



Via Federal Express

August 13, 2010
In reply refer to SHEA-110258

Regional Water Quality Control Board
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90013

Attention: Information Technology Unit

Reference: Compliance File CI-6027 and NPDES No. CA0001309

Subject: Second Quarter 2010 NPDES Discharge Monitoring Report
Submittal – Santa Susana Site

Dear Sir/Madam,

The Boeing Company (Boeing) is pleased to submit the Second Quarter 2010 Discharge Monitoring Report (DMR) for the Santa Susana Field Laboratory (Santa Susana Site). In conformance with National Pollutant Discharge Elimination System (NPDES) Permit No. CA0001309 (NPDES Permit), field actions and results from activities related to the Santa Susana Site outfalls (**Figure 1**) during the period of April 1-June 30 2010 (i.e., Second Quarter 2010), are detailed herein. Included are summary tables of surface water sample analytical results, rainfall summaries, liquid waste shipment summaries, and surface water sample laboratory analytical reports.

Hard copies of this DMR are available to the public at California State University at Northridge Library; Simi Valley Library; and the Platt Branch of the Los Angeles Library. An electronic version of this DMR is located at:

www.boeing.com/aboutus/environment/santa_susana/programs.html.

SECOND QUARTER 2010 DMR CONTENTS AND DISCHARGE SUMMARY

Figure 1 is a site location map that displays positions of regulated outfalls at the Santa Susana Site. A summary of the Second Quarter 2010 measured precipitation at the Santa Susana Site is presented in **Appendix A**. All sanitary wastes from the domestic sewage treatment plants (STPs I, II, and III) were shipped off-site for disposal. These data and details of all other liquid waste shipments are summarized in **Appendix B**.

The Santa Susana Site experienced three daily rain events with greater than 0.1 inch of rainfall in a 24-hour period (see **Appendix A**). These rainfall events occurred on April 5, April 11, and April 20th, 2010. Prior to and following each rain event, storm water outfall location field inspections were conducted. In accordance with NPDES Permit requirements, Second Quarter sampling was also performed at specific outfalls where discharge occurred and more than 0.1 inch of rainfall in a 24-hour period occurred. **Table 1** summarizes the Second Quarter 2010 sampling record by outfall/location where flow was observed, and sample type collected per the requirements of the NPDES Permit.

Table 1. Second Quarter 2010 Sampling Record -- Boeing SSFL

Date	Outfall/Location	Samples Collected (i.e. grab, composite)
4/5/2010	Outfall 009 (WS-13 Drainage)	Composite
	Outfall 010 (Building 203)	Grab ¹
4/12/2010	Outfall 009 (WS-13 Drainage)	Composite
5/12/2010	Arroyo Simi Receiving Water/Sediment	Grab

Samples collected were submitted to and analyzed by a California-certified analytical laboratory per the NPDES Permit requirements. The analytical results from these Second Quarter 2010 surface water samples are presented in tabular form by outfall location, the constituents evaluated (analytes), sampling dates of the analytical result, and data validation qualifiers in **Appendices C** and **D**.

A bioassessment review was conducted on May 17th, 2010 for Second Quarter 2010 as required by the permit. However, because all drainages associated with NPDES Permit-regulated outfalls at the Santa Susana Site were dry at the time of sampling, the biologist determined that there was no suitable habitat from which to complete the bioassessment sampling due to the lack of naturally occurring continuous flow of water in these drainages.

A summary table of NPDES Permit effluent limit exceedances and/or benchmark limits based on the surface water analytical data is provided in **Appendix E**. In addition, the results of a reasonable potential analysis (RPA) utilizing updated monitoring data are provided in **Appendix F**. **Appendix G** contains copies of the laboratory analytical reports, chains of custody, and data validation reports. Quarterly Summary Notes are a compilation of notes, abbreviations, and data validation codes that are used in the analytical data summary tables and are included as a supplement in **Appendices C** through **F**.

¹The low flow conditions did not allow for composite samples to be taken; thus, grab sampling was performed.

SECOND QUARTER 2010 SITE-WIDE STORM WATER POLLUTION PREVENTION PLAN (SWPPP)/BEST MANAGEMENT PRACTICES (BMP) ACTIVITIES

Boeing continued to implement the site-wide Storm Water Pollution Prevention Plan (SWPPP) throughout Second Quarter 2010. Specifically, Boeing:

- Conducted monthly, and post storm season inspections as required by the site-wide SWPPP to identify and mitigate any concerns following the storm season that may affect the quality of stormwater runoff from the Santa Susana site in preparation of the next storm season.
- Continued implementation of the removal of structural features, concrete foundations, metal, and other debris from the Santa Susana Site.
- Bi-weekly inspections were conducted according to the individual construction SWPPPs for these projects.
- Maintenance was conducted to the BMPs in response to the bi-weekly, monthly and post season inspections conducted across the site.

Boeing also continued to plant native vegetation and implement Interim Source Removal Action (ISRA) related activities at Outfalls 008 and 009, and perform Northern Drainage cleanup activities and BMP upgrades. These activities are discussed more fully below, and summarized in **Table 2**.

Site-Wide Planting of Native Vegetation

Boeing continued to focus its native plant restoration program during the dry season on areas where soil erosion is probable as recommended by the Surface Water Expert Panel. Boeing continued to reintroduce native vegetative species along the Northern Drainage (Outfall 009 watershed) area during the Second Quarter 2010 that included an additional 1,785 plants. Repopulated species include Mulefat, Elderberry, Creeping Wild Rye, Mugwort and Coyote Brush. Irrigation lines were also installed during the planting activities during the First and Second Quarter within the watersheds of Outfalls 001, 002, 009, and 018. Irrigation is conducted three times each week throughout the dry season to ensure the native species become established.

ISRA Related Activities

Proactively addressing constituents that have historically exceeded NPDES Permit limits, and pursuant to the December 3, 2008 Section 13304 Order issued by the Los Angeles Regional Water Quality Control Board (Regional Board), Boeing has aggressively undertaken source removal and related activities in the Outfall 008 and 009 watersheds.

During the Second Quarter 2010, Boeing:

- Continued soil sampling to complete source delineation of ISRA areas within the Outfall 009 watershed.
- Identified a potential soil borrow area within the Outfall 009 watershed for use as backfill of Phase II excavations and collected soil samples to characterize the soil.
- Conducted waste characterization soil sampling for ISRA areas within the Outfall 009 watershed.
- Maintained and monitored site conditions at the ISRA areas, including BMPs per the ISRA SWPPP.
- Conducted performance monitoring inspections and sampling at 2009 ISRA areas and select culverts, per the ISRA Performance Monitoring Plan.
- Completed installation of a water supply system to the planted areas at Outfall 008 (near HVS-2) and at Outfall 009 culvert locations, per the Surface Water Expert Panel recommendations.
- Submitted permit applications for a grading permit and oak tree permit to Ventura County, CWA Section 404 permit to the U.S. Army Corps of Engineers, and CWA Section 401 notification to RWQCB, and received permits.
- Prepared supplemental plans for 2010 implementation, including a Soil Management Plan, Transportation Plan, Health and Safety Plan, and SWPPP, and submitted to RWQCB.
- Together with NASA, Boeing has continued efforts to move forward with the excavation and disposal of soils from ISRA areas ELV-1C and ELV-1D, located on federal property administered by NASA in the Outfall 009 watershed. On April 15, 2010, at the Regional Board's request, Boeing and NASA voluntarily agreed to postpone the ELV excavation in light of "[i]ssues ... raised by interested parties." The excavation remains pending².

Boeing submitted the 2010 ISRA Work Plan Addendum to the Regional Board on April 30, 2010 for review and approval. The work plan provided a summary of the 2009 and 2010 ISRA data gap investigation results, and identified the remaining ISRA Preliminary Evaluation Areas (PEAs) that Boeing will implement in 2010 and 2011.

Boeing continues to conduct weekly status meetings and submit monthly and quarterly progress reports to Regional Board Staff on the progress of the ISRA activities. ISRA-related documents can be found electronically at:

http://www.boeing.com/aboutus/environment/santa_susana/isra.html

² http://www.boeing.com/aboutus/environment/santa_susana/isra.html

Northern Drainage

Boeing has actively worked to restore the Northern Drainage following clean-up activities performed in the Second Quarter 2010 under the Department of Toxic Substances Control (DTSC) oversight. Specifically, Boeing:

- Installed containerized native plants and associated irrigation systems in the Northern Drainage on Sage Ranch property per the Surface Water Expert Panel Recommendations. Installation of native plants was completed in May 2010. Approximately twelve hundred native plants were planted in several topographic lows within and adjacent to the Outfall 009 drainage under the direction of the Surface Water Expert Panel. A biologist has inspected plant development on a weekly basis and will continue to monitor until the plants are successfully rooted.
- Started culvert maintenance in June 2010. Culvert maintenance activities included removing the sediment that accumulated during the previous rainy season, replacing straw wattles that were flattened, keying-in straw wattles that were destabilized and relocating sediment that has collected behind silt fencing. Straw wattles and hay bales that were damaged during water pipe maintenance in the vicinity of well RD-82 were replaced and all construction supplies were removed from the area. The water was shut down temporarily while repairs were made and there was no discharge to the Northern Drainage.

Boeing continues to perform BMP maintenance activities through the summer months following the rain season

Outfalls 011 and 018 Treatment Systems

Boeing demobilized two temporary storm water treatment systems (TSTSs) at Outfalls 011 and 018 in the Second Quarter 2010. The TSTSs had capacities of 690 gallons per minute (gpm) at Outfall 011 and 1,035 gpm at Outfall 018. Based upon the results of the Outfall 011 and 018 TSTSs, Boeing is implementing permanent chemical treatment systems at these two locations for the upcoming winter season. Design and construction of these two systems is scheduled to begin in the Fourth Quarter 2010. A more detailed summary of the treatment systems operation and processes are provided below.

Outfall 011 TSTS

The Outfall 011 TSTS, located adjacent to R-1 Pond (Figure 1), consisted of screen filters, an equalization tank, two banks of sand filters (with the second bank filter consisting of smaller diameter sand), bag filters, and granular activated carbon (GAC) media filters. During the First Quarter 2010, storm water was pumped from the Perimeter Pond to the R-1 Pond for treatment. Potassium permanganate (KMnO₄) solution was injected into the influent

water to oxidize dissolved iron and manganese, which allows each to be later removed by downstream processes within the TSTS. Treated effluent water from the GAC skid was discharged directly to Outfall 011.

Demobilization for the Outfall 011 TSTS began in April 2010 and was completed in May 2010.

Boeing is in the process of upgrading this system to a more permanent chemical treatment system similar to what was used at Outfall 018 during this past storm season, which showed almost complete constituents of concern (COC) removal. Boeing is currently designing and purchasing the major components of this treatment system, such as the ACTIFLO unit (rapid clarification), equalization/storage tanks, and sand filtration units. The ACTIFLO unit will control high turbidity peaks and protect the rest of the system from solids overload. Results from the pilot study performed in the summer of 2009 showed that the ACTIFLO process removes targeted metals (iron, manganese, lead, mercury, and copper) that adhere to sediments within stormwater runoff.

Outfall 018 TSTS

The Outfall 018 TSTS was a more complex system consisting of both a clean water treatment system and a solids handling and disposal system.

Chemicals utilized during the operation of the TSTS included KMnO_4 , aluminum sulfate (alum), polymer, caustic and acid which are injected into the water at different stages to enhance treatment. KMnO_4 oxidizes iron and manganese and promotes precipitation out of solution, while alum and polymer stimulate coagulation and flocculation of organics and fine sediments with co-precipitation of other metals and constituents. The introduction of basic and acid materials allowed for pH adjustment that optimized the aforementioned chemical reactions. The clean water treatment system was comprised of screen filters, equalization tanks, contact tanks with weir and lamella plates, two banks of sand filters, bag filters, and GAC media filters. The solids present in the influent water, together with those resulting from the addition of alum and polymer produced sludge that was removed by settling in the contact tanks with lamellae plates. The fraction of solids that remained in suspension was removed by filtration through two stages of sand filters followed by bag filters with 0.5 μm bags. The finished effluent was then polished through a bank of GAC media filters before discharging clean water was discharged at approximately 1,000 gpm as clean water at Outfall 018.

The solids handling and disposal system was designed to remove all the solids produced by the clean water treatment system. These solids were collected in solids holding tanks, which received sludge from the contact tanks and backwash water from the sand filters, and contains particulates retained by the sand filtration stages. Settled solids from the solids holding tank were pumped to a centrifuge, while the supernatant was routed back to the front end of the clean water treatment system. Finally, the dewatered solids from

the centrifuge were collected in roll-off bins and transported off-site for disposal, while the centrate (liquid fraction) is routed back to the front end of the clean water treatment system. Demobilization of the Outfall 018 TSTS began in April 2010 and was completed in June 2010.

Boeing is in the process of upgrading this system to a more permanent chemical treatment system with an ACTIFLO process based on the results from the 2009-2010 storm season. Boeing is currently upgrading the treatment system design, as well as purchasing the major components such as the ACTIFLO unit, equalization/storage tanks, and sand filtration units. The ACTIFLO unit will control high turbidity peaks and protect the rest of the system from solids overload. Results from the pilot study performed in the summer of 2009 showed that the ACTIFLO process removes targeted metals (iron, manganese, lead, mercury, and copper) which adhere to sediments (solids) within stormwater runoff.

The following is a summary of the specific BMP activities by outfall location that were conducted during the first quarter.

Table 2: Boeing's BMP Activities during the Second Quarter 2010

OUTFALL (Location)	BMP ACTIVITIES DURING SECOND QUARTER 2010
001 (South Slope below Perimeter Pond)	Inspected sediment and erosion control BMPs, performed maintenance on the flume, and conducted housekeeping activities at the sample location. Continued irrigation of native plants three times per week until plants become established. Performed weed abatement.
002 (South Slope below R-2 Pond)	Inspected sediment and erosion control BMPs, performed maintenance on the flume and conducted housekeeping activities at the sample location. Continued irrigation of native plants three times per week until plants become established. Performed weed abatement.
003 (RMHF)	Conducted structural BMP and storm water filter system inspections. Performed maintenance on flume and conducted housekeeping activities at the sample location. Planned for improved retention and movement of excess stormwater to a consolidated location. Began upgrade of structural BMP including the replacement of Granular Activated Carbon and Zeolite media. Performed weed abatement.
004 (SRE)	Conducted structural BMP and storm water filter system inspections. Performed maintenance on flume and conducted housekeeping activities at the sample location. Planned for improved retention and movement of excess stormwater to a consolidated location. Began upgrade of structural BMP including the replacement of Granular Activated Carbon and Zeolite media. Performed weed

OUTFALL (Location)	BMP ACTIVITIES DURING SECOND QUARTER 2010
	abatement.
005 (FSDF-1)	Conducted sedimentation basin and storm water filter system inspections. Maintained temporary treatment system for Outfalls 005/007. Conducted housekeeping activities at the sample location. Planning for improved retention and movement of excess stormwater to a consolidated location. Performed weed abatement.
006 (FSDF-2)	Conducted structural BMP and storm water filter system inspections. Performed maintenance on flume and conducted housekeeping activities at the sample location. Planned for improved retention and movement of excess stormwater to a consolidated location. Began upgrade of structural BMP including the replacement of GAC and Zeolite media. Raised berms upstream of the sand filter media bed. Performed weed abatement/vegetation removal.
007 (Building 100)	Conducted BMP, sedimentation basin and storm water filter system inspections. Conducted housekeeping activities at the outfall and sample location. Planned for improved retention and movement of excess stormwater to a consolidated location. Performed weed abatement.
008 (Happy Valley)	Inspected sediment and erosion control BMPs, performed maintenance on the flume, and conducted housekeeping activities at the sample location. Added rip-rap to existing BMPs. Conducted ISRA work, including restoration and erosion control activities, such as, planting native plants for erosion control. Native plants were irrigated three times per week. Performed maintenance on outfall access road and weed abatement.
009 (WS-13 Drainage)	Inspected sediment and erosion control BMPs, performed maintenance on the flume and conducted housekeeping activities at the sample location. Conducted ISRA work, including restoration and erosion control activities, such as planting native plants for erosion control. Conducted irrigation of new plants three times per week. Performed weed abatement.
010 (Building 203)	Conducted structural BMP and storm water filter system inspections. Performed maintenance on flume and conducted housekeeping activities at the sample location. Planned for improved retention and movement of excess stormwater to a consolidated location. Began upgrade of structural BMP, including the replacement of Granular Activated Carbon and Zeolite media. Added wattles upstream of BMP. Performed weed abatement.

OUTFALL (Location)	BMP ACTIVITIES DURING SECOND QUARTER 2010
011 (Perimeter Pond)	Conducted BMP and drainage system inspections. Performed maintenance and conducted housekeeping at the sample location. Completed demobilization of TSTS. Installed erosion control measures. Performed weed abatement.
012 (ALFA Test Stand)	Conducted inspection of structural BMPs. Performed maintenance and conducted housekeeping activities at the sample location. Planned for improved retention and movement of excess stormwater to a consolidated location. Performed weed abatement.
013 (BRAVO Test Stand)	Conducted inspection of structural BMPs. Performed maintenance and conducted housekeeping activities at the sample location. Planned for improved retention and movement of excess stormwater to a consolidated location. Performed weed abatement.
014 (APTF Test Stand)	Conducted inspection of structural BMPs. Performed maintenance and conducted housekeeping activities at the sample location.
018 (R-2 Spillway)	Conducted structural BMP inspections. Performed housekeeping activities at the sample location. Completed demobilization of TSTS. Continued irrigation of native plants three times per week until plants become established. Performed weed abatement.
019 (GETS)	Groundwater Extraction Treatment System (GETS) operation is ongoing. Currently, treated ground water is hauled off-site, no discharges.

SUMMARY OF NONCOMPLIANCE

The following summary of noncompliance results for Second Quarter 2010 monitoring results is organized by outfall location. As indicated in the Permit, only the exceedances of a permit limit or benchmark limits are discussed in this DMR. Those constituents that are detected but do not have a permit limit or benchmark limit are not included. No constituents were detected in the receiving water sample at concentrations greater than the receiving water limits for the Arroyo Simi.

Outfall 009

The following is a summary of exceedances of benchmark limits at Outfall 009 (WS-13 Drainage). The benchmark limit exceedances are further detailed in **Appendix E**.

Dioxins and Furans: TCDD Toxic Equivalent Quotient (TEQ)

TCDD TEQ in storm water samples from Outfall 009 exceeded the TCDD TEQ daily benchmark limit on April 5 and April 12, 2010. The measured concentration for the sample collected on April 5 was 1.58×10^{-6} µg/L, and the measured concentration for the sample collected on April 12 was 1.47×10^{-6} µg/L. Both values exceed the benchmark limit daily maximum of 2.8×10^{-8} µg/L.

TCDD congeners have been frequently detected in DTSC-approved, non-impacted background soils at the SSFL (MWH, 2005). In some areas, operations onsite have utilized combustion processes; however, when these potentially impacted areas were investigated, the TCDD TEQ values in soils were found either to be equivalent to background levels or, if elevated, they were shown to decrease over relatively short distances to near background levels down slope or down drainage from the suspected source area.

The presence of TCDD in both background soils and fire-related materials is well documented in the scientific literature (USEPA, 2000) and substantiated by previously-completed on- and offsite studies (MWH, 2005), and presented in the Flow Science Background Report (Flow Science, 2006). These reports suggest that the levels of TCDD TEQ measured in surface water at the SSFL could originate primarily from wildfire combustion processes, regional and atmospheric deposition, and other naturally occurring sources over which Boeing has no reasonable control.

A report completed by the Stormwater Expert Panel, *SSFL Stormwater Dioxin Background Report*,³ underscores the significant role of background dioxins (TCDD) in storm water discharges from Outfalls 001, 002, 008, and 009 at the Santa Susana Site. Among other things, the Expert Panel explains that dioxins are ubiquitous in the environment and come from wildfires and atmospheric deposition from widespread offsite emissions. As a result, "natural background soils are a significant source of dioxins in storm water" at Santa Susana.

The Regional Board Staff has recognized that many chemical constituents "are naturally occurring in the environment" and that in many cases "these constituents may be naturally elevated above the [applicable] water quality objective," thereby resulting in exceedances of applicable effluent limits. For this reason, Staff has recommended that the Regional Board "consider developing" implementation provisions for water quality standards to account for background conditions.⁴ Continued monitoring of surface water

³ Available at http://www.boeing.com/aboutus/environment/santa_susana/tech_reports.html.

⁴ See Revised Staff Report for 2008-2010 Triennial Review (Mar. 18, 2010); available at: http://www.swrcb.ca.gov/rwqcb4/water_issues/programs/basin_plan/BasinPlanTriennialReview/Addl_Documents2010_03_18/Revised%20Staff%20Report.pdf; see also Response to Comments on the Draft Triennial Review Staff Report and Tentative Resolution at 3-5 (Mar. 18, 2010); available at:

will provide a more thorough dataset with which to further evaluate the occurrence and likely sources of TCDD.

Whatever the source of the exceedance, Boeing is committed to fulfilling the requirements of the NPDES permit and therefore continues to take actions to reduce discharges of regulated constituents, including TCDD. Those actions taken during the Second Quarter 2010 are described in the sections above of this DMR addressing **Site-Wide Planting of Native Vegetation, ISRA Related Activities**, and **Northern Drainage** activities and in **Table 2**.

REASONABLE POTENTIAL ANALYSIS (RPA)

Outfall monitoring data were collected during the Second Quarter 2010 for Outfalls 009 and 010. Data from this quarter were added to the RPA dataset as per the MWH and Flow Science RPA procedures for the outfall monitoring group, Outfalls 003-010 (excluding Outfall 008) (MWH and Flow Science, 2006). The analytical results for this sampling period did not trigger reasonable potential for any constituents not already regulated under the current NPDES Permit. Complete RPA tables for the outfall monitoring group are provided in **Appendix F**.

Boeing does not believe the currently used RPA procedures are appropriate for storm water and storm water-dominated discharges from the SSFL. The RPA procedures are outlined in the California State Implementation Plan (SIP) and EPA's Technical Support Document for Water Quality-Based Toxics Control (TSD). It is inappropriate to use the RPA procedures for determining water quality impacts in the stormwater context because those procedures were developed for steady-state discharges. Stormwater discharges are not steady-state discharges, but rather exhibit highly variable flow rates and water quality COC concentrations during and between storms.⁵

DATA VALIDATION AND QUALITY CONTROL DISCUSSION

In accordance with current EPA guidelines and procedures, or as specified in the NPDES Monitoring and Reporting Program, chemical analyses of surface water discharge and receiving water samples were completed at a State of California-certified laboratory. Data validation was performed on

http://www.swrcb.ca.gov/rwqcb4/water_issues/programs/basin_plan/BasinPlanTriennialReview/Addl_Documents2010_03_18/Response%20to%20Comments%20on%20the%20Tentative%20Resolution%20and%20Staff%20Report.pdf.

⁵ See Flow Science, Boeing SSFL Technical Memo for RPA Procedures (May 2006) (submitted to Regional Board May 8, 2006) available at:

http://www.boeing.com/aboutus/environment/santa_susana/water_quality/tech_reports_10-11-10_ReasonablePotentialAnalyMethodTechMemo.pdf

the analytical results and quality control elements were found to be within acceptable limits for the analytical methods reported, except as noted on the analytical summary tables. As noted above, measures were implemented by the analytical laboratory to monitor and/or evaluate its low level detections, to analyze for interferences and to ensure that cross contamination does not occur in the future. Laboratory analytical reports, including validation reports and notes, are included in **Appendix D**. Attachment T-A of the NPDES Permit issued to the SSFL presents the State of California Water Resources Control Board (SWRCB or "State Board") minimum levels (MLs) for use in reporting and determining compliance with NPDES Permit limits.

The analytical laboratory achieved these MLs for this reporting period when technically possible. When the laboratory reporting limits (RLs) were elevated, the laboratory maximum detectable limits (MDLs) were below the State of California MLs. However, some constituents' daily maximum discharge limits in the NPDES Permit are less than their respective MLs, and less than the RL. In cases where the NPDES Permit limit is less than the RL and ML, the RL was used to determine compliance. The specific constituents that have NPDES Permit limits that are less than the RL and ML are: mercury, bis(2-ethylhexyl)phthalate, cyanide, polychlorinated biphenyls (PCBs) (Aroclor congeners), chlordane, DDD, DDE, DDT, dieldrin, toxaphene, and chlorpyrifos. These compounds were either not a required analyses or below the RL in all of the surface water/receiving water samples collected during Second Quarter 2010.

FACILITY CONTACT

If there are any questions regarding this DMR or its enclosures, you may contact Ms. Lori Blair at (818) 466-8741.

CERTIFICATION

I certify under penalty of law that this document and all appendices were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for a knowing violation.

Executed on the 13th of August 2010, at The Boeing Company, Santa Susana Site.

Sincerely,



Tom Gallacher
Director, Santa Susana Field Laboratory
Environment, Health and Safety

LB:bjc

Figure: 1 Storm Water Drainage System and Outfall Locations

Appendices:

- A Second Quarter 2010 Rainfall Data Summary
- B Second Quarter 2010 Liquid Waste Shipment Summary Tables
- C Second Quarter 2010 Summary Tables, Discharge Monitoring Data
- D Second Quarter 2010 Radiological Monitoring Data
- E Second Quarter 2010 Summary of Permit Limit Exceedances
- F Second Quarter 2010 Reasonable Potential Analysis (RPA) Summary Tables
- G Second Quarter 2010 Analytical Laboratory Reports, Chain-of-Custody, and Validation Reports

cc: Ms. Cassandra Owens, Regional Water Quality Control Board
Mr. Rick Brausch, Dept. of Toxic Substances Control
Mr. Gerard Abrams, Dept. of Toxic Substances Control
Mr. Robert Marshall, California State University, Northridge, Oviatt Library
Mr. Gabriel Lundeen, Simi Valley Library
Ms. Lynn Light, Los Angeles Library, Platt Branch

References Cited:

Flow Science, 2006. Potential Background Constituent Levels in Storm Water at Boeing's Santa Susana Field Laboratory. February 23.

Gullett, B., Touati, A., 2003. PCDD/F Emissions from Forest Fire Simulations. Atmospheric Environment, v. 37, p. 803-813.

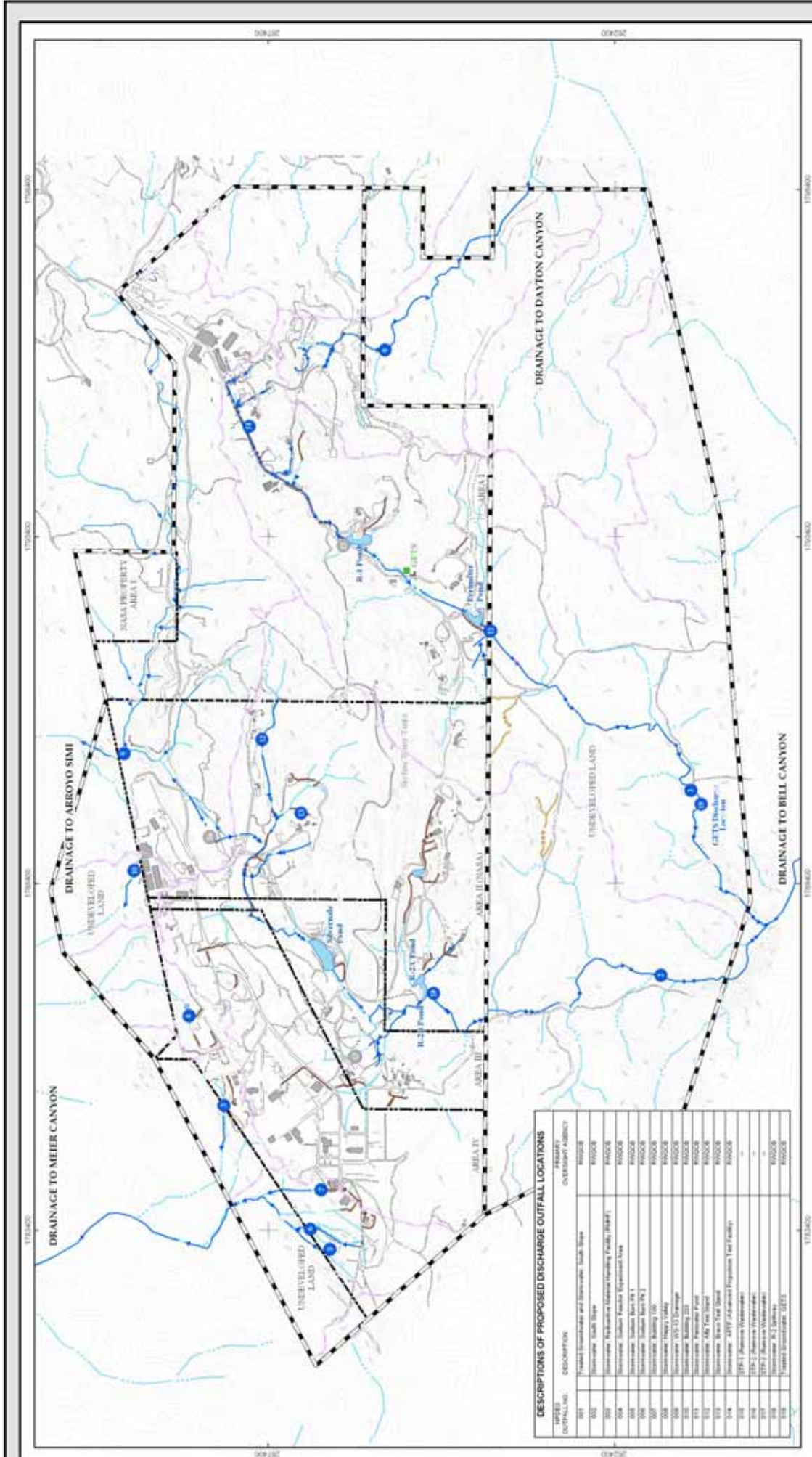
MWH. 2005. Standardized Risk Assessment Methodology (SRAM) Work Plan – Revision 2 Final, Santa Susana Field Laboratory, Ventura County, California. September.

MWH and Flow Science, 2006. Reasonable Potential Analysis Methodology Technical Memo- Version 1, Final, Santa Susana Field Laboratory, Ventura County, California. April 28.

USEPA, 2000. Exposure and Human Health Reassessment of 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) and Related Compounds. Part I: Estimating Exposure to Dioxin-Like Compounds. Volume 3: Properties, Environmental Levels, and Background Exposures. Draft. EPA/600/P-00/001Ac. Office of Research and Development, Washington, DC. March.

FIGURE 1

STORM WATER DRAINAGE SYSTEM AND OUTFALL LOCATIONS



DESCRIPTIONS OF PROPOSED DISCHARGE OUTFALL LOCATIONS

OUTFALL NO.	DESCRIPTION	REGULATORY OVERSIGHT AGENCY
001	Related Infrastructure and Structures - South Slope	NOV020R
002	Infrastructure - South Slope	NOV020R
003	Infrastructure - Trucking/Logistics/Industrial/Processing Facility (TRILIF)	NOV020R
004	Infrastructure - Industrial/Process Equipment Area	NOV020R
005	Infrastructure - Industrial Area Pk 1	NOV020R
006	Infrastructure - Industrial Area Pk 2	NOV020R
007	Infrastructure - Building 100	NOV020R
008	Infrastructure - Heavy Vehicle	NOV020R
009	Infrastructure - 10/11 Storage	NOV020R
010	Infrastructure - Building 200	NOV020R
011	Infrastructure - 40/42 Pond	NOV020R
012	Infrastructure - 40/42 Pond	NOV020R
013	Infrastructure - 40/42 Pond	NOV020R
014	Infrastructure - 40/42 Pond	NOV020R
015	Infrastructure - 40/42 Pond	NOV020R
016	Infrastructure - 40/42 Pond	NOV020R
017	Infrastructure - 40/42 Pond	NOV020R
018	Infrastructure - 40/42 Pond	NOV020R
019	Infrastructure - 40/42 Pond	NOV020R
020	Infrastructure - 40/42 Pond	NOV020R
021	Infrastructure - 40/42 Pond	NOV020R
022	Infrastructure - 40/42 Pond	NOV020R
023	Infrastructure - 40/42 Pond	NOV020R
024	Infrastructure - 40/42 Pond	NOV020R
025	Infrastructure - 40/42 Pond	NOV020R
026	Infrastructure - 40/42 Pond	NOV020R
027	Infrastructure - 40/42 Pond	NOV020R
028	Infrastructure - 40/42 Pond	NOV020R
029	Infrastructure - 40/42 Pond	NOV020R
030	Infrastructure - 40/42 Pond	NOV020R
031	Infrastructure - 40/42 Pond	NOV020R
032	Infrastructure - 40/42 Pond	NOV020R
033	Infrastructure - 40/42 Pond	NOV020R
034	Infrastructure - 40/42 Pond	NOV020R
035	Infrastructure - 40/42 Pond	NOV020R
036	Infrastructure - 40/42 Pond	NOV020R
037	Infrastructure - 40/42 Pond	NOV020R
038	Infrastructure - 40/42 Pond	NOV020R
039	Infrastructure - 40/42 Pond	NOV020R
040	Infrastructure - 40/42 Pond	NOV020R
041	Infrastructure - 40/42 Pond	NOV020R
042	Infrastructure - 40/42 Pond	NOV020R
043	Infrastructure - 40/42 Pond	NOV020R
044	Infrastructure - 40/42 Pond	NOV020R
045	Infrastructure - 40/42 Pond	NOV020R
046	Infrastructure - 40/42 Pond	NOV020R
047	Infrastructure - 40/42 Pond	NOV020R
048	Infrastructure - 40/42 Pond	NOV020R
049	Infrastructure - 40/42 Pond	NOV020R
050	Infrastructure - 40/42 Pond	NOV020R
051	Infrastructure - 40/42 Pond	NOV020R
052	Infrastructure - 40/42 Pond	NOV020R
053	Infrastructure - 40/42 Pond	NOV020R
054	Infrastructure - 40/42 Pond	NOV020R
055	Infrastructure - 40/42 Pond	NOV020R
056	Infrastructure - 40/42 Pond	NOV020R
057	Infrastructure - 40/42 Pond	NOV020R
058	Infrastructure - 40/42 Pond	NOV020R
059	Infrastructure - 40/42 Pond	NOV020R
060	Infrastructure - 40/42 Pond	NOV020R
061	Infrastructure - 40/42 Pond	NOV020R
062	Infrastructure - 40/42 Pond	NOV020R
063	Infrastructure - 40/42 Pond	NOV020R
064	Infrastructure - 40/42 Pond	NOV020R
065	Infrastructure - 40/42 Pond	NOV020R
066	Infrastructure - 40/42 Pond	NOV020R
067	Infrastructure - 40/42 Pond	NOV020R
068	Infrastructure - 40/42 Pond	NOV020R
069	Infrastructure - 40/42 Pond	NOV020R
070	Infrastructure - 40/42 Pond	NOV020R
071	Infrastructure - 40/42 Pond	NOV020R
072	Infrastructure - 40/42 Pond	NOV020R
073	Infrastructure - 40/42 Pond	NOV020R
074	Infrastructure - 40/42 Pond	NOV020R
075	Infrastructure - 40/42 Pond	NOV020R
076	Infrastructure - 40/42 Pond	NOV020R
077	Infrastructure - 40/42 Pond	NOV020R
078	Infrastructure - 40/42 Pond	NOV020R
079	Infrastructure - 40/42 Pond	NOV020R
080	Infrastructure - 40/42 Pond	NOV020R
081	Infrastructure - 40/42 Pond	NOV020R
082	Infrastructure - 40/42 Pond	NOV020R
083	Infrastructure - 40/42 Pond	NOV020R
084	Infrastructure - 40/42 Pond	NOV020R
085	Infrastructure - 40/42 Pond	NOV020R
086	Infrastructure - 40/42 Pond	NOV020R
087	Infrastructure - 40/42 Pond	NOV020R
088	Infrastructure - 40/42 Pond	NOV020R
089	Infrastructure - 40/42 Pond	NOV020R
090	Infrastructure - 40/42 Pond	NOV020R
091	Infrastructure - 40/42 Pond	NOV020R
092	Infrastructure - 40/42 Pond	NOV020R
093	Infrastructure - 40/42 Pond	NOV020R
094	Infrastructure - 40/42 Pond	NOV020R
095	Infrastructure - 40/42 Pond	NOV020R
096	Infrastructure - 40/42 Pond	NOV020R
097	Infrastructure - 40/42 Pond	NOV020R
098	Infrastructure - 40/42 Pond	NOV020R
099	Infrastructure - 40/42 Pond	NOV020R
100	Infrastructure - 40/42 Pond	NOV020R

Legend

- IPCES Outfalls (RWQCB Primary Oversight Authority)
- HRRPDES Outfalls
- Groundwater Extraction Treatment System (GETS)
- Surface Water Reclamation Ponds
- Surface Water Drainage Dike
- Internal Drainage
- Concrete Lined Drainage
- Grassland Drainage

Base Map Legend

- USA Property Administration
- State/County
- Drainage Pathways
- AC Corridor
- Drill Hole
- Existing Industry or Structure

Scale

0 500 1,000 2,000 Feet

NOV CONSULTING
10/11/2014, 10:27 AM

Site Map with Outfall Locations and Storm Water Drainage Systems

FIGURE 3

MWH

10/11/2014, 10:27 AM

NOV CONSULTING
10/11/2014, 10:27 AM

APPENDIX A

SECOND QUARTER 2010 RAINFALL DATA SUMMARY

APPENDIX B

SECOND QUARTER 2010 LIQUID WASTE SHIPMENTS SUMMARY
TABLES

TABLE B-1
THE BOEING COMPANY

NPDES PERMIT CA0001309
LIQUID WASTE SHIPMENTS
April 2010

DATE SHIPPED	TYPE OF LIQUID	QTY.	UNITS	TRANSPORTER	DESTINATION
4/1/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	42840	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/1/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	42740	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/2/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	42680	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/2/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43120	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/5/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	42900	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/5/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	42640	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/6/2010	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT	5000	GAL.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	LACSD Saugus
4/6/2010	WASTE WATER FROM AREA II SEWAGE TREATMENT PLANT	5000	GAL.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	LACSD Carson
4/6/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	42980	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/6/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	42860	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/7/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	42960	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/7/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	42860	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/8/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	42880	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/8/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43180	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/9/2010	HAZARDOUS WASTE LIQUID (OIL FILLED TRANSFORMER <50PPM PCBs)	1380	LBS.	VEOLIA ES TECHNICAL SOLUTIONS 5736 WEST JEFFERSON STREET, PHOENIX, AZ	VEOLIA ES TECHNICAL SOLUTIONS 5736 WEST JEFFERSON STREET, PHOENIX, AZ
4/9/2010	HAZARDOUS WASTE LIQUID (OIL FILLED TRANSFORMER <50PPM PCBs)	1396	LBS.	VEOLIA ES TECHNICAL SOLUTIONS 5736 WEST JEFFERSON STREET, PHOENIX, AZ	VEOLIA ES TECHNICAL SOLUTIONS 5736 WEST JEFFERSON STREET, PHOENIX, AZ

TABLE B-1
THE BOEING COMPANY

NPDES PERMIT CA0001309
LIQUID WASTE SHIPMENTS
April 2010

DATE SHIPPED	TYPE OF LIQUID	QTY.	UNITS	TRANSPORTER	DESTINATION
4/9/2010	HAZARDOUS WASTE LIQUID (OIL FILLED TRANSFORMER <50PPM PCBs)	1378	LBS.	VEOLIA ES TECHNICAL SOLUTIONS 5736 WEST JEFFERSON STREET, PHOENIX, AZ	VEOLIA ES TECHNICAL SOLUTIONS 5736 WEST JEFFERSON STREET, PHOENIX, AZ
4/9/2010	NON-RCRA HAZARDOUS WASTE LIQUID (OIL FILLED TRANSFORMER)	1236	LBS.	VEOLIA ES TECHNICAL SOLUTIONS 5736 WEST JEFFERSON STREET, PHOENIX, AZ	VEOLIA ES TECHNICAL SOLUTIONS 5736 WEST JEFFERSON STREET, PHOENIX, AZ
4/9/2010	NON-RCRA HAZARDOUS WASTE LIQUID (OIL FILLED TRANSFORMER)	1283	LBS.	VEOLIA ES TECHNICAL SOLUTIONS 5736 WEST JEFFERSON STREET, PHOENIX, AZ	VEOLIA ES TECHNICAL SOLUTIONS 5736 WEST JEFFERSON STREET, PHOENIX, AZ
4/9/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43120	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/9/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43040	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/12/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43040	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/12/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	42620	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/13/2010	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT	5000	GAL.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	LACSD Saugus
4/13/2010	WASTE WATER FROM AREA II SEWAGE TREATMENT PLANT	5000	GAL.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	LACSD Saugus
4/13/2010	WASTE WATER FROM AREA III SEWAGE TREATMENT PLANT	5000	GAL.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	LACSD Carson
4/13/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	42940	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/13/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43280	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/14/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43180	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/15/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	42800	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/15/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43160	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/16/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43160	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.

TABLE B-1
THE BOEING COMPANY

NPDES PERMIT CA0001309
LIQUID WASTE SHIPMENTS
April 2010

DATE SHIPPED	TYPE OF LIQUID	QTY.	UNITS	TRANSPORTER	DESTINATION
4/16/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	42980	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/19/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	42920	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/19/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43060	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/20/2010	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT	5000	GAL.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	LACSD Saugus
4/20/2010	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT	5000	GAL.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	LACSD Saugus
4/20/2010	WASTE WATER FROM AREA II SEWAGE TREATMENT PLANT	5000	GAL.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	LACSD Carson
4/20/2010	CORROSIVE LIQUID, ACIDIC, INORGANIC (NITRIC ACID)	47	LBS.	VEOLIA ES TECHNICAL SOLUTIONS 1704 WEST FIRST STREET, AZUSA, CA	VEOLIA ES TECHNICAL SOLUTIONS 1704 WEST FIRST STREET, AZUSA, CA
4/20/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43120	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/20/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43440	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/21/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	42940	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/21/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43120	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/22/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43060	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/22/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43020	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/23/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43400	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/23/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43240	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/26/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43300	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.

TABLE B-1
THE BOEING COMPANY

NPDES PERMIT CA0001309
LIQUID WASTE SHIPMENTS
April 2010

DATE SHIPPED	TYPE OF LIQUID	QTY.	UNITS	TRANSPORTER	DESTINATION
4/26/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43140	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/27/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43040	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/27/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43520	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/28/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43340	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/28/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43420	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/29/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43320	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/29/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43380	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/30/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43520	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
4/30/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43320	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.

TABLE B-2
THE BOEING COMPANY

NPDES PERMIT CA0001309
LIQUID WASTE SHIPMENTS
May 2010

DATE SHIPPED	TYPE OF LIQUID	QTY.	UNITS	TRANSPORTER	DESTINATION
5/3/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43700	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/3/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43180	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/4/2010	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT	5000	GAL.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	LACSD Saugus
5/4/2010	WASTE WATER FROM AREA II SEWAGE TREATMENT PLANT	5000	GAL.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	LACSD Saugus
5/4/2010	WASTE WATER FROM AREA II SEWAGE TREATMENT PLANT	5000	GAL.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	LACSD Carson
5/4/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	44580	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/4/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43500	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/5/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43140	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/5/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43340	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/6/2010	POLYCHLORINATED BIPHENYLS	17	KG.	VEOLIA ES TECHNICAL SOLUTIONS 5736 WEST JEFFERSON STREET, PHOENIX, AZ	VEOLIA ES TECHNICAL SOLUTIONS 5736 WEST JEFFERSON STREET, PHOENIX, AZ
5/6/2010	NON-HAZARDOUS WASTE LIQUID (OUTFALL STORM WATER)	177	LBS.	VEOLIA ES TECHNICAL SOLUTIONS 5736 WEST JEFFERSON STREET, PHOENIX, AZ	VEOLIA ES TECHNICAL SOLUTIONS 5736 WEST JEFFERSON STREET, PHOENIX, AZ
5/6/2010	NON-HAZARDOUS WASTE LIQUID (OUTFALL STORM WATER)	15	LBS.	VEOLIA ES TECHNICAL SOLUTIONS 5736 WEST JEFFERSON STREET, PHOENIX, AZ	VEOLIA ES TECHNICAL SOLUTIONS 5736 WEST JEFFERSON STREET, PHOENIX, AZ
5/6/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43180	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/6/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43140	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/7/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43620	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/7/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	44680	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.

TABLE B-2
THE BOEING COMPANY

NPDES PERMIT CA0001309
LIQUID WASTE SHIPMENTS
May 2010

DATE SHIPPED	TYPE OF LIQUID	QTY.	UNITS	TRANSPORTER	DESTINATION
5/10/2010	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT	5000	GAL.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	LACSD Satagus
5/10/2010	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT	5000	GAL.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	LACSD Satagus
5/10/2010	WASTE WATER FROM AREA II SEWAGE TREATMENT PLANT	5000	GAL.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	LACSD Carson
5/10/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43280	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/10/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43620	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/11/2010	WASTE MERCURY CONTAINED IN MANUFACTURING ARTICLES	5	LBS.	VEOLIA ES TECHNICAL SOLUTIONS 1704 WEST FIRST STREET, AZUSA, CA	VEOLIA ES TECHNICAL SOLUTIONS 1704 WEST FIRST STREET, AZUSA, CA
5/11/2010	NON-RCRA HAZARDOUS WASTE LIQUID (OIL, WATER)	4815	LBS.	VEOLIA ES TECHNICAL SOLUTIONS 1704 WEST FIRST STREET, AZUSA, CA	VEOLIA ES TECHNICAL SOLUTIONS 1704 WEST FIRST STREET, AZUSA, CA
5/11/2010	NON-RCRA HAZARDOUS WASTE LIQUID (OIL, WATER)	1078	LBS.	VEOLIA ES TECHNICAL SOLUTIONS 1704 WEST FIRST STREET, AZUSA, CA	VEOLIA ES TECHNICAL SOLUTIONS 1704 WEST FIRST STREET, AZUSA, CA
5/11/2010	NON-RCRA HAZARDOUS WASTE LIQUID (OIL, WATER)	111	LBS.	VEOLIA ES TECHNICAL SOLUTIONS 1704 WEST FIRST STREET, AZUSA, CA	VEOLIA ES TECHNICAL SOLUTIONS 1704 WEST FIRST STREET, AZUSA, CA
5/11/2010	HAZARDOUS WASTE LIQUID (TRICHLOROETHENE, WATER)	1745	LBS.	VEOLIA ES TECHNICAL SOLUTIONS 1704 WEST FIRST STREET, AZUSA, CA	VEOLIA ES TECHNICAL SOLUTIONS 1704 WEST FIRST STREET, AZUSA, CA
5/11/2010	HAZARDOUS WASTE LIQUID (CADMIUM, MERCURY)	694	LBS.	VEOLIA ES TECHNICAL SOLUTIONS 1704 WEST FIRST STREET, AZUSA, CA	VEOLIA ES TECHNICAL SOLUTIONS 1704 WEST FIRST STREET, AZUSA, CA
5/11/2010	WASTE SODIUM HYDROXIDE SOLUTION	23	LBS.	VEOLIA ES TECHNICAL SOLUTIONS 1704 WEST FIRST STREET, AZUSA, CA	VEOLIA ES TECHNICAL SOLUTIONS 1704 WEST FIRST STREET, AZUSA, CA
5/11/2010	WASTE HYDROCHLORIC ACID SOLUTION	54	LBS.	VEOLIA ES TECHNICAL SOLUTIONS 1704 WEST FIRST STREET, AZUSA, CA	VEOLIA ES TECHNICAL SOLUTIONS 1704 WEST FIRST STREET, AZUSA, CA
5/11/2010	WASTE CORROSIVE LIQUID, ACIDIC, INORGANIC (LABPACK)	14	LBS.	VEOLIA ES TECHNICAL SOLUTIONS 1704 WEST FIRST STREET, AZUSA, CA	VEOLIA ES TECHNICAL SOLUTIONS 1704 WEST FIRST STREET, AZUSA, CA
5/11/2010	NON-RCRA HAZARDOUS WASTE LIQUID LABPACK	21	LBS.	VEOLIA ES TECHNICAL SOLUTIONS 1704 WEST FIRST STREET, AZUSA, CA	VEOLIA ES TECHNICAL SOLUTIONS 1704 WEST FIRST STREET, AZUSA, CA
5/11/2010	WASTE TOXIC LIQUID, CORROSIVE, INORGANIC (SODIUM CYANIDE, SODIUM HYDROXIDE)	51	LBS.	VEOLIA ES TECHNICAL SOLUTIONS 1704 WEST FIRST STREET, AZUSA, CA	VEOLIA ES TECHNICAL SOLUTIONS 1704 WEST FIRST STREET, AZUSA, CA

TABLE B-2
THE BOEING COMPANY

NPDES PERMIT CA0001309
LIQUID WASTE SHIPMENTS
May 2010

DATE SHIPPED	TYPE OF LIQUID	QTY.	UNITS	TRANSPORTER	DESTINATION
5/11/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43360	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/11/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43180	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/11/2010	BATTERIES, WET, NON-SPILLABLE, ELECTRIC STORAGE	134	LBS.	VEOLIA ES TECHNICAL SOLUTIONS 1704 WEST FIRST STREET, AZUSA, CA	VEOLIA ES TECHNICAL SOLUTIONS 1704 WEST FIRST STREET, AZUSA, CA
5/12/2010	WASTE WATER FROM AREA II SEWAGE TREATMENT PLANT	5000	GAL.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	LACSD Saugus
5/12/2010	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT	5000	GAL.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	LACSD Saugus
5/13/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43300	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/13/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43240	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/13/2010	NON-HAZARDOUS WASTE LIQUID (STORM WATER)	43400	LBS.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/13/2010	NON-HAZARDOUS WASTE LIQUID (STORM WATER)	43580	LBS.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/13/2010	NON-HAZARDOUS WASTE LIQUID (STORM WATER)	44840	LBS.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/13/2010	NON-HAZARDOUS WASTE LIQUID (STORM WATER)	13920	LBS.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/14/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43440	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/14/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43160	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/17/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43380	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/17/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	39740	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/17/2010	NON-HAZARDOUS WASTE LIQUID (POTABLE WATER)	40400	LBS.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.

TABLE B-2
THE BOEING COMPANY

NPDES PERMIT CA0001309
LIQUID WASTE SHIPMENTS
May 2010

DATE SHIPPED	TYPE OF LIQUID	QTY.	UNITS	TRANSPORTER	DESTINATION
5/17/2010	NON-HAZARDOUS WASTE LIQUID (POTABLE WATER)	41740	LBS.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/18/2010	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT	5000	GAL.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	LACSD Saugus
5/18/2010	WASTE WATER FROM AREA II SEWAGE TREATMENT PLANT	5000	GAL.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	LACSD Saugus
5/18/2010	WASTE WATER FROM AREA II SEWAGE TREATMENT PLANT	5000	GAL.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	LACSD Carson
5/18/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	40320	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/18/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	41500	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/18/2010	NON-HAZARDOUS WASTE LIQUID (POTABLE WATER)	10280	LBS.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/19/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43400	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/19/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43380	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/19/2010	NON-HAZARDOUS WASTE LIQUID (OUTFALL RINSE WATER)	43120	LBS.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/19/2010	NON-HAZARDOUS WASTE LIQUID (OUTFALL RINSE WATER)	44560	LBS.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/20/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43520	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/20/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43400	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/20/2010	NON-HAZARDOUS WASTE LIQUID (OUTFALL RINSE WATER)	43340	LBS.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/20/2010	NON-HAZARDOUS WASTE LIQUID (OUTFALL RINSE WATER)	43680	LBS.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/20/2010	NON-HAZARDOUS WASTE LIQUID (OUTFALL RINSE WATER)	43580	LBS.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.

TABLE B-2
THE BOEING COMPANY

NPDES PERMIT CA0001309
LIQUID WASTE SHIPMENTS
May 2010

DATE SHIPPED	TYPE OF LIQUID	QTY.	UNITS	TRANSPORTER	DESTINATION
5/20/2010	NON-HAZARDOUS WASTE LIQUID (OUTFALL RINSE WATER)	21720	LBS.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/21/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43080	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/21/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43220	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/24/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43280	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/24/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	39840	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/24/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43540	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/24/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	39940	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/25/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43060	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/25/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43100	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/26/2010	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT	5000	GAL.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	LACSD Saugus
5/26/2010	WASTE WATER FROM AREA II SEWAGE TREATMENT PLANT	5000	GAL.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	LACSD Saugus
5/26/2010	WASTE WATER FROM AREA II SEWAGE TREATMENT PLANT	5000	GAL.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	LACSD Carson
5/26/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43280	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/26/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	42920	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/27/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43280	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
5/27/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43980	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.

TABLE B-2
THE BOEING COMPANY

NPDES PERMIT CA0001309
LIQUID WASTE SHIPMENTS
May 2010

DATE SHIPPED	TYPE OF LIQUID	QTY.	UNITS	TRANSPORTER	DESTINATION
5/28/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	44420	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD, LOS ANGELES, CA.
5/28/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43340	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD, LOS ANGELES, CA.

TABLE B-3
THE BOEING COMPANY

NPDES PERMIT CA0001309
LIQUID WASTE SHIPMENTS
June 2010

DATE SHIPPED	TYPE OF LIQUID	QTY.	UNITS	TRANSPORTER	DESTINATION
6/1/2010	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT	5000	GAL.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	LACSD Saugus
6/1/2010	WASTE WATER FROM AREA II SEWAGE TREATMENT PLANT	5000	GAL.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	LACSD Saugus
6/1/2010	WASTE WATER FROM AREA III SEWAGE TREATMENT PLANT	5000	GAL.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	LACSD Carson
6/1/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43280	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/1/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43200	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/2/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43260	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/2/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43100	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/2/2010	NON-HAZARDOUS WASTE LIQUID (OUTFALL STORM WATER)	38100	LBS.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/2/2010	NON-HAZARDOUS WASTE LIQUID (OUTFALL STORM WATER)	39840	LBS.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/3/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43620	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/3/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43200	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/3/2010	NON-HAZARDOUS WASTE LIQUID (OUTFALL STORM WATER)	41740	LBS.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/3/2010	NON-HAZARDOUS WASTE LIQUID (OUTFALL STORM WATER)	37380	LBS.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/3/2010	NON-HAZARDOUS WASTE LIQUID (OUTFALL STORM WATER)	13020	LBS.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/4/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43380	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/4/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43400	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.

TABLE B-3
THE BOEING COMPANY

NPDES PERMIT CA0001309
LIQUID WASTE SHIPMENTS
June 2010

DATE SHIPPED	TYPE OF LIQUID	QTY.	UNITS	TRANSPORTER	DESTINATION
6/7/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43460	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/7/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43420	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/8/2010	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT	5000	GAL.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	LACSD Saugus
6/8/2010	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT	5000	GAL.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	LACSD Saugus
6/8/2010	WASTE WATER FROM AREA II SEWAGE TREATMENT PLANT	5000	GAL.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	LACSD Carson
6/8/2010	HAZARDOUS WASTE LIQUID (TRICHLOROETHENE)	6300	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SIEMENS WATER TECHNOLOGIES 5375 S. BOYLE AVE. LOS ANGELES, CA. 90058
6/8/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43460	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/8/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43580	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/8/2010	NON-HAZARDOUS WASTE LIQUID (RAIN WATER)	25120	LBS.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/9/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43300	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/9/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43000	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/10/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43400	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/10/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43240	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/11/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43460	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/11/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43460	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/14/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43520	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.

TABLE B-3
THE BOEING COMPANY

NPDES PERMIT CA0001309
LIQUID WASTE SHIPMENTS
June 2010

DATE SHIPPED	TYPE OF LIQUID	QTY.	UNITS	TRANSPORTER	DESTINATION
6/14/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43160	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/15/2010	WASTE WATER FROM AREA I SEWAGE TREATMENT PLANT	5000	GAL.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	LACSD Saugus
6/15/2010	WASTE WATER FROM AREA II SEWAGE TREATMENT PLANT	5000	GAL.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	LACSD Saugus
6/15/2010	WASTE WATER FROM AREA III SEWAGE TREATMENT PLANT	5000	GAL.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	LACSD Carson
6/15/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43480	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/15/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43680	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/16/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43600	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/16/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43220	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/17/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43820	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/17/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43460	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/18/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43820	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/18/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43400	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/21/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43640	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/21/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43400	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/22/2010	HAZARDOUS WASTE LIQUID (TRICHLOROETHENE)	35620	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SIEMENS WATER TECHNOLOGIES 5375 S. BOYLE AVE. LOS ANGELES, CA. 90058
6/22/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43560	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.

TABLE B-3
THE BOEING COMPANY

NPDES PERMIT CA0001309
LIQUID WASTE SHIPMENTS
June 2010

DATE SHIPPED	TYPE OF LIQUID	QTY.	UNITS	TRANSPORTER	DESTINATION
6/22/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43580	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/23/2010	HAZARDOUS WASTE LIQUID (TRICHLOROETHENE)	29640	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SIEMENS WATER TECHNOLOGIES 5375 S. BOYLE AVE. LOS ANGELES, CA. 90058
6/23/2010	NON-HAZARDOUS WASTE LIQUID (GROUNDWATER)	24340	LBS.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/23/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43400	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/23/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43460	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/24/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43760	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/24/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43660	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/25/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43380	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/25/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43460	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/28/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43220	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/28/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43380	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/29/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43740	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/29/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43520	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/30/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43480	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.
6/30/2010	NON-HAZARDOUS WASTE LIQUID (GETS GROUNDWATER)	43360	LBS.	MP ENVIRONMENTAL SERVICES 3400 MANOR STREET, BAKERSFIELD, CA 93308	SOUTHWEST PROCESSORS INC. 4120 BANDINI BLVD. LOS ANGELES, CA.

APPENDIX C

SECOND QUARTER 2010 SUMMARY TABLES, DISCHARGE
MONITORING DATA

**SECOND QUARTER 2010 REPORTING SUMMARY NOTES
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309**

Notes:

1. For Dioxins and Furans, laboratory results may have been reported in picograms/liter (pg/L). However, the permit limit is stated in micrograms/liter (µg/L). To evaluate permit compliance, the laboratory results have been converted to µg/L, as necessary, to calculate the TCDD TEQ.
2. TCDD TEQs for the purpose of determining permit compliance are the sum of the products of the detected dioxin congener concentration multiplied by that congener's TEF. The resulting compliance TCDD TEQ does not include those congener concentrations that are reported as DNQ, as specified on Page 53 of the NPDES permit.
3. For some sample dates, pH was determined with a field instrument and was noted as such. These results were not validated. Since pH does not have an RL, the possible pH range is shown in the RL column.
4. The NPDES permit limit or benchmark limit for mercury of 0.10 µg/L (Outfalls 001, 002, 011, 018 and 019) and 0.13 µg/L (Outfalls 003-010) are not achievable by the laboratory; therefore, the laboratory reporting limit of 0.20 µg/L was used to determine compliance.
5. All of the following abbreviations and/or notes may not occur on every table.

-92.9 +/-200	A negative radiochemical analytical result indicates the count rate of the sample was less than the background condition
\$	reported result or other information was incorrectly reported by the laboratory; result was corrected by the data validator
--	based on validation of the data, a qualifier was not required
-/-	no permit limit established for daily maximum or monthly average
<(value)	analyte not detected at a concentration greater than or equal to the DL, MDL, or RL (see laboratory report for specific detail)
*	result not validated
*1	improper preservation of sample
*2	the ICP/MS ppb check standard was recovered above the control limit; therefore, the constituent detected was qualified as estimated (J)
*3	initial and or continuing calibration recoveries were outside acceptable control limits
*5	blank spike/blank spike duplicate relative percent difference was outside the control limit

**SECOND QUARTER 2010 REPORTING SUMMARY NOTES
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309**

*10	value was estimated detect or estimated non detect (J,UJ) due to deficiencies in quantitation of the constituent including constituents reported by the laboratory as Estimated Maximum Possible Concentration (EMPC) values
*11	no calibration was performed for this compound; result is reported as a tentatively identified compound (TIC)
ANR	analysis not required; e.g., constituent or outfall was not required by the permit to be sampled and analyzed (annual, semi-annual, etc.)
B	laboratory method blank contamination
C	calibration %RSD or %D were noncompliant
C5	Calibration verification %R was outside method control limits
%D	percent difference between the initial and continuing calibration relative response factors
deg F	degrees Fahrenheit
DL	detection limit
DNQ	detected but not quantified (constituent value greater than or equal to the laboratory method detection limit and less then the laboratory reporting limit)
E	duplicates show poor agreement
H	holding time was exceeded
I	ICP interference check solution results were unsatisfactory
J	estimated value
Ja	estimated value, analyte detected at a value 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.
K	The sample dilution's set-up did not meet the oxygen depletion criteria of at least 2 mg/l. Therefore, the reported result is an estimated value only.
L2	the laboratory control sample %R was below the method control limits
L	laboratory control sample %R was outside control limits
LOD	limit of detection
M1	matrix spike (MS) and/or MS duplicate were above the acceptance limits due to sample matrix interference
M2	the MS and/or MS duplicate were below the acceptance limits due to sample matrix interference
MDA	minimum detected activity
MDL	method detection limit
MGD	million gallons per day
MHA*	Due to high level of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information.
mg/L	milligrams per liter
ml/L/hr	milliliters per liter per hour

**SECOND QUARTER 2010 REPORTING SUMMARY NOTES
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309**

NA	not applicable; no permit limit established for the constituent and/or outfall
ND	analyte value less than the LOD or MDL
NM	not measured or determined
NTU	nephelometric turbidity unit
pCi/L	picocuries per liter
pg/L	picograms per liter
Q	matrix spike recovery outside of control limits
R	as a validation qualifier, results are rejected; the presence or absence of analyte cannot be verified
R	(reason code in parentheses) %R for calibration not within control limits
RL	laboratory reporting limit
RL-1	reporting limit raised due to sample matrix effects
%RSD	percent relative standard deviation
S	surrogate recovery was outside control limits
TEQ	toxic equivalent
T	presumed contamination, as indicated by a detect in the trip blank
TU _c	toxicity units (chronic)
U	result not detected
µg/L	micrograms per liter
UJ	result not detected at the estimated reporting limit
umhos/cm	micromhos per centimeter
WHO TEF	World Health Organization toxic equivalency factor
^	analysis not completed due to hold time exceedence or insufficient sample volume

OUTFALL 009 (WS-13 Drainage)

**SECOND QUARTER 2010 REPORTING SUMMARY
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309**

April 1 through June 30, 2010

ANALYTE	UNITS	Benchmark Limit Daily Max/Monthly Avg	4/5/2010			4/12/2010		
			SAMPLE TYPE	RESULT	VALIDATION QUALIFIER	SAMPLE TYPE	RESULT	VALIDATION QUALIFIER
Asbestos	MFL	-/-	Comp	ND < 1.4	U	ANR	ANR	ANR
Chloride	mg/L	150/-	Comp	5.0	--	Comp	3.5	*
Fluoride	mg/L	1.6/-	ANR	ANR	ANR	ANR	ANR	ANR
Nitrate + Nitrite as Nitrogen (N)	mg/L	10/-	Comp	0.42	--	Comp	0.39	*
Oil & Grease	mg/L	15/-	Grab	ND < 1.3	U	Grab	ND < 1.3	*
Perchlorate	ug/L	6.0/-	ANR	ANR	ANR	ANR	ANR	ANR
pH (Field)	pH units	6.5-8.5/-	Grab	6.8	*	Grab	7.3	*
Sulfate	mg/L	250/-	Comp	7.7	--	Comp	6.1	*
Temperature	deg. F	86/-	Grab	51	*	Grab	50	*
Total Cyanide	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Total Dissolved Solids	mg/L	850/-	Comp	74	--	Comp	38	*
Total Suspended Solids	mg/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Volume Discharged	MGD	17.8/-	Meas	0.22131	*	Meas	0.33346	*
METALS								
Aluminum	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Antimony	ug/L	6.0/-	Comp	0.42	J (DNQ)	Comp	0.53	Ja* (DNQ)
Antimony, dissolved	ug/L	-/-	Comp	0.33	J (DNQ)	Comp	0.49	Ja* (DNQ)
Arsenic	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Beryllium	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Boron	mg/L	1.0/-	ANR	ANR	ANR	ANR	ANR	ANR
Cadmium	ug/L	4.0/-	Comp	ND < 0.10	U	Comp	ND < 0.10	*
Cadmium, dissolved	ug/L	-/-	Comp	ND < 0.10	U	Comp	0.11	Ja* (DNQ)
Chromium	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Copper	ug/L	14.0/-	Comp	5.2	J (*III)	Comp	5.63	*
Copper, dissolved	ug/L	-/-	Comp	3.7	J (*III)	Comp	3.02	B*
Iron	mg/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Lead	ug/L	5.2/-	Comp	2.8	--	Comp	5.0	*
Lead, dissolved	ug/L	-/-	Comp	0.39	J (C, DNQ)	Comp	0.55	Ja* (DNQ)
Mercury	ug/L	0.13/-	Comp	ND < 0.10	U	Comp	ND < 0.10	U
Mercury, dissolved	ug/L	-/-	Comp	ND < 0.10	U	Comp	ND < 0.10	U
Nickel	ug/L	100/-	ANR	ANR	ANR	ANR	ANR	ANR
Selenium	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Silver	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Thallium	ug/L	2.0/-	Comp	0.24	J (DNQ)	Comp	ND < 0.20	*
Thallium, dissolved	ug/L	-/-	Comp	ND < 0.20	U	Comp	0.29	Ja* (DNQ)
Vanadium	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Zinc	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
ORGANICS								
Benzene	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Carbon Tetrachloride	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Chloroform	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
1,1-Dichloroethane	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
1,2-Dichloroethane	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
1,1-Dichloroethene	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Ethylbenzene	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Tetrachloroethene	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Toluene	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Xylenes (Total)	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
1,1,1-Trichloroethane	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
1,1,2-Trichloroethane	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Trichloroethene	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Trichlorofluoromethane	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Vinyl chloride	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR

OUTFALL 009 (WS-13 Drainage)

**SECOND QUARTER 2010 REPORTING SUMMARY
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309**

April 1 through June 30, 2010

ANALYTE	UNITS	Benchmark Limit Daily Max/Monthly Avg	4/5/2010			4/12/2010		
			SAMPLE TYPE	RESULT	VALIDATION QUALIFIER	SAMPLE TYPE	RESULT	VALIDATION QUALIFIER
ADDITIONAL ANALYTES								
1,1,2,2-Tetrachloroethane	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
1,2,4-Trichlorobenzene	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
1,2-Dichlorobenzene	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
1,2-Dichloropropane	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
1,2-Diphenylhydrazine/Azobenzene	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
1,3-Dichlorobenzene	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
1,4-Dichlorobenzene	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
2,4,6-Trichlorophenol	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
2,4-Dichlorophenol	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
2,4-Dimethylphenol	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
2,4-Dinitrophenol	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
2,4-Dinitrotoluene	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
2,6-Dinitrotoluene	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
2-Chloroethylvinylether	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
2-Chloronaphthalene	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
2-Chlorophenol	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
2-Methyl-4,6-dinitrophenol	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
2-Nitrophenol	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
3,3'-Dichlorobenzidine	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
4,4'-DDD	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
4,4'-DDE	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
4,4'-DDT	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
4-Bromophenylphenylether	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
4-Chloro-3-methylphenol	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
4-Chlorophenylphenylether	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
4-Nitrophenol	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Acenaphthene	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Acrolein	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Acrylonitrile	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Acute Toxicity	% SURVIVAL	70-100/-	ANR	ANR	ANR	ANR	ANR	ANR
Aldrin	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
alpha-BHC	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Anthracene	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Aroclor-1016	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Aroclor-1221	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Aroclor-1232	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Aroclor-1242	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Aroclor-1248	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Aroclor-1254	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Aroclor-1260	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Benzidine	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Benzo(a)anthracene	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Benzo(a)pyrene	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Benzo(b)fluoranthene	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Benzo(g,h,i)perylene	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Benzo(k)fluoranthene	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
beta-BHC	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
bis (2-Chloroethyl) ether	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
bis (2-ethylhexyl) Phthalate	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
bis(2-Chloroethoxy) methane	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
bis(2-Chloroisopropyl) ether	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Bromodichloromethane	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Bromoform	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Bromomethane	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR

OUTFALL 009 (WS-13 Drainage)

**SECOND QUARTER 2010 REPORTING SUMMARY
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309**

April 1 through June 30, 2010

ANALYTE	UNITS	Benchmark Limit Daily Max/Monthly Avg	4/5/2010			4/12/2010		
			SAMPLE TYPE	RESULT	VALIDATION QUALIFIER	SAMPLE TYPE	RESULT	VALIDATION QUALIFIER
Butylbenzylphthalate	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Chlordane	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Chlorobenzene	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Chloroethane	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Chloromethane	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Chronic Toxicity	TUC	1.0/-	ANR	ANR	ANR	ANR	ANR	ANR
Chrysene	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
cis-1,3-Dichloropropene	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
delta-BHC	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Dibenzo(a,h)anthracene	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Dibromochloromethane	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Dieldrin	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Diethylphthalate	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Dimethylphthalate	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Di-n-butylphthalate	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Di-n-octylphthalate	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Endosulfan I	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Endosulfan II	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Endosulfan sulfate	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Endrin	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Endrin aldehyde	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Fluoranthene	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Fluorene	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Heptachlor	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Heptachlor epoxide	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Hexachlorobenzene	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Hexachlorobutadiene	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Hexachlorocyclopentadiene	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Hexachloroethane	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Indeno(1,2,3-cd)pyrene	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Isophorone	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Lindane (gamma-BHC)	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Methylene Chloride	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Naphthalene	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Nitrobenzene	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
n-Nitrosodimethylamine	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
n-Nitroso-di-n-propylamine	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
n-Nitrosodiphenylamine	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Pentachlorophenol	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Phenanthrene	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Phenol	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Pyrene	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
Toxaphene	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
trans-1,2-Dichloroethene	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR
trans-1,3-Dichloropropene	ug/L	-/-	ANR	ANR	ANR	ANR	ANR	ANR

OUTFALL 009 (WS-13 Drainage)

SECOND QUARTER 2010 REPORTING SUMMARY
 THE BOEING COMPANY
 SANTA SUSANA FIELD LABORATORY
 NPDES PERMIT CA0001309

Sample Type: Composite
 Sample Date April 5, 2010

ANALYTE	LAB LOD (ug/L)	LAB RL (ug/L)	LAB RESULT (ug/L)	VALIDATION QUALIFIER	1998 WHO TEF	TCDD Equivalent (w/out DNQ Values) (ug/L)
1,2,3,4,6,7,8-HpCDD	1.00E-06	5.00E-05	1.30E-04	--	0.01	1.30E-06
1,2,3,4,6,7,8-HpCDF	6.90E-07	5.00E-05	ND	U (B)	0.01	ND
1,2,3,4,7,8,9-HpCDF	1.20E-06	5.00E-05	ND	U (B)	0.01	ND
1,2,3,4,7,8-HxCDD	7.60E-07	5.00E-05	ND	U (B)	0.1	ND
1,2,3,4,7,8-HxCDF	7.00E-07	5.00E-05	ND	U (B)	0.1	ND
1,2,3,6,7,8-HxCDD	7.00E-07	5.00E-05	ND	U (B)	0.1	ND
1,2,3,6,7,8-HxCDF	6.40E-07	5.00E-05	ND	U (B)	0.1	ND
1,2,3,7,8,9-HxCDD	6.00E-07	5.00E-05	ND	U (B)	0.1	ND
1,2,3,7,8,9-HxCDF	6.80E-07	5.00E-05	ND	U (B)	0.1	ND
1,2,3,7,8-PeCDD	8.00E-07	5.00E-05	ND	U (B)	1	ND
1,2,3,7,8-PeCDF	6.20E-07	1.90E-06	1.90E-06	UJ (*III)	0.05	9.50E-08
2,3,4,6,7,8-HxCDF	5.60E-07	5.00E-05	ND	U (B)	0.1	ND
2,3,4,7,8-PeCDF	6.90E-07	5.00E-05	2.60E-06	J (DNQ)	0.5	ND
2,3,7,8-TCDD	3.50E-07	1.00E-05	ND	U	1	ND
2,3,7,8-TCDF	3.60E-07	1.00E-05	ND	U	0.1	ND
OCDD	2.60E-06	1.00E-04	1.70E-03	--	0.0001	1.70E-07
OCDF	7.80E-07	1.00E-04	1.00E-04	--	0.0001	1.00E-08

TCDD TEQ w/out DNQ Values	1.58E-06
---------------------------	----------

TCDD TEQ BENCHMARK LIMIT = 2.80E-08

See attached notes for abbreviations, definitions, and other explanations for the data presented in this table.

OUTFALL 009 (WS-13 Drainage)

**SECOND QUARTER 2010 REPORTING SUMMARY
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309**

Sample Type: Composite
Sample Date April 12, 2010

ANALYTE	LAB LOD (ug/L)	LAB RL (ug/L)	LAB RESULT (ug/L)	VALIDATION QUALIFIER	1998 WHO TEF	TCDD Equivalent (w/out DNQ Values) (ug/L)
1,2,3,4,6,7,8-HpCDD	2.30E-06	5.00E-05	1.30E-04	--	0.01	1.30E-06
1,2,3,4,6,7,8-HpCDF	7.20E-07	5.00E-05	ND	U (B)	0.01	ND
1,2,3,4,7,8,9-HpCDF	1.20E-06	5.00E-05	ND	U (B)	0.01	ND
1,2,3,4,7,8-HxCDD	5.80E-07	5.00E-05	ND	U (B)	0.1	ND
1,2,3,4,7,8-HxCDF	8.00E-07	5.00E-05	ND	U (B)	0.1	ND
1,2,3,6,7,8-HxCDD	5.10E-07	5.00E-05	ND	U (B)	0.1	ND
1,2,3,6,7,8-HxCDF	7.20E-07	5.00E-05	ND	U (B)	0.1	ND
1,2,3,7,8,9-HxCDD	4.50E-07	5.00E-05	ND	U (B)	0.1	ND
1,2,3,7,8,9-HxCDF	9.10E-07	5.00E-05	ND	U	0.1	ND
1,2,3,7,8-PeCDD	8.10E-07	5.00E-05	ND	U	1	ND
1,2,3,7,8-PeCDF	6.90E-07	5.00E-05	ND	U	0.05	ND
2,3,4,6,7,8-HxCDF	6.40E-07	5.00E-05	ND	U (B)	0.1	ND
2,3,4,7,8-PeCDF	7.10E-07	5.00E-05	ND	U	0.5	ND
2,3,7,8-TCDD	4.30E-07	1.00E-05	ND	U	1	ND
2,3,7,8-TCDF	4.30E-07	1.00E-05	ND	U	0.1	ND
OCDD	4.60E-06	9.00E-05	1.60E-03	--	0.0001	1.60E-07
OCDF	1.30E-06	9.00E-05	1.00E-04	--	0.0001	1.00E-08

TCDD TEQ w/out DNQ Values

1.47E-06

TCDD TEQ BENCHMARK LIMIT = 2.80E-08

See attached notes for abbreviations, definitions, and other explanations for the data presented in this table.

OUTFALL 009 (WS-13 Drainage)

**SECOND QUARTER 2010 REPORTING SUMMARY
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309**

April 1 through June 30, 2010

ANALYTE	UNITS	Permit Limit Daily Max/Monthly Ava	4/5/2010			4/12/2010		
			Sample Type	Result	Concentration Result Validation Qualifier	Sample Type	Result	Concentration Result Validation Qualifier
Max Discharge for event	MGD	17.8	Meas	0.110655		Meas	0.16673	
Chloride	LBS/DAY	22,268/-	Comp	4.61	--	Comp	4.87	*
Nitrate + Nitrite as Nitrogen (N)	LBS/DAY	1,485/-	Comp	0.39	--	Comp	0.54	*
Oil & Grease	LBS/DAY	2,227/-	Grab	ND	U	Grab	ND	*
Sulfate	LBS/DAY	37,113/-	Comp	7.11	--	Comp	8.48	*
Total Dissolved Solids	LBS/DAY	126,184/-	Comp	68.29	--	Comp	52.84	*
Antimony	LBS/DAY	0.89/-	Comp	0.0004	J (DNQ)	Comp	0.00	Ja* (DNQ)
Cadmium	LBS/DAY	0.59/-	Comp	ND	U	Comp	ND	*
Copper	LBS/DAY	2.08/-	Comp	0.005	J (*III)	Comp	0.01	*
Lead	LBS/DAY	0.77/-	Comp	0.003	--	Comp	0.01	*
Mercury	LBS/DAY	0.02/-	Comp	ND	U	Comp	ND	U
Thallium	LBS/DAY	0.3/-	Comp	0.0002	J (DNQ)	Comp	ND	*
TCDD TEQ, NoDNQ	LBS/DAY	4.2E-09/-	Comp	1.45E-09	--	Comp	2.04E-09	--

OUTFALL 010 (Building 203)

**SECOND QUARTER 2010 REPORTING SUMMARY
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309**

April 1 through June 30, 2010

ANALYTE	UNITS	Permit Limit Daily Max/Monthly Avg	4/5/2010		
			SAMPLE TYPE	RESULT	VALIDATION QUALIFIER
Chloride	mg/L	150/-	Grab	12	*
Fluoride	mg/L	1.6/-	ANR	ANR	ANR
Nitrate + Nitrite as Nitrogen (N)	mg/L	10/-	Grab	0.93	*
Oil & Grease	mg/L	15/-	Grab	ND < 1.3	*
Perchlorate	ug/L	6.0/-	ANR	ANR	ANR
pH (Field)	pH units	6.5-8.5/-	Grab	6.9	*
Sulfate	mg/L	250/-	Grab	11	*
Temperature	deg. F	86/-	Grab	55	*
Total Cyanide	ug/L	-/-	ANR	ANR	ANR
Total Dissolved Solids	mg/L	850/-	Grab	160	*
Total Suspended Solids	mg/L	-/-	ANR	ANR	ANR
Volume Discharged	MGD	17.8/-	Meas	NR	*
METALS					
Aluminum	ug/L	-/-	ANR	ANR	ANR
Antimony	ug/L	6.0/-	Grab	0.40	J* (DNQ)
Antimony, dissolved	ug/l	-/-	Grab	0.44	J* (DNQ)
Arsenic	ug/L	-/-	ANR	ANR	ANR
Beryllium	ug/L	-/-	ANR	ANR	ANR
Boron	mg/L	1.0/-	ANR	ANR	ANR
Cadmium	ug/L	4.0/-	Grab	ND < 0.10	*
Cadmium, dissolved	ug/l	-/-	Grab	ND < 0.10	*
Chromium	ug/L	-/-	ANR	ANR	ANR
Copper	ug/L	14.0/-	Grab	2.6	*
Copper, dissolved	ug/l	-/-	Grab	2.0	*
Iron	mg/L	-/-	ANR	ANR	ANR
Lead	ug/L	5.2/-	Grab	0.52	J* (DNQ)
Lead, dissolved	ug/l	-/-	Grab	ND < 0.20	*
Mercury	ug/L	0.13/-	Grab	ND < 0.10	U
Mercury, dissolved	ug/l	-/-	Grab	ND < 0.10	U
Nickel	ug/L	100/-	ANR	ANR	ANR
Selenium	ug/L	-/-	ANR	ANR	ANR
Silver	ug/L	-/-	ANR	ANR	ANR
Thallium	ug/L	2.0/-	Grab	ND < 0.20	*
Thallium, dissolved	ug/l	-/-	Grab	ND < 0.20	*
Vanadium	ug/L	-/-	ANR	ANR	ANR
Zinc	ug/L	-/-	ANR	ANR	ANR
ORGANICS					
Benzene	ug/L	-/-	ANR	ANR	ANR
Carbon Tetrachloride	ug/L	-/-	ANR	ANR	ANR
Chloroform	ug/L	-/-	ANR	ANR	ANR

OUTFALL 010 (Building 203)

SECOND QUARTER 2010 REPORTING SUMMARY
 THE BOEING COMPANY
 SANTA SUSANA FIELD LABORATORY
 NPDES PERMIT CA0001309

April 1 through June 30, 2010

ANALYTE	UNITS	Permit Limit Daily Max/Monthly Avg	4/5/2010		
			SAMPLE TYPE	RESULT	VALIDATION QUALIFIER
1,1-Dichloroethane	ug/L	-/-	ANR	ANR	ANR
1,2-Dichloroethane	ug/L	-/-	ANR	ANR	ANR
1,1-Dichloroethene	ug/L	-/-	ANR	ANR	ANR
Ethylbenzene	ug/L	-/-	ANR	ANR	ANR
Tetrachloroethene	ug/L	-/-	ANR	ANR	ANR
Toluene	ug/L	-/-	ANR	ANR	ANR
Xylenes (Total)	ug/L	-/-	ANR	ANR	ANR
1,1,1-Trichloroethane	ug/L	-/-	ANR	ANR	ANR
1,1,2-Trichloroethane	ug/L	-/-	ANR	ANR	ANR
Trichloroethene	ug/L	-/-	ANR	ANR	ANR
Trichlorofluoromethane	ug/L	-/-	ANR	ANR	ANR
Vinyl chloride	ug/L	-/-	ANR	ANR	ANR
ADDITIONAL ANALYTES					
1,1,2,2-Tetrachloroethane	ug/L	-/-	ANR	ANR	ANR
1,2,4-Trichlorobenzene	ug/L	-/-	ANR	ANR	ANR
1,2-Dichlorobenzene	ug/L	-/-	ANR	ANR	ANR
1,2-Dichloropropane	ug/L	-/-	ANR	ANR	ANR
1,2-Diphenylhydrazine/Azobenzene	ug/L	-/-	ANR	ANR	ANR
1,3-Dichlorobenzene	ug/L	-/-	ANR	ANR	ANR
1,4-Dichlorobenzene	ug/L	-/-	ANR	ANR	ANR
2,4,6-Trichlorophenol	ug/L	-/-	ANR	ANR	ANR
2,4-Dichlorophenol	ug/L	-/-	ANR	ANR	ANR
2,4-Dimethylphenol	ug/L	-/-	ANR	ANR	ANR
2,4-Dinitrophenol	ug/L	-/-	ANR	ANR	ANR
2,4-Dinitrotoluene	ug/L	-/-	ANR	ANR	ANR
2,6-Dinitrotoluene	ug/L	-/-	ANR	ANR	ANR
2-Chloroethylvinylether	ug/L	-/-	ANR	ANR	ANR
2-Chloronaphthalene	ug/L	-/-	ANR	ANR	ANR
2-Chlorophenol	ug/L	-/-	ANR	ANR	ANR
2-Methyl-4,6-dinitrophenol	ug/L	-/-	ANR	ANR	ANR
2-Nitrophenol	ug/L	-/-	ANR	ANR	ANR
3,3'-Dichlorobenzidine	ug/L	-/-	ANR	ANR	ANR
4,4'-DDD	ug/L	-/-	ANR	ANR	ANR
4,4'-DDE	ug/L	-/-	ANR	ANR	ANR
4,4'-DDT	ug/L	-/-	ANR	ANR	ANR
4-Bromophenylphenylether	ug/L	-/-	ANR	ANR	ANR
4-Chloro-3-methylphenol	ug/L	-/-	ANR	ANR	ANR
4-Chlorophenylphenylether	ug/L	-/-	ANR	ANR	ANR
4-Nitrophenol	ug/L	-/-	ANR	ANR	ANR
Acenaphthene	ug/L	-/-	ANR	ANR	ANR
Acrolein	ug/L	-/-	ANR	ANR	ANR

OUTFALL 010 (Building 203)

**SECOND QUARTER 2010 REPORTING SUMMARY
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309**

April 1 through June 30, 2010

ANALYTE	UNITS	Permit Limit Daily Max/Monthly Avg	4/5/2010		
			SAMPLE TYPE	RESULT	VALIDATION QUALIFIER
Acrylonitrile	ug/L	-/-	ANR	ANR	ANR
Acute Toxicity	% SURVIVAL	70-100/-	ANR	ANR	ANR
Aldrin	ug/L	-/-	ANR	ANR	ANR
alpha-BHC	ug/L	-/-	ANR	ANR	ANR
Anthracene	ug/L	-/-	ANR	ANR	ANR
Aroclor-1016	ug/L	-/-	ANR	ANR	ANR
Aroclor-1221	ug/L	-/-	ANR	ANR	ANR
Aroclor-1232	ug/L	-/-	ANR	ANR	ANR
Aroclor-1242	ug/L	-/-	ANR	ANR	ANR
Aroclor-1248	ug/L	-/-	ANR	ANR	ANR
Aroclor-1254	ug/L	-/-	ANR	ANR	ANR
Aroclor-1260	ug/L	-/-	ANR	ANR	ANR
Benzidine	ug/L	-/-	ANR	ANR	ANR
Benzo(a)anthracene	ug/L	-/-	ANR	ANR	ANR
Benzo(a)pyrene	ug/L	-/-	ANR	ANR	ANR
Benzo(b)fluoranthene	ug/L	-/-	ANR	ANR	ANR
Benzo(g,h,i)perylene	ug/L	-/-	ANR	ANR	ANR
Benzo(k)fluoranthene	ug/L	-/-	ANR	ANR	ANR
beta-BHC	ug/L	-/-	ANR	ANR	ANR
bis (2-Chloroethyl) ether	ug/L	-/-	ANR	ANR	ANR
bis (2-ethylhexyl) Phthalate	ug/L	-/-	ANR	ANR	ANR
bis(2-Chloroethoxy) methane	ug/L	-/-	ANR	ANR	ANR
bis(2-Chloroisopropyl) ether	ug/L	-/-	ANR	ANR	ANR
Bromodichloromethane	ug/L	-/-	ANR	ANR	ANR
Bromoform	ug/L	-/-	ANR	ANR	ANR
Bromomethane	ug/L	-/-	ANR	ANR	ANR
Butylbenzylphthalate	ug/L	-/-	ANR	ANR	ANR
Chlordane	ug/L	-/-	ANR	ANR	ANR
Chlorobenzene	ug/L	-/-	ANR	ANR	ANR
Chloroethane	ug/L	-/-	ANR	ANR	ANR
Chloromethane	ug/L	-/-	ANR	ANR	ANR
Chronic Toxicity	TUC	1.0/-	ANR	ANR	ANR
Chrysene	ug/L	-/-	ANR	ANR	ANR
cis-1,3-Dichloropropene	ug/L	-/-	ANR	ANR	ANR
delta-BHC	ug/L	-/-	ANR	ANR	ANR
Dibenzo(a,h)anthracene	ug/L	-/-	ANR	ANR	ANR
Dibromochloromethane	ug/L	-/-	ANR	ANR	ANR
Dieldrin	ug/L	-/-	ANR	ANR	ANR
Diethylphthalate	ug/L	-/-	ANR	ANR	ANR
Dimethylphthalate	ug/L	-/-	ANR	ANR	ANR
Di-n-butylphthalate	ug/L	-/-	ANR	ANR	ANR

OUTFALL 010 (Building 203)

**SECOND QUARTER 2010 REPORTING SUMMARY
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309**

April 1 through June 30, 2010

ANALYTE	UNITS	Permit Limit Daily Max/Monthly Avg	4/5/2010		
			SAMPLE TYPE	RESULT	VALIDATION QUALIFIER
Di-n-octylphthalate	ug/L	-/-	ANR	ANR	ANR
Endosulfan I	ug/L	-/-	ANR	ANR	ANR
Endosulfan II	ug/L	-/-	ANR	ANR	ANR
Endosulfan sulfate	ug/L	-/-	ANR	ANR	ANR
Endrin	ug/L	-/-	ANR	ANR	ANR
Endrin aldehyde	ug/L	-/-	ANR	ANR	ANR
Fluoranthene	ug/L	-/-	ANR	ANR	ANR
Fluorene	ug/L	-/-	ANR	ANR	ANR
Heptachlor	ug/L	-/-	ANR	ANR	ANR
Heptachlor epoxide	ug/L	-/-	ANR	ANR	ANR
Hexachlorobenzene	ug/L	-/-	ANR	ANR	ANR
Hexachlorobutadiene	ug/L	-/-	ANR	ANR	ANR
Hexachlorocyclopentadiene	ug/L	-/-	ANR	ANR	ANR
Hexachloroethane	ug/L	-/-	ANR	ANR	ANR
Indeno(1,2,3-cd)pyrene	ug/L	-/-	ANR	ANR	ANR
Isophorone	ug/L	-/-	ANR	ANR	ANR
Lindane (gamma-BHC)	ug/L	-/-	ANR	ANR	ANR
Methylene Chloride	ug/L	-/-	ANR	ANR	ANR
Naphthalene	ug/L	-/-	ANR	ANR	ANR
Nitrobenzene	ug/L	-/-	ANR	ANR	ANR
n-Nitrosodimethylamine	ug/L	-/-	ANR	ANR	ANR
n-Nitroso-di-n-propylamine	ug/L	-/-	ANR	ANR	ANR
n-Nitrosodiphenylamine	ug/L	-/-	ANR	ANR	ANR
Pentachlorophenol	ug/L	-/-	ANR	ANR	ANR
Phenanthrene	ug/L	-/-	ANR	ANR	ANR
Phenol	ug/L	-/-	ANR	ANR	ANR
Pyrene	ug/L	-/-	ANR	ANR	ANR
Toxaphene	ug/L	-/-	ANR	ANR	ANR
trans-1,2-Dichloroethene	ug/L	-/-	ANR	ANR	ANR
trans-1,3-Dichloropropene	ug/L	-/-	ANR	ANR	ANR

OUTFALL 010 (Building 203)

SECOND QUARTER 2010 REPORTING SUMMARY
 THE BOEING COMPANY
 SANTA SUSANA FIELD LABORATORY
 NPDES PERMIT CA0001309

Sample Type: Composite
 Sample Date: April 5, 2010

ANALYTE	LAB LOD (ug/L)	LAB RL (ug/L)	LAB RESULT (ug/L)	VALIDATION QUALIFIER	1998 WHO TEF	TCDD Equivalent (w/out DNQ Values) (ug/L)
1,2,3,4,6,7,8-HpCDD	8.60E-07	5.00E-05	ND	U (B)	0.01	ND
1,2,3,4,6,7,8-HpCDF	4.50E-07	5.00E-05	ND	U (B)	0.01	ND
1,2,3,4,7,8,9-HpCDF	7.50E-07	5.00E-05	ND	U	0.01	ND
1,2,3,4,7,8-HxCDD	4.30E-07	5.00E-05	ND	U (B)	0.1	ND
1,2,3,4,7,8-HxCDF	3.70E-07	5.00E-05	ND	U	0.1	ND
1,2,3,6,7,8-HxCDD	3.90E-07	5.00E-05	ND	U (B)	0.1	ND
1,2,3,6,7,8-HxCDF	3.30E-07	5.00E-05	ND	U	0.1	ND
1,2,3,7,8,9-HxCDD	3.40E-07	5.00E-05	ND	U	0.1	ND
1,2,3,7,8,9-HxCDF	3.60E-07	5.00E-05	ND	U	0.1	ND
1,2,3,7,8-PeCDD	7.80E-07	5.00E-05	ND	U	1	ND
1,2,3,7,8-PeCDF	5.90E-07	5.00E-05	ND	U	0.05	ND
2,3,4,6,7,8-HxCDF	2.80E-07	5.00E-05	ND	U	0.1	ND
2,3,4,7,8-PeCDF	6.80E-07	5.00E-05	ND	U	0.5	ND
2,3,7,8-TCDD	5.00E-07	1.00E-05	ND	U	1	ND
2,3,7,8-TCDF	3.30E-07	1.00E-05	ND	U	0.1	ND
OCDD	8.70E-07	2.00E-04	ND	U (B)	0.0001	ND
OCDF	4.90E-07	1.00E-04	ND	U (B)	0.0001	ND
TCDD TEQ w/out DNQ Values						ND

TCDD TEQ PERMIT LIMIT = 2.80E-08

See attached notes for abbreviations, definitions, and other explanations for the data presented in this table.

**BMP EFFECTIVENESS
OUTFALL 010 (Building 203)**

**SECOND QUARTER 2010 REPORTING SUMMARY
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309**

April 1 through June 30, 2010

SAMPLE NAME	SAMPLE DATE	ANALYTE	UNITS	RESULTS
010 EFF-1	4/5/2010	Density	g/cc	0.99*
010 EFF-1	4/5/2010	Sediment	mg/L	16*

ARROYO SIMI (Frontier Park Receiving Water)

**SECOND QUARTER 2010 REPORTING SUMMARY
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309**

April 1 through June 30, 2010

ANALYTE	SAMPLE TYPE	UNITS	Permit Limit Daily Max/Monthly Avg	5/12/2010	
				RESULT	VALIDATION QUALIFIER
Water Velocity	Meas	ft/sec	-/-	0.05	*
pH (Field)	Grab	pH Units	6.5-8.5/-	7.6	*
Temperature	Grab	F	-/-	70	*
Hardness	Grab	mg/L	-/-	850	--
Calcium	Grab	mg/L	-/-	230	--
Magnesium	Grab	mg/L	-/-	70	J (C)
4,4'-DDD	Grab	ug/L	0.0014/-	ND < 0.0019	C*
4,4'-DDE	Grab	ug/L	0.001/-	ND < 0.0028	*
4,4'-DDT	Grab	ug/L	0.001/-	ND < 0.0038	*
Aroclor-1016	Grab	ug/L	0.0003/-	ND < 0.24	*
Aroclor-1221	Grab	ug/L	0.0003/-	ND < 0.24	*
Aroclor-1232	Grab	ug/L	0.0003/-	ND < 0.24	*
Aroclor-1242	Grab	ug/L	0.0003/-	ND < 0.24	*
Aroclor-1248	Grab	ug/L	0.0003/-	ND < 0.24	*
Aroclor-1254	Grab	ug/L	0.0003/-	ND < 0.24	*
Aroclor-1260	Grab	ug/L	0.0003/-	ND < 0.24	*
Chlordane	Grab	ug/L	0.001/-	ND < 0.053	*
Diazinon	Grab	ug/L	0.16/-	ND < 0.10	UJ (H)
Dieldrin	Grab	ug/L	0.0002/-	ND < 0.0019	*
Toxaphene	Grab	ug/L	0.0003/-	ND < 0.24	*
Chlorpyrifos	Grab	ug/L	0.02/-	ND < 0.010	U

APPENDIX D

SECOND QUARTER 2010 RADIOLOGICAL MONITORING DATA

**SECOND QUARTER 2010 REPORTING SUMMARY NOTES
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309**

Notes:

1. For Dioxins and Furans, laboratory results may have been reported in picograms/liter (pg/L). However, the permit limit is stated in micrograms/liter (µg/L). To evaluate permit compliance, the laboratory results have been converted to µg/L, as necessary, to calculate the TCDD TEQ.
2. TCDD TEQs for the purpose of determining permit compliance are the sum of the products of the detected dioxin congener concentration multiplied by that congener's TEF. The resulting compliance TCDD TEQ does not include those congener concentrations that are reported as DNQ, as specified on Page 53 of the NPDES permit.
3. For some sample dates, pH was determined with a field instrument and was noted as such. These results were not validated. Since pH does not have an RL, the possible pH range is shown in the RL column.
4. The NPDES permit limit or benchmark limit for mercury of 0.10 µg/L (Outfalls 001, 002, 011, 018 and 019) and 0.13 µg/L (Outfalls 003-010) are not achievable by the laboratory; therefore, the laboratory reporting limit of 0.20 µg/L was used to determine compliance.
5. All of the following abbreviations and/or notes may not occur on every table.

-92.9 +/-200	A negative radiochemical analytical result indicates the count rate of the sample was less than the background condition
\$	reported result or other information was incorrectly reported by the laboratory; result was corrected by the data validator
--	based on validation of the data, a qualifier was not required
-/-	no permit limit established for daily maximum or monthly average
<(value)	analyte not detected at a concentration greater than or equal to the DL, MDL, or RL (see laboratory report for specific detail)
*	result not validated
*1	improper preservation of sample
*2	the ICP/MS ppb check standard was recovered above the control limit; therefore, the constituent detected was qualified as estimated (J)
*3	initial and or continuing calibration recoveries were outside acceptable control limits
*5	blank spike/blank spike duplicate relative percent difference was outside the control limit

**SECOND QUARTER 2010 REPORTING SUMMARY NOTES
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309**

*10	value was estimated detect or estimated non detect (J,UJ) due to deficiencies in quantitation of the constituent including constituents reported by the laboratory as Estimated Maximum Possible Concentration (EMPC) values
*11	no calibration was performed for this compound; result is reported as a tentatively identified compound (TIC)
ANR	analysis not required; e.g., constituent or outfall was not required by the permit to be sampled and analyzed (annual, semi-annual, etc.)
B	laboratory method blank contamination
C	calibration %RSD or %D were noncompliant
C5	Calibration verification %R was outside method control limits
%D	percent difference between the initial and continuing calibration relative response factors
deg F	degrees Fahrenheit
DL	detection limit
DNQ	detected but not quantified (constituent value greater than or equal to the laboratory method detection limit and less then the laboratory reporting limit)
E	duplicates show poor agreement
H	holding time was exceeded
I	ICP interference check solution results were unsatisfactory
J	estimated value
Ja	estimated value, analyte detected at a value 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.
K	The sample dilution's set-up did not meet the oxygen depletion criteria of at least 2 mg/l. Therefore, the reported result is an estimated value only.
L2	the laboratory control sample %R was below the method control limits
L	laboratory control sample %R was outside control limits
LOD	limit of detection
M1	matrix spike (MS) and/or MS duplicate were above the acceptance limits due to sample matrix interference
M2	the MS and/or MS duplicate were below the acceptance limits due to sample matrix interference
MDA	minimum detected activity
MDL	method detection limit
MGD	million gallons per day
MHA*	Due to high level of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information.
mg/L	milligrams per liter
ml/L/hr	milliliters per liter per hour

**SECOND QUARTER 2010 REPORTING SUMMARY NOTES
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309**

NA	not applicable; no permit limit established for the constituent and/or outfall
ND	analyte value less than the LOD or MDL
NM	not measured or determined
NTU	nephelometric turbidity unit
pCi/L	picocuries per liter
pg/L	picograms per liter
Q	matrix spike recovery outside of control limits
R	as a validation qualifier, results are rejected; the presence or absence of analyte cannot be verified
R	(reason code in parentheses) %R for calibration not within control limits
RL	laboratory reporting limit
RL-1	reporting limit raised due to sample matrix effects
%RSD	percent relative standard deviation
S	surrogate recovery was outside control limits
TEQ	toxic equivalent
T	presumed contamination, as indicated by a detect in the trip blank
TU _c	toxicity units (chronic)
U	result not detected
µg/L	micrograms per liter
UJ	result not detected at the estimated reporting limit
umhos/cm	micromhos per centimeter
WHO TEF	World Health Organization toxic equivalency factor
^	analysis not completed due to hold time exceedence or insufficient sample volume

OUTFALL 009 (WS-13 Drainage)

**SECOND QUARTER 2010 REPORTING SUMMARY
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309**

April 1 through June 30, 2010

ANALYTE	SAMPLE TYPE	UNITS	Benchmark Limit Daily Max/Monthly Avg	4/5/2010			4/12/2010		
				RESULT	VALIDATION QUALIFIER	MDA	RESULT	VALIDATION QUALIFIER	MDA
RADIOACTIVITY									
Gross Alpha	Composite	pCi/L	15/-	0.84 ± 0.70	UJ(C)	1	2.1 ± 1.0	J(C, DNQ)	1.2
Gross Beta	Composite	pCi/L	50/-	ND < 4 ± 0.80	U(B)	1.1	2.76 ± 0.83	J(DNQ)	0.97
Strontium-90	Composite	pCi/L	8.0/-	0.2 ± 0.26	U	0.43	-0.03 ± 0.21	U	0.37
Total Combined Radium-226 & Radium 228	Composite	pCi/L	5.0/-	0.12 ± 0.32	U	0.66	0.0 ± 0.26	U	0.61
Tritium	Composite	pCi/L	20000/-	80 ± 190	U	330	-6 ± 97	U	180
Uranium, Total	Composite	pCi/L	20/-	ND < 0.677 ± 0.036	U(B)	0.21	ND < 0.677 ± 0.063	U(B)	0.21
Potassium-40	Composite	pCi/L	-/-	-40 ± 170	U	210	-90 ± 3500	U	200
Cesium 137	Composite	pCi/L	200/-	0.6 ± 8.7	U	16	1.2 ± 9.0	U	17

OUTFALL 010 (Building 203)

**SECOND QUARTER 2010 REPORTING SUMMARY
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309**

April 1 through June 30, 2010

ANALYTE	SAMPLE TYPE	UNITS	Permit Limit Daily Max/Monthly Avg	4/5/2010		
				RESULT	VALIDATION QUALIFIER	MDA
RADIOACTIVITY						
Gross Alpha	Grab	pCi/L	15/-	0.91 ± 0.89	UJ (C)	1.4
Gross Beta	Grab	pCi/L	50/-	ND < 4 ± 0.89	U (B)	1.1
Strontium-90	Grab	pCi/L	8.0/-	-0.007 ± 0.22	U	0.38
Total Combined Radium-226 & Radium 228	Grab	pCi/L	5.0/-	0.21 ± 0.42	U	0.83
Tritium	Grab	pCi/L	20000/-	50 ± 190	U	330
Uranium, Total	Grab	pCi/L	20/-	ND < 0.677 ± 0.037	U (B)	0.21
Potassium-40	Grab	pCi/L	-/-	-40 ± 280	U	270
Cesium 137	Grab	pCi/L	200/-	1.1 ± 7.4	U	14

APPENDIX E

SECOND QUARTER 2010 SUMMARY OF PERMIT LIMIT
EXCEEDENCES

**SECOND QUARTER 2010 REPORTING SUMMARY NOTES
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309**

Notes:

1. For Dioxins and Furans, laboratory results may have been reported in picograms/liter (pg/L). However, the permit limit is stated in micrograms/liter (µg/L). To evaluate permit compliance, the laboratory results have been converted to µg/L, as necessary, to calculate the TCDD TEQ.
2. TCDD TEQs for the purpose of determining permit compliance are the sum of the products of the detected dioxin congener concentration multiplied by that congener's TEF. The resulting compliance TCDD TEQ does not include those congener concentrations that are reported as DNQ, as specified on Page 53 of the NPDES permit.
3. For some sample dates, pH was determined with a field instrument and was noted as such. These results were not validated. Since pH does not have an RL, the possible pH range is shown in the RL column.
4. The NPDES permit limit or benchmark limit for mercury of 0.10 µg/L (Outfalls 001, 002, 011, 018 and 019) and 0.13 µg/L (Outfalls 003-010) are not achievable by the laboratory; therefore, the laboratory reporting limit of 0.20 µg/L was used to determine compliance.
5. All of the following abbreviations and/or notes may not occur on every table.

-92.9 +/-200	A negative radiochemical analytical result indicates the count rate of the sample was less than the background condition
\$	reported result or other information was incorrectly reported by the laboratory; result was corrected by the data validator
--	based on validation of the data, a qualifier was not required
-/-	no permit limit established for daily maximum or monthly average
<(value)	analyte not detected at a concentration greater than or equal to the DL, MDL, or RL (see laboratory report for specific detail)
*	result not validated
*1	improper preservation of sample
*2	the ICP/MS ppb check standard was recovered above the control limit; therefore, the constituent detected was qualified as estimated (J)
*3	initial and or continuing calibration recoveries were outside acceptable control limits
*5	blank spike/blank spike duplicate relative percent difference was outside the control limit

**SECOND QUARTER 2010 REPORTING SUMMARY NOTES
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309**

*10	value was estimated detect or estimated non detect (J,UJ) due to deficiencies in quantitation of the constituent including constituents reported by the laboratory as Estimated Maximum Possible Concentration (EMPC) values
*11	no calibration was performed for this compound; result is reported as a tentatively identified compound (TIC)
ANR	analysis not required; e.g., constituent or outfall was not required by the permit to be sampled and analyzed (annual, semi-annual, etc.)
B	laboratory method blank contamination
C	calibration %RSD or %D were noncompliant
C5	Calibration verification %R was outside method control limits
%D	percent difference between the initial and continuing calibration relative response factors
deg F	degrees Fahrenheit
DL	detection limit
DNQ	detected but not quantified (constituent value greater than or equal to the laboratory method detection limit and less then the laboratory reporting limit)
E	duplicates show poor agreement
H	holding time was exceeded
I	ICP interference check solution results were unsatisfactory
J	estimated value
Ja	estimated value, analyte detected at a value 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.
K	The sample dilution's set-up did not meet the oxygen depletion criteria of at least 2 mg/l. Therefore, the reported result is an estimated value only.
L2	the laboratory control sample %R was below the method control limits
L	laboratory control sample %R was outside control limits
LOD	limit of detection
M1	matrix spike (MS) and/or MS duplicate were above the acceptance limits due to sample matrix interference
M2	the MS and/or MS duplicate were below the acceptance limits due to sample matrix interference
MDA	minimum detected activity
MDL	method detection limit
MGD	million gallons per day
MHA*	Due to high level of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information.
mg/L	milligrams per liter
ml/L/hr	milliliters per liter per hour

**SECOND QUARTER 2010 REPORTING SUMMARY NOTES
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309**

NA	not applicable; no permit limit established for the constituent and/or outfall
ND	analyte value less than the LOD or MDL
NM	not measured or determined
NTU	nephelometric turbidity unit
pCi/L	picocuries per liter
pg/L	picograms per liter
Q	matrix spike recovery outside of control limits
R	as a validation qualifier, results are rejected; the presence or absence of analyte cannot be verified
R	(reason code in parentheses) %R for calibration not within control limits
RL	laboratory reporting limit
RL-1	reporting limit raised due to sample matrix effects
%RSD	percent relative standard deviation
S	surrogate recovery was outside control limits
TEQ	toxic equivalent
T	presumed contamination, as indicated by a detect in the trip blank
TU _c	toxicity units (chronic)
U	result not detected
µg/L	micrograms per liter
UJ	result not detected at the estimated reporting limit
umhos/cm	micromhos per centimeter
WHO TEF	World Health Organization toxic equivalency factor
^	analysis not completed due to hold time exceedence or insufficient sample volume

SUMMARY OF BENCHMARK LIMIT EXCEEDANCES

SECOND QUARTER 2010
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309

DAILY MAX BENCHMARK LIMIT EXCEEDANCES							
OUTFALL	LOCATIONS	SAMPLE DATE	ANALYTE	BENCHMARK LIMIT DAILY MAX	DAILY MAX RESULT	UNITS	VALIDATION QUALIFIER
Outfall 009	WS-13 Drainage	04/05/10	TCDD TEQ_NoDNQ	2.80E-08	1.58E-06	ug/L	--
Outfall 009	WS-13 Drainage	04/12/10	TCDD TEQ_NoDNQ	2.80E-08	1.47E-06	ug/L	--

APPENDIX F

SECOND QUARTER 2010 REASONABLE POTENTIAL ANALYSIS
(RPA) SUMMARY TABLES

**SECOND QUARTER 2010 REASONABLE POTENTIAL ANALYSIS SUMMARY
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309**

1. The following Reasonable Potential Analysis (RPA) provides the analytical results as performed by the procedures outlined in *Reasonable Potential Analysis Methodology Technical Memo* (MWH and Flow Science, 2006).
2. The monitoring data set utilized to conduct the RPA consists of all applicable and relevant data from August 2004 through the present reporting quarter.
3. As directed by the CTR and the Regional Water Control Board 2,3,7,8-TCDD (Dioxin) values are to be expressed in NPDES permitting and this RPA as TCDD Total Equivalence units (TEQs). A TCDD TEQ is determined by multiplying each of the seventeen dioxin and furan congeners by their respective total equivalence factor (TEF), and summing the results of those products. For the purposes of this RPA, the resulting TCDD TEQ does not include those congener concentrations that are reported as DNQ, as specified on Page 53, of the NPDES Permit Effective June 29, 2009.
4. In calculating the average, standard deviation, coefficient of variation, and projected maximum effluent concentration (99/99), one-half of the MDL was used for concentration results reported as ND. Data reported with qualifiers were not included in this RPA as Boeing believes qualified data are not "appropriate, valid, relevant, (nor) representative"¹ of storm water constituents and are therefore not utilized in its RPA.
5. All of the following abbreviations and/or notes may not occur on every table.

Definition of Acronyms, Abbreviations, and Terminology Used

>=	Greater than or equal to
*	Freshwater aquatic life criteria for metals are expressed as a function of total hardness (mg/L) in the water body. The equations are provided in the CTR, (US EPA, 2000). Values displayed correspond to a total hardness of 100 mg/l.
µg/L	Concentration units, micrograms per liter
All Data Qualified	All available monitoring data are qualified and no statistical analysis is performed.
Annually	The 2009 NPDES Permit requires annual monitoring.
Available Data < DL	All available monitoring data that are not qualified are below detection limits.
B	Background
C	Concentration
CCC	Criterion Continuous Concentration
CMC	Criterion Maximum Concentration
CTR	California Toxics Rule
CV	Coefficient of Variation
DL	Detection Limit
EPA TSD	EPA's Technical Support Document for Water Quality Based Toxics Control, (see references).

¹ SIP, p. 5.

**SECOND QUARTER 2010 REASONABLE POTENTIAL ANALYSIS SUMMARY
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309**

Definition of Acronyms, Abbreviations, and Terminology Used (Continued)

Fibers/L	Units for asbestos concentration, fibers per liter
HH O	Human Health criteria for consumption of Organisms only
HH W&O	Human Health criteria for consumption of Water and Organisms
MEC	Maximum Observed Effluent Concentration
Min	Minimum
NA	Not Applicable
Narrative	Water quality criteria are expressed as a narrative objective rather than a numeric objective, and therefore are not part of the statistical RPA calculations.
None	No available CTR or Basin Plan criteria.
pH Dependent	CTR Criteria are based on pH.
Once Per Discharge	The 2009 NPDES Permit requires monitoring once per discharge event.
Qualified Data	Data qualifier definitions are: (a) J- The reported result is an estimate. The value is less than the minimum calibration level but greater than the estimated detection limit (EDL), (b) U/UJ- The analyte was not detected in the sample at the detection limit /estimated detection limit (EDL), (c) B- Analyte found in sample and associated blank, and (d) DNQ- Detected Not Quantified.
Reserved	EPA has reserved the CTR criteria.
RPA	Reasonable Potential Analysis
SIP	The State Water Resources Control Board "Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California," (see references).
Tot	Total

Priority Pollutant RPA Column Explanation

CTR	Provides CTR constituent reference number.
Constituent	Provides CTR constituent common name.
Units	Provides the data set's concentration units as referenced by 2009 NPDES Permit.
MEC	Provides the outfall monitoring group's maximum value from the applicable data set.
CV	Equal to the standard deviation divided by the average of the applicable data set. If the number of samples is less than 10, the CV is assumed to be 0.6.
<i>Step 1 identifies all applicable water quality criteria.</i>	
CTR Criteria	Concentration criteria as listed in the CTR.
CMC = Acute	The Freshwater CMC is listed as the acute concentration criterion.
CCC = Chronic	The Freshwater CCC is listed as the chronic concentration criterion.
HH W& O(Not App)	The HH W&O is deemed not applicable based on past Regional Board RPAs.
HH O = HH	The HH O is listed as the CTR human health concentration criterion.
Basin Plan Criteria	Applicable Basin Plan Criteria are listed for the Los Angeles River and/or Calleguas Creek watersheds.

**SECOND QUARTER 2010 REASONABLE POTENTIAL ANALYSIS SUMMARY
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309**

C = Lowest Criteria	The comparison concentration (C) is equal to the lowest criterion for a constituent based on the CMC, CCC, HH O, and Basin Plan Criteria listed.
<u>Priority Pollutant RPA Column Explanation (Continued)</u>	
<i>Step 2 defines the applicable data set.</i>	
Is Effluent Data Available	If there is available monitoring data that is not qualified and above DL, then YES. If not, then NO.
<i>Step 3 determines the maximum observed effluent concentration.</i>	
Was Constituent Detected in Effluent Data	If the constituent was detected, then YES. If all monitoring data are non-detect or qualified then NO.
Are all DL >C	If constituent was detected in effluent data then not applicable (NA). If constituent was not detected and all analysis detection limits are less than the comparison concentration, then YES, if not then NO.
If DL > C MEC = Min (DL)	If the previous cell answer was yes, then the MEC is equal to the minimum detection limit. If not, then NA.
<i>Step 4 compares the MEC to the lowest applicable water quality criteria.</i>	
MEC >= C	If the MEC is greater than or equal to the comparison concentration then YES, if not then NO.

Note: Steps 5 and 6 of the Priority Pollutant RPA do not apply to Boeing SSFL because the Regional Board gives no consideration for receiving water background constituent concentrations. Furthermore, Boeing SSFL defers the application of best professional judgment in Step 7 and final determination of reasonable potential in Step 8 to the Regional Board Staff.

Nonpriority Pollutant RPA Column Explanation

Constituent	Provides the Non Priority Pollutant constituent common name
Monitoring	Provides the 2009 NPDES Permit directed monitoring frequency
Units	Provides the data set's concentration units as referenced by 2009 NPDES Permit
Number of Samples	Provides the number of available samples that are not qualified
MEC	Provides the outfall monitoring group's maximum value from the applicable data set
CV	Equal to the standard deviation divided by the average of the applicable data set. If the number of samples is less than 10, the CV is assumed to be 0.6.
Multiplier	Utilizes the EPA's TSD calculation to determine multiplier for which the maximum effluent concentration is calculated. (MWH and Flow Science, 2006, or EPA TSD, 1991)
Projected Maximum Effluent Concentration	Utilizes the product of the multiplier and the MEC as an estimate for the projected maximum effluent concentration.
Dilution Ratio	The Regional Board allocates no dilution ratio to Boeing SSFL.
Background Concentration	The Regional Board allocates no background concentration to Boeing SSFL.
Projected Maximum Receiving Water Concentration	The Regional Board estimates the projected maximum receiving water concentration as equal to the projected maximum effluent concentration.

**SECOND QUARTER 2010 REASONABLE POTENTIAL ANALYSIS SUMMARY
THE BOEING COMPANY
SANTA SUSANA FIELD LABORATORY
NPDES PERMIT CA0001309**

Nonpriority Pollutant RPA Column Explanation (Continued)

Step 1, Determine Water Quality Objectives	The water quality objective is based on appropriate Basin Plan criteria.
BU – Beneficial Use Protection, NC – Human noncarcinogen, AP- Aquatic Life Protection, TMDL – Total Maximum Daily Load	This is the Regional Board’s Basis for determining if reasonable potential should be evaluated for a non-priority pollutant.

Note: Boeing SSFL has completed appropriate statistical calculations, but defers the application of best professional judgment and the final determination of reasonable potential to the Regional Board Staff.

References

Los Angeles Regional Water Quality Control Board, “Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties, (Basin Plan).” June 13, 1994.

MWH and Flow Science, “Reasonable Potential Analysis Methodology Technical Memo- Version 1, Final, Santa Susan Field Laboratory, Ventura County, California.” April 28, 2006.

State Water Resources Control Board, “Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California, (SIP)” Resolution No. 2005-0019, February 24, 2005.

US EPA, *40CFR part 131, Water Quality Standards; Establishment of numeric Criteria for Priority Toxic Pollutants for the State of California*,(CTR) Federal Registry, May 18, 2000, pp. 31682-31719.

US EPA, “Technical Support Document for Water Quality-based Toxics Control.” EPA/505/2-90-001, PB-91-127415, March 1991.

Table F1
 REASONABLE POTENTIAL ANALYSIS FOR PRIORITY POLLUTANTS, (OUTFALLS 003-007, 009-010)

SECOND QUARTER 2010
 THE BOEING COMPANY
 SANTA SUSANA FIELD LABORATORY
 NPDES PERMIT CA0001309

Outfall	CTR	Constituent	Units	MEC	CV	Step 1: Water Quality Criteria, Determine C										Step 2		Step 3		Step 4			
						Freshwater					Human Health					Basin Plan Title 22 GWR	C = Lowest Criteria	Is Effluent Data Available	Was Constituent Detected in Effluent Data		Are all Detection Limits > C	If DL > C, MEC = Min (DL) MEC >= C	
						CMC = Acute	CCC = Chronic	HH W&O (Not App)	HH O = HH	4300	14	150	NONE	NONE	NONE								6
3-7, 9-10	001	Antimony	ug/L	0.53	0.6	NONE	NONE	NONE	4300	14	150	NONE	NONE	NONE	6	50	6	Yes	Yes	NA	NA	No	No
3-7, 9-10	002	Arsenic	ug/L	All Data Qualified	0.6	340	NONE	NONE	Narrative	NONE	NONE	NONE	NONE	NONE	4	4	4	No	No	NA	NA	No	No
3-7, 9-10	003	Beryllium	ug/L	All Data Qualified	0.6	NONE	NONE	Narrative	Narrative	NONE	NONE	NONE	NONE	NONE	5	2.46	2.46	Yes	No	NA	NA	No	No
3-7, 9-10	004	Cadmium	ug/L	Available Data <DL	0.6	2.46	NONE	NONE	Narrative	NONE	206.98	NONE	NONE	NONE	5	206.98	206.98	No	No	NA	NA	No	No
3-7, 9-10	005a	Chromium	ug/L	All Data Qualified	0.6	16.29	NONE	NONE	Narrative	NONE	11.43	NONE	NONE	NONE	50	11.43	11.43	No	No	NA	NA	No	No
3-7, 9-10	005b	Chromium VI	ug/L	All Data Qualified	0.6	5.63	NONE	NONE	NONE	1300	9.33	NONE	NONE	NONE	50	9.33	9.33	Yes	Yes	NA	NA	No	No
3-7, 9-10	006	Copper	ug/L	5.63	0.6	5	NONE	NONE	NONE	1300	9.33	NONE	NONE	NONE	50	9.33	9.33	Yes	Yes	NA	NA	No	No
3-7, 9-10	007	Lead	ug/L	5	0.6	5	NONE	NONE	NONE	1300	9.33	NONE	NONE	NONE	50	9.33	9.33	Yes	Yes	NA	NA	No	No
3-7, 9-10	008	Mercury	ug/L	All Data Qualified	0.6	Reserved	Reserved	Reserved	0.05	0.05	3.18	NONE	NONE	NONE	2	0.05	0.05	No	No	NA	NA	No	No
3-7, 9-10	009	Nickel	ug/L	All Data Qualified	0.6	52.16	Reserved	Reserved	4600	610	52.16	NONE	NONE	NONE	100	52.16	52.16	No	No	NA	NA	No	No
3-7, 9-10	010	Selenium	ug/L	All Data Qualified	0.6	Reserved	Reserved	Reserved	NONE	NONE	5.00	NONE	NONE	NONE	50	5.00	5.00	No	No	NA	NA	No	No
3-7, 9-10	011	Silver	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE	NONE	none	NONE	NONE	NONE	50	4.06	4.06	No	No	NA	NA	No	No
3-7, 9-10	012	Thallium	ug/L	Available Data <DL	0.6	NONE	NONE	NONE	6.3	1.7	6.3	NONE	NONE	NONE	2	2.00	2.00	Yes	No	NA	NA	No	No
3-7, 9-10	013	Zinc	ug/L	All Data Qualified	0.6	119.82	NONE	NONE	NONE	none	119.82	NONE	NONE	NONE	2	119.82	119.82	No	No	NA	NA	No	No
3-7, 9-10	014	Total Cyanide	ug/L	All Data Qualified	0.6	22	NONE	NONE	220000	700	5.2	NONE	NONE	NONE	200	5.2	5.2	No	No	NA	NA	No	No
3-7, 9-10	015	Asbestos	Fibers/L	All Data Qualified	0.6	NONE	NONE	NONE	7000000	7000000	NONE	NONE	NONE	NONE	7x10^6	7000000	7000000	No	No	NA	NA	No	No
3-7, 9-10	016	TCDD TEQ, NoDNQ	ug/L	1.58E-06	0.6	NONE	NONE	NONE	1.3e-008	320	780	NONE	NONE	NONE	3x10^-5	1.40E-08	1.40E-08	Yes	Yes	NA	NA	Yes	Yes
3-7, 9-10	017	Acrolein	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	0.059	0.66	0.66	NONE	NONE	NONE	1	0.66	0.66	No	No	NA	NA	No	No
3-7, 9-10	018	Acrylonitrile	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	0.059	0.66	0.66	NONE	NONE	NONE	1	0.66	0.66	No	No	NA	NA	No	No
3-7, 9-10	019	Benzene	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	1.2	71	71	NONE	NONE	NONE	1	1	1	No	No	NA	NA	No	No
3-7, 9-10	020	Bromoform	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	4.3	360	360	NONE	NONE	NONE	1	360	360	No	No	NA	NA	No	No
3-7, 9-10	021	Carbon Tetrachloride	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	0.25	4.4	4.4	NONE	NONE	NONE	600	4.4	4.4	No	No	NA	NA	No	No
3-7, 9-10	022	Chlorobenzene	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	680	21000	21000	NONE	NONE	NONE	21000	21000	21000	No	No	NA	NA	No	No
3-7, 9-10	023	Dibromochloromethane	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	0.401	34	34	NONE	NONE	NONE	34	34	34	No	No	NA	NA	No	No
3-7, 9-10	024	Chloroethane	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	34	34	34	No	No	NA	NA	No	No
3-7, 9-10	025	2-Chloroethylvinylether	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	No	No	NA	NA	No	No
3-7, 9-10	026	Chloroform	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	Reserved	Reserved	Reserved	NONE	NONE	NONE	NONE	NONE	NONE	No	No	NA	NA	No	No
3-7, 9-10	027	Bromodichloromethane	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	0.56	46	46	NONE	NONE	NONE	46	46	46	No	No	NA	NA	No	No
3-7, 9-10	028	1,1-Dichloroethane	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	5	5	5	No	No	NA	NA	No	No
3-7, 9-10	029	1,2-Dichloroethane	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	0.38	99	99	NONE	NONE	NONE	0.5	0.5	0.5	No	No	NA	NA	No	No
3-7, 9-10	030	1,1-Dichloroethene	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	0.057	3.2	3.2	NONE	NONE	NONE	6	3.2	3.2	No	No	NA	NA	No	No
3-7, 9-10	031	1,2-Dichloropropane	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE	39	39	NONE	NONE	NONE	5	5	5	No	No	NA	NA	No	No
3-7, 9-10	032	1,3-Dichloropropane (Total)	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	10	1700	1700	NONE	NONE	NONE	0.5	0.5	0.5	No	No	NA	NA	No	No
3-7, 9-10	033	Ethylbenzene	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	3100	28000	28000	NONE	NONE	NONE	0.7	0.7	0.7	No	No	NA	NA	No	No
3-7, 9-10	034	Bromomethane	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	48	4000	4000	NONE	NONE	NONE	4000	4000	4000	No	No	NA	NA	No	No
3-7, 9-10	035	Chloromethane	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	Narrative	Narrative	NONE	NONE	NONE	NONE	1600	1600	1600	No	No	NA	NA	No	No
3-7, 9-10	036	Methylene chloride	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	4.7	1600	1600	NONE	NONE	NONE	1600	1600	1600	No	No	NA	NA	No	No
3-7, 9-10	037	1,1,2,2-Tetrachloroethane	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	0.17	11	11	NONE	NONE	NONE	1	1	1	No	No	NA	NA	No	No
3-7, 9-10	038	Tetrachloroethene	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	0.8	8.85	8.85	NONE	NONE	NONE	5	5	5	No	No	NA	NA	No	No
3-7, 9-10	039	Toluene	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	6800	200000	200000	NONE	NONE	NONE	150	150	150	No	No	NA	NA	No	No
3-7, 9-10	040	trans-1,2-Dichloroethene	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	700	140000	140000	NONE	NONE	NONE	10	10	10	No	No	NA	NA	No	No
3-7, 9-10	041	1,1-Trichloroethane	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	Narrative	Narrative	200	NONE	NONE	NONE	200	200	200	No	No	NA	NA	No	No
3-7, 9-10	042	1,1,1-Trichloroethane	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	0.6	42	42	NONE	NONE	NONE	5	5	5	No	No	NA	NA	No	No
3-7, 9-10	043	Trichloroethane	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	2.7	81	81	NONE	NONE	NONE	5	5	5	No	No	NA	NA	No	No
3-7, 9-10	044	Vinyl chloride	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	2	525	525	NONE	NONE	NONE	0.5	0.5	0.5	No	No	NA	NA	No	No
3-7, 9-10	045	2-chlorophenol	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	120	400	400	NONE	NONE	NONE	400	400	400	No	No	NA	NA	No	No

Table F1
 REASONABLE POTENTIAL ANALYSIS FOR PRIORITY POLLUTANTS, (OUTFALLS 003-007, 009-010)

SECOND QUARTER 2010
 THE BOEING COMPANY
 SANTA SUSANA FIELD LABORATORY
 NPDES PERMIT CA0001309

Step 1: Water Quality Criteria, Determine C										Step 2		Step 3		Step 4	
CFR CRITERIA										Basin Plan Title 22 GWR	C = Lowest Criteria	Is Effluent Data Available	Was Constituent Detected in Effluent Data	Are all Detection Limits > C	If DL > C, MEC = Min (DL) MEC >= C
Outfall	CTR	Constituent	Units	MEC	CV	Freshwater CMC = Acute CCC = Chronic	Human Health HH W&O (Not App)	HH O = HH	790						
3-7, 9-10	046	2,4-Dichlorophenol	ug/L	All Data Qualified	0.6	NONE	93	790	790	No	No	No	NA	No	
3-7, 9-10	047	2,4-dimethylphenol	ug/L	All Data Qualified	0.6	NONE	540	2300	2300	No	No	No	NA	No	
3-7, 9-10	048	2-Methyl-4,6-dinitrophenol	ug/L	All Data Qualified	0.6	NONE	13.4	765	765	No	No	No	NA	No	
3-7, 9-10	049	2,4-dinitrophenol	ug/L	All Data Qualified	0.6	NONE	70	14000	14000	No	No	No	NA	No	
3-7, 9-10	050	2-nitrophenol	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE	No	No	No	NA	No	
3-7, 9-10	051	4-nitrophenol	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE	No	No	No	NA	No	
3-7, 9-10	052	4-Chloro-3-methylphenol	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE	No	No	No	NA	No	
3-7, 9-10	053	Pentaachlorophenol	ug/L	All Data Qualified	0.6	pH dependent	0.28	8.2	1	No	No	No	NA	No	
3-7, 9-10	054	Phenol	ug/L	All Data Qualified	0.6	NONE	21000	4600000	4600000	No	No	No	NA	No	
3-7, 9-10	055	2,4,6-Trichlorophenol	ug/L	All Data Qualified	0.6	NONE	2.1	6.5	6.5	No	No	No	NA	No	
3-7, 9-10	056	Acenaphthene	ug/L	All Data Qualified	0.6	NONE	1200	2700	2700	No	No	No	NA	No	
3-7, 9-10	057	Acenaphthylene	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE	No	No	No	NA	No	
3-7, 9-10	058	Anthracene	ug/L	All Data Qualified	0.6	NONE	9600	110000	110000	No	No	No	NA	No	
3-7, 9-10	059	Benzidine	ug/L	All Data Qualified	0.6	NONE	0.00012	0.00054	0.00054	No	No	No	NA	No	
3-7, 9-10	060	Benzo(a)Anthracene	ug/L	All Data Qualified	0.6	NONE	0.0044	0.049	0.049	No	No	No	NA	No	
3-7, 9-10	061	Benzo(a)Pyrene	ug/L	All Data Qualified	0.6	NONE	0.0044	0.049	0.049	No	No	No	NA	No	
3-7, 9-10	062	Benzo(b)Fluoranthene	ug/L	All Data Qualified	0.6	NONE	0.0044	0.049	0.049	No	No	No	NA	No	
3-7, 9-10	063	Benzo(g,h,j)Perylene	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE	No	No	No	NA	No	
3-7, 9-10	064	Benzo(k)Fluoranthene	ug/L	All Data Qualified	0.6	NONE	0.0044	0.049	0.049	No	No	No	NA	No	
3-7, 9-10	065	Bis(2-Chloroethoxy)methane	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE	No	No	No	NA	No	
3-7, 9-10	066	bis (2-Chloroethyl) ether	ug/L	All Data Qualified	0.6	NONE	0.031	1.4	1.4	No	No	No	NA	No	
3-7, 9-10	067	Bis(2-Chloroisopropyl) Ether	ug/L	All Data Qualified	0.6	NONE	1400	170000	170000	No	No	No	NA	No	
3-7, 9-10	068	bis (2-ethylhexyl) Phthalate	ug/L	All Data Qualified	0.6	NONE	1.8	5.9	4	No	No	No	NA	No	
3-7, 9-10	069	4-Bromophenylether	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE	No	No	No	NA	No	
3-7, 9-10	070	Butylbenzylphthalate	ug/L	All Data Qualified	0.6	NONE	3000	5200	5200	No	No	No	NA	No	
3-7, 9-10	071	2-Chloronaphthalene	ug/L	All Data Qualified	0.6	NONE	1700	4300	4300	No	No	No	NA	No	
3-7, 9-10	072	4-Chlorophenylether	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE	No	No	No	NA	No	
3-7, 9-10	073	Chrysene	ug/L	All Data Qualified	0.6	NONE	0.0044	0.049	0.049	No	No	No	NA	No	
3-7, 9-10	074	Dibenzo(a,h)Anthracene	ug/L	All Data Qualified	0.6	NONE	0.0044	0.049	0.049	No	No	No	NA	No	
3-7, 9-10	075	1,2-Dichlorobenzene	ug/L	All Data Qualified	0.6	NONE	2700	17000	17000	No	No	No	NA	No	
3-7, 9-10	076	1,3-Dichlorobenzene	ug/L	All Data Qualified	0.6	NONE	400	2600	2600	No	No	No	NA	No	
3-7, 9-10	077	1,4-Dichlorobenzene	ug/L	All Data Qualified	0.6	NONE	400	2600	2600	No	No	No	NA	No	
3-7, 9-10	078	3,3'-Dichlorobenzidine	ug/L	All Data Qualified	0.6	NONE	0.04	0.077	0.077	No	No	No	NA	No	
3-7, 9-10	079	Diethylphthalate	ug/L	All Data Qualified	0.6	NONE	23000	120000	120000	No	No	No	NA	No	
3-7, 9-10	080	Dimethylphthalate	ug/L	All Data Qualified	0.6	NONE	313000	2900000	2900000	No	No	No	NA	No	
3-7, 9-10	081	Di-n-butylphthalate	ug/L	All Data Qualified	0.6	NONE	2700	12000	12000	No	No	No	NA	No	
3-7, 9-10	082	2,4-Dinitrotoluene	ug/L	All Data Qualified	0.6	NONE	NONE	9.1	9.1	No	No	No	NA	No	
3-7, 9-10	083	2,6-Dinitrotoluene	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE	No	No	No	NA	No	
3-7, 9-10	084	Di-n-octylphthalate	ug/L	All Data Qualified	0.6	NONE	NONE	NONE	NONE	No	No	No	NA	No	
3-7, 9-10	085	1,2-Diphenylhydrazine	ug/L	All Data Qualified	0.6	NONE	0.04	0.54	0.54	No	No	No	NA	No	
3-7, 9-10	086	Fluoranthene	ug/L	All Data Qualified	0.6	NONE	300	370	370	No	No	No	NA	No	
3-7, 9-10	087	Fluorene	ug/L	All Data Qualified	0.6	NONE	1300	14000	14000	No	No	No	NA	No	
3-7, 9-10	088	Hexachlorobenzene	ug/L	All Data Qualified	0.6	NONE	0.00075	0.00077	0.00077	No	No	No	NA	No	
3-7, 9-10	089	Hexachlorobutadiene	ug/L	All Data Qualified	0.6	NONE	0.44	50	50	No	No	No	NA	No	
3-7, 9-10	090	Hexachlorocyclopentadiene	ug/L	All Data Qualified	0.6	NONE	240	17000	17000	No	No	No	NA	No	
3-7, 9-10	091	Hexachloroethane	ug/L	All Data Qualified	0.6	NONE	1.9	8.9	8.9	No	No	No	NA	No	

Table F1
 REASONABLE POTENTIAL ANALYSIS FOR PRIORITY POLLUTANTS, (OUTFALLS 003-007, 009-010)

SECOND QUARTER 2010
 THE BOEING COMPANY
 SANTA SUSANA FIELD LABORATORY
 NPDES PERMIT CA0001309

Outfall		Constituent		Units	CV	Freshwater			Human Health			Basin Plan Title 22 GWR	C = Lowest Criteria	Step 2 Is Effluent Data Available	Step 3 Was Constituent Detected in Effluent Data	Step 3 Are all Detection Limits > C	If DL > C, MEC = Min (DL) MEC >= C	Step 4
CTR	Constituent	MEC	Units			CMC = Acute	CCC = Chronic	HH W&O (Not App)	HH O = HH	0.0044	600							
3-7, 9-10	092	Indeno(1,2,3-cd)Pyrene	All Data Qualified	ug/L	0.6	NONE	NONE	0.0044	600	0.049	0.049	600	0.049	No	No	NA	No	
3-7, 9-10	093	Isophorone	All Data Qualified	ug/L	0.6	NONE	NONE	8.4	600	NONE	NONE	NONE	NONE	No	No	NA	No	
3-7, 9-10	094	Naphthalene	All Data Qualified	ug/L	0.6	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	No	No	NA	No	
3-7, 9-10	095	Nitrobenzene	All Data Qualified	ug/L	0.6	NONE	NONE	17	1900	8.1	8.1	1900	8.1	No	No	NA	No	
3-7, 9-10	096	N-Nitrosodimethylamine	All Data Qualified	ug/L	0.6	NONE	NONE	0.00069	8.1	8.1	8.1	8.1	8.1	No	No	NA	No	
3-7, 9-10	097	n-Nitroso-di-n-propylamine	All Data Qualified	ug/L	0.6	NONE	NONE	0.005	1.4	1.4	1.4	1.4	1.4	No	No	NA	No	
3-7, 9-10	098	n-Nitrosodiphenylamine	All Data Qualified	ug/L	0.6	NONE	NONE	5	16	16	16	16	16	No	No	NA	No	
3-7, 9-10	099	Phenanthrene	All Data Qualified	ug/L	0.6	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	No	No	NA	No	
3-7, 9-10	100	Pyrene	All Data Qualified	ug/L	0.6	NONE	NONE	960	11000	11000	11000	11000	11000	No	No	NA	No	
3-7, 9-10	101	1,2,4-Trichlorobenzene	All Data Qualified	ug/L	0.6	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	No	No	NA	No	
3-7, 9-10	102	Aldrin	All Data Qualified	ug/L	0.6	3	NONE	0.00013	0.00014	0.00014	0.00014	0.00014	0.00014	No	No	NA	No	
3-7, 9-10	103	alpha-BHC	All Data Qualified	ug/L	0.6	NONE	NONE	0.0039	0.013	0.013	0.013	0.013	0.013	No	No	NA	No	
3-7, 9-10	104	beta-BHC	All Data Qualified	ug/L	0.6	NONE	NONE	0.014	0.046	0.046	0.046	0.046	0.046	No	No	NA	No	
3-7, 9-10	105	Lindane (gamma-BHC)	All Data Qualified	ug/L	0.6	0.95	NONE	0.019	0.063	0.063	0.063	0.063	0.063	No	No	NA	No	
3-7, 9-10	106	delta-BHC	All Data Qualified	ug/L	0.6	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	No	No	NA	No	
3-7, 9-10	107	Chlordane	All Data Qualified	ug/L	0.6	2.4	0.0043	0.00057	0.00059	0.00059	0.00059	0.00059	0.00059	No	No	NA	No	
3-7, 9-10	108	4,4'-DDT	All Data Qualified	ug/L	0.6	1.1	0.001	0.00059	0.00059	0.00059	0.00059	0.00059	0.00059	No	No	NA	No	
3-7, 9-10	109	4,4'-DDE	All Data Qualified	ug/L	0.6	NONE	NONE	0.00059	0.00059	0.00059	0.00059	0.00059	0.00059	No	No	NA	No	
3-7, 9-10	110	4,4'-DDD	All Data Qualified	ug/L	0.6	NONE	NONE	0.00083	0.00084	0.00084	0.00084	0.00084	0.00084	No	No	NA	No	
3-7, 9-10	111	Dieldrin	All Data Qualified	ug/L	0.6	0.22	0.056	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014	No	No	NA	No	
3-7, 9-10	112	Endosulfan I	All Data Qualified	ug/L	0.6	0.24	0.056	110	240	240	240	240	240	No	No	NA	No	
3-7, 9-10	113	Endosulfan II	All Data Qualified	ug/L	0.6	0.22	0.056	110	240	240	240	240	240	No	No	NA	No	
3-7, 9-10	114	Endosulfan Sulfate	All Data Qualified	ug/L	0.6	NONE	NONE	110	240	240	240	240	240	No	No	NA	No	
3-7, 9-10	115	Endrin	All Data Qualified	ug/L	0.6	0.086	0.036	0.76	0.81	0.81	0.81	0.81	0.81	No	No	NA	No	
3-7, 9-10	116	Endrin Aldehyde	All Data Qualified	ug/L	0.6	NONE	NONE	0.76	0.81	0.81	0.81	0.81	0.81	No	No	NA	No	
3-7, 9-10	117	Heptachlor	All Data Qualified	ug/L	0.6	0.52	0.0338	0.00021	0.00021	0.00021	0.00021	0.00021	0.00021	No	No	NA	No	
3-7, 9-10	118	Heptachlor Epoxide	All Data Qualified	ug/L	0.6	0.52	0.0038	0.0001	0.00011	0.00011	0.00011	0.00011	0.00011	No	No	NA	No	
3-7, 9-10	119	Aroclor-1016	All Data Qualified	ug/L	0.6	NONE	0.014	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017	No	No	NA	No	
3-7, 9-10	120	Aroclor-1221	All Data Qualified	ug/L	0.6	NONE	0.014	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017	No	No	NA	No	
3-7, 9-10	121	Aroclor-1232	All Data Qualified	ug/L	0.6	NONE	0.014	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017	No	No	NA	No	
3-7, 9-10	122	Aroclor-1242	All Data Qualified	ug/L	0.6	NONE	0.014	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017	No	No	NA	No	
3-7, 9-10	123	Aroclor-1248	All Data Qualified	ug/L	0.6	NONE	0.014	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017	No	No	NA	No	
3-7, 9-10	124	Aroclor-1254	All Data Qualified	ug/L	0.6	NONE	0.014	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017	No	No	NA	No	
3-7, 9-10	125	Aroclor-1260	All Data Qualified	ug/L	0.6	NONE	0.014	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017	No	No	NA	No	
3-7, 9-10	126	Toxaphene	All Data Qualified	ug/L	0.6	0.73	0.0002	0.0073	0.00075	0.00075	0.00075	0.00075	0.00075	No	No	NA	No	

Table F1
REASONABLE POTENTIAL ANALYSIS FOR SECONDARY POLLUTANTS, (OUTFALLS 003-007, 009-010)

SECOND QUARTER 2010
 THE BOEING COMPANY
 SANTA SUSANA FIELD LABORATORY
 NPDES PERMIT CA0001309

Outfall	Constituent	Monitoring	Units	Number of Samples	MEC	CV	Multiplier	Projected Maximum Effluent Concentration (99/99)	Dilution Ratio	Background Concentration	Projected Maximum Receiving Water Concentration	Step 1, Determine Water Quality Objectives	BU - Beneficial use protection NC-Human noncarcinogen AP-Aquatic life protection
3-7, 9-10	Boron	Annual Discharge	mg/L	0	All Data Qualified	0.60	All Data Qualified	All Qualified Data	0	0	NA	1	BU
3-7, 9-10	Chloride	Annual Discharge	mg/L	3	12	0.60	5.62	67.47	0	0	67.47	150	BU
3-7, 9-10	Fluoride	Annual Discharge	mg/L	0	All Data Qualified	0.60	All Data Qualified	All Qualified Data	0	0	NA	1.6	BU
3-7, 9-10	Nitrate + Nitrite as Nitrogen (N)	Annual Discharge	mg/L	3	0.93	0.60	5.62	5.23	0	0	5.23	8	BU/TMDL
3-7, 9-10	Oil & Grease	Annual Discharge	mg/L	2	Available Data <DL	0.60	7.39	Available Data <DL	0	0	NA	10	BU
3-7, 9-10	Sulfate	Annual Discharge	mg/L	3	11	0.60	5.62	61.85	0	0	61.85	300	BU
3-7, 9-10	Total Dissolved Solids	Annual Discharge	mg/L	3	160	0.60	5.62	899.59	0	0	899.59	150	BU
3-7, 9-10	Total Suspended Solids	Annual Discharge	mg/L	0	All Data Qualified	0.60	All Data Qualified	All Qualified Data	0	0	NA	45	BU

APPENDIX G

SECOND QUARTER 2010 ANALYTICAL LABORATORY REPORTS,
CHAIN-OF-CUSTODY, AND VALIDATION REPORTS

THIS PAGE LEFT INTENTIONALLY BLANK

APPENDIX G
TABLE OF CONTENTS

Section No.

- 1 Outfall 009 – April 5, 2010 - MEC^X Data Validation Report
- 2 Outfall 009 - April 5, 2010 -Test America Analytical Laboratory Report
- 3 Outfall 009 – April 12, 2010 - MEC^X Data Validation Report
- 4 Outfall 009 - April 12, 2010 -Test America Analytical Laboratory Report
- 5 Outfall 010 – April 5, 2010 - MEC^X Data Validation Report
- 6 Outfall 010 - April 5, 2010 -Test America Analytical Laboratory Report
- 7 Outfall 010 - BMP Effectiveness - April 5, 2010 - Test America Analytical
Laboratory Report.
- 8 Arroyo Simi Receiving Water May 12, 2010- MEC^X Data Validation Report
- 9 Arroyo Simi Receiving Water May 12, 2010 - Test America Analytical
Laboratory Report.
- 10 May 17th, 2010 - Aquatic Bioassay & Consulting Bioassessment Report

THIS PAGE LEFT INTENTIONALLY BLANK

APPENDIX G

Section 1

Outfall 009 – April 5, 2010

MEC^X Data Validation Report

THIS PAGE LEFT INTENTIONALLY BLANK



DATA VALIDATION REPORT

Boeing SSFL NPDES

SAMPLE DELIVERY GROUP: ITD0281

Prepared by

MECX, LP
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title: Boeing SSFL NPDES
 Contract Task Order: 1261.100D.00
 Sample Delivery Group: ITD0281
 Project Manager: B. Kelly
 Matrix: Water
 QC Level: IV
 No. of Samples: 2
 No. of Reanalyses/Dilutions: 0
 Laboratory: TestAmerica-Irvine

Table 1. Sample Identification

Client ID	Laboratory ID	Sub-Laboratory ID	Matrix	Collected	Method
Outfall 010	ITD0281-02	G0D070520-001, F0D070524-001	Water	4/5/2010 09:45	245.1, 245.1 (Diss), ASTM 5174-91, 900.0 MOD, 901.1 MOD, 903.0 MOD, 904 MOD, 905 MOD, 906.0 MOD, 1613

II. Sample Management

No anomalies were observed regarding sample management. The samples in this SDG were received at the laboratories within the temperature limits of 4°C ±2°C. According to the case narrative for this SDG, the samples were received intact, on ice, and properly preserved, if applicable. The COCs were appropriately signed and dated by field and/or laboratory personnel. Custody seals were intact upon receipt at TestAmerica-West Sacramento and TestAmerica-St. Louis. As the samples were couriered to TestAmerica-Irvine, no custody seals were required. If necessary, the client ID was added to the sample result summary by the reviewer.

Data Qualifier Reference Table

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

Qualification Code Reference Table

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

Qualification Code Reference Table Cont.

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

III. Method Analyses

A. EPA METHOD 1613—Dioxin/Furans

Reviewed By: L. Calvin

Date Reviewed: May 10, 2010

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

- Holding Times: Extraction and analytical holding times were met. The water sample was extracted and analyzed within one year of collection.
- Instrument Performance: Instrument performance criteria were met. Following are findings associated with instrument performance.
 - GC Column Performance: A Windows Defining Mix (WDM) containing the first and last eluting congeners of each descriptor and isomer specificity compounds was analyzed with the initial calibration sequence and at the beginning of each analytical sequence. The GC column performance in the calibrations was acceptable, with the height of the valley between the closely eluting isomers and 2,3,7,8-TCDD reported as less than 25%.
 - Mass Spectrometer Performance: The mass spectrometer performance was acceptable with the static resolving power greater than 10,000.
- Calibration: Calibration criteria were met.
 - Initial Calibration: Initial calibration criteria were met. The initial calibration was acceptable with %RSDs $\leq 20\%$ for the 16 native compounds (calibration by isotope dilution) and $\leq 35\%$ for the one native and all labeled compounds (calibration by internal standard). The relative retention times and ion abundance ratios were within the Method 1613 QC limits for all standards.
 - Continuing Calibration: Calibration verification (VER) consisted of a mid-level standard (CS3) analyzed at the beginning of each analytical sequence. The VERs were acceptable with the concentrations within the acceptance criteria listed in Table 6 of EPA Method 1613. The ion abundance ratios and relative retention times were within the method QC limits.
- Blanks: The method blank had detects between the EDL and the RL for all target compounds except isomers and totals for TCDD, TCDF, and PeCDF. Several detects in the method blank did not meet ratio criteria and were reported as EMPCs; however, due to the extent of contamination present in the method blank, it was the reviewer's professional opinion that those results be utilized to qualify applicable sample results. Isomers present

in the sample between the EDLs and RLs were qualified as nondetected, “U,” at the levels of contamination. The sample results for total HpCDD and total HpCDF were also qualified as nondetected, “U,” at the level of contamination, as all peaks comprising the total were present in the method blank at similar concentrations. The result for total HxCDD was qualified as estimated, “J,” as only a portion of the total was considered method blank contamination.

- Blank Spikes and Laboratory Control Samples: OPR recoveries were within the acceptance criteria listed in Table 6 of Method 1613.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: This SDG had no identified field blank or equipment rinsate samples.
 - Field Duplicates: There were no field duplicate samples identified for this SDG.
- Internal Standards Performance: The labeled standard recoveries were within the acceptance criteria listed in Table 7 of Method 1613.
- Compound Identification: Compound identification was verified. The laboratory analyzed for polychlorinated dioxins/furans by EPA Method 1613.
- Compound Quantification and Reported Detection Limits: Compound quantitation was verified by recalculating a representative number of reportable sample results. Total HxCDD included one EMPC peak and was qualified as estimated, “J.” Any detects reported between the estimated detection limit (EDL) and the reporting limit (RL) were qualified as estimated, “J,” and coded with “DNQ,” in order to comply with the NPDES permit. Nondetects are valid to the EDL.

B. EPA METHOD 245.1—Mercury

Reviewed By:

Date Reviewed:

The sample listed in Table 1 for these analyses was validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for Metals (DVP-5, Rev. 0 and DVP-21, Rev. 0)*, *EPA Method 245.1*, and the *National Functional Guidelines for Inorganic Data Review (7/02)*.

- Holding Times: The analytical holding time, 28 days for mercury, was met.
- Tuning: Not applicable to this analysis.

- Calibration: Calibration criteria were met. Mercury initial calibration r^2 values were ≥ 0.995 and all initial and continuing calibration recoveries were within 85-115%. CRI recoveries were within the control limits of 70-130%.
- Blanks: Method blanks and CCBs had no detects.
- Interference Check Samples: Not applicable to this analysis.
- Blank Spikes and Laboratory Control Samples: Recoveries were within laboratory-established QC limits.
- Laboratory Duplicates: No laboratory duplicate analyses were performed.
- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were performed for total mercury. Recoveries and the RPD were within laboratory-established QC limits.
- Serial Dilution: No serial dilution analyses were performed.
- Internal Standards Performance: Not applicable to this analysis.
- Sample Result Verification: Calculations were verified and the sample results reported on the sample result summary were verified against the raw data. No transcription errors or calculation errors were noted. When the sample results were qualified and the reviewer was able to clearly determine bias, detected results were qualified as either "J+" or "J-"; otherwise, bias was not indicated in the qualification. Any detects between the method detection limit and the reporting limit were qualified as estimated, "J," and coded with "DNQ," in order to comply with the NPDES permit. Reported nondetects are valid to the MDL.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: This SDG had no identified field blank or equipment rinsate samples.
 - Field Duplicates: There were no field duplicate samples identified for this SDG.

C. VARIOUS EPA METHODS — Radionuclides

Reviewed By: P. Meeks

Date Reviewed: June 1, 2010

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

- **Holding Times:** The tritium sample was analyzed within 180 days of collection. All remaining aliquots were prepared within the five-day analytical holding time for unpreserved samples.
- **Calibration:** The laboratory calibration information included the standard certificates and applicable preparation/dilutions logs for NIST-traceability.

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

The tritium aliquot was spiked for efficiency determination; therefore, no calibration was necessary. All chemical yields were at least 40% and were considered acceptable. The gamma spectroscopy analytes were determined at the maximum photopeak energy. The kinetic phosphorescence analyzer (KPA) was calibrated immediately prior to the sample analysis. All KPA calibration check standard recoveries were within 90-110% and were deemed acceptable.

- **Blanks:** Total uranium was detected in both method blanks and gross beta was detected in one method blank at 0.213, 0.242, and 1.55 pCi/L, respectively; therefore, total uranium and gross beta detected in the sample were qualified as nondetected, "U," at the reporting limits. There were no other analytes detected in the method blanks or the KPA CCBs.
- **Blank Spikes and Laboratory Control Samples:** The recoveries and RPDs (radium-226, radium-228, strontium-90) were within laboratory-established control limits.
- **Laboratory Duplicates:** No laboratory duplicate analyses were performed on the sample in this SDG.
- **Matrix Spike/Matrix Spike Duplicate:** No matrix spikes or MS/MSD analyses were performed for the sample in this SDG. Method accuracy was evaluated based on the LCS results.
- **Sample Result Verification:** An EPA Level IV review was performed for the sample in this data package. The sample results and MDAs reported on the sample result form were verified against the raw data and no calculation or transcription errors were noted. Any detects between the MDA and the reporting limit were qualified as estimated, "J," and

coded with “DNQ,” in order to comply with the NPDES permit. Reported nondetects are valid to the MDA.

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

Validated Sample Result Forms ITD0281

Analysis Method ASTM 5174-91

Sample Name	Outfall 010	Matrix Type:	WATER		Validation Level:	IV		
Lab Sample Name:	ITD0281-02	Sample Date:	4/5/2010 9:45:00 AM					
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Total Uranium	7440-61-1	ND	0.677	0.21	pCi/L	Jb	U	B

Analysis Method EPA 245.1

Sample Name	Outfall 010	Matrix Type:	Water		Validation Level:	IV		
Lab Sample Name:	ITD0281-02	Sample Date:	4/5/2010 9:45:00 AM					
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Mercury	7439-97-6	ND	0.20	0.10	ug/l		U	

Analysis Method EPA 245.1-Diss

Sample Name	Outfall 010	Matrix Type:	Water		Validation Level:	IV		
Lab Sample Name:	ITD0281-02	Sample Date:	4/5/2010 9:45:00 AM					
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Mercury	7439-97-6	ND	0.20	0.10	ug/l		U	

Analysis Method EPA 900.0 MOD

Sample Name	Outfall 010	Matrix Type:	WATER		Validation Level:	IV		
Lab Sample Name:	ITD0281-02	Sample Date:	4/5/2010 9:45:00 AM					
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Gross Alpha	12587-46-1	0.91	3	1.4	pCi/L	U	UJ	C
Gross Beta	12587-47-2	ND	4	1.1	pCi/L	Jb	U	B

Analysis Method EPA 901.1 MOD

Sample Name	Outfall 010	Matrix Type:	WATER		Validation Level:	IV		
Lab Sample Name:	ITD0281-02	Sample Date:	4/5/2010 9:45:00 AM					
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Cesium 137	10045-97-3	1.1	20	14	pCi/L	U	U	
Potassium 40	13966-00-2	-40	0	270	pCi/L	U	U	

Analysis Method *EPA 903.0 MOD*

Sample Name	Outfall 010	Matrix Type: WATER		Validation Level: IV				
Lab Sample Name:	ITD0281-02	Sample Date: 4/5/2010 9:45:00 AM						
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Radium (226)	13982-63-3	0.042	1	0.15	pCi/L	U	UJ	C

Analysis Method *EPA 904 MOD*

Sample Name	Outfall 010	Matrix Type: WATER		Validation Level: IV				
Lab Sample Name:	ITD0281-02	Sample Date: 4/5/2010 9:45:00 AM						
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Radium 228	15262-20-1	0.17	1	0.68	pCi/L	U	U	

Analysis Method *EPA 905 MOD*

Sample Name	Outfall 010	Matrix Type: WATER		Validation Level: IV				
Lab Sample Name:	ITD0281-02	Sample Date: 4/5/2010 9:45:00 AM						
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Strontium 90	10098-97-2	-0.007	3	0.38	pCi/L	U	U	

Analysis Method *EPA 906.0 MOD*

Sample Name	Outfall 010	Matrix Type: WATER		Validation Level: IV				
Lab Sample Name:	ITD0281-02	Sample Date: 4/5/2010 9:45:00 AM						
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Tritium	10028-17-8	50	500	330	pCi/L	U	U	

Analysis Method EPA-5 1613B

Sample Name Outfall 010 **Matrix Type:** WATER **Validation Level:** IV
Lab Sample Name: ITD0281-02 **Sample Date:** 4/5/2010 9:45:00 AM

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,2,3,4,6,7,8-HpCDD	35822-46-9	ND	0.00005	0.0000008	ug/L	J, B	U	B
1,2,3,4,6,7,8-HpCDF	67562-39-4	ND	0.00005	0.0000004	ug/L	J, B	U	B
1,2,3,4,7,8,9-HpCDF	55673-89-7	ND	0.00005	0.0000007	ug/L		U	
1,2,3,4,7,8-HxCDD	39227-28-6	ND	0.00005	0.0000004	ug/L	J, B	U	B
1,2,3,4,7,8-HxCDF	70648-26-9	ND	0.00005	0.0000003	ug/L		U	
1,2,3,6,7,8-HxCDD	57653-85-7	ND	0.00005	0.0000003	ug/L	J, B	U	B
1,2,3,6,7,8-HxCDF	57117-44-9	ND	0.00005	0.0000003	ug/L		U	
1,2,3,7,8,9-HxCDD	19408-74-3	ND	0.00005	0.0000003	ug/L		U	
1,2,3,7,8,9-HxCDF	72918-21-9	ND	0.00005	0.0000003	ug/L		U	
1,2,3,7,8-PeCDD	40321-76-4	ND	0.00005	0.0000007	ug/L		U	
1,2,3,7,8-PeCDF	57117-41-6	ND	0.00005	0.0000005	ug/L		U	
2,3,4,6,7,8-HxCDF	60851-34-5	ND	0.00005	0.0000002	ug/L		U	
2,3,4,7,8-PeCDF	57117-31-4	ND	0.00005	0.0000006	ug/L		U	
2,3,7,8-TCDD	1746-01-6	ND	0.00001	0.0000005	ug/L		U	
2,3,7,8-TCDF	51207-31-9	ND	0.00001	0.0000003	ug/L		U	
OCDD	3268-87-9	ND	0.0002	0.0000008	ug/L	B	U	B
OCDF	39001-02-0	ND	0.0001	0.0000004	ug/L	J, B	U	B
Total HpCDD	37871-00-4	ND	0.00005	0.0000008	ug/L	J, B	U	B
Total HpCDF	38998-75-3	ND	0.00005	0.0000004	ug/L	J, B	U	B
Total HxCDD	34465-46-8	4.5e-006	4.5e-006	0.0000003	ug/L	J, Q, B	J	B, DNQ, *III
Total HxCDF	55684-94-1	ND	0.00005	0.0000002	ug/L		U	
Total PeCDD	36088-22-9	ND	0.00005	0.0000005	ug/L		U	
Total PeCDF	30402-15-4	ND	0.00005	0.0000001	ug/L		U	
Total TCDD	41903-57-5	ND	0.00001	0.0000002	ug/L		U	
Total TCDF	55722-27-5	3.8e-006	0.00001	0.0000003	ug/L	J	J	DNQ

THIS PAGE LEFT INTENTIONALLY BLANK

APPENDIX G

Section 2

Outfall 009 – April 5, 2010

Test America Analytical Laboratory Report

THIS PAGE LEFT INTENTIONALLY BLANK

LABORATORY REPORT

Prepared For: MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project: Routine Outfall 009

Sampled: 04/05/10-04/06/10
Received: 04/05/10
Issued: 05/06/10 18:36

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

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

CASE NARRATIVE

SAMPLE RECEIPT: Samples were received intact, at 2°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 TestAmerica 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: Some analytes in this sample and the associated method blank have an ion abundance ratio that is outside of criteria. The analytes are considered as an "estimated maximum possible concentration" (EMPC) because the quantitation is based on the theoretical ion abundance ratio. Analytical results are reported with a "Q" flag.

Some analytes in the associated method blank are reported at a concentration below the estimated detection limit (EDL). The data is reported as a positive detection because the peaks elute at the correct retention time for both characteristic ions and have a signal to noise ratio greater than the method required 2.5:1.

TestAmerica Irvine

Debby Wilson
Project Manager

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD0278

Sampled: 04/05/10-04/06/10
Received: 04/05/10

LABORATORY ID

ITD0278-01
ITD0278-02
ITD0278-03

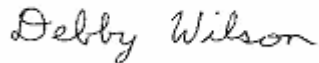
CLIENT ID

Outfall 009 (GRAB)
Outfall 009 (COMPOSITE)
TRIP BLANK

MATRIX

Water
Water
Water

Reviewed By:



TestAmerica Irvine

Debby Wilson
Project Manager

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD0278

Sampled: 04/05/10-04/06/10
Received: 04/05/10

HEXANE EXTRACTABLE MATERIAL

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD0278-01 (Outfall 009 (GRAB) - Water)					Sampled: 04/05/10				
Reporting Units: mg/l									
Hexane Extractable Material (Oil & Grease)	EPA 1664A	10D2050	1.3	4.7	ND	1	04/19/10	04/19/10	

TestAmerica Irvine

Debby Wilson
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 TestAmerica.

ITD0278 <Page 3 of 37>

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD0278

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD0278-02 (Outfall 009 (COMPOSITE) - Water)					Sampled: 04/05/10				
Reporting Units: ug/l									
Mercury	EPA 245.1	10D0779	0.10	0.20	ND	1	04/07/10	04/07/10	
Antimony	EPA 200.8	10D0554	0.30	2.0	0.42	1	04/06/10	04/13/10	Ja
Cadmium	EPA 200.8	10D0554	0.10	1.0	ND	1	04/06/10	04/13/10	
Copper	EPA 200.8	10D0554	0.50	2.0	5.2	1	04/06/10	04/13/10	
Lead	EPA 200.8	10D0554	0.20	1.0	2.8	1	04/06/10	04/13/10	
Thallium	EPA 200.8	10D0554	0.20	1.0	0.24	1	04/06/10	04/13/10	Ja

TestAmerica Irvine

Debby Wilson
 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 TestAmerica.

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD0278

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

DISSOLVED METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD0278-02 (Outfall 009 (COMPOSITE) - Water)					Sampled: 04/05/10				
Reporting Units: ug/l									
Mercury	EPA 245.1-Diss	10D0902	0.10	0.20	ND	1	04/08/10	04/08/10	
Antimony	EPA 200.8-Diss	10D0887	0.30	2.0	0.33	1	04/08/10	04/13/10	Ja
Cadmium	EPA 200.8-Diss	10D0887	0.10	1.0	ND	1	04/08/10	04/13/10	
Copper	EPA 200.8-Diss	10D0887	0.50	2.0	3.7	1	04/08/10	04/13/10	
Lead	EPA 200.8-Diss	10D0887	0.20	1.0	0.39	1	04/08/10	04/13/10	Ja
Thallium	EPA 200.8-Diss	10D0887	0.20	1.0	ND	1	04/08/10	04/13/10	

TestAmerica Irvine

Debby Wilson
 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 TestAmerica.

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD0278

Sampled: 04/05/10-04/06/10
Received: 04/05/10

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD0278-02 (Outfall 009 (COMPOSITE) - Water)					Sampled: 04/05/10				
Reporting Units: mg/l									
Chloride	EPA 300.0	10D0435	0.25	0.50	5.0	1	04/05/10	04/05/10	
Nitrate/Nitrite-N	EPA 300.0	10D0435	0.15	0.26	0.42	1	04/05/10	04/05/10	
Sulfate	EPA 300.0	10D0435	0.20	0.50	7.7	1	04/05/10	04/05/10	
Total Dissolved Solids	SM2540C	10D0804	1.0	10	74	1	04/08/10	04/08/10	

TestAmerica Irvine

Debby Wilson
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 TestAmerica.

ITD0278 <Page 6 of 37>

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD0278

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

EPA-5 1613B

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD0278-02 (Outfall 009 (COMPOSITE) - Water)					Sampled: 04/05/10				
Reporting Units: ug/L									
1,2,3,4,6,7,8-HpCDD	EPA-5 1613B	99181	0.000001	0.00005	0.00013	0.96	04/09/10	04/13/10	B
1,2,3,4,6,7,8-HpCDF	EPA-5 1613B	99181	0.0000069	0.00005	0.000028	0.96	04/09/10	04/13/10	Q, J, B
1,2,3,4,7,8,9-HpCDF	EPA-5 1613B	99181	0.0000012	0.00005	0.000037	0.96	04/09/10	04/13/10	J, Q, B
1,2,3,4,7,8-HxCDD	EPA-5 1613B	99181	0.0000076	0.00005	0.000044	0.96	04/09/10	04/13/10	J, B
1,2,3,4,7,8-HxCDF	EPA-5 1613B	99181	0.0000007	0.00005	0.000033	0.96	04/09/10	04/13/10	J, B
1,2,3,6,7,8-HxCDD	EPA-5 1613B	99181	0.0000007	0.00005	0.000007	0.96	04/09/10	04/13/10	J, B
1,2,3,6,7,8-HxCDF	EPA-5 1613B	99181	0.0000064	0.00005	0.000026	0.96	04/09/10	04/13/10	J, B
1,2,3,7,8,9-HxCDD	EPA-5 1613B	99181	0.0000006	0.00005	0.000077	0.96	04/09/10	04/13/10	J, B
1,2,3,7,8,9-HxCDF	EPA-5 1613B	99181	0.0000068	0.00005	0.000002	0.96	04/09/10	04/13/10	J, B
1,2,3,7,8-PeCDD	EPA-5 1613B	99181	0.0000008	0.00005	0.000034	0.96	04/09/10	04/13/10	J, B
1,2,3,7,8-PeCDF	EPA-5 1613B	99181	0.0000062	0.00005	0.000019	0.96	04/09/10	04/13/10	J, Q
2,3,4,6,7,8-HxCDF	EPA-5 1613B	99181	0.0000056	0.00005	0.000002	0.96	04/09/10	04/13/10	J, Q, B
2,3,4,7,8-PeCDF	EPA-5 1613B	99181	0.0000069	0.00005	0.000026	0.96	04/09/10	04/13/10	J
2,3,7,8-TCDD	EPA-5 1613B	99181	0.0000035	0.00001	ND	0.96	04/09/10	04/13/10	
2,3,7,8-TCDF	EPA-5 1613B	99181	0.0000036	0.00001	ND	0.96	04/09/10	04/13/10	
OCDD	EPA-5 1613B	99181	0.0000026	0.0001	0.0017	0.96	04/09/10	04/13/10	B
OCDF	EPA-5 1613B	99181	0.0000078	0.0001	0.0001	0.96	04/09/10	04/13/10	B
Total HpCDD	EPA-5 1613B	99181	0.000001	0.00005	0.00031	0.96	04/09/10	04/13/10	B
Total HpCDF	EPA-5 1613B	99181	0.0000069	0.00005	0.000075	0.96	04/09/10	04/13/10	J, Q, B
Total HxCDD	EPA-5 1613B	99181	0.0000006	0.00005	0.000038	0.96	04/09/10	04/13/10	J, B
Total HxCDF	EPA-5 1613B	99181	0.0000056	0.00005	0.000026	0.96	04/09/10	04/13/10	J, Q, B
Total PeCDD	EPA-5 1613B	99181	0.0000008	0.00005	0.000034	0.96	04/09/10	04/13/10	J, B
Total PeCDF	EPA-5 1613B	99181	0.0000005	0.00005	0.000097	0.96	04/09/10	04/13/10	J, Q
Total TCDD	EPA-5 1613B	99181	0.0000014	0.00001	ND	0.96	04/09/10	04/13/10	
Total TCDF	EPA-5 1613B	99181	0.0000013	0.00001	ND	0.96	04/09/10	04/13/10	

Surrogate: 13C-1,2,3,4,6,7,8-HpCDD (23-140%)	57 %
Surrogate: 13C-1,2,3,4,6,7,8-HpCDF (28-143%)	52 %
Surrogate: 13C-1,2,3,4,7,8,9-HpCDF (26-138%)	48 %
Surrogate: 13C-1,2,3,4,7,8-HxCDD (32-141%)	51 %
Surrogate: 13C-1,2,3,4,7,8-HxCDF (26-152%)	49 %
Surrogate: 13C-1,2,3,6,7,8-HxCDD (28-130%)	50 %
Surrogate: 13C-1,2,3,6,7,8-HxCDF (26-123%)	50 %
Surrogate: 13C-1,2,3,7,8,9-HxCDF (29-147%)	46 %
Surrogate: 13C-1,2,3,7,8-PeCDD (25-181%)	53 %
Surrogate: 13C-1,2,3,7,8-PeCDF (24-185%)	51 %
Surrogate: 13C-2,3,4,6,7,8-HxCDF (28-136%)	52 %
Surrogate: 13C-2,3,4,7,8-PeCDF (21-178%)	50 %
Surrogate: 13C-2,3,7,8-TCDD (25-164%)	47 %
Surrogate: 13C-2,3,7,8-TCDF (24-169%)	50 %
Surrogate: 13C-OCDD (17-157%)	55 %
Surrogate: 37Cl4-2,3,7,8-TCDD (35-197%)	101 %

TestAmerica Irvine

Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD0278

Sampled: 04/05/10-04/06/10
Received: 04/05/10

ASTM 5174-91

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD0278-02 (Outfall 009 (COMPOSITE) - Water)					Sampled: 04/05/10				
Reporting Units: pCi/L									
Total Uranium	ASTM 5174-91	98114	0.21	0.677	0.317	1	04/08/10	04/13/10	Jb

TestAmerica Irvine

Debby Wilson
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 TestAmerica.*

ITD0278 <Page 8 of 37>

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD0278

Sampled: 04/05/10-04/06/10
Received: 04/05/10

ASTM 5174-91

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD0278-03 (TRIP BLANK - Water)					Sampled: 04/06/10				
Reporting Units: pCi/L									
Total Uranium	ASTM 5174-91	119221	0.21	0.677	0.185	1	04/29/10	05/03/10	U

TestAmerica Irvine

Debby Wilson
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 TestAmerica.

ITD0278 <Page 9 of 37>

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD0278

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

EPA 900.0 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD0278-02 (Outfall 009 (COMPOSITE) - Water)					Sampled: 04/05/10				
Reporting Units: pCi/L									
Gross Alpha	EPA 900.0 MOD	98090	1	3	0.84	1	04/08/10	04/16/10	U
Gross Beta	EPA 900.0 MOD	98090	1.1	4	1.91	1	04/08/10	04/16/10	Jb
Sample ID: ITD0278-03 (TRIP BLANK - Water)					Sampled: 04/06/10				
Reporting Units: pCi/L									
Gross Alpha	EPA 900.0 MOD	105073	0.92	3	1.11	1	04/15/10	04/26/10	Jb
Gross Beta	EPA 900.0 MOD	105073	1.6	4	2.5	1	04/15/10	04/26/10	Jb

TestAmerica Irvine

Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD0278

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

EPA 901.1 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD0278-02 (Outfall 009 (COMPOSITE) - Water)					Sampled: 04/05/10				
Reporting Units: pCi/L									
Cesium 137	EPA 901.1 MOD	98345	16	20	0.6	1	04/08/10	05/06/10	U
Potassium 40	EPA 901.1 MOD	98345	210	NA	-40	1	04/08/10	05/06/10	U
Sample ID: ITD0278-03 (TRIP BLANK - Water)					Sampled: 04/06/10				
Reporting Units: pCi/L									
Cesium 137	EPA 901.1 MOD	103219	11	20	3	1	04/13/10	04/13/10	U
Potassium 40	EPA 901.1 MOD	103219	210	NA	-140	1	04/13/10	04/13/10	U

TestAmerica Irvine

Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD0278

Sampled: 04/05/10-04/06/10
Received: 04/05/10

EPA 903.0 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD0278-02 (Outfall 009 (COMPOSITE) - Water)					Sampled: 04/05/10				
Reporting Units: pCi/L									
Radium (226)	EPA 903.0 MOD	98325	0.13	1	0.041	1	04/08/10	04/30/10	U
Sample ID: ITD0278-03 (TRIP BLANK - Water)					Sampled: 04/06/10				
Reporting Units: pCi/L									
Radium (226)	EPA 903.0 MOD	100043	0.23	1	0.14	1	04/10/10	05/05/10	U

TestAmerica Irvine

Debby Wilson
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 TestAmerica.

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD0278

Sampled: 04/05/10-04/06/10
Received: 04/05/10

EPA 904 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD0278-02 (Outfall 009 (COMPOSITE) - Water)					Sampled: 04/05/10				
Reporting Units: pCi/L									
Radium 228	EPA 904 MOD	98327	0.53	1	0.08	1	04/08/10	04/30/10	U
Sample ID: ITD0278-03 (TRIP BLANK - Water)					Sampled: 04/06/10				
Reporting Units: pCi/L									
Radium 228	EPA 904 MOD	100044	0.67	1	-0.09	1	04/10/10	05/05/10	U

TestAmerica Irvine

Debby Wilson
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 TestAmerica.

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD0278

Sampled: 04/05/10-04/06/10
Received: 04/05/10

EPA 905 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD0278-02 (Outfall 009 (COMPOSITE) - Water)					Sampled: 04/05/10				
Reporting Units: pCi/L									
Strontium 90	EPA 905 MOD	98328	0.43	3	0.2	1	04/08/10	04/20/10	U
Sample ID: ITD0278-03 (TRIP BLANK - Water)					Sampled: 04/06/10				
Reporting Units: pCi/L									
Strontium 90	EPA 905 MOD	100045	0.67	3	0.2	1	04/10/10	04/20/10	U

TestAmerica Irvine

Debby Wilson
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 TestAmerica.

ITD0278 <Page 14 of 37>

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD0278

Sampled: 04/05/10-04/06/10
Received: 04/05/10

EPA 906.0 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD0278-02 (Outfall 009 (COMPOSITE) - Water)					Sampled: 04/05/10				
Reporting Units: pCi/L									
Tritium	EPA 906.0 MOD	112082	330	500	80	1	04/22/10	04/22/10	U
Sample ID: ITD0278-03 (TRIP BLANK - Water)					Sampled: 04/06/10				
Reporting Units: pCi/L									
Tritium	EPA 906.0 MOD	112082	330	500	170	1	04/22/10	04/22/10	U

TestAmerica Irvine

Debby Wilson
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 TestAmerica.

ITD0278 <Page 15 of 37>

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD0278

Sampled: 04/05/10-04/06/10
Received: 04/05/10

SHORT HOLD TIME DETAIL REPORT

	Hold Time (in days)	Date/Time Sampled	Date/Time Received	Date/Time Extracted	Date/Time Analyzed
Sample ID: Outfall 009 (COMPOSITE) (ITD0278-02) - Water EPA 300.0	2	04/05/2010 11:58	04/05/2010 17:30	04/05/2010 18:45	04/05/2010 18:50

TestAmerica Irvine

Debby Wilson
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 TestAmerica.*

ITD0278 <Page 16 of 37>

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD0278

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

METHOD BLANK/QC DATA

HEXANE EXTRACTABLE MATERIAL

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10D2050 Extracted: 04/19/10											
Blank Analyzed: 04/19/2010 (10D2050-BLK1)											
Hexane Extractable Material (Oil & Grease)	ND	5.0	1.4	mg/l							
LCS Analyzed: 04/19/2010 (10D2050-BS1)											
Hexane Extractable Material (Oil & Grease)	19.3	5.0	1.4	mg/l	20.0		96	78-114			MNR1
LCS Dup Analyzed: 04/19/2010 (10D2050-BSD1)											
Hexane Extractable Material (Oil & Grease)	19.1	5.0	1.4	mg/l	20.0		96	78-114	1	11	

TestAmerica Irvine

Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD0278

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10D0554 Extracted: 04/06/10											
Blank Analyzed: 04/13/2010 (10D0554-BLK1)											
Antimony	ND	2.0	0.30	ug/l							
Cadmium	ND	1.0	0.10	ug/l							
Copper	ND	2.0	0.50	ug/l							
Lead	ND	1.0	0.20	ug/l							
Thallium	ND	1.0	0.20	ug/l							
LCS Analyzed: 04/13/2010 (10D0554-BS1)											
Antimony	80.1	2.0	0.30	ug/l	80.0		100	85-115			
Cadmium	78.6	1.0	0.10	ug/l	80.0		98	85-115			
Copper	84.9	2.0	0.50	ug/l	80.0		106	85-115			
Lead	83.0	1.0	0.20	ug/l	80.0		104	85-115			
Thallium	83.2	1.0	0.20	ug/l	80.0		104	85-115			
Matrix Spike Analyzed: 04/13/2010 (10D0554-MS1) Source: ITD0283-01											
Antimony	70.7	2.0	0.30	ug/l	80.0	0.756	87	70-130			
Cadmium	74.9	1.0	0.10	ug/l	80.0	0.232	93	70-130			
Copper	88.6	2.0	0.50	ug/l	80.0	7.57	101	70-130			
Lead	87.2	1.0	0.20	ug/l	80.0	7.34	100	70-130			
Thallium	81.5	1.0	0.20	ug/l	80.0	ND	102	70-130			
Matrix Spike Dup Analyzed: 04/13/2010 (10D0554-MSD1) Source: ITD0283-01											
Antimony	76.8	2.0	0.30	ug/l	80.0	0.756	95	70-130	8	20	
Cadmium	79.5	1.0	0.10	ug/l	80.0	0.232	99	70-130	6	20	
Copper	90.6	2.0	0.50	ug/l	80.0	7.57	104	70-130	2	20	
Lead	93.8	1.0	0.20	ug/l	80.0	7.34	108	70-130	7	20	
Thallium	85.1	1.0	0.20	ug/l	80.0	ND	106	70-130	4	20	

TestAmerica Irvine

Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD0278

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10D0779 Extracted: 04/07/10											
Blank Analyzed: 04/07/2010 (10D0779-BLK1)											
Mercury	ND	0.20	0.10	ug/l							
LCS Analyzed: 04/07/2010 (10D0779-BS1)											
Mercury	8.05	0.20	0.10	ug/l	8.00		101	85-115			
Matrix Spike Analyzed: 04/07/2010 (10D0779-MS1)											
						Source: ITD0281-02					
Mercury	8.10	0.20	0.10	ug/l	8.00	ND	101	70-130			
Matrix Spike Dup Analyzed: 04/07/2010 (10D0779-MSD1)											
						Source: ITD0281-02					
Mercury	7.98	0.20	0.10	ug/l	8.00	ND	100	70-130	1	20	

TestAmerica Irvine

Debby Wilson
 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 TestAmerica.

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD0278

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10D0887 Extracted: 04/08/10											
Blank Analyzed: 04/13/2010 (10D0887-BLK1)											
Antimony	ND	2.0	0.30	ug/l							
Cadmium	ND	1.0	0.10	ug/l							
Copper	ND	2.0	0.50	ug/l							
Lead	ND	1.0	0.20	ug/l							
Thallium	ND	1.0	0.20	ug/l							
LCS Analyzed: 04/13/2010 (10D0887-BS1)											
Antimony	87.2	2.0	0.30	ug/l	80.0		109	85-115			
Cadmium	86.9	1.0	0.10	ug/l	80.0		109	85-115			
Copper	86.5	2.0	0.50	ug/l	80.0		108	85-115			
Lead	82.8	1.0	0.20	ug/l	80.0		104	85-115			
Thallium	87.8	1.0	0.20	ug/l	80.0		110	85-115			
Matrix Spike Analyzed: 04/13/2010 (10D0887-MS1) Source: ITD0076-01											
Antimony	88.9	2.0	0.30	ug/l	80.0	0.360	111	70-130			
Cadmium	84.1	1.0	0.10	ug/l	80.0	0.121	105	70-130			
Copper	86.9	2.0	0.50	ug/l	80.0	2.43	106	70-130			
Lead	77.9	1.0	0.20	ug/l	80.0	0.226	97	70-130			
Thallium	74.8	1.0	0.20	ug/l	80.0	0.217	93	70-130			
Matrix Spike Dup Analyzed: 04/13/2010 (10D0887-MSD1) Source: ITD0076-01											
Antimony	89.7	2.0	0.30	ug/l	80.0	0.360	112	70-130	0.9	20	
Cadmium	85.2	1.0	0.10	ug/l	80.0	0.121	106	70-130	1	20	
Copper	87.4	2.0	0.50	ug/l	80.0	2.43	106	70-130	0.7	20	
Lead	81.3	1.0	0.20	ug/l	80.0	0.226	101	70-130	4	20	
Thallium	78.1	1.0	0.20	ug/l	80.0	0.217	97	70-130	4	20	

TestAmerica Irvine

Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD0278

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10D0902 Extracted: 04/08/10											
Blank Analyzed: 04/08/2010 (10D0902-BLK1)											
Mercury	ND	0.20	0.10	ug/l							
LCS Analyzed: 04/08/2010 (10D0902-BS1)											
Mercury	7.63	0.20	0.10	ug/l	8.00		95	85-115			
Matrix Spike Analyzed: 04/08/2010 (10D0902-MS1)											
						Source: ITD0503-03					
Mercury	8.41	0.20	0.10	ug/l	8.00	0.176	103	70-130			
Matrix Spike Dup Analyzed: 04/08/2010 (10D0902-MSD1)											
						Source: ITD0503-03					
Mercury	8.36	0.20	0.10	ug/l	8.00	0.176	102	70-130	0.6	20	

TestAmerica Irvine

Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD0278

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10D0435 Extracted: 04/05/10											
Blank Analyzed: 04/05/2010 (10D0435-BLK1)											
Chloride	ND	0.50	0.25	mg/l							
Nitrate/Nitrite-N	ND	0.26	0.15	mg/l							
Sulfate	ND	0.50	0.20	mg/l							
LCS Analyzed: 04/05/2010 (10D0435-BS1)											
Chloride	4.60	0.50	0.25	mg/l	5.00		92	90-110			
Sulfate	9.70	0.50	0.20	mg/l	10.0		97	90-110			
Matrix Spike Analyzed: 04/05/2010 (10D0435-MS1)											
						Source: ITD0278-02					
Chloride	9.65	0.50	0.25	mg/l	5.00	4.99	93	80-120			
Sulfate	17.5	0.50	0.20	mg/l	10.0	7.65	98	80-120			
Matrix Spike Analyzed: 04/06/2010 (10D0435-MS2)											
						Source: ITD0267-02					
Chloride	32.6	2.5	1.2	mg/l	5.00	28.7	78	80-120			MHA
Sulfate	81.4	2.5	1.0	mg/l	10.0	70.4	110	80-120			MHA
Matrix Spike Dup Analyzed: 04/05/2010 (10D0435-MSD1)											
						Source: ITD0278-02					
Chloride	9.70	0.50	0.25	mg/l	5.00	4.99	94	80-120	0.5	20	
Sulfate	17.4	0.50	0.20	mg/l	10.0	7.65	97	80-120	0.6	20	
Batch: 10D0804 Extracted: 04/08/10											
Blank Analyzed: 04/08/2010 (10D0804-BLK1)											
Total Dissolved Solids	ND	10	1.0	mg/l							
LCS Analyzed: 04/08/2010 (10D0804-BS1)											
Total Dissolved Solids	1010	10	1.0	mg/l	1000		101	90-110			

TestAmerica Irvine

Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD0278

Sampled: 04/05/10-04/06/10
Received: 04/05/10

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10D0804 Extracted: 04/08/10											
Duplicate Analyzed: 04/08/2010 (10D0804-DUP1)						Source: ITD0389-02					
Total Dissolved Solids	302	10	1.0	mg/l		302			0	10	

TestAmerica Irvine

Debby Wilson
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 TestAmerica.

ITD0278 <Page 23 of 37>

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD0278

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

METHOD BLANK/QC DATA

EPA-5 1613B

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Data Qualifiers
Batch: 99181 Extracted: 04/09/10											
Blank Analyzed: 04/12/2010 (G0D090000181B)						Source:					
1,2,3,4,6,7,8-HpCDD	0.0000064	0.00005	0.00000081	ug/L				-			J
1,2,3,4,6,7,8-HpCDF	0.0000021	0.00005	0.00000039	ug/L				-			J, Q
1,2,3,4,7,8,9-HpCDF	0.0000018	0.00005	0.00000066	ug/L				-			J
1,2,3,4,7,8-HxCDD	0.00000095	0.00005	0.00000054	ug/L				-			J, Q
1,2,3,4,7,8-HxCDF	0.0000011	0.00005	0.00000042	ug/L				-			J, Q
1,2,3,6,7,8-HxCDD	0.0000012	0.00005	0.00000005	ug/L				-			J, Q
1,2,3,6,7,8-HxCDF	0.00000082	0.00005	0.00000037	ug/L				-			J, Q
1,2,3,7,8,9-HxCDD	0.0000014	0.00005	0.00000043	ug/L				-			J
1,2,3,7,8,9-HxCDF	0.0000012	0.00005	0.00000004	ug/L				-			J
1,2,3,7,8-PeCDD	0.0000003	0.00005	0.00000073	ug/L				-			J, Q
1,2,3,7,8-PeCDF	ND	0.00005	0.00000069	ug/L				-			
2,3,4,6,7,8-HxCDF	0.0000012	0.00005	0.00000003	ug/L				-			J
2,3,4,7,8-PeCDF	ND	0.00005	0.00000072	ug/L				-			
2,3,7,8-TCDD	ND	0.00001	0.00000054	ug/L				-			
2,3,7,8-TCDF	ND	0.00001	0.00000052	ug/L				-			
OCDD	0.000044	0.0001	0.000001	ug/L				-			J
OCDF	0.0000052	0.0001	0.00000071	ug/L				-			J
Total HpCDD	0.000014	0.00005	0.00000081	ug/L				-			J
Total HpCDF	0.0000051	0.00005	0.00000039	ug/L				-			J, Q
Total HxCDD	0.0000036	0.00005	0.00000043	ug/L				-			J, Q
Total HxCDF	0.0000047	0.00005	0.00000003	ug/L				-			J, Q
Total PeCDD	0.0000003	0.00005	0.00000073	ug/L				-			J, Q
Total PeCDF	ND	0.00005	0.00000058	ug/L				-			
Total TCDD	ND	0.00001	0.00000054	ug/L				-			
Total TCDF	ND	0.00001	0.00000052	ug/L				-			
Surrogate: 13C-1,2,3,4,6,7,8-HpCDD	0.001			ug/L	0.00200		51	23-140			
Surrogate: 13C-1,2,3,4,6,7,8-HpCDF	0.00093			ug/L	0.00200		46	28-143			
Surrogate: 13C-1,2,3,4,7,8,9-HpCDF	0.00084			ug/L	0.00200		42	26-138			
Surrogate: 13C-1,2,3,4,7,8-HxCDD	0.00091			ug/L	0.00200		46	32-141			
Surrogate: 13C-1,2,3,4,7,8-HxCDF	0.00084			ug/L	0.00200		42	26-152			
Surrogate: 13C-1,2,3,6,7,8-HxCDD	0.00095			ug/L	0.00200		47	28-130			
Surrogate: 13C-1,2,3,6,7,8-HxCDF	0.00083			ug/L	0.00200		42	26-123			
Surrogate: 13C-1,2,3,7,8,9-HxCDF	0.00085			ug/L	0.00200		43	29-147			
Surrogate: 13C-1,2,3,7,8-PeCDD	0.00087			ug/L	0.00200		44	25-181			
Surrogate: 13C-1,2,3,7,8-PeCDF	0.00078			ug/L	0.00200		39	24-185			

TestAmerica Irvine

Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD0278

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

METHOD BLANK/QC DATA

EPA-5 1613B

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 99181 Extracted: 04/09/10											
Blank Analyzed: 04/12/2010 (G0D090000181B)						Source:					
Surrogate: 13C-2,3,4,6,7,8-HxCDF	0.00094			ug/L	0.00200		47	28-136			
Surrogate: 13C-2,3,4,7,8-PeCDF	0.00083			ug/L	0.00200		42	21-178			
Surrogate: 13C-2,3,7,8-TCDD	0.00069			ug/L	0.00200		34	25-164			
Surrogate: 13C-2,3,7,8-TCDF	0.00074			ug/L	0.00200		37	24-169			
Surrogate: 13C-OCDD	0.002			ug/L	0.00400		51	17-157			
Surrogate: 37Cl4-2,3,7,8-TCDD	0.00081			ug/L	0.000800		101	35-197			
LCS Analyzed: 04/13/2010 (G0D090000181C)						Source:					
1,2,3,4,6,7,8-HpCDD	0.00107	0.00005	0.0000086	ug/L	0.00100		107	70-140			B
1,2,3,4,6,7,8-HpCDF	0.00106	0.00005	0.000001	ug/L	0.00100		106	82-122			B
1,2,3,4,7,8,9-HpCDF	0.00126	0.00005	0.0000016	ug/L	0.00100		126	78-138			B
1,2,3,4,7,8-HxCDD	0.00117	0.00005	0.000001	ug/L	0.00100		117	70-164			B
1,2,3,4,7,8-HxCDF	0.00114	0.00005	0.0000023	ug/L	0.00100		114	72-134			B
1,2,3,6,7,8-HxCDD	0.00121	0.00005	0.00000096	ug/L	0.00100		121	76-134			B
1,2,3,6,7,8-HxCDF	0.00111	0.00005	0.0000021	ug/L	0.00100		111	84-130			B
1,2,3,7,8,9-HxCDD	0.00107	0.00005	0.00000083	ug/L	0.00100		107	64-162			B
1,2,3,7,8,9-HxCDF	0.00112	0.00005	0.0000019	ug/L	0.00100		112	78-130			B
1,2,3,7,8-PeCDD	0.0011	0.00005	0.0000023	ug/L	0.00100		110	70-142			B
1,2,3,7,8-PeCDF	0.00114	0.00005	0.0000026	ug/L	0.00100		114	80-134			
2,3,4,6,7,8-HxCDF	0.00108	0.00005	0.0000016	ug/L	0.00100		108	70-156			B
2,3,4,7,8-PeCDF	0.00115	0.00005	0.0000026	ug/L	0.00100		115	68-160			
2,3,7,8-TCDD	0.000245	0.00001	0.00000096	ug/L	0.000200		123	67-158			
2,3,7,8-TCDF	0.000221	0.00001	0.00000078	ug/L	0.000200		111	75-158			
OCDD	0.00228	0.0001	0.0000023	ug/L	0.00200		114	78-144			B
OCDF	0.00212	0.0001	0.0000011	ug/L	0.00200		106	63-170			B
Surrogate: 13C-1,2,3,4,6,7,8-HpCDD	0.00119			ug/L	0.00200		59	26-166			
Surrogate: 13C-1,2,3,4,6,7,8-HpCDF	0.00111			ug/L	0.00200		56	21-158			
Surrogate: 13C-1,2,3,4,7,8,9-HpCDF	0.000984			ug/L	0.00200		49	20-186			
Surrogate: 13C-1,2,3,4,7,8-HxCDD	0.000984			ug/L	0.00200		49	21-193			
Surrogate: 13C-1,2,3,4,7,8-HxCDF	0.000885			ug/L	0.00200		44	19-202			
Surrogate: 13C-1,2,3,6,7,8-HxCDD	0.000957			ug/L	0.00200		48	25-163			
Surrogate: 13C-1,2,3,6,7,8-HxCDF	0.000879			ug/L	0.00200		44	21-159			
Surrogate: 13C-1,2,3,7,8,9-HxCDF	0.000952			ug/L	0.00200		48	17-205			
Surrogate: 13C-1,2,3,7,8-PeCDD	0.000837			ug/L	0.00200		42	21-227			
Surrogate: 13C-1,2,3,7,8-PeCDF	0.000701			ug/L	0.00200		35	21-192			
Surrogate: 13C-2,3,4,6,7,8-HxCDF	0.00102			ug/L	0.00200		51	22-176			

TestAmerica Irvine

Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD0278

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

METHOD BLANK/QC DATA

EPA-5 1613B

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 99181 Extracted: 04/09/10											
LCS Analyzed: 04/13/2010 (G0D090000181C)											
Surrogate: 13C-2,3,4,7,8-PeCDF	0.000763			ug/L	0.00200		38	13-328			
Surrogate: 13C-2,3,7,8-TCDD	0.000549			ug/L	0.00200		28	20-175			
Surrogate: 13C-2,3,7,8-TCDF	0.000586			ug/L	0.00200		29	22-152			
Surrogate: 13C-OCDD	0.0024			ug/L	0.00400		60	13-199			
Surrogate: 37C14-2,3,7,8-TCDD	0.000815			ug/L	0.000800		102	31-191			

TestAmerica Irvine

Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD0278

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

METHOD BLANK/QC DATA

ASTM 5174-91

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<u>Batch: 119221 Extracted: 04/29/10</u>											
Matrix Spike Dup Analyzed: 05/03/2010 (F0D070495002D)						Source: ITD0278-03					
Total Uranium	29.9	0.7	0.2	pCi/L	27.1	0.185	110	62-150	0.7	20	
Matrix Spike Analyzed: 05/03/2010 (F0D070495002S)						Source: ITD0278-03					
Total Uranium	30.1	0.7	0.2	pCi/L	27.1	0.185	110	62-150			
Blank Analyzed: 05/03/2010 (F0D290000221B)						Source:					
Total Uranium	0.213	0.677	0.21	pCi/L				-			Jb
LCS Analyzed: 05/03/2010 (F0D290000221C)						Source:					
Total Uranium	6.02	0.68	0.21	pCi/L	5.42		111	90-120			
<u>Batch: 98114 Extracted: 04/08/10</u>											
Matrix Spike Dup Analyzed: 04/13/2010 (F0C270425001D)						Source: F0C270425001					
Total Uranium	29.9	0.7	0.2	pCi/L	27.1	1.61	104	62-150	2	20	
Matrix Spike Analyzed: 04/13/2010 (F0C270425001S)						Source: F0C270425001					
Total Uranium	29.3	0.7	0.2	pCi/L	27.1	1.61	102	62-150			
Blank Analyzed: 04/13/2010 (F0D080000114B)						Source:					
Total Uranium	0.267	0.677	0.21	pCi/L				-			Jb
LCS Analyzed: 04/13/2010 (F0D080000114C)						Source:					
Total Uranium	5.69	0.68	0.21	pCi/L	5.42		105	90-120			

TestAmerica Irvine

Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 009
Report Number: ITD0278

Sampled: 04/05/10-04/06/10
Received: 04/05/10

METHOD BLANK/QC DATA

EPA 900.0 MOD

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<u>Batch: 105073 Extracted: 04/15/10</u>											
Matrix Spike Analyzed: 04/26/2010 (F0D140466001S)						Source: F0D140466001					
Gross Alpha	49.4	3	1.1	pCi/L	49.4	2.1	96	35-150			
Gross Beta	75.6	4	1.1	pCi/L	67.8	2.76	108	54-150			
Duplicate Analyzed: 04/27/2010 (F0D140466001X)						Source: F0D140466001					
Gross Alpha	2.1	3	1.1	pCi/L		2.1	-				Jb
Gross Beta	2.86	4	1.1	pCi/L		2.76	-				Jb
Blank Analyzed: 04/26/2010 (F0D150000073B)						Source:					
Gross Alpha	0.27	3	0.83	pCi/L			-				U
Gross Beta	-0.09	4	0.95	pCi/L			-				U
LCS Analyzed: 04/26/2010 (F0D150000073C)						Source:					
Gross Alpha	51.1	3	1.3	pCi/L	49.4		103	62-134			
Gross Beta	69.5	4	1	pCi/L	67.8		102	58-133			
<u>Batch: 98090 Extracted: 04/08/10</u>											
Matrix Spike Analyzed: 04/16/2010 (F0D070407001S)						Source: F0D070407001					
Gross Alpha	55.2	3	1.3	pCi/L	49.4	0.51	110	35-150			
Gross Beta	70.6	4	1	pCi/L	67.8	1.2	102	54-150			
Duplicate Analyzed: 04/16/2010 (F0D070407001X)						Source: F0D070407001					
Gross Alpha	0.43	3	1.3	pCi/L		0.51	-				U
Gross Beta	0.54	4	1.1	pCi/L		1.2	-				U
Blank Analyzed: 04/16/2010 (F0D080000090B)						Source:					
Gross Alpha	0.21	2	0.83	pCi/L			-				U
Gross Beta	-0.33	4	0.95	pCi/L			-				U

TestAmerica Irvine

Debby Wilson
Project Manager

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD0278

Sampled: 04/05/10-04/06/10
Received: 04/05/10

METHOD BLANK/QC DATA

EPA 900.0 MOD

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 98090 Extracted: 04/08/10											
LCS Analyzed: 04/16/2010 (F0D08000090C)											
Gross Alpha	52.3	3	1.3	pCi/L	49.4		106	62-134			
Gross Beta	67	4	1	pCi/L	67.8		99	58-133			

TestAmerica Irvine

Debby Wilson
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 TestAmerica.

ITD0278 <Page 29 of 37>

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009
 Report Number: ITD0278

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

METHOD BLANK/QC DATA

EPA 901.1 MOD

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<u>Batch: 103219 Extracted: 04/13/10</u>											
Duplicate Analyzed: 04/14/2010 (F0D070495002X)						Source: ITD0278-03					
Cesium 137	-0.7	20	12	pCi/L		3	-				U
Potassium 40	-100	NA	200	pCi/L		-140	-				U
Blank Analyzed: 04/13/2010 (F0D130000219B)						Source:					
Cesium 137	-0.4	20	17	pCi/L			-				U
Potassium 40	50	NA	170	pCi/L			-				U
LCS Analyzed: 04/19/2010 (F0D130000219C)						Source:					
Americium 241	145000	NA	400	pCi/L	143000		102	87-110			
Cobalt 60	87400	NA	200	pCi/L	91800		95	89-110			
Cesium 137	54700	20	200	pCi/L	57000		96	90-110			
<u>Batch: 98345 Extracted: 04/08/10</u>											
Duplicate Analyzed: 05/06/2010 (F0D070524001X)						Source: F0D070524001					
Cesium 137	0.3	20	19	pCi/L		1.1	-				U
Potassium 40	-90	NA	200	pCi/L		-40	-				U
Blank Analyzed: 05/01/2010 (F0D080000345B)						Source:					
Cesium 137	3.5	20	13	pCi/L			-				U
Potassium 40	-80	NA	200	pCi/L			-				U
LCS Analyzed: 05/03/2010 (F0D080000345C)						Source:					
Americium 241	131000	NA	500	pCi/L	141000		93	87-110			
Cobalt 60	79500	NA	200	pCi/L	87900		90	89-110			
Cesium 137	48400	20	200	pCi/L	53100		91	90-110			

TestAmerica Irvine

Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009
 Report Number: ITD0278

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

METHOD BLANK/QC DATA

EPA 903.0 MOD

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<u>Batch: 100043 Extracted: 04/10/10</u>											
Blank Analyzed: 05/05/2010 (F0D10000043B)						Source:					
Radium (226)	0.071	1	0.13	pCi/L			-				U
LCS Analyzed: 05/05/2010 (F0D10000043C)						Source:					
Radium (226)	10.9	1	0.2	pCi/L	11.3		97	68-136			
LCS Dup Analyzed: 05/05/2010 (F0D10000043L)						Source:					
Radium (226)	12.2	1	0.1	pCi/L	11.3		109	68-136	12	40	
<u>Batch: 98325 Extracted: 04/08/10</u>											
Blank Analyzed: 04/30/2010 (F0D080000325B)						Source:					
Radium (226)	0.055	1	0.14	pCi/L			-				U
LCS Analyzed: 04/30/2010 (F0D080000325C)						Source:					
Radium (226)	9.6	1	0.2	pCi/L	11.3		85	68-136			
LCS Dup Analyzed: 04/30/2010 (F0D080000325L)						Source:					
Radium (226)	9.62	1	0.14	pCi/L	11.3		85	68-136	0.5	40	

TestAmerica Irvine

Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009
 Report Number: ITD0278

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

METHOD BLANK/QC DATA

EPA 904 MOD

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<u>Batch: 100044 Extracted: 04/10/10</u>											
Blank Analyzed: 05/05/2010 (F0D10000044B)											
Radium 228	0.1	1	0.6	pCi/L				-			U
LCS Analyzed: 05/05/2010 (F0D10000044C)											
Radium 228	5.6	1	0.59	pCi/L	6.33		88	60-142			
LCS Dup Analyzed: 05/05/2010 (F0D10000044L)											
Radium 228	6.21	1	0.62	pCi/L	6.33		98	60-142	10	40	
<u>Batch: 98327 Extracted: 04/08/10</u>											
Blank Analyzed: 04/30/2010 (F0D080000327B)											
Radium 228	0.31	1	0.54	pCi/L				-			U
LCS Analyzed: 04/30/2010 (F0D080000327C)											
Radium 228	5.49	1	0.69	pCi/L	6.34		87	60-142			
LCS Dup Analyzed: 04/30/2010 (F0D080000327L)											
Radium 228	5.49	1	0.52	pCi/L	6.34		87	60-142	0.07	40	

TestAmerica Irvine

Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009
 Report Number: ITD0278

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

METHOD BLANK/QC DATA

EPA 905 MOD

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	Limit	RPD	RPD Limit	Data Qualifiers
<u>Batch: 100045 Extracted: 04/10/10</u>											
Blank Analyzed: 04/20/2010 (F0D100000045B)											
Strontium 90	0.06	3	0.38	pCi/L			-				U
LCS Analyzed: 04/20/2010 (F0D100000045C)											
Strontium 90	7.41	3	0.4	pCi/L	6.77		109	80-130			
LCS Dup Analyzed: 04/20/2010 (F0D100000045L)											
Strontium 90	6.77	3	0.34	pCi/L	6.77		100	80-130	9	40	
<u>Batch: 98328 Extracted: 04/08/10</u>											
Blank Analyzed: 04/20/2010 (F0D080000328B)											
Strontium 90	0.18	3	0.4	pCi/L			-				U
LCS Analyzed: 04/20/2010 (F0D080000328C)											
Strontium 90	6.01	3	0.39	pCi/L	6.77		89	80-130			
LCS Dup Analyzed: 04/20/2010 (F0D080000328L)											
Strontium 90	6.78	3	0.36	pCi/L	6.77		100	80-130	12	40	

TestAmerica Irvine

Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD0278

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

METHOD BLANK/QC DATA

EPA 906.0 MOD

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 112082 Extracted: 04/22/10											
Duplicate Analyzed: 04/22/2010 (F0D070495001X)						Source: ITD0278-02					
Tritium	30	500	330	pCi/L		80		-			U
Matrix Spike Analyzed: 04/22/2010 (F0D070495002S)						Source: ITD0278-03					
Tritium	4610	500	330	pCi/L	4490	170	99	62-147			
Blank Analyzed: 04/22/2010 (F0D220000082B)						Source:					
Tritium	-80	500	330	pCi/L				-			U
LCS Analyzed: 04/22/2010 (F0D220000082C)						Source:					
Tritium	4600	500	330	pCi/L	4490		102	85-112			

TestAmerica Irvine

Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD0278

Sampled: 04/05/10-04/06/10
Received: 04/05/10

DATA QUALIFIERS AND DEFINITIONS

B	Method blank contamination. The associated method blank contains the target analyte at a reportable level.
J	Estimated result. Result is less than the reporting limit.
Ja	Estimated value. Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). The user of this data should be aware that this data is of limited reliability.
Jb	Result is greater than sample detection limit but less than stated reporting limit.
MHA	Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).
MNR1	There was no MS/MSD analyzed with this batch due to insufficient sample volume. See Blank Spike/Blank Spike Duplicate.
Q	Estimated maximum possible concentration (EMPC).
U	Result is less than the sample detection limit.
ND	Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
RPD	Relative Percent Difference

TestAmerica Irvine

Debby Wilson
Project Manager

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD0278

Sampled: 04/05/10-04/06/10
Received: 04/05/10

Certification Summary

TestAmerica Irvine

Method	Matrix	Nelac	California
EPA 1664A	Water	X	X
EPA 200.8-Diss	Water	X	X
EPA 200.8	Water	X	X
EPA 245.1-Diss	Water	X	X
EPA 245.1	Water	X	X
EPA 300.0	Water	X	X
SM2540C	Water	X	

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

Subcontracted Laboratories

EMS Laboratories *California Cert #1119*

117 W. Bellevue Drive - Pasadena, CA 91105

Analysis Performed: Asbestos-TEM (100.2 - DW)
Samples: ITD0278-02

TestAmerica St. Louis

13715 Rider Trail North - Earth City, MO 63045

Method Performed: ASTM 5174-91
Samples: ITD0278-02, ITD0278-03

Method Performed: EPA 900.0 MOD
Samples: ITD0278-02, ITD0278-03

Method Performed: EPA 901.1 MOD
Samples: ITD0278-02, ITD0278-03

Method Performed: EPA 903.0 MOD
Samples: ITD0278-02, ITD0278-03

Method Performed: EPA 904 MOD
Samples: ITD0278-02, ITD0278-03

Method Performed: EPA 905 MOD
Samples: ITD0278-02, ITD0278-03

Method Performed: EPA 906.0 MOD
Samples: ITD0278-02, ITD0278-03

TestAmerica Irvine

Debby Wilson
Project Manager

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD0278

Sampled: 04/05/10-04/06/10
Received: 04/05/10

TestAmerica West Sacramento

880 Riverside Parkway - West Sacramento, CA 95605

Method Performed: EPA-5 1613B
Samples: ITD0278-02

TestAmerica Irvine

Debby Wilson
Project Manager

ITD 0278

Client Name/Address: MVW-Arcadia 618 Michillinda Ave, Suite 200 Arcadia, CA 91007 Test America Contact: Joseph Doak		Project: Boeing-SSFL NPDES Routine Outfall 009 GRAB Stormwater at WS-13		ANALYSIS REQUIRED										Field readings: Temp °F = 50.50 pH = 6.76 Time of readings = 08:40
Project Manager: Bronwyn Kelly R. SIMON Sample: M. ZHEL I		Phone Number: (626) 568-6691 Fax Number: (626) 568-6515		Oil & Grease (1664-HEM)										Comments
Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservative	Bottle #								
Outfall 009	W	1L Amber	2	4-5-2010 08:40	HCl	1A, 1B								
These Samples are the Grab Portion of Outfall 009 for this storm event. Composite samples will follow and are to be added to this work order.														
Relinquished By <i>Neil P...</i>	4-5-2010	Date/Time	Received By <i>Mark Chung</i>	4-5-10 14:20	Date/Time									
Relinquished By <i>Mark Chung</i>	4-5-10 17:30	Date/Time	Received By <i>Vin Bohan</i>	4/5/10 17:30	Date/Time									
Relinquished By		Date/Time	Received By		Date/Time									

5V08 1.9

Client Name/Address:
 MWH-Arcadia
 618 Michillinda Ave, Suite 200
 Arcadia, CA 91007

Test America Contact: Joseph Doak

Project:
 Boeing-SSFL NPDES
 Routine Outfall 009
 COMPOSITE
 Stormwater at WS-13

Project Manager: Bronwyn Kelly
M. S. Kelly

Phone Number:
 (626) 568-6691

Sampler: *R. Sandell*
 Fax Number:
 (626) 568-6515

Sample Description	Sample Matrix	Container Type	# of Cont.	Preservative	Bottle #
Outfall 009	W	1L Poly	1	HNO ₃	2A
Outfall 009 Dup	W	1L Poly	1	HNO ₃	2B
Outfall 009	W	1L Amber	2	None	3A, 3B
Outfall 009	W	500 mL Poly	2	None	4A, 4B
Outfall 009	W	500 mL Poly	1	None	5
Outfall 009	W	2.5 Gal Cube	1	None	6A
Outfall 009	W	500 mL Amber	1	None	6B
Outfall 009	W	1 Gal Poly	1	None	7
Outfall 009	W	1L Poly	1	None	8

ANALYSIS REQUIRED		Total Recoverable Metals: Sb, Cd, Cu, Pb, Hg, Tl	TCDD (and all congeners)	Cl ⁻ , SO ₄ ²⁻ , NO ₃ ⁻ , NO ₂ ⁻ , Perchlorate	TDS	Gross Alpha(900.0), Gross Beta(900.0), Tritium (H-3) (906.0), Sr-90 (905.0), Total Radium 226 (903.0 or 903.1) & Radium 228 (904.0), Uranium (908.0), K-40, CS-137 (901.0 or 901.1)	Chronic Toxicity	Total Dissolved Metals: Sb, Cd, Cu, Pb, Hg, Tl	Comments
		X							High Flow
			X						
				X					
					X				
						X			
									Unfiltered and unpreserved analysis
							X		Only test if first or second rain events of the year
								X	Filter w/in 24hrs of receipt at lab

COC Page 2 of 2 are the composite samples for Outfall 009 for this storm event.

These must be added to the same work order for COC Page 1 of 2 for Outfall 009 for the same event.

Relinquished By <i>Paul S...</i>	Date/Time: 4-5-10 10:10	Received By <i>Matt D...</i>	Date/Time: 4-5-10 14:00
Relinquished By <i>Matt D...</i>	Date/Time: 4-5-10 17:30	Received By	Date/Time:
Relinquished By	Date/Time:	Received By	Date/Time:

Turn-around time: (Check)
 24 Hour: _____ 72 Hour: _____ 10 Day: _____
 48 Hour: _____ 5 Day: _____ Normal:

Sample Integrity: (Check)
 Intact: _____ On Ice:

Data Requirements: (Check)
 No Level IV: _____ All Level IV: _____ NPDES Level IV:

SV08 1.9

ADDITIONAL ANALYSIS REQUEST FORM

Date: 4/10/10 Project Manager: Heather Clark

Client: MWH Pasadena/Boeing Contact: Bronwyn Kelly

Project: Routine Outfall 009

Date Sampled: 4/5/10 Date Received: 4/5/10

Request Via:

Telephone
 COC Form
 Fax
 E-mail
 Other

Status:

In Progress
 Completed
 Received Today
 Received Yesterday
 On Hold
 Other

Turn Around Time:

Same Day
 24HR
 48HR
 3Day
 5Day
 Standard
 No Rush Charge

Work Order Number	Sample Description	Analysis Requested	Special Requirements
HDO278-02	Outfall 009 (composite)	Asbestos STEM-100.2 (DW)	- please send to EMS laboratories

0.0
4/16/10
15:45

DATE: April 14, 2010
CUSTOMER: Test America, Irvine
17461 Derian Avenue, Suite 100
Irvine, CA 92614
ATTENTION: Heather Clark
REPORT NO: 136820
REFERENCE: ITD0278
SUBJECT: ANALYSIS OF WATER SAMPLES FOR ASBESTOS BY TEM
ACCREDITATION: California Dept. of Health Services ELAP 1119

The date and times of collection, receipt, filtration, and analysis are as follows:

SAMPLE NO: ITD0278-01
DATE COLLECTED: 4/5/10 at 1158
RECEIVED: 4/7/10 at 1020
FILTERED: 4/7/10 at 1107
ANALYZED: 4/9/10

The sample was analyzed for fibers >10 um to conform with the drinking water document, EPA 600 E 94 134, 100.2. This regulation calls for an MCL (maximum contaminant level) of 7 MFL (millions of fibers per liter) and an analytical sensitivity of 0.2 MFL.

The analytical sensitivity of 0.2 MFL was not reached due to turbidity.

The results of the analysis and the detection limit(s) are summarized on the following page(s), accompanied by the chain of custody.

Respectfully submitted,
EMS Laboratories, Inc.



B.M. Kolk
Laboratory Director
BMK/mt

*Note: The report shall not be reproduced, except in full, without the written approval of EMS Laboratories, Inc.
Note: The results of the analysis are based upon the sample submitted to the laboratory. No representation is made regarding the sampling area other than that implied by the analytical results for the immediate vicinity of the samples analyzed as calculated from the data presented with those samples. All the analytical quality control data meet the requirement of the procedure unless otherwise indicated. Any deviation or exclusion from the test method is noted in this cover letter. Unless otherwise noted in this cover letter the samples were received properly packaged, clearly identified and intact.*

ANALYSIS OF WATER BY TEM (EPA-600 R 94 134) EPA 100.2

LAB NO: 136820
 CLIENT: Test America
 4/9/2010

Laboratory I.D.	Client I.D.	FILTER MEDIA DATA			No. of G.O.	Analyzed Area, mm ²	Sample Volume (ml)
		Type	Diameter mm	Effective Area mm ²			
136820-1	ITD0278-01*	PC	47	1017	10	0.094	8

* FOR FIBERS > 10um ONLY

ANALYTICAL RESULTS

Laboratory I.D.	Client I.D.	No. of Asbestos Str.			Detection Limit (MFL)	CONCENTRATION (MFL)		
		All Sizes	5-9.9um	>10um		All Sizes	5-9.9um	>10um
136820-1	ITD0278-01*	-	-	N.D.	1.4	-	-	< 1.4

* FOR FIBERS > 10um ONLY

The analysis was carried out to the approved TEM method. This laboratory is in compliance with the quality specified by the method.


 Authorized Signature

- PC - Polycarbonate
- MCE - Mixed cellulose ester
- G.O. - Grid Openings
- Str - Structures
- MFL - Millions of fibers per liter

TEM-7A (2009Rev.)

**Analysis of Water by Transmission Electron Microscopy
(EPA-600 R 94 134) EPA 100.2**

EMS No. 136820 **Client** Test America
Sample No. ITD0278-01 **Date Analyzed** 4/9/2010

Fibers > 10 µm in length (chrysotile)	<u>BDL*</u>	MFL
Mass (chrysotile)	<u>0</u>	ug/L
More/Less than 5 Fibers in Sample (chrysotile)	<u>LESS</u>	
Poisson 95% Confidence Interval	<u>0 to 5</u>	MFL
Detection Limit	<u>1.4</u>	MFL

* BDL : Below Detection Limit; MFL: Million Fibers per Liter

Particle Size Distribution (Chrysotile)

Particle Length - Microns							
O - 0.49	0.50 - 0.99	1.00 - 1.49	1.50 - 1.99	2.00 - 2.49	2.5 - 4.99	5.00 - 9.99	10 & UP
<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Particle Width - Microns							
O - .04	.05 - .09	.1 - .14	.15 - .19	.2 - .24	.25 - .49	.50 - .99	1 & UP
<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Aspect Ratio L/W							
0 - 9.9	10 - 19.9	20 - 29.9	30 - 39.9	40 - 49.9	50 - 99	100 - 199	200 & UP
<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

TEM 7B (1994)

**Analysis of Water by Transmission Electron Microscopy
(EPA-600/4-83-043)**

EMS No. 136820 **Date Analyzed** 4/9/2010
Client Test America
Sample No. EMS BLANK

Fibers (chrysotile)	<u>ND</u>	MFL
> 5 Micron length (chrysotile)	<u>ND</u>	MFL
Mass (chrysotile)	<u>0</u>	ug/L
More/Less than 5 Fibers in Sample (chrysotile)	<u>LESS</u>	
Sensitivity Level	<u>0.01</u>	MFL

Particle Size Distribution (Chrysotile)

Particle Length - Microns					
0 - 0.49	0.50 - 0.99	1.00 - 1.49	1.50 - 1.99	2.00 - 2.49	2.5 & UP
<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Particle Width - Microns					
0 - .04	.05 - .09	.1 - .14	.15 - .19	.2 - .24	.25 & UP
<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Aspect Ratio L/W					
0 - 9.9	10 - 19.9	20 - 29.9	30 - 39.9	40 - 49.9	50 & UP
<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>



TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

PROJECT NO. ITD0278

ITD0278

Lot #: F0D070495

Debbie Wilson

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

TESTAMERICA LABORATORIES, INC.



Lynn Fussner
Project Manager

May 6, 2010

Case Narrative
LOT NUMBER: F0D070495

This report contains the analytical results for the two samples received under chain of custody by TestAmerica St. Louis on April 7, 2010. These samples are associated with your ITD0278 project.

The analytical results included in this report meet all applicable quality control procedure requirements, except as noted below

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

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

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

Observations/Nonconformances

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

Sample preparation was started in the TestAmerica Irvine laboratory prior to shipment of the samples to the TestAmerica St. Louis laboratory. The initial sample preparation consisted of acidification of samples to a pH less than 2 with Nitric Acid. Documentation of the acidification is attached in the Preparation Log.

Radium-226 by GFPC (EPA 903.0 MOD)

There was insufficient sample volume to perform MS/MSD analysis. A LCS/LCSD was performed to demonstrate accuracy and replicate precision.

Affected Samples:

F0D070495 (1): ITD0278-02
F0D070495 (2): ITD0278-03

Radium-228 by GFPC (EPA 904 MOD)

There was insufficient sample volume to perform MS/MSD analysis. A LCS/LCSD was performed to demonstrate accuracy and replicate precision.

Affected Samples:

F0D070495 (1): ITD0278-02
F0D070495 (2): ITD0278-03

H-3 by Distillation & LSC (906.0 MOD)

Tritium samples were received in non amber glass bottles.

Affected Samples:

F0D070495 (1): ITD0278-02
F0D070495 (2): ITD0278-03

Preparation Log (initial pH adjustment)

Laboratory: TestAmerica Irvine

Method: Radium 226/228 by 903.0/904.0

Analyst: Francis Kocher

Nitric Acid Lot #: H51022 Metallinckrodt CHEMICALS

DATE: 04/06/10

Lab Sample Number	Sample Volume (L)	Nitric Acid Volume added (ml)	Time	Check pH < 2	Comments
ITD0278-07H	10	40	11:57	yes	
ITD0281-02H	10	40	11:58	yes	
ITD02817278	10	40	12:03	yes	5.0 blank

pH Adjustment Log
 pH Adjustment Log.xls
 Revision 0, 03/26/2010

METHODS SUMMARY

F0D070495

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

References:

ASTM Annual Book Of ASTM Standards.

EPA "EASTERN ENVIRONMENTAL RADIATION FACILITY RADIOCHEMISTRY
PROCEDURES MANUAL" US EPA EPA 520/5-84-006 AUGUST 1984

SAMPLE SUMMARY

F0D070495

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
LXL72	001	ITD0278-02	04/05/10	11:58
LXL76	002	ITD0278-03	04/06/10	12:03

NOTE (S) :

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

TestAmerica Irvine

Client Sample ID: ITD0278-02

Radiochemistry

Lab Sample ID: FOD070495-001
 Work Order: LXL72
 Matrix: WATER

Date Collected: 04/05/10 1158
 Date Received: 04/07/10 0915

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	mdc	Prep Date	Analysis Date
Gamma Cs-137 & Hits by EPA 901.1 MOD							
				pCi/L		Batch # 0098345	Yld %
Cesium 137	0.6	U	8.7	20.0	16	04/08/10	05/06/10
Potassium 40	-40	U	170		210	04/08/10	05/06/10
Gross Alpha/Beta EPA 900							
				pCi/L		Batch # 0098090	Yld %
Gross Alpha	0.84	U	0.70	3.00	1.0	04/08/10	04/16/10
Gross Beta	1.91	J	0.80	4.00	1.1	04/08/10	04/16/10
SR-90 BY GFPC EPA-905 MOD							
				pCi/L		Batch # 0098328	Yld % 79
Strontium 90	0.20	U	0.26	3.00	0.43	04/08/10	04/20/10
TRITIUM (Distill) by EPA 906.0 MOD							
				pCi/L		Batch # 0112082	Yld %
Tritium	80	U	190	500	330	04/22/10	04/22/10
Total Uranium by KPA ASTM 5174-91							
				pCi/L		Batch # 0098114	Yld %
Total Uranium	0.317	J	0.036	0.677	0.21	04/08/10	04/13/10
Radium 226 by EPA 903.0 MOD							
				pCi/L		Batch # 0098325	Yld % 100
Radium (226)	0.041	U	0.074	1.00	0.13	04/08/10	04/30/10
Radium 228 by GFPC EPA 904 MOD							
				pCi/L		Batch # 0098327	Yld % 92
Radium 228	0.08	U	0.31	1.00	0.53	04/08/10	04/30/10

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC.

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

U Result is less than the sample detection limit.

TestAmerica Irvine

Client Sample ID: ITD0278-03

Radiochemistry

Lab Sample ID: F0D070495-002
 Work Order: LXL76
 Matrix: WATER

Date Collected: 04/06/10 1203
 Date Received: 04/07/10 0915

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	mdc	Prep Date	Analysis Date
Gamma Cs-137 & Hits by EPA 901.1 MOD				pCi/L		Batch # 0103219	Yld %
Cesium 137	3.0	U	6.6	20.0	11	04/13/10	04/13/10
Potassium 40	-140	U	530		210	04/13/10	04/13/10
Gross Alpha/Beta EPA 900				pCi/L		Batch # 0105073	Yld %
Gross Alpha	1.11	J	0.71	3.00	0.92	04/15/10	04/26/10
Gross Beta	2.5	J	1.1	4.0	1.6	04/15/10	04/26/10
SR-90 BY GFPC EPA-905 MOD				pCi/L		Batch # 0100045	Yld % 75
Strontium 90	0.20	U	0.40	3.00	0.67	04/10/10	04/20/10
TRITIUM (Distill) by EPA 906.0 MOD				pCi/L		Batch # 0112082	Yld %
Tritium	170	U	200	500	330	04/22/10	04/22/10
Total Uranium by KPA ASTM 5174-91				pCi/L		Batch # 0119221	Yld %
Total Uranium	0.185	U	0.023	0.677	0.21	04/29/10	05/03/10
Radium 226 by EPA 903.0 MOD				pCi/L		Batch # 0100043	Yld % 109
Radium (226)	0.14	U	0.15	1.00	0.23	04/10/10	05/05/10
Radium 228 by GFPC EPA 904 MOD				pCi/L		Batch # 0100044	Yld % 108
Radium 228	-0.09	U	0.38	1.00	0.67	04/10/10	05/05/10

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC.

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

U Result is less than the sample detection limit.

METHOD BLANK REPORT

Radiochemistry

Client Lot ID: FOD070495
 Matrix: WATER

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDC	Prep Date	Lab Sample ID Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD							
Tritium	-80	U	180	500	330	04/22/10	FOD220000-082B 04/22/10
Total Uranium by KPA ASTM 5174-91							
Total Uranium	0.213	J	0.026	0.677	0.21	04/29/10	FOD290000-221B 05/03/10
Gross Alpha/Beta EPA 900							
Gross Alpha	0.27	U	0.48	3.00	0.83	04/15/10	FOD150000-073B 04/26/10
Gross Beta	-0.09	U	0.53	4.00	0.95	04/15/10	04/26/10
Total Uranium by KPA ASTM 5174-91							
Total Uranium	0.267	J	0.033	0.677	0.21	04/08/10	FOD080000-114B 04/13/10
Gross Alpha/Beta EPA 900							
Gross Alpha	0.21	U	0.46	2.00	0.83	04/08/10	FOD080000-090B 04/16/10
Gross Beta	-0.33	U	0.50	4.00	0.95	04/08/10	04/16/10
Radium 226 by EPA 903.0 MOD							
Radium (226)	0.055	U	0.084	1.00	0.14	04/08/10	FOD080000-325B 04/30/10
Radium 228 by GFPC EPA 904 MOD							
Radium 228	0.31	U	0.33	1.00	0.54	04/08/10	FOD080000-327B 04/30/10
SR-90 BY GFPC EPA-905 MOD							
Strontium 90	0.18	U	0.25	3.00	0.40	04/08/10	FOD080000-328B 04/20/10
Gamma Cs-137 & Hits by EPA 901.1 MOD							
Cesium 137	3.5	U	7.4	20.0	13	04/08/10	FOD080000-345B 05/01/10
Potassium 40	-80	U	350		200	04/08/10	05/01/10
Radium 226 by EPA 903.0 MOD							
Radium (226)	0.071	U	0.084	1.00	0.13	04/10/10	FOD100000-043B 05/05/10
Radium 228 by GFPC EPA 904 MOD							
Radium 228	0.10	U	0.35	1.00	0.60	04/10/10	FOD100000-044B 05/05/10
SR-90 BY GFPC EPA-905 MOD							
Strontium 90	0.06	U	0.22	3.00	0.38	04/10/10	FOD100000-045B 04/20/10
Gamma Cs-137 & Hits by EPA 901.1 MOD							
Cesium 137	-0.4	U	9.3	20.0	17	04/13/10	FOD130000-219B 04/13/10
Potassium 40	50	U	100		170	04/13/10	04/13/10

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined using instrument performance only

Bold results are greater than the MDC.

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

U Result is less than the sample detection limit.

Laboratory Control Sample Report

Radiochemistry

Client Lot ID: FOD070495
 Matrix: WATER

Parameter	Spike Amount	Result	Total Uncert. (2 σ +/-)	MDC	% Yld	% Rec	Lab Sample ID QC Control Limits
Gross Alpha/Beta EPA 900							
Gross Alpha	49.4	52.3	5.8	900.0 MOD		106	FOD080000-090C (62 - 134)
	Batch #:	0098090		Analysis Date:	04/16/10		
Gross Alpha/Beta EPA 900							
Gross Beta	67.8	67.0	5.7	900.0 MOD		99	FOD080000-090C (58 - 133)
	Batch #:	0098090		Analysis Date:	04/16/10		
Total Uranium by KPA ASTM 5174-91							
Total Uranium	27.1	29.0	3.5	5174-91		107	FOD080000-114C (90 - 120)
	Batch #:	0098114		Analysis Date:	04/13/10		
Total Uranium by KPA ASTM 5174-91							
Total Uranium	5.42	5.69	0.59	5174-91		105	FOD080000-114C (90 - 120)
	Batch #:	0098114		Analysis Date:	04/13/10		
Gamma Cs-137 & Hits by EPA 901.1 MOD							
Americium 241	141000	131000	10000	901.1 MOD		93	FOD080000-345C (87 - 110)
Cesium 137	53100	48400	2800			91	(90 - 110)
Cobalt 60	87900	79500	4500			90	(89 - 110)
	Batch #:	0098345		Analysis Date:	05/03/10		
Gamma Cs-137 & Hits by EPA 901.1 MOD							
Americium 241	143000	145000	12000	901.1 MOD		102	FOD130000-219C (87 - 110)
Cesium 137	57000	54700	3300			96	(90 - 110)
Cobalt 60	91800	87400	5000			95	(89 - 110)
	Batch #:	0103219		Analysis Date:	04/19/10		
Gross Alpha/Beta EPA 900							
Gross Beta	67.8	69.5	5.9	900.0 MOD		102	FOD150000-073C (58 - 133)
	Batch #:	0105073		Analysis Date:	04/26/10		
Gross Alpha/Beta EPA 900							
Gross Alpha	49.4	51.1	5.8	900.0 MOD		103	FOD150000-073C (62 - 134)
	Batch #:	0105073		Analysis Date:	04/26/10		
TRITIUM (Distill) by EPA 906.0 MOD							
Tritium	4490	4600	490	906.0 MOD		102	FOD220000-082C (85 - 112)
	Batch #:	0112082		Analysis Date:	04/22/10		
Total Uranium by KPA ASTM 5174-91							
Total Uranium	27.1	29.6	3.6	5174-91		109	FOD290000-221C (90 - 120)
	Batch #:	0119221		Analysis Date:	05/03/10		
Total Uranium by KPA ASTM 5174-91							
Total Uranium	5.42	6.02	0.62	5174-91		111	FOD290000-221C (90 - 120)
	Batch #:	0119221		Analysis Date:	05/03/10		

NOTE(S)

MDC is determined by instrument performance only

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

Laboratory Control Sample/LCS Duplicate Report

Radiochemistry

Client Lot ID: F0D070495
 Matrix: WATER

Parameter	Spike Amount	Result	Total Uncert. (2 σ +/-)	% Yld	% Rec	Lab Sample ID	
						QC Control Limits	Precision
Radium 226 by EPA 903.0 MOD		pCi/L	903.0 MOD			F0D080000-325C	
Radium (226)	11.3	9.6	1.0	75	85	(68 - 136)	
Spk 2	11.3	9.62	0.97	109	85	(68 - 136)	0.5 %RPD
	Batch #:	0098325		Analysis Date:	04/30/10		
Radium 228 by GFPC EPA 904 MOD		pCi/L	904 MOD			F0D080000-327C	
Radium 228	6.34	5.49	0.78	72	87	(60 - 142)	
Spk 2	6.34	5.49	0.68	104	87	(60 - 142)	0.07 %RPD
	Batch #:	0098327		Analysis Date:	04/30/10		
SR-90 BY GFPC EPA-905 MOD		pCi/L	905 MOD			F0D080000-328C	
Strontium 90	6.77	6.01	0.74	78	89	(80 - 130)	
Spk 2	6.77	6.78	0.78	81	100	(80 - 130)	12 %RPD
	Batch #:	0098328		Analysis Date:	04/20/10		
Radium 226 by EPA 903.0 MOD		pCi/L	903.0 MOD			F0D100000-043C	
Radium (226)	11.3	10.9	1.1	107	97	(68 - 136)	
Spk 2	11.3	12.2	1.2	102	109	(68 - 136)	12 %RPD
	Batch #:	0100043		Analysis Date:	05/05/10		
Radium 228 by GFPC EPA 904 MOD		pCi/L	904 MOD			F0D100000-044C	
Radium 228	6.33	5.60	0.74	99	88	(60 - 142)	
Spk 2	6.33	6.21	0.79	98	98	(60 - 142)	10 %RPD
	Batch #:	0100044		Analysis Date:	05/05/10		
SR-90 BY GFPC EPA-905 MOD		pCi/L	905 MOD			F0D100000-045C	
Strontium 90	6.77	7.41	0.85	76	109	(80 - 130)	
Spk 2	6.77	6.77	0.77	82	100	(80 - 130)	9 %RPD
	Batch #:	0100045		Analysis Date:	04/20/10		

NOTE(S)

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

MATRIX SPIKE REPORT

Radiochemistry

Client Lot Id: FOD070495
 Matrix: WATER

Date Sampled: 04/06/10
 Date Received: 04/07/10

Parameter	Spike Amount	Spike Result	Total Uncert. (2σ+/-)	Spike Yld.	Sample Result	Total Uncert. (2σ+/-)	QC Sample ID		QC Control Limits
							%YLD	%REC	
TRITIUM (Distill) by EPA 906.0 MOD			pCi/L		906.0 MOD				FOD070495-002
Tritium	4490	4610	490		170	200		99	(62 - 147)
	Batch #:	0112082		Analysis Date:	04/22/10				
Gross Alpha/Beta EPA 900			pCi/L		900.0 MOD				FOD070407-001
Gross Beta	67.8	70.6	6.0		1.20	0.78		102	(54 - 150)
	Batch #:	0098090		Analysis Date:	04/16/10				
Gross Alpha/Beta EPA 900			pCi/L		900.0 MOD				FOD070407-001
Gross Alpha	49.4	55.2	6.4		0.51	0.64		110	(35 - 150)
	Batch #:	0098090		Analysis Date:	04/16/10				
Gross Alpha/Beta EPA 900			pCi/L		900.0 MOD				FOD140466-001
Gross Beta	67.8	75.6	6.4		2.76	0.83		108	(54 - 150)
	Batch #:	0105073		Analysis Date:	04/26/10				
Gross Alpha/Beta EPA 900			pCi/L		900.0 MOD				FOD140466-001
Gross Alpha	49.4	49.4	5.7		2.1	1.0		96	(35 - 150)
	Batch #:	0105073		Analysis Date:	04/26/10				

NOTE(S)

Data are incomplete without the case narrative.

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

MATRIX SPIKE/MATRIX SPIKE DUPLICATE REPORT

Radiochemistry

Client Lot ID: F0C270425
 Matrix: WATER

Date Sampled: 03/25/10 0950
 Date Received: 03/27/10 0815

Parameter	Spike Amount	SPIKE Result	Total Uncert. (2 σ +/-)	Spike Yld	SAMPLE Result	Total Uncert. (2 σ +/-)	QC Sample ID		QC Control Limits
							% Yld	% Rec	
Total Uranium by KPA ASTM 5			pCi/L	5174-91			F0C270425-001		
Total Uranium	27.1	29.3	3.5		1.61	0.17		102	(62 - 150)
Spk2	27.1	29.9	3.6		1.61	0.17		104	(62 - 150)
							Precision:	2	%RPD
Batch #:			0098114	Analysis date:		04/13/10			
Total Uranium by KPA ASTM 5			pCi/L	5174-91			F0D070495-002		
Total Uranium	27.1	30.1	3.6		0.185 U	0.023		110	(62 - 150)
Spk2	27.1	29.9	3.6		0.185 U	0.023		110	(62 - 150)
							Precision:	0.7	%RPD
Batch #:			0119221	Analysis date:		05/03/10			

NOTE(S)

Data are incomplete without the case narrative.

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

U Result is less than the sample detection limit.

DUPLICATE EVALUATION REPORT

Radiochemistry

Client Lot ID: FOD070495
 Matrix: WATER

Date Sampled: 04/05/10
 Date Received: 04/07/10

Parameter	SAMPLE Result		Total Uncert. (2σ +/-)	% Yld	DUPLICATE Result		Total Uncert. (2σ +/-)	% Yld	QC Sample ID Precision
TRITIUM (Distill) by EPA 906.0 MOD				pCi/L	906.0 MOD				FOD070495-001
Tritium	80	U	190		30	U	190		82 %RPD
	Batch #:		0112082 (Sample)		0112082 (Duplicate)				
Gamma Cs-137 & Hits by EPA 901.1 MOD				pCi/L	901.1 MOD				FOD070495-002
Cesium 137	3.0	U	6.6		-0.7	U	6.8		332 %RPD
Potassium 40	-140	U	530		-100	U	12000		14 %RPD
	Batch #:		0103219 (Sample)		0103219 (Duplicate)				
Gross Alpha/Beta EPA 900				pCi/L	900.0 MOD				FOD070407-001
Gross Alpha	0.51	U	0.64		0.43	U	0.77		18 %RPD
Gross Beta	1.20	J	0.78		0.54	U	0.66		76 %RPD
	Batch #:		0098090 (Sample)		0098090 (Duplicate)				
Gamma Cs-137 & Hits by EPA 901.1 MOD				pCi/L	901.1 MOD				FOD070524-001
Cesium 137	1.1	U	7.4		0.3	U	10		121 %RPD
Potassium 40	-40	U	280		-90	U	3800		81 %RPD
	Batch #:		0098345 (Sample)		0098345 (Duplicate)				
Gross Alpha/Beta EPA 900				pCi/L	900.0 MOD				FOD140466-001
Gross Alpha	2.1	J	1.0		2.1	J	1.0		2 %RPD
Gross Beta	2.76	J	0.83		2.86	J	0.87		4 %RPD
	Batch #:		0105073 (Sample)		0105073 (Duplicate)				

NOTE(S)

Data are incomplete without the case narrative.
 Calculations are performed before rounding to avoid round-off error in calculated results

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

U Result is less than the sample detection limit.

SUBCONTRACT ORDER

TestAmerica Irvine

ITD0278

SENDING LABORATORY:

TestAmerica Irvine
 17461 Derian Avenue, Suite 100
 Irvine, CA 92614
 Phone: (949) 261-1022
 Fax: (949) 260-3297
 Project Manager: Heather Clark

RECEIVING LABORATORY:

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

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: ITD0278-02				
Water		Sampled: 04/05/10 11:58		
Level 4 Data Package - Out	04/19/10 12:00	05/03/10 11:58		
Gross Alpha-O	04/19/10 12:00	10/02/10 11:58		Out St Louis, Boeing permit, DO NOT FILTER!
Gross Beta-O	04/19/10 12:00	10/02/10 11:58		Out St Louis, Boeing permit, DO NOT FILTER!
Radium 226-O	04/19/10 12:00	04/05/11 11:58		Out St Louis, Boeing permit, DO NOT FILTER!
Radium 228-O	04/19/10 12:00	04/05/11 11:58		Out St Louis, Boeing permit, DO NOT FILTER!
Strontium 90-O	04/19/10 12:00	04/05/11 11:58		Out St Louis, Boeing permit, DO NOT FILTER!
Tritium-O	04/19/10 12:00	04/05/11 11:58		Out St Louis, Boeing permit, DO NOT FILTER!
Gamma Spec-O	04/19/10 12:00	04/05/11 11:58		Out St Louis, K-40 and CS-137 only, DO NOT FILTER
Uranium, Combined-O	04/19/10 12:00	04/05/11 11:58		Out St Louis, Boeing permit, DO NOT FILTER!
<i>Containers Supplied:</i>				
2.5 gal Poly (H)		500 mL Amber (I)		
Sample ID: ITD0278-03				
Water		Sampled: 04/06/10 12:03		
Radium 228-O	04/19/10 12:00	04/06/11 12:03		Out St Louis, Boeing permit, DO NOT FILTER!
Strontium 90-O	04/19/10 12:00	04/06/11 12:03		Out St Louis, Boeing permit, DO NOT FILTER!
Tritium-O	04/19/10 12:00	04/06/11 12:03		Out St Louis, Boeing permit, DO NOT FILTER!
Uranium, Combined-O	04/19/10 12:00	04/06/11 12:03		Out St Louis, Boeing permit, DO NOT FILTER!
Gamma Spec-O	04/19/10 12:00	04/06/11 12:03		Out St Louis, K-40 and CS-137 only, DO NOT FILTER
Gross Alpha-O	04/19/10 12:00	10/03/10 12:03		Out St Louis, Boeing permit, DO NOT FILTER!
Gross Beta-O	04/19/10 12:00	10/03/10 12:03		Out St Louis, Boeing permit, DO NOT FILTER!
Level 4 Data Package - Out	04/19/10 12:00	05/04/10 12:03		
Radium 226-O	04/19/10 12:00	04/06/11 12:03		Out St Louis, Boeing permit, DO NOT FILTER!
<i>Containers Supplied:</i>				
2.5 gal Poly (A)				

Released By	Date	Received By	Date
		<i>Amber B</i>	4-7-10 9:15
			4-7-10 9:15
			AS 4-9-10
Released By	Date	Received By	Date

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Lot #(s): F0D070495
↓ 524

CONDITION UPON RECEIPT FORM

Client: TA Irvine
 Quote No: 85044
 COC/RPA No: ITD0278

239

Initiated By: AB Date: 4-2-10 Time: 9:15

Shipping Information

Shipper: FedEx UPS DHL Courier Client Other: _____ Multiple Packages:

Shipping # (s):* Sample Temperature (s):**

1. <u>42892134080 msp</u>	6. _____	1. <u>60</u>	6. _____
2. _____	7. _____	2. _____	7. _____
3. _____	8. _____	3. _____	8. _____
4. _____	9. _____	4. _____	9. _____
5. _____	10. _____	5. _____	10. _____

*Numbered shipping lines correspond to Numbered Sample Temp lines

**Sample must be received at 4°C ± 2°C. If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid or Rad tests- Liquid or Solids

Condition (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1. <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Are there custody seals present on the cooler?	8. <input type="checkbox"/> Y <input checked="" type="checkbox"/> N	Are there custody seals present on bottles?
2. <input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> N/A	Do custody seals on cooler appear to be tampered with?	9. <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A	Do custody seals on bottles appear to be tampered with?
3. <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Were contents of cooler frisked after opening, but before unpacking?	10. <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A	Was sample received with proper pH? (If not, make note below)
4. <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N	Sample received with Chain of Custody?	11. <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Sample received in proper containers?
5. <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A	Does the Chain of Custody match sample ID's on the container(s)?	12. <input type="checkbox"/> Y <input type="checkbox"/> N <input checked="" type="checkbox"/> N/A	Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below)
6. <input type="checkbox"/> Y <input checked="" type="checkbox"/> N	Was sample received broken?	13. <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A	Was Internal COC/Workshare received?
7. <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	Is sample volume sufficient for analysis?	14. <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A	Was pH taken by original TestAmerica lab?

¹ For DOB-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX and soils.

Notes:

Per LF TAT 2/23 day

Did not receive COC for ITD0281 (did receive the W/S)
4.5.10 - 8945

Received COC via email 4.7.10 J 4.7.10

Corrective Action:

Client Contact Name: _____
 Sample(s) processed "as is"
 Sample(s) on hold until: _____
 Project Management Review: John

Informed by: _____

If released, notify: _____
 Date: 4/12/10

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED IN. IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIAL AND THE DATE NEXT TO THAT ITEM.

ADMIN-0004, REVISED 10/21/08 \Slsvr01\QA\FORMS\ST-LOUIS\ADMIN\VA.dmln004 rev11.doc

THIS PAGE LEFT INTENTIONALLY BLANK

APPENDIX G

Section 3

Outfall 009 – April 12, 2010

MEC^X Data Validation Report

THIS PAGE LEFT INTENTIONALLY BLANK



DATA VALIDATION REPORT

Boeing SSFL NPDES

SAMPLE DELIVERY GROUP: ITD1026

Prepared by

MECX, LP
12269 East Vassar Drive
Aurora, CO 80014

I. INTRODUCTION

Task Order Title: Boeing SSFL NPDES
 Contract Task Order: 1261.100D.00
 Sample Delivery Group: ITD1026
 Project Manager: B. Kelly
 Matrix: Water
 QC Level: IV
 No. of Samples: 1
 No. of Reanalyses/Dilutions: 0
 Laboratory: TestAmerica-Irvine

Table 1. Sample Identification

Client ID	Laboratory ID	Sub-Laboratory ID	Matrix	Collected	Method
Outfall 009 (COMPOSITE)	ITD1026-02	G0D140502-001, F0D140466-001	WATER	4/12/2010 5:25:00 AM	245.1, 245.1 (Diss), ASTM 5174-91, 900.0 MOD, 901.1 MOD, 903.0 MOD, 904 MOD, 905 MOD, 906.0 MOD, 1613

II. Sample Management

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

Data Qualifier Reference Table

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

Qualification Code Reference Table

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

Qualification Code Reference Table Cont.

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

III. Method Analyses

A. EPA METHOD 1613—Dioxin/Furans

Reviewed By: L. Calvin

Date Reviewed: May 26, 2010

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

- Holding Times: Extraction and analytical holding times were met. The water sample was extracted and analyzed within one year of collection.
- Instrument Performance: Instrument performance criteria were met. Following are findings associated with instrument performance.
 - GC Column Performance: A Windows Defining Mix (WDM) containing the first and last eluting congeners of each descriptor and isomer specificity compounds was analyzed with the initial calibration sequence and at the beginning of each analytical sequence. The GC column performance in the calibrations was acceptable, with the height of the valley between the closely eluting isomers and 2,3,7,8-TCDD reported as less than 25%.
 - Mass Spectrometer Performance: The mass spectrometer performance was acceptable with the static resolving power greater than 10,000.
- Calibration: Calibration criteria were met.
 - Initial Calibration: Initial calibration criteria were met. The initial calibration was acceptable with %RSDs $\leq 20\%$ for the 16 native compounds (calibration by isotope dilution) and $\leq 35\%$ for the one native and all labeled compounds (calibration by internal standard). The relative retention times and ion abundance ratios were within the Method 1613 QC limits for all standards.
 - Continuing Calibration: Calibration verification (VER) consisted of a mid-level standard (CS3) analyzed at the beginning of each analytical sequence. The VERs were acceptable with the concentrations within the acceptance criteria listed in Table 6 of EPA Method 1613. A recovery for 13C-1,2,3,6,7,8-HxCDD above the QC limit in the VER did not impact sample data. The ion abundance ratios and relative retention times were within the method QC limits.
- Blanks: The method blank had detects between the EDL and the RL for all target compounds except isomers and totals for TCDD, PeCDD, and PeCDF. Most detects in the method blank did not meet ratio criteria and were reported as EMPCs; however, due to the extent of contamination present in the method blank, it was the reviewer's professional

opinion that those results be utilized to qualify applicable sample results. Isomers present in the sample between the EDLs and RLs were qualified as nondetected, "U," at the levels of contamination. The results for totals HxCDD, HxCDF, and HpCDF were qualified as estimated, "J," as only a portion of the total was considered method blank contamination. Method blank results for OCDD, OCDF, 1,2,3,4,6,7,8-HpCDD and total HpCDD were insufficient to qualify the sample results.

- Blank Spikes and Laboratory Control Samples: OPR recoveries were within the acceptance criteria listed in Table 6 of Method 1613.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: This SDG had no identified field blank or equipment rinsate samples.
 - Field Duplicates: There were no field duplicate samples identified for this SDG.
- Internal Standards Performance: The labeled standard recoveries were within the acceptance criteria listed in Table 7 of Method 1613.
- Compound Identification: Compound identification was verified. The laboratory analyzed for polychlorinated dioxins/furans by EPA Method 1613.
- Compound Quantification and Reported Detection Limits: Compound quantitation was verified by recalculating a representative number of reportable sample results. All individual isomers reported as EMPCs were previously qualified as nondetected for method blank contamination and were not further qualified as EMPCs. Any totals including EMPC peaks were qualified as estimated, "J." Any detects reported between the estimated detection limit (EDL) and the reporting limit (RL) were qualified as estimated, "J," and coded with "DNQ," in order to comply with the NPDES permit. Nondetects are valid to the EDL.

B. EPA METHOD 245.1—Mercury

Reviewed By: P. Meeks

Date Reviewed: May 13, 2010

The sample listed in Table 1 for these analyses was validated based on the guidelines outlined in the MEC^x *Data Validation Procedure for Metals (DVP-5, Rev. 0 and DVP-21, Rev. 0)*, *EPA Method 245.1*, and the *National Functional Guidelines for Inorganic Data Review (7/02)*.

- Holding Times: The analytical holding time, 28 days for mercury, was met.

- Tuning: Not applicable to this method.
- Calibration: Calibration criteria were met. Mercury initial calibration r^2 values were ≥ 0.995 and all initial and continuing calibration recoveries were within 85-115%. CRI recoveries were within the control limits of 70-130%.
- Blanks: Method blanks and CCBs had no detects.
- Interference Check Samples: Not applicable to this method.
- Blank Spikes and Laboratory Control Samples: Recoveries were within laboratory-established QC limits.
- Laboratory Duplicates: No laboratory duplicate analyses were performed on the sample in this SDG.
- Matrix Spike/Matrix Spike Duplicate: No MS/MSD analyses were performed on the sample in this SDG. Method accuracy was evaluated based on LCS results.
- Serial Dilution: No serial dilution analyses were performed on the sample in this SDG.
- Internal Standards Performance: Not applicable to this method.
- Sample Result Verification: Calculations were verified and the sample results reported on the sample result summary were verified against the raw data. No transcription errors or calculation errors were noted. When the sample results were qualified and the reviewer was able to clearly determine bias, detected results were qualified as either "J+" or "J-"; otherwise, bias was not indicated in the qualification. Any detects between the method detection limit and the reporting limit were qualified as estimated, "J," and coded with "DNQ," in order to comply with the NPDES permit. Reported nondetects are valid to the MDL.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: This SDG had no identified field blank or equipment rinsate samples.
 - Field Duplicates: There were no field duplicate samples identified for this SDG.

C. VARIOUS EPA METHODS — Radionuclides

Reviewed By: P. Meeks

Date Reviewed: June 1, 2010

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

- **Holding Times:** The tritium sample was analyzed within 180 days of collection. All remaining aliquots were prepared within the five-day analytical holding time for unpreserved samples.
- **Calibration:** The laboratory calibration information included the standard certificates and applicable preparation/dilutions logs for NIST-traceability.

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

The tritium aliquot was spiked for efficiency determination; therefore, no calibration was necessary. All chemical yields were at least 40% and were considered acceptable. The gamma spectroscopy analytes were determined at the maximum photopeak energy. The kinetic phosphorescence analyzer (KPA) was calibrated immediately prior to the sample analysis. All KPA calibration check standard recoveries were within 90-110% and were deemed acceptable.

- **Blanks:** Total uranium was detected in the method blanks at 0.213 and 0.234 pCi/L; therefore, total uranium detected in the sample was qualified as nondetected, "U," at the reporting limit. There were no other analytes detected in the method blanks or the KPA CCBs.
- **Blank Spikes and Laboratory Control Samples:** The recoveries and RPDs (radium-226, radium-228, strontium-90) were within laboratory-established control limits.
- **Laboratory Duplicates:** Laboratory duplicate analyses were performed on the sample in this SDG for gross alpha, gross, beta, tritium, cesium-137, and potassium-40. The RPDs were within the laboratory-established control limit.
- **Matrix Spike/Matrix Spike Duplicate:** A matrix spike analysis was performed for gross alpha and gross beta. The recoveries were within the laboratory-established control limits. No MS/MSD analyses were performed for the sample in this SDG. Method accuracy for the remaining analytes was evaluated based on the LCS results.
- **Sample Result Verification:** An EPA Level IV review was performed for the sample in this data package. The sample results and MDAs reported on the sample result form were

verified against the raw data and no calculation or transcription errors were noted. Any detects between the MDA and the reporting limit were qualified as estimated, "J," and coded with "DNQ," in order to comply with the NPDES permit. Reported nondetects are valid to the MDA.

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

Validated Sample Result Forms ITD1026

Analysis Method *ASTM 5174-91*

Sample Name Outfall 009 (COMPOSITE Matrix Type: WATER **Validation Level:** IV

Lab Sample Name: ITD1026-02 **Sample Date:** 4/12/2010 5:25:00 AM

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Total Uranium	7440-61-1	ND	0.677	0.21	pCi/L	Jb	U	B

Analysis Method *EPA 245.1*

Sample Name Outfall 009 (COMPOSITE Matrix Type: Water **Validation Level:** IV

Lab Sample Name: ITD1026-02 **Sample Date:** 4/12/2010 5:25:00 AM

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Mercury	7439-97-6	ND	0.20	0.10	ug/l		U	

Analysis Method *EPA 245.1-Diss*

Sample Name Outfall 009 (COMPOSITE Matrix Type: Water **Validation Level:** IV

Lab Sample Name: ITD1026-02 **Sample Date:** 4/12/2010 5:25:00 AM

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Mercury	7439-97-6	ND	0.20	0.10	ug/l		U	

Analysis Method *EPA 900.0 MOD*

Sample Name Outfall 009 (COMPOSITE Matrix Type: WATER **Validation Level:** IV

Lab Sample Name: ITD1026-02 **Sample Date:** 4/12/2010 5:25:00 AM

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Gross Alpha	12587-46-1	2.1	3	1.2	pCi/L	Jb	J	C, DNQ
Gross Beta	12587-47-2	2.76	4	0.97	pCi/L	Jb	J	DNQ

Analysis Method *EPA 901.1 MOD*

Sample Name Outfall 009 (COMPOSITE Matrix Type: WATER **Validation Level:** IV

Lab Sample Name: ITD1026-02 **Sample Date:** 4/12/2010 5:25:00 AM

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Cesium 137	10045-97-3	1.2	20	17	pCi/L	U	U	
Potassium 40	13966-00-2	-90	0	200	pCi/L	U	U	

Analysis Method *EPA 903.0 MOD*

Sample Name	Outfall 009 (COMPOSITE Matrix Type: WATER					Validation Level: IV		
Lab Sample Name:	ITD1026-02	Sample Date:		4/12/2010 5:25:00 AM				
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Radium (226)	13982-63-3	0.16	1	0.15	pCi/L	Jb	J	C, DNQ

Analysis Method *EPA 904 MOD*

Sample Name	Outfall 009 (COMPOSITE Matrix Type: WATER					Validation Level: IV		
Lab Sample Name:	ITD1026-02	Sample Date:		4/12/2010 5:25:00 AM				
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Radium 228	15262-20-1	-0.16	1	0.46	pCi/L	U	U	

Analysis Method *EPA 905 MOD*

Sample Name	Outfall 009 (COMPOSITE Matrix Type: WATER					Validation Level: IV		
Lab Sample Name:	ITD1026-02	Sample Date:		4/12/2010 5:25:00 AM				
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Strontium 90	10098-97-2	-0.03	3	0.37	pCi/L	U	U	

Analysis Method *EPA 906.0 MOD*

Sample Name	Outfall 009 (COMPOSITE Matrix Type: WATER					Validation Level: IV		
Lab Sample Name:	ITD1026-02	Sample Date:		4/12/2010 5:25:00 AM				
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Tritium	10028-17-8	-6	500	180	pCi/L	U	U	

Analysis Method EPA-5 1613B

Sample Name Outfall 009 (COMPOSITE Matrix Type: WATER **Validation Level:** IV
Lab Sample Name: ITD1026-02 **Sample Date:** 4/12/2010 5:25:00 AM

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,2,3,4,6,7,8-HpCDD	35822-46-9	0.00013	0.00005	0.0000023	ug/L	Ba		
1,2,3,4,6,7,8-HpCDF	67562-39-4	ND	0.00005	0.0000007	ug/L	J, Q, Ba	U	B
1,2,3,4,7,8,9-HpCDF	55673-89-7	ND	0.00005	0.0000012	ug/L	J, Q, Ba	U	B
1,2,3,4,7,8-HxCDD	39227-28-6	ND	0.00005	0.0000005	ug/L	J, Ba	U	B
1,2,3,4,7,8-HxCDF	70648-26-9	ND	0.00005	0.0000008	ug/L	J, Ba	U	B
1,2,3,6,7,8-HxCDD	57653-85-7	ND	0.00005	0.0000005	ug/L	J, Q, Ba	U	B
1,2,3,6,7,8-HxCDF	57117-44-9	ND	0.00005	0.0000007	ug/L	J, Q, Ba	U	B
1,2,3,7,8,9-HxCDD	19408-74-3	ND	0.00005	0.0000004	ug/L	J, Q, Ba	U	B
1,2,3,7,8,9-HxCDF	72918-21-9	ND	0.00005	0.0000009	ug/L		U	
1,2,3,7,8-PeCDD	40321-76-4	ND	0.00005	0.0000008	ug/L		U	
1,2,3,7,8-PeCDF	57117-41-6	ND	0.00005	0.0000006	ug/L		U	
2,3,4,6,7,8-HxCDF	60851-34-5	ND	0.00005	0.0000006	ug/L	J, Q, Ba	U	B
2,3,4,7,8-PeCDF	57117-31-4	ND	0.00005	0.0000007	ug/L		U	
2,3,7,8-TCDD	1746-01-6	ND	0.00001	0.0000004	ug/L		U	
2,3,7,8-TCDF	51207-31-9	ND	0.00001	0.0000004	ug/L		U	
OCDD	3268-87-9	0.0016	0.00009	0.0000046	ug/L	Ba		
OCDF	39001-02-0	0.0001	0.00009	0.0000013	ug/L	Ba		
Total HpCDD	37871-00-4	0.00032	0.00005	0.0000023	ug/L	Ba		
Total HpCDF	38998-75-3	0.000079	0.000079	0.0000007	ug/L	J, Q, Ba	J	B, DNQ, *III
Total HxCDD	34465-46-8	0.000037	0.000037	0.0000004	ug/L	J, Q, Ba	J	B, DNQ, *III
Total HxCDF	55684-94-1	0.00003	0.00003	0.0000006	ug/L	J, Q, Ba	J	B, DNQ, *III
Total PeCDD	36088-22-9	ND	0.00005	0.0000004	ug/L		U	
Total PeCDF	30402-15-4	ND	0.00005	0.0000001	ug/L		U	
Total TCDD	41903-57-5	ND	0.00001	0.0000001	ug/L		U	
Total TCDF	55722-27-5	ND	0.00001	0.0000001	ug/L		U	

THIS PAGE LEFT INTENTIONALLY BLANK

APPENDIX G

Section 4

Outfall 009 – April 12, 2010

Test America Analytical Laboratory Report

THIS PAGE LEFT INTENTIONALLY BLANK

LABORATORY REPORT

Prepared For: MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project: Routine Outfall 009

Sampled: 04/12/10-04/13/10
Received: 04/12/10
Issued: 05/11/10 16:11

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

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

LABORATORY ID

ITD1026-01
ITD1026-02
ITD1026-03

CLIENT ID

Outfall 009 (GRAB)
Outfall 009 (COMPOSITE)
TRIP BLANK

MATRIX

Water
Water
Water

Reviewed By:



TestAmerica Irvine

Kathleen A. Robb For Debby Wilson
Project Manager

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD1026

Sampled: 04/12/10-04/13/10
Received: 04/12/10

HEXANE EXTRACTABLE MATERIAL

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD1026-01 (Outfall 009 (GRAB) - Water)					Sampled: 04/12/10				
Reporting Units: mg/l									
Hexane Extractable Material (Oil & Grease)	EPA 1664A	10D2926	1.3	4.7	ND	1	04/26/10	04/26/10	

TestAmerica Irvine

Kathleen A. Robb For Debby Wilson
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 TestAmerica.

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD1026

Sampled: 04/12/10-04/13/10
 Received: 04/12/10

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD1026-02 (Outfall 009 (COMPOSITE) - Water)					Sampled: 04/12/10				
Reporting Units: ug/l									
Mercury	EPA 245.1	10D1371	0.10	0.20	ND	1	04/13/10	04/13/10	
Antimony	EPA 200.8	10D1345	0.30	2.0	0.53	1	04/13/10	04/19/10	Ja
Cadmium	EPA 200.8	10D1345	0.10	1.0	ND	1	04/13/10	04/19/10	
Copper	EPA 200.8	10D1345	0.500	2.00	5.63	1	04/13/10	04/19/10	
Lead	EPA 200.8	10D1345	0.20	1.0	5.0	1	04/13/10	04/17/10	
Thallium	EPA 200.8	10D1345	0.20	1.0	ND	1	04/13/10	04/17/10	

TestAmerica Irvine

Kathleen A. Robb For Debby Wilson
 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 TestAmerica.

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD1026

Sampled: 04/12/10-04/13/10
 Received: 04/12/10

DISSOLVED METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD1026-02 (Outfall 009 (COMPOSITE) - Water)					Sampled: 04/12/10				
Reporting Units: ug/l									
Mercury	EPA 245.1-Diss	10D1565	0.10	0.20	ND	1	04/14/10	04/14/10	
Antimony	EPA 200.8-Diss	10D1382	0.30	2.0	0.49	1	04/13/10	04/16/10	Ja
Cadmium	EPA 200.8-Diss	10D1382	0.10	1.0	0.11	1	04/13/10	04/16/10	Ja
Copper	EPA 200.8-Diss	10D1382	0.500	2.00	3.02	1	04/13/10	04/16/10	B
Lead	EPA 200.8-Diss	10D1382	0.20	1.0	0.55	1	04/13/10	04/16/10	Ja
Thallium	EPA 200.8-Diss	10D1382	0.20	1.0	0.29	1	04/13/10	04/16/10	Ja

TestAmerica Irvine

Kathleen A. Robb For Debby Wilson
 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 TestAmerica.

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD1026

Sampled: 04/12/10-04/13/10
 Received: 04/12/10

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD1026-02 (Outfall 009 (COMPOSITE) - Water)					Sampled: 04/12/10				
Reporting Units: mg/l									
Chloride	EPA 300.0	10D1218	0.25	0.50	3.5	1	04/12/10	04/12/10	
Nitrate/Nitrite-N	EPA 300.0	10D1218	0.15	0.26	0.39	1	04/12/10	04/12/10	
Sulfate	EPA 300.0	10D1218	0.20	0.50	6.1	1	04/12/10	04/12/10	
Total Dissolved Solids	SM2540C	10D1613	1.0	10	38	1	04/15/10	04/15/10	

TestAmerica Irvine

Kathleen A. Robb For Debby Wilson
 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 TestAmerica.

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD1026

Sampled: 04/12/10-04/13/10
Received: 04/12/10

EPA-5 1613B

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD1026-02 (Outfall 009 (COMPOSITE) - Water)					Sampled: 04/12/10				
Reporting Units: ug/L									
1,2,3,4,6,7,8-HpCDD	EPA-5 1613B	106245	0.0000023	0.00005	0.00013	0.94	04/16/10	04/22/10	Ba
1,2,3,4,6,7,8-HpCDF	EPA-5 1613B	106245	0.0000072	0.00005	0.000033	0.94	04/16/10	04/22/10	J, Q, Ba
1,2,3,4,7,8,9-HpCDF	EPA-5 1613B	106245	0.0000012	0.00005	0.00000084	0.94	04/16/10	04/22/10	J, Q, Ba
1,2,3,4,7,8-HxCDD	EPA-5 1613B	106245	0.0000058	0.00005	0.0000032	0.94	04/16/10	04/22/10	J, Ba
1,2,3,4,7,8-HxCDF	EPA-5 1613B	106245	0.0000008	0.00005	0.000002	0.94	04/16/10	04/22/10	J, Ba
1,2,3,6,7,8-HxCDD	EPA-5 1613B	106245	0.0000051	0.00005	0.0000053	0.94	04/16/10	04/22/10	J, Q, Ba
1,2,3,6,7,8-HxCDF	EPA-5 1613B	106245	0.0000072	0.00005	0.0000013	0.94	04/16/10	04/22/10	J, Q, Ba
1,2,3,7,8,9-HxCDD	EPA-5 1613B	106245	0.0000045	0.00005	0.0000053	0.94	04/16/10	04/22/10	J, Q, Ba
1,2,3,7,8,9-HxCDF	EPA-5 1613B	106245	0.0000091	0.00005	ND	0.94	04/16/10	04/22/10	
1,2,3,7,8-PeCDD	EPA-5 1613B	106245	0.0000081	0.00005	ND	0.94	04/16/10	04/22/10	
1,2,3,7,8-PeCDF	EPA-5 1613B	106245	0.0000069	0.00005	ND	0.94	04/16/10	04/22/10	
2,3,4,6,7,8-HxCDF	EPA-5 1613B	106245	0.0000064	0.00005	0.00000088	0.94	04/16/10	04/22/10	J, Q, Ba
2,3,4,7,8-PeCDF	EPA-5 1613B	106245	0.0000071	0.00005	ND	0.94	04/16/10	04/22/10	
2,3,7,8-TCDD	EPA-5 1613B	106245	0.0000043	0.00001	ND	0.94	04/16/10	04/22/10	
2,3,7,8-TCDF	EPA-5 1613B	106245	0.0000043	0.00001	ND	0.94	04/16/10	04/22/10	
OCDD	EPA-5 1613B	106245	0.0000046	0.00009	0.0016	0.94	04/16/10	04/22/10	Ba
OCDF	EPA-5 1613B	106245	0.0000013	0.00009	0.0001	0.94	04/16/10	04/22/10	Ba
Total HpCDD	EPA-5 1613B	106245	0.0000023	0.00005	0.00032	0.94	04/16/10	04/22/10	Ba
Total HpCDF	EPA-5 1613B	106245	0.0000073	0.00005	0.000079	0.94	04/16/10	04/22/10	J, Q, Ba
Total HxCDD	EPA-5 1613B	106245	0.0000045	0.00005	0.000037	0.94	04/16/10	04/22/10	J, Q, Ba
Total HxCDF	EPA-5 1613B	106245	0.0000064	0.00005	0.00003	0.94	04/16/10	04/22/10	J, Q, Ba
Total PeCDD	EPA-5 1613B	106245	0.0000044	0.00005	ND	0.94	04/16/10	04/22/10	
Total PeCDF	EPA-5 1613B	106245	0.0000012	0.00005	ND	0.94	04/16/10	04/22/10	
Total TCDD	EPA-5 1613B	106245	0.0000017	0.00001	ND	0.94	04/16/10	04/22/10	
Total TCDF	EPA-5 1613B	106245	0.0000017	0.00001	ND	0.94	04/16/10	04/22/10	

Surrogate: 13C-1,2,3,4,6,7,8-HpCDD (23-140%)	81 %
Surrogate: 13C-1,2,3,4,6,7,8-HpCDF (28-143%)	78 %
Surrogate: 13C-1,2,3,4,7,8,9-HpCDF (26-138%)	76 %
Surrogate: 13C-1,2,3,4,7,8-HxCDD (32-141%)	74 %
Surrogate: 13C-1,2,3,4,7,8-HxCDF (26-152%)	77 %
Surrogate: 13C-1,2,3,6,7,8-HxCDD (28-130%)	75 %
Surrogate: 13C-1,2,3,6,7,8-HxCDF (26-123%)	78 %
Surrogate: 13C-1,2,3,7,8,9-HxCDF (29-147%)	67 %
Surrogate: 13C-1,2,3,7,8-PeCDD (25-181%)	74 %
Surrogate: 13C-1,2,3,7,8-PeCDF (24-185%)	71 %
Surrogate: 13C-2,3,4,6,7,8-HxCDF (28-136%)	80 %
Surrogate: 13C-2,3,4,7,8-PeCDF (21-178%)	75 %
Surrogate: 13C-2,3,7,8-TCDD (25-164%)	65 %
Surrogate: 13C-2,3,7,8-TCDF (24-169%)	69 %
Surrogate: 13C-OCDD (17-157%)	85 %
Surrogate: 37Cl4-2,3,7,8-TCDD (35-197%)	103 %

TestAmerica Irvine

Kathleen A. Robb For Debby Wilson
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 TestAmerica.

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD1026

Sampled: 04/12/10-04/13/10
Received: 04/12/10

ASTM 5174-91

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD1026-02 (Outfall 009 (COMPOSITE) - Water)					Sampled: 04/12/10				
Reporting Units: pCi/L									
Total Uranium	ASTM 5174-91	119221	0.21	0.677	0.532	1	04/29/10	05/03/10	Jb

TestAmerica Irvine

Kathleen A. Robb For Debby Wilson
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 TestAmerica.

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD1026

Sampled: 04/12/10-04/13/10
Received: 04/12/10

ASTM 5174-91

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD1026-03 (TRIP BLANK - Water)					Sampled: 04/13/10				
Reporting Units: pCi/L									
Total Uranium	ASTM 5174-91	119221	0.21	0.677	0.234	1	04/29/10	05/03/10	Jb

TestAmerica Irvine

Kathleen A. Robb For Debby Wilson
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 TestAmerica.

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD1026

Sampled: 04/12/10-04/13/10
 Received: 04/12/10

EPA 900.0 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD1026-02 (Outfall 009 (COMPOSITE) - Water)					Sampled: 04/12/10				
Reporting Units: pCi/L									
Gross Alpha	EPA 900.0 MOD	105073	1.2	3	2.1	1	04/15/10	04/27/10	Jb
Gross Beta	EPA 900.0 MOD	105073	0.97	4	2.76	1	04/15/10	04/27/10	Jb
Sample ID: ITD1026-03 (TRIP BLANK - Water)					Sampled: 04/13/10				
Reporting Units: pCi/L									
Gross Alpha	EPA 900.0 MOD	105073	0.75	3	0.21	1	04/15/10	04/26/10	U
Gross Beta	EPA 900.0 MOD	105073	1.5	4	0.38	1	04/15/10	04/26/10	U

TestAmerica Irvine

Kathleen A. Robb For Debby Wilson
 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 TestAmerica.

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD1026

Sampled: 04/12/10-04/13/10
 Received: 04/12/10

EPA 901.1 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD1026-02 (Outfall 009 (COMPOSITE) - Water)					Sampled: 04/12/10				
Reporting Units: pCi/L									
Cesium 137	EPA 901.1 MOD	105347	17	20	1.2	1	04/15/10	05/06/10	U
Potassium 40	EPA 901.1 MOD	105347	200	NA	-90	1	04/15/10	05/06/10	U
Sample ID: ITD1026-03 (TRIP BLANK - Water)					Sampled: 04/13/10				
Reporting Units: pCi/L									
Cesium 137	EPA 901.1 MOD	105347	14	20	ND	1	04/15/10	05/06/10	U
Potassium 40	EPA 901.1 MOD	105347	260	NA	-70	1	04/15/10	05/06/10	U

TestAmerica Irvine

Kathleen A. Robb For Debby Wilson
 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 TestAmerica.

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD1026

Sampled: 04/12/10-04/13/10
Received: 04/12/10

EPA 903.0 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD1026-02 (Outfall 009 (COMPOSITE) - Water)					Sampled: 04/12/10				
Reporting Units: pCi/L									
Radium (226)	EPA 903.0 MOD	104356	0.15	1	0.16	1	04/14/10	05/06/10	Jb
Sample ID: ITD1026-03 (TRIP BLANK - Water)					Sampled: 04/13/10				
Reporting Units: pCi/L									
Radium (226)	EPA 903.0 MOD	104356	0.18	1	0.002	1	04/14/10	05/06/10	U

TestAmerica Irvine

Kathleen A. Robb For Debby Wilson
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 TestAmerica.

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD1026

Sampled: 04/12/10-04/13/10
 Received: 04/12/10

EPA 904 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD1026-02 (Outfall 009 (COMPOSITE) - Water)					Sampled: 04/12/10				
Reporting Units: pCi/L									
Radium 228	EPA 904 MOD	104357	0.46	1	-0.16	1	04/14/10	05/06/10	U
Sample ID: ITD1026-03 (TRIP BLANK - Water)					Sampled: 04/13/10				
Reporting Units: pCi/L									
Radium 228	EPA 904 MOD	104357	0.43	1	0.02	1	04/14/10	05/06/10	U

TestAmerica Irvine

Kathleen A. Robb For Debby Wilson
 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 TestAmerica.

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD1026

Sampled: 04/12/10-04/13/10
 Received: 04/12/10

EPA 905 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD1026-02 (Outfall 009 (COMPOSITE) - Water)					Sampled: 04/12/10				
Reporting Units: pCi/L									
Strontium 90	EPA 905 MOD	104358	0.37	3	-0.03	1	04/14/10	04/22/10	U
Sample ID: ITD1026-03 (TRIP BLANK - Water)					Sampled: 04/13/10				
Reporting Units: pCi/L									
Strontium 90	EPA 905 MOD	104358	0.34	3	-0.04	1	04/14/10	04/22/10	U

TestAmerica Irvine

Kathleen A. Robb For Debby Wilson
 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 TestAmerica.

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD1026

Sampled: 04/12/10-04/13/10
 Received: 04/12/10

EPA 906.0 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD1026-02 (Outfall 009 (COMPOSITE) - Water)					Sampled: 04/12/10				
Reporting Units: pCi/L									
Tritium	EPA 906.0 MOD	119067	180	500	-6	1	04/29/10	04/29/10	U
Sample ID: ITD1026-03 (TRIP BLANK - Water)					Sampled: 04/13/10				
Reporting Units: pCi/L									
Tritium	EPA 906.0 MOD	119067	190	500	-98	1	04/29/10	04/29/10	U

TestAmerica Irvine

Kathleen A. Robb For Debby Wilson
 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 TestAmerica.

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD1026

Sampled: 04/12/10-04/13/10
Received: 04/12/10

SHORT HOLD TIME DETAIL REPORT

	Hold Time (in days)	Date/Time Sampled	Date/Time Received	Date/Time Extracted	Date/Time Analyzed
Sample ID: Outfall 009 (COMPOSITE) (ITD1026-02) - Water					
EPA 300.0	2	04/12/2010 05:25	04/12/2010 14:30	04/12/2010 21:30	04/12/2010 23:18
Filtration	1	04/12/2010 05:25	04/12/2010 14:30	04/12/2010 20:15	04/12/2010 20:22

TestAmerica Irvine

Kathleen A. Robb For Debby Wilson
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 TestAmerica.*

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD1026

Sampled: 04/12/10-04/13/10
 Received: 04/12/10

METHOD BLANK/QC DATA

HEXANE EXTRACTABLE MATERIAL

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10D2926 Extracted: 04/26/10											
Blank Analyzed: 04/26/2010 (10D2926-BLK1)											
Hexane Extractable Material (Oil & Grease)	ND	5.0	1.4	mg/l							
LCS Analyzed: 04/26/2010 (10D2926-BS1)											
Hexane Extractable Material (Oil & Grease)	19.1	5.0	1.4	mg/l	20.0		96	78-114			MNR1
LCS Dup Analyzed: 04/26/2010 (10D2926-BSD1)											
Hexane Extractable Material (Oil & Grease)	19.4	5.0	1.4	mg/l	20.0		97	78-114	2	11	

TestAmerica Irvine

Kathleen A. Robb For Debby Wilson
 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 TestAmerica.

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD1026

Sampled: 04/12/10-04/13/10
 Received: 04/12/10

METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Data Qualifiers
Batch: 10D1345 Extracted: 04/13/10											
Blank Analyzed: 04/17/2010-04/19/2010 (10D1345-BLK1)											
Antimony	ND	2.0	0.30	ug/l							
Cadmium	ND	1.0	0.10	ug/l							
Copper	ND	2.00	0.500	ug/l							
Lead	ND	1.0	0.20	ug/l							
Thallium	ND	1.0	0.20	ug/l							
LCS Analyzed: 04/17/2010 (10D1345-BS1)											
Antimony	82.5	2.0	0.30	ug/l	80.0		103	85-115			
Cadmium	82.0	1.0	0.10	ug/l	80.0		102	85-115			
Copper	81.5	2.00	0.500	ug/l	80.0		102	85-115			
Lead	77.2	1.0	0.20	ug/l	80.0		96	85-115			
Thallium	76.9	1.0	0.20	ug/l	80.0		96	85-115			
Matrix Spike Analyzed: 04/17/2010 (10D1345-MS1) Source: ITD1026-02											
Antimony	77.3	2.0	0.30	ug/l	80.0	0.528	96	70-130			
Cadmium	78.5	1.0	0.10	ug/l	80.0	ND	98	70-130			
Copper	82.8	2.00	0.500	ug/l	80.0	5.63	96	70-130			
Lead	78.5	1.0	0.20	ug/l	80.0	5.02	92	70-130			
Thallium	73.4	1.0	0.20	ug/l	80.0	ND	92	70-130			
Matrix Spike Dup Analyzed: 04/17/2010 (10D1345-MSD1) Source: ITD1026-02											
Antimony	76.4	2.0	0.30	ug/l	80.0	0.528	95	70-130	1	20	
Cadmium	77.3	1.0	0.10	ug/l	80.0	ND	97	70-130	2	20	
Copper	82.2	2.00	0.500	ug/l	80.0	5.63	96	70-130	0.7	20	
Lead	79.3	1.0	0.20	ug/l	80.0	5.02	93	70-130	1	20	
Thallium	73.5	1.0	0.20	ug/l	80.0	ND	92	70-130	0.1	20	

TestAmerica Irvine

Kathleen A. Robb For Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD1026

Sampled: 04/12/10-04/13/10
 Received: 04/12/10

METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10D1371 Extracted: 04/13/10											
Blank Analyzed: 04/13/2010 (10D1371-BLK1)											
Mercury	ND	0.20	0.10	ug/l							
LCS Analyzed: 04/13/2010 (10D1371-BS1)											
Mercury	7.56	0.20	0.10	ug/l	8.00		94	85-115			
Matrix Spike Analyzed: 04/13/2010 (10D1371-MS1)											
						Source: ITD0980-10					
Mercury	8.10	0.20	0.10	ug/l	8.00	ND	101	70-130			
Matrix Spike Dup Analyzed: 04/13/2010 (10D1371-MSD1)											
						Source: ITD0980-10					
Mercury	8.06	0.20	0.10	ug/l	8.00	ND	101	70-130	0.5	20	

TestAmerica Irvine

Kathleen A. Robb For Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD1026

Sampled: 04/12/10-04/13/10
 Received: 04/12/10

METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10D1382 Extracted: 04/13/10											
Blank Analyzed: 04/16/2010 (10D1382-BLK1)											
Antimony	ND	2.0	0.30	ug/l							
Cadmium	ND	1.0	0.10	ug/l							
Copper	1.35	2.00	0.500	ug/l							Ja
Lead	ND	1.0	0.20	ug/l							
Thallium	ND	1.0	0.20	ug/l							
LCS Analyzed: 04/16/2010 (10D1382-BS1)											
Antimony	79.7	2.0	0.30	ug/l	80.0		100	85-115			
Cadmium	78.5	1.0	0.10	ug/l	80.0		98	85-115			
Copper	79.4	2.00	0.500	ug/l	80.0		99	85-115			
Lead	74.5	1.0	0.20	ug/l	80.0		93	85-115			
Thallium	76.0	1.0	0.20	ug/l	80.0		95	85-115			
Matrix Spike Analyzed: 04/16/2010 (10D1382-MS1) Source: ITD1026-02											
Antimony	80.5	2.0	0.30	ug/l	80.0	0.485	100	70-130			
Cadmium	77.8	1.0	0.10	ug/l	80.0	0.108	97	70-130			
Copper	80.5	2.00	0.500	ug/l	80.0	3.02	97	70-130			
Lead	75.5	1.0	0.20	ug/l	80.0	0.551	94	70-130			
Thallium	76.0	1.0	0.20	ug/l	80.0	0.295	95	70-130			
Matrix Spike Dup Analyzed: 04/16/2010 (10D1382-MSD1) Source: ITD1026-02											
Antimony	82.6	2.0	0.30	ug/l	80.0	0.485	103	70-130	3	20	
Cadmium	79.9	1.0	0.10	ug/l	80.0	0.108	100	70-130	3	20	
Copper	82.6	2.00	0.500	ug/l	80.0	3.02	100	70-130	3	20	
Lead	77.4	1.0	0.20	ug/l	80.0	0.551	96	70-130	3	20	
Thallium	78.1	1.0	0.20	ug/l	80.0	0.295	97	70-130	3	20	

TestAmerica Irvine

Kathleen A. Robb For Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD1026

Sampled: 04/12/10-04/13/10
 Received: 04/12/10

METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10D1565 Extracted: 04/14/10											
Blank Analyzed: 04/14/2010 (10D1565-BLK1)											
Mercury	ND	0.20	0.10	ug/l							
LCS Analyzed: 04/14/2010 (10D1565-BS1)											
Mercury	8.20	0.20	0.10	ug/l	8.00		103	85-115			
Matrix Spike Analyzed: 04/14/2010 (10D1565-MS1)											
						Source: ITD0648-01					
Mercury	8.41	0.20	0.10	ug/l	8.00	ND	105	70-130			
Matrix Spike Dup Analyzed: 04/14/2010 (10D1565-MSD1)											
						Source: ITD0648-01					
Mercury	8.33	0.20	0.10	ug/l	8.00	ND	104	70-130	1	20	

TestAmerica Irvine

Kathleen A. Robb For Debby Wilson
 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 TestAmerica.

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD1026

Sampled: 04/12/10-04/13/10
 Received: 04/12/10

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10D1218 Extracted: 04/12/10											
Blank Analyzed: 04/12/2010 (10D1218-BLK1)											
Chloride	ND	0.50	0.25	mg/l							
Nitrate/Nitrite-N	ND	0.26	0.15	mg/l							
Sulfate	ND	0.50	0.20	mg/l							
LCS Analyzed: 04/12/2010 (10D1218-BS1)											
Chloride	4.89	0.50	0.25	mg/l	5.00		98	90-110			
Sulfate	9.33	0.50	0.20	mg/l	10.0		93	90-110			
Matrix Spike Analyzed: 04/12/2010 (10D1218-MS1)											
						Source: ITD1073-02					
Chloride	227	10	5.0	mg/l	50.0	193	69	80-120			M2
Sulfate	655	10	4.0	mg/l	100	616	39	80-120			MHA
Matrix Spike Analyzed: 04/12/2010 (10D1218-MS2)											
						Source: ITD1026-02					
Chloride	9.04	0.50	0.25	mg/l	5.00	3.54	110	80-120			
Sulfate	16.7	0.50	0.20	mg/l	10.0	6.09	106	80-120			
Matrix Spike Dup Analyzed: 04/12/2010 (10D1218-MSD1)											
						Source: ITD1073-02					
Chloride	230	10	5.0	mg/l	50.0	193	75	80-120	1	20	M2
Sulfate	662	10	4.0	mg/l	100	616	46	80-120	1	20	MHA
Batch: 10D1613 Extracted: 04/15/10											
Blank Analyzed: 04/15/2010 (10D1613-BLK1)											
Total Dissolved Solids	ND	10	1.0	mg/l							
LCS Analyzed: 04/15/2010 (10D1613-BS1)											
Total Dissolved Solids	990	10	1.0	mg/l	1000		99	90-110			

TestAmerica Irvine

Kathleen A. Robb For Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 009
Report Number: ITD1026

Sampled: 04/12/10-04/13/10
Received: 04/12/10

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10D1613 Extracted: 04/15/10											
Duplicate Analyzed: 04/15/2010 (10D1613-DUP1)											
Source: ITD1204-14											
Total Dissolved Solids	366	10	1.0	mg/l		359			2	10	

TestAmerica Irvine

Kathleen A. Robb For Debby Wilson
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 TestAmerica.

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD1026

Sampled: 04/12/10-04/13/10
 Received: 04/12/10

METHOD BLANK/QC DATA

EPA-5 1613B

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	RPD Limits	RPD RPD	Data Qualifiers
Batch: 106245 Extracted: 04/16/10										
Blank Analyzed: 04/22/2010 (G0D160000245B)					Source:					
1,2,3,4,6,7,8-HpCDD	0.0000047	0.00005	0.00000056	ug/L				-		J, Q
1,2,3,4,6,7,8-HpCDF	0.0000024	0.00005	0.000001	ug/L				-		J, Q
1,2,3,4,7,8,9-HpCDF	0.00000086	0.00005	0.0000017	ug/L				-		J, Q
1,2,3,4,7,8-HxCDD	0.0000014	0.00005	0.00000048	ug/L				-		J, Q
1,2,3,4,7,8-HxCDF	0.0000013	0.00005	0.00000056	ug/L				-		J, Q
1,2,3,6,7,8-HxCDD	0.0000012	0.00005	0.0000004	ug/L				-		J, Q
1,2,3,6,7,8-HxCDF	0.00000053	0.00005	0.00000049	ug/L				-		J, Q
1,2,3,7,8,9-HxCDD	0.0000005	0.00005	0.00000036	ug/L				-		J, Q
1,2,3,7,8,9-HxCDF	0.000001	0.00005	0.00000057	ug/L				-		J, Q
1,2,3,7,8-PeCDD	ND	0.00005	0.00000081	ug/L				-		
1,2,3,7,8-PeCDF	ND	0.00005	0.00000078	ug/L				-		
2,3,4,6,7,8-HxCDF	0.00000088	0.00005	0.00000043	ug/L				-		J, Q
2,3,4,7,8-PeCDF	ND	0.00005	0.00000086	ug/L				-		
2,3,7,8-TCDD	ND	0.00001	0.00000059	ug/L				-		
2,3,7,8-TCDF	0.00000063	0.00001	0.00000044	ug/L				-		J
OCDD	0.000026	0.0001	0.0000012	ug/L				-		J, Q
OCDF	0.000006	0.0001	0.00000096	ug/L				-		J, Q
Total HpCDD	0.0000079	0.00005	0.00000056	ug/L				-		J, Q
Total HpCDF	0.0000066	0.00005	0.00001	ug/L				-		J, Q
Total HxCDD	0.0000031	0.00005	0.00000036	ug/L				-		J, Q
Total HxCDF	0.0000044	0.00005	0.00000043	ug/L				-		J, Q
Total PeCDD	ND	0.00005	0.00000081	ug/L				-		
Total PeCDF	ND	0.00005	0.00000053	ug/L				-		
Total TCDD	ND	0.00001	0.00000059	ug/L				-		
Total TCDF	0.00000063	0.00001	0.00000044	ug/L				-		J
Surrogate: 13C-1,2,3,4,6,7,8-HpCDD	0.0015			ug/L	0.00200		77	23-140		
Surrogate: 13C-1,2,3,4,6,7,8-HpCDF	0.0015			ug/L	0.00200		73	28-143		
Surrogate: 13C-1,2,3,4,7,8,9-HpCDF	0.0014			ug/L	0.00200		70	26-138		
Surrogate: 13C-1,2,3,4,7,8-HxCDD	0.0014			ug/L	0.00200		70	32-141		
Surrogate: 13C-1,2,3,4,7,8-HxCDF	0.0014			ug/L	0.00200		70	26-152		
Surrogate: 13C-1,2,3,6,7,8-HxCDD	0.0015			ug/L	0.00200		76	28-130		
Surrogate: 13C-1,2,3,6,7,8-HxCDF	0.0015			ug/L	0.00200		75	26-123		
Surrogate: 13C-1,2,3,7,8,9-HxCDF	0.0014			ug/L	0.00200		68	29-147		
Surrogate: 13C-1,2,3,7,8-PeCDD	0.0015			ug/L	0.00200		73	25-181		
Surrogate: 13C-1,2,3,7,8-PeCDF	0.0014			ug/L	0.00200		71	24-185		

TestAmerica Irvine

Kathleen A. Robb For Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009
 Report Number: ITD1026

Sampled: 04/12/10-04/13/10
 Received: 04/12/10

METHOD BLANK/QC DATA

EPA-5 1613B

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 106245 Extracted: 04/16/10											
Blank Analyzed: 04/22/2010 (G0D160000245B)											
Source:											
Surrogate: 13C-2,3,4,6,7,8-HxCDF	0.0016			ug/L	0.00200		78	28-136			
Surrogate: 13C-2,3,4,7,8-PeCDF	0.0015			ug/L	0.00200		73	21-178			
Surrogate: 13C-2,3,7,8-TCDD	0.0012			ug/L	0.00200		59	25-164			
Surrogate: 13C-2,3,7,8-TCDF	0.0013			ug/L	0.00200		67	24-169			
Surrogate: 13C-OCDD	0.0032			ug/L	0.00400		81	17-157			
Surrogate: 37Cl4-2,3,7,8-TCDD	0.00077			ug/L	0.000800		96	35-197			
LCS Analyzed: 04/22/2010 (G0D160000245C)											
Source:											
1,2,3,4,6,7,8-HpCDD	0.00103	0.00005	0.0000034	ug/L	0.00100		103	70-140			Ba
1,2,3,4,6,7,8-HpCDF	0.00105	0.00005	0.0000031	ug/L	0.00100		105	82-122			Ba
1,2,3,4,7,8,9-HpCDF	0.00116	0.00005	0.0000059	ug/L	0.00100		116	78-138			Ba
1,2,3,4,7,8-HxCDD	0.00106	0.00005	0.000002	ug/L	0.00100		106	70-164			Ba
1,2,3,4,7,8-HxCDF	0.00105	0.00005	0.0000023	ug/L	0.00100		105	72-134			Ba
1,2,3,6,7,8-HxCDD	0.00111	0.00005	0.0000018	ug/L	0.00100		111	76-134			Ba
1,2,3,6,7,8-HxCDF	0.00108	0.00005	0.0000021	ug/L	0.00100		108	84-130			Ba
1,2,3,7,8,9-HxCDD	0.000927	0.00005	0.0000016	ug/L	0.00100		93	64-162			Ba
1,2,3,7,8,9-HxCDF	0.00102	0.00005	0.0000025	ug/L	0.00100		102	78-130			Ba
1,2,3,7,8-PeCDD	0.00102	0.00005	0.0000025	ug/L	0.00100		102	70-142			
1,2,3,7,8-PeCDF	0.00105	0.00005	0.0000022	ug/L	0.00100		105	80-134			
2,3,4,6,7,8-HxCDF	0.00103	0.00005	0.0000018	ug/L	0.00100		103	70-156			Ba
2,3,4,7,8-PeCDF	0.00102	0.00005	0.0000022	ug/L	0.00100		102	68-160			
2,3,7,8-TCDD	0.00023	0.00001	0.00000064	ug/L	0.000200		115	67-158			
2,3,7,8-TCDF	0.000194	0.00001	0.00000058	ug/L	0.000200		97	75-158			
OCDD	0.00212	0.0001	0.0000055	ug/L	0.00200		106	78-144			Ba
OCDF	0.00208	0.0001	0.0000048	ug/L	0.00200		104	63-170			Ba
Surrogate: 13C-1,2,3,4,6,7,8-HpCDD	0.00145			ug/L	0.00200		72	26-166			
Surrogate: 13C-1,2,3,4,6,7,8-HpCDF	0.00134			ug/L	0.00200		67	21-158			
Surrogate: 13C-1,2,3,4,7,8,9-HpCDF	0.00122			ug/L	0.00200		61	20-186			
Surrogate: 13C-1,2,3,4,7,8-HxCDD	0.00128			ug/L	0.00200		64	21-193			
Surrogate: 13C-1,2,3,4,7,8-HxCDF	0.0013			ug/L	0.00200		65	19-202			
Surrogate: 13C-1,2,3,6,7,8-HxCDD	0.0013			ug/L	0.00200		65	25-163			
Surrogate: 13C-1,2,3,6,7,8-HxCDF	0.00131			ug/L	0.00200		66	21-159			
Surrogate: 13C-1,2,3,7,8,9-HxCDF	0.00121			ug/L	0.00200		61	17-205			
Surrogate: 13C-1,2,3,7,8-PeCDD	0.00128			ug/L	0.00200		64	21-227			
Surrogate: 13C-1,2,3,7,8-PeCDF	0.00117			ug/L	0.00200		59	21-192			
Surrogate: 13C-2,3,4,6,7,8-HxCDF	0.00139			ug/L	0.00200		69	22-176			

TestAmerica Irvine

Kathleen A. Robb For Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD1026

Sampled: 04/12/10-04/13/10
 Received: 04/12/10

METHOD BLANK/QC DATA

EPA-5 1613B

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 106245 Extracted: 04/16/10											
LCS Analyzed: 04/22/2010 (G0D160000245C)											
Surrogate: 13C-2,3,4,7,8-PeCDF	0.00129			ug/L	0.00200		64	13-328			
Surrogate: 13C-2,3,7,8-TCDD	0.000995			ug/L	0.00200		50	20-175			
Surrogate: 13C-2,3,7,8-TCDF	0.00109			ug/L	0.00200		55	22-152			
Surrogate: 13C-OCDD	0.00292			ug/L	0.00400		73	13-199			
Surrogate: 37Cl4-2,3,7,8-TCDD	0.000816			ug/L	0.000800		102	31-191			

TestAmerica Irvine

Kathleen A. Robb For Debby Wilson
 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 TestAmerica.

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD1026

Sampled: 04/12/10-04/13/10
 Received: 04/12/10

METHOD BLANK/QC DATA

ASTM 5174-91

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 119221 Extracted: 04/29/10											
Matrix Spike Dup Analyzed: 05/03/2010 (F0D070495002D)						Source: F0D070495002					
Total Uranium	29.9	0.7	0.2	pCi/L	27.1	0.185	110	62-150	0.7	20	
Matrix Spike Analyzed: 05/03/2010 (F0D070495002S)						Source: F0D070495002					
Total Uranium	30.1	0.7	0.2	pCi/L	27.1	0.185	110	62-150			
Blank Analyzed: 05/03/2010 (F0D290000221B)						Source:					
Total Uranium	0.213	0.677	0.21	pCi/L				-			Jb
LCS Analyzed: 05/03/2010 (F0D290000221C)						Source:					
Total Uranium	6.02	0.68	0.21	pCi/L	5.42		111	90-120			

TestAmerica Irvine

Kathleen A. Robb For Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009
 Report Number: ITD1026

Sampled: 04/12/10-04/13/10
 Received: 04/12/10

METHOD BLANK/QC DATA

EPA 900.0 MOD

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 105073 Extracted: 04/15/10											
Matrix Spike Analyzed: 04/26/2010 (F0D140466001S)						Source: ITD1026-02					
Gross Alpha	49.4	3	1.1	pCi/L	49.4	2.1	96	35-150			
Gross Beta	75.6	4	1.1	pCi/L	67.8	2.76	108	54-150			
Duplicate Analyzed: 04/27/2010 (F0D140466001X)						Source: ITD1026-02					
Gross Alpha	2.1	3	1.1	pCi/L		2.1	-				Jb
Gross Beta	2.86	4	1.1	pCi/L		2.76	-				Jb
Blank Analyzed: 04/26/2010 (F0D150000073B)						Source:					
Gross Alpha	0.27	3	0.83	pCi/L			-				U
Gross Beta	-0.09	4	0.95	pCi/L			-				U
LCS Analyzed: 04/26/2010 (F0D150000073C)						Source:					
Gross Alpha	51.1	3	1.3	pCi/L	49.4		103	62-134			
Gross Beta	69.5	4	1	pCi/L	67.8		102	58-133			

TestAmerica Irvine

Kathleen A. Robb For Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD1026

Sampled: 04/12/10-04/13/10
 Received: 04/12/10

METHOD BLANK/QC DATA

EPA 901.1 MOD

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 105347 Extracted: 04/15/10											
Duplicate Analyzed: 05/06/2010 (F0D140466001X)						Source: ITD1026-02					
Cesium 137	-0.02	20	17	pCi/L		1.2		-			U
Potassium 40	-100	NA	300	pCi/L		-90		-			U
Blank Analyzed: 05/06/2010 (F0D150000347B)						Source:					
Cesium 137	-0.9	20	14	pCi/L				-			U
Potassium 40	-80	NA	230	pCi/L				-			U
LCS Analyzed: 05/06/2010 (F0D150000347C)						Source:					
Americium 241	146000	NA	700	pCi/L	141000		103	87-110			
Cobalt 60	86100	NA	300	pCi/L	87900		98	89-110			
Cesium 137	53000	20	300	pCi/L	53100		100	90-110			

TestAmerica Irvine

Kathleen A. Robb For Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD1026

Sampled: 04/12/10-04/13/10
 Received: 04/12/10

METHOD BLANK/QC DATA

EPA 903.0 MOD

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<u>Batch: 104356 Extracted: 04/14/10</u>											
Blank Analyzed: 05/06/2010 (F0D140000356B)						Source:					
Radium (226)	-0.08	1	0.24	pCi/L				-			U
LCS Analyzed: 05/06/2010 (F0D140000356C)						Source:					
Radium (226)	10.7	1	0.2	pCi/L	11.3		95	68-136			
LCS Dup Analyzed: 05/06/2010 (F0D140000356L)						Source:					
Radium (226)	10	1	0.2	pCi/L	11.3		89	68-136	7	40	

TestAmerica Irvine

Kathleen A. Robb For Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD1026

Sampled: 04/12/10-04/13/10
 Received: 04/12/10

METHOD BLANK/QC DATA

EPA 904 MOD

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 104357 Extracted: 04/14/10											
Blank Analyzed: 05/06/2010 (F0D140000357B)											
Radium 228	0.08	1	0.5	pCi/L				-			U
LCS Analyzed: 05/06/2010 (F0D140000357C)											
Radium 228	7.36	1	0.46	pCi/L	6.33		116	60-142			
LCS Dup Analyzed: 05/06/2010 (F0D140000357L)											
Radium 228	7.78	1	0.44	pCi/L	6.33		123	60-142	6	40	

TestAmerica Irvine

Kathleen A. Robb For Debby Wilson
 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 TestAmerica.

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD1026

Sampled: 04/12/10-04/13/10
 Received: 04/12/10

METHOD BLANK/QC DATA

EPA 905 MOD

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 104358 Extracted: 04/14/10											
Blank Analyzed: 04/22/2010 (F0D140000358B)											
Strontium 90	0.16	3	0.29	pCi/L				-			U
LCS Analyzed: 04/22/2010 (F0D140000358C)											
Strontium 90	6.48	3	0.32	pCi/L	6.77		96	80-130			
LCS Dup Analyzed: 04/22/2010 (F0D140000358L)											
Strontium 90	7.04	3	0.37	pCi/L	6.77		104	80-130	8	40	

TestAmerica Irvine

Kathleen A. Robb For Debby Wilson
 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 TestAmerica.

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD1026

Sampled: 04/12/10-04/13/10
 Received: 04/12/10

METHOD BLANK/QC DATA

EPA 906.0 MOD

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 119067 Extracted: 04/29/10											
Duplicate Analyzed: 04/29/2010 (F0D140466001X)						Source: ITD1026-02					
Tritium	-48	500	180	pCi/L		-6		-			U
Matrix Spike Analyzed: 04/29/2010 (F0D140466002S)						Source: ITD1026-03					
Tritium	4090	500	190	pCi/L	4480	-98	93	62-147			
Blank Analyzed: 04/29/2010 (F0D290000067B)						Source:					
Tritium	30	500	180	pCi/L				-			U
LCS Analyzed: 04/29/2010 (F0D290000067C)						Source:					
Tritium	4440	500	180	pCi/L	4480		99	85-112			

TestAmerica Irvine

Kathleen A. Robb For Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD1026

Sampled: 04/12/10-04/13/10
Received: 04/12/10

DATA QUALIFIERS AND DEFINITIONS

- B** Analyte was detected in the associated Method Blank.
- Ba** Method blank contamination. The associated method blank contains the target analyte at a reportable level.
- J** Estimated result. Result is less than the reporting limit.
- Ja** Estimated value. Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). The user of this data should be aware that this data is of limited reliability.
- Jb** Result is greater than sample detection limit but less than stated reporting limit.
- M2** The MS and/or MSD were below the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
- MHA** Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).
- MNR1** There was no MS/MSD analyzed with this batch due to insufficient sample volume. See Blank Spike/Blank Spike Duplicate.
- Q** Estimated maximum possible concentration (EMPC).
- U** Result is less than the sample detection limit.
- ND** Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
- RPD** Relative Percent Difference

TestAmerica Irvine

Kathleen A. Robb For Debby Wilson
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 TestAmerica.

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD1026

Sampled: 04/12/10-04/13/10
Received: 04/12/10

Certification Summary

TestAmerica Irvine

Method	Matrix	Nelac	California
EDD + Level 4	Water	N/A	N/A
EPA 1664A	Water	X	X
EPA 200.8-Diss	Water	X	X
EPA 200.8	Water	X	X
EPA 245.1-Diss	Water	X	X
EPA 245.1	Water	X	X
EPA 300.0	Water	X	X
Filtration	Water	N/A	N/A
SM2540C	Water	X	

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

Subcontracted Laboratories

TestAmerica St. Louis

13715 Rider Trail North - Earth City, MO 63045

Method Performed: ASTM 5174-91
Samples: ITD1026-02, ITD1026-03

Method Performed: EPA 900.0 MOD
Samples: ITD1026-02, ITD1026-03

Method Performed: EPA 901.1 MOD
Samples: ITD1026-02, ITD1026-03

Method Performed: EPA 903.0 MOD
Samples: ITD1026-02, ITD1026-03

Method Performed: EPA 904 MOD
Samples: ITD1026-02, ITD1026-03

Method Performed: EPA 905 MOD
Samples: ITD1026-02, ITD1026-03

Method Performed: EPA 906.0 MOD
Samples: ITD1026-02, ITD1026-03

TestAmerica Irvine

Kathleen A. Robb For Debby Wilson
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 TestAmerica.

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 009

Report Number: ITD1026

Sampled: 04/12/10-04/13/10
Received: 04/12/10

TestAmerica West Sacramento

880 Riverside Parkway - West Sacramento, CA 95605

Method Performed: EPA-5 1613B
Samples: ITD1026-02

TestAmerica Irvine

Kathleen A. Robb For Debby Wilson
Project Manager

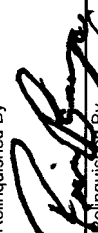
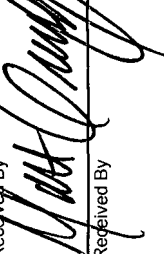
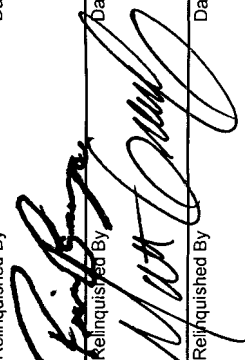
<p>Client Name/Address: MWH-Arcadia 618 Michillinda Ave, Suite 200 Arcadia, CA 91007</p> <p>Test America Contact: Joseph Doak</p>			<p>Project: Boeing-SSFL NPDES Routine Outfall 009 GRAB Stormwater at WS-13</p>			<p>ANALYSIS REQUIRED</p>			<p>Field readings: Temp °F = 50.0 pH = 7.3 Time of readings = 08:15</p>		
<p>Project Manager: Bronwyn Kelly Sampler: R Bava</p>			<p>Phone Number: (626) 568-6691 Fax Number: (626) 568-6515</p>			<p>Oil & Grease (1664-HEM)</p>			<p>Comments</p>		
Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date/Time	Preservative	Botl #					
Outfall 009	W	1L Amber	2	4/2/2010 8:15	HCl	1A, 1B					
							<p>These Samples are the Grab Portion of Outfall 009 for this storm event. Composite samples will follow and are to be added to this work order.</p>				
Relinquished By: R Bava		Date/Time: 4-2-2010 14:30		Received By: Matt O'Connell		Date/Time: 4-12-10 14:30		Turn-around time: (Check) 24 Hour: _____ 72 Hour: _____ 10 Day: _____ 48 Hour: _____ 5 Day: _____ Normal: <input checked="" type="checkbox"/>			
Relinquished By: Matt O'Connell		Date/Time: 4-12-10 16:40		Received By: [Signature]		Date/Time: 4/12/10 16:40		Sample Integrity: (Check) Intact: <input checked="" type="checkbox"/> On Ice: <input checked="" type="checkbox"/>			
Relinquished By: Matt O'Connell		Date/Time: _____		Received By: [Signature]		Date/Time: 4/12/10 16:40		Data Requirements: (Check) No Level IV: _____ All Level IV: _____ NPDES Level IV: <input checked="" type="checkbox"/>			

#191 2.8

Client Name/Address: MWH-Arcadia 618 Michillinda Ave, Suite 200 Arcadia, CA 91007		Project: Boeing-SSFL NPDES Routine Outfall 009 COMPOSITE Stormwater at WS-13		ANALYSIS REQUIRED										Comments low flow				
Test America Contact: Joseph Doak		Phone Number: (626) 568-6691 Fax Number: (626) 568-6515		Total Recoverable Metals: Sb, Cd, Cu, Pb, Hg, Tl		TCD (and all congeners)		Cl-, SO ₄ , NO ₃ +NO ₂ -N, ammonia		TDS		Gross Alpha(900.0), Gross Beta(900.0), Tritium (H-3) (906.0), Sr-90 (905.0), Total Combined Radium 226 (903.0 or 903.1) & Radium 228 (904.0), Uranium (908.0), K-40, CS-137 (901.0 or 901.1)			Chronic Toxicity		Total Dissolved Metals: Sb, Cd, Cu, Pb, Hg, Tl	
Project Manager: Bronwyn Kelly Sampler: R. Banaga		Sampling Date/Time 4-12-2010 05:25		Preservative HNO ₃		Bottle # 2A												
Outfall 009 Dup		1L Poly		1		HNO ₃		2A										
Outfall 009		1L Poly		1		HNO ₃		2B										
Outfall 009		1L Amber		2		None		3A, 3B										
Outfall 009		500 mL Poly		2		None		4A, 4B										
Outfall 009		500 mL Poly		1		None		5		X								
Outfall 009		2.5 Gal Cube 500 ml Amber		1		None		6A		X							Unfiltered and unpreserved analysis	
Outfall 009		1-Gal Poly		1		None		7									Only test if first or second rain events of the year	
Outfall 009		1L Poly		1		None		8								Filler w/in 24hrs of receipt at lab		

COC Page 2 of 2 are the composite samples for Outfall 009 for this storm event.

These must be added to the same work order for COC Page 1 of 2 for Outfall 009 for the same event.

Relinquished By 	Date/Time: 4-12-2010 14:30	Received By 	Date/Time: 4-12-10 14:30
Relinquished By 	Date/Time: 4-12-10 16:40	Received By (Blank)	Date/Time: (Blank)

Turn-around time: (Check)

24 Hour: 72 Hour: 10 Day:

48 Hour: 5 Day: Normal:

Sample Integrity: (Check) In tact: On Ice:

Data Requirements: (Check)

No Level IV: All Level IV: NPDES Level IV:

#191 28



TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

PROJECT NO. ITD1026


MWH-Pasadena Boeing

Lot #: F0D140466

Debbie Wilson

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

TESTAMERICA LABORATORIES, INC.



Lynn Fussner
Project Manager

May 10, 2010

Case Narrative
LOT NUMBER: F0D140466

This report contains the analytical results for the two samples received under chain of custody by TestAmerica St. Louis on April 14, 2010. These samples are associated with your MWH-Pasadena Boeing project.

The analytical results included in this report meet all applicable quality control procedure requirements, except as noted below.

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

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

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

Observations/Nonconformances

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

Sample preparation was started in the TestAmerica Irvine laboratory prior to shipment of the samples to the TestAmerica St. Louis laboratory. The initial sample preparation consisted of acidification of samples to a pH less than 2 with Nitric Acid. Documentation of the acidification is attached in the Preparation Log.

Radium-226 by GFPC (EPA 903.0 MOD)

There was insufficient sample provided to perform the client requested sample duplicate.

Affected Samples:

F0D140466 (1): ITD1026-02

F0D140466 (2): ITD1026-03

Radium-228 by GFPC (EPA 904 MOD)

There was insufficient sample provided to perform the client requested sample duplicate.

Affected Samples:

F0D140466 (1): ITD1026-02

F0D140466 (2): ITD1026-03

H-3 by Distillation & LSC (EPA 906.0 MOD)

Tritium sample was received in a non glass amber bottle.

Affected Samples:

F0D140466 (1): ITD1026-02

F0D140466 (2): ITD1026-03

pH Adjustment Log

Laboratory: **TestAmerica Irvine**

Method: **Radium 226/228 by 903.0/904.0**

Analyst

Nitric Acid Lot #: **H45029**

Mallinckrodt Chemicals

DATE: **01/13/16**

TIME: **2:50 PM**

Lab Sample Number	Sample Volume (L)	Nitric Acid Volume added (ml)	Check pH < 2	Comments
ITD1026-02H	10	40	22	
	10	40	22	rip blank

pH Adjustment Log
 slsvr01/inorganics/wetchem/spreadsheets/pH Adjustment Log.xls
 Revision 0, 03/26/2010

METHODS SUMMARY

F0D140466

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

References:

ASTM Annual Book Of ASTM Standards.

EPA "EASTERN ENVIRONMENTAL RADIATION FACILITY RADIOCHEMISTRY
PROCEDURES MANUAL" US EPA EPA 520/5-84-006 AUGUST 1984

SAMPLE SUMMARY

F0D140466

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
LXX3H	001	ITD1026-02	04/12/10	05:25
LXX34	002	ITD1026-03	04/13/10	

NOTE (S) :

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

TestAmerica Irvine

Client Sample ID: ITD1026-02

Radiochemistry

Lab Sample ID: F0D140466-001
 Work Order: LXX3H
 Matrix: WATER

Date Collected: 04/12/10 0525
 Date Received: 04/14/10 0900

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	mdc	Prep Date	Analysis Date
Gamma Cs-137 & Hits by EPA 901.1 MOD							
Cesium 137	1.2	U	9.0	20.0	17	04/15/10	05/06/10
Potassium 40	-90	U	3500		200	04/15/10	05/06/10
Gross Alpha/Beta EPA 900							
Gross Alpha	2.1	J	1.0	3.0	1.2	04/15/10	04/27/10
Gross Beta	2.76	J	0.83	4.00	0.97	04/15/10	04/27/10
SR-90 BY GFPC EPA-905 MOD							
Strontium 90	-0.03	U	0.21	3.00	0.37	04/14/10	04/22/10
TRITIUM (Distill) by EPA 906.0 MOD							
Tritium	-6	U	97	500	180	04/29/10	04/29/10
Total Uranium by KPA ASTM 5174-91							
Total Uranium	0.532	J	0.063	0.677	0.21	04/29/10	05/03/10
Radium 226 by EPA 903.0 MOD							
Radium (226)	0.16	J	0.11	1.00	0.15	04/14/10	05/06/10
Radium 228 by GFPC EPA 904 MOD							
Radium 228	-0.16	U	0.24	1.00	0.46	04/14/10	05/06/10

NOTE (S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC.

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

U Result is less than the sample detection limit.

TestAmerica Irvine

Client Sample ID: ITD1026-03

Radiochemistry

Lab Sample ID: FOD140466-002
 Work Order: LXX34
 Matrix: WATER

Date Collected: 04/13/10 0000
 Date Received: 04/14/10 0900

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	mdc	Prep Date	Analysis Date
Gamma Cs-137 & Hits by EPA 901.1 MOD							
Cesium 137	0.0	U	6.8	20.0	14	04/15/10	05/06/10
Potassium 40	-70	U	700		260	04/15/10	05/06/10
Gross Alpha/Beta EPA 900							
Gross Alpha	0.21	U	0.43	3.00	0.75	04/15/10	04/26/10
Gross Beta	0.38	U	0.91	4.00	1.5	04/15/10	04/26/10
SR-90 BY GFPC EPA-905 MOD							
Strontium 90	-0.04	U	0.19	3.00	0.34	04/14/10	04/22/10
TRITIUM (Distill) by EPA 906.0 MOD							
Tritium	-98	U	83	500	190	04/29/10	04/29/10
Total Uranium by KPA ASTM 5174-91							
Total Uranium	0.234	J	0.030	0.677	0.21	04/29/10	05/03/10
Radium 226 by EPA 903.0 MOD							
Radium (226)	0.002	U	0.092	1.00	0.18	04/14/10	05/06/10
Radium 228 by GFPC EPA 904 MOD							
Radium 228	0.02	U	0.24	1.00	0.43	04/14/10	05/06/10

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC.

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

U Result is less than the sample detection limit.

METHOD BLANK REPORT

Radiochemistry

Client Lot ID: FOD140466
 Matrix: WATER

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDC	Prep Date	Lab Sample ID Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD							
Tritium	30	U	100	500	180	04/29/10	FOD290000-067B 04/29/10
Total Uranium by KPA ASTM 5174-91							
Total Uranium	0.213	J	0.026	0.677	0.21	04/29/10	FOD290000-221B 05/03/10
Gross Alpha/Beta EPA 900							
Gross Alpha	0.27	U	0.48	3.00	0.83	04/15/10	FOD150000-073B 04/26/10
Gross Beta	-0.09	U	0.53	4.00	0.95	04/15/10	04/26/10
Radium 226 by EPA 903.0 MOD							
Radium (226)	-0.08	U	0.11	1.00	0.24	04/14/10	FOD140000-356B 05/06/10
Radium 228 by GFPC EPA 904 MOD							
Radium 228	0.08	U	0.29	1.00	0.50	04/14/10	FOD140000-357B 05/06/10
SR-90 BY GFPC EPA-905 MOD							
Strontium 90	0.16	U	0.18	3.00	0.29	04/14/10	FOD140000-358B 04/22/10
Gamma Cs-137 & Hits by EPA 901.1 MOD							
Cesium 137	-0.9	U	7.6	20.0	14	04/15/10	FOD150000-347B 05/06/10
Potassium 40	-80	U	550		230	04/15/10	05/06/10

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined using instrument performance only

Bold results are greater than the MDC.

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

U Result is less than the sample detection limit.

Laboratory Control Sample Report

Radiochemistry

Client Lot ID: FOD140466
 Matrix: WATER

Parameter	Spike Amount	Result	Total Uncert. (2 σ +/-)	MDC	% Yld	% Rec	Lab Sample ID QC Control Limits
Gross Alpha/Beta EPA 900							
Gross Beta	67.8	69.5	5.9	1.0		102	FOD150000-073C (58 - 133)
	Batch #:	0105073			Analysis Date:	04/26/10	
Gross Alpha/Beta EPA 900							
Gross Alpha	49.4	51.1	5.8	1.3		103	FOD150000-073C (62 - 134)
	Batch #:	0105073			Analysis Date:	04/26/10	
Gamma Cs-137 & Hits by EPA 901.1 MOD							
Americium 241	141000	146000	12000	700		103	FOD150000-347C (87 - 110)
Cesium 137	53100	53000	3100	300		100	(90 - 110)
Cobalt 60	87900	86100	4900	300		98	(89 - 110)
	Batch #:	0105347			Analysis Date:	05/06/10	
TRITIUM (Distill) by EPA 906.0 MOD							
Tritium	4480	4440	470	180		99	FOD290000-067C (85 - 112)
	Batch #:	0119067			Analysis Date:	04/29/10	
Total Uranium by KPA ASTM 5174-91							
Total Uranium	27.1	29.6	3.6	0.2		109	FOD290000-221C (90 - 120)
	Batch #:	0119221			Analysis Date:	05/03/10	
Total Uranium by KPA ASTM 5174-91							
Total Uranium	5.42	6.02	0.62	0.21		111	FOD290000-221C (90 - 120)
	Batch #:	0119221			Analysis Date:	05/03/10	

NOTE (S)

MDC is determined by instrument performance only
 Calculations are performed before rounding to avoid round-off error in calculated results

Laboratory Control Sample/LCS Duplicate Report

Radiochemistry

Client Lot ID: FOD140466
 Matrix: WATER

Parameter	Spike Amount	Result	Total Uncert. (2 σ +/-)	% Yld	% Rec	Lab Sample ID	
						QC Control Limits	Precision
Radium 226 by EPA	903.0 MOD		pCi/L	903.0 MOD			FOD140000-356C
Radium (226)	11.3	10.7	1.1	98	95	(68 - 136)	
Spk 2	11.3	10	1.0	98	89	(68 - 136)	7 %RPD
	Batch #:	0104356		Analysis Date:	05/06/10		
Radium 228 by GFPC EPA	904 MOD		pCi/L	904 MOD			FOD140000-357C
Radium 228	6.33	7.36	0.86	87	116	(60 - 142)	
Spk 2	6.33	7.78	0.89	88	123	(60 - 142)	6 %RPD
	Batch #:	0104357		Analysis Date:	05/06/10		
SR-90 BY GFPC EPA	905 MOD		pCi/L	905 MOD			FOD140000-358C
Strontium 90	6.77	6.48	0.73	86	96	(80 - 130)	
Spk 2	6.77	7.04	0.80	82	104	(80 - 130)	8 %RPD
	Batch #:	0104358		Analysis Date:	04/22/10		

NOTE(S)

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

MATRIX SPIKE REPORT

Radiochemistry

Client Lot Id: FOD140466
 Matrix: WATER

Date Sampled: 04/13/10
 Date Received: 04/14/10

Parameter	Spike Amount	Spike Result	Total Uncert. (2σ +/-)	Spike Yld.	Sample Result	Total Uncert. (2σ +/-)	QC Sample ID		QC Control Limits
							%YLD	%REC	
TRITIUM (Distill) by EPA	906.0	MOD	pCi/L		906.0	MOD	FOD140466-002		
Tritium	4480	4090	450		-98	83		93	(62 - 147)
	Batch #:	0119067		Analysis Date:	04/29/10				
Gross Alpha/Beta EPA	900		pCi/L		900.0	MOD	FOD140466-001		
Gross Beta	67.8	75.6	6.4		2.76	0.83		108	(54 - 150)
	Batch #:	0105073		Analysis Date:	04/26/10				
Gross Alpha/Beta EPA	900		pCi/L		900.0	MOD	FOD140466-001		
Gross Alpha	49.4	49.4	5.7		2.1	1.0		96	(35 - 150)
	Batch #:	0105073		Analysis Date:	04/26/10				

NOTE(S)

Data are incomplete without the case narrative.

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

MATRIX SPIKE/MATRIX SPIKE DUPLICATE REPORT

Radiochemistry

Client Lot ID: FOD070495
 Matrix: WATER

Date Sampled: 04/06/10 1203
 Date Received: 04/07/10 0915

Parameter	Spike Amount	SPIKE Result	Total Uncert. (2σ +/-)	Spike Yld	SAMPLE Result	Total Uncert. (2σ +/-)	QC Sample ID		QC Control Limits
							% Yld	% Rec	
Total Uranium by KPA ASTM 5			pCi/L	5174-91			FOD070495-002		
Total Uranium	27.1	30.1	3.6	0.185	U	0.023	110		(62 - 150)
Spk2	27.1	29.9	3.6	0.185	U	0.023	110		(62 - 150)
						Precision:	0.7	%RPD	
		Batch #:	0119221	Analysis date:	05/03/10				

NOTE(S)

Data are incomplete without the case narrative.

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

U Result is less than the sample detection limit.

DUPLICATE EVALUATION REPORT

Radiochemistry

Client Lot ID: FOD140466
 Matrix: WATER

Date Sampled: 04/12/10

Date Received: 04/14/10

Parameter	SAMPLE		Total	% Yld	DUPLICATE		Total	QC Sample ID	
	Result		Uncert. (2σ+/-)		Result	Uncert. (2σ+/-)	% Yld	Precision	
Gross Alpha/Beta EPA 900				pCi/L	900.0 MOD			FOD140466-001	
Gross Alpha	2.1	J	1.0		2.1	J	1.0	2	%RPD
Gross Beta	2.76	J	0.83		2.86	J	0.87	4	%RPD
	Batch #:		0105073 (Sample)		0105073 (Duplicate)				
Gamma Cs-137 & Hits by EPA 901.1 MOD				pCi/L	901.1 MOD			FOD140466-001	
Cesium 137	1.2	U	9.0		-0.02	U	8.8	207	%RPD
Potassium 40	-90	U	3500		-100	U	2000	20	%RPD
	Batch #:		0105347 (Sample)		0105347 (Duplicate)				
TRITIUM (Distill) by EPA 906.0 MOD				pCi/L	906.0 MOD			FOD140466-001	
Tritium	-6	U	97		-48	U	91	153	%RPD
	Batch #:		0119067 (Sample)		0119067 (Duplicate)				

NOTE(S)

Data are incomplete without the case narrative.

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

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

U Result is less than the sample detection limit.

SUBCONTRACT ORDER

TestAmerica Irvine

ITD1026

Cell 348

SENDING LABORATORY:

RECEIVING LABORATORY:

TestAmerica Irvine
 17461 Derian Avenue, Suite 100
 Irvine, CA 92614
 Phone: (949) 261-1022
 Fax: (949) 260-3297
 Project Manager: Heather Clark

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

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: ITD1026-02				
Water		Sampled: 04/12/10 05:25		
Uranium, Combined-O	04/26/10 12:00	04/12/11 05:25		Out St Louis, Boeing permit, DO NOT FILTER!
Gamma Spec-O	04/26/10 12:00	04/12/11 05:25		Out St Louis, K-40 and CS-137 only, DO NOT FILTER
Gross Alpha-O	04/26/10 12:00	10/09/10 05:25		Out St Louis, Boeing permit, DO NOT FILTER!
Gross Beta-O	04/26/10 12:00	10/09/10 05:25		Out St Louis, Boeing permit, DO NOT FILTER!
Level 4 Data Package - Out	04/26/10 12:00	05/10/10 05:25		
Radium 226-O	04/26/10 12:00	04/12/11 05:25		Out St Louis, Boeing permit, DO NOT FILTER!
Radium 228-O	04/26/10 12:00	04/12/11 05:25		Out St Louis, Boeing permit, DO NOT FILTER!
Tritium-O	04/26/10 12:00	04/12/11 05:25		Out St Louis, Boeing permit, DO NOT FILTER!
Sroutium 90-O	04/26/10 12:00	04/12/11 05:25		Out St Louis, Boeing permit, DO NOT FILTER!
<i>Containers Supplied:</i>				
2.5 gal Poly (H)	500 mL Amber (I)			
Sample ID: ITD1026-03				
Water		Sampled: 04/13/10 00:00		
Uranium, Combined-O	04/26/10 12:00	04/13/11 00:00		Out St Louis, Boeing permit, DO NOT FILTER!
Gross Alpha-O	04/26/10 12:00	10/10/10 00:00		Out St Louis, Boeing permit, DO NOT FILTER!
Gamma Spec-O	04/26/10 12:00	04/13/11 00:00		Out St Louis, K-40 and CS-137 only, DO NOT FILTER
Gross Beta-O	04/26/10 12:00	10/10/10 00:00		Out St Louis, Boeing permit, DO NOT FILTER!
Level 4 Data Package - Out	04/26/10 12:00	05/11/10 00:00		
Radium 226-O	04/26/10 12:00	04/13/11 00:00		Out St Louis, Boeing permit, DO NOT FILTER!
Radium 228-O	04/26/10 12:00	04/13/11 00:00		Out St Louis, Boeing permit, DO NOT FILTER!
Sroutium 90-O	04/26/10 12:00	04/13/11 00:00		Out St Louis, Boeing permit, DO NOT FILTER!
Tritium-O	04/26/10 12:00	04/13/11 00:00		Out St Louis, Boeing permit, DO NOT FILTER!
<i>Containers Supplied:</i>				
2.5 gal Poly (A)				

Released By _____ Date _____ Received By *B-T* Date *4/14/10 0900*

Released By _____ Date _____ Received By _____ Date _____



Lot #(s): F00140466

CONDITION UPON RECEIPT FORM

Client: TA Irvine
 Quote No: 85044
 COC/RFA No: ITD 1026

345

Initiated By: DN Date: 4/14/10 Time: 0900

Shipping Information

Shipper: FedEx UPS DHL Courier Client Other: _____ Multiple Packages: Y N

Shipping # (s):*	Sample Temperature (s):**
1. <u>4289 2134 2192</u>	1. <u>ambient</u>
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____
5. _____	5. _____

*Numbered shipping lines correspond to Numbered Sample Temp lines

**Sample must be received at 4°C ± 2°C- If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid or Rad tests- Liquid or Solids

Condition (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1. <input checked="" type="radio"/> Y <input type="radio"/> N	Are there custody seals present on the cooler?	8. <input checked="" type="radio"/> Y <input type="radio"/> N	Are there custody seals present on bottles?
2. <input type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> N/A	Do custody seals on cooler appear to be tampered with?	9. <input type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> N/A	Do custody seals on bottles appear to be tampered with?
3. <input checked="" type="radio"/> Y <input type="radio"/> N	Were contents of cooler frisked after opening, but before unpacking?	10. <input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> N/A	Was sample received with proper pH? (If not, make note below)
4. <input checked="" type="radio"/> Y <input type="radio"/> N	Sample received with Chain of Custody?	11. <input checked="" type="radio"/> Y <input type="radio"/> N	Sample received in proper containers?
5. <input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> N/A	Does the Chain of Custody match sample ID's on the container(s)?	12. <input type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> N/A	Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below)
6. <input type="radio"/> Y <input checked="" type="radio"/> N	Was sample received broken?	13. <input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> N/A	Was Internal COC/Workshare received?
7. <input checked="" type="radio"/> Y <input type="radio"/> N	Is sample volume sufficient for analysis?	14. <input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> N/A	Was pH taken by original TestAmerica lab?

¹ For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX and soils.

Notes: 5. Blank sample not on COC & the sample label for ITD1026-02 fell off in transit.

Corrective Action:

Client Contact Name: _____
 Sample(s) processed "as is"
 Sample(s) on hold until: _____
 Project Management Review: DN

Informed by: _____
 If released, notify: _____
 Date: 4/15/2010

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED IN. IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIAL AND THE DATE NEXT TO THAT ITEM.

ADMIN-0004, REVISED 10/21/08 \WSlv:01\QA\FORMS\ST-LOUIS\ADMIN\AdmIn004 rev11.doc

APPENDIX G

Section 5

Outfall 010 – April 5, 2010
MEC^X Data Validation Report

THIS PAGE LEFT INTENTIONALLY BLANK



DATA VALIDATION REPORT

Boeing SSFL NPDES

SAMPLE DELIVERY GROUP: ITD0281

Prepared by

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

I. INTRODUCTION

Task Order Title: Boeing SSFL NPDES
 Contract Task Order: 1261.100D.00
 Sample Delivery Group: ITD0281
 Project Manager: B. Kelly
 Matrix: Water
 QC Level: IV
 No. of Samples: 2
 No. of Reanalyses/Dilutions: 0
 Laboratory: TestAmerica-Irvine

Table 1. Sample Identification

Client ID	Laboratory ID	Sub-Laboratory ID	Matrix	Collected	Method
Outfall 010	ITD0281-02	G0D070520-001, F0D070524-001	Water	4/5/2010 09:45	245.1, 245.1 (Diss), ASTM 5174-91, 900.0 MOD, 901.1 MOD, 903.0 MOD, 904 MOD, 905 MOD, 906.0 MOD, 1613

II. Sample Management

No anomalies were observed regarding sample management. The samples in this SDG were received at the laboratories within the temperature limits of 4°C ±2°C. According to the case narrative for this SDG, the samples were received intact, on ice, and properly preserved, if applicable. The COCs were appropriately signed and dated by field and/or laboratory personnel. Custody seals were intact upon receipt at TestAmerica-West Sacramento and TestAmerica-St. Louis. As the samples were couriered to TestAmerica-Irvine, no custody seals were required. If necessary, the client ID was added to the sample result summary by the reviewer.

Data Qualifier Reference Table

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

Qualification Code Reference Table

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

Qualification Code Reference Table Cont.

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

III. Method Analyses

A. EPA METHOD 1613—Dioxin/Furans

Reviewed By: L. Calvin

Date Reviewed: May 10, 2010

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

- Holding Times: Extraction and analytical holding times were met. The water sample was extracted and analyzed within one year of collection.
- Instrument Performance: Instrument performance criteria were met. Following are findings associated with instrument performance.
 - GC Column Performance: A Windows Defining Mix (WDM) containing the first and last eluting congeners of each descriptor and isomer specificity compounds was analyzed with the initial calibration sequence and at the beginning of each analytical sequence. The GC column performance in the calibrations was acceptable, with the height of the valley between the closely eluting isomers and 2,3,7,8-TCDD reported as less than 25%.
 - Mass Spectrometer Performance: The mass spectrometer performance was acceptable with the static resolving power greater than 10,000.
- Calibration: Calibration criteria were met.
 - Initial Calibration: Initial calibration criteria were met. The initial calibration was acceptable with %RSDs $\leq 20\%$ for the 16 native compounds (calibration by isotope dilution) and $\leq 35\%$ for the one native and all labeled compounds (calibration by internal standard). The relative retention times and ion abundance ratios were within the Method 1613 QC limits for all standards.
 - Continuing Calibration: Calibration verification (VER) consisted of a mid-level standard (CS3) analyzed at the beginning of each analytical sequence. The VERs were acceptable with the concentrations within the acceptance criteria listed in Table 6 of EPA Method 1613. The ion abundance ratios and relative retention times were within the method QC limits.
- Blanks: The method blank had detects between the EDL and the RL for all target compounds except isomers and totals for TCDD, TCDF, and PeCDF. Several detects in the method blank did not meet ratio criteria and were reported as EMPCs; however, due to the extent of contamination present in the method blank, it was the reviewer's professional opinion that those results be utilized to qualify applicable sample results. Isomers present

in the sample between the EDLs and RLs were qualified as nondetected, “U,” at the levels of contamination. The sample results for total HpCDD and total HpCDF were also qualified as nondetected, “U,” at the level of contamination, as all peaks comprising the total were present in the method blank at similar concentrations. The result for total HxCDD was qualified as estimated, “J,” as only a portion of the total was considered method blank contamination.

- Blank Spikes and Laboratory Control Samples: OPR recoveries were within the acceptance criteria listed in Table 6 of Method 1613.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: This SDG had no identified field blank or equipment rinsate samples.
 - Field Duplicates: There were no field duplicate samples identified for this SDG.
- Internal Standards Performance: The labeled standard recoveries were within the acceptance criteria listed in Table 7 of Method 1613.
- Compound Identification: Compound identification was verified. The laboratory analyzed for polychlorinated dioxins/furans by EPA Method 1613.
- Compound Quantification and Reported Detection Limits: Compound quantitation was verified by recalculating a representative number of reportable sample results. Total HxCDD included one EMPC peak and was qualified as estimated, “J.” Any detects reported between the estimated detection limit (EDL) and the reporting limit (RL) were qualified as estimated, “J,” and coded with “DNQ,” in order to comply with the NPDES permit. Nondetects are valid to the EDL.

B. EPA METHOD 245.1—Mercury

Reviewed By:

Date Reviewed:

The sample listed in Table 1 for these analyses was validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for Metals (DVP-5, Rev. 0 and DVP-21, Rev. 0)*, *EPA Method 245.1*, and the *National Functional Guidelines for Inorganic Data Review (7/02)*.

- Holding Times: The analytical holding time, 28 days for mercury, was met.
- Tuning: Not applicable to this analysis.

- Calibration: Calibration criteria were met. Mercury initial calibration r^2 values were ≥ 0.995 and all initial and continuing calibration recoveries were within 85-115%. CRI recoveries were within the control limits of 70-130%.
- Blanks: Method blanks and CCBs had no detects.
- Interference Check Samples: Not applicable to this analysis.
- Blank Spikes and Laboratory Control Samples: Recoveries were within laboratory-established QC limits.
- Laboratory Duplicates: No laboratory duplicate analyses were performed.
- Matrix Spike/Matrix Spike Duplicate: MS/MSD analyses were performed for total mercury. Recoveries and the RPD were within laboratory-established QC limits.
- Serial Dilution: No serial dilution analyses were performed.
- Internal Standards Performance: Not applicable to this analysis.
- Sample Result Verification: Calculations were verified and the sample results reported on the sample result summary were verified against the raw data. No transcription errors or calculation errors were noted. When the sample results were qualified and the reviewer was able to clearly determine bias, detected results were qualified as either "J+" or "J-"; otherwise, bias was not indicated in the qualification. Any detects between the method detection limit and the reporting limit were qualified as estimated, "J," and coded with "DNQ," in order to comply with the NPDES permit. Reported nondetects are valid to the MDL.
- Field QC Samples: Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - Field Blanks and Equipment Rinsates: This SDG had no identified field blank or equipment rinsate samples.
 - Field Duplicates: There were no field duplicate samples identified for this SDG.

C. VARIOUS EPA METHODS — Radionuclides

Reviewed By: P. Meeks

Date Reviewed: June 1, 2010

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

- **Holding Times:** The tritium sample was analyzed within 180 days of collection. All remaining aliquots were prepared within the five-day analytical holding time for unpreserved samples.
- **Calibration:** The laboratory calibration information included the standard certificates and applicable preparation/dilutions logs for NIST-traceability.

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

The tritium aliquot was spiked for efficiency determination; therefore, no calibration was necessary. All chemical yields were at least 40% and were considered acceptable. The gamma spectroscopy analytes were determined at the maximum photopeak energy. The kinetic phosphorescence analyzer (KPA) was calibrated immediately prior to the sample analysis. All KPA calibration check standard recoveries were within 90-110% and were deemed acceptable.

- **Blanks:** Total uranium was detected in both method blanks and gross beta was detected in one method blank at 0.213, 0.242, and 1.55 pCi/L, respectively; therefore, total uranium and gross beta detected in the sample were qualified as nondetected, "U," at the reporting limits. There were no other analytes detected in the method blanks or the KPA CCBs.
- **Blank Spikes and Laboratory Control Samples:** The recoveries and RPDs (radium-226, radium-228, strontium-90) were within laboratory-established control limits.
- **Laboratory Duplicates:** No laboratory duplicate analyses were performed on the sample in this SDG.
- **Matrix Spike/Matrix Spike Duplicate:** No matrix spikes or MS/MSD analyses were performed for the sample in this SDG. Method accuracy was evaluated based on the LCS results.
- **Sample Result Verification:** An EPA Level IV review was performed for the sample in this data package. The sample results and MDAs reported on the sample result form were verified against the raw data and no calculation or transcription errors were noted. Any detects between the MDA and the reporting limit were qualified as estimated, "J," and

coded with “DNQ,” in order to comply with the NPDES permit. Reported nondetects are valid to the MDA.

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

Validated Sample Result Forms ITD0281

Analysis Method ASTM 5174-91

Sample Name	Outfall 010	Matrix Type:	WATER	Validation Level:	IV			
Lab Sample Name:	ITD0281-02	Sample Date:	4/5/2010 9:45:00 AM					
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Total Uranium	7440-61-1	ND	0.677	0.21	pCi/L	Jb	U	B

Analysis Method EPA 245.1

Sample Name	Outfall 010	Matrix Type:	Water	Validation Level:	IV			
Lab Sample Name:	ITD0281-02	Sample Date:	4/5/2010 9:45:00 AM					
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Mercury	7439-97-6	ND	0.20	0.10	ug/l		U	

Analysis Method EPA 245.1-Diss

Sample Name	Outfall 010	Matrix Type:	Water	Validation Level:	IV			
Lab Sample Name:	ITD0281-02	Sample Date:	4/5/2010 9:45:00 AM					
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Mercury	7439-97-6	ND	0.20	0.10	ug/l		U	

Analysis Method EPA 900.0 MOD

Sample Name	Outfall 010	Matrix Type:	WATER	Validation Level:	IV			
Lab Sample Name:	ITD0281-02	Sample Date:	4/5/2010 9:45:00 AM					
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Gross Alpha	12587-46-1	0.91	3	1.4	pCi/L	U	UJ	C
Gross Beta	12587-47-2	ND	4	1.1	pCi/L	Jb	U	B

Analysis Method EPA 901.1 MOD

Sample Name	Outfall 010	Matrix Type:	WATER	Validation Level:	IV			
Lab Sample Name:	ITD0281-02	Sample Date:	4/5/2010 9:45:00 AM					
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Cesium 137	10045-97-3	1.1	20	14	pCi/L	U	U	
Potassium 40	13966-00-2	-40	0	270	pCi/L	U	U	

Analysis Method *EPA 903.0 MOD*

Sample Name	Outfall 010	Matrix Type:	WATER		Validation Level:	IV		
Lab Sample Name:	ITD0281-02	Sample Date:	4/5/2010 9:45:00 AM					
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Radium (226)	13982-63-3	0.042	1	0.15	pCi/L	U	UJ	C

Analysis Method *EPA 904 MOD*

Sample Name	Outfall 010	Matrix Type:	WATER		Validation Level:	IV		
Lab Sample Name:	ITD0281-02	Sample Date:	4/5/2010 9:45:00 AM					
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Radium 228	15262-20-1	0.17	1	0.68	pCi/L	U	U	

Analysis Method *EPA 905 MOD*

Sample Name	Outfall 010	Matrix Type:	WATER		Validation Level:	IV		
Lab Sample Name:	ITD0281-02	Sample Date:	4/5/2010 9:45:00 AM					
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Strontium 90	10098-97-2	-0.007	3	0.38	pCi/L	U	U	

Analysis Method *EPA 906.0 MOD*

Sample Name	Outfall 010	Matrix Type:	WATER		Validation Level:	IV		
Lab Sample Name:	ITD0281-02	Sample Date:	4/5/2010 9:45:00 AM					
Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Tritium	10028-17-8	50	500	330	pCi/L	U	U	

Analysis Method EPA-5 1613B

Sample Name Outfall 010 **Matrix Type:** WATER **Validation Level:** IV
Lab Sample Name: ITD0281-02 **Sample Date:** 4/5/2010 9:45:00 AM

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
1,2,3,4,6,7,8-HpCDD	35822-46-9	ND	0.00005	0.0000008	ug/L	J, B	U	B
1,2,3,4,6,7,8-HpCDF	67562-39-4	ND	0.00005	0.0000004	ug/L	J, B	U	B
1,2,3,4,7,8,9-HpCDF	55673-89-7	ND	0.00005	0.0000007	ug/L		U	
1,2,3,4,7,8-HxCDD	39227-28-6	ND	0.00005	0.0000004	ug/L	J, B	U	B
1,2,3,4,7,8-HxCDF	70648-26-9	ND	0.00005	0.0000003	ug/L		U	
1,2,3,6,7,8-HxCDD	57653-85-7	ND	0.00005	0.0000003	ug/L	J, B	U	B
1,2,3,6,7,8-HxCDF	57117-44-9	ND	0.00005	0.0000003	ug/L		U	
1,2,3,7,8,9-HxCDD	19408-74-3	ND	0.00005	0.0000003	ug/L		U	
1,2,3,7,8,9-HxCDF	72918-21-9	ND	0.00005	0.0000003	ug/L		U	
1,2,3,7,8-PeCDD	40321-76-4	ND	0.00005	0.0000007	ug/L		U	
1,2,3,7,8-PeCDF	57117-41-6	ND	0.00005	0.0000005	ug/L		U	
2,3,4,6,7,8-HxCDF	60851-34-5	ND	0.00005	0.0000002	ug/L		U	
2,3,4,7,8-PeCDF	57117-31-4	ND	0.00005	0.0000006	ug/L		U	
2,3,7,8-TCDD	1746-01-6	ND	0.00001	0.0000005	ug/L		U	
2,3,7,8-TCDF	51207-31-9	ND	0.00001	0.0000003	ug/L		U	
OCDD	3268-87-9	ND	0.0002	0.0000008	ug/L	B	U	B
OCDF	39001-02-0	ND	0.0001	0.0000004	ug/L	J, B	U	B
Total HpCDD	37871-00-4	ND	0.00005	0.0000008	ug/L	J, B	U	B
Total HpCDF	38998-75-3	ND	0.00005	0.0000004	ug/L	J, B	U	B
Total HxCDD	34465-46-8	4.5e-006	4.5e-006	0.0000003	ug/L	J, Q, B	J	B, DNQ, *III
Total HxCDF	55684-94-1	ND	0.00005	0.0000002	ug/L		U	
Total PeCDD	36088-22-9	ND	0.00005	0.0000005	ug/L		U	
Total PeCDF	30402-15-4	ND	0.00005	0.0000001	ug/L		U	
Total TCDD	41903-57-5	ND	0.00001	0.0000002	ug/L		U	
Total TCDF	55722-27-5	3.8e-006	0.00001	0.0000003	ug/L	J	J	DNQ

THIS PAGE LEFT INTENTIONALLY BLANK

APPENDIX G

Section 6

Outfall 010 – April 5, 2010

Test America Analytical Laboratory Report

THIS PAGE LEFT INTENTIONALLY BLANK

LABORATORY REPORT

Prepared For: MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project: Routine Outfall 010

Sampled: 04/05/10-04/06/10
Received: 04/05/10
Revised: 08/06/10 08:44

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

*The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. The Chain(s) of Custody, 9 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 TestAmerica 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: Some analytes in this sample and the associated method blank have an ion abundance ratio that is outside of criteria. The analytes are considered as an "estimated maximum possible concentration" (EMPC) because the quantitation is based on the theoretical ion abundance ratio. Analytical results are reported with a "Q" flag.

Some analytes in the associated method blank are reported at a concentration below the estimated detection limit (EDL). The data is reported as a positive detection because the peaks elute at the correct retention time for both characteristic ions and have a signal to noise ratio greater than the method required 2.5:1.

Revised to report as one grab sample per chain of custody.

TestAmerica Irvine

Debby Wilson
Project Manager

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 010

Report Number: ITD0281

Sampled: 04/05/10-04/06/10
Received: 04/05/10

LABORATORY ID

ITD0281-02
ITD0281-03

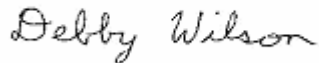
CLIENT ID

Outfall 010 (Grab)
TRIP BLANK

MATRIX

Water
Water

Reviewed By:



TestAmerica Irvine

Debby Wilson
Project Manager

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 010

Report Number: ITD0281

Sampled: 04/05/10-04/06/10
Received: 04/05/10

HEXANE EXTRACTABLE MATERIAL

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD0281-02 (Outfall 010 (Grab) - Water)					Sampled: 04/05/10				
Reporting Units: mg/l									
Hexane Extractable Material (Oil & Grease)	EPA 1664A	10H0497	1.3	4.7	ND	1	04/19/10	04/19/10	

TestAmerica Irvine

Debby Wilson
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 TestAmerica.

ITD0281 <Page 3 of 38>

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 010

Report Number: ITD0281

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD0281-02 (Outfall 010 (Grab) - Water)					Sampled: 04/05/10				
Reporting Units: ug/l									
Mercury	EPA 245.1	10D0779	0.10	0.20	ND	1	04/07/10	04/07/10	
Antimony	EPA 200.8	10D0554	0.30	2.0	0.40	1	04/06/10	04/13/10	J
Cadmium	EPA 200.8	10D0554	0.10	1.0	ND	1	04/06/10	04/13/10	
Copper	EPA 200.8	10D0554	0.50	2.0	2.6	1	04/06/10	04/13/10	
Lead	EPA 200.8	10D0554	0.20	1.0	0.52	1	04/06/10	04/13/10	J
Thallium	EPA 200.8	10D0554	0.20	1.0	ND	1	04/06/10	04/13/10	

TestAmerica Irvine

Debby Wilson
 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 TestAmerica.

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 010

Report Number: ITD0281

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

DISSOLVED METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD0281-02 (Outfall 010 (Grab) - Water)					Sampled: 04/05/10				
Reporting Units: ug/l									
Mercury	EPA 245.1-Diss	10D0902	0.10	0.20	ND	1	04/08/10	04/08/10	
Antimony	EPA 200.8-Diss	10D0887	0.30	2.0	0.44	1	04/08/10	04/13/10	J
Cadmium	EPA 200.8-Diss	10D0887	0.10	1.0	ND	1	04/08/10	04/13/10	
Copper	EPA 200.8-Diss	10D0887	0.50	2.0	2.0	1	04/08/10	04/13/10	
Lead	EPA 200.8-Diss	10D0887	0.20	1.0	ND	1	04/08/10	04/13/10	
Thallium	EPA 200.8-Diss	10D0887	0.20	1.0	ND	1	04/08/10	04/13/10	

TestAmerica Irvine

Debby Wilson
 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 TestAmerica.

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 010

Report Number: ITD0281

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD0281-02 (Outfall 010 (Grab) - Water)					Sampled: 04/05/10				
Reporting Units: mg/l									
Chloride	EPA 300.0	10D0435	0.25	0.50	12	1	04/05/10	04/05/10	
Nitrate/Nitrite-N	EPA 300.0	10D0435	0.15	0.26	0.93	1	04/05/10	04/05/10	
Sulfate	EPA 300.0	10D0435	0.20	0.50	11	1	04/05/10	04/05/10	
Total Dissolved Solids	SM2540C	10D0804	1.0	10	160	1	04/08/10	04/08/10	

TestAmerica Irvine

Debby Wilson
 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 TestAmerica.

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 010

Report Number: ITD0281

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

EPA-5 1613B

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD0281-02 (Outfall 010 (Grab) - Water)					Sampled: 04/05/10				
Reporting Units: ug/L									
1,2,3,4,6,7,8-HpCDD	EPA-5 1613B	99181	0.00000086	0.00005	2e-005	0.96	04/09/10	04/13/10	J, B
1,2,3,4,6,7,8-HpCDF	EPA-5 1613B	99181	0.00000045	0.00005	4e-006	0.96	04/09/10	04/13/10	J, B
1,2,3,4,7,8,9-HpCDF	EPA-5 1613B	99181	0.00000075	0.00005	ND	0.96	04/09/10	04/13/10	
1,2,3,4,7,8-HxCDD	EPA-5 1613B	99181	0.00000043	0.00005	7.6e-007	0.96	04/09/10	04/13/10	J, B
1,2,3,4,7,8-HxCDF	EPA-5 1613B	99181	0.00000037	0.00005	ND	0.96	04/09/10	04/13/10	
1,2,3,6,7,8-HxCDD	EPA-5 1613B	99181	0.00000039	0.00005	1.2e-006	0.96	04/09/10	04/13/10	J, B
1,2,3,6,7,8-HxCDF	EPA-5 1613B	99181	0.00000033	0.00005	ND	0.96	04/09/10	04/13/10	
1,2,3,7,8,9-HxCDD	EPA-5 1613B	99181	0.00000034	0.00005	ND	0.96	04/09/10	04/13/10	
1,2,3,7,8,9-HxCDF	EPA-5 1613B	99181	0.00000036	0.00005	ND	0.96	04/09/10	04/13/10	
1,2,3,7,8-PeCDD	EPA-5 1613B	99181	0.00000078	0.00005	ND	0.96	04/09/10	04/13/10	
1,2,3,7,8-PeCDF	EPA-5 1613B	99181	0.00000059	0.00005	ND	0.96	04/09/10	04/13/10	
2,3,4,6,7,8-HxCDF	EPA-5 1613B	99181	0.00000028	0.00005	ND	0.96	04/09/10	04/13/10	
2,3,4,7,8-PeCDF	EPA-5 1613B	99181	0.00000068	0.00005	ND	0.96	04/09/10	04/13/10	
2,3,7,8-TCDD	EPA-5 1613B	99181	0.00000005	0.00001	ND	0.96	04/09/10	04/13/10	
2,3,7,8-TCDF	EPA-5 1613B	99181	0.00000033	0.00001	ND	0.96	04/09/10	04/13/10	
OCDD	EPA-5 1613B	99181	0.00000087	0.0001	0.0002	0.96	04/09/10	04/13/10	B
OCDF	EPA-5 1613B	99181	0.00000049	0.0001	2.8e-005	0.96	04/09/10	04/13/10	J, B
Total HpCDD	EPA-5 1613B	99181	0.00000086	0.00005	4.6e-005	0.96	04/09/10	04/13/10	J, B
Total HpCDF	EPA-5 1613B	99181	0.00000045	0.00005	1.8e-005	0.96	04/09/10	04/13/10	J, B
Total HxCDD	EPA-5 1613B	99181	0.00000034	0.00005	4.5e-006	0.96	04/09/10	04/13/10	J, Q, B
Total HxCDF	EPA-5 1613B	99181	0.00000029	0.00005	ND	0.96	04/09/10	04/13/10	
Total PeCDD	EPA-5 1613B	99181	0.00000051	0.00005	ND	0.96	04/09/10	04/13/10	
Total PeCDF	EPA-5 1613B	99181	0.00000001	0.00005	ND	0.96	04/09/10	04/13/10	
Total TCDD	EPA-5 1613B	99181	0.00000025	0.00001	ND	0.96	04/09/10	04/13/10	
Total TCDF	EPA-5 1613B	99181	0.00000033	0.00001	3.8e-006	0.96	04/09/10	04/13/10	J

Surrogate: 13C-1,2,3,4,6,7,8-HpCDD (23-140%)	56 %
Surrogate: 13C-1,2,3,4,6,7,8-HpCDF (28-143%)	51 %
Surrogate: 13C-1,2,3,4,7,8,9-HpCDF (26-138%)	48 %
Surrogate: 13C-1,2,3,4,7,8-HxCDD (32-141%)	50 %
Surrogate: 13C-1,2,3,4,7,8-HxCDF (26-152%)	50 %
Surrogate: 13C-1,2,3,6,7,8-HxCDD (28-130%)	50 %
Surrogate: 13C-1,2,3,6,7,8-HxCDF (26-123%)	48 %
Surrogate: 13C-1,2,3,7,8,9-HxCDF (29-147%)	47 %
Surrogate: 13C-1,2,3,7,8-PeCDD (25-181%)	53 %
Surrogate: 13C-1,2,3,7,8-PeCDF (24-185%)	51 %
Surrogate: 13C-2,3,4,6,7,8-HxCDF (28-136%)	52 %
Surrogate: 13C-2,3,4,7,8-PeCDF (21-178%)	49 %
Surrogate: 13C-2,3,7,8-TCDD (25-164%)	47 %
Surrogate: 13C-2,3,7,8-TCDF (24-169%)	51 %
Surrogate: 13C-OCDD (17-157%)	57 %
Surrogate: 37Cl4-2,3,7,8-TCDD (35-197%)	100 %

TestAmerica Irvine

Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 010

Report Number: ITD0281

Sampled: 04/05/10-04/06/10
Received: 04/05/10

ASTM 5174-91

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD0281-02 (Outfall 010 (Grab) - Water)					Sampled: 04/05/10				
Reporting Units: pCi/L									
Total Uranium	ASTM 5174-91	98114	0.21	0.677	0.322	1	04/08/10	04/13/10	Jb

TestAmerica Irvine

Debby Wilson
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 TestAmerica.

ITD0281 <Page 8 of 38>

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 010

Report Number: ITD0281

Sampled: 04/05/10-04/06/10
Received: 04/05/10

ASTM 5174-91

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD0281-03 (TRIP BLANK - Water)					Sampled: 04/06/10				
Reporting Units: pCi/L									
Total Uranium	ASTM 5174-91	119221	0.21	0.677	0.242	1	04/29/10	05/03/10	Jb

TestAmerica Irvine

Debby Wilson
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 TestAmerica.

ITD0281 <Page 9 of 38>

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 010

Report Number: ITD0281

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

EPA 900.0 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD0281-02 (Outfall 010 (Grab) - Water)					Sampled: 04/05/10				
Reporting Units: pCi/L									
Gross Alpha	EPA 900.0 MOD	98090	1.4	3	0.91	1	04/08/10	04/16/10	U
Gross Beta	EPA 900.0 MOD	98090	1.1	4	2.92	1	04/08/10	04/16/10	Jb
Sample ID: ITD0281-03 (TRIP BLANK - Water)					Sampled: 04/06/10				
Reporting Units: pCi/L									
Gross Alpha	EPA 900.0 MOD	105073	0.97	3	-0.07	1	04/15/10	04/26/10	U
Gross Beta	EPA 900.0 MOD	105073	1.5	4	1.55	1	04/15/10	04/26/10	Jb

TestAmerica Irvine

Debby Wilson
 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 TestAmerica.

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 010

Report Number: ITD0281

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

EPA 901.1 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD0281-02 (Outfall 010 (Grab) - Water)					Sampled: 04/05/10				
Reporting Units: pCi/L									
Cesium 137	EPA 901.1 MOD	98345	14	20	1.1	1	04/08/10	05/01/10	U
Potassium 40	EPA 901.1 MOD	98345	270	NA	-40	1	04/08/10	05/01/10	U
Sample ID: ITD0281-03 (TRIP BLANK - Water)					Sampled: 04/06/10				
Reporting Units: pCi/L									
Cesium 137	EPA 901.1 MOD	103219	11	20	1	1	04/13/10	04/13/10	U
Potassium 40	EPA 901.1 MOD	103219	200	NA	-40	1	04/13/10	04/13/10	U

TestAmerica Irvine

Debby Wilson
 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 TestAmerica.

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 010

Report Number: ITD0281

Sampled: 04/05/10-04/06/10
Received: 04/05/10

EPA 903.0 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD0281-02 (Outfall 010 (Grab) - Water)					Sampled: 04/05/10				
Reporting Units: pCi/L									
Radium (226)	EPA 903.0 MOD	98325	0.15	1	0.042	1	04/08/10	04/30/10	U
Sample ID: ITD0281-03 (TRIP BLANK - Water)					Sampled: 04/06/10				
Reporting Units: pCi/L									
Radium (226)	EPA 903.0 MOD	100043	0.2	1	-0.011	1	04/10/10	05/05/10	U

TestAmerica Irvine

Debby Wilson
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 TestAmerica.

ITD0281 <Page 12 of 38>

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 010

Report Number: ITD0281

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

EPA 904 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD0281-02 (Outfall 010 (Grab) - Water)					Sampled: 04/05/10				
Reporting Units: pCi/L									
Radium 228	EPA 904 MOD	98327	0.68	1	0.17	1	04/08/10	04/30/10	U
Sample ID: ITD0281-03 (TRIP BLANK - Water)					Sampled: 04/06/10				
Reporting Units: pCi/L									
Radium 228	EPA 904 MOD	100044	0.71	1	0.19	1	04/10/10	05/05/10	U

TestAmerica Irvine

Debby Wilson
 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 TestAmerica.

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 010

Report Number: ITD0281

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

EPA 905 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD0281-02 (Outfall 010 (Grab) - Water)					Sampled: 04/05/10				
Reporting Units: pCi/L									
Strontium 90	EPA 905 MOD	98328	0.38	3	-0.007	1	04/08/10	04/20/10	U
Sample ID: ITD0281-03 (TRIP BLANK - Water)					Sampled: 04/06/10				
Reporting Units: pCi/L									
Strontium 90	EPA 905 MOD	100045	0.72	3	-0.02	1	04/10/10	04/20/10	U

TestAmerica Irvine

Debby Wilson
 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 TestAmerica.

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 010

Report Number: ITD0281

Sampled: 04/05/10-04/06/10
Received: 04/05/10

EPA 906.0 MOD

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD0281-02 (Outfall 010 (Grab) - Water)					Sampled: 04/05/10				
Reporting Units: pCi/L									
Tritium	EPA 906.0 MOD	112082	330	500	50	1	04/22/10	04/22/10	U
Sample ID: ITD0281-03 (TRIP BLANK - Water)					Sampled: 04/06/10				
Reporting Units: pCi/L									
Tritium	EPA 906.0 MOD	112082	330	500	70	1	04/22/10	04/23/10	U

TestAmerica Irvine

Debby Wilson
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 TestAmerica.

ITD0281 <Page 15 of 38>

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 010

Report Number: ITD0281

Sampled: 04/05/10-04/06/10
Received: 04/05/10

SHORT HOLD TIME DETAIL REPORT

	Hold Time (in days)	Date/Time Sampled	Date/Time Received	Date/Time Extracted	Date/Time Analyzed
Sample ID: Outfall 010 (Grab) (ITD0281-02) - Water EPA 300.0	2	04/05/2010 09:45	04/05/2010 17:30	04/05/2010 19:00	04/05/2010 19:35

TestAmerica Irvine

Debby Wilson
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 TestAmerica.*

ITD0281 <Page 16 of 38>

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 010

Report Number: ITD0281

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

METHOD BLANK/QC DATA

HEXANE EXTRACTABLE MATERIAL

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<u>Batch: 10H0497 Extracted: 08/05/10</u>											
Blank Analyzed: 08/05/2010 (10H0497-BLK1)											
Hexane Extractable Material (Oil & Grease)	ND	5.0	1.4	mg/l							
LCS Analyzed: 08/05/2010 (10H0497-BS1)											
Hexane Extractable Material (Oil & Grease)	20.7	5.0	1.4	mg/l	20.0		104	78-114			MNR1
LCS Dup Analyzed: 08/05/2010 (10H0497-BSD1)											
Hexane Extractable Material (Oil & Grease)	21.0	5.0	1.4	mg/l	20.0		105	78-114	1	11	

TestAmerica Irvine

Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 010

Report Number: ITD0281

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10D0554 Extracted: 04/06/10											
Blank Analyzed: 04/13/2010 (10D0554-BLK1)											
Antimony	ND	2.0	0.30	ug/l							
Cadmium	ND	1.0	0.10	ug/l							
Copper	ND	2.0	0.50	ug/l							
Lead	ND	1.0	0.20	ug/l							
Thallium	ND	1.0	0.20	ug/l							
LCS Analyzed: 04/13/2010 (10D0554-BS1)											
Antimony	80.1	2.0	0.30	ug/l	80.0		100	85-115			
Cadmium	78.6	1.0	0.10	ug/l	80.0		98	85-115			
Copper	84.9	2.0	0.50	ug/l	80.0		106	85-115			
Lead	83.0	1.0	0.20	ug/l	80.0		104	85-115			
Thallium	83.2	1.0	0.20	ug/l	80.0		104	85-115			
Matrix Spike Analyzed: 04/13/2010 (10D0554-MS1) Source: ITD0283-01											
Antimony	70.7	2.0	0.30	ug/l	80.0	0.756	87	70-130			
Cadmium	74.9	1.0	0.10	ug/l	80.0	0.232	93	70-130			
Copper	88.6	2.0	0.50	ug/l	80.0	7.57	101	70-130			
Lead	87.2	1.0	0.20	ug/l	80.0	7.34	100	70-130			
Thallium	81.5	1.0	0.20	ug/l	80.0	ND	102	70-130			
Matrix Spike Dup Analyzed: 04/13/2010 (10D0554-MSD1) Source: ITD0283-01											
Antimony	76.8	2.0	0.30	ug/l	80.0	0.756	95	70-130	8	20	
Cadmium	79.5	1.0	0.10	ug/l	80.0	0.232	99	70-130	6	20	
Copper	90.6	2.0	0.50	ug/l	80.0	7.57	104	70-130	2	20	
Lead	93.8	1.0	0.20	ug/l	80.0	7.34	108	70-130	7	20	
Thallium	85.1	1.0	0.20	ug/l	80.0	ND	106	70-130	4	20	

TestAmerica Irvine

Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 010

Report Number: ITD0281

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10D0779 Extracted: 04/07/10											
Blank Analyzed: 04/07/2010 (10D0779-BLK1)											
Mercury	ND	0.20	0.10	ug/l							
LCS Analyzed: 04/07/2010 (10D0779-BS1)											
Mercury	8.05	0.20	0.10	ug/l	8.00		101	85-115			
Matrix Spike Analyzed: 04/07/2010 (10D0779-MS1)											
						Source: ITD0281-02					
Mercury	8.10	0.20	0.10	ug/l	8.00	ND	101	70-130			
Matrix Spike Dup Analyzed: 04/07/2010 (10D0779-MSD1)											
						Source: ITD0281-02					
Mercury	7.98	0.20	0.10	ug/l	8.00	ND	100	70-130	1	20	

TestAmerica Irvine

Debby Wilson
 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 TestAmerica.

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 010

Report Number: ITD0281

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10D0887 Extracted: 04/08/10											
Blank Analyzed: 04/13/2010 (10D0887-BLK1)											
Antimony	ND	2.0	0.30	ug/l							
Cadmium	ND	1.0	0.10	ug/l							
Copper	ND	2.0	0.50	ug/l							
Lead	ND	1.0	0.20	ug/l							
Thallium	ND	1.0	0.20	ug/l							
LCS Analyzed: 04/13/2010 (10D0887-BS1)											
Antimony	87.2	2.0	0.30	ug/l	80.0		109	85-115			
Cadmium	86.9	1.0	0.10	ug/l	80.0		109	85-115			
Copper	86.5	2.0	0.50	ug/l	80.0		108	85-115			
Lead	82.8	1.0	0.20	ug/l	80.0		104	85-115			
Thallium	87.8	1.0	0.20	ug/l	80.0		110	85-115			
Matrix Spike Analyzed: 04/13/2010 (10D0887-MS1) Source: ITD0076-01											
Antimony	88.9	2.0	0.30	ug/l	80.0	0.360	111	70-130			
Cadmium	84.1	1.0	0.10	ug/l	80.0	0.121	105	70-130			
Copper	86.9	2.0	0.50	ug/l	80.0	2.43	106	70-130			
Lead	77.9	1.0	0.20	ug/l	80.0	0.226	97	70-130			
Thallium	74.8	1.0	0.20	ug/l	80.0	0.217	93	70-130			
Matrix Spike Dup Analyzed: 04/13/2010 (10D0887-MSD1) Source: ITD0076-01											
Antimony	89.7	2.0	0.30	ug/l	80.0	0.360	112	70-130	0.9	20	
Cadmium	85.2	1.0	0.10	ug/l	80.0	0.121	106	70-130	1	20	
Copper	87.4	2.0	0.50	ug/l	80.0	2.43	106	70-130	0.7	20	
Lead	81.3	1.0	0.20	ug/l	80.0	0.226	101	70-130	4	20	
Thallium	78.1	1.0	0.20	ug/l	80.0	0.217	97	70-130	4	20	

TestAmerica Irvine

Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 010

Report Number: ITD0281

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

METHOD BLANK/QC DATA

DISSOLVED METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10D0902 Extracted: 04/08/10											
Blank Analyzed: 04/08/2010 (10D0902-BLK1)											
Mercury	ND	0.20	0.10	ug/l							
LCS Analyzed: 04/08/2010 (10D0902-BS1)											
Mercury	7.63	0.20	0.10	ug/l	8.00		95	85-115			
Matrix Spike Analyzed: 04/08/2010 (10D0902-MS1)											
						Source: ITD0503-03					
Mercury	8.41	0.20	0.10	ug/l	8.00	0.176	103	70-130			
Matrix Spike Dup Analyzed: 04/08/2010 (10D0902-MSD1)											
						Source: ITD0503-03					
Mercury	8.36	0.20	0.10	ug/l	8.00	0.176	102	70-130	0.6	20	

TestAmerica Irvine

Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 010

Report Number: ITD0281

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10D0435 Extracted: 04/05/10											
Blank Analyzed: 04/05/2010 (10D0435-BLK1)											
Chloride	ND	0.50	0.25	mg/l							
Nitrate/Nitrite-N	ND	0.26	0.15	mg/l							
Sulfate	ND	0.50	0.20	mg/l							
LCS Analyzed: 04/05/2010 (10D0435-BS1)											
Chloride	4.60	0.50	0.25	mg/l	5.00		92	90-110			
Sulfate	9.70	0.50	0.20	mg/l	10.0		97	90-110			
Matrix Spike Analyzed: 04/05/2010 (10D0435-MS1) Source: ITD0278-02											
Chloride	9.65	0.50	0.25	mg/l	5.00	4.99	93	80-120			
Sulfate	17.5	0.50	0.20	mg/l	10.0	7.65	98	80-120			
Matrix Spike Analyzed: 04/06/2010 (10D0435-MS2) Source: ITD0267-02											
Chloride	32.6	2.5	1.2	mg/l	5.00	28.7	78	80-120			MHA
Sulfate	81.4	2.5	1.0	mg/l	10.0	70.4	110	80-120			MHA
Matrix Spike Dup Analyzed: 04/05/2010 (10D0435-MSD1) Source: ITD0278-02											
Chloride	9.70	0.50	0.25	mg/l	5.00	4.99	94	80-120	0.5	20	
Sulfate	17.4	0.50	0.20	mg/l	10.0	7.65	97	80-120	0.6	20	
Batch: 10D0804 Extracted: 04/08/10											
Blank Analyzed: 04/08/2010 (10D0804-BLK1)											
Total Dissolved Solids	ND	10	1.0	mg/l							
LCS Analyzed: 04/08/2010 (10D0804-BS1)											
Total Dissolved Solids	1010	10	1.0	mg/l	1000		101	90-110			

TestAmerica Irvine

Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 010

Report Number: ITD0281

Sampled: 04/05/10-04/06/10
Received: 04/05/10

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10D0804 Extracted: 04/08/10											
Duplicate Analyzed: 04/08/2010 (10D0804-DUP1)						Source: ITD0389-02					
Total Dissolved Solids	302	10	1.0	mg/l		302			0	10	

TestAmerica Irvine

Debby Wilson
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 TestAmerica.

ITD0281 <Page 23 of 38>

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 010

Report Number: ITD0281

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

METHOD BLANK/QC DATA

EPA-5 1613B

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD RPD	RPD Limit	Data Qualifiers
Batch: 99181 Extracted: 04/09/10											
Blank Analyzed: 04/12/2010 (G0D090000181B)						Source:					
1,2,3,4,6,7,8-HpCDD	0.0000064	0.00005	0.00000081	ug/L				-			J
1,2,3,4,6,7,8-HpCDF	0.0000021	0.00005	0.00000039	ug/L				-			J, Q
1,2,3,4,7,8,9-HpCDF	0.0000018	0.00005	0.00000066	ug/L				-			J
1,2,3,4,7,8-HxCDD	0.00000095	0.00005	0.00000054	ug/L				-			J, Q
1,2,3,4,7,8-HxCDF	0.0000011	0.00005	0.00000042	ug/L				-			J, Q
1,2,3,6,7,8-HxCDD	0.0000012	0.00005	0.00000005	ug/L				-			J, Q
1,2,3,6,7,8-HxCDF	0.00000082	0.00005	0.00000037	ug/L				-			J, Q
1,2,3,7,8,9-HxCDD	0.0000014	0.00005	0.00000043	ug/L				-			J
1,2,3,7,8,9-HxCDF	0.0000012	0.00005	0.00000004	ug/L				-			J
1,2,3,7,8-PeCDD	0.0000003	0.00005	0.00000073	ug/L				-			J, Q
1,2,3,7,8-PeCDF	ND	0.00005	0.00000069	ug/L				-			
2,3,4,6,7,8-HxCDF	0.0000012	0.00005	0.00000003	ug/L				-			J
2,3,4,7,8-PeCDF	ND	0.00005	0.00000072	ug/L				-			
2,3,7,8-TCDD	ND	0.00001	0.00000054	ug/L				-			
2,3,7,8-TCDF	ND	0.00001	0.00000052	ug/L				-			
OCDD	0.000044	0.0001	0.000001	ug/L				-			J
OCDF	0.0000052	0.0001	0.00000071	ug/L				-			J
Total HpCDD	0.000014	0.00005	0.00000081	ug/L				-			J
Total HpCDF	0.0000051	0.00005	0.00000039	ug/L				-			J, Q
Total HxCDD	0.0000036	0.00005	0.00000043	ug/L				-			J, Q
Total HxCDF	0.0000047	0.00005	0.00000003	ug/L				-			J, Q
Total PeCDD	0.0000003	0.00005	0.00000073	ug/L				-			J, Q
Total PeCDF	ND	0.00005	0.00000058	ug/L				-			
Total TCDD	ND	0.00001	0.00000054	ug/L				-			
Total TCDF	ND	0.00001	0.00000052	ug/L				-			
Surrogate: 13C-1,2,3,4,6,7,8-HpCDD	0.001			ug/L	0.00200		51	23-140			
Surrogate: 13C-1,2,3,4,6,7,8-HpCDF	0.00093			ug/L	0.00200		46	28-143			
Surrogate: 13C-1,2,3,4,7,8,9-HpCDF	0.00084			ug/L	0.00200		42	26-138			
Surrogate: 13C-1,2,3,4,7,8-HxCDD	0.00091			ug/L	0.00200		46	32-141			
Surrogate: 13C-1,2,3,4,7,8-HxCDF	0.00084			ug/L	0.00200		42	26-152			
Surrogate: 13C-1,2,3,6,7,8-HxCDD	0.00095			ug/L	0.00200		47	28-130			
Surrogate: 13C-1,2,3,6,7,8-HxCDF	0.00083			ug/L	0.00200		42	26-123			
Surrogate: 13C-1,2,3,7,8,9-HxCDF	0.00085			ug/L	0.00200		43	29-147			
Surrogate: 13C-1,2,3,7,8-PeCDD	0.00087			ug/L	0.00200		44	25-181			
Surrogate: 13C-1,2,3,7,8-PeCDF	0.00078			ug/L	0.00200		39	24-185			

TestAmerica Irvine

Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 010
 Report Number: ITD0281

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

METHOD BLANK/QC DATA

EPA-5 1613B

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 99181 Extracted: 04/09/10											
Blank Analyzed: 04/12/2010 (G0D090000181B)						Source:					
Surrogate: 13C-2,3,4,6,7,8-HxCDF	0.00094			ug/L	0.00200		47	28-136			
Surrogate: 13C-2,3,4,7,8-PeCDF	0.00083			ug/L	0.00200		42	21-178			
Surrogate: 13C-2,3,7,8-TCDD	0.00069			ug/L	0.00200		34	25-164			
Surrogate: 13C-2,3,7,8-TCDF	0.00074			ug/L	0.00200		37	24-169			
Surrogate: 13C-OCDD	0.002			ug/L	0.00400		51	17-157			
Surrogate: 37Cl4-2,3,7,8-TCDD	0.00081			ug/L	0.000800		101	35-197			
LCS Analyzed: 04/13/2010 (G0D090000181C)						Source:					
1,2,3,4,6,7,8-HpCDD	0.00107	0.00005	0.0000086	ug/L	0.00100		107	70-140			B
1,2,3,4,6,7,8-HpCDF	0.00106	0.00005	0.000001	ug/L	0.00100		106	82-122			B
1,2,3,4,7,8,9-HpCDF	0.00126	0.00005	0.0000016	ug/L	0.00100		126	78-138			B
1,2,3,4,7,8-HxCDD	0.00117	0.00005	0.000001	ug/L	0.00100		117	70-164			B
1,2,3,4,7,8-HxCDF	0.00114	0.00005	0.0000023	ug/L	0.00100		114	72-134			B
1,2,3,6,7,8-HxCDD	0.00121	0.00005	0.0000096	ug/L	0.00100		121	76-134			B
1,2,3,6,7,8-HxCDF	0.00111	0.00005	0.0000021	ug/L	0.00100		111	84-130			B
1,2,3,7,8,9-HxCDD	0.00107	0.00005	0.0000083	ug/L	0.00100		107	64-162			B
1,2,3,7,8,9-HxCDF	0.00112	0.00005	0.0000019	ug/L	0.00100		112	78-130			B
1,2,3,7,8-PeCDD	0.0011	0.00005	0.0000023	ug/L	0.00100		110	70-142			B
1,2,3,7,8-PeCDF	0.00114	0.00005	0.0000026	ug/L	0.00100		114	80-134			
2,3,4,6,7,8-HxCDF	0.00108	0.00005	0.0000016	ug/L	0.00100		108	70-156			B
2,3,4,7,8-PeCDF	0.00115	0.00005	0.0000026	ug/L	0.00100		115	68-160			
2,3,7,8-TCDD	0.000245	0.00001	0.0000096	ug/L	0.000200		123	67-158			
2,3,7,8-TCDF	0.000221	0.00001	0.0000078	ug/L	0.000200		111	75-158			
OCDD	0.00228	0.0001	0.0000023	ug/L	0.00200		114	78-144			B
OCDF	0.00212	0.0001	0.0000011	ug/L	0.00200		106	63-170			B
Surrogate: 13C-1,2,3,4,6,7,8-HpCDD	0.00119			ug/L	0.00200		59	26-166			
Surrogate: 13C-1,2,3,4,6,7,8-HpCDF	0.00111			ug/L	0.00200		56	21-158			
Surrogate: 13C-1,2,3,4,7,8,9-HpCDF	0.000984			ug/L	0.00200		49	20-186			
Surrogate: 13C-1,2,3,4,7,8-HxCDD	0.000984			ug/L	0.00200		49	21-193			
Surrogate: 13C-1,2,3,4,7,8-HxCDF	0.000885			ug/L	0.00200		44	19-202			
Surrogate: 13C-1,2,3,6,7,8-HxCDD	0.000957			ug/L	0.00200		48	25-163			
Surrogate: 13C-1,2,3,6,7,8-HxCDF	0.000879			ug/L	0.00200		44	21-159			
Surrogate: 13C-1,2,3,7,8,9-HxCDF	0.000952			ug/L	0.00200		48	17-205			
Surrogate: 13C-1,2,3,7,8-PeCDD	0.000837			ug/L	0.00200		42	21-227			
Surrogate: 13C-1,2,3,7,8-PeCDF	0.000701			ug/L	0.00200		35	21-192			
Surrogate: 13C-2,3,4,6,7,8-HxCDF	0.00102			ug/L	0.00200		51	22-176			

TestAmerica Irvine

Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 010

Report Number: ITD0281

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

METHOD BLANK/QC DATA

EPA-5 1613B

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 99181 Extracted: 04/09/10											
LCS Analyzed: 04/13/2010 (G0D090000181C)											
Surrogate: 13C-2,3,4,7,8-PeCDF	0.000763			ug/L	0.00200		38	13-328			
Surrogate: 13C-2,3,7,8-TCDD	0.000549			ug/L	0.00200		28	20-175			
Surrogate: 13C-2,3,7,8-TCDF	0.000586			ug/L	0.00200		29	22-152			
Surrogate: 13C-OCDD	0.0024			ug/L	0.00400		60	13-199			
Surrogate: 37Cl4-2,3,7,8-TCDD	0.000815			ug/L	0.000800		102	31-191			

TestAmerica Irvine

Debby Wilson
 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 TestAmerica.

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 010
 Report Number: ITD0281

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

METHOD BLANK/QC DATA

ASTM 5174-91

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<u>Batch: 119221 Extracted: 04/29/10</u>											
Matrix Spike Dup Analyzed: 05/03/2010 (F0D070495002D)						Source: F0D070495002					
Total Uranium	29.9	0.7	0.2	pCi/L	27.1	0.185	110	62-150	0.7	20	
Matrix Spike Analyzed: 05/03/2010 (F0D070495002S)						Source: F0D070495002					
Total Uranium	30.1	0.7	0.2	pCi/L	27.1	0.185	110	62-150			
Blank Analyzed: 05/03/2010 (F0D290000221B)						Source:					
Total Uranium	0.213	0.677	0.21	pCi/L				-			Jb
LCS Analyzed: 05/03/2010 (F0D290000221C)						Source:					
Total Uranium	6.02	0.68	0.21	pCi/L	5.42		111	90-120			
<u>Batch: 98114 Extracted: 04/08/10</u>											
Matrix Spike Dup Analyzed: 04/13/2010 (F0C270425001D)						Source: F0C270425001					
Total Uranium	29.9	0.7	0.2	pCi/L	27.1	1.61	104	62-150	2	20	
Matrix Spike Analyzed: 04/13/2010 (F0C270425001S)						Source: F0C270425001					
Total Uranium	29.3	0.7	0.2	pCi/L	27.1	1.61	102	62-150			
Blank Analyzed: 04/13/2010 (F0D080000114B)						Source:					
Total Uranium	0.267	0.677	0.21	pCi/L				-			Jb
LCS Analyzed: 04/13/2010 (F0D080000114C)						Source:					
Total Uranium	5.69	0.68	0.21	pCi/L	5.42		105	90-120			

TestAmerica Irvine

Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 010
 Report Number: ITD0281

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

METHOD BLANK/QC DATA

EPA 900.0 MOD

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	Limits	RPD	RPD Limit	Data Qualifiers
<u>Batch: 105073 Extracted: 04/15/10</u>											
Matrix Spike Analyzed: 04/26/2010 (F0D140466001S)						Source: F0D140466001					
Gross Alpha	49.4	3	1.1	pCi/L	49.4	2.1	96	35-150			
Gross Beta	75.6	4	1.1	pCi/L	67.8	2.76	108	54-150			
Duplicate Analyzed: 04/27/2010 (F0D140466001X)						Source: F0D140466001					
Gross Alpha	2.1	3	1.1	pCi/L		2.1	-				Jb
Gross Beta	2.86	4	1.1	pCi/L		2.76	-				Jb
Blank Analyzed: 04/26/2010 (F0D150000073B)						Source:					
Gross Alpha	0.27	3	0.83	pCi/L			-				U
Gross Beta	-0.09	4	0.95	pCi/L			-				U
LCS Analyzed: 04/26/2010 (F0D150000073C)						Source:					
Gross Alpha	51.1	3	1.3	pCi/L	49.4		103	62-134			
Gross Beta	69.5	4	1	pCi/L	67.8		102	58-133			
<u>Batch: 98090 Extracted: 04/08/10</u>											
Matrix Spike Analyzed: 04/16/2010 (F0D070407001S)						Source: F0D070407001					
Gross Alpha	55.2	3	1.3	pCi/L	49.4	0.51	110	35-150			
Gross Beta	70.6	4	1	pCi/L	67.8	1.2	102	54-150			
Duplicate Analyzed: 04/16/2010 (F0D070407001X)						Source: F0D070407001					
Gross Alpha	0.43	3	1.3	pCi/L		0.51	-				U
Gross Beta	0.54	4	1.1	pCi/L		1.2	-				U
Blank Analyzed: 04/16/2010 (F0D080000090B)						Source:					
Gross Alpha	0.21	2	0.83	pCi/L			-				U
Gross Beta	-0.33	4	0.95	pCi/L			-				U

TestAmerica Irvine

Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 010

Report Number: ITD0281

Sampled: 04/05/10-04/06/10
Received: 04/05/10

METHOD BLANK/QC DATA

EPA 900.0 MOD

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 98090 Extracted: 04/08/10											
LCS Analyzed: 04/16/2010 (F0D08000090C)											
Gross Alpha	52.3	3	1.3	pCi/L	49.4		106	62-134			
Gross Beta	67	4	1	pCi/L	67.8		99	58-133			

TestAmerica Irvine

Debby Wilson
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 TestAmerica.

ITD0281 <Page 29 of 38>

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 010
Report Number: ITD0281

Sampled: 04/05/10-04/06/10
Received: 04/05/10

METHOD BLANK/QC DATA

EPA 901.1 MOD

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<u>Batch: 103219 Extracted: 04/13/10</u>											
Duplicate Analyzed: 04/14/2010 (F0D070495002X)						Source: F0D070495002					
Cesium 137	-0.7	20	12	pCi/L		3	-				U
Potassium 40	-100	NA	200	pCi/L		-140	-				U
Blank Analyzed: 04/13/2010 (F0D130000219B)						Source:					
Cesium 137	-0.4	20	17	pCi/L			-				U
Potassium 40	50	NA	170	pCi/L			-				U
LCS Analyzed: 04/19/2010 (F0D130000219C)						Source:					
Americium 241	145000	NA	400	pCi/L	143000		102	87-110			
Cobalt 60	87400	NA	200	pCi/L	91800		95	89-110			
Cesium 137	54700	20	200	pCi/L	57000		96	90-110			
<u>Batch: 98345 Extracted: 04/08/10</u>											
Duplicate Analyzed: 05/06/2010 (F0D070524001X)						Source: ITD0281-02					
Cesium 137	0.3	20	19	pCi/L		1.1	-				U
Potassium 40	-90	NA	200	pCi/L		-40	-				U
Blank Analyzed: 05/01/2010 (F0D080000345B)						Source:					
Cesium 137	3.5	20	13	pCi/L			-				U
Potassium 40	-80	NA	200	pCi/L			-				U
LCS Analyzed: 05/03/2010 (F0D080000345C)						Source:					
Americium 241	131000	NA	500	pCi/L	141000		93	87-110			
Cobalt 60	79500	NA	200	pCi/L	87900		90	89-110			
Cesium 137	48400	20	200	pCi/L	53100		91	90-110			

TestAmerica Irvine

Debby Wilson
Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 010
 Report Number: ITD0281

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

METHOD BLANK/QC DATA

EPA 903.0 MOD

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<u>Batch: 100043 Extracted: 04/10/10</u>											
Blank Analyzed: 05/05/2010 (F0D10000043B)						Source:					
Radium (226)	0.071	1	0.13	pCi/L			-				U
LCS Analyzed: 05/05/2010 (F0D10000043C)						Source:					
Radium (226)	10.9	1	0.2	pCi/L	11.3		97	68-136			
LCS Dup Analyzed: 05/05/2010 (F0D10000043L)						Source:					
Radium (226)	12.2	1	0.1	pCi/L	11.3		109	68-136	12	40	
<u>Batch: 98325 Extracted: 04/08/10</u>											
Blank Analyzed: 04/30/2010 (F0D080000325B)						Source:					
Radium (226)	0.055	1	0.14	pCi/L			-				U
LCS Analyzed: 04/30/2010 (F0D080000325C)						Source:					
Radium (226)	9.6	1	0.2	pCi/L	11.3		85	68-136			
LCS Dup Analyzed: 04/30/2010 (F0D080000325L)						Source:					
Radium (226)	9.62	1	0.14	pCi/L	11.3		85	68-136	0.5	40	

TestAmerica Irvine

Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 010
 Report Number: ITD0281

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

METHOD BLANK/QC DATA

EPA 904 MOD

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
<u>Batch: 100044 Extracted: 04/10/10</u>											
Blank Analyzed: 05/05/2010 (F0D10000044B)						Source:					
Radium 228	0.1	1	0.6	pCi/L			-				U
LCS Analyzed: 05/05/2010 (F0D10000044C)						Source:					
Radium 228	5.6	1	0.59	pCi/L	6.33		88	60-142			
LCS Dup Analyzed: 05/05/2010 (F0D10000044L)						Source:					
Radium 228	6.21	1	0.62	pCi/L	6.33		98	60-142	10	40	
<u>Batch: 98327 Extracted: 04/08/10</u>											
Blank Analyzed: 04/30/2010 (F0D080000327B)						Source:					
Radium 228	0.31	1	0.54	pCi/L			-				U
LCS Analyzed: 04/30/2010 (F0D080000327C)						Source:					
Radium 228	5.49	1	0.69	pCi/L	6.34		87	60-142			
LCS Dup Analyzed: 04/30/2010 (F0D080000327L)						Source:					
Radium 228	5.49	1	0.52	pCi/L	6.34		87	60-142	0.07	40	

TestAmerica Irvine

Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 010
 Report Number: ITD0281

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

METHOD BLANK/QC DATA

EPA 905 MOD

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	Limit	RPD	RPD Limit	Data Qualifiers
<u>Batch: 100045 Extracted: 04/10/10</u>											
Blank Analyzed: 04/20/2010 (F0D10000045B)											
Strontium 90	0.06	3	0.38	pCi/L			-				U
LCS Analyzed: 04/20/2010 (F0D10000045C)											
Strontium 90	7.41	3	0.4	pCi/L	6.77		109	80-130			
LCS Dup Analyzed: 04/20/2010 (F0D10000045L)											
Strontium 90	6.77	3	0.34	pCi/L	6.77		100	80-130	9	40	
<u>Batch: 98328 Extracted: 04/08/10</u>											
Blank Analyzed: 04/20/2010 (F0D080000328B)											
Strontium 90	0.18	3	0.4	pCi/L			-				U
LCS Analyzed: 04/20/2010 (F0D080000328C)											
Strontium 90	6.01	3	0.39	pCi/L	6.77		89	80-130			
LCS Dup Analyzed: 04/20/2010 (F0D080000328L)											
Strontium 90	6.78	3	0.36	pCi/L	6.77		100	80-130	12	40	

TestAmerica Irvine

Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 010

Report Number: ITD0281

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

METHOD BLANK/QC DATA

EPA 906.0 MOD

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 112082 Extracted: 04/22/10											
Duplicate Analyzed: 04/22/2010 (F0D070495001X)						Source: F0D070495001					
Tritium	30	500	330	pCi/L		80	-				U
Matrix Spike Analyzed: 04/22/2010 (F0D070495002S)						Source: F0D070495002					
Tritium	4610	500	330	pCi/L	4490	170	99	62-147			
Blank Analyzed: 04/22/2010 (F0D220000082B)						Source:					
Tritium	-80	500	330	pCi/L							U
LCS Analyzed: 04/22/2010 (F0D220000082C)						Source:					
Tritium	4600	500	330	pCi/L	4490		102	85-112			

TestAmerica Irvine

Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Routine Outfall 010

Report Number: ITD0281

Sampled: 04/05/10-04/06/10
 Received: 04/05/10

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
ITD0281-02	1664-HEM	Hexane Extractable Material (Oil & Greas	mg/l	0.28	4.7	15
ITD0281-02	Antimony-200.8	Antimony	ug/l	0.40	2.0	6
ITD0281-02	Cadmium-200.8	Cadmium	ug/l	0.068	1.0	4
ITD0281-02	Chloride - 300.0	Chloride	mg/l	12	0.50	150
ITD0281-02	Copper-200.8	Copper	ug/l	2.63	2.0	14
ITD0281-02	Lead-200.8	Lead	ug/l	0.52	1.0	5.2
ITD0281-02	Nitrogen, NO3+NO2 -N EPA 300.0	Nitrate/Nitrite-N	mg/l	0.93	0.26	10
ITD0281-02	Sulfate-300.0	Sulfate	mg/l	11	0.50	250
ITD0281-02	TDS - SM2540C	Total Dissolved Solids	mg/l	157	10	850
ITD0281-02	Thallium-200.8	Thallium	ug/l	0.071	1.0	2

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
-----------	----------	---------	-------	--------	-----	------------------

TestAmerica Irvine

Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 010

Report Number: ITD0281

Sampled: 04/05/10-04/06/10
Received: 04/05/10

DATA QUALIFIERS AND DEFINITIONS

- B** Method blank contamination. The associated method blank contains the target analyte at a reportable level.
- 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.
- Jb** Result is greater than sample detection limit but less than stated reporting limit.
- MHA** Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).
- MNR1** There was no MS/MSD analyzed with this batch due to insufficient sample volume. See Blank Spike/Blank Spike Duplicate.
- Q** Estimated maximum possible concentration (EMPC).
- U** Result is less than the sample detection limit.
- ND** Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
- RPD** Relative Percent Difference

TestAmerica Irvine

Debby Wilson
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 TestAmerica.

ITD0281 <Page 36 of 38>

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 010

Report Number: ITD0281

Sampled: 04/05/10-04/06/10
Received: 04/05/10

Certification Summary

TestAmerica Irvine

Method	Matrix	Nelac	California
EDD + Level 4	Water	N/A	N/A
EPA 1664A	Water	X	X
EPA 200.8-Diss	Water	X	X
EPA 200.8	Water	X	X
EPA 245.1-Diss	Water	X	X
EPA 245.1	Water	X	X
EPA 300.0	Water	X	X
SM2540C	Water	X	

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

Subcontracted Laboratories

TestAmerica St. Louis *California Cert #2542, Nevada Cert #MO00542009A*

13715 Rider Trail North - Earth City, MO 63045

Method Performed: ASTM 5174-91
Samples: ITD0281-02, ITD0281-03

Method Performed: EPA 900.0 MOD
Samples: ITD0281-02, ITD0281-03

Method Performed: EPA 901.1 MOD
Samples: ITD0281-02, ITD0281-03

Method Performed: EPA 903.0 MOD
Samples: ITD0281-02, ITD0281-03

Method Performed: EPA 904 MOD
Samples: ITD0281-02, ITD0281-03

Method Performed: EPA 905 MOD
Samples: ITD0281-02, ITD0281-03

Method Performed: EPA 906.0 MOD
Samples: ITD0281-02, ITD0281-03

TestAmerica Irvine

Debby Wilson
Project Manager

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Routine Outfall 010

Report Number: ITD0281

Sampled: 04/05/10-04/06/10
Received: 04/05/10

TestAmerica West Sacramento *NELAC Cert #1119CA, Nevada Cert #CA44*

880 Riverside Parkway - West Sacramento, CA 95605

Method Performed: EPA-5 1613B
Samples: ITD0281-02

TestAmerica Irvine

Debby Wilson
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 TestAmerica.

ITD0281 <Page 38 of 38>

**BOEING
TASK ORDER FORM**

This Task Order No. **T1008069-93715-OF** by and between MWH Americas, Inc. (“MWH”) and Test America Laboratories, Inc. Irvine (“LABORATORY”) incorporates by reference the Boeing Master Services Agreement No. MSA 091508.

LABORATORY shall attach a copy of this duly executed Task Order to the invoice.

Invoices CANNOT be processed without this document attached.

1. **PROJECT INFORMATION:**

Boeing, Santa Susana Field Laboratory (SSFL) this project is part of NPDES Activities being performed under California Region Water Quality Control Board at the project site.

Task 1 – NPDES Monitoring Laboratory Activities:

1. Samples will be collected per the NPDES Permit. Assumes one rain event occurring greater than 0.1 inches with limited outfalls flowing and analytical costs associated with sampling event. \$220,000

Task 2 – ISRA Performance Monitoring:

1. Samples will be collected per the NPDES Permit. Assumes one rain event occurring greater than 0.1 inches with limited outfalls flowing and analytical costs associated with sampling event. \$34,600

Task 3 – OF 011 and 018 Temp SWTS Monitoring:

1. Samples will be collected per the NPDES Permit. Assumes one rain event occurring greater than 0.1 inches with limited outfalls flowing and analytical costs associated with sampling event. \$16,000

Task 4 – NPDES BMP Effectiveness Monitoring:

1. Samples will be collected as part of the ongoing BMP upgrades and effectiveness, Media Rinse Sampling as necessary per Boeing direction. \$60,000

Boeing Work Authorization Number: 1008069

MWH Job Number/Cost Code(s):

March Services (02/27/10-04/02/10): 112103 Do Not Exceed \$122,000, 112203 Do Not Exceed \$27,000, 112303 Do Not Exceed \$10,000, 123103 Do Not Exceed \$20,000;

April Services (04/03/10-04/30/10): 112104 Do Not Exceed \$33,000, 112204 Do Not Exceed \$7,000, 112304 Do Not Exceed \$2,000, 123104 Do Not Exceed \$20,000;

May Services (05/01/10-05/28/10): 112105 Do Not Exceed \$33,000, 112205 Do Not Exceed \$0, 112305 Do Not Exceed \$2,000, 123105 Do Not Exceed \$10,000;

June Services (05/29/10-07/02/10): 112106 Do Not Exceed \$32,000, 112206 Do Not Exceed \$0, 112306 Do Not Exceed \$2,000, 123106 Do Not Exceed \$10,000;

2. **SCHEDULE:**

Estimated Start Date: February 27, 2010

Collection Schedule and Special Conditions:

Schedule will be based on anticipated weather and site conditions. The laboratory will be notified in advance of sample collection. A courier will be on-call as needed for sample pick-up at SSFL.

Sample End Date: July 02, 2010

3. **DELIVERY LOCATION FOR SHIPMENT OF SUPPLIES:**

Send To: MWH
Project Site
5800 Woolsey Canyon Road,
Canoga Park CA 91304
Attn: Eric Walker

Supplies must be delivered by:

Prior to storm events or as needed

4. **KEY PERSONNEL:**

MWH Project Chemist: Kristine McIlvenna
MWH CPG Representative: Lilian Plumlee
LABORATORY Project Manager: Bronwyn Kelly
LABORATORY QA Manager: Joseph Doak

5. **PROJECT-SPECIFIC TECHNICAL REQUIREMENTS**

The LABORATORY shall strictly comply with the project-specific requirement set forth in the Scope of Work of the BOEING Master Services Agreement 091508.

Task Order addended with approved variances? Yes No [Circle One]
If yes, variances must be attached to the Task Order

At MWH or their designee's (MECx) direction additional blank and QC samples may be added after the MWH/AMEC quality managers review of the data.

6. **Special Terms and Conditions (insert below):**

Within 28 days of sample receipt by laboratory:
"CLP-like Level IV Data Package" Laboratory deliverables shipped to;
MECX
12269 East Vissar Drive
Aurora, CO 80014
Attn. Liz Wessling

b) Special handling of the samples required by this Task Order is as instructed in writing by MWH personnel.

7. COMPENSATION:

The Compensation to be paid to the LABORATORY for the performance of the Subcontracted Services under this Task Order is set forth in Appendix I and IA. Samples will be submitted to the lab on an as needed basis, depending on weather and site conditions.

8. DELIVERABLES

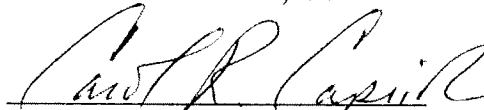
Summary Date Package and Electronic Data Deliverables _____ business days.

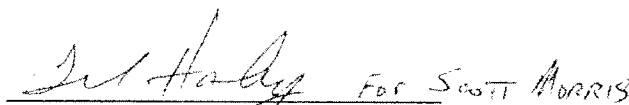
Level IV Raw Data Package Deliverables _____ business days

MWH and LABORATORY have executed this Task Order and LABORATORY is directed to proceed with the subcontracted services set out in this Task Order.

MWH Americas, Inc.

LABORATORY


Signature


Signature

Carol Capriola
Name (Typed or Printed)

FRED HALEY FOR SCOTT MORRIS
Name (Typed or Printed)

4/19/2010
Date

4/19/2010
Date

Please return a signed copy of this Task Order to Diane Martens at diane.martens@mwhglobal.com or fax to (916) 418-8522. A fully executed Task Order will be returned to Test America. Thank you.

APPENDIX I

TASK ORDER COMPENSATION/RATE SCHEDULE (Unit Price)

This Task Order Compensation/Rate Schedule is made this the February 27, 2010 by and between MWH Americas, Inc. ("MWH") and TestAmerica Laboratories, Inc. ("LABORATORY").

1. The rates set forth in the Appendix B August 14, 2008, Analytical Methods Pricing Sheet for Stormwater Monitoring and Reporting Program, shall include all costs related to the performance of the Subcontracted Services including, but not limited to all direct and indirect costs, General & Administrative expenses, overhead, cost of money and profit. Costs for the all Subcontracted Services shall be calculated by multiplying the appropriate unit price times the number of units provided for each Item/Analysis using the rates set forth in the Appendix B August 14, 2008, Analytical Methods Pricing Sheet for Stormwater Monitoring and Reporting Program.
2. Unit prices shall include, but not be limited to sample containers, container shipment, shipment of samples to LABORATORY (unless otherwise stated in the Scope of Services), sample preparation, dry weight correction (for solid matrices), ~~trip blank analysis for volatile organics (if required in the Task Order),~~ matrix spike/matrix spike duplicate analysis (as applicable) at the rate of one (1) MS/MSD sample per 20 environmental samples collected by MWH, second column confirmation for all GC methods and those HPLC analyses which specify confirmation columns, sample and sample residue and by-product disposal, standard data package deliverables and electronic data deliverable packages as required in the Scope of Services and all other costs related to the performance of the Scope of Services.
3. In the event that LABORATORY fails to meet a delivery time requirement, LABORATORY agrees that the damages for delay cannot reasonably be calculated in advance of such delay. Therefore, LABORATORY agrees to pay MWH as liquidated damages, and not as a penalty, for each and every such delay in the amount equal to ~~5% for the first day of delay and 3%~~ 2% for each calendar day of delay thereafter for the cost of each delayed sample analysis or other deliverable up to the total amount of the Task Order unless otherwise expressly set forth in the applicable Task Order. 50% of the applicable sample data group.
4. LABORATORY shall not be entitled to any other payment or reimbursement unless expressly set forth in the Task Order.
5. LABORATORY shall not take any action that would cause the amount for which MWH would be obligated to pay to LABORATORY to exceed the sum of \$330,600.00 and MWH shall have no obligation to pay LABORATORY in excess of the aforementioned sum unless such sum is changed by a Change Order.
6. LABORATORY shall submit monthly invoices to MWH for Subcontracted Services properly performed in the preceding month, along with such Supporting Documentation as MWH may reasonably require. MWH may prescribe the format of such invoice. Invoices shall be sent to the address and department named below.

MWH Americas, Inc
PO Box 6610
Broomfield CO 80021
Attn: Accounts Payable

AND

Copy of invoice should be sent to the address and person named below:

MWH AMERICAS, INC.
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attn: Bronwyn Kelly
Fax: (626) 568-6515
Email: Bronwyn Kelly: bronwyn.kelly@mwhglobal.com

Invoices submitted by LABORATORY will:

- 6.1 Show the name of the PROJECT, the MWH Job Number, Task Order Number, and the invoice period;
- 6.2 Accurately describe the subcontracted services rendered during the invoice period;
- 6.3 The Unit Description, Unit Price, Number of Units Performed and total amount due to LABORATORY;
- 6.4 Identification and justification of any other charges;
- 6.5 Identification of any reports and other deliverable items submitted; and
- 6.6 Such other information as MWH or MWH's client ("CLIENT") may reasonably require.

7. LABORATORY shall coordinate the submittal of its invoice for inclusion with the invoice submitted by MWH to CLIENT. A specific monthly submittal date will be established. If LABORATORY's invoice is received after the specified date, the invoice will be included in MWH's invoice to the CLIENT for the subsequent month.

8. Failure of LABORATORY to comply with the prescribed format or failure to provide adequate supporting documentation may result in rejection of the invoice. In the event that MWH disputes any amount as being due or lacking sufficient supporting data, MWH will include all amounts not in dispute in the invoice which MWH submits monthly to its CLIENT. When the amounts in dispute are resolved to the reasonable satisfaction of MWH, those amounts shall be submitted to the CLIENT for payment in the next monthly invoice.

9. MWH will pay all undisputed portions of LABORATORY's monthly invoice within 30 calendar days of MWH's receipt of LABORATORY's properly prepared monthly invoice relating to such Subcontracted Services. MWH may set-off or withhold against any amounts payable to LABORATORY any amounts that may become due MWH from the LABORATORY or amounts reasonably necessary to protect MWH from or arising out of LABORATORY's performance of the Scope of Services.

10. No payment made by MWH to LABORATORY under this Agreement shall be construed as evidence of acceptance of the Subcontracted Services or a waiver of MWH's right to demand the correction of any defect or deficiency in the Subcontracted Services.

11. LABORATORY warrants that its accounting-related are kept in accordance with generally accepted accounting practices and that its overall accounting system is sufficient to sustain an audit by local, state or federal audit agencies. LABORATORY agrees that should an audit disallow LABORATORY's costs based on inadequate or insufficient records, LABORATORY will promptly reimburse MWH for all such disallowed costs.

12. The purpose of any such audit shall be only for verification of reimbursable costs, and LABORATORY shall not be required to provide access to cost records where prices are expressed as fixed unit prices.

13. LABORATORY shall retain all supporting documentation for a period of 5 years after final payment or until all disputes, claims, litigation and appeals have been fully resolved, whichever is longer.

14. LABORATORY shall grant to MWH reasonable access and the right to examine and copy such Supporting Documents at no additional cost to MWH.

15. The receipt of the following deliverables, when applicable, are a prerequisite for final payment:

15.1 All non-expendable personal property purchased and approved or paid for by MWH.

15.2 A formal written release of all claims for Compensation and waiver of all liens relating to the Subcontracted Services.



TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

PROJECT NO. ITD0281

ITD0281

Lot #: F0D070524

Debbie Wilson

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

TESTAMERICA LABORATORIES, INC.

A handwritten signature in black ink, appearing to read "Lynn Fussner", is written in a cursive style.

Lynn Fussner
Project Manager

May 6, 2010

Case Narrative
LOT NUMBER: F0D070524

This report contains the analytical results for the two samples received under chain of custody by TestAmerica St. Louis on April 7, 2010. These samples are associated with your ITD0281 project.

The analytical results included in this report meet all applicable quality control procedure requirements, except as noted below.

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

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

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

Observations/Nonconformances

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

Sample preparation was started in the TestAmerica Irvine laboratory prior to shipment of the samples to the TestAmerica St. Louis laboratory. The initial sample preparation consisted of acidification of samples to a pH less than 2 with Nitric Acid. Documentation of the acidification is attached in the Preparation Log.

Radium-226 by GFPC (EPA 903.0 MOD)

There was insufficient sample volume to perform MS/MSD analysis. A LCS/LCSD was performed to demonstrate accuracy and replicate precision.

Affected Samples:

F0D070524 (1): ITD0281-02
F0D070524 (2): ITD0281-03

Radium-228 by GFPC (EPA 904 MOD)

There was insufficient sample volume to perform MS/MSD analysis. A LCS/LCSD was performed to demonstrate accuracy and replicate precision.
LOT NUMBER F0D070524

Affected Samples:

F0D070524 (1): ITD0281-02
F0D070524 (2): ITD0281-03

H-3 by Distillation & LSC (906.0 MOD)

Tritium samples were received in non amber glass bottles.

Affected Samples:

F0D070524 (1): ITD0281-02
F0D070524 (2): ITD0281-03

METHODS SUMMARY

F0D070524

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

References:

ASTM Annual Book Of ASTM Standards.

EPA "EASTERN ENVIRONMENTAL RADIATION FACILITY RADIOCHEMISTRY
PROCEDURES MANUAL" US EPA EPA 520/5-84-006 AUGUST 1984

SAMPLE SUMMARY

F0D070524

<u>WO #</u>	<u>SAMPLE#</u>	<u>CLIENT SAMPLE ID</u>	<u>SAMPLED DATE</u>	<u>SAMP TIME</u>
LXMDQ	001	ITD0281-02	04/05/10	09:45
LXMD5	002	ITD0281-03	04/06/10	12:03

NOTE(S) :

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

TestAmerica Irvine

Client Sample ID: ITD0281-02

Radiochemistry

Lab Sample ID: F0D070524-001
 Work Order: LXMDQ
 Matrix: WATER

Date Collected: 04/05/10 0945
 Date Received: 04/07/10 0915

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	mdc	Prep Date	Analysis Date
Gamma Cs-137 & Hits by EPA 901.1 MOD							
Cesium 137	1.1	U	7.4	20.0	14	04/08/10	05/01/10
Potassium 40	-40	U	280		270	04/08/10	05/01/10
Gross Alpha/Beta EPA 900							
Gross Alpha	0.91	U	0.89	3.00	1.4	04/08/10	04/16/10
Gross Beta	2.92	J	0.89	4.00	1.1	04/08/10	04/16/10
SR-90 BY GFPC EPA-905 MOD							
Strontium 90	-0.007	U	0.22	3.00	0.38	04/08/10	04/20/10
TRITIUM (Distill) by EPA 906.0 MOD							
Tritium	50	U	190	500	330	04/22/10	04/22/10
Total Uranium by KPA ASTM 5174-91							
Total Uranium	0.322	J	0.037	0.677	0.21	04/08/10	04/13/10
Radium 226 by EPA 903.0 MOD							
Radium (226)	0.042	U	0.084	1.00	0.15	04/08/10	04/30/10
Radium 228 by GFPC EPA 904 MOD							
Radium 228	0.17	U	0.41	1.00	0.68	04/08/10	04/30/10

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC.

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

U Result is less than the sample detection limit.

TestAmerica Irvine

Client Sample ID: ITD0281-03

Radiochemistry

Lab Sample ID: F0D070524-002
 Work Order: LXMD5
 Matrix: WATER

Date Collected: 04/06/10 1203
 Date Received: 04/07/10 0915

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	mdc	Prep Date	Analysis Date
Gamma Cs-137 & Hits by EPA 901.1 MOD							
				pCi/L		Batch # 0103219	Yld %
Cesium 137	1.0	U	5.9	20.0	11	04/13/10	04/13/10
Potassium 40	-40	U	170		200	04/13/10	04/13/10
Gross Alpha/Beta EPA 900							
				pCi/L		Batch # 0105073	Yld %
Gross Alpha	-0.07	U	0.46	3.00	0.97	04/15/10	04/26/10
Gross Beta	1.55	J	0.98	4.00	1.5	04/15/10	04/26/10
SR-90 BY GFPC EPA-905 MOD							
				pCi/L		Batch # 0100045	Yld % 77
Strontium 90	-0.02	U	0.40	3.00	0.72	04/10/10	04/20/10
TRITIUM (Distill) by EPA 906.0 MOD							
				pCi/L		Batch # 0112082	Yld %
Tritium	70	U	190	500	330	04/22/10	04/23/10
Total Uranium by KPA ASTM 5174-91							
				pCi/L		Batch # 0119221	Yld %
Total Uranium	0.242	J	0.030	0.677	0.21	04/29/10	05/03/10
Radium 226 by EPA 903.0 MOD							
				pCi/L		Batch # 0100043	Yld % 106
Radium (226)	-0.011	U	0.094	1.00	0.20	04/10/10	05/05/10
Radium 228 by GFPC EPA 904 MOD							
				pCi/L		Batch # 0100044	Yld % 103
Radium 228	0.19	U	0.42	1.00	0.71	04/10/10	05/05/10

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined by instrument performance only.

Bold results are greater than the MDC.

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

U Result is less than the sample detection limit.

METHOD BLANK REPORT

Radiochemistry

Client Lot ID: F0D070524
 Matrix: WATER

Parameter	Result	Qual	Total Uncert. (2 σ +/-)	RL	MDC	Prep Date	Lab Sample ID Analysis Date
TRITIUM (Distill) by EPA 906.0 MOD							
Tritium	-80	U	180	500	330	04/22/10	F0D220000-082B
Total Uranium by KPA ASTM 5174-91							
Total Uranium	0.213	J	0.026	0.677	0.21	04/29/10	F0D290000-221B
Gross Alpha/Beta EPA 900							
Gross Alpha	0.27	U	0.48	3.00	0.83	04/15/10	F0D150000-073B
Gross Beta	-0.09	U	0.53	4.00	0.95	04/15/10	04/26/10
Total Uranium by KPA ASTM 5174-91							
Total Uranium	0.267	J	0.033	0.677	0.21	04/08/10	F0D080000-114B
Gross Alpha/Beta EPA 900							
Gross Alpha	0.21	U	0.46	2.00	0.83	04/08/10	F0D080000-090B
Gross Beta	-0.33	U	0.50	4.00	0.95	04/08/10	04/16/10
Radium 226 by EPA 903.0 MOD							
Radium (226)	0.055	U	0.084	1.00	0.14	04/08/10	F0D080000-325B
Radium 228 by GFPC EPA 904 MOD							
Radium 228	0.31	U	0.33	1.00	0.54	04/08/10	F0D080000-327B
SR-90 BY GFPC EPA-905 MOD							
Strontium 90	0.18	U	0.25	3.00	0.40	04/08/10	F0D080000-328B
Gamma Cs-137 & Hits by EPA 901.1 MOD							
Cesium 137	3.5	U	7.4	20.0	13	04/08/10	F0D080000-345B
Potassium 40	-80	U	350		200	04/08/10	05/01/10
Radium 226 by EPA 903.0 MOD							
Radium (226)	0.071	U	0.084	1.00	0.13	04/10/10	F0D100000-043B
Radium 228 by GFPC EPA 904 MOD							
Radium 228	0.10	U	0.35	1.00	0.60	04/10/10	F0D100000-044B
SR-90 BY GFPC EPA-905 MOD							
Strontium 90	0.06	U	0.22	3.00	0.38	04/10/10	F0D100000-045B
Gamma Cs-137 & Hits by EPA 901.1 MOD							
Cesium 137	-0.4	U	9.3	20.0	17	04/13/10	F0D130000-219B
Potassium 40	50	U	100		170	04/13/10	04/13/10

NOTE(S)

Data are incomplete without the case narrative.

MDC is determined using instrument performance only

Bold results are greater than the MDC.

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

U Result is less than the sample detection limit.

Laboratory Control Sample Report

Radiochemistry

Client Lot ID: F0D070524
 Matrix: WATER

Parameter	Spike Amount	Result	Total Uncert. (2 σ +/-)	MDC	% Yld	% Rec	Lab Sample ID QC Control Limits
Gross Alpha/Beta EPA 900							
			pCi/L	900.0 MOD			F0D080000-090C
Gross Alpha	49.4	52.3	5.8	1.3		106	(62 - 134)
	Batch #:	0098090		Analysis Date:	04/16/10		
Gross Alpha/Beta EPA 900							
			pCi/L	900.0 MOD			F0D080000-090C
Gross Beta	67.8	67.0	5.7	1.0		99	(58 - 133)
	Batch #:	0098090		Analysis Date:	04/16/10		
Total Uranium by KPA ASTM 5174-91							
			pCi/L	5174-91			F0D080000-114C
Total Uranium	27.1	29.0	3.5	0.2		107	(90 - 120)
	Batch #:	0098114		Analysis Date:	04/13/10		
Total Uranium by KPA ASTM 5174-91							
			pCi/L	5174-91			F0D080000-114C
Total Uranium	5.42	5.69	0.59	0.21		105	(90 - 120)
	Batch #:	0098114		Analysis Date:	04/13/10		
Gamma Cs-137 & Hits by EPA 901.1 MOD							
			pCi/L	901.1 MOD			F0D080000-345C
Americium 241	141000	131000	10000	500		93	(87 - 110)
Cesium 137	53100	48400	2800	200		91	(90 - 110)
Cobalt 60	87900	79500	4500	200		90	(89 - 110)
	Batch #:	0098345		Analysis Date:	05/03/10		
Gamma Cs-137 & Hits by EPA 901.1 MOD							
			pCi/L	901.1 MOD			F0D130000-219C
Americium 241	143000	145000	12000	400		102	(87 - 110)
Cesium 137	57000	54700	3300	200		96	(90 - 110)
Cobalt 60	91800	87400	5000	200		95	(89 - 110)
	Batch #:	0103219		Analysis Date:	04/19/10		
Gross Alpha/Beta EPA 900							
			pCi/L	900.0 MOD			F0D150000-073C
Gross Beta	67.8	69.5	5.9	1.0		102	(58 - 133)
	Batch #:	0105073		Analysis Date:	04/26/10		
Gross Alpha/Beta EPA 900							
			pCi/L	900.0 MOD			F0D150000-073C
Gross Alpha	49.4	51.1	5.8	1.3		103	(62 - 134)
	Batch #:	0105073		Analysis Date:	04/26/10		
TRITIUM (Distill) by EPA 906.0 MOD							
			pCi/L	906.0 MOD			F0D220000-082C
Tritium	4490	4600	490	330		102	(85 - 112)
	Batch #:	0112082		Analysis Date:	04/22/10		
Total Uranium by KPA ASTM 5174-91							
			pCi/L	5174-91			F0D290000-221C
Total Uranium	27.1	29.6	3.6	0.2		109	(90 - 120)
	Batch #:	0119221		Analysis Date:	05/03/10		
Total Uranium by KPA ASTM 5174-91							
			pCi/L	5174-91			F0D290000-221C
Total Uranium	5.42	6.02	0.62	0.21		111	(90 - 120)
	Batch #:	0119221		Analysis Date:	05/03/10		

NOTE(S)

MDC is determined by instrument performance only
Calculations are performed before rounding to avoid round-off error in calculated results

Laboratory Control Sample/LCS Duplicate Report

Radiochemistry

Client Lot ID: F0D070524

Matrix: WATER

Parameter	Spike Amount	Result	Total Uncert. (2 σ +/-)	% Yld	% Rec	Lab Sample ID	
						QC Control Limits	Precision
Radium 226 by EPA	903.0 MOD	pCi/L	903.0 MOD			F0D080000-325C	
Radium (226)	11.3	9.6	1.0	75	85	(68 - 136)	
Spk 2	11.3	9.62	0.97	109	85	(68 - 136) 0.5 %RPD	
	Batch #:	0098325		Analysis Date:	04/30/10		
Radium 228 by GFPC EPA	904 MOD	pCi/L	904 MOD			F0D080000-327C	
Radium 228	6.34	5.49	0.78	72	87	(60 - 142)	
Spk 2	6.34	5.49	0.68	104	87	(60 - 142) 0.07 %RPD	
	Batch #:	0098327		Analysis Date:	04/30/10		
SR-90 BY GFPC EPA	905 MOD	pCi/L	905 MOD			F0D080000-328C	
Strontium 90	6.77	6.01	0.74	78	89	(80 - 130)	
Spk 2	6.77	6.78	0.78	81	100	(80 - 130) 12 %RPD	
	Batch #:	0098328		Analysis Date:	04/20/10		
Radium 226 by EPA	903.0 MOD	pCi/L	903.0 MOD			F0D100000-043C	
Radium (226)	11.3	10.9	1.1	107	97	(68 - 136)	
Spk 2	11.3	12.2	1.2	102	109	(68 - 136) 12 %RPD	
	Batch #:	0100043		Analysis Date:	05/05/10		
Radium 228 by GFPC EPA	904 MOD	pCi/L	904 MOD			F0D100000-044C	
Radium 228	6.33	5.60	0.74	99	88	(60 - 142)	
Spk 2	6.33	6.21	0.79	98	98	(60 - 142) 10 %RPD	
	Batch #:	0100044		Analysis Date:	05/05/10		
SR-90 BY GFPC EPA	905 MOD	pCi/L	905 MOD			F0D100000-045C	
Strontium 90	6.77	7.41	0.85	76	109	(80 - 130)	
Spk 2	6.77	6.77	0.77	82	100	(80 - 130) 9 %RPD	
	Batch #:	0100045		Analysis Date:	04/20/10		

NOTE(S)

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

MATRIX SPIKE REPORT

Radiochemistry

Client Lot Id: F0D070495
 Matrix: WATER

Date Sampled: 04/06/10
 Date Received: 04/07/10

Parameter	Spike Amount	Spike Result	Total Uncert. (2σ +/-)	Spike Yld.	Sample Result	Total Uncert. (2σ +/-)	QC Sample ID		QC Control Limits
							%YLD	%REC	
TRITIUM (Distill) by EPA	906.0	MOD	pCi/L		906.0	MOD	F0D070495-002		
Tritium	4490	4610	490		170	200	99		(62 - 147)
	Batch #:	0112082			Analysis Date:	04/22/10			
Gross Alpha/Beta EPA 900			pCi/L		900.0	MOD	F0D070407-001		
Gross Beta	67.8	70.6	6.0		1.20	0.78	102		(54 - 150)
	Batch #:	0098090			Analysis Date:	04/16/10			
Gross Alpha/Beta EPA 900			pCi/L		900.0	MOD	F0D070407-001		
Gross Alpha	49.4	55.2	6.4		0.51	0.64	110		(35 - 150)
	Batch #:	0098090			Analysis Date:	04/16/10			
Gross Alpha/Beta EPA 900			pCi/L		900.0	MOD	F0D140466-001		
Gross Beta	67.8	75.6	6.4		2.76	0.83	108		(54 - 150)
	Batch #:	0105073			Analysis Date:	04/26/10			
Gross Alpha/Beta EPA 900			pCi/L		900.0	MOD	F0D140466-001		
Gross Alpha	49.4	49.4	5.7		2.1	1.0	96		(35 - 150)
	Batch #:	0105073			Analysis Date:	04/26/10			

NOTE(S)

Data are incomplete without the case narrative.

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

MATRIX SPIKE/MATRIX SPIKE DUPLICATE REPORT

Radiochemistry

Client Lot ID: FOC270425
 Matrix: WATER

Date Sampled: 03/25/10 0950

Date Received: 03/27/10 0815

Parameter	Spike Amount	SPIKE Result	Total Uncert. (2 σ +/-)	Spike Yld	SAMPLE Result	Total Uncert. (2 σ +/-)	QC Sample ID		QC Control Limits
							% Yld	%Rec	
Total Uranium by KPA ASTM 5			pCi/L	5174-91			FOC270425-001		
Total Uranium	27.1	29.3	3.5	1.61		0.17	102		(62 - 150)
Spk2	27.1	29.9	3.6	1.61		0.17	104		(62 - 150)
							Precision:	2	%RPD
Batch #: 0098114			Analysis date: 04/13/10						
Total Uranium by KPA ASTM 5			pCi/L	5174-91			FOD070495-002		
Total Uranium	27.1	30.1	3.6	0.185	U	0.023	110		(62 - 150)
Spk2	27.1	29.9	3.6	0.185	U	0.023	110		(62 - 150)
							Precision:	0.7	%RPD
Batch #: 0119221			Analysis date: 05/03/10						

NOTE(S)

Data are incomplete without the case narrative.

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

U Result is less than the sample detection limit.

DUPLICATE EVALUATION REPORT

Radiochemistry

Client Lot ID: F0D070524
Matrix: WATER

Date Sampled: 04/05/10
Date Received: 04/07/10

Parameter	SAMPLE Result		Total Uncert. (2σ +/-)	% Yld	DUPLICATE Result		Total Uncert. (2σ +/-)	% Yld	QC Sample ID
									Precision
TRITIUM (Distill) by EPA 906.0 MOD				pCi/L	906.0 MOD				F0D070495-001
Tritium	80	U	190		30	U	190		82 %RPD
	Batch #:		0112082 (Sample)		0112082 (Duplicate)				
Gamma Cs-137 & Hits by EPA 901.1 MOD				pCi/L	901.1 MOD				F0D070495-002
Cesium 137	3.0	U	6.6		-0.7	U	6.8		332 %RPD
Potassium 40	-140	U	530		-100	U	12000		14 %RPD
	Batch #:		0103219 (Sample)		0103219 (Duplicate)				
Gross Alpha/Beta EPA 900				pCi/L	900.0 MOD				F0D070407-001
Gross Alpha	0.51	U	0.64		0.43	U	0.77		18 %RPD
Gross Beta	1.20	J	0.78		0.54	U	0.66		76 %RPD
	Batch #:		0098090 (Sample)		0098090 (Duplicate)				
Gamma Cs-137 & Hits by EPA 901.1 MOD				pCi/L	901.1 MOD				F0D070524-001
Cesium 137	1.1	U	7.4		0.3	U	10		121 %RPD
Potassium 40	-40	U	280		-90	U	3800		81 %RPD
	Batch #:		0098345 (Sample)		0098345 (Duplicate)				
Gross Alpha/Beta EPA 900				pCi/L	900.0 MOD				F0D140466-001
Gross Alpha	2.1	J	1.0		2.1	J	1.0		2 %RPD
Gross Beta	2.76	J	0.83		2.86	J	0.87		4 %RPD
	Batch #:		0105073 (Sample)		0105073 (Duplicate)				

NOTE(S)

Data are incomplete without the case narrative.

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

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

U Result is less than the sample detection limit.

SUBCONTRACT ORDER

TestAmerica Irvine

TTD0281

SENDING LABORATORY:

TestAmerica Irvine
 17461 Derian Avenue, Suite 100
 Irvine, CA 92614
 Phone: (949) 261-1022
 Fax: (949) 260-3297
 Project Manager: Heather Clark

RECEIVING LABORATORY:

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

Analysis	Due	Expires	Laboratory ID	Comments
Sample ID: TTD0281-02				
Water		Sampled: 04/05/10 09:45		
Uranium, Combined-O	04/19/10 12:00	04/05/11 09:45		Out St Louis, Boeing permit, DO NOT FILTER!
Gross Alpha-O	04/19/10 12:00	10/02/10 09:45		Out St Louis, Boeing permit, DO NOT FILTER!
Gross Beta-O	04/19/10 12:00	10/02/10 09:45		Out St Louis, Boeing permit, DO NOT FILTER!
Level 4 Data Package - Out	04/19/10 12:00	05/03/10 09:45		
Radium 226-O	04/19/10 12:00	04/05/11 09:45		Out St Louis, Boeing permit, DO NOT FILTER!
Radium 228-O	04/19/10 12:00	04/05/11 09:45		Out St Louis, Boeing permit, DO NOT FILTER!
Strontium 90-O	04/19/10 12:00	04/05/11 09:45		Out St Louis, Boeing permit, DO NOT FILTER!
Gamma Spec-O	04/19/10 12:00	04/05/11 09:45		Out St Louis, K-40 and CS-137 only, DO NOT FILTER!
Tritium-O	04/19/10 12:00	04/05/11 09:45		Out St Louis, Boeing permit, DO NOT FILTER!
<i>Containers Supplied:</i>				
2.5 gal Poly (H)	500 mL Amber (I)			
Sample ID: TTD0281-03				
Water		Sampled: 04/06/10 12:03		
Gamma Spec-O	04/19/10 12:00	04/06/11 12:03		Out St Louis, K-40 and CS-137 only, DO NOT FILTER!
Radium 228-O	04/19/10 12:00	04/06/11 12:03		Out St Louis, Boeing permit, DO NOT FILTER!
Strontium 90-O	04/19/10 12:00	04/06/11 12:03		Out St Louis, Boeing permit, DO NOT FILTER!
Uranium, Combined-O	04/19/10 12:00	04/06/11 12:03		Out St Louis, Boeing permit, DO NOT FILTER!
Tritium-O	04/19/10 12:00	04/06/11 12:03		Out St Louis, Boeing permit, DO NOT FILTER!
Gross Alpha-O	04/19/10 12:00	10/03/10 12:03		Out St Louis, Boeing permit, DO NOT FILTER!
Gross Beta-O	04/19/10 12:00	10/03/10 12:03		Out St Louis, Boeing permit, DO NOT FILTER!
Radium 226-O	04/19/10 12:00	04/06/11 12:03		Out St Louis, Boeing permit, DO NOT FILTER!
<i>Containers Supplied:</i>				
2.5 gal Poly (A)				

Angelo Bon 4-7-10 9:15

Released By _____ Date _____ Received By _____ Date _____

Released By _____ Date _____ Received By _____ Date _____



Lot #(s): F0D070495
524

CONDITION UPON RECEIPT FORM

Client: TA Irvine

Quote No: 85044

COC/RFA No: ITD0278

Initiated By: AB

Date: 4-2-10

Time: 9:15

Shipping Information

Shipper: FedEx UPS DHL Courier Client Other: _____ Multiple Packages:

Shipping # (s):*	Sample Temperature (s):**
1. <u>428921340800 msp</u>	1. <u>6</u>
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____
5. _____	5. _____
6. _____	6. _____
7. _____	7. _____
8. _____	8. _____
9. _____	9. _____
10. _____	10. _____

*Numbered shipping lines correspond to Numbered Sample Temp lines

**Sample must be received at 4°C ± 2°C. If not, note contents below. Temperature variance does NOT affect the following: Metals-Liquid or Rad tests- Liquid or Solids

Condition (Circle "Y" for yes, "N" for no and "N/A" for not applicable):

1. <input checked="" type="radio"/> Y <input type="radio"/> N	Are there custody seals present on the cooler?	8. <input type="radio"/> Y <input checked="" type="radio"/> N	Are there custody seals present on bottles?
2. <input type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> N/A	Do custody seals on cooler appear to be tampered with?	9. <input type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> N/A	Do custody seals on bottles appear to be tampered with?
3. <input checked="" type="radio"/> Y <input type="radio"/> N	Were contents of cooler frisked after opening, but before unpacking?	10. <input type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> N/A	Was sample received with proper pH? (If not, make note below)
4. <input checked="" type="radio"/> Y <input checked="" type="radio"/> N	Sample received with Chain of Custody?	11. <input checked="" type="radio"/> Y <input type="radio"/> N	Sample received in proper containers?
5. <input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> N/A	Does the Chain of Custody match sample ID's on the container(s)?	12. <input type="radio"/> Y <input type="radio"/> N <input checked="" type="radio"/> N/A	Headspace in VOA or TOX liquid samples? (If Yes, note sample ID's below)
6. <input type="radio"/> Y <input checked="" type="radio"/> N	Was sample received broken?	13. <input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> N/A	Was Internal COC/Workshare received?
7. <input checked="" type="radio"/> Y <input type="radio"/> N	Is sample volume sufficient for analysis?	14. <input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> N/A	Was pH taken by original TestAmerica lab?

¹ For DOE-AL (Pantex, LANL, Sandia) sites, pH of ALL containers received must be verified, EXCEPT VOA, TOX and soils.

Notes:

Per LF TAT 2/23 day

Did not receive COC for ITD0281 (did receive the W/S)
4.5.10 - 0945

Received COC via email 4.7.10 4.7.10

Corrective Action:

- Client Contact Name: _____
- Sample(s) processed "as is"
- Sample(s) on hold until: _____
- Project Management Review: [Signature]

Informed by: _____

If released, notify: _____
 Date: 4/12/10

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED IN. IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR INITIAL AND THE DATE NEXT TO THAT ITEM.

APPENDIX G

Section 7

Outfall 010, BMP Effectiveness, April 5, 2010
Test America Analytical Laboratory Reports

THIS PAGE LEFT INTENTIONALLY BLANK

LABORATORY REPORT

Prepared For: MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project: BMP Effectiveness 2009
BMP Effectiveness

Sampled: 04/05/10
Received: 04/05/10
Issued: 04/19/10 20:44

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

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

LABORATORY ID

ITD0305-01

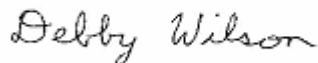
CLIENT ID

010 EFF-1

MATRIX

Water

Reviewed By:



TestAmerica Irvine

Debby Wilson For Heather Clark
Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: BMP Effectiveness 2009
 BMP Effectiveness
 Report Number: ITD0305

Sampled: 04/05/10
 Received: 04/05/10

INORGANICS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITD0305-01 (010 EFF-1 - Water)									
Reporting Units: g/cc									
Density	Displacement	10D1484	N/A	NA	0.99	1	04/14/10	04/14/10	
Sample ID: ITD0305-01 (010 EFF-1 - Water)									
Reporting Units: mg/l									
Sediment	ASTM D3977	10D1485	10	10	16	1	04/05/10	04/14/10	

TestAmerica Irvine

Debby Wilson For Heather Clark
 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 TestAmerica.

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: BMP Effectiveness 2009
BMP Effectiveness
Report Number: ITD0305

Sampled: 04/05/10
Received: 04/05/10

METHOD BLANK/QC DATA

INORGANICS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10D1484 Extracted: 04/14/10										
Duplicate Analyzed: 04/14/2010 (10D1484-DUP1)										
Density	0.993	NA	N/A	g/cc		Source: ITD0305-01 0.993		0.05	20	

TestAmerica Irvine

Debby Wilson For Heather Clark
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 TestAmerica.

ITD0305 <Page 3 of 5>

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: BMP Effectiveness 2009
BMP Effectiveness
Report Number: ITD0305

Sampled: 04/05/10
Received: 04/05/10

DATA QUALIFIERS AND DEFINITIONS

ND Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
RPD Relative Percent Difference

TestAmerica Irvine

Debby Wilson For Heather Clark
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 TestAmerica.

ITD0305 <Page 4 of 5>

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: BMP Effectiveness 2009
BMP Effectiveness
Report Number: ITD0305

Sampled: 04/05/10
Received: 04/05/10

Certification Summary

TestAmerica Irvine

Method	Matrix	Nelac	California
ASTM D3977	Water		
Displacement	Water		

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

TestAmerica Irvine

Debby Wilson For Heather Clark
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 TestAmerica.

APPENDIX G

Section 8

Arroyo Simi, May 12, 2010

MEC^X Data Validation Report

THIS PAGE LEFT INTENTIONALLY BLANK



DATA VALIDATION REPORT

Boeing SSFL NPDES

SAMPLE DELIVERY GROUP: ITE1178

Prepared by

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

I. INTRODUCTION

Task Order Title: Boeing SSFL NPDES
Contract Task Order: 1261.100D.00
Sample Delivery Group: ITE1178
Project Manager: B. Kelly
Matrix: Water
QC Level: IV
No. of Samples: 1
No. of Reanalyses/Dilutions: 0
Laboratory: TestAmerica-Irvine

Table 1. Sample Identification

Client ID	Laboratory ID	Sub-Laboratory ID	Matrix	Collected	Method
Arroyo Simi-FP	ITD0278-01	N/A	WATER	5/12/2010 12:00:00 PM	EPA 200.7, SM2340B, 525.2

II. Sample Management

No anomalies were observed regarding sample management. The temperature at which the samples in this SDG were received was not noted by the laboratory; however, the samples were noted to have been received on ice, three hours after collection. According to the case narrative for this SDG, the samples were received intact and properly preserved, if applicable. The COCs were appropriately signed and dated by field and/or laboratory personnel. Custody seals were intact. If necessary, the client ID was added to the sample result summary by the reviewer.

Data Qualifier Reference Table

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

Qualification Code Reference Table

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

Qualification Code Reference Table Cont.

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

III. Method Analyses

A. EPA METHOD 200.7—Metals

Reviewed By: P. Meeks

Date Reviewed: June 23, 2010

The sample listed in Table 1 for these analyses was validated based on the guidelines outlined in the *MEC^x Data Validation Procedure for Metals (DVP-5, Rev. 0 and DVP-21, Rev. 0)*, *EPA Methods 200.7 and SM2340B*, and the *National Functional Guidelines for Inorganic Data Review (7/02)*.

- Holding Times: The analytical holding time, six months for ICP metals, was met.
- Tuning: Not applicable to these analyses.
- Calibration: Calibration criteria were met. One magnesium CCV recovery was above the control limit; at 127%; therefore, magnesium detected in the sample was qualified as estimated, "J." All remaining initial and continuing calibration recoveries were within 90-110% for the ICP. CRI recoveries were within the control limits of 70-130%.
- Blanks: Method blanks and CCBs had no applicable detects.
- Interference Check Samples: Recoveries were within the control limits of 80-120%. There were no target compounds present in the ICSA solution at concentrations indicative of matrix interference.
- Blank Spikes and Laboratory Control Samples: Recoveries were within method-established QC limits.
- Laboratory Duplicates: No laboratory duplicate analyses were performed on the sample in this SDG.
- Matrix Spike/Matrix Spike Duplicate: No MS/MSD analyses were performed on the sample in this SDG. Method accuracy was evaluated based on LCS results.
- Serial Dilution: No serial dilution analyses were performed on the sample in this SDG.
- Internal Standards Performance: Not applicable to these analyses.
- Sample Result Verification: Calculations were verified and the sample results reported on the sample result summary were verified against the raw data. No transcription errors or calculation errors were noted. When the sample results were qualified and the reviewer was able to clearly determine bias, detected results were qualified as either "J+" or "J-"; otherwise, bias was not indicated in the qualification. Any detects between the method detection limit and the reporting limit were qualified as estimated, "J," and coded with

“DNQ,” in order to comply with the NPDES permit. Reported nondetects are valid to the MDL.

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

B. EPA METHOD 525.2/625—Semivolatile Organic Compounds (SVOCs) Diazinon and Chlorpyrifos

Reviewed By: P. Meeks

Date Reviewed: June 23, 2010

The sample listed in Table 1 for this analysis was validated based on the guidelines outlined in the *MEC^X Data Validation Procedure for Semivolatile Organics (DVP-3, Rev. 0)*, *EPA Method 625*, *EPA Method 525.2*, and the *National Functional Guidelines for Organic Data Review (10/99)*.

- Holding Times: The sample was extracted 26 hours after collection which exceeds the “immediate” holding time for diazinon; therefore, nondetected diazinon in the sample was qualified as estimated, “UJ.” The sample was analyzed within 40 days of extraction.
- GC/MS Tuning: The DFTPP tunes met the method abundance criteria. The sample was analyzed within 12 hours of the DFTPP injection time.
- Calibration: Calibration criteria were met. The initial calibration %RSDs were $\leq 30\%$ and RRFs were ≥ 0.05 . The second source ICV had %Ds less than 20%. The CCV RRFs were ≥ 0.05 and the CCV %Ds were $\leq 30\%$.
- Blanks: The method blank had no detects for chlorpyrifos or diazinon above the MDL.
- Blank Spikes and Laboratory Control Samples: LCD/LCSD recoveries and RPDs were within the laboratory-established control limits.
- Surrogate Recovery: Surrogate recoveries were within laboratory-established QC limits.
- Matrix Spike/Matrix Spike Duplicate: No MS/MSD analyses were performed on the sample in this SDG. Method accuracy and precision were evaluated based on LCS/LCSD results.

- **Field QC Samples:** Field QC samples were evaluated, and if necessary, qualified based on method blanks and other laboratory QC results affecting the usability of the field QC data. Any remaining detects were used to evaluate the associated site samples. Following are findings associated with field QC samples:
 - **Field Blanks and Equipment Rinsates:** This SDG had no identified field blank or equipment rinsate samples.
 - **Field Duplicates:** There were no field duplicate samples identified for this SDG.
- **Internal Standards Performance:** The internal standard area counts and retention times were within the control limits established by the continuing calibration standards: -50%/+100% for internal standard areas and ± 30 seconds for retention times.
- **Compound Identification:** Compound identification was verified. The laboratory analyzed for diazinon and chlorpyrifos by method 525.2.
- **Compound Quantification and Reported Detection Limits:** Compound quantification was verified. The reporting limits were supported by the low point of the initial calibration and the laboratory MDLs.
- **System Performance:** Review of the raw data indicated no problems with system performance.

Validated Sample Result Forms ITE1178

Analysis Method *EPA 200.7*

Sample Name Arroyo Simi-FP **Matrix Type:** Water **Validation Level:** IV

Lab Sample Name: ITE1178-01 **Sample Date:** 5/12/2010 12:00:00 PM

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Calcium	7440-70-2	230	0.10	0.050	mg/l			
Magnesium	7439-95-4	70	0.020	0.012	mg/l		J	C

Analysis Method *EPA 525.2*

Sample Name Arroyo Simi-FP **Matrix Type:** Water **Validation Level:** IV

Lab Sample Name: ITE1178-01 **Sample Date:** 5/12/2010 12:00:00 PM

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Chlorpyrifos	2921-88-2	ND	1.0	0.010	ug/l		U	
Diazinon	333-41-5	ND	0.25	0.10	ug/l		UJ	H

Analysis Method *SM2340B*

Sample Name Arroyo Simi-FP **Matrix Type:** Water **Validation Level:** IV

Lab Sample Name: ITE1178-01 **Sample Date:** 5/12/2010 12:00:00 PM

Analyte	CAS No	Result Value	RL	MDL	Result Units	Lab Qualifier	Validation Qualifier	Validation Notes
Hardness (as CaCO3)		850	0.33	0.17	mg/l			

THIS PAGE LEFT INTENTIONALLY BLANK

APPENDIX G

Section 9

Arroyo Simi, May 12, 2010

Test America Analytical Laboratory Report

THIS PAGE LEFT INTENTIONALLY BLANK

LABORATORY REPORT

Prepared For: MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project: Quartely Arroyo Simi-Frontier
Park
Quarterly Arroyo Simi-Frontier
Sampled: 05/12/10
Received: 05/12/10
Issued: 05/26/10 16:46

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

The results listed within this Laboratory Report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the applicable certifications as noted. All soil samples are reported on a wet weight basis unless otherwise noted in the report. This Laboratory Report is confidential and is intended for the sole use of TestAmerica and its client. This report shall not be reproduced, except in full, without written permission from TestAmerica. The Chain of Custody, 1 page, is included and is 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 TestAmerica 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: No analyses were subcontracted to an outside laboratory.

LABORATORY ID

ITE1178-01

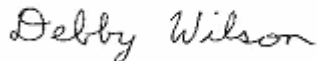
CLIENT ID

Arroyo Simi-FP

MATRIX

Water

Reviewed By:



TestAmerica Irvine

Debby Wilson
Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Quartely Arroyo Simi-Frontier Park
 Quarterly Arroyo Simi-Frontier Park
 Report Number: ITE1178

Sampled: 05/12/10
 Received: 05/12/10

ORGANIC COMPOUNDS BY GC/MS (EPA 525.2)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITE1178-01 (Arroyo Simi-FP - Water)									
Reporting Units: ug/l									
Chlorpyrifos	EPA 525.2	10E1671	0.010	1.0	ND	1	05/13/10	05/14/10	
Diazinon	EPA 525.2	10E1671	0.10	0.25	ND	1	05/13/10	05/14/10	
<i>Surrogate: 1,3-Dimethyl-2-nitrobenzene (70-130%)</i>					104 %				
<i>Surrogate: 1,3-Dimethyl-2-nitrobenzene (70-130%)</i>					104 %				
<i>Surrogate: Triphenylphosphate (70-130%)</i>					107 %				
<i>Surrogate: Triphenylphosphate (70-130%)</i>					107 %				
<i>Surrogate: Perylene-d12 (70-130%)</i>					125 %				
<i>Surrogate: Perylene-d12 (70-130%)</i>					125 %				

TestAmerica Irvine

Debby Wilson
 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 TestAmerica.

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Quartely Arroyo Simi-Frontier Park
 Quarterly Arroyo Simi-Frontier Park
 Report Number: ITE1178

Sampled: 05/12/10
 Received: 05/12/10

ORGANOCHLORINE PESTICIDES (EPA 608)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITE1178-01 (Arroyo Simi-FP - Water)									
Reporting Units: ug/l									
4,4'-DDD	EPA 608	10E2073	0.0019	0.0047	ND	0.943	05/17/10	05/18/10	C
4,4'-DDE	EPA 608	10E2073	0.0028	0.0047	ND	0.943	05/17/10	05/18/10	
4,4'-DDT	EPA 608	10E2073	0.0038	0.0094	ND	0.943	05/17/10	05/18/10	
Dieldrin	EPA 608	10E2073	0.0019	0.0047	ND	0.943	05/17/10	05/18/10	
Chlordane	EPA 608	10E2073	0.053	0.094	ND	0.943	05/17/10	05/18/10	
Toxaphene	EPA 608	10E2073	0.24	0.47	ND	0.943	05/17/10	05/18/10	
Surrogate: Decachlorobiphenyl (45-120%)					80 %				
Surrogate: Tetrachloro-m-xylene (35-115%)					76 %				

TestAmerica Irvine

Debby Wilson
 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 TestAmerica.

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Quartely Arroyo Simi-Frontier Park
 Quarterly Arroyo Simi-Frontier Park
 Report Number: ITE1178

Sampled: 05/12/10
 Received: 05/12/10

TOTAL PCBS (EPA 608)

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITE1178-01 (Arroyo Simi-FP - Water) - cont.									
Reporting Units: ug/l									
Aroclor 1016	EPA 608	10E2073	0.24	0.47	ND	0.943	05/17/10	05/18/10	
Aroclor 1221	EPA 608	10E2073	0.24	0.47	ND	0.943	05/17/10	05/18/10	
Aroclor 1232	EPA 608	10E2073	0.24	0.47	ND	0.943	05/17/10	05/18/10	
Aroclor 1242	EPA 608	10E2073	0.24	0.47	ND	0.943	05/17/10	05/18/10	
Aroclor 1248	EPA 608	10E2073	0.24	0.47	ND	0.943	05/17/10	05/18/10	
Aroclor 1254	EPA 608	10E2073	0.24	0.47	ND	0.943	05/17/10	05/18/10	
Aroclor 1260	EPA 608	10E2073	0.24	0.47	ND	0.943	05/17/10	05/18/10	
Surrogate: Decachlorobiphenyl (45-120%)					83 %				

TestAmerica Irvine

Debby Wilson
 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 TestAmerica.

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Quartely Arroyo Simi-Frontier Park
Quarterly Arroyo Simi-Frontier Park
Report Number: ITE1178

Sampled: 05/12/10
Received: 05/12/10

METALS

Analyte	Method	Batch	MDL Limit	Reporting Limit	Sample Result	Dilution Factor	Date Extracted	Date Analyzed	Data Qualifiers
Sample ID: ITE1178-01 (Arroyo Simi-FP - Water)									
Reporting Units: mg/l									
Hardness (as CaCO ₃)	SM2340B	[CALC]	N/A	0.33	850	1	05/18/10	05/19/10	
Calcium	EPA 200.7	10E2255	0.050	0.10	230	1	05/18/10	05/18/10	
Magnesium	EPA 200.7	10E2255	0.012	0.020	70	1	05/18/10	05/19/10	

TestAmerica Irvine

Debby Wilson
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 TestAmerica.

ITE1178 <Page 5 of 14>

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Quartely Arroyo Simi-Frontier Park
Quarterly Arroyo Simi-Frontier Park
Report Number: ITE1178

Sampled: 05/12/10
Received: 05/12/10

SHORT HOLD TIME DETAIL REPORT

	Hold Time (in days)	Date/Time Sampled	Date/Time Received	Date/Time Extracted	Date/Time Analyzed
Sample ID: Arroyo Simi-FP (ITE1178-01) - Water EPA 525.2	1	05/12/2010 12:00	05/12/2010 19:45	05/13/2010 14:45	05/14/2010 06:50

TestAmerica Irvine

Debby Wilson
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 TestAmerica.*

ITE1178 <Page 6 of 14>

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Quartely Arroyo Simi-Frontier Park
 Quarterly Arroyo Simi-Frontier Park
 Report Number: ITE1178

Sampled: 05/12/10
 Received: 05/12/10

METHOD BLANK/QC DATA

ORGANIC COMPOUNDS BY GC/MS (EPA 525.2)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10E1671 Extracted: 05/13/10											
Blank Analyzed: 05/14/2010 (10E1671-BLK1)											
Chlorpyrifos	ND	1.0	0.010	ug/l							
Diazinon	ND	0.25	0.10	ug/l							
Surrogate: 1,3-Dimethyl-2-nitrobenzene	5.45			ug/l	5.00		109	70-130			
Surrogate: 1,3-Dimethyl-2-nitrobenzene	5.45			ug/l	5.00		109	70-130			
Surrogate: Triphenylphosphate	5.68			ug/l	5.00		114	70-130			
Surrogate: Triphenylphosphate	5.68			ug/l	5.00		114	70-130			
Surrogate: Perylene-d12	6.26			ug/l	5.00		125	70-130			
Surrogate: Perylene-d12	6.26			ug/l	5.00		125	70-130			
LCS Analyzed: 05/14/2010 (10E1671-BS1)											
Chlorpyrifos	5.38	1.0	0.010	ug/l	5.00		108	70-130			MNR1
Diazinon	5.06	0.25	0.10	ug/l	5.00		101	70-130			
Surrogate: 1,3-Dimethyl-2-nitrobenzene	5.33			ug/l	5.00		107	70-130			
Surrogate: 1,3-Dimethyl-2-nitrobenzene	5.33			ug/l	5.00		107	70-130			
Surrogate: Triphenylphosphate	5.09			ug/l	5.00		102	70-130			
Surrogate: Triphenylphosphate	5.09			ug/l	5.00		102	70-130			
Surrogate: Perylene-d12	6.14			ug/l	5.00		123	70-130			
Surrogate: Perylene-d12	6.14			ug/l	5.00		123	70-130			
LCS Dup Analyzed: 05/14/2010 (10E1671-BSD1)											
Chlorpyrifos	5.15	1.0	0.010	ug/l	5.00		103	70-130	4	30	
Diazinon	3.83	0.25	0.10	ug/l	5.00		77	70-130	28	30	
Surrogate: 1,3-Dimethyl-2-nitrobenzene	5.11			ug/l	5.00		102	70-130			
Surrogate: 1,3-Dimethyl-2-nitrobenzene	5.11			ug/l	5.00		102	70-130			
Surrogate: Triphenylphosphate	5.37			ug/l	5.00		107	70-130			
Surrogate: Triphenylphosphate	5.37			ug/l	5.00		107	70-130			
Surrogate: Perylene-d12	5.86			ug/l	5.00		117	70-130			
Surrogate: Perylene-d12	5.86			ug/l	5.00		117	70-130			

TestAmerica Irvine

Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Quartely Arroyo Simi-Frontier Park
 Quarterly Arroyo Simi-Frontier Park
 Report Number: ITE1178

Sampled: 05/12/10
 Received: 05/12/10

METHOD BLANK/QC DATA

ORGANOCHLORINE PESTICIDES (EPA 608)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10E2073 Extracted: 05/17/10											
Blank Analyzed: 05/18/2010 (10E2073-BLK1)											
4,4'-DDD	ND	0.0050	0.0020	ug/l							
4,4'-DDE	ND	0.0050	0.0030	ug/l							
4,4'-DDT	ND	0.010	0.0040	ug/l							
Dieldrin	ND	0.0050	0.0020	ug/l							
Chlordane	ND	0.10	0.056	ug/l							
Toxaphene	ND	0.50	0.25	ug/l							
Surrogate: Decachlorobiphenyl	0.403			ug/l	0.500		81	45-120			
Surrogate: Tetrachloro-m-xylene	0.391			ug/l	0.500		78	35-115			
LCS Analyzed: 05/18/2010 (10E2073-BS1)											
4,4'-DDD	0.482	0.0050	0.0020	ug/l	0.500		96	55-120			
4,4'-DDE	0.425	0.0050	0.0030	ug/l	0.500		85	50-120			
4,4'-DDT	0.453	0.010	0.0040	ug/l	0.500		91	55-120			
Dieldrin	0.449	0.0050	0.0020	ug/l	0.500		90	55-115			
Surrogate: Decachlorobiphenyl	0.426			ug/l	0.500		85	45-120			
Surrogate: Tetrachloro-m-xylene	0.429			ug/l	0.500		86	35-115			
Matrix Spike Analyzed: 05/18/2010 (10E2073-MS1) Source: ITE1219-01											
4,4'-DDD	0.407	0.015	0.0059	ug/l	0.495	ND	82	50-125			
4,4'-DDE	0.476	0.015	0.0089	ug/l	0.495	ND	96	45-125			
4,4'-DDT	0.449	0.030	0.012	ug/l	0.495	ND	91	50-125			
Dieldrin	0.387	0.015	0.0059	ug/l	0.495	ND	78	50-120			
Surrogate: Decachlorobiphenyl	0.389			ug/l	0.495		79	45-120			
Surrogate: Tetrachloro-m-xylene	0.381			ug/l	0.495		77	35-115			
Matrix Spike Analyzed: 05/18/2010 (10E2073-MS3) Source: ITE1342-01											
4,4'-DDD	0.408	0.014	0.0057	ug/l	0.472	ND	87	50-125			
4,4'-DDE	0.375	0.014	0.0085	ug/l	0.472	ND	80	45-125			
4,4'-DDT	0.390	0.028	0.011	ug/l	0.472	ND	83	50-125			
Dieldrin	0.377	0.014	0.0057	ug/l	0.472	ND	80	50-120			
Surrogate: Decachlorobiphenyl	0.391			ug/l	0.472		83	45-120			
Surrogate: Tetrachloro-m-xylene	0.349			ug/l	0.472		74	35-115			

TestAmerica Irvine

Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Quartely Arroyo Simi-Frontier Park
 Quarterly Arroyo Simi-Frontier Park
 Report Number: ITE1178

Sampled: 05/12/10
 Received: 05/12/10

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: 10E2073 Extracted: 05/17/10											
Matrix Spike Dup Analyzed: 05/18/2010 (10E2073-MSD1)						Source: ITE1219-01					
4,4'-DDD	0.416	0.015	0.0059	ug/l	0.495	ND	84	50-125	2	30	
4,4'-DDE	0.448	0.015	0.0089	ug/l	0.495	ND	90	45-125	6	30	
4,4'-DDT	0.468	0.030	0.012	ug/l	0.495	ND	95	50-125	4	30	
Dieldrin	0.374	0.015	0.0059	ug/l	0.495	ND	75	50-120	4	30	
Surrogate: Decachlorobiphenyl	0.408			ug/l	0.495		82	45-120			
Surrogate: Tetrachloro-m-xylene	0.363			ug/l	0.495		73	35-115			
Matrix Spike Dup Analyzed: 05/18/2010 (10E2073-MSD3)						Source: ITE1342-01					
4,4'-DDD	0.408	0.014	0.0057	ug/l	0.472	ND	87	50-125	0.06	30	
4,4'-DDE	0.373	0.014	0.0085	ug/l	0.472	ND	79	45-125	0.7	30	
4,4'-DDT	0.388	0.028	0.011	ug/l	0.472	ND	82	50-125	0.6	30	
Dieldrin	0.375	0.014	0.0057	ug/l	0.472	ND	79	50-120	0.6	30	
Surrogate: Decachlorobiphenyl	0.388			ug/l	0.472		82	45-120			
Surrogate: Tetrachloro-m-xylene	0.346			ug/l	0.472		73	35-115			

TestAmerica Irvine

Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Quartely Arroyo Simi-Frontier Park
 Quarterly Arroyo Simi-Frontier Park
 Report Number: ITE1178

Sampled: 05/12/10
 Received: 05/12/10

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: 10E2073 Extracted: 05/17/10											
Blank Analyzed: 05/17/2010 (10E2073-BLK1)											
Aroclor 1016	ND	0.50	0.25	ug/l							
Aroclor 1221	ND	0.50	0.25	ug/l							
Aroclor 1232	ND	0.50	0.25	ug/l							
Aroclor 1242	ND	0.50	0.25	ug/l							
Aroclor 1248	ND	0.50	0.25	ug/l							
Aroclor 1254	ND	0.50	0.25	ug/l							
Aroclor 1260	ND	0.50	0.25	ug/l							
Surrogate: Decachlorobiphenyl	0.447			ug/l	0.500		89	45-120			
LCS Analyzed: 05/17/2010 (10E2073-BS2)											
Aroclor 1016	3.34	0.50	0.25	ug/l	4.00		83	50-115			
Aroclor 1260	3.55	0.50	0.25	ug/l	4.00		89	60-120			
Surrogate: Decachlorobiphenyl	0.445			ug/l	0.500		89	45-120			
Matrix Spike Analyzed: 05/17/2010 (10E2073-MS2)											
						Source: ITE1219-01					
Aroclor 1016	5.93	0.50	0.25	ug/l	3.96	ND	150	45-120			MI
Aroclor 1260	3.30	0.50	0.25	ug/l	3.96	ND	83	55-125			
Surrogate: Decachlorobiphenyl	0.418			ug/l	0.495		84	45-120			
Matrix Spike Analyzed: 05/18/2010 (10E2073-MS4)											
						Source: ITE1342-01					
Aroclor 1016	2.89	0.47	0.24	ug/l	3.77	ND	77	45-120			
Aroclor 1260	3.07	0.47	0.24	ug/l	3.77	ND	81	55-125			
Surrogate: Decachlorobiphenyl	0.400			ug/l	0.472		85	45-120			
Matrix Spike Dup Analyzed: 05/17/2010 (10E2073-MSD2)											
						Source: ITE1219-01					
Aroclor 1016	5.88	0.50	0.25	ug/l	3.96	ND	148	45-120	0.9	30	MI
Aroclor 1260	3.35	0.50	0.25	ug/l	3.96	ND	85	55-125	1	25	
Surrogate: Decachlorobiphenyl	0.424			ug/l	0.495		86	45-120			

TestAmerica Irvine

Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Quartely Arroyo Simi-Frontier Park
 Quarterly Arroyo Simi-Frontier Park
 Report Number: ITE1178

Sampled: 05/12/10
 Received: 05/12/10

METHOD BLANK/QC DATA

TOTAL PCBS (EPA 608)

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10E2073 Extracted: 05/17/10											
Matrix Spike Dup Analyzed: 05/18/2010 (10E2073-MSD4)						Source: ITE1342-01					
Aroclor 1016	2.79	0.47	0.24	ug/l	3.77	ND	74	45-120	3	30	
Aroclor 1260	2.99	0.47	0.24	ug/l	3.77	ND	79	55-125	3	25	
Surrogate: Decachlorobiphenyl	0.393			ug/l	0.472		83	45-120			

TestAmerica Irvine

Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
 618 Michillinda Avenue, Suite 200
 Arcadia, CA 91007
 Attention: Bronwyn Kelly

Project ID: Quartely Arroyo Simi-Frontier Park
 Quarterly Arroyo Simi-Frontier Park
 Report Number: ITE1178

Sampled: 05/12/10
 Received: 05/12/10

METHOD BLANK/QC DATA

METALS

Analyte	Result	Reporting Limit	MDL	Units	Spike Level	Source Result	%REC %REC	%REC Limits	RPD	RPD Limit	Data Qualifiers
Batch: 10E2255 Extracted: 05/18/10											
Blank Analyzed: 05/18/2010-05/19/2010 (10E2255-BLK1)											
Calcium	ND	0.10	0.050	mg/l							
Magnesium	ND	0.020	0.012	mg/l							
LCS Analyzed: 05/18/2010-05/19/2010 (10E2255-BS1)											
Calcium	2.56	0.10	0.050	mg/l	2.50		102	85-115			
Magnesium	2.43	0.020	0.012	mg/l	2.50		97	85-115			
Matrix Spike Analyzed: 05/18/2010-05/19/2010 (10E2255-MS1) Source: ITE1205-01											
Calcium	370	0.10	0.050	mg/l	2.50	359	434	70-130			MHA
Magnesium	103	0.020	0.012	mg/l	2.50	101	103	70-130			MHA
Matrix Spike Dup Analyzed: 05/18/2010-05/19/2010 (10E2255-MSD1) Source: ITE1205-01											
Calcium	376	0.10	0.050	mg/l	2.50	359	652	70-130	1	20	MHA
Magnesium	104	0.020	0.012	mg/l	2.50	101	128	70-130	0.6	20	MHA

TestAmerica Irvine

Debby Wilson
 Project Manager

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Quartely Arroyo Simi-Frontier Park
Quarterly Arroyo Simi-Frontier Park
Report Number: ITE1178

Sampled: 05/12/10
Received: 05/12/10

DATA QUALIFIERS AND DEFINITIONS

- C** Calibration Verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.
- M1** The MS and/or MSD were above the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
- MHA** Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).
- MNR1** There was no MS/MSD analyzed with this batch due to insufficient sample volume. See Blank Spike/Blank Spike Duplicate.
- ND** Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified.
- RPD** Relative Percent Difference

TestAmerica Irvine

Debby Wilson
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 TestAmerica.

ITE1178 <Page 13 of 14>

MWH-Pasadena/Boeing
618 Michillinda Avenue, Suite 200
Arcadia, CA 91007
Attention: Bronwyn Kelly

Project ID: Quartely Arroyo Simi-Frontier Park
Quarterly Arroyo Simi-Frontier Park
Report Number: ITE1178

Sampled: 05/12/10
Received: 05/12/10

Certification Summary

TestAmerica Irvine

Method	Matrix	Nelac	California
EDD + Level 4	Water	N/A	N/A
EPA 200.7	Water	X	X
EPA 525.2	Water		
EPA 608	Water	X	X
SM2340B	Water	X	X

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

TestAmerica Irvine

Debby Wilson
Project Manager

THIS PAGE LEFT INTENTIONALLY BLANK

APPENDIX G

Section 10

May 17th, 2010

Aquatic Bioassay & Consulting Bioassessment Report

THIS PAGE LEFT INTENTIONALLY BLANK

Date: June 23rd, 2010

To: Bronwyn Kelly
Senior Geologist
MWH Americas, Inc.
618 Michillinda Ave., Suite 200
Arcadia, CA 91007



From: Scott Johnson
Director of Environmental Programs
Aquatic Bioassay and Consulting Laboratories
29 N. Olive St.
Ventura, CA 93001

RE: BIOASSESSMENT SAMPLING FOR THE BOEING COMPANY AT THE SANTA SUSANA FIELD LABORATORY (2010)

The Bioassessment Sampling and Analysis Plan for The Boeing Company at the Santa Susana Field Laboratory (SSFL) specifies that spring/summer bioassessment sampling occur from four to six weeks following the last major storm event of the 2010 rain season. This time period was established by, and is included in, the state-wide bioassessment protocols established by the State of California's Surface Water Ambient Monitoring Program (SWAMP 2007). Flowing water through a stream reach over this period of time is necessary for the aquatic benthic macroinvertebrate (BMI) community that might reside there to become established and ensures that valid BMI samples will be collected.

The last storm to generate flow occurred on March 11th, 2010, when 0.65 inches of rain fell on the SSFL property. Discharges from Outfalls 1, 5 and 6 stopped within a week of this rain event based on site visits by Boeing staff. On May 17th, 2010 Scott Johnson visited each of these outfalls and confirmed that these sites were dry and that valid BMI samples could not have been collected (see photos).

As specified in the Sampling and Analysis plan, bioassessment sampling at the SSFL may occur during the fall if the groundwater extraction treatment system (GETS) is completed as planned and is discharging into Bell Canyon Creek. If discharge to the Creek does not begin at least four weeks prior to the end of the fall season, sampling will begin during the spring/summer season of 2011 following the last major storm of that rain season.

If you have any questions regarding this memo or future sampling plans please contact me directly.

Sincerely,

A handwritten signature in blue ink, appearing to read "Scott Johnson", is written over a light blue horizontal line.

Scott Johnson
Director of Environmental Programs
805 643 5621 x 11

Photos taken downstream and upstream of each permitted discharge point from the SSFL property.



Outfall 1, downstream



Outfall 1, upstream



Outfall 5, downstream



Outfall 5, upstream



Outfall 6, downstream



Outfall 6, upstream