimated, "UJ," in sample Outfall 007. Sample Trip Blank was a field QC sample and required no qualification. The %RSDs were ≤35% or r^2 values ≥0.995 for the remaining target compounds listed on the sample result summary forms.

Two continuing calibrations were associated with the sample analyses, dated 03/03/06, one for acrolein and acrylonitrile and one for the remaining target compounds. The RRFs for were ≥0.05 and all %Ds were within the QC limit of ≤20%, with the exception of the %D for 2-chloroethyl vinyl ether. The nondetect result for 2-chloroethyl vinyl ether was qualified as estimated, "UJ," in sample Outfall 007. Sample Trip Blank was a field QC sample and required no qualification. No further qualifications were required.

2.4 BLANKS

One method blank (6C03009-BLK1) was analyzed with this SDG. No target compounds were detected above the MDLs in the method blank. Review of the method blank raw data indicated no false negatives. No qualifications were required.

2.5 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

One blank spike (6C03009-BS1) was analyzed with this SDG. Target compounds acrolein and acrylonitrile were not included in the blank spike. All recoveries were within the laboratory-established QC limits. A representative number of recoveries were calculated from the raw data and no calculation or transcription errors were found. No qualifications were required.

2.6 SURROGATE RECOVERY

Surrogate recoveries were within the laboratory QC limits of 80-120% for this SDG. A representative number of recoveries were calculated from the raw data, and no transcription or calculation errors were noted. No qualifications were required.

2.7 MATRIX SPIKE/MATRIX SPIKE DUPLICATE

MS/MSD analyses were not performed on the site sample in this SDG. Evaluation of method accuracy was based on the blank spike results. No qualifications were required.

2.8 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:

2.8.1 Trip Blanks

Sample Trip Blank was the trip blank associated with site sample Outfall 007. No target compounds were detected in the trip blank. No qualifications were required.

2.8.2 Field Blanks and Equipment Rinsates

There were no field blank or equipment rinsate samples identified for this SDG. No qualifications were required.

2.8.3 Field Duplicates

There were no field duplicate samples identified for this SDG.

2.9 INTERNAL STANDARDS PERFORMANCE

The internal standard area counts and retention times were within the control limits established by the continuing calibration standard: -50%/+100% for internal standard areas and ± 30 seconds for retention times. The internal standard areas were checked from the raw data, and no transcription or calculation errors were noted. No qualifications were required.

2.10 COMPOUND IDENTIFICATION

The laboratory analyzed for volatile target compounds by EPA Method 624. Review of the sample chromatogram, retention times, and spectra indicated no problems with target compound identification. No qualifications were required.

2.11 COMPOUND QUANTIFICATION AND REPORTED DETECTION LIMITS

Compound quantification is verified at a Level IV data validation. No calculation or transcription errors were found. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs. Any detects reported between the MDL and the reporting limit were qualified as estimated, "J," and annotated with the "DNQ" qualifier code in accordance with the NPDES permit. No further qualifications were required.

2.12 TENTATIVELY IDENTIFIED COMPOUNDS

TICs were not reported by the laboratory for this SDG. No qualifications were required.

2.13 SYSTEM PERFORMANCE

Review of the raw data indicated no problems with system performance. No qualifications were required.



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 2520 E. Sunset Rd., #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 007

Report Number: IPB2647

Sampled: 02/28/06
 Received: 02/28/06

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: IPB2647-01 (Outfall 007 - Water)									
Reporting Units: ug/l									
Benzene	EPA 624	6C03009	0.28	1.0	ND	1	03/03/06	03/03/06	u
Bromodichloromethane	EPA 624	6C03009	0.30	2.0	ND	1	03/03/06	03/03/06	u
Bromoform	EPA 624	6C03009	0.32	5.0	ND	1	03/03/06	03/03/06	u
Bromomethane	EPA 624	6C03009	0.42	5.0	ND	1	03/03/06	03/03/06	u
Carbon tetrachloride	EPA 624	6C03009	0.28	0.50	ND	1	03/03/06	03/03/06	u
Chlorobenzene	EPA 624	6C03009	0.36	2.0	ND	1	03/03/06	03/03/06	u
Chloroethane	EPA 624	6C03009	0.40	5.0	ND	1	03/03/06	03/03/06	u
Chloroform	EPA 624	6C03009	0.33	2.0	ND	1	03/03/06	03/03/06	u
Chloromethane	EPA 624	6C03009	0.30	5.0	0.43	1	03/03/06	03/03/06	J
Dibromochloromethane	EPA 624	6C03009	0.28	2.0	ND	1	03/03/06	03/03/06	u
1,2-Dichlorobenzene	EPA 624	6C03009	0.32	2.0	ND	1	03/03/06	03/03/06	u
1,3-Dichlorobenzene	EPA 624	6C03009	0.35	2.0	ND	1	03/03/06	03/03/06	u
1,4-Dichlorobenzene	EPA 624	6C03009	0.37	2.0	ND	1	03/03/06	03/03/06	u
1,1-Dichloroethane	EPA 624	6C03009	0.27	2.0	ND	1	03/03/06	03/03/06	u
1,2-Dichloroethane	EPA 624	6C03009	0.28	0.50	ND	1	03/03/06	03/03/06	u
1,1-Dichloroethene	EPA 624	6C03009	0.42	5.0	ND	1	03/03/06	03/03/06	u
trans-1,2-Dichloroethene	EPA 624	6C03009	0.27	2.0	ND	1	03/03/06	03/03/06	u
1,2-Dichloropropane	EPA 624	6C03009	0.35	2.0	ND	1	03/03/06	03/03/06	u
cis-1,3-Dichloropropene	EPA 624	6C03009	0.22	2.0	ND	1	03/03/06	03/03/06	u
trans-1,3-Dichloropropene	EPA 624	6C03009	0.32	2.0	ND	1	03/03/06	03/03/06	u
Ethylbenzene	EPA 624	6C03009	0.25	2.0	ND	1	03/03/06	03/03/06	u
Methylene chloride	EPA 624	6C03009	0.70	5.0	ND	1	03/03/06	03/03/06	u
1,1,2,2-Tetrachloroethane	EPA 624	6C03009	0.24	2.0	ND	1	03/03/06	03/03/06	u
Tetrachloroethene	EPA 624	6C03009	0.32	2.0	ND	1	03/03/06	03/03/06	u
Toluene	EPA 624	6C03009	0.36	2.0	ND	1	03/03/06	03/03/06	u
1,1,1-Trichloroethane	EPA 624	6C03009	0.30	2.0	ND	1	03/03/06	03/03/06	u
1,1,2-Trichloroethane	EPA 624	6C03009	0.30	2.0	ND	1	03/03/06	03/03/06	u
Trichloroethene	EPA 624	6C03009	0.26	2.0	ND	1	03/03/06	03/03/06	u
Trichlorofluoromethane	EPA 624	6C03009	0.34	5.0	ND	1	03/03/06	03/03/06	u
Vinyl chloride	EPA 624	6C03009	0.26	0.50	ND	1	03/03/06	03/03/06	u
Xylenes, Total	EPA 624	6C03009	0.90	4.0	ND	1	03/03/06	03/03/06	u
Trichlorotrifluoroethane (Freon 113)	EPA 624	6C03009	1.2	5.0	ND	1	03/03/06	03/03/06	u
Surrogate: Dibromofluoromethane (80-120%)					111 %				
Surrogate: Toluene-d8 (80-120%)					108 %				
Surrogate: 4-Bromofluorobenzene (80-120%)					95 %				

see qual code
 u
 J
 J DNO

Del Mar Analytical - Irvine
 Michele Chamberlin
 Project Manager

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Level III

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Del Mar Analytical

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9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 007

Report Number: IPB2647

Sampled: 02/28/06
Received: 02/28/06

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: IPB2647-02 (Trip Blank - Water)									
Reporting Units: ug/l									
Benzene	EPA 624	6C03009	0.28	1.0	ND	1	03/03/06	03/03/06	<i>see qual code</i> ↓
Bromodichloromethane	EPA 624	6C03009	0.30	2.0	ND	1	03/03/06	03/03/06	
Bromoform	EPA 624	6C03009	0.32	5.0	ND	1	03/03/06	03/03/06	
Bromomethane	EPA 624	6C03009	0.42	5.0	ND	1	03/03/06	03/03/06	
Carbon tetrachloride	EPA 624	6C03009	0.28	0.50	ND	1	03/03/06	03/03/06	
Chlorobenzene	EPA 624	6C03009	0.36	2.0	ND	1	03/03/06	03/03/06	
Chloroethane	EPA 624	6C03009	0.40	5.0	ND	1	03/03/06	03/03/06	
Chloroform	EPA 624	6C03009	0.33	2.0	ND	1	03/03/06	03/03/06	
Chloromethane	EPA 624	6C03009	0.30	5.0	ND	1	03/03/06	03/03/06	
Dibromochloromethane	EPA 624	6C03009	0.28	2.0	ND	1	03/03/06	03/03/06	
1,2-Dichlorobenzene	EPA 624	6C03009	0.32	2.0	ND	1	03/03/06	03/03/06	
1,3-Dichlorobenzene	EPA 624	6C03009	0.35	2.0	ND	1	03/03/06	03/03/06	
1,4-Dichlorobenzene	EPA 624	6C03009	0.37	2.0	ND	1	03/03/06	03/03/06	
1,1-Dichloroethane	EPA 624	6C03009	0.27	2.0	ND	1	03/03/06	03/03/06	
1,2-Dichloroethane	EPA 624	6C03009	0.28	0.50	ND	1	03/03/06	03/03/06	
1,1-Dichloroethene	EPA 624	6C03009	0.42	5.0	ND	1	03/03/06	03/03/06	
trans-1,2-Dichloroethene	EPA 624	6C03009	0.27	2.0	ND	1	03/03/06	03/03/06	
1,2-Dichloropropane	EPA 624	6C03009	0.35	2.0	ND	1	03/03/06	03/03/06	
cis-1,3-Dichloropropene	EPA 624	6C03009	0.22	2.0	ND	1	03/03/06	03/03/06	
trans-1,3-Dichloropropene	EPA 624	6C03009	0.32	2.0	ND	1	03/03/06	03/03/06	
Ethylbenzene	EPA 624	6C03009	0.25	2.0	ND	1	03/03/06	03/03/06	
Methylene chloride	EPA 624	6C03009	0.70	5.0	ND	1	03/03/06	03/03/06	
1,1,2,2-Tetrachloroethane	EPA 624	6C03009	0.24	2.0	ND	1	03/03/06	03/03/06	
Tetrachloroethene	EPA 624	6C03009	0.32	2.0	ND	1	03/03/06	03/03/06	
Toluene	EPA 624	6C03009	0.36	2.0	ND	1	03/03/06	03/03/06	
1,1,1-Trichloroethane	EPA 624	6C03009	0.30	2.0	ND	1	03/03/06	03/03/06	
1,1,2-Trichloroethane	EPA 624	6C03009	0.30	2.0	ND	1	03/03/06	03/03/06	
Trichloroethene	EPA 624	6C03009	0.26	2.0	ND	1	03/03/06	03/03/06	
Trichlorofluoromethane	EPA 624	6C03009	0.34	5.0	ND	1	03/03/06	03/03/06	
Vinyl chloride	EPA 624	6C03009	0.26	0.50	ND	1	03/03/06	03/03/06	
Xylenes, Total	EPA 624	6C03009	0.90	4.0	ND	1	03/03/06	03/03/06	
Trichlorotrifluoroethane (Freon 113)	EPA 624	6C03009	1.2	5.0	ND	1	03/03/06	03/03/06	
Surrogate: Dibromofluoromethane (80-120%)					110 %				
Surrogate: Toluene-d8 (80-120%)					108 %				
Surrogate: 4-Bromofluorobenzene (80-120%)					96 %				

Del Mar Analytical - Irvine
Michele Chamberlin
Project Manager

Level IV

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CONTRACT COMPLIANCE SCREENING FORM FOR HARDCOPY DATA

MEC^x
 12269 East Vassar Drive
 Aurora, CO 80014

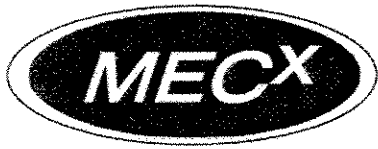
Package ID: B4WC46
 Task Order: 1261.001D.01
 SDG No.: IPB2647

No. of Analyses: 1

Laboratory: Del Mar Analytical
 Reviewer: P. Meeks
 Analysis/Method: General Minerals

Date: April 4, 2006
 Reviewer's Signature


ACTION ITEMS^a	
1. Case Narrative Deficiencies	_____
2. Out of Scope Analyses	_____
3. Analyses Not Conducted	_____
4. Missing Hardcopy Deliverables	_____
5. Incorrect Hardcopy Deliverables	_____
6. Deviations from Analysis Protocol, e.g., Holding Times GC/MS Tune/Inst. Performance Calibration Method blanks Surrogates Matrix Spike/Dup LCS Field QC Internal Standard Performance Compound Identification Quantitation System Performance	Qualification applied for a detect below the reporting limit. _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____
COMMENTS^b	_____
<p>^a Subcontracted analytical laboratory is not meeting contract and/or method requirements.</p> <p>^b Differences in protocol have been adopted by the laboratory but no action against the laboratory is required.</p>	



DATA VALIDATION REPORT

NPDES Sampling
Outfall 007

ANALYSIS: GENERAL MINERALS

SAMPLE DELIVERY GROUP: IPB2647

Prepared by

MECX, LLC
12269 East Vassar Drive
Aurora, CO 80014

1. INTRODUCTION

Task Order Title: NPDES Sampling
MEC^X Project Number: 1261.001D.01
Sample Delivery Group: IPB2647
Project Manager: P. Costa
Matrix: Water
Analysis: General Minerals
QC Level: Level IV
No. of Samples: 1
No. of Reanalyses/Dilutions: 0
Reviewer: P. Meeks
Date of Review: April 4, 2006

The sample listed in Table 1 was validated based on the guidelines outlined in the MEC^X *Data Validation Procedure for General Minerals (DVP-6, Rev. 0)*, *USEPA Methods for Chemical Analysis of Water and Wastes Methods 160.2 and, 335.2*, and validation guidelines outlined in the *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (2/94)*. Any deviations from these procedures and guidelines are documented herein. Qualifiers were applied in cases where the data did not meet the required QC criteria or where special consideration by the data user is required. Data qualifiers were placed on Form Is with the associated qualification codes. Analytes that were rejected for any reason are denoted on the Form Is as having only the "R" data qualifier and associated qualification code(s) denoting the reason for rejection. Any additional problems with the data that may have resulted in an estimated value were not denoted by a qualification code since the data had already been rejected.

Table 1. Sample Identification

Client ID	Laboratory ID	Matrix	COC Method
Outfall 007	IPB2647-01	Water	General Minerals

2. DATA VALIDATION FINDINGS

2.1 SAMPLE MANAGEMENT

Following are findings associated with sample management:

2.1.1 Sample Preservation, Handling, and Transport

The sample in this SDG was received at the laboratory within the temperature limits of $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$. No preservation problems were noted by the laboratory. No qualifications were required.

2.1.2 Chain of Custody

The COC was signed and dated by field and laboratory personnel and accounted for the sample and analyses presented in this SDG. As the sample was couriered directly from the field to the laboratory, custody seals were not necessary. No qualifications were required.

2.1.3 Holding Times

The holding times were assessed by comparing the date of collection with the dates of analysis. All analyses were performed within the method specified holding times. No qualifications were required.

2.2 CALIBRATION

For cyanide, the initial calibration correlation coefficient was ≥ 0.995 and the ICV and CCV recoveries were within the control limits of 90-110%. For TSS, balance calibration logs were reviewed and found to be acceptable. No qualifications were required.

2.3 BLANKS

There were no detects in the method blanks or CCBs associated with the sample analyses. Raw data was reviewed to verify the blank data. No qualifications were required.

2.4 BLANK SPIKES AND LABORATORY CONTROL SAMPLES

The reported LCS recoveries were within the laboratory-established control limits. No qualifications were required.

2.5 LABORATORY DUPLICATES

No MS/MSD or duplicate analyses were performed in association with this SDG; therefore, no assessment was made with respect to this criterion.

2.6 MATRIX SPIKES

No MS/MSD analyses were performed in association with this SDG; therefore, no assessment was made with respect to this criterion. Evaluation of method accuracy was based on LCS results. No qualifications were required.

2.7 SAMPLE RESULT VERIFICATION

A Level IV review was performed for the sample in this data package. Calculations were verified, and the sample results reported on the Form Is were verified against the raw data. Cyanide detected below the reporting limit was qualified as estimated, "J," and denoted with "DNQ," in accordance with the NPDES permit. No further qualifications were required.

2.8 FIELD QC SAMPLES

Field QC samples are evaluated, and if necessary, qualified based only on laboratory blanks. Any remaining detects are used to evaluate the associated sample. The following are findings associated with field QC samples:

2.8.1 Field Blanks and Equipment Rinsates

The sample in this SDG had no associated field QC samples. No qualifications were required.

2.8.2 Field Duplicates

There were no field duplicate pairs associated with this SDG.

MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 007
 Report Number: IPB2647

Sampled: 02/28/06
 Received: 02/28/06

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB2647-01 (Outfall 007 - Water) - cont.									
Reporting Units: ug/l									
Total Cyanide	EPA 335.2	6C02125	2.2	5.0	2.3	1	03/02/06	03/02/06	J J
Perchlorate	EPA 314.0	6C03066	0.80	4.0	ND	1	03/03/06	03/03/06	*

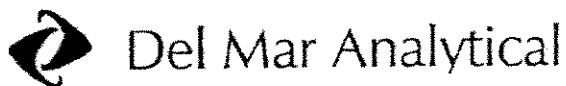
Lab Qual	Qual Code
J J	DWQ
*	

* Analysis not validated

Del Mar Analytical - Irvine
 Michele Chamberlin
 Project Manager

LEVEL IV

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 9830 South 51st St., Suite B-120, Phoenix, AZ 85044 (480) 785-0043 FAX (480) 785-0851
 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-Pasadena/Boeing 300 North Lake Avenue, Suite 1200 Pasadena, CA 91101 Attention: Bronwyn Kelly	Project ID: Annual Outfall 007 Report Number: IPB2647	Sampled: 02/28/06 Received: 02/28/06
--	--	---

INORGANICS

Analyte	Method	Batch	MDL Reporting		Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers	
			Limit	Limit					Real Qual	Real Code
Sample ID: IPB2647-01 (Outfall 007 - Water) - cont.										
Reporting Units: mg/l										
Chloride	EPA 300.0	6B28141	0.26	0.50	2.9	1	02/28/06	03/01/06	*	
Nitrate/Nitrite-N	EPA 300.0	6B28141	0.072	0.26	0.53	1	02/28/06	03/01/06		
Oil & Grease	EPA 413.1	6C08046	0.90	4.8	ND	1	03/08/06	03/08/06		
Sulfate	EPA 300.0	6B28141	0.18	0.50	4.8	1	02/28/06	03/01/06		
Total Dissolved Solids	SM2540C	6C03069	N/A	10	110	1	03/03/06	03/03/06		
Total Suspended Solids	EPA 160.2	6C05025	10	10	15	1	03/05/06	03/05/06		

Del Mar Analytical - Irvine
 Michele Chamberlin
 Project Manager

LEVEL IV
 * Analysis not validated

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APPENDIX G

Section 59

Outfall 008, February 28, 2006

Del Mar Analytical Laboratory Report



LABORATORY REPORT

Prepared For: MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project: Annual Outfall 008

Sampled: 02/28/06
Received: 02/28/06
Issued: 03/30/06 11:54

NELAP #01108CA California ELAP#1197 CSDLAC #10117

*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 Del Mar Analytical and its client. This report shall not be reproduced, except in full, without written permission from Del Mar Analytical. The Chain of Custody, 1 page, is included and is 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.

LABORATORY ID	CLIENT ID	MATRIX
IPB2648-01	Outfall 008	Water
IPB2648-02	Trip Blank	Water

Reviewed By:

Del Mar Analytical - Irvine
Michele Chamberlin
Project Manager



MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 008

Report Number: IPB2648

Sampled: 02/28/06

Received: 02/28/06

CORRECTIVE ACTION REPORT

Department: Extractions

Date: 03/09/2006

Method: EPA 625

Matrix: Water

QC Batch: 6C06054

Identification and Definition of Problem:

- 1) The percent recoveries for dimethylphthalate and diethylphthalate in the LCSD were below laboratory acceptance limits.
- 2) The RPD between the LCS and LCSD exceeded laboratory acceptance limits for dimethylphthalate and diethylphthalate.

Determination of the Cause of the Problem:

- 1) A definitive cause for the QC failure has not been determined.
- 2) The RPDs failed due to the difference between the low LCSD recoveries and the acceptable LCS recoveries.

Corrective Action Taken:

Although the LCS recoveries for these two analytes were within acceptance limits, all results reported for dimethylphthalate and diethylphthalate must still be considered potentially biased low and can be used as estimates only.

Quality Assurance Approval: _____

Michele Chamberlin

Date: 03/16/2006 09:57 AM

Del Mar Analytical - Irvine
Michele Chamberlin
Project Manager



MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 008

Report Number: IPB2648

Sampled: 02/28/06

Received: 02/28/06

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: IPB2648-01 (Outfall 008 - Water)									
Reporting Units: ug/l									
Benzene	EPA 624	6C03009	0.28	1.0	ND	1	03/03/06	03/03/06	
Bromodichloromethane	EPA 624	6C03009	0.30	2.0	ND	1	03/03/06	03/03/06	
Bromoform	EPA 624	6C03009	0.32	5.0	ND	1	03/03/06	03/03/06	
Bromomethane	EPA 624	6C03009	0.42	5.0	ND	1	03/03/06	03/03/06	
Carbon tetrachloride	EPA 624	6C03009	0.28	0.50	ND	1	03/03/06	03/03/06	
Chlorobenzene	EPA 624	6C03009	0.36	2.0	ND	1	03/03/06	03/03/06	
Chloroethane	EPA 624	6C03009	0.40	5.0	ND	1	03/03/06	03/03/06	
Chloroform	EPA 624	6C03009	0.33	2.0	ND	1	03/03/06	03/03/06	
Chloromethane	EPA 624	6C03009	0.30	5.0	ND	1	03/03/06	03/03/06	
Dibromochloromethane	EPA 624	6C03009	0.28	2.0	ND	1	03/03/06	03/03/06	
1,2-Dichlorobenzene	EPA 624	6C03009	0.32	2.0	ND	1	03/03/06	03/03/06	
1,3-Dichlorobenzene	EPA 624	6C03009	0.35	2.0	ND	1	03/03/06	03/03/06	
1,4-Dichlorobenzene	EPA 624	6C03009	0.37	2.0	ND	1	03/03/06	03/03/06	
1,1-Dichloroethane	EPA 624	6C03009	0.27	2.0	ND	1	03/03/06	03/03/06	
1,2-Dichloroethane	EPA 624	6C03009	0.28	0.50	ND	1	03/03/06	03/03/06	
1,1-Dichloroethene	EPA 624	6C03009	0.42	5.0	ND	1	03/03/06	03/03/06	
trans-1,2-Dichloroethene	EPA 624	6C03009	0.27	2.0	ND	1	03/03/06	03/03/06	
1,2-Dichloropropane	EPA 624	6C03009	0.35	2.0	ND	1	03/03/06	03/03/06	
cis-1,3-Dichloropropene	EPA 624	6C03009	0.22	2.0	ND	1	03/03/06	03/03/06	
trans-1,3-Dichloropropene	EPA 624	6C03009	0.32	2.0	ND	1	03/03/06	03/03/06	
Ethylbenzene	EPA 624	6C03009	0.25	2.0	ND	1	03/03/06	03/03/06	
Methylene chloride	EPA 624	6C03009	0.70	5.0	ND	1	03/03/06	03/03/06	
1,1,2,2-Tetrachloroethane	EPA 624	6C03009	0.24	2.0	ND	1	03/03/06	03/03/06	
Tetrachloroethene	EPA 624	6C03009	0.32	2.0	ND	1	03/03/06	03/03/06	
Toluene	EPA 624	6C03009	0.36	2.0	ND	1	03/03/06	03/03/06	
1,1,1-Trichloroethane	EPA 624	6C03009	0.30	2.0	ND	1	03/03/06	03/03/06	
1,1,2-Trichloroethane	EPA 624	6C03009	0.30	2.0	ND	1	03/03/06	03/03/06	
Trichloroethene	EPA 624	6C03009	0.26	2.0	ND	1	03/03/06	03/03/06	
Trichlorofluoromethane	EPA 624	6C03009	0.34	5.0	ND	1	03/03/06	03/03/06	
Vinyl chloride	EPA 624	6C03009	0.26	0.50	ND	1	03/03/06	03/03/06	
Xylenes, Total	EPA 624	6C03009	0.90	4.0	ND	1	03/03/06	03/03/06	
Trichlorotrifluoroethane (Freon 113)	EPA 624	6C03009	1.2	5.0	ND	1	03/03/06	03/03/06	
Surrogate: Dibromofluoromethane (80-120%)									112 %
Surrogate: Toluene-d8 (80-120%)									108 %
Surrogate: 4-Bromofluorobenzene (80-120%)									95 %

Del Mar Analytical - Irvine
 Michele Chamberlin
 Project Manager

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MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 008

Report Number: IPB2648

Sampled: 02/28/06

Received: 02/28/06

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: IPB2648-02 (Trip Blank - Water)									
Reporting Units: ug/l									
Benzene	EPA 624	6C03009	0.28	1.0	ND	1	03/03/06	03/03/06	
Bromodichloromethane	EPA 624	6C03009	0.30	2.0	ND	1	03/03/06	03/03/06	
Bromoform	EPA 624	6C03009	0.32	5.0	ND	1	03/03/06	03/03/06	
Bromomethane	EPA 624	6C03009	0.42	5.0	ND	1	03/03/06	03/03/06	
Carbon tetrachloride	EPA 624	6C03009	0.28	0.50	ND	1	03/03/06	03/03/06	
Chlorobenzene	EPA 624	6C03009	0.36	2.0	ND	1	03/03/06	03/03/06	
Chloroethane	EPA 624	6C03009	0.40	5.0	ND	1	03/03/06	03/03/06	
Chloroform	EPA 624	6C03009	0.33	2.0	ND	1	03/03/06	03/03/06	
Chloromethane	EPA 624	6C03009	0.30	5.0	ND	1	03/03/06	03/03/06	
Dibromochloromethane	EPA 624	6C03009	0.28	2.0	ND	1	03/03/06	03/03/06	
1,2-Dichlorobenzene	EPA 624	6C03009	0.32	2.0	ND	1	03/03/06	03/03/06	
1,3-Dichlorobenzene	EPA 624	6C03009	0.35	2.0	ND	1	03/03/06	03/03/06	
1,4-Dichlorobenzene	EPA 624	6C03009	0.37	2.0	ND	1	03/03/06	03/03/06	
1,1-Dichloroethane	EPA 624	6C03009	0.27	2.0	ND	1	03/03/06	03/03/06	
1,2-Dichloroethane	EPA 624	6C03009	0.28	0.50	ND	1	03/03/06	03/03/06	
1,1-Dichloroethene	EPA 624	6C03009	0.42	5.0	ND	1	03/03/06	03/03/06	
trans-1,2-Dichloroethene	EPA 624	6C03009	0.27	2.0	ND	1	03/03/06	03/03/06	
1,2-Dichloropropane	EPA 624	6C03009	0.35	2.0	ND	1	03/03/06	03/03/06	
cis-1,3-Dichloropropene	EPA 624	6C03009	0.22	2.0	ND	1	03/03/06	03/03/06	
trans-1,3-Dichloropropene	EPA 624	6C03009	0.32	2.0	ND	1	03/03/06	03/03/06	
Ethylbenzene	EPA 624	6C03009	0.25	2.0	ND	1	03/03/06	03/03/06	
Methylene chloride	EPA 624	6C03009	0.70	5.0	ND	1	03/03/06	03/03/06	
1,1,2,2-Tetrachloroethane	EPA 624	6C03009	0.24	2.0	ND	1	03/03/06	03/03/06	
Tetrachloroethene	EPA 624	6C03009	0.32	2.0	ND	1	03/03/06	03/03/06	
Toluene	EPA 624	6C03009	0.36	2.0	ND	1	03/03/06	03/03/06	
1,1,1-Trichloroethane	EPA 624	6C03009	0.30	2.0	ND	1	03/03/06	03/03/06	
1,1,2-Trichloroethane	EPA 624	6C03009	0.30	2.0	ND	1	03/03/06	03/03/06	
Trichloroethene	EPA 624	6C03009	0.26	2.0	ND	1	03/03/06	03/03/06	
Trichlorofluoromethane	EPA 624	6C03009	0.34	5.0	ND	1	03/03/06	03/03/06	
Vinyl chloride	EPA 624	6C03009	0.26	0.50	ND	1	03/03/06	03/03/06	
Xylenes, Total	EPA 624	6C03009	0.90	4.0	ND	1	03/03/06	03/03/06	
Trichlorotrifluoroethane (Freon 113)	EPA 624	6C03009	1.2	5.0	ND	1	03/03/06	03/03/06	
Surrogate: Dibromofluoromethane (80-120%)									106 %
Surrogate: Toluene-d8 (80-120%)									111 %
Surrogate: 4-Bromofluorobenzene (80-120%)									92 %

Del Mar Analytical - Irvine
Michele Chamberlin
Project Manager



MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 008

Report Number: IPB2648

Sampled: 02/28/06
 Received: 02/28/06

PURGEABLES-- GC/MS (EPA 624)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB2648-01 (Outfall 008 - Water)									
Reporting Units: ug/l									
Acrolein	EPA 624	6C03009	4.6	50	ND	1	03/03/06	03/03/06	
Acrylonitrile	EPA 624	6C03009	0.70	50	ND	1	03/03/06	03/03/06	
2-Chloroethyl vinyl ether	EPA 624	6C03009	1.8	5.0	ND	1	03/03/06	03/03/06	
Surrogate: Dibromofluoromethane (80-120%)					112 %				
Surrogate: Toluene-d8 (80-120%)					108 %				
Surrogate: 4-Bromofluorobenzene (80-120%)					95 %				
Sample ID: IPB2648-02 (Trip Blank - Water)									
Reporting Units: ug/l									
Acrolein	EPA 624	6C03009	4.6	50	ND	1	03/03/06	03/03/06	
Acrylonitrile	EPA 624	6C03009	0.70	50	ND	1	03/03/06	03/03/06	
2-Chloroethyl vinyl ether	EPA 624	6C03009	1.8	5.0	ND	1	03/03/06	03/03/06	
Surrogate: Dibromofluoromethane (80-120%)					106 %				
Surrogate: Toluene-d8 (80-120%)					111 %				
Surrogate: 4-Bromofluorobenzene (80-120%)					92 %				

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 Project Manager

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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 008

Report Number: IPB2648

Sampled: 02/28/06

Received: 02/28/06

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: IPB2648-01 (Outfall 008 - Water)									
Reporting Units: ug/l									
Acenaphthene	EPA 625	6C06054	4.1	9.4	ND	0.943	03/06/06	03/09/06	
Acenaphthylene	EPA 625	6C06054	3.0	9.4	ND	0.943	03/06/06	03/09/06	
Aniline	EPA 625	6C06054	2.7	9.4	ND	0.943	03/06/06	03/09/06	
Anthracene	EPA 625	6C06054	3.0	9.4	ND	0.943	03/06/06	03/09/06	
Benzidine	EPA 625	6C06054	4.9	19	ND	0.943	03/06/06	03/09/06	
Benzoic acid	EPA 625	6C06054	2.5	19	ND	0.943	03/06/06	03/09/06	
Benzo(a)anthracene	EPA 625	6C06054	3.5	9.4	ND	0.943	03/06/06	03/09/06	
Benzo(b)fluoranthene	EPA 625	6C06054	2.5	9.4	ND	0.943	03/06/06	03/09/06	
Benzo(k)fluoranthene	EPA 625	6C06054	3.2	9.4	ND	0.943	03/06/06	03/09/06	
Benzo(g,h,i)perylene	EPA 625	6C06054	5.0	9.4	ND	0.943	03/06/06	03/09/06	
Benzo(a)pyrene	EPA 625	6C06054	3.3	9.4	ND	0.943	03/06/06	03/09/06	
Benzyl alcohol	EPA 625	6C06054	2.4	19	ND	0.943	03/06/06	03/09/06	
Bis(2-chloroethoxy)methane	EPA 625	6C06054	3.7	9.4	ND	0.943	03/06/06	03/09/06	
Bis(2-chloroethyl)ether	EPA 625	6C06054	4.2	9.4	ND	0.943	03/06/06	03/09/06	
Bis(2-chloroisopropyl)ether	EPA 625	6C06054	4.3	9.4	ND	0.943	03/06/06	03/09/06	
Bis(2-ethylhexyl)phthalate	EPA 625	6C06054	4.9	47	ND	0.943	03/06/06	03/09/06	
4-Bromophenyl phenyl ether	EPA 625	6C06054	4.3	9.4	ND	0.943	03/06/06	03/09/06	
Butyl benzyl phthalate	EPA 625	6C06054	3.3	19	ND	0.943	03/06/06	03/09/06	
4-Chloroaniline	EPA 625	6C06054	5.7	9.4	ND	0.943	03/06/06	03/09/06	
2-Chloronaphthalene	EPA 625	6C06054	3.8	9.4	ND	0.943	03/06/06	03/09/06	
4-Chloro-3-methylphenol	EPA 625	6C06054	3.3	19	ND	0.943	03/06/06	03/09/06	
2-Chlorophenol	EPA 625	6C06054	4.0	9.4	ND	0.943	03/06/06	03/09/06	
4-Chlorophenyl phenyl ether	EPA 625	6C06054	2.8	9.4	ND	0.943	03/06/06	03/09/06	
Chrysene	EPA 625	6C06054	2.6	9.4	ND	0.943	03/06/06	03/09/06	
Dibenz(a,h)anthracene	EPA 625	6C06054	4.4	19	ND	0.943	03/06/06	03/09/06	
Dibenzofuran	EPA 625	6C06054	2.5	9.4	ND	0.943	03/06/06	03/09/06	
Di-n-butyl phthalate	EPA 625	6C06054	2.6	19	ND	0.943	03/06/06	03/09/06	
1,3-Dichlorobenzene	EPA 625	6C06054	3.9	9.4	ND	0.943	03/06/06	03/09/06	
1,4-Dichlorobenzene	EPA 625	6C06054	3.7	9.4	ND	0.943	03/06/06	03/09/06	
1,2-Dichlorobenzene	EPA 625	6C06054	4.2	9.4	ND	0.943	03/06/06	03/09/06	
3,3-Dichlorobenzidine	EPA 625	6C06054	10	19	ND	0.943	03/06/06	03/09/06	
2,4-Dichlorophenol	EPA 625	6C06054	3.9	9.4	ND	0.943	03/06/06	03/09/06	
Diethyl phthalate	EPA 625	6C06054	2.9	9.4	ND	0.943	03/06/06	03/09/06	L2
2,4-Dimethylphenol	EPA 625	6C06054	4.2	19	ND	0.943	03/06/06	03/09/06	
Dimethyl phthalate	EPA 625	6C06054	3.4	9.4	ND	0.943	03/06/06	03/09/06	L2
4,6-Dinitro-2-methylphenol	EPA 625	6C06054	4.8	19	ND	0.943	03/06/06	03/09/06	
2,4-Dinitrophenol	EPA 625	6C06054	5.0	19	ND	0.943	03/06/06	03/09/06	
2,4-Dinitrotoluene	EPA 625	6C06054	4.0	9.4	ND	0.943	03/06/06	03/09/06	
2,6-Dinitrotoluene	EPA 625	6C06054	3.0	9.4	ND	0.943	03/06/06	03/09/06	
Di-n-octyl phthalate	EPA 625	6C06054	4.4	19	ND	0.943	03/06/06	03/09/06	
Fluoranthene	EPA 625	6C06054	4.0	9.4	ND	0.943	03/06/06	03/09/06	

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 Project Manager

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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 008

Report Number: IPB2648

Sampled: 02/28/06

Received: 02/28/06

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: IPB2648-01 (Outfall 008 - Water) - cont.									
Reporting Units: ug/l									
Fluorene	EPA 625	6C06054	3.7	9.4	ND	0.943	03/06/06	03/09/06	
Hexachlorobenzene	EPA 625	6C06054	4.5	9.4	ND	0.943	03/06/06	03/09/06	
Hexachlorobutadiene	EPA 625	6C06054	4.0	9.4	ND	0.943	03/06/06	03/09/06	
Hexachlorocyclopentadiene	EPA 625	6C06054	3.2	19	ND	0.943	03/06/06	03/09/06	
Hexachloroethane	EPA 625	6C06054	4.0	9.4	ND	0.943	03/06/06	03/09/06	
Indeno(1,2,3-cd)pyrene	EPA 625	6C06054	5.1	19	ND	0.943	03/06/06	03/09/06	
Isophorone	EPA 625	6C06054	3.5	9.4	ND	0.943	03/06/06	03/09/06	
2-Methylnaphthalene	EPA 625	6C06054	2.8	9.4	ND	0.943	03/06/06	03/09/06	
2-Methylphenol	EPA 625	6C06054	3.5	9.4	ND	0.943	03/06/06	03/09/06	
4-Methylphenol	EPA 625	6C06054	3.6	9.4	ND	0.943	03/06/06	03/09/06	
Naphthalene	EPA 625	6C06054	4.2	9.4	ND	0.943	03/06/06	03/09/06	
2-Nitroaniline	EPA 625	6C06054	3.7	19	ND	0.943	03/06/06	03/09/06	
3-Nitroaniline	EPA 625	6C06054	4.2	19	ND	0.943	03/06/06	03/09/06	
4-Nitroaniline	EPA 625	6C06054	4.6	19	ND	0.943	03/06/06	03/09/06	
Nitrobenzene	EPA 625	6C06054	4.0	19	ND	0.943	03/06/06	03/09/06	
2-Nitrophenol	EPA 625	6C06054	4.0	9.4	ND	0.943	03/06/06	03/09/06	
4-Nitrophenol	EPA 625	6C06054	6.2	19	ND	0.943	03/06/06	03/09/06	
N-Nitrosodiphenylamine	EPA 625	6C06054	3.8	9.4	ND	0.943	03/06/06	03/09/06	
N-Nitroso-di-n-propylamine	EPA 625	6C06054	3.4	9.4	ND	0.943	03/06/06	03/09/06	
Pentachlorophenol	EPA 625	6C06054	3.8	19	ND	0.943	03/06/06	03/09/06	
Phenanthrene	EPA 625	6C06054	3.1	9.4	ND	0.943	03/06/06	03/09/06	
Phenol	EPA 625	6C06054	3.8	9.4	ND	0.943	03/06/06	03/09/06	
Pyrene	EPA 625	6C06054	3.7	9.4	ND	0.943	03/06/06	03/09/06	
1,2,4-Trichlorobenzene	EPA 625	6C06054	4.2	9.4	ND	0.943	03/06/06	03/09/06	
2,4,5-Trichlorophenol	EPA 625	6C06054	3.4	19	ND	0.943	03/06/06	03/09/06	
2,4,6-Trichlorophenol	EPA 625	6C06054	3.9	19	ND	0.943	03/06/06	03/09/06	
1,2-Diphenylhydrazine/Azobenzene	EPA 625	6C06054	4.7	19	ND	0.943	03/06/06	03/09/06	
N-Nitrosodimethylamine	EPA 625	6C06054	3.5	19	ND	0.943	03/06/06	03/09/06	
Surrogate: 2-Fluorophenol (30-120%)					51 %				
Surrogate: Phenol-d6 (35-120%)					28 %				Z6
Surrogate: 2,4,6-Tribromophenol (45-120%)					66 %				
Surrogate: Nitrobenzene-d5 (45-120%)					13 %				Z6
Surrogate: 2-Fluorobiphenyl (45-120%)					27 %				Z6
Surrogate: Terphenyl-d14 (45-120%)					34 %				Z6

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 Michele Chamberlin
 Project Manager

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MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 008

Report Number: IPB2648

Sampled: 02/28/06

Received: 02/28/06

ORGANOCHLORINE PESTICIDES (EPA 608)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB2648-01 (Outfall 008 - Water) - cont.									
Reporting Units: ug/l									
Aldrin	EPA 608	6C05031	0.028	0.094	ND	0.943	03/05/06	03/07/06	
alpha-BHC	EPA 608	6C05031	0.019	0.094	ND	0.943	03/05/06	03/07/06	
beta-BHC	EPA 608	6C05031	0.014	0.094	ND	0.943	03/05/06	03/07/06	
delta-BHC	EPA 608	6C05031	0.019	0.19	ND	0.943	03/05/06	03/07/06	
gamma-BHC (Lindane)	EPA 608	6C05031	0.019	0.094	ND	0.943	03/05/06	03/07/06	
Chlordane	EPA 608	6C05031	0.19	0.94	ND	0.943	03/05/06	03/07/06	
4,4'-DDD	EPA 608	6C05031	0.019	0.094	ND	0.943	03/05/06	03/07/06	
4,4'-DDE	EPA 608	6C05031	0.024	0.094	ND	0.943	03/05/06	03/07/06	
4,4'-DDT	EPA 608	6C05031	0.033	0.094	ND	0.943	03/05/06	03/07/06	
Dieldrin	EPA 608	6C05031	0.014	0.094	ND	0.943	03/05/06	03/07/06	
Endosulfan I	EPA 608	6C05031	0.014	0.094	ND	0.943	03/05/06	03/07/06	
Endosulfan II	EPA 608	6C05031	0.038	0.094	ND	0.943	03/05/06	03/07/06	
Endosulfan sulfate	EPA 608	6C05031	0.019	0.19	ND	0.943	03/05/06	03/07/06	
Endrin	EPA 608	6C05031	0.019	0.094	ND	0.943	03/05/06	03/07/06	
Endrin aldehyde	EPA 608	6C05031	0.042	0.094	ND	0.943	03/05/06	03/07/06	
Endrin ketone	EPA 608	6C05031	0.019	0.094	ND	0.943	03/05/06	03/07/06	
Heptachlor	EPA 608	6C05031	0.028	0.094	ND	0.943	03/05/06	03/07/06	
Heptachlor epoxide	EPA 608	6C05031	0.028	0.094	ND	0.943	03/05/06	03/07/06	
Methoxychlor	EPA 608	6C05031	0.033	0.094	ND	0.943	03/05/06	03/07/06	
Toxaphene	EPA 608	6C05031	1.4	4.7	ND	0.943	03/05/06	03/07/06	
Surrogate: Tetrachloro- <i>m</i> -xylene (35-115%)									48 %
Surrogate: Decachlorobiphenyl (45-120%)									54 %

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Project Manager

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 2520 E. Sunset Rd. #3, Las Vegas, NV 89120 (702) 798-3620 FAX (702) 798-3621

MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 008

Report Number: IPB2648

Sampled: 02/28/06
 Received: 02/28/06

TOTAL PCBS (EPA 608)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB2648-01 (Outfall 008 - Water) - cont.									
Reporting Units: ug/l									
Aroclor 1016	EPA 608	6C05031	0.19	0.94	ND	0.943	03/05/06	03/06/06	
Aroclor 1221	EPA 608	6C05031	0.094	0.94	ND	0.943	03/05/06	03/06/06	
Aroclor 1232	EPA 608	6C05031	0.24	0.94	ND	0.943	03/05/06	03/06/06	
Aroclor 1242	EPA 608	6C05031	0.24	0.94	ND	0.943	03/05/06	03/06/06	
Aroclor 1248	EPA 608	6C05031	0.24	0.94	ND	0.943	03/05/06	03/06/06	
Aroclor 1254	EPA 608	6C05031	0.24	0.94	ND	0.943	03/05/06	03/06/06	
Aroclor 1260	EPA 608	6C05031	0.38	0.94	ND	0.943	03/05/06	03/06/06	
<i>Surrogate: Decachlorobiphenyl (45-120%)</i>					85 %				

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MWH-Pasadena/Boeing
 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 008

Report Number: IPB2648

Sampled: 02/28/06
 Received: 02/28/06

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB2648-01 (Outfall 008 - Water) - cont.									
Reporting Units: mg/l									
Boron	EPA 200.7	6C03084	0.0074	0.050	0.056	1	03/03/06	03/07/06	

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MWH-Pasadena/Boeing
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 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 008
 Report Number: IPB2648

Sampled: 02/28/06
 Received: 02/28/06

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB2648-01 (Outfall 008 - Water) - cont.									
Reporting Units: ug/l									
Aluminum	EPA 200.7	6C03084	40	50	4700	1	03/03/06	03/04/06	
Antimony	EPA 200.8	6C02098	0.18	2.0	0.28	1	03/02/06	03/02/06	J
Arsenic	EPA 200.7	6C03084	4.4	5.0	4.4	1	03/03/06	03/04/06	J
Beryllium	EPA 200.7	6C03084	0.90	2.0	ND	1	03/03/06	03/04/06	
Cadmium	EPA 200.8	6C02098	0.015	1.0	0.20	1	03/02/06	03/02/06	J
Chromium	EPA 200.7	6C03084	2.0	5.0	6.9	1	03/03/06	03/04/06	B
Copper	EPA 200.8	6C02098	0.49	2.0	7.6	1	03/02/06	03/02/06	
Lead	EPA 200.8	6C02098	0.040	1.0	4.4	1	03/02/06	03/02/06	
Mercury	EPA 245.1	6C02097	0.063	0.20	ND	1	03/02/06	03/02/06	
Nickel	EPA 200.7	6C03084	2.0	10	5.0	1	03/03/06	03/04/06	J
Selenium	EPA 200.7	6C03084	8.0	10	ND	1	03/03/06	03/04/06	
Silver	EPA 200.7	6C03084	3.0	10	ND	1	03/03/06	03/04/06	
Thallium	EPA 200.8	6C02098	N/A	1.0	ND	1	03/02/06	03/02/06	
Vanadium	EPA 200.7	6C03084	3.0	10	13	1	03/03/06	03/04/06	
Zinc	EPA 200.7	6C03084	15	20	40	1	03/03/06	03/04/06	

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 Michele Chamberlin
 Project Manager

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MWH-Pasadena/Boeing
300 North Lake Avenue, Suite 1200
Pasadena, CA 91101
Attention: Bronwyn Kelly

Project ID: Annual Outfall 008

Report Number: IPB2648

Sampled: 02/28/06
Received: 02/28/06

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB2648-01 (Outfall 008 - Water) - cont.									
Reporting Units: mg/l									
Chloride	EPA 300.0	6B28141	0.26	0.50	25	1	02/28/06	03/01/06	
Nitrate/Nitrite-N	EPA 300.0	6B28141	0.072	0.26	2.6	1	02/28/06	03/01/06	
Oil & Grease	EPA 413.1	6C08046	0.90	4.8	ND	1	03/08/06	03/08/06	
Sulfate	EPA 300.0	6B28141	0.18	0.50	13	1	02/28/06	03/01/06	
Total Dissolved Solids	SM2540C	6C03069	10	10	260	1	03/03/06	03/03/06	
Total Suspended Solids	EPA 160.2	6C06085	10	10	110	1	03/06/06	03/06/06	

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INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: IPB2648-01 (Outfall 008 - Water) - cont.									
Reporting Units: ug/l									
Total Cyanide	EPA 335.2	6C02125	2.2	5.0	2.3	1	03/02/06	03/02/06	J
Perchlorate	EPA 314.0	6C03066	0.80	4.0	1.8	1	03/03/06	03/03/06	J

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Received: 02/28/06

SHORT HOLD TIME DETAIL REPORT

	Hold Time (in days)	Date/Time Sampled	Date/Time Received	Date/Time Extracted	Date/Time Analyzed
Sample ID: Outfall 008 (IPB2648-01) - Water					
EPA 300.0	2	02/28/2006 08:15	02/28/2006 18:35	02/28/2006 23:30	03/01/2006 04:41
EPA 624	3	02/28/2006 08:15	02/28/2006 18:35	03/03/2006 00:00	03/03/2006 15:27
Sample ID: Trip Blank (IPB2648-02) - Water					
EPA 624	3	02/28/2006 15:45	02/28/2006 18:35	03/03/2006 00:00	03/03/2006 10:45

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 300 North Lake Avenue, Suite 1200
 Pasadena, CA 91101
 Attention: Bronwyn Kelly

Project ID: Annual Outfall 008
 Report Number: IPB2648

Sampled: 02/28/06
 Received: 02/28/06

METHOD BLANK/QC DATA

PURGEABLES BY GC/MS (EPA 624)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	RPD Limits	RPD RPD	Data Limit	Qualifiers
Batch: 6C03009 Extracted: 03/03/06											
Blank Analyzed: 03/03/2006 (6C03009-BLK1)											
Benzene	ND	1.0	0.28	ug/l							
Bromodichloromethane	ND	2.0	0.30	ug/l							
Bromoform	ND	5.0	0.32	ug/l							
Bromomethane	ND	5.0	0.42	ug/l							
Carbon tetrachloride	ND	0.50	0.28	ug/l							
Chlorobenzene	ND	2.0	0.36	ug/l							
Chloroethane	ND	5.0	0.40	ug/l							
Chloroform	ND	2.0	0.33	ug/l							
Chloromethane	ND	5.0	0.30	ug/l							
Dibromochloromethane	ND	2.0	0.28	ug/l							
1,2-Dichlorobenzene	ND	2.0	0.32	ug/l							
1,3-Dichlorobenzene	ND	2.0	0.35	ug/l							
1,4-Dichlorobenzene	ND	2.0	0.37	ug/l							
1,1-Dichloroethane	ND	2.0	0.27	ug/l							
1,2-Dichloroethane	ND	0.50	0.28	ug/l							
1,1-Dichloroethene	ND	5.0	0.42	ug/l							
trans-1,2-Dichloroethene	ND	2.0	0.27	ug/l							
1,2-Dichloropropane	ND	2.0	0.35	ug/l							
cis-1,3-Dichloropropene	ND	2.0	0.22	ug/l							
trans-1,3-Dichloropropene	ND	2.0	0.32	ug/l							
Ethylbenzene	ND	2.0	0.25	ug/l							
Methylene chloride	ND	5.0	0.70	ug/l							
1,1,2,2-Tetrachloroethane	ND	2.0	0.24	ug/l							
Tetrachloroethene	ND	2.0	0.32	ug/l							
Toluene	ND	2.0	0.36	ug/l							
1,1,1-Trichloroethane	ND	2.0	0.30	ug/l							
1,1,2-Trichloroethane	ND	2.0	0.30	ug/l							
Trichloroethene	ND	2.0	0.26	ug/l							
Trichlorofluoromethane	ND	5.0	0.34	ug/l							
Vinyl chloride	ND	0.50	0.26	ug/l							
Xylenes, Total	ND	4.0	0.90	ug/l							
Trichlorotrifluoroethane (Freon 113)	ND	5.0	1.2	ug/l							
Surrogate: Dibromofluoromethane	26.5			ug/l	25.0		106	80-120			
Surrogate: Toluene-d8	27.3			ug/l	25.0		109	80-120			
Surrogate: 4-Bromofluorobenzene	23.2			ug/l	25.0		93	80-120			

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